

# Minnesota's Physician Assistant Workforce, 2016

HIGHLIGHTS FROM THE 2016 PHYSICIAN ASSISTANT SURVEY

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# Minnesota's Physician Assistant Workforce, 2016

## HIGHLIGHTS FROM THE 2016 PHYSICIAN ASSISTANT SURVEY<sup>i</sup>

### Overall

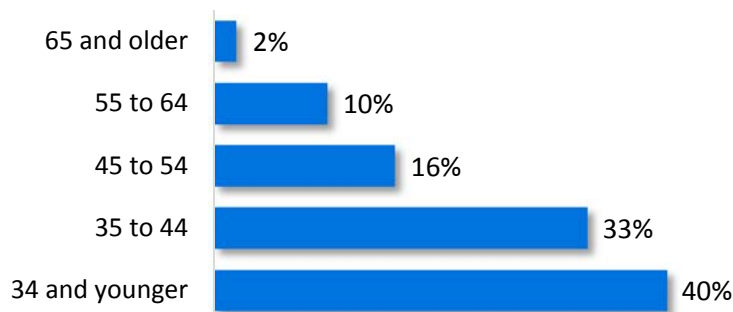
Physician assistants (PAs) are health care professionals who work under the supervision of physicians. They work in primary care clinics, conducting physicals and prescribing medications, but they may specialize in any branch of medicine. PAs serve an essential role on a health care team, filling gaps in services that result from shortages of physicians and increased need for health care among Minnesota's aging population. PAs must graduate from accredited educational physician assistant programs.<sup>ii</sup> According to the Minnesota Board of Medical Practice, there were **2,242** physician assistants with active licenses in Minnesota as of July, 2016.<sup>iii</sup>

### Demographics

**Sex.** With a few exceptions, health care professions are predominantly female, and this is true for physician assistants as well. Approximately 72 percent of all Minnesota PAs are female, and among the youngest new cohort of PAs, eight out of ten are female.

**Age.** Demographically, physician assistants are among the youngest health care providers in Minnesota, with nearly half below the age of 35. The median age of physician assistants is just 37. PAs are younger than Minnesota physicians (whose median age is 50) and younger than the Minnesota workforce overall (41). The large share of young professionals entering the field is good news for Minnesota, particularly as more physicians retire, and team-based care, which relies more on PAs and nurses, becomes the standard.

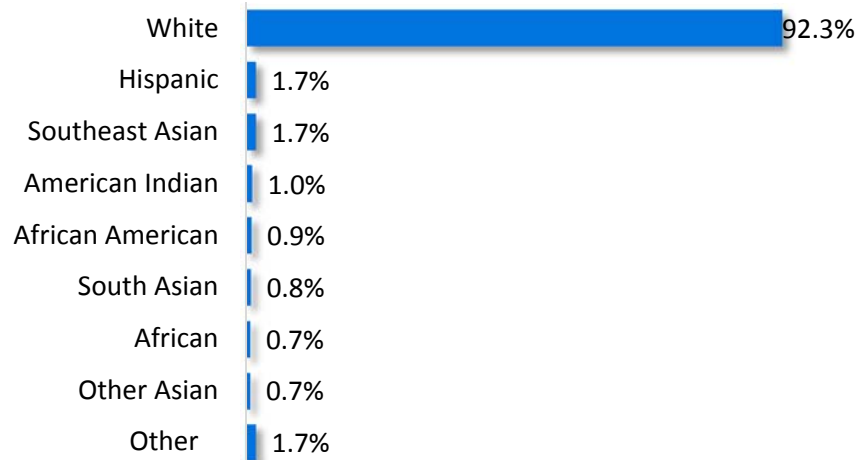
**Age of Minnesota Physician Assistants**



*Source: Minnesota Board of Medical Practice, July 2016. Analysis done by MDH. Percentages are based on all 2,422 Minnesota licensed physician assistants who provided valid birth dates to the Board.*

**Race and Ethnicity.** Typical of racial patterns among health care professionals, the majority (92.3 percent) of PAs indicated they were white. There were small shares of PAs identifying as Hispanic and/or Southeast Asian (both 1.7 percent) and even smaller shares of American Indian, African American, African or South Asian.

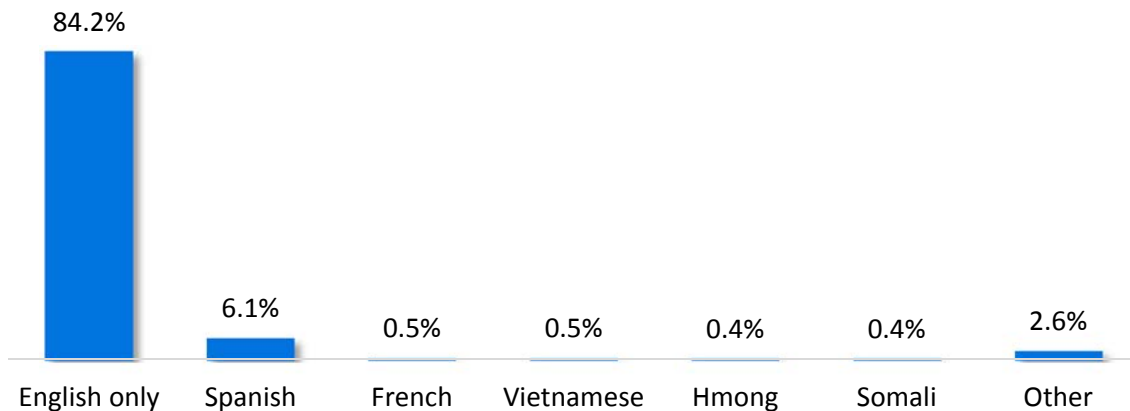
**Race of Minnesota Physician Assistants**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. Respondents could select as many races as applicable.

**Languages Spoken in Practice.** The majority of physician assistants—approximately 84 percent—spoke only English in their practices. The second most commonly spoken language was Spanish. Very small shares of physician assistants spoke other languages such as French, Vietnamese, Hmong or Somali with their patients.

**Languages Spoken by Minnesota Physician Assistants in their Practices**

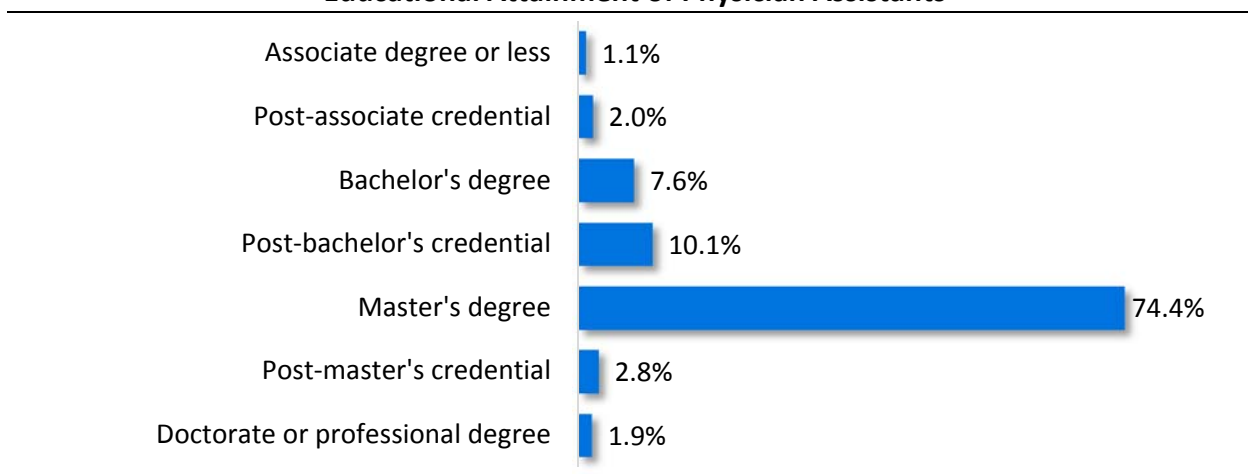


Source: MDH Physician Assistant Workforce Questionnaire, 2016. Respondents could select as many languages as applicable, but were instructed **not** to include languages spoken only through an interpreter.

## Education

**Educational Attainment.** Nearly three-quarters of all Minnesota's physician assistants have a master's degree. Younger cohorts of PAs are even more likely to have earned master's degrees (93 percent of those age 40 and below). When asked how likely they were to pursue additional training or credentials to advance in their field, only about 8 percent of PAs said they were "very likely" to enroll (6.1 percent) or were "currently enrolled" (1.4 percent) in a training program.

**Educational Attainment of Physician Assistants**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. Percentages are based on 2,001 valid responses.

**Minnesota Physician Assistant Graduates.** To date, less than one quarter of PAs earned their highest degree in Minnesota. An additional 27 percent of all PAs were educated in one of Minnesota's four border states—Iowa, North Dakota, South Dakota or Wisconsin. At least until now, Minnesota has imported far more PAs than it has been able to train to fill the demand. Within the last three years, however, two new PA programs have opened in Minnesota (Bethel University and Saint Catherine's University). In 2015, Minnesota produced 91 new graduates across its three PA programs. It is worth noting that the number of new graduates in 2015 matches almost exactly the 90 projected annual job openings for PAs in Minnesota.<sup>iv</sup> This suggests that going forward, Minnesota may be in a better position to grow its own PA workforce. All three programs are in the Twin Cities metropolitan area, however, potentially leaving gaps in the rural supply of PAs.

**Physician Assistant Program Graduates, by Year**

Region	Institution	2013	2014	2015
Twin Cities	Augsburg	25	25	28
Twin Cities	Bethel	0	0	31
Twin Cities	Saint Catherine's	0	24	32
<b>Total</b>		<b>25</b>	<b>49</b>	<b>91</b>

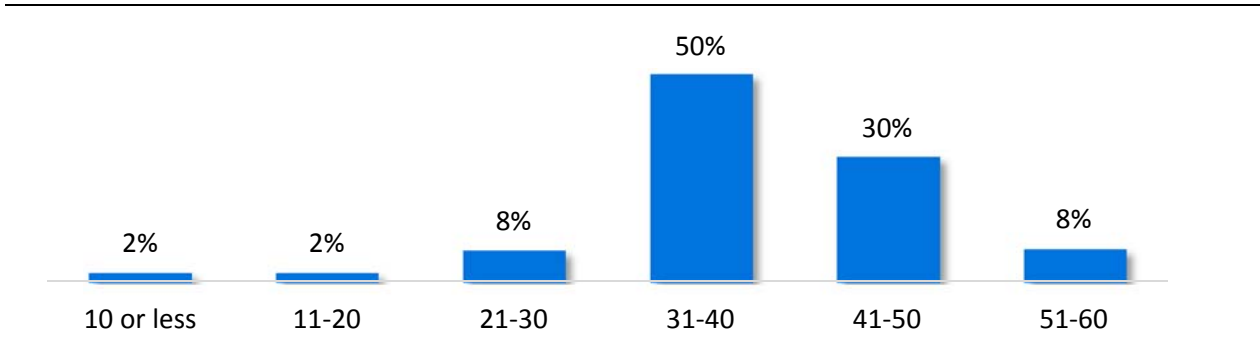
Source: LMIWise.org, citing National Center of Education Statistics.

## Employment, Hours and Future Plans

**Share of Physician Assistants Employed.** An estimated **98.1 percent** of Minnesota licensed physician assistants reported on the MDH questionnaire that they were “working in a paid or unpaid position related to [their] license.” This indicates that the vast majority of the potential PA workforce is being utilized.

**Hours Worked.** The median work week for physician assistants was 40 hours, and half of all PAs worked between 31 and 40 hours per week. A relatively small proportion of PAs (only 12 percent) worked 30 hours or fewer. (Likewise, 86.3 percent reported that they worked a full-time schedule—not shown below.) In addition, PAs spent the majority of their time caring for patients: 81 percent reported on the MDH survey that they spent more than three-quarters of their time providing direct patient care. This is another indication that PAs are being fully utilized professionally.

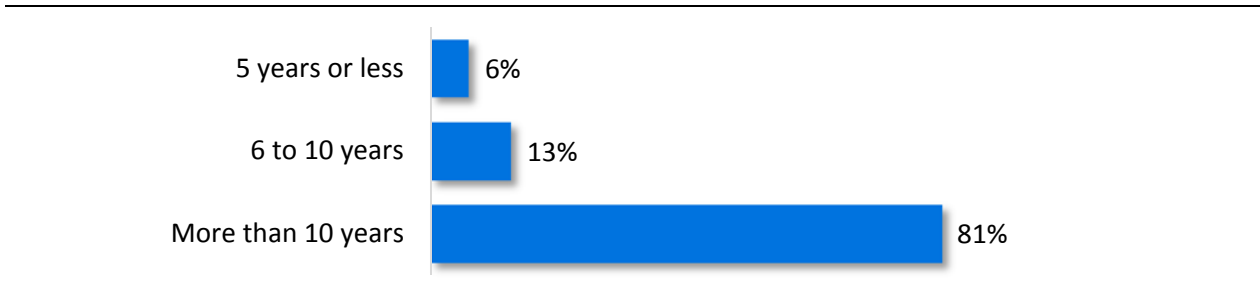
**Hours Worked in a Typical Week**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 2,178 valid survey responses.

**Future Plans.** Just 6 percent of Minnesota PAs indicated that they planned to leave the field within five years. Among that small sub-group, the majority (69 percent) indicated they would retire. Eight percent of this sub-group (or 11 total PAs) planned to leave the field due to burnout or dissatisfaction, and another eight percent said they planned to pursue training to advance in their current or a related profession. That 81 percent of PAs planned to remain in the field for more than ten more years reflects the stability (and relative youth) of this profession.

**“How long do you plan to continue practicing as a physician assistant in Minnesota?”**

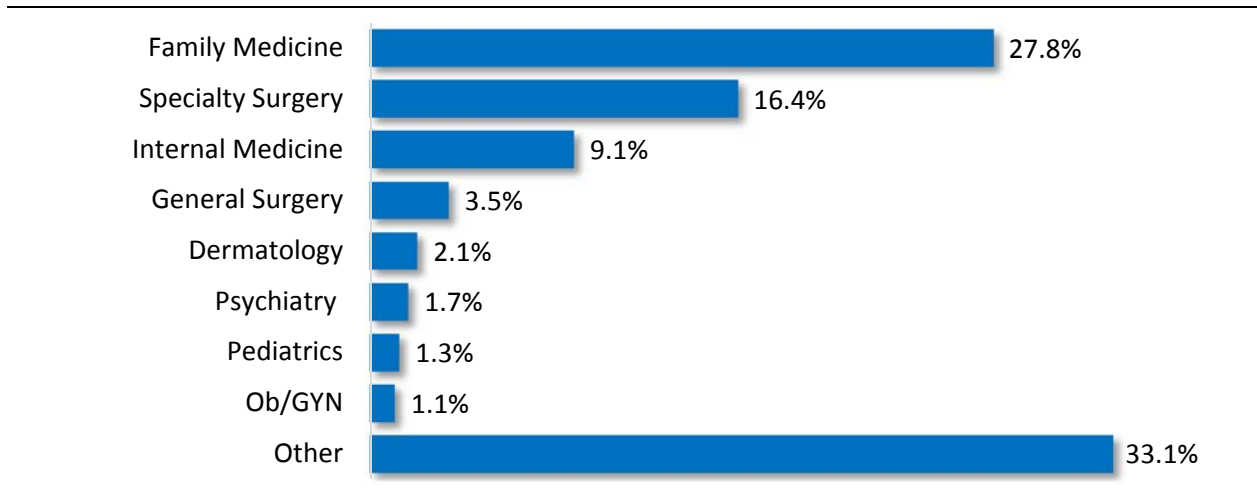


Source: MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 2,183 valid survey responses.

## Physician Assistants at Work

**Medical Specialties.** The questionnaire asked physician assistants to identify all the medical specialties they practiced. As shown below, the single most commonly reported specialty was family medicine, with just under 28 percent of PAs identifying this specialty. However, the largest share of PAs reported that they had another specialty not included in the selection list. Based on open-ended responses, PAs' most common "other" specialties were critical/urgent care/emergency medicine; cardiology; gastroenterology; orthopedics; and urology.

**Physician Assistants' Medical Specialties**



**Source:** MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 2,260 valid survey responses.

**Work Settings.** The questionnaire also asked PAs to identify their primary work setting.<sup>v</sup> Much like physicians, PAs frequently split their time between two, three, or even more work settings; the table below displays primary settings only. As shown, nearly all PAs work in either a traditional clinic or hospital setting.

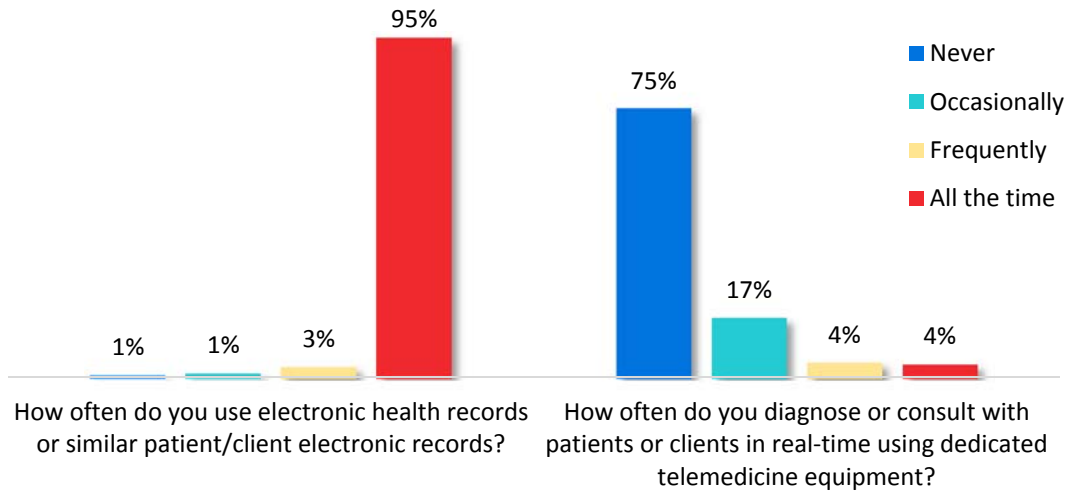
**Physician Assistants' Primary Work Settings**

Setting	Share of PAs Working in this Setting
Clinic/Professional Office/Health Center/Ambulatory Care	65.6%
Hospital	27.7%
Academic (Teaching/Research)	4.0%
Community/Faith-Based Organization	0.6%
Long-Term Care Facility	0.5%
Pharmacy	0.2%
State, County, or City Agency	0.2%
Other	0.9%

**Source:** MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 1,984 valid survey responses.

**Technology at Work: The Use of EHRs and Telemedicine Equipment.** The 2016 questionnaire included items about the use of both electronic health records (EHRs) and dedicated telemedicine equipment. The results showed that the vast majority of PAs use EHRs “all the time,” but most do not use telemedicine equipment regularly.

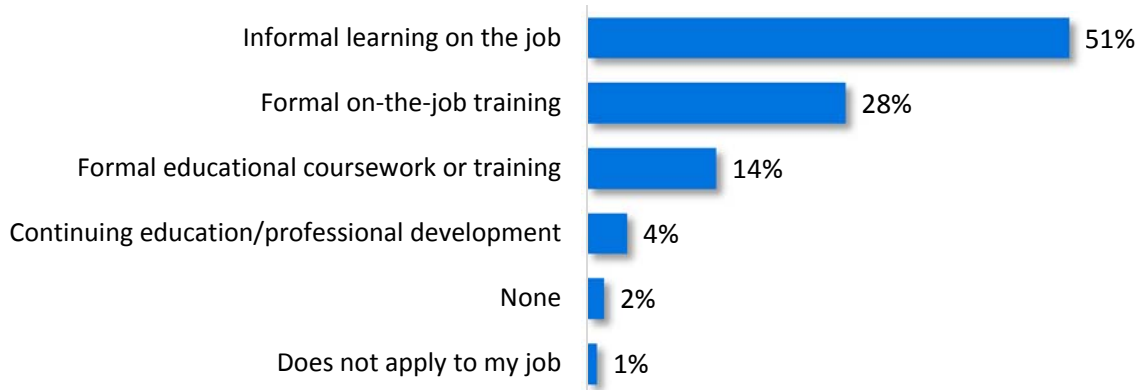
**PAs’ Use of Electronic Health Records and Telemedicine Equipment**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. The charts are based on 2,173 survey responses.

**Teamwork.** Health care providers increasingly work in multidisciplinary teams, prompting educators and health policymakers to ask how best to train providers to communicate and coordinate across professions. MDH included a question on its 2016 survey to shed light on these concerns. As shown below, nearly 80 percent of physician assistants reported that learning on the job (either informal or formal) *best* prepared them to work in multidisciplinary teams.

**“Which of the following work or educational experiences best prepared you to work in a multidisciplinary team when providing care?”**

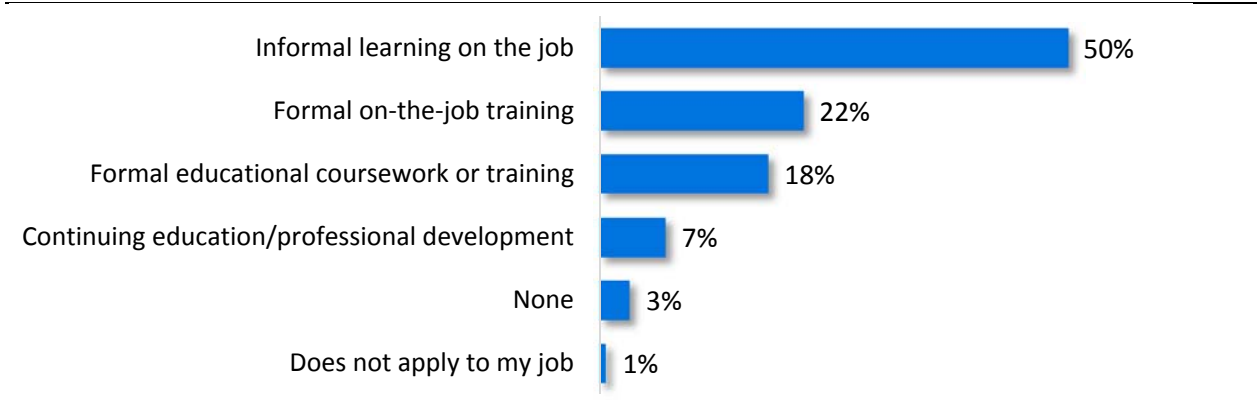


Source: MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 2,001 survey responses.



**Cultural Competence.** Minnesota health care professionals must navigate diverse racial, ethnic, and cultural norms in their work. This, too, raises questions about the best way to prepare the health care workforce to provide “culturally competent” care. As shown below, PAs again most commonly indicated that formal or informal learning *on the job* (as opposed to training or education) provided the best preparation for working with diverse groups of patients.

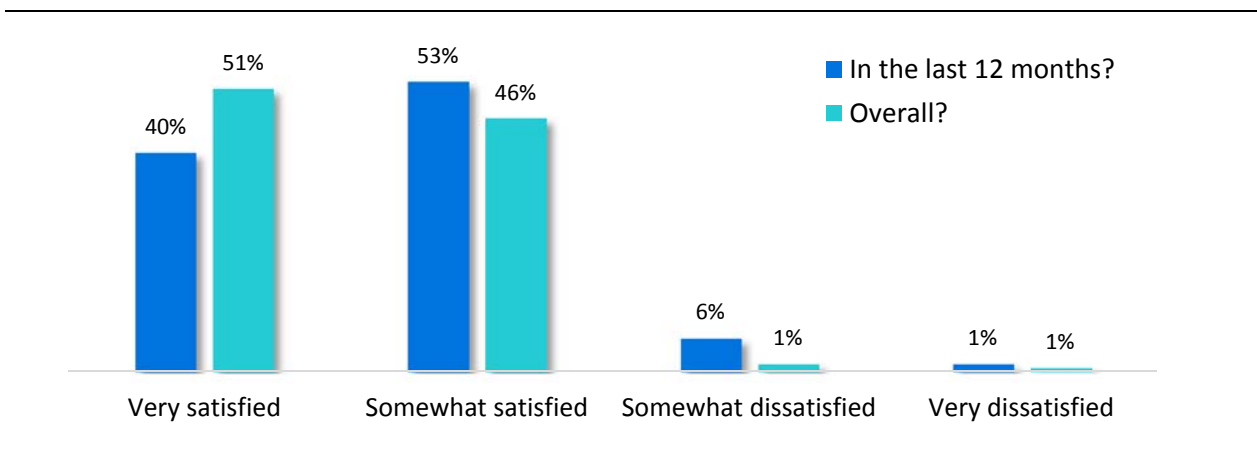
**“Which of the following work or educational experiences best prepared you to provide culturally competent care?”**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 2,009 survey responses.

**Work and Career Satisfaction.** The 2016 survey included questions on career satisfaction in the past 12 months and overall. As shown below, the majority of physician assistants indicated that they were either “somewhat satisfied” or “very satisfied,” both in the past 12 months and overall. PAs were slightly more likely to report being very satisfied with their career overall compared to the last 12 months—a trend typical among health care professionals for which work satisfaction data is available. This is consistent with national findings which suggest that the increase in administrative work—such as dealing with billing, insurance, and electronic medical records—has dampened work satisfaction among health care providers.

**“How satisfied have you been with your career...”**



Source: MDH Physician Assistant Workforce Questionnaire, 2016. The chart is based on 1,581 responses.

The survey also asked physician assistants to describe their greatest sources of professional satisfaction and dissatisfaction. It is clear from the responses that most health care professionals go into the field in order to work directly with patients and make a difference, and it is these activities which bring the greatest satisfaction. This is certainly true for physician assistants. Hundreds of PAs reported how important it was to them to provide direct care, with many noting the satisfaction that comes from developing good relationships with patients and high levels of patient satisfaction. Many PAs also mentioned that they enjoyed having autonomy at work, and were able to maintain work-life balance.

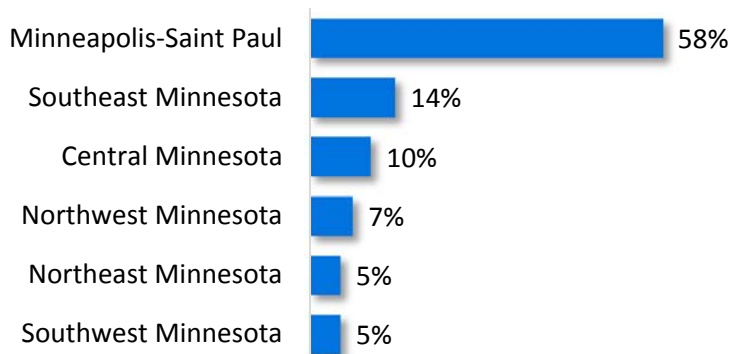
Regarding professional dissatisfaction, the most common responses among PAs involved sentiments around the amount of administrative, documentation, and “paperwork” their jobs entailed—specifically, dealing with insurance rules (including pre-authorizations) and electronic medical records. PAs felt these activities diverted time from patient care. A smaller number of PAs expressed dissatisfaction with work hours and/or pay, indicating that they did not like working on weekends and/or found it difficult to pay back their student loans on their current salary. A relatively small handful of PAs also indicated that they felt there was a lack of understanding about the nature of the profession.

## Geographic Distribution

To understand accessibility of physician assistant services around the state, the next two charts provide two different views of the geographic distribution of PAs.<sup>vi</sup> These analyses are based on geocoded practice addresses supplied to the Board of Medical Practice by PAs when they renew their licenses.<sup>vii</sup>

**Distribution by Region.** The first chart below shows the distribution of PAs across the six planning areas around Minnesota. As shown, slightly over half of all PAs work in the Twin Cities metro area, with another 14 percent in the Southeast region, reflecting the substantial pull of the Mayo Clinic in Rochester. The remainder of the state is home to significantly smaller shares of PAs. For reference, the Twin Cities metro area is home to approximately 54 percent, and the southeast region approximately 9 percent of all Minnesotans. This suggests that the location of physician assistants—and therefore the accessibility of their services—is slightly more heavily concentrated in the Twin Cities and Rochester areas compared to the resident population in those areas.

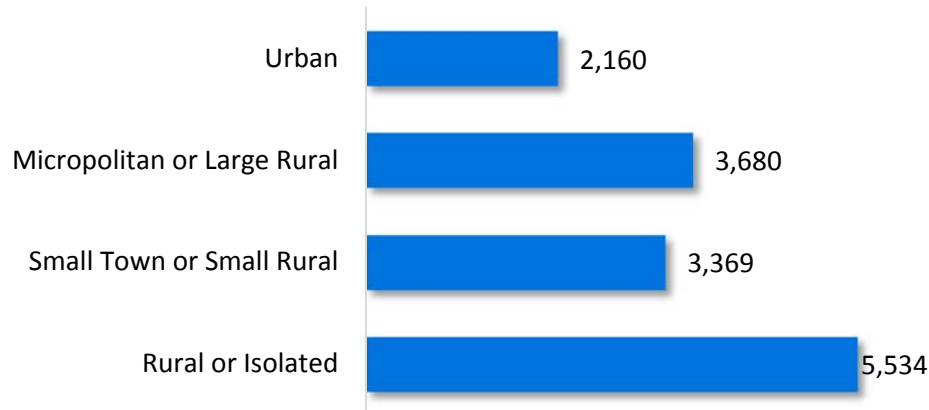
**Physician Assistants by Minnesota Region**



*Source: Minnesota Department of Health (MDH) geocoding and analysis of July, 2016 Minnesota Board of Medical Practice business address data. Percentages above are based on 2,151 valid Minnesota addresses.*

**Distribution across urban and rural areas.** The chart below provides another view of the geographic distribution of physician assistants, showing the size of the population for every one PA in urban, large rural, small rural, and isolated rural areas.<sup>viii</sup> As shown, there are 2,160 people for every one PA in urban areas of Minnesota, compared to over twice that in many of the most rural areas of the state. This pattern is typical of other health care professions, and reflects the relative inaccessibility of care in sparsely populated areas of Minnesota.

**Minnesota Population-to-Physician Assistant Ratio**



Source: Minnesota Department of Health (MDH) analysis of July, 2016 Minnesota Board of Medical Practice address data. Percentages above are based on 2,151 valid Minnesota addresses.

Visit our website at <http://www.health.state.mn.us/divs/orhpc/workforce/reports.html> to learn more about the Minnesota healthcare workforce. County-level data for this profession is available at <http://www.health.state.mn.us/divs/orhpc/workforce/database/>.

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<sup>i</sup> The Minnesota Department of Health (MDH), in cooperation with the Minnesota Board of Medical Practice, collected information on demographics, education, career and future plans of physician assistants during a workforce questionnaire in 2016. Unless noted, all data are based on information collected from that survey. The response rate for the 2016 PA survey was 98.6 percent.

<sup>ii</sup> Description comes from the Occupational Outlook Handbook (<http://www.bls.gov/ooh/healthcare/physician-assistants.htm>).

<sup>iii</sup> Of the total licensed professionals, 271 listed a practice address that was either outside Minnesota or otherwise could not be geocoded, and based on the survey responses we know that 1.9% of the total licensees were not working as an PA. Thus, not all actively licensed PAs are part of the Minnesota workforce.

<sup>iv</sup> This is based on 10-year employment projections from the Minnesota Department of Employment and Economic Development (DEED). DEED projects a total of 900 openings for physician assistants in Minnesota across the ten-year period of 2014 to 2024. This figure includes openings due to employment growth and replacement of workers who leave the profession.

<sup>v</sup> Half of PAs reported working in one setting; 24.8 reported splitting their time across two settings, and another 25.1 said they worked at three or more different settings. For the purposes of the analysis in this section, we present data only on the setting physician assistants reported as their "primary" setting. An analysis of PAs work settings indicates that the types of settings in which PAs worked did not differ depending on whether they were primary or secondary.

<sup>vi</sup> Visit our website at <http://www.health.state.mn.us/divs/orhpc/workforce/method.html> to learn more about how the two sets of geographic regions in this report are defined.

<sup>vii</sup> Addresses are generally practice locations, but a very small number of physician assistants may have reported home addresses. Additionally, approximately 11 percent reported a practice address to the Board that could not be geocoded because it was outside Minnesota or was a post office box.