

Office of Rural Health and Primary Care Health Workforce Analysis Program

Greater Minnesota Health Professional Demand Survey 2008

Highlights

At the beginning of 2008, hospitals and clinics in Greater Minnesota reported some of the highest vacancy rates in recent years.

- The estimated vacancy rate for physicians was 19 percent, more than twice the estimate one year earlier.
- Primary care accounted for 57 percent of physician positions and 52 percent of physician vacancies.
- The estimated vacancy rate for primary care specialties was 18 percent, but estimated vacancy rates for medical special specialties and other non-surgical specialties were even higher.
- Internal medicine, hospitalists, orthopedic surgeons and psychiatrists had the highest vacancy rates for individual specialties.
- More than half of respondents employed physician assistants. The estimated vacancy rate for physician assistants was 18 percent, the highest estimate in recent years.
- The estimated vacancy rate for nurse practitioners was 14 percent, the highest since 2004-05.

Background

The annual Minnesota Health Professional Demand Survey gathers information that can be used to assess the demand for physicians, physician assistants and advanced practice nurses in Minnesota.

The survey questionnaire was mailed in June 2008 to 163 employers in the 80 counties outside the seven-county Twin Cities area, including administrators of hospitals, clinics and community mental health centers. Responses were received from 109 employers, for a response rate of 67 percent, compared to a 52 percent response rate in 2007. See Methodology at the end of this fact sheet for more information.

The 2008 survey asked about numbers of:

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

The 2008 survey also asked about recruiting during 2007, including reasons for vacancies and how long it took to fill vacancies.



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Vacancy rates were derived by dividing the number of vacant position by the sum of the FTE number of vacancies and the number of FTEs currently employed. Many respondents reported actively recruiting for more positions than they reported vacant. Recruitment rates were calculated by dividing the number of FTE positions being recruited by the sum of FTEs currently employed.

Surveys conducted in 2005 and before included Twin Cities area employers, but response rates were too low to provide reliable data. Earlier surveys also included questions about mental health professionals, but these were dropped from the 2006 survey because the sample missed too many employers of mental health providers.

PHYSICIANS

The 109 Greater Minnesota respondents reported employing 3,432 full-time-equivalent physicians as of May 1, 2008. One large employer accounted for 36 percent of these (this employer's share would have been larger, but the employer did not supply complete data for some categories of physicians). The Office of Rural Health and Primary Care estimates that approximately 5,500 physicians were practicing in the 80 Greater Minnesota counties in 2008. The physician employees reported by survey respondents represent 62 percent of the estimated 5,500 physicians in active practice outside the seven-county Twin Cities area.

Because the one large employer did not provide complete employment or vacancy data, all data reported below for physicians excludes this employer. Thus, while the total level of demand for physicians outside the Twin Cities is understated, the data reported here is more representative of the situation found in most regions outside the Twin Cities.

Physicians 2008, Greater Minnesota (excluding largest employer)

	Respondents with employees	Number of Employees	Respondents with vacancies	May 1, 2008 vacancies
All Physicians	101*	2,186	69*	514
Primary care specialties	82	1,236	57	266
Medical specialties	22	185	18	59
Surgical specialties	42	204	21	43
Other specialties	48	561	29	146

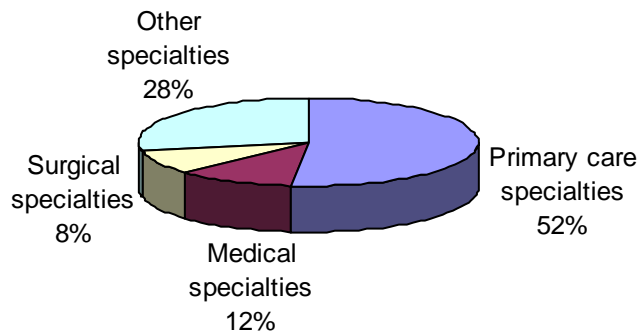
*Many employ physicians in more than one category

The remaining 108 respondents reported employing 2,186 full-time-equivalent physicians. Primary care accounted for 57 percent of reported physician employees, but only 43 percent of physicians hired during the previous 12 months.

Physician Employment, Hiring and Vacancies 108 Non-Twin Cities Employers, May 2008

	Employed	Hired	Vacant
Primary Care	57%	43%	52%
Medical Specialties	8%	12%	12%
Surgical Specialties	9%	10%	8%
Other Specialties	26%	34%	28%
Total	100%	100%	100%

Reported Physician Vacancies, 2008
108 Non-Twin Cities Employers



They 101 employers with physician employees reported 514 physician vacancies, resulting in a vacancy rate of 19 percent, twice the 2007 estimate of 9.1 percent. Primary care accounted for 52 percent of reported vacancies, down slightly from a year earlier. Vacancy rates were computed by dividing the number of reported vacancies by the sum of numbers of currently employed physicians and vacancies. Reported vacancy rates were twice as high in 2008 as in 2007.

Greater Minnesota Physician Vacancies (excluding largest employer)

	January 1, 2006		January 1, 2007		May 1, 2008	
	Vacancies	Percent of total	Vacancies	Percent of total	Vacancies	Percent of total
Primary care	34	52%	95	56%	266	52%
Medical specialties	6	9%	20	12%	59	12%
Surgical specialties	8	12%	16	10%	43	8%
Other specialties	18	27%	37	22%	146	28%
TOTAL	66	100%	168	100%	514	100%

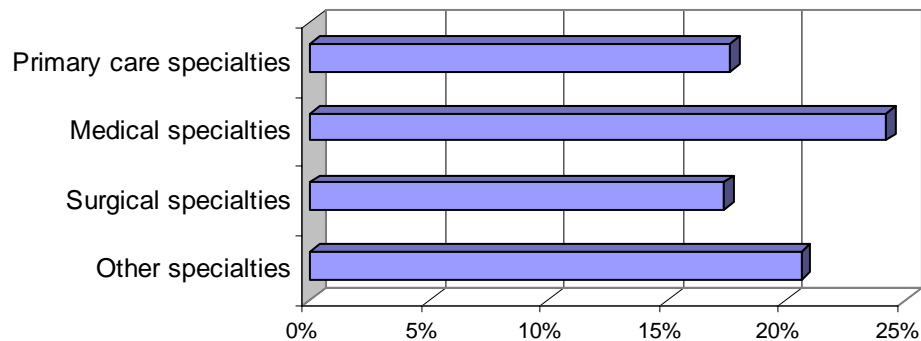
Vacancy rates in 2008 were highest for medical specialties and other non-surgical specialties. In both 2006 and 2008, estimated vacancy rates have been highest for medical specialties. Estimated vacancy rates for primary care have generally been somewhat lower than for other specialties.

Surveys in 2007 and earlier asked respondents to separately report numbers of vacancies and numbers of positions being recruited at the time of the survey. Many respondents reported recruiting for more positions that they reported vacant. The 2008 survey only asked about vacant positions.

Economic analysts often consider vacancy rates over 6 percent to be high. By this standard, the vacancy rates reported here for physicians are high. However, differences in data collection make it difficult to compare this data to traditional government measures of job vacancies in other occupations.

Estimated physician vacancy rates, Greater Minnesota (excluding largest employer)

	12/31/04	12/31/05	12/31/06	05/01/08
Primary care	7.5%	7.4%	9.4%	17.7%
Medical specialties	11.1%	8.3%	10.7%	24.2%
Surgical specialties	7.4%	7.8%	8.5%	17.4%
Other specialties	9.4%	12.1%	8.1%	20.7%
All physicians	8.2%	8.4%	9.1%	19.0%

Estimated Physician Vacancy Rates, 2008

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). For specialties with data for fewer than 50 positions, a small change in the number of vacancies would significantly change the vacancy rate. Reported vacancy rates for specialties with fewer than 100 positions should be treated with care.

Vacancy rates exceeded 25 percent for internal medicine specialists, hospitalists and orthopedic surgeons. The psychiatry vacancy rate was 20 percent. Vacancy rates were low for anesthesiology and diagnostic radiology.

The family practice vacancy rate was 16.2 percent. The average time to fill a family practice position was 10 months, compared to 15 months in 2007.

	Greater Minnesota (excluding largest employer)	
	Vacancy Rate	Positions*
Hospitalist	25.9%	73
Internal Medicine (general)	25.8%	258
Orthopedic surgery	25.5%	73
Psychiatry	20.0%	106
Pediatrics	16.8%	137
General surgery	16.5%	129
Family Medicine	16.2%	959
OB/GYN	13.9%	137
Emergency Medicine (FP/IM & BC)	12.9%	162
Diagnostic radiology	8.3%	60
Anesthesiology	1.5%	66

* Employed FTEs plus vacancies. Data reported only for specialties with at least 50 reported positions.

Respondents said it typically took nearly 11 months to recruit internal medicine specialists, 12 months to recruit orthopedic surgeons and nine months to recruit psychiatrists. Despite the reported high vacancy rate for hospitalists, respondents reported an average recruit time of only three to four months. Employers also reported even longer recruitment times for psychiatrists and internal medicine specialists in 2007.

PHYSICIAN ASSISTANTS AND ADVANCE PRACTICE NURSES

The Demand Assessment survey also asked employers about vacancies and recruitment of physician assistants and advance practice nurses.

Physician assistants

Fifty-three percent of respondents reported employing physician assistants. These 58 employers reported employing a total of 349 FTE physician assistants at the beginning of 2008. One large employer accounted for 38 percent of these positions. The other 57 employers had 216 FTE positions. The one large employer did not report vacancy or recruitment data. The vacancy and recruitment data reported below excludes this one large employer.

Twenty-six employers reported hiring 46 physicians during the 12 months prior to May 1, 2008.

Twenty-one employers reported physician assistant vacancies. They had 46 FTE vacancies. The overall vacancy rate was 17.5 percent.

Respondents reported it took an average of 5.7 months to recruit a physician assistant in 2008, compared to 7.6 months a year earlier.

Physician Assistant Employees and Vacancies

Greater Minnesota (excluding largest employer)

	2004-05	2006-07	2008
Respondents employing PAs*	61	35	57
Employees	234	134	216
Vacancies	22	25	46
Vacancy rate	6.3%	15.9%	17.5%

* Due to sampling variation, changes in the number of respondents employing physician assistants do not necessarily reflect changes in numbers of organizations in Minnesota employing physician assistants.

Nurse practitioners

Sixty-eight, or 56 percent of all respondents, reported employing a total of 460 nurse practitioners in May 2008 at sites outside the Twin Cities area. One large employer accounted for 46 percent of these nurse practitioners. The other 67 respondents reported employing 255 nurse practitioners.

Of these, nearly three-fourths (74 percent) were in adult or family practice.

Nineteen respondents, or 17 percent, reported vacancies. They said they had 42 FTE vacancies, making the vacancy rate 14.3 percent.

More than two thirds of nurse practitioner (NP) vacancies were for family practice NPs. Vacancy and recruiting rates were about twice as high as estimates for 2004-05. The 2005-06 response rate was too low to calculate vacancy or recruitment rates.

Respondents said it took an average of 4.5 months to recruit a family practice nurse practitioner.

Nurse Practitioners, 2008, Greater Minnesota (excluding largest employer)

Specialty	Respondents with employees	Number of Employees	Respondents with vacancies	May 1, 2008 vacancies
Nurse Practitioners	67*	255	19*	42
Adult	20	31	2	7
Family	47	157	13	28
Geriatrics	5	14	1	1
OB/GYN	14	20	0	0
Pediatrics/neonatal	7	12	1	1
Psychiatry	12	21	5	5

* Some employers reported nurse practitioner employees and vacancies in more than one category.

Nurse Practitioner Employees, Vacancies and Recruiting, Greater Minnesota (excluding largest employer)

	2004-05	2006-07	2008
Respondents	188	92	108
Employees	320	195	255
Vacancies	22	29	42
Vacancy rate	6.3%	12.9%	14.3%

Other Advanced Nursing Practitioners

Because of a small number of respondents, data for other advanced practice nursing professions does not support reliable conclusions about market demand.

Certified registered nurse anesthetists. Seventeen respondents reported employing a total of 279 FTE certified registered nurse anesthetists (CRNA), but more than half of these were associated with one larger employer (which did not provide vacancy data). Only one employer reported a vacancy.

Eight respondents reported an average of four months to fill a CRNA position.

Clinical Nurse Specialists. Ten respondents reported employing only 14 clinical nurse specialists. Four employers reported a total of five vacancies.

Certified nurse midwives. Nine employers reported a total of 11 certified nurse midwives. They reported only one vacancy.

METHODOLOGY

The Minnesota Center for Rural Health (MCRH) at the Rural Health Resource Center administered the survey for the Minnesota Department of Health's Office of Rural and Primary Care.

MCRH mailed scannable surveys to 175 health facilities located in 80 "Greater Minnesota" counties outside the seven-county Twin Cities area in June 2008. The seven Twin Cities counties excluded from the survey are Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington. After the mailing, 12 potential respondents were identified as duplicates, leaving a sample of 163.

Reminder postcards were mailed to the entire sample after one month. Follow-up phone calls were made to large health systems and hospitals that had not responded. Large clinics or health systems with multiple satellite clinics were asked to complete one survey for all of their sites. Clarification of possible duplicate reporting by organizations was verified by phone or email contact with the administrator or recruiter.

The survey mailing list includes hospitals, clinics, health systems, mental health centers, and Veteran's Administration (VA) hospitals and clinics. The RHRC developed the list from those provided by the Minnesota Department of Health, the Minnesota Hospital Association, the Indian Health Service and the Veterans Administration.

Responses were received from 109 facilities. Four facilities reported no employees in any of the occupations covered by the survey.

Facility Type	Surveys Mailed	Responses	Response Rate
Clinic	71	28	39%
Hospital	28	11	39%
Combined Hospital-Clinic	41	41	100%
Health System	13	13	100%
Mental Health Center	22	14	64%
Unidentified		2	
TOTAL	163	109	67%

The overall response rate was 67 percent. It is not known what percentage of total Greater Minnesota employment the 109 respondents constitute. Clinics and hospital-affiliated clinics accounted for 72 percent of respondents.

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