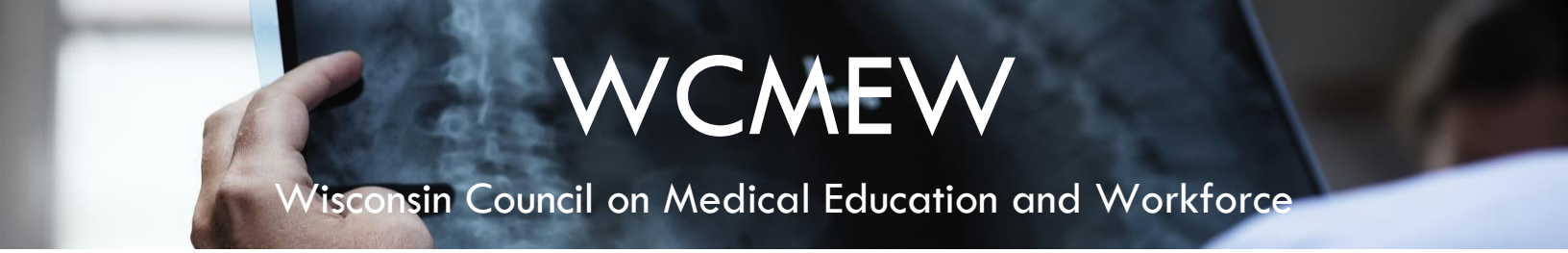


Mapping Our Way to Success: Wisconsin's Physician Workforce

2018 Healthcare Workforce Report – Issue Brief

This report is the latest in a series of publications focusing on the current and projected supply and demand for physician services in Wisconsin produced by the Wisconsin Council on Medical Education and Workforce (WCMEW). WCMEW's objectives are to assess Wisconsin's physician resources both today and in the future, develop and evaluate initiatives directed at ensuring the adequacy of those resources, and recommend solutions where appropriate.

Progress New education and training programs have shown positive results in Primary Care Physician (PCP) expansion and retention across Wisconsin, leveraging noteworthy innovations in clinical training and in-state retention strategies. Initiatives such as state investment in Graduate Medical Education residencies and Medical College of Wisconsin expansions are projected to produce over 450 new physicians by year 2035. However, demand for PCPs, driven by an expanding and aging population, will outpace projected supply. To date, a largely uncoordinated approach to education and training has hampered a comprehensive solution to the impending problem of workforce shortages. Further, 40% of the current PCP workforce is expected to retire by 2035, a challenge which is compounded by other major demographic shifts. Provider gaps will be distributed unevenly across the state – with most regions experiencing significant deficits in future PCPs. Based on these conclusions, Wisconsin cannot expect to fill the demand for primary care through the physician workforce alone.

> ***34.3% of all Wisconsin physicians are over the age of 55 – and 40% of the current PCP workforce is expected to retire by 2035***

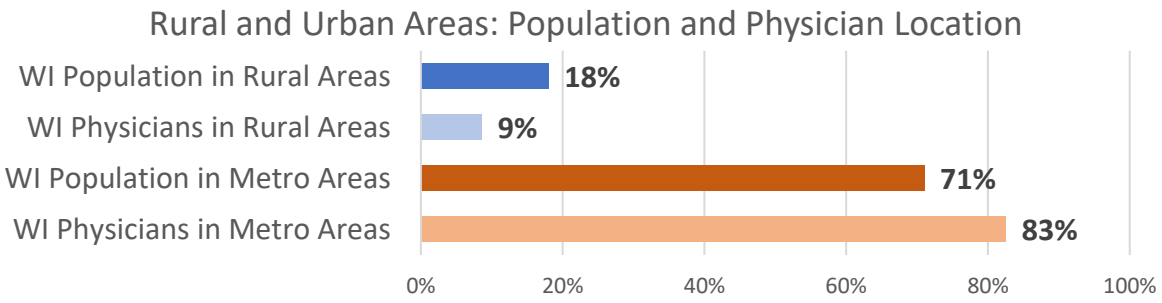
Report Goals and New Approach WCMEW's focus in the report is assessing regional differences for projected supply and demand of care across Wisconsin, highlighting maldistribution issues. The geographic units used for analysis of primary care are Hospital Service Areas (HSAs), which are local health care markets for hospital care, first defined in the Dartmouth Atlas.[1] Whereas WCMEW's 2016 report provided a statewide analysis of projected physicians needed based on various care delivery scenarios, this report does not make any attempt to analyze changing delivery scenarios.

Analysis The full report provides a profile of active Wisconsin physicians using data from the Wisconsin Medical Society (WMS). Projections for the supply of PCPs into the year 2035 are made by analyzing additional supply of physicians from medical schools, Graduate Medical Education (GME) training, and recruitment. Physicians leaving practice due to dissatisfaction, relocation, or retirement are then included in estimates. These estimates also include lifestyle changes, accounting for a trend in fewer hours worked by younger

[1] The Dartmouth Atlas is initiative of the Dartmouth Medical School conducting research into health care cost and utilization issues nationwide.

physicians compared to those in older age cohorts.[2] Demand projections are made by applying statewide averages for physician service utilization from WHIO, the Wisconsin Health Information Organization. WHIO collects paid insurance claims information from millions of residents across the state, which were used as a proxy for demand for physician services.

Findings Data indicates a mismatch between the total current physician and population location as shown in the graph below; physicians are disproportionally located in metropolitan areas.



Statewide, the PCP workforce is projected to increase by 3.8%, but the projected increase from medical schools, GME programs, and turnover are largely offset by retirements of current physicians and lifestyle changes of young physicians. Overall, demand is projected to increase by 20.9%, although there is wide variance among HSAs, ranging from 3.9% to 39.7%. Total population increases, together with an aging population, are drivers of these increases in demand. Supply and demand projections are compared in the full report, showing surpluses or deficits for each HSA.

> ***Overall, demand for primary care is projected to increase by approximately 21%, but wide variance is evident, ranging from a 4% to 40% projected increase. Across Wisconsin regions, PCP projections range up to a deficit of 93.7% in the year 2035.***

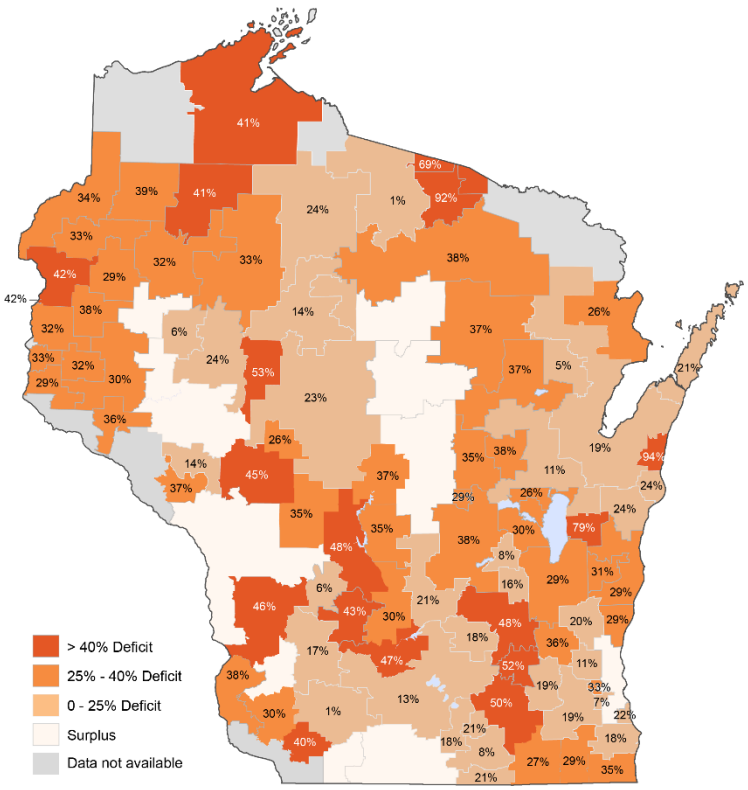
Statewide, there is a projected shortfall of 745 FTE PCPs, or 14% compared to overall supply. Wide variance among HSAs is evident, ranging up to a deficit of 93.7%. While percentage surplus or deficit provides one indicator of physicians needed for each HSA, absolute figures for total PCP deficits highlight projected population growth in cities. Rural communities are expected to see the greatest percentage deficits, whereas metro areas can expect the greatest total FTE deficits.

Rural areas are expected to experience the highest percentage PCP deficits, but those regions may be adequately served by only a few additional PCPs for relatively small populations. Rural areas traditionally have fewer resources at their disposal to recruit and retain physicians, and will need to continue seeking creative approaches to best use their scarce physician resources.[3] Urban and suburban HSAs facing shortfalls will have more resources to recruit or otherwise produce sufficient PCPs to meet their needs, but will also need to recruit and retain the largest physician workforce, as would be expected for Wisconsin's largest cities.

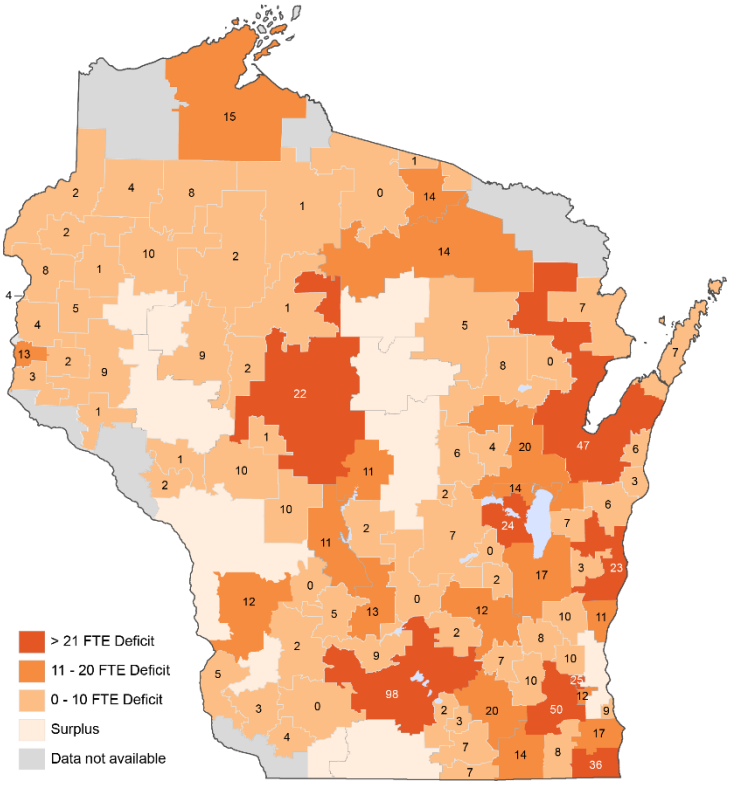
[2] *The Complexities of Physician Supply and Demand, 2018 Update*. Association of American Medical Colleges, 2018.
[3] *Keeping Physicians in Rural Practice*. American Academy of Family Physicians, 2014.

The following maps illustrate areas with highest projected unmet need in 2035, where dark orange indicates greatest unmet need – by either percentage PCP deficit in Map 1, or full-time equivalent (FTE) physician deficit in Map 2 – measured in physicians needed to meet primary care demand.

Map 1: Projected Physician Deficits, Percent of All Unmet Need (Year 2035), by Hospital Service



Map 2: Projected FTE Deficits (Year 2035), by Hospital Service Area



Insights from Health Systems and Educators Conversations with health systems and educators across Wisconsin helped expand on WCMEW's data findings – broadening the conversation beyond the physician workforce. Leaders expressed various challenges and successes in recruitment and retention of providers in rural communities, and a wide range of experiences incorporating Advanced Practice Clinicians (APCs) into patient care. Leaders shared their insights regarding:

- Utilizing team-based care initiatives and integrating APCs while navigating complex regulatory policies;
- Value of proactive workforce planning that can help systems prepare for growth and changing care delivery patters;
- Concerns regarding the need for greater integration of students into clinical settings, including resources needed for coordination, ensuring high-quality student experiences amidst growing competition for clinical sites.

Workforce Recommendation: Continued Emphasis on Infrastructure and Long-Term Planning Proactive, data-informed decision-making is critical at health systems, government levels, and educational institutions. Several programs are showing early results that warrant continued investment.

At the same time, these programs must be responsive to emerging issues in underserved areas. Further, a longer-term perspective is needed in workforce development.

1. **Continue to fund programs that invest in infrastructure development and training**. Target current and projected underserved geographic areas to prioritize workforce development. Infrastructure programs must also be flexible to emerging demands for financing of housing, travel, and other needs.
2. **Expand and increase coordination of clinical training sites.** Efforts must be made to ensure an adequate number of clinical training sites, including the necessary resources such as faculty and preceptors. In addition, systems and procedures should be implemented to better coordinate clinical placements to ensure that these limited resources are appropriately utilized.
3. **Expand rural and underserved programs by recruiting students likely to stay.** Programs with a rural or underserved focus should continue to prioritize recruiting students likely to dedicate their practice to underserved areas. Educational institutions must commit resources to assessment of application and admissions processes to ensure policies support desired outcomes.
4. **Build workforce into strategic planning processes**. Workforce priorities should be integrated into all elements of strategic planning to enable long-term workforce viability and investment. Share best practices regarding what is working well regarding planning, and where improvement is needed.

Workforce Recommendation: Collect and Leverage Data for Decision-Making To accurately assess workforce trends and implications across Wisconsin, more data is needed in several areas to ensure relevant and timely evaluation of workforce issues.

5. **Develop comprehensive APC workforce data.** Understanding the current demographics and geographic distribution of APCs is critical to assessing care models and implications. WCMEW should create a database to facilitate the modeling of future supply and demand, assessing distribution trends.
6. **Best practices and outcomes for team-based care must be identified.** Outcomes may include patient health, cost-saving, provider burnout level, and other indicators. Effective models must be shared across care settings, geographic regions, and specialties to ensure that all members of the workforce are being most effectively utilized.
7. **Track data longitudinally to ensure accurate analysis of program reforms and expansions.** New medical school expansions and GME funding have contributed to significant advances of provider training across Wisconsin. However, sufficient data is not available to track long-term outcomes. Assessing rationales for relocating or leaving practice must also be tracked to evaluate decision-making processes and ensure incentives align with desired outcomes.
8. **Develop methods to assess distributions of populations and providers across regions that most accurately reflect patient access to care, given current imperfect current geographic units.** This report utilizes Health Service Areas for patient and provider data, but using transportation patterns or other methods may more accurately reflect real care delivery trends.
9. **Explore and identify which providers in Wisconsin will be most needed for the state's aging population.** Today, priority for grant funding and other development projects is given for primary care, but tomorrow's patient population may require providers such as gerontologists to meet the needs of an aging population.

With questions or to access the full report, contact:

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