

Office of Rural Health & Primary Care Health Workforce Analysis Program

Minnesota Health Professional Demand Survey: 2005 Vacancy Rates for Physicians, Advanced Practice and Mental Health Providers

Highlights

At the end of 2004:

- The physician vacancy rate was higher in Greater Minnesota than in the seven-county Twin Cities area.
- The vacancy rate for medical specialty physicians was higher than for primary care physicians in both the Twin Cities and Greater Minnesota.
- Among individual specialties, the highest vacancy rates were reported for psychiatry and OB/GYN outside the Twin Cities.
- Greater Minnesota had higher vacancy rates than the Twin Cities for physician assistants, nurse practitioners and certified nurse anesthetists.
- Twin Cities area respondents reported higher vacancy rates than Greater Minnesota respondents for clinical psychologists and mental health social workers.

These are general patterns that must be interpreted with caution because different sampling patterns were used to gather data in the Twin Cities and Greater Minnesota. In addition, vacancy rates are determined by the number of reported openings as a percentage of total positions, and may not be a good measure of need.

Background

The Minnesota Health Professional Demand Survey is conducted annually to gather information that can be used to assess the demand for physicians, physician assistants, advanced practice nurses and mental health providers in Minnesota. The survey was administered by the Minnesota Center for Rural Health at the Rural Health Resource Center for the Minnesota Department of Health's Office of Rural and Primary Care.

The questionnaire was mailed in early 2005 to administrators of hospitals, clinics and community mental health centers, asking for information about numbers of:

- Practitioners currently employed
- Vacant positions
- Practitioners being recruited.



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This data was used to compute vacancy rates for each profession in the Twin Cities metropolitan area, Greater Minnesota and rural Minnesota. Estimated vacancy rates are reported below.

The survey also asked about recruiting during 2004, including reasons for vacancies and how long it took to fill vacancies. This data is available upon request from the Office of Rural Health and Primary Care.

The questionnaire was mailed to 413 hospitals, clinics, health systems and mental health centers. It was sent to all hospitals in the state, all non-metropolitan clinics and a sample of metropolitan area clinics. Responses were received from 206 employers, for an overall response rate of 50 percent. See the appendix for more information methodology.

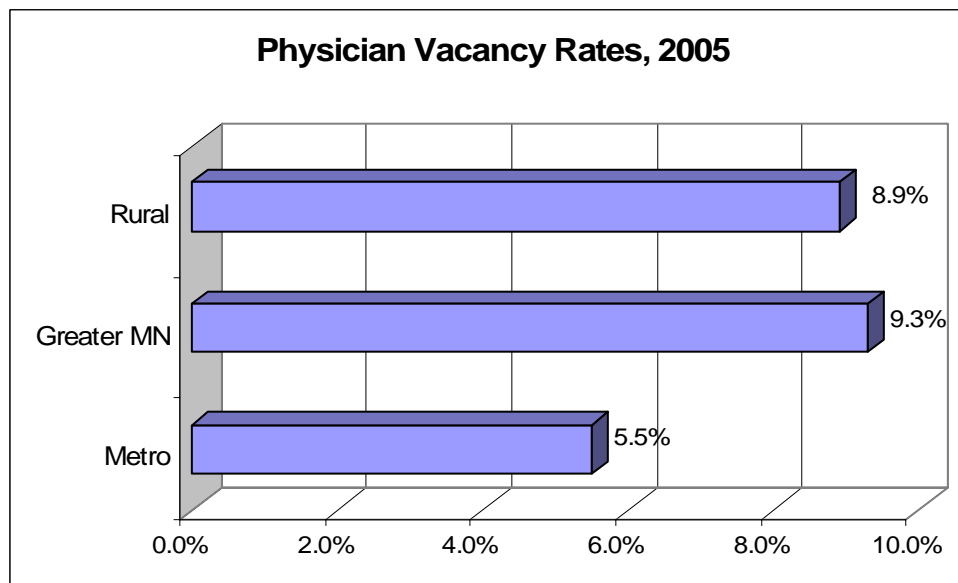
Because different sampling methods were used within and outside the Twin Cities metropolitan area, caution should be exercised when comparing vacancy rates between regions.

Metropolitan definition. The metropolitan region was defined to include Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties. Greater Minnesota includes the other 80 counties. Rural Minnesota was defined to include the 80 Greater Minnesota counties minus the cities of Duluth and Rochester.

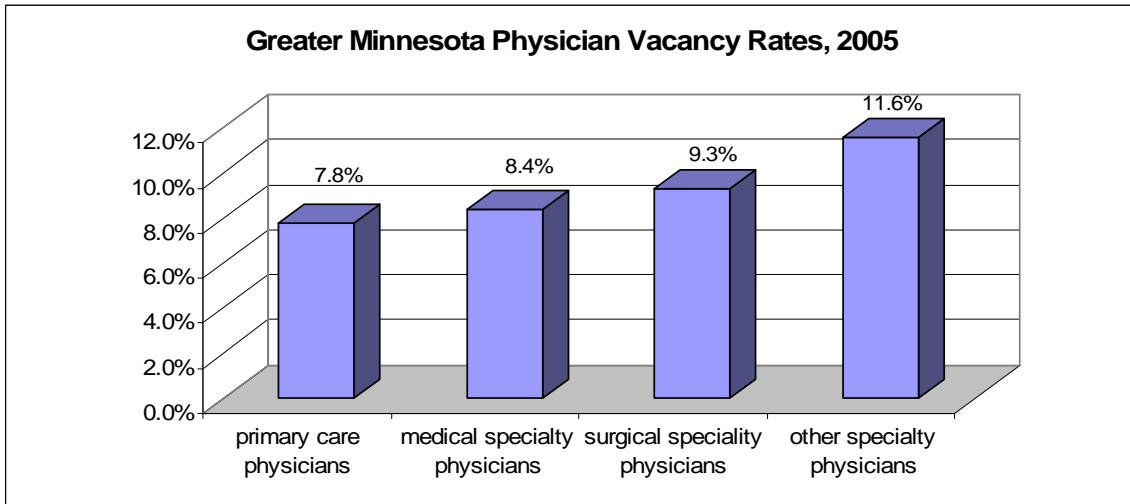
Vacancy rate calculation. Vacancy rates were derived by dividing the number of professionals being recruited by the sum of currently employed practitioners and the number of professionals being recruited.

PHYSICIANS

- Physician vacancy rates were higher in Greater Minnesota than in the Twin Cities metropolitan area for primary care physicians and surgical specialties, although differences in the samples and in response rates may account for the differences.
- Vacancy rates in Rural Minnesota, excluding Duluth and Rochester, were not much different than for Greater Minnesota as a whole. Rural vacancy rates were somewhat higher for medical specialties, but somewhat lower for surgical specialties.

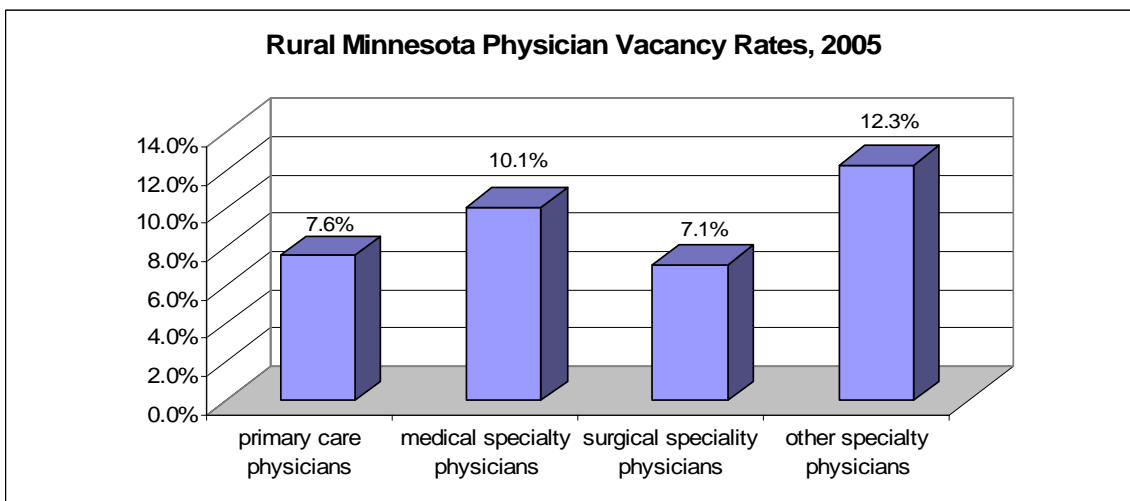


Greater Minnesota. Greater Minnesota respondents reported 311 vacancies and said they were actively recruiting for 318 physician positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall physician vacancy rate of 9.3 percent. The vacancy rate for primary care physicians was 7.8 percent. Vacancy rates for specialties were somewhat higher.



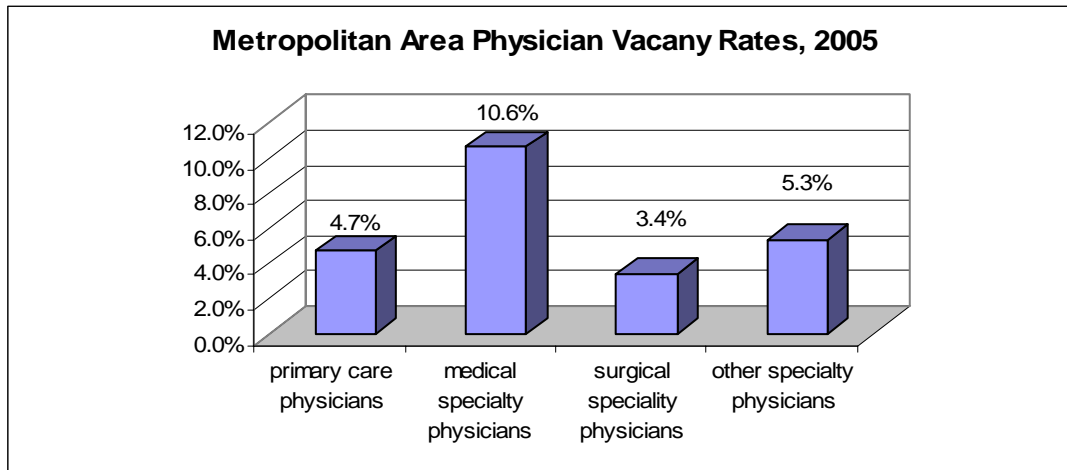
Rural Minnesota. A closer look at rural conditions is afforded by excluding responses from Rochester and Duluth.

Rural Minnesota respondents reported 176 vacancies and said they were actively recruiting for 183 physician positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall physician vacancy rate of 8.9 percent. The vacancy rate for primary care physicians was 7.6 percent. Vacancy rates for specialties other than surgical specialties were somewhat higher.



Twin Cities Metropolitan Area. Metropolitan area respondents reported 176 physician vacancies and said they were recruiting for 183 positions. Dividing the number of vacancies by the sum of vacancies and

currently filled positions produced an overall vacancy rate of 5.5 percent. The vacancy rate for primary care physicians was 4.7 percent. The vacancy rate for non-surgical specialties was 10.6 percent. The vacancy rate for surgical specialties was 3.4 percent. The vacancy rate for other specialty physicians was 5.3 percent.



Physician vacancy rates by specialty. Vacancy rates are reported below for individual specialties for which respondents reported information on at least 50 positions (number currently practicing plus reported vacancies) in each region. For specialties with data for fewer than 50 positions, a change of one in the number of vacancies would change the vacancy rate by two percent points or more. Vacancy rate for specialties with fewer than 100 positions should be treated with care.

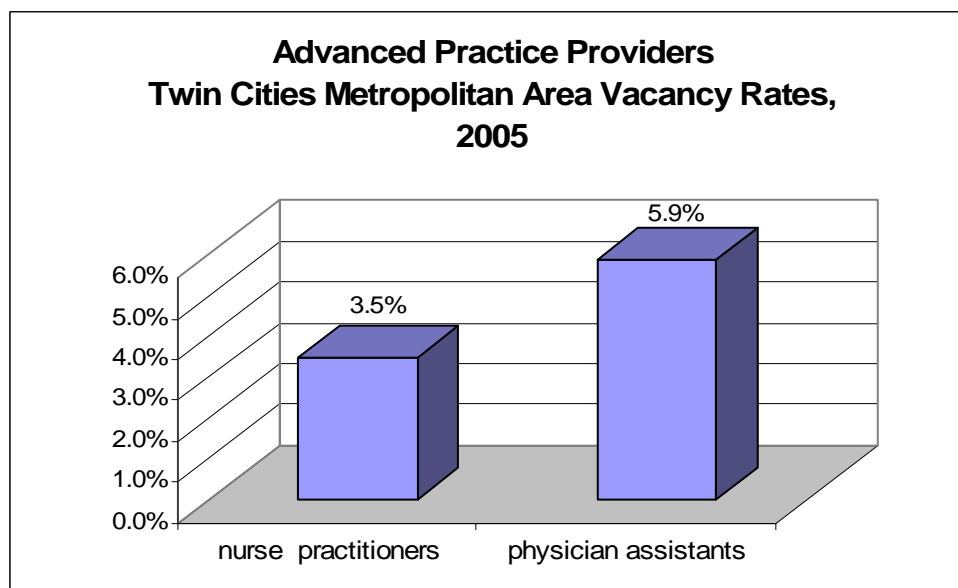
	Metropolitan Area		Greater Minnesota		Rural Minnesota	
	Vacancy Rate	Positions	Vacancy Rate	Positions	Vacancy Rate	Positions
Family Medicine	3.3%	241	5.8%	813	5.6%	688
Internal Medicine	4.3%	162	6.6%	256	6.1%	164
OB/GYN	7.4%	81	16.5%	128	20.4%	74
Pediatrics	5.7%	122	9.8%	144	9.3%	87
Cardiovascular Diseases			7.1%	141		
Orthopedic Surgery			9.4%	127	10.9%	73
Diagnostic Radiology	2.4%	127	13.5%	193	7.2%	55
Gastroentology	10.1%	70	11.5%	78		
Neurology	7.4%	54	8.1%	89		
Psychiatry			19.3%	145	20.3%	89
General Surgery			2.5%	122	2.3%	89
Emergency Medicine (FP/IM)			7.2%	63	6.9%	51
Emergency Medicine (BC)			3.7%	81		
Pathology			14.1%	71		
Hematology/oncology			10.3%	68		
Dermatology			9.4%	53		
Anesthesiology			2.5%	140		

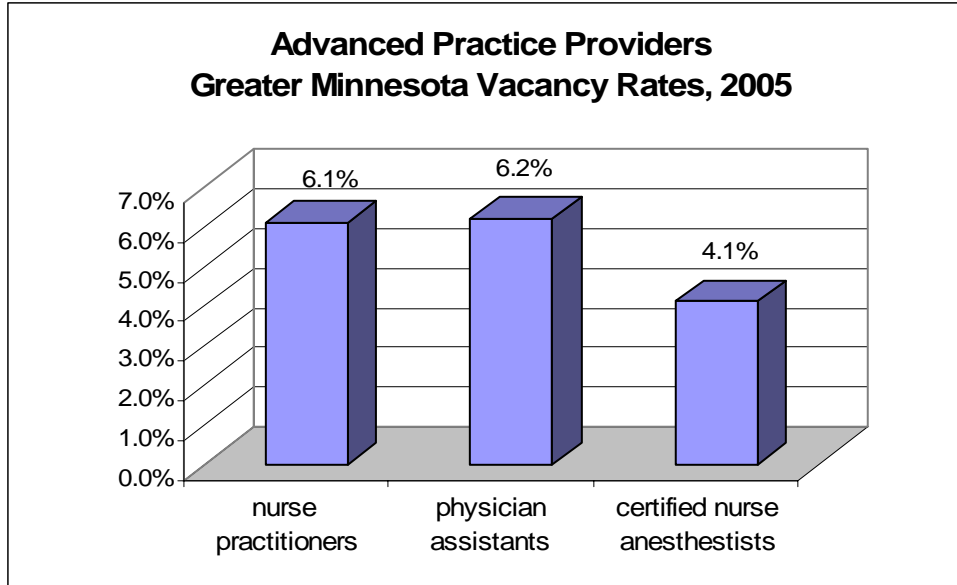
The highest rates were for psychiatry and OB/GYN in Greater Minnesota, and especially, in Rural Minnesota (Greater Minnesota excluding Rochester and Duluth). High vacancy rates were also reported for gastroenterology statewide, for diagnostic radiology in Greater Minnesota, and for orthopedic surgery outside the metropolitan area. However, in all cases, these high vacancy rates are based on a relatively small number of positions.

Vacancy rates for family medicine and internal medicine were relatively low, although a bit higher in Greater Minnesota. A low vacancy rate was found for anesthesiology, but reliable data was only obtained for Greater Minnesota.

ADVANCED PRACTICE PROVIDERS

The Demand Assessment survey also asked employers about vacancies and recruitment of advanced practice providers—physician assistants, nurse practitioners, certified nurse midwives and certified registered nurse anesthetists. Respondents reported on too few certified nurse midwife positions to allow calculation of reliable vacancy rates. There were too few CRNA positions in the metropolitan area to produce reliable vacancy rates. The survey did not ask about other registered nurses or licensed practical nurses. The Department of Employment and Economic Development publishes data on RN and LPN vacancies twice a year.



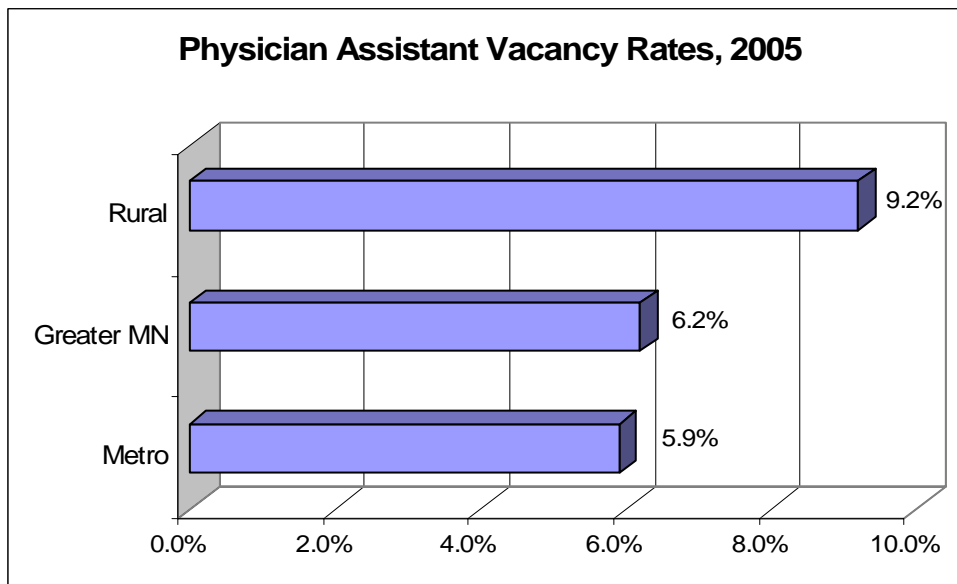


Physician Assistants

Greater Minnesota. Greater Minnesota respondents reported 16 vacancies and said they were actively recruiting for 20 physician assistant positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall physician assistant vacancy rate of 6.1 percent.

Rural Minnesota. Rural Minnesota respondents reported 15 vacancies and said they were actively recruiting for 17 physician assistant positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall physician vacancy rate of 9.2 percent.

Twin Cities Metropolitan Area. Metropolitan area respondents reported nine vacancies and said they were recruiting for 19 positions. Dividing the number of vacancies by the sum of vacancies and currently filled positions produced an overall vacancy rate of 5.9 percent.

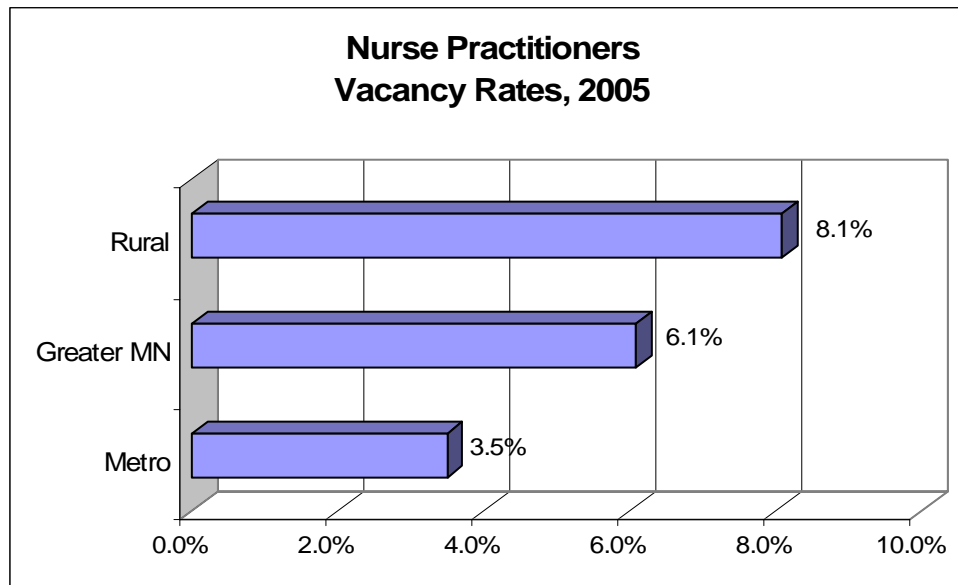


Nurse practitioners

Greater Minnesota. Greater Minnesota respondents reported 21.5 vacancies and said they were actively recruiting for 36 nurse practitioner positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall nurse practitioner vacancy rate of 6.1 percent.

Rural Minnesota. Rural Minnesota respondents reported 19.5 vacancies and said they were actively recruiting for 28 nurse practitioner positions. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall nurse practitioner vacancy rate of 8.1 percent.

Twin Cities Metropolitan Area. Metropolitan area respondents reported 10 vacancies and said they were recruiting for 28 positions. Dividing the number of vacancies by the sum of vacancies and currently filled positions produced an overall vacancy rate of 3.5 percent.



Certified Nurse Midwives

Respondents in Greater Minnesota reported no certified nurse midwife vacancies and said they were recruiting for four positions, all in the rural portion of Greater Minnesota. Because of the small number of nurse midwife positions reported from Greater Minnesota respondents, no vacancy rates are reported for Greater Minnesota or Rural Minnesota.

Twin Cities Metropolitan Area. Metropolitan area respondents reported one vacancy and said they were recruiting for three positions. Dividing the number of vacancies by the sum of vacancies and currently filled positions produced an overall vacancy rate of 1.0 percent.

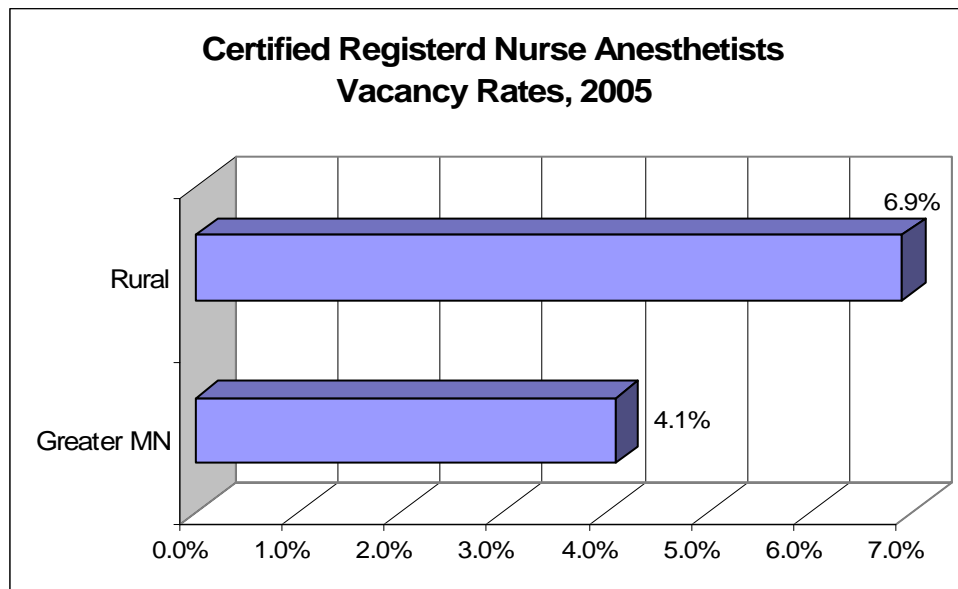
Certified Registered Nurse Anesthetists

Greater Minnesota. Greater Minnesota respondents reported 11 vacancies and said they were actively recruiting for 22 certified registered nurse anesthetists (CRNAs). Dividing the number of reported

vacancies by the sum of vacancies and currently filled positions produced an overall CRNA vacancy rate of 4.1 percent.

Rural Minnesota. Rural Minnesota respondents reported seven vacancies and said they were actively recruiting for 17 certified registered nurse anesthetists. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall CRNA vacancy rate of 6.9 percent.

Twin Cities Metropolitan Area. Metropolitan area respondents reported five vacancies and said they were recruiting for nine positions. Because of the small number of positions reported by respondents, no vacancy rate is reported.



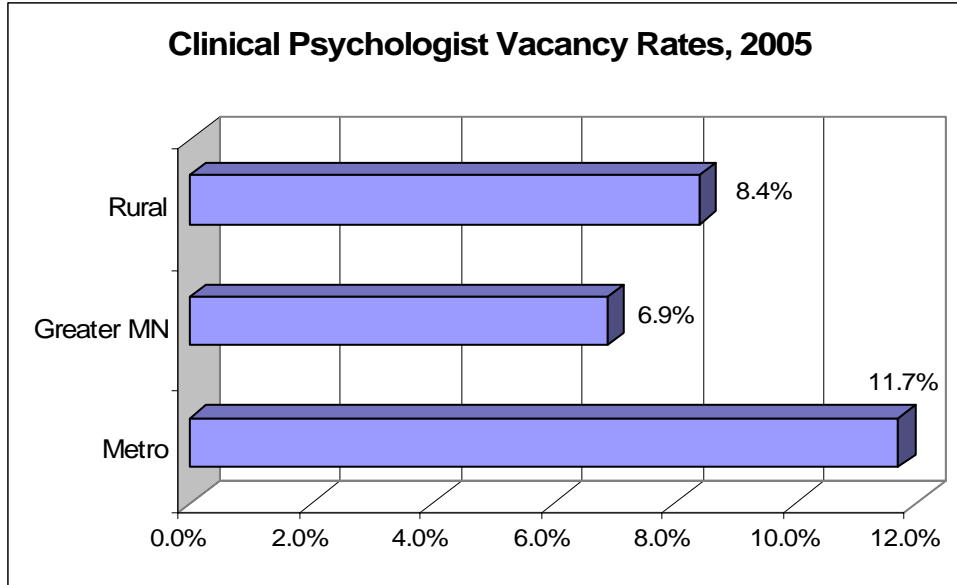
MENTAL HEALTH PROVIDERS

Clinical psychologists

Greater Minnesota. Greater Minnesota respondents reported 11 vacancies and said they were actively recruiting for 12.5 clinical psychologists. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall clinical psychologist vacancy rate of 6.9 percent.

Rural Minnesota. Rural Minnesota respondents reported 11 vacancies and said they were actively recruiting for 10.5 clinical psychologists. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall clinical psychologist vacancy rate of 8.4 percent.

Twin Cities Metropolitan Area. Metropolitan area respondents reported 17.6 clinical psychologist vacancies and said they were recruiting for 15 positions. Dividing the number of vacancies by the sum of vacancies and currently filled positions produced an overall vacancy rate of 11.7 percent.

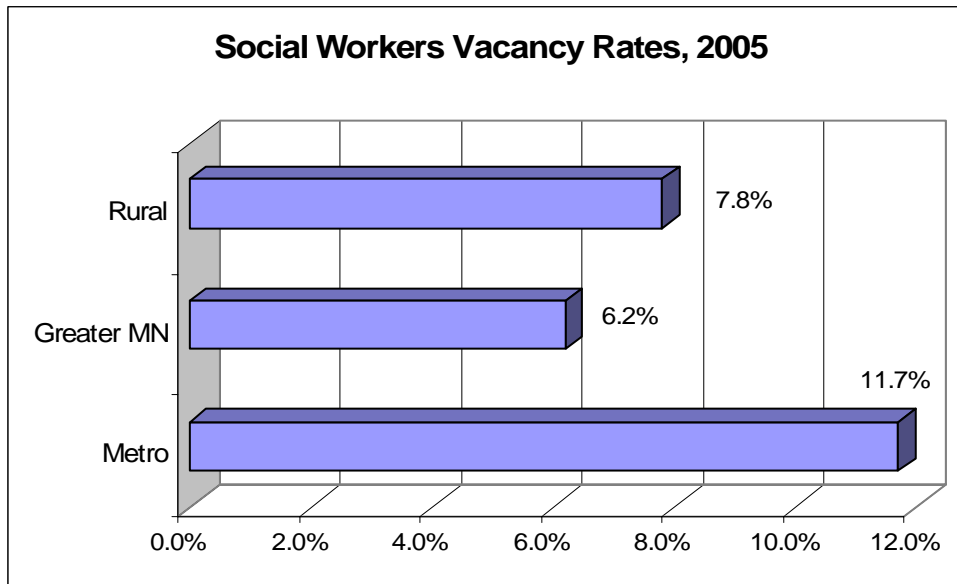


Social workers

Greater Minnesota. Greater Minnesota respondents reported 20 vacancies and said they were actively recruiting for 36.7 social workers. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall social worker vacancy rate of 6.2 percent.

Rural Minnesota. Rural Minnesota respondents reported 17 vacancies and said they were actively recruiting for 32.7 social workers. Dividing the number of reported vacancies by the sum of vacancies and currently filled positions produced an overall social worker vacancy rate of 7.8 percent.

Twin Cities Metropolitan Area. Metropolitan area respondents reported 27 social worker vacancies and said they were recruiting for 59.3 positions. Dividing the number of vacancies by the sum of vacancies and currently filled positions produced an overall vacancy rate of 11.7 percent.



APPENDIX A – METHODOLOGY

The 2004 questionnaire was mailed to 427 employers of health care professionals. Fourteen potential respondents were eliminated due to bad addresses or duplication, because the employer was no longer in business or because it did not employ any physicians, advanced practice nurses or mental health providers. Responses were received from 206 of the remaining 413 employers, for an overall response rate of 50 percent.

Separate samples were used for employers in the seven-county Twin Cities area and 80 Greater Minnesota counties. The survey was sent to all 189 Greater Minnesota hospitals, clinics, health systems and mental health clinics and systems. The survey was sent to all Twin Cities metropolitan area hospitals and a sample of 215 clinics drawn from a total of 1,254 clinics in the metropolitan area. The Greater Minnesota response rate was 63 percent; the metropolitan area response rate was 36 percent.

Clinics (40 percent) and hospital/clinic combinations (28 percent) accounted for more than two-thirds of all the responses:

- **Clinics** 40 percent
- **Hospital/clinics** 28 percent
- **Mental health centers** 13 percent
- **Hospitals** 12 percent
- **Health systems** 7 percent