

Michigan Healthcare Workforce Index



Ranking the Health of Michigan's
Healthcare Occupations

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Executive Summary

The Michigan Health Council (MHC) was awarded a grant by the Michigan Health Endowment Fund to create the Solutions Net. The Net's work includes creating a statewide healthcare workforce plan and identifying action steps to implement the plan. As a first step in this process, MHC collected data regarding the current and projected statewide healthcare workforce shortages. The resulting **Michigan Healthcare Workforce Index (MHWI)** is the product of those research efforts – a first-of-its-kind, comprehensive index that assesses the “health” of 36 healthcare occupations in Michigan. Combining data from Lightcast, the Association of American Medical Colleges (AAMC) and the Accreditation Council for Graduate Medical Education (ACGME) – MHC was able to systematically rank each healthcare occupation on a variety of inputs and make comparisons across occupations. **The purpose of ranking and comparing occupations is not to conclude that some occupations are better than others. In a political world of finite resources, MHC's goal is to help decision-makers quickly understand the current state of individual occupations and the collective healthcare workforce across a range of factors.** MHC wants decision-makers to use the MHWI as one of many tools to help inform how to invest limited time and resources for maximum impact. While no social science methodology is perfect, MHC believes that the insights and analysis gleaned from the MHWI will spark informed discussions about the best ways to build Michigan's healthcare workforce capacity.

Key Findings:

- Nearly all occupations analyzed are projected to experience workforce shortages between now and 2032.
- Those occupations that are not projected to experience statewide shortages still have distribution problems – many occupations are lacking presences in rural areas.
- The “healthiest” occupation over the next ten years is Nurse Practitioners.
- The “unhealthiest” occupation over the next ten years is Dental Assistants.
- Occupations with fewer education requirements beyond a high school diploma struggle to break out of the bottom third of the Index due to low wages.
- Mental health occupations – ranging from Community Health Workers to Psychologists – face immense shortages and competitive wage challenges that raise concerns about the health of these occupations over the next decade.

About MHC Insight

Michigan Health Council (MHC) is a solutions-oriented nonprofit with a seven-decade track record of developing sustainable programming for healthcare employers, educators, and professionals. A partner in building healthcare workforce capacity, MHC is the force behind MHC Insight – Michigan’s preeminent resource for data, analysis, and labor market intelligence on critical issues facing Michigan’s healthcare workforce.

MHC Insight collects and disseminates healthcare workforce data and research to support stakeholders’ efforts to develop systems-level approaches to building healthcare workforce capacity. MHC Insight can help organizations address their specific issues but prioritizes solutions to societal needs that cannot be solved in silos – like bolstering access to care, reducing health inequities, and increasing Michigan’s healthcare workforce diversity. The first step in this process is creating a shared understanding of what current data tells us about our workforce.

About the Solutions Net

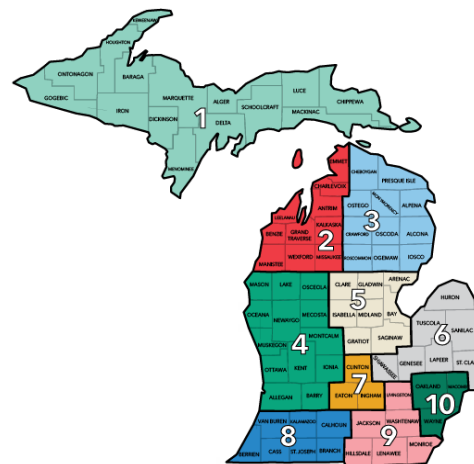
MHC Insight is the force behind the Solutions Net, a constellation of products and services that catalyze data on healthcare workforce gaps into actionable talent solutions accessible to organizations statewide. Solutions Net deliverables include: workforce gap analysis, plan to address prioritized gaps, and briefing documents helping stakeholders execute the plan.

Report Regions

Michigan is grouped geographically into 10 prosperity regions. Prosperity regions were created in 2013 to encourage local private, public and non-profit partners from each region to develop a local economic vision. Additionally, state agencies have organized their services around these new geographic boundaries to create a better structure for collaboration.

This report presents data in the Appendix by prosperity region.

Figure 1: Report Regions



Methodology

This report highlights labor market information at a statewide and regional level for Michigan. A full healthcare workforce overview is provided within, identifying key components of the labor market including projections, wage, and supply data. MHC analyzes labor market information at the occupation level with 68 customized occupations, using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. For this report, MHC collapsed several occupations with similar educational requirements (such as physicians, or behavioral healthcare occupations) into groups to produce a clearer picture of the supply of professionals for these occupations. These occupation groups combine data for occupations with similar skillsets, educational attainment, and experience requirements.

Data Sources

The MHWI utilized three different quantitative data sources, plus several qualitative data reviews detailed below.

- **Lightcast:** Lightcast gathers and integrates economic, labor market, demographic, education, profile, and job posting data from dozens of government and private-sector sources, creating a comprehensive and current dataset that includes both published data and detailed estimates with full United States coverage. Occupation data presents employment and wage information, categorized by worker type – Registered Nurses, Welders, Web Developers, etc. Occupation job counts are generated by taking industry job counts from the Bureau of Labor Statistics' (BLS) Quarterly Census of Employment and Wages and combining them with staffing patterns from the BLS's Occupational Employment Statistics (OES) dataset. Staffing patterns are unique to industries and show the percentage breakout of each industry into its component occupations. Lightcast regionalizes OES staffing patterns, creating location-specific staffing patterns that take into account the region's particular industry mix. The result is tailored staffing patterns that generate location-specific occupation employment data.

Basic occupation earnings data come from OES as well. Lightcast unsuppresses earnings data where necessary and models the Metropolitan Statistical Area (MSA)-level earnings native to OES down to the county level. Although OES is not published as a time series, Lightcast has developed one using historical OES data. This time series offers several benefits, including historical occupation earnings back to 2005, reduced volatility between years of published OES data, and the ability to use historical years of OES to unsuppress latest year OES data.

Like industry employment data, occupation employment data goes back to 2001 and is also projected 10 years into the future. Projections are generated by applying projected staffing patterns to Lightcast's projected industry employment data.

Finally, Lightcast provides data on college enrollments and graduates, as reported in the National Center for Education Statistics' (NCES) Integrated Post-Secondary Education Data System (IPEDS) dataset. This includes gender and race/ethnicity data for enrollees

by school; graduates by school, Classification of Instructional Program (CIP) code, award level, gender, and race/ethnicity; and data on distance completions, as well as information on tuition and other student fees.

- **Association of American Medical Colleges (AAMC):** AAMC data from the 2021 Michigan workforce profile residents was utilized to determine a physician retention rate in Michigan. In 2020, the residency retention rate of physicians in Michigan was 45 percent.
- **Accreditation Council for Graduate Medical Education (ACGME):** Data from the 2021-2022 ACGME Data Resource Book were utilized to gain a better understanding of the residency and medical education retention rates in Michigan.

Index Creation

The MHWI was created using a rankings methodology, combining several quantitative inputs. To start, occupations with similar education requirements were grouped together to capture a more accurate picture of their supply. While Lightcast does have specific projections and wage data for physician subspecialties, these subspecialties are different from the descriptions in the ACGME Data Resource Book. Moreover, the residency retention rate provided by AAMC applies across physician subspecialties, but it is possible that certain subspecialties have higher or lower retention rates than that of the overall occupation. As a result, for clarity of analysis, it was more cohesive to collapse the 17 physician subspecialties provided by Lightcast into one larger Physician group.¹

Next, many behavioral health occupations require a Master of Social Work (MSW). Because there is no way to know what happens to an individual once they receive their MSW (e.g., do they begin practicing, decide to return to school for another degree, become a substance abuse counselor, etc.?) it was necessary to collapse all occupations requiring an MSW – Marriage and Family Therapists; Healthcare Social Workers; Rehabilitation Counselors; Mental Health and Substance Abuse Social Workers; and Substance Abuse, Behavioral Disorder, and Mental Health Counselors – into one group for analysis. This is separate from Social Workers, All Other and Child, Family and School Social Workers, both of which require a Bachelor of Social Work (BSW) and were similarly grouped together. This is also true of Psychologists – a group that combines Clinical and Counseling Psychologists, School Psychologists and All Other Psychologists (however, Industrial Organizational Psychologists were dropped from the Index because the occupation was too small for analysis).

Finally, three dentistry occupations were also combined for similar educational and ease of analysis reasons – General Dentists, Orthodontists, Prosthodontists and All Other Specialty Dentists. Oral and Maxillofacial Surgeons were dropped because they were a subspecialty for which education data could not be pulled. This was also true of Orderlies. As a result, MHC's 65 healthcare occupations became 36 for the purposes of this index.

Once the occupations were condensed, data for each occupation (or group of occupations) was pulled from Lightcast. The input variables included a measure of current

¹ Anesthesiologists, Cardiologists, Dermatologists, Emergency Medicine Physicians, Family Medicine Physicians, General Internal Medicine Physicians, Neurologists, OBGYNs, Ophthalmologists (Except Pediatric), Orthopedic Surgeons (Except Pediatric), General Pediatricians, Pediatric Surgeons, Pathologists, Psychiatrists, Radiologists, All Other Surgeons, All Other Physicians

employment (2022 jobs), projected employment (2032 jobs), 2022-2032 openings, 2021 median wage, 2011 median wage and 2022 turnover. In addition, education supply data was pulled from IPEDS, with additional qualitative confirmation occurring through the review of each educational institution's website for up-to-date program specifics.

These input variables were then combined to create four final ranking variables – Growth, Shortage, Wage, and Turnover. The current employment and projected employment numbers were used in order to calculate by what percentage the occupation was expected to grow over the next ten years (Growth). The occupation's 2021 median wage and 2011 median wage were combined to determine by what percentage the occupation's wage had increased (or decreased) over ten years (Wage).

Turnover remained in its natural form – a measure that is calculated by comparing total separations to total jobs (separations divided by jobs). A separation is recorded when an individual's Social Security Number that appeared on a company's payroll is no longer present. By comparing separations to the total number of jobs in an occupation, Lightcast can benchmark the level of movement taking place in that occupation (Turnover).

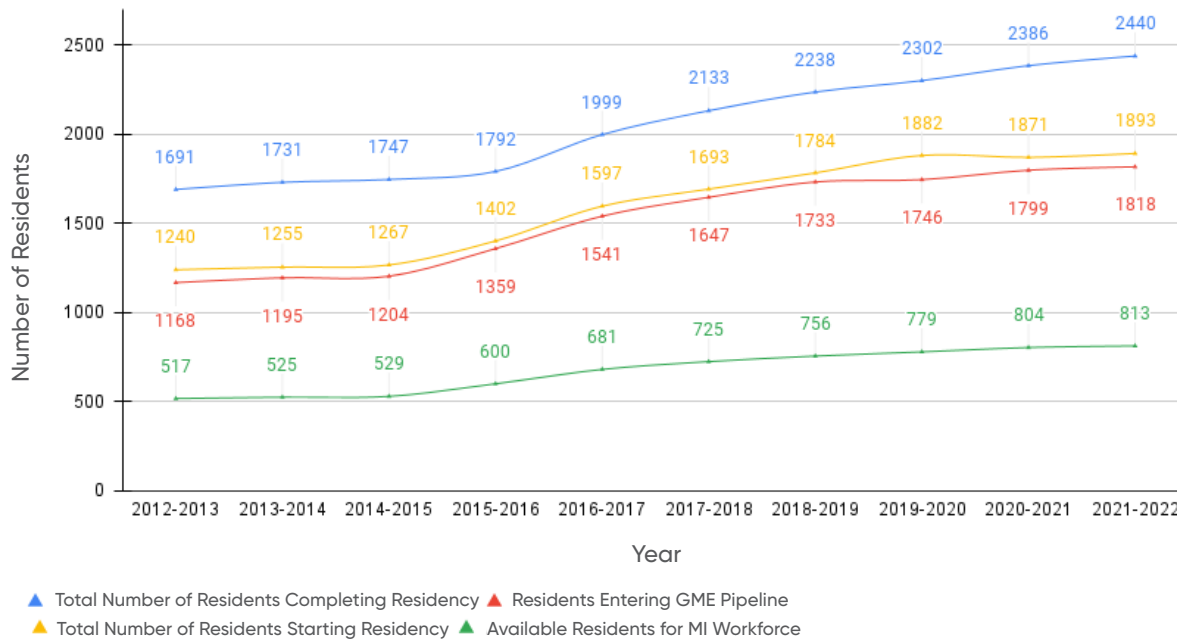
Finally, by comparing how many openings an occupation is expected to have over the next ten years, to the educational supply over ten years, an estimate for shortages or surpluses can be calculated. The Lightcast Openings figure estimates the change in growth and replacement jobs (Growth + Replacements = Openings). Growth captures the change in the total number of workers employed in an occupation, while replacement jobs are estimates of workers permanently leaving an occupation and needing to be replaced by new hires. A combination of both numbers indicates total Openings for the time frame. Terminal educational completions (i.e., final degree required) from the most recent IPEDS year was multiplied by ten in order to match the ten-year openings numbers from Lightcast, and then a shortage ratio was calculated by looking at the absolute shortage or surplus of the occupation (Openings – Completions) over the expected size of the occupation in 2032 (Openings - Completions / 2032 Jobs). This was the final ranking variable, Shortage.

The Shortage variable was further modified for Physicians, since the number of individuals completing medical school in a state is not a good representation of the physician supply for the state. Using ACGME data for Michigan, 1,818 residents entered the GME pipeline in 2021-2022. By removing those residents who do not complete their education, and applying a residency retention rate of 45 percent from AAMC, this resulted in 813 residents available for the Michigan workforce per year. Note that the number used was those entering the residency education process in order to account for the various lengths of residency that many subspecialties require.

To verify this number, MHC completed this exercise going back ten years, in order to look at the stability of residency classes in Michigan. The results are plotted in [figure 2](#).²

² The number of residents completing and entering will never be equivalent since some physician subspecialties have longer residencies than others.

Figure 2: Medical Residency Trends



While the size of the residency classes in Michigan has increased since 2012, the number of medical schools in Michigan has also increased in this time frame, resulting in more residency slots needing to be available, and thus accounting for the increase in residency classes around the state. It is also important to note that several other occupations offer the option for residency – Dentists, Pharmacists, Nurse Practitioners and Physician Assistants – but there is no data tracking mechanism comparable to that of Physicians. As a result, MHWI shortage figures for these occupations are most likely a best-case scenario, since it is probable that individuals may be relocating to other states in order to pursue job opportunities either pre- or post-residency.

Each occupation was then ranked from 1 to 36 on each ranking variable, i.e., if Dentists had the lowest Turnover, then it was ranked as the number one occupation on Turnover. However, Dentists also had a middle-of-the-pack Growth number, resulting in Dentists ranking 28th on that variable. Across the board, in each variable, a lower number means the occupation is well-positioned on that variable, while a higher number means the occupation is faring poorly compared to other occupations. These rankings were then summed by occupation (e.g., Dentists – #28 Growth, #2 Shortage, #11 Wage, #1 Turnover = 42), and re-ranked so that occupations with the smallest overall sum were highest (or “healthiest”) on the list.

Each MHWI variable received equal weight during the summation procedure; however, many versions of this methodology were tested to determine if weighting one variable more (e.g., a 35 percent weight applied to Shortage) would result in a different version of the results. No matter how many versions were tested, each occupation tended to remain in the third of the list in which it was placed without using any weights.

Table 1: Michigan Healthcare Workforce Index

Occupation	Rank Growth	Rank Shortage	Rank Wage	Rank Turnover	Overall Rank
Nurse Practitioners	1	4	3	13	1
Optometrists	9	12	13	2	2
Dentists, General	28	2	11	1	3
Nurse Anesthetists	18	20	1	8	4
Radiation Therapists	24	1	23	4	5
Occupational Therapists	11	3	18	21	6
Physician Assistants	4	15	17	19	7
Diagnostic Medical Sonographers	13	9	31	7	8
Nuclear Medicine Technologists	26	17	14	5	9
Respiratory Therapists	14	16	25	9	10
Radiologic Technologists and Technicians	31	5	19	10	11
Physician Group	33	8	22	3	12
Physical Therapists	8	13	32	12	13
Nurse Midwives	23	25	2	16	14
Paramedics	15	26	4	20	15
Licensed Practical and Licensed Vocational Nurses	22	6	12	28	16
Registered Nurses	27	7	20	17	17
Community Health Workers	6	21	16	29	18
Magnetic Resonance Imaging Technologists	30	28	5	11	19
Occupations Requiring an MSW	7	23	21	26	20
Pharmacists	34	11	27	6	21
Cardiovascular Technologists and Technicians	29	22	15	15	22
Medical Assistants	12	31	9	30	23
Home Health and Personal Care Aides	5	36	7	35	24
Surgical Technologists	32	10	26	18	25
Psychologists	16	27	34	14	26
Phlebotomists	17	34	8	32	27
Occupational Therapy Assistants	2	32	24	34	28
Physical Therapist Assistants	3	29	28	33	29
Child, Family, and School Social Workers	19	14	35	25	30
Clinical Lab Technologists and Technicians	25	18	29	22	31
Emergency Medical Technicians	10	24	36	24	32
Dental Hygienists	21	19	33	23	33
Pharmacy Technicians	36	30	10	27	34
Nursing Assistants	35	35	6	36	35
Dental Assistants	20	33	30	31	36

MHWI Results

The “healthiest” occupation over the next ten years is Nurse Practitioners (NPs). NPs ranked first in Growth, top five in Shortage and Wage, and thirteenth in Turnover. Optometrists ranked second overall due to their ranking in the top 13 across all four variables. Rounding out the overall top five are the three other occupations that ranked first in a particular category – Dentists in Turnover, Nurse Anesthetists in Wage and Radiation Therapists in Shortage. Dental Assistants are the “unhealthiest” occupation, with low rankings (over 30) in three of the four categories. The occupations that ranked last in each category – EMTs in Wage, Pharmacy Technicians in Growth, Nursing Assistants in Turnover and Home Health Care and Personal Aides in Shortage, also all fall towards the bottom, with the first three in the bottom five ranked occupations.

Other occupations that fall in the bottom half of the list include all behavioral health occupations – those requiring an MSW, a BSW, or Psychologists. Moreover, the bottom half of the list is also populated with occupations that require very little additional education beyond high school – several technicians, Medical Assistants, Phlebotomists, various therapy assistants, Dental Hygienists, Pharmacy Technicians, and Nursing Assistants.

Only three occupations are projected to have a surplus between 2022 and 2032 – Dentists, Radiation Therapists and Occupational Therapists. All three occupations rank in the top ten. However, even with a surplus, these occupations can be poorly distributed across Michigan. For example, it is harder to gain access to a dentist in some areas than others. In 21 counties in Michigan, there are fewer than 3.5 dentists per 10,000 people, and in another 20 counties there are between 3.6 and 4.9 dentists for 10,000 people. This means that although Michigan’s overall ratio of dentists per 10,000 people is at the national average, people living in about half the counties in this state have far fewer dentists available.³ In other words, more than 1.7 million residents of Michigan live in areas with a shortage of Dentists. Furthermore, Northern Michigan is without a dental hygiene program, which has exacerbated the impact of the overall oral health labor distribution in a more rural part of the state.⁴

Physicians are just out of the top ten occupations – coming in at number twelve – largely thanks to low turnover. While they are experiencing a shortage, it is a smaller one compared to many other healthcare occupations. Many subspecialties are experiencing more significant shortages than the group overall; Detroit is ranked as the fourth in the nation when it comes to average age of OBGYNs, and sixth for the highest risk of shortages.⁵ Nationally, the top three specialties with the biggest shortages are cardiologists, family doctors, and general surgeons.⁶ And, it is estimated that the demand for neurologists will exceed supply by 19 percent in the year 2025.⁷

Paramedics – which rank in the top half of the Index due to relatively higher wages and growth – still have a significant labor shortage; EMTs (which make lower wages, and therefore, fall in the bottom five) have a similar shortage. In January of 2022, the Michigan Association of Ambulance Services, Fire Chiefs and EMS Practitioners reported a shortage of nearly 1,000 EMTs and Paramedics and asked for the Michigan State Legislature for funding to help cover the cost of training and recruiting individuals to fill those roles.⁸

According to forecasts by Becker’s Hospital Review, the world may be short by 5.7 million nurses by 2030. NursingEducation.org used HRSA data to rank states on their projected

shortage of nurses through 2030, and Michigan ranked 16th of 50 states, with a projected 11.7 percent shortage of Licensed Practical and Vocational Nurses (LPNs).⁹ According to the American Nurses Association, 1.1 million nurses were needed by 2022 to address the current nursing shortage, and the 2020 National Nursing Workforce Survey found that more than one-fifth of all nurses plan to retire within the next five years.¹⁰ While Registered Nurses and LPNs ranked in the middle of the MHWI, when considering the absolute value of nurses needed over the next ten years (as opposed to the percentage of the occupation), Registered Nurses and LPNs combined rank seventh – behind Home Health and Personal Care Aides, Nursing Assistants, Medical Assistants, Dental Assistants, Pharmacy Technicians and Occupations Requiring an MSW.

Meanwhile, the American Society of Health System Pharmacists reported turnover rates of 21 percent for Pharmacy Technicians in 2021, with nearly one in ten pharmacy administrators saying they had lost 41 percent or more of their technicians.¹¹ In Michigan, the Michigan Pharmacists Association CEO connected the shortage to the low wages and high pressure of the job, stating that as restaurants and retailers raised their wages upwards of \$15 per hour, technicians saw opportunities for more money and less stress elsewhere in the workforce.¹² In the MHWI, Pharmacy Technicians saw an 88 percent shortage or a projected shortage of almost 14,000 individuals over the next ten years.

³ Beek, M. V., & Davidson, J. (2016). Dental Therapists: A Proposal to Expand Access to Dental Care in Michigan. Mackinac Center for Public Policy. <https://www.mackinac.org/S2016-06>

⁴ Machado, K. P. (2023). Northern Michigan Reacts to Dental Assistance Shortage. *Decisions in Dentistry*. <https://decisionsindentistry.com/2023/03/northern-michigan-reacts-to-dental-assistant-shortage/>

⁵ *Looming Physician Shortages: A Growing Women's Health Crisis*. (2018). Doximity. <https://assets.doxcdn.com/image/upload/pdfs/ob-gyn-workload-and-potential-shortages-2018.pdf>

⁶ Business Journal Staff. (2010). Michigan's Physician Shortage is a Concern. *Crain's Grand Rapids Business*. <https://www.craingsgrandrapids.com/uncategorized/michigans-physician-shortage-is-a-concern/>

⁷ Alexander, J. (2023, January 17). Neurologist Shortage: 3 Solutions to a Growing Problem. *LocumTenens*. <https://www.locumtenens.com/blog/neurologist-shortage-3-solutions-to-a-growing-problem/>

⁸ Flores, A. (2022, January 24). Michigan Emergency Medical Services Groups Need Roughly 1,000 New Workers. *WZZM*. <https://www.wzzm13.com/article/news/local/ems-funding-staffing-shortage/69-5d740dc9-e479-4370-9bfb-2c3964b36023>

⁹ Troyer, M. (2021, August 25). States That Will Need Nurses the Most by 2030. *NursingEducation*. <https://nursingeducation.org/states-that-will-need-nurses-the-most-by-2030/>

¹⁰ 60 Key Nursing Statistics and Trends for 2021. (n.d.). *University of St. Augustine for Health Sciences*. <https://www.usa.edu/blog/nursing-statistics/#nursingShortage>

¹¹ Hospitals and Health Systems Experiencing Severe Shortage of Pharmacy Technicians. (2022, March 15). *ASHP*. <https://www.ashp.org/news/2022/03/15/hospitals-and-health-systems-experiencing-severe-shortage-of-pharmacy-technicians?loginreturnUrl=SSOCheckOnly>

¹² George, M. (2023, February 10). Pharmacy Technician Shortage Causes Strain in Hospitals and Retail Pharmacies. *The State News*. https://statenews.com/article/2023/02/pharmacy-technician-shortage-causes-strain-in-hospital-and-retail-pharmacies?ct=content_open&cv=cbox_latest

The Kaiser Family Foundation reported in 2020 that Michigan had one of the most severe behavioral health professional shortages in the country. Over 5.2 million Michiganders live in a Mental Health Care Health Professional Shortage Area (HPSA), or where the population to provider ratio is at least 30,000 to one (20,000 to one if there are unusually high needs in the community). In order to remove the Mental Health Care HPSA designation, an additional 226 practitioners are needed.¹³ This is in line with the MHWI, where all behavioral health professionals rank in the bottom half of the Index. Moreover, while Psychiatrists are members of the Physician group in the MHWI, their impact on mental health is critical. According to a December 2018 analysis by University of Michigan researchers, two-thirds of Michigan's psychiatrists are based in the Ann Arbor-Detroit region. Of Michigan's 83 counties, 33 had no psychiatrist and another ten counties had only one. North of Mount Pleasant, the number of psychiatrists to residents is half the ratio of downstate. There are only 11.84 psychiatrists per 100,000 residents in the state overall.¹⁴

Demographics of Healthcare Occupations

Listed in [figure 3](#) and [figure 4](#) are the average sex, race and ethnic diversity across healthcare occupations in Michigan in 2022. Women tend to outnumber men, and white individuals tend to outnumber all other races. However, some occupations are more diverse. Listed below are the top occupations with a lower percentage of white individuals working in the occupation (translating to more racial and ethnic diversity). The occupations with the most men (over 50 percent) are all physicians or dentists. As seen in [table 2](#), most occupations that exhibit more diversity are behavioral health, LPNs or patient support. A U.S. health workforce study completed in 2020 found that Black, Native American and Hispanic people were underrepresented in ten professions analyzed (compared to their percentage of the overall population) – advanced practice registered nurses, dentists, occupational therapists, pharmacists, physical therapists, physician assistants, physicians, registered nurses, respiratory therapists and speech language pathologists.¹⁵ This is borne out in Michigan's results as well – where these occupations do not make the list of more diverse occupations (see [table 2](#)).

¹³ *Mental Health Care Health Professional Shortage Areas (HPSAs)*. (2022). KFF. <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&selectedRows=%7B%22states%22:%7B%22michigan%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

¹⁴ Mack, J. (2020, February 18). Michigan's Psychiatrist Shortage Makes Access to Mental Health Services Much Harder. *MLive*. <https://www.mlive.com/news/2020/02/michigans-psychiatrist-shortage-makes-access-to-mental-health-services-much-harder.html>

¹⁵ Estimation and Comparison of Current and Future Racial/Ethnic Representation in the US Health Care Workforce. Edward Salsberg, Chelsea Richwine, Et. al. 2020

Figure 3: 2022 Healthcare Occupations by Sex

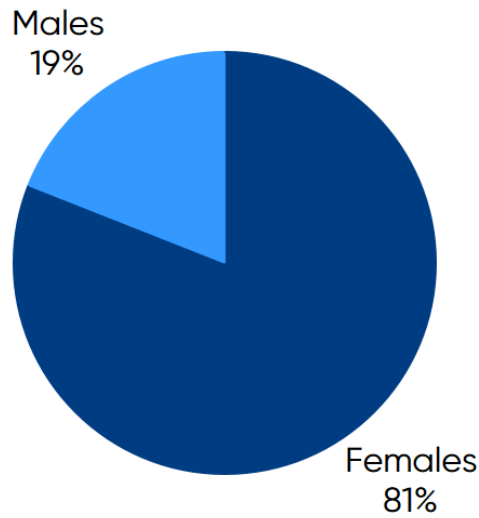


Figure 4: 2022 Healthcare Occupations by Race/Ethnicity

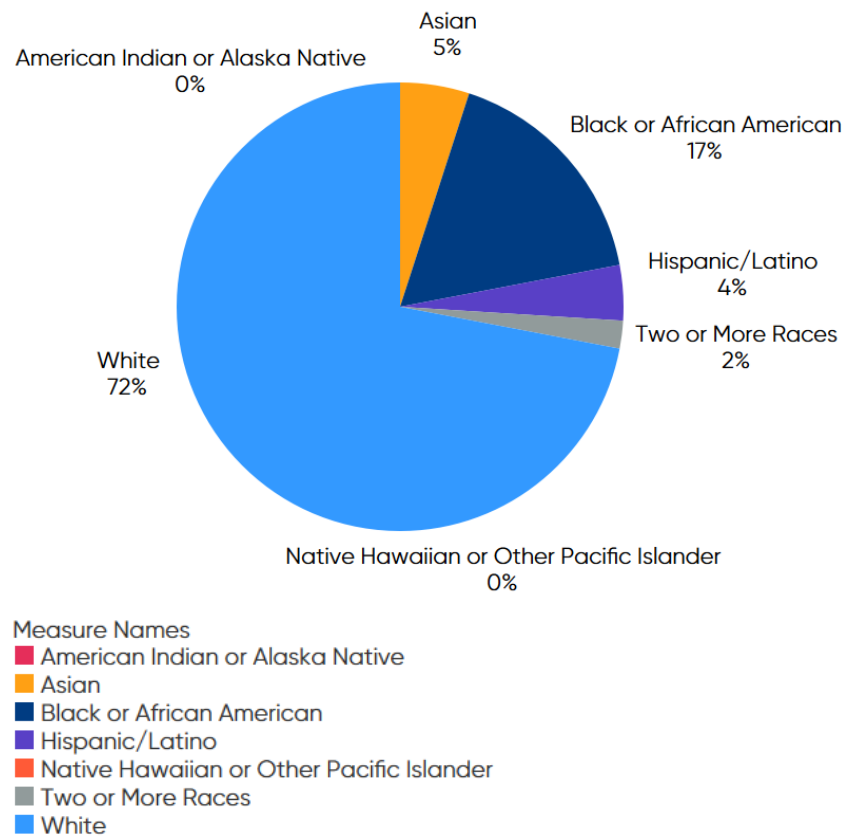


Table 2: Most Diverse Occupations (by percentage)

Description	Males	Females	Hispanic or Latino	White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian or Other Pacific Islander	Two or More Races
Nursing Assistants	11%	89%	5%	55%	35%	1%	3%	0%	2%
Orderlies	26%	74%	6%	58%	31%	Insf. Data	3%	Insf. Data	2%
Home Health and Personal Care Aides	16%	84%	5%	59%	30%	1%	3%	0%	2%
Child, Family, and School Social Workers	15%	85%	5%	65%	26%	0%	1%	Insf. Data	2%
Community Health Workers	25%	75%	6%	66%	23%	1%	2%	Insf. Data	2%
Licensed Practical and Licensed Vocational Nurses	9%	91%	3%	67%	25%	0%	2%	Insf. Data	2%
Social Workers, All Other	17%	83%	4%	67%	24%	1%	1%	Insf. Data	3%
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	25%	75%	4%	68%	23%	0%	2%	Insf. Data	3%
Mental Health and Substance Abuse Social Workers	17%	83%	5%	69%	21%	0%	2%	Insf. Data	3%
Healthcare Social Workers	16%	84%	4%	69%	23%	0%	2%	Insf. Data	2%
Rehabilitation Counselors	30%	70%	4%	69%	22%	0%	2%	Insf. Data	2%
Phlebotomists	14%	86%	7%	69%	18%	0%	3%	Insf. Data	2%
Medical Assistants	7%	93%	9%	70%	15%	0%	3%	0%	2%

Additionally, a substantial body of literature suggests that fostering a diverse and inclusive workforce is critical to increasing access to care and improving aspects of healthcare quality among underserved populations.¹⁶ Studies have demonstrated that physicians and dentists from underrepresented minority groups are more likely to practice in high-need specialties and in underserved communities.¹⁷ Some studies have suggested that a diverse workforce may improve health care professionals' cultural competence and better prepare them to respond to the needs of the entire population.¹⁸ Literature on patient-physician concordance suggests that diversity may be important for quality of care with regard to patient communication, preventive care, and patient satisfaction.¹⁹ A diverse workforce with a broader set of experiences in leadership roles can also aid in shaping research and policy agendas.²⁰

¹⁶ Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority physicians' role in the care of underserved patients: diversifying the physician workforce may be key in addressing health disparities. *JAMA Intern Med.* 2014;174(2):289-291. doi:10.1001/jamainternmed.2013.12756; Wilbur K, Snyder C, Essary AC, Reddy S, Will KK, Saxon M. Developing workforce diversity in the health professions: a social justice perspective. *Health Prof Educ.* 2020;6(2):222-229. doi:10.1016/j.hpe.2020.01.002; Cantor JC, Miles EL, Baker LC, Barker DC. Physician service to the underserved: implications for affirmative action in medical education. *Inquiry.* 1996;33(2):167-180.

¹⁷ Goodfellow A, Ulloa JG, Dowling PT, et al. Predictors of primary care physician practice location in underserved urban or rural areas in the United States: a systematic literature review. *Acad Med.* 2016;91(9):1313-1321. doi:10.1097/ACM.0000000000001203; Mertz EA, Wides CD, Kottek AM, Calvo JM, Gates PE. Underrepresented minority dentists: quantifying their numbers and characterizing the communities they serve. *Health Aff (Millwood).* 2016;35(12):2190-2199. doi:10.1377/hlthaff.2016.1122

¹⁸ Gurin P, Dey E, Hurtado S, Gurin G. Diversity and higher education: theory and impact on educational outcomes. *Harvard Educ Rev.* 2002;72(3):330-367. doi:10.17763/haer.72.3.01151786u134n051

¹⁹ Shen MJ, Peterson EB, Costas-Muñiz R, et al. The effects of race and racial concordance on patient-physician communication: a systematic review of the literature. *J Racial Ethn Health Disparities.* 2018;5(1):117-140. doi:10.1007/s40615-017-0350-4

²⁰ Cohen JJ, Gabriel BA, Terrell C. The case for diversity in the health care workforce. *Health Aff (Millwood).* 2002;21(5):90-102. doi:10.1377/hlthaff.21.5.90

MHC Insight's Take

Nurses need help, but so do other occupations

While Registered Nurses and LPNs ranked in the middle of the MHWI, the absolute numbers of their combined shortages move them up into the top ten unhealthiest occupations. The occupations that come in above them are those that often do not receive a lot of attention – patient support occupations – because the educational pathway for these jobs is ambiguous and hard to track. Behavioral health occupations also have larger shortages, the need for which is discussed below.

Table 3: Occupations With the Highest Absolute Value Shortages

Occupation	Shortage
Home Health and Personal Care Aides	168,312
Nursing Assistants	61,907
Medical Assistants	24,510
Dental Assistants	14,864
Pharmacy Technicians	13,951
Occupations Requiring an MSW	10,702
Registered Nurses	5,136
Phlebotomists	4,217
Physical Therapist Assistants	4,031
Child, Family, and School Social Workers (just BSW)	3,972

Population health statistics point to the need for a more robust behavioral health workforce

The crisis surrounding behavioral health occupations cannot be overlooked. As the Michigan population demonstrates more need for assistance, the gaps in care provision around the state will be acutely felt. From February 1 to 13, 2023, 29.9 percent of adults in Michigan reported symptoms of anxiety and/or depressive disorder, which is comparable to the 32.3 percent of adults in the U.S.²¹ Drug overdose death rates have increased in Michigan from 14.3 per 100,000 in 2011 to 31.5 per 100,000 in 2021.²² In 2021, there were 2,536 opioid overdose deaths in Michigan, which accounted for 82 percent of all drug overdose deaths in the state.²³ Across the U.S., opioid overdose deaths accounted for 75 percent of all drug overdose deaths in the country in 2021.²⁴ In 2021, Michigan's age-adjusted suicide

²¹ Cohen JJ, Gabriel BA, Terrell C. The case for diversity in the health care workforce. *Health Aff (Millwood)*. 2002;21(5):90-102. doi:10.1377/hlthaff.21.5.90

²² Ibid

²³ Ibid

²⁴ Ibid

rate was higher than the national level.²⁵ Finally, a new report from Altarum finds that behavioral health provider capacity was especially low in the northern half of the lower peninsula of Michigan, where four counties have no psychiatrist, no psychologist, and no substance use disorder (SUD) treatment facility.²⁶ Expanding access to behavioral health care in all of Michigan to the same rates of care seen in the best access areas of the state would improve access for 336,000 people with a mental illness and 85,000 people with a SUD.²⁷ All of this establishes the need for more growth in all behavioral health occupations – from psychiatrists to substance abuse counselors.

Building more career pathways could help individuals in high-growth, low-wage occupations stay and advance in the healthcare workforce.

Ultimately, with the largest absolute value (and in some cases, percentage) shortages occurring in occupations that do not require much education beyond high school it becomes critical to ask if these occupations are offering enough opportunities for career progression. Indeed, building more career pathways and apprenticeships could help individuals in high-growth, low wage occupations stay in the healthcare workforce and advance. This will be even more crucial as the population ages, and home health occupations become necessary to assist with Michiganders aging in place. As a result, Community Health Workers and Home Health Care Aides are two of the most critical occupations essential to the next ten years. Moreover, the shortages across the board for almost all healthcare occupations point to the need for a public awareness campaign on par with Science Technology Engineering and Math (STEM) awareness to drive more interest in health careers and more coordination between employers and educators to strengthen the pipeline. This is vital in particular for nursing and patient support occupations, whose large shortages show no signs of abating over the next ten years.

Promoting career pathways can help healthcare professionals better reflect the communities they serve

Finally, growth in the diversity of healthcare practitioners is essential to better healthcare outcomes for the population. While some occupations are relatively more diverse – in particular LPNs, behavioral health and patient support occupations – many of these occupations are lower wage earning. This means that while they are a better reflection of the communities they serve, professionals in these occupations may consider leaving healthcare if they find higher wages in another industry. Healthcare employers must work with partners to find creative ways to invest in the healthcare careers of their lower wage, more diverse professionals.

²⁵ Ibid

²⁶ Access to Behavioral Health Care Remains a Challenge in Michigan (2022, December 13). Altarum. <https://altarum.org/news/access-behavioral-health-care-remains-challenge-michigan>.

²⁷ Ibid

APPENDIX

Michigan Health Workforce Index (Detailed)

Occupation	2022 Jobs	2032 Jobs	2022-2032 % Change	Turnover
Nurse Practitioners	6,408	8,713	36%	23%
Optometrists	1,405	1,628	16%	12%
Dentists, General	4,813	5,060	5%	11%
Nurse Anesthetists	2,058	2,230	8%	20%
Radiation Therapists	462	490	6%	17%
Occupational Therapists	4,830	5,442	13%	29%
Physician Assistants	5,208	6,318	21%	27%
Diagnostic Medical Sonographers	3,107	3,478	12%	20%
Nuclear Medicine Technologists	624	657	5%	19%
Respiratory Therapists	4,963	5,548	12%	20%
Radiologic Technologists and Technicians	6,406	6,718	5%	22%
Physician Group	27,772	28,860	4%	13%
Physical Therapists	8,513	9,881	16%	23%
Nurse Midwives	245	261	7%	25%
Paramedics	2,738	3,060	12%	28%
Licensed Practical and Licensed Vocational Nurses	11,457	12,295	7%	51%
Registered Nurses	104,062	109,533	5%	26%
Community Health Workers	1,782	2,105	18%	59%
Magnetic Resonance Imaging Technologists	1,492	1,566	5%	23%
Occupations Requiring an MSW	23,218	27,088	17%	45%
Pharmacists	10,417	10,621	2%	20%
Cardiovascular Technologists and Technicians	2,259	2,373	5%	25%
Medical Assistants	24,569	27,506	12%	66%
Home Health and Personal Care Aides	92,070	109,993	19%	86%
Surgical Technologists	4,141	4,336	5%	27%
Psychologists	5,235	5,768	10%	24%
Phlebotomists	3,250	3,567	10%	67%
Occupational Therapy Assistants	1,638	2,007	22%	84%
Physical Therapist Assistants	3,751	4,582	22%	74%
Child, Family, and School Social Workers	13,780	14,887	8%	43%
Clinical Lab Technologists and Technicians	9,559	10,091	6%	30%
Emergency Medical Technicians	3,696	4,185	13%	41%
Dental Hygienists	8,084	8,676	7%	32%
Pharmacy Technicians	15,731	15,848	1%	49%
Nursing Assistants	41,866	42,324	1%	88%
Dental Assistants	11,681	12,581	8%	67%

Occupation	2022 - 2032 Openings	Educational Completions 2021	Completions x 10	Openings - Completions
Nurse Practitioners	6,177	594	5,940	237
Optometrists	692	37	370	322
Dentists, General	1,774	266	2,660	-886
Nurse Anesthetists	1,251	50	500	751
Radiation Therapists	249	182	1,820	-1,571
Occupational Therapists	3,637	388	3,880	-243
Physician Assistants	4,378	258	2,580	1,798
Diagnostic Medical Sonographers	2,182	190	1,900	282
Nuclear Medicine Technologists	372	18	180	192
Respiratory Therapists	3,350	175	1,750	1,600
Radiologic Technologists and Technicians	3,967	374	3,740	227
Physician Group	9,574	813	8,130	1,444
Physical Therapists	5,498	314	3,140	2,358
Nurse Midwives	152	4	40	112
Paramedics	2,000	52	520	1,480
Licensed Practical and Licensed Vocational Nurses	10,580	1,006	10,060	520
Registered Nurses	67,456	6,232	62,320	5,136
Community Health Workers	2,429	165	1,650	779
Magnetic Resonance Imaging Technologists	994	9	90	904
Occupations Requiring an MSW	27,032	1,633	16,330	10,702
Pharmacists	4,547	336	3,360	1,187
Cardiovascular Technologists and Technicians	1,652	77	770	882
Medical Assistants	39,360	1,485	14,850	24,510
Home Health and Personal Care Aides	170,732	242	2,420	168,312
Surgical Technologists	3,100	262	2,620	480
Psychologists	4,418	119	1,190	3,228
Phlebotomists	5,187	97	970	4,217
Occupational Therapy Assistants	3,214	117	1,170	2,044
Physical Therapist Assistants	6,711	268	2,680	4,031
Child, Family, and School Social Workers	14,362	1,039	10,390	3,972
Clinical Lab Technologists and Technicians	7,459	444	4,440	3,019
Emergency Medical Technicians	3,720	203	2,030	1,690
Dental Hygienists	6,200	328	3,280	2,920
Pharmacy Technicians	14,861	91	910	13,951
Nursing Assistants	64,457	255	2,550	61,907
Dental Assistants	18,534	367	3,670	14,864

Occupation	Ratio Shortage	2021 Wages	2011 Wages	Wage Growth '11-'21	Percentage Growth '11-'21
Nurse Practitioners	3%	\$49.02	\$30.01	\$19.01	63%
Optometrists	20%	\$60.12	\$46.00	\$14.12	31%
Dentists, General	-18%	\$105.07	\$77.98	\$27.09	35%
Nurse Anesthetists	34%	\$106.18	\$30.62	\$75.56	247%
Radiation Therapists	-321%	\$37.82	\$32.11	\$5.71	18%
Occupational Therapists	-4%	\$37.32	\$30.98	\$6.34	20%
Physician Assistants	28%	\$50.42	\$41.42	\$9.00	22%
Diagnostic Medical Sonographers	8%	\$30.14	\$27.04	\$3.10	11%
Nuclear Medicine Technologists	29%	\$37.26	\$29.57	\$7.69	26%
Respiratory Therapists	29%	\$29.37	\$25.13	\$4.24	17%
Radiologic Technologists and Technicians	3%	\$29.12	\$24.25	\$4.87	20%
Physician Group	5%	\$108.60	\$92.11	\$16.49	18%
Physical Therapists	24%	\$38.24	\$36.89	\$1.35	4%
Nurse Midwives	43%	\$57.36	\$30.00	\$27.36	91%
Paramedics	48%	\$22.09	\$14.19	\$7.90	56%
Licensed Practical and Licensed Vocational Nurses	4%	\$27.02	\$20.21	\$6.81	34%
Registered Nurses	5%	\$36.86	\$30.71	\$6.15	20%
Community Health Workers	37%	\$22.30	\$18.20	\$4.10	23%
Magnetic Resonance Imaging Technologists	58%	\$36.11	\$24.24	\$11.87	49%
Occupations Requiring an MSW	40%	\$24.79	\$20.90	\$3.89	19%
Pharmacists	11%	\$61.37	\$52.75	\$8.63	16%
Cardiovascular Technologists and Technicians	37%	\$29.58	\$23.74	\$5.84	25%
Medical Assistants	89%	\$17.85	\$13.16	\$4.69	36%
Home Health and Personal Care Aides	153%	\$13.49	\$9.76	\$3.72	38%
Surgical Technologists	11%	\$22.92	\$19.64	\$3.28	17%
Psychologists	56%	\$34.05	\$33.54	\$0.51	2%
Phlebotomists	118%	\$18.00	\$13.11	\$4.89	37%
Occupational Therapy Assistants	102%	\$24.24	\$20.70	\$3.54	17%
Physical Therapist Assistants	88%	\$23.76	\$20.52	\$3.24	16%
Child, Family, and School Social Workers	27%	\$23.68	\$23.61	\$0.07	0%
Clinical Lab Technologists and Technicians	30%	\$24.14	\$21.24	\$2.90	14%
Emergency Medical Technicians	40%	\$14.13	\$14.18	-\$0.05	0%
Dental Hygienists	34%	\$29.92	\$29.34	\$0.57	2%
Pharmacy Technicians	88%	\$17.58	\$12.99	\$4.59	35%
Nursing Assistants	146%	\$17.09	\$12.08	\$5.01	41%
Dental Assistants	118%	\$18.11	\$16.11	\$2.00	12%

Occupation	Rank Growth	Rank Shortage	Rank Wage	Rank Turnover	Overall Rank
Nurse Practitioners	1	4	3	13	1
Optometrists	9	12	13	2	2
Dentists, General	28	2	11	1	3
Nurse Anesthetists	18	20	1	8	4
Radiation Therapists	24	1	23	4	5
Occupational Therapists	11	3	18	21	6
Physician Assistants	4	15	17	19	7
Diagnostic Medical Sonographers	13	9	31	7	8
Nuclear Medicine Technologists	26	17	14	5	9
Respiratory Therapists	14	16	25	9	10
Radiologic Technologists and Technicians	31	5	19	10	11
Physician Group	33	8	22	3	12
Physical Therapists	8	13	32	12	13
Nurse Midwives	23	25	2	16	14
Paramedics	15	26	4	20	15
Licensed Practical and Licensed Vocational Nurses	22	6	12	28	16
Registered Nurses	27	7	20	17	17
Community Health Workers	6	21	16	29	18
Magnetic Resonance Imaging Technologists	30	28	5	11	19
Occupations Requiring an MSW	7	23	21	26	20
Pharmacists	34	11	27	6	21
Cardiovascular Technologists and Technicians	29	22	15	15	22
Medical Assistants	12	31	9	30	23
Home Health and Personal Care Aides	5	36	7	35	24
Surgical Technologists	32	10	26	18	25
Psychologists	16	27	34	14	26
Phlebotomists	17	34	8	32	27
Occupational Therapy Assistants	2	32	24	34	28
Physical Therapist Assistants	3	29	28	33	29
Child, Family, and School Social Workers	19	14	35	25	30
Clinical Lab Technologists and Technicians	25	18	29	22	31
Emergency Medical Technicians	10	24	36	24	32
Dental Hygienists	21	19	33	23	33
Pharmacy Technicians	36	30	10	27	34
Nursing Assistants	35	35	6	36	35
Dental Assistants	20	33	30	31	36

Region 1

Occupation Table

65 Occupations in Region 1
 Lightcast Q2 2023 Data Set
 May 2023
 Michigan

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26003	Alger County, MI
26013	Baraga County, MI
26033	Chippewa County, MI
26041	Delta County, MI
26043	Dickinson County, MI
26053	Gogebic County, MI
26061	Houghton County, MI
26071	Iron County, MI
26083	Keweenaw County, MI
26095	Luce County, MI
26097	Mackinac County, MI
26103	Marquette County, MI
26131	Ontonagon County, MI
26153	Schoolcraft County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	96	100	4	4%	11%	38	\$100.87	\$140.63
29-1212	Cardiologists	0	0	0	0%	0%	0	\$0.00	Insf. Data
29-2031	Cardiovascular Technologists and Technicians	35	28	(6)	(18%)	Insf. Data	22	\$22.06	\$16.13

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
21-1021	Child, Family, and School Social Workers	439	411	(28)	(6%)	37%	396	\$26.51	\$18.42
19-3033	Clinical and Counseling Psychologists	49	49	0	1%	24%	35	\$35.16	\$33.01
29-2018	Clinical Laboratory Technologists and Technicians	234	202	(32)	(14%)	24%	158	\$26.81	\$21.50
21-1094	Community Health Workers	36	41	5	12%	43%	47	\$17.83	\$23.44
31-9091	Dental Assistants	287	280	(7)	(3%)	49%	413	\$18.22	\$13.68
29-1292	Dental Hygienists	141	141	(1)	(1%)	22%	97	\$35.78	\$29.04
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1021	Dentists, General	133	127	(6)	(4%)	10%	39	\$83.02	\$90.93
29-1213	Dermatologists	0	0	0	0%	0%	0	\$0.00	Insf. Data
29-2032	Diagnostic Medical Sonographers	64	58	(6)	(9%)	18%	37	\$30.60	\$26.74
29-2042	Emergency Medical Technicians	178	186	8	5%	33%	159	\$12.80	\$9.91
29-1214	Emergency Medicine Physicians	60	58	(2)	(4%)	Insf. Data	21	\$103.02	\$87.06
29-1215	Family Medicine Physicians	58	62	4	7%	Insf. Data	24	\$100.45	\$75.54
29-1216	General Internal Medicine Physicians	39	38	(1)	(2%)	Insf. Data	14	\$74.11	\$60.81
21-1022	Healthcare Social Workers	139	131	(8)	(6%)	41%	129	\$24.33	\$21.23
31-1128	Home Health and Personal Care Aides	2,071	2,659	588	28%	73%	4,220	\$12.78	\$9.46
19-3032	Industrial-Organizational Psychologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2061	Licensed Practical and Licensed Vocational Nurses	598	606	9	2%	41%	521	\$23.12	\$16.98

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2035	Magnetic Resonance Imaging Technologists	11	13	2	14%	Insf. Data	10	\$33.77	\$22.51
21-1013	Marriage and Family Therapists	17	16	(2)	(10%)	Insf. Data	16	\$25.95	\$26.85
31-9092	Medical Assistants	399	466	67	17%	52%	684	\$16.63	\$11.26
21-1023	Mental Health and Substance Abuse Social Workers	122	128	6	5%	36%	124	\$24.38	\$10.43
29-1217	Neurologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2033	Nuclear Medicine Technologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$29.62
29-1151	Nurse Anesthetists	33	35	2	7%	Insf. Data	22	\$101.14	\$26.29
29-1161	Nurse Midwives	0	0	0	0%	0%	0	\$0.00	\$26.26
29-1171	Nurse Practitioners	159	209	50	31%	19%	148	\$49.39	\$26.17
31-1131	Nursing Assistants	1,334	1,265	(69)	(5%)	76%	1,970	\$16.86	\$12.17
29-1218	Obstetricians and Gynecologists	16	17	1	4%	Insf. Data	<10	\$90.80	\$124.04
29-1122	Occupational Therapists	117	114	(3)	(2%)	23%	71	\$36.70	\$26.66
31-2011	Occupational Therapy Assistants	31	31	(0)	(1%)	67%	51	\$24.13	\$20.87
29-1241	Ophthalmologists, Except Pediatric	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$86.30
29-1041	Optometrists	35	43	8	23%	Insf. Data	20	\$48.93	\$43.12
29-1022	Oral and Maxillofacial Surgeons	0	0	0	0%	0%	0	\$0.00	Insf. Data
31-1132	Orderlies	36	29	(7)	(19%)	52%	51	\$14.51	\$12.15
29-1023	Orthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1242	Orthopedic Surgeons, Except Pediatric	22	22	0	2%	Insf. Data	<10	\$93.67	\$0.00
29-2043	Paramedics	134	140	6	4%	22%	85	\$16.56	\$994
29-1221	Pediatricians, General	15	16	1	6%	Insf. Data	<10	\$65.98	\$69.56
29-1243	Pediatric Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	252	243	(9)	(3%)	19%	106	\$57.48	\$53.21

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2052	Pharmacy Technicians	409	427	18	4%	45%	411	\$15.45	\$11.47
31-9097	Phlebotomists	83	70	(12)	(15%)	45%	110	\$14.74	\$11.50
31-2021	Physical Therapist Assistants	155	158	4	2%	56%	230	\$24.55	\$19.52
29-1123	Physical Therapists	235	230	(4)	(2%)	18%	113	\$39.72	\$37.29
29-1071	Physician Assistants	123	144	20	17%	20%	100	\$49.61	\$40.99
29-1229	Physicians, All Other	265	253	(11)	(4%)	11%	81	\$93.17	\$87.78
29-1222	Physicians, Pathologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$52.33
29-1223	Psychiatrists	20	21	1	3%	Insf. Data	<10	\$75.36	\$85.47
19-3039	Psychologists, All Other	11	12	1	12%	Insf. Data	<10	\$29.75	\$32.77
29-1124	Radiation Therapists	22	18	(4)	(19%)	Insf. Data	<10	\$32.76	\$45.39
29-2034	Radiologic Technologists and Technicians	178	152	(26)	(15%)	19%	95	\$27.11	\$22.48
29-1224	Radiologists	28	31	3	9%	Insf. Data	13	\$91.38	\$87.31
29-1141	Registered Nurses	2,474	2,124	(350)	(14%)	21%	1,387	\$30.72	\$26.36
21-1015	Rehabilitation Counselors	126	154	29	23%	44%	163	\$28.25	\$28.19
29-1126	Respiratory Therapists	93	80	(13)	(14%)	18%	52	\$27.84	\$21.67
19-3034	School Psychologists	48	50	2	5%	28%	42	\$34.57	\$33.06
21-1029	Social Workers, All Other	74	73	(2)	(3%)	37%	72	\$34.85	\$28.23
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	261	280	18	7%	35%	279	\$22.87	\$21.82
29-1249	Surgeons, All Other	33	31	(2)	(5%)	Insf. Data	10	\$125.14	Insf. Data
29-2055	Surgical Technologists	82	66	(16)	(19%)	23%	53	\$21.53	\$16.02
		12,131	12,363	231	2%	41%	13,000		

Region 2

Occupation Table

65 Occupations in Region 2

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26009	Antrim County, MI
26019	Benzie County, MI
26029	Charlevoix County, MI
26047	Emmet County, MI
26055	Grand Traverse County, MI
26079	Kalkaska County, MI
26089	Leelanau County, MI
26101	Manistee County, MI
26113	Missaukee County, MI
26165	Wexford County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	72	73	0	0%	Insf. Data	25	\$100.78	\$156.25
29-1212	Cardiologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2031	Cardiovascular Technologists and Technicians	36	39	2	7%	Insf. Data	29	\$28.66	\$27.66
21-1021	Child, Family, and School Social Workers	406	468	62	15%	40%	465	\$26.68	\$22.92
19-3033	Clinical and Counseling Psychologists	67	76	9	13%	32%	56	\$30.45	\$40.55

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2018	Clinical Laboratory Technologists and Technicians	319	337	18	6%	29%	264	\$22.48	\$18.91
21-1094	Community Health Workers	43	57	14	33%	44%	68	\$19.13	\$17.44
31-9091	Dental Assistants	574	692	118	21%	50%	1,059	\$17.46	\$15.43
29-1292	Dental Hygienists	324	393	70	22%	23%	320	\$34.14	\$28.64
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	\$59.13
29-1021	Dentists, General	191	228	36	19%	11%	104	\$59.53	\$85.78
29-1213	Dermatologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2032	Diagnostic Medical Sonographers	127	144	17	13%	20%	97	\$29.85	\$27.05
29-2042	Emergency Medical Technicians	132	130	(2)	(2%)	69%	104	\$15.35	\$14.65
29-1214	Emergency Medicine Physicians	58	60	3	5%	Insf. Data	22	\$111.21	\$75.36
29-1215	Family Medicine Physicians	67	72	4	6%	Insf. Data	26	\$100.51	\$105.88
29-1216	General Internal Medicine Physicians	53	56	3	5%	Insf. Data	21	\$71.93	\$52.48
21-1022	Healthcare Social Workers	162	187	24	15%	42%	190	\$28.38	\$16.10
31-1128	Home Health and Personal Care Aides	2,206	2,755	549	25%	81%	4,295	\$12.80	\$9.69
19-3032	Industrial-Organizational Psychologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2061	Licensed Practical and Licensed Vocational Nurses	312	336	24	8%	43%	294	\$23.95	\$17.69
29-2035	Magnetic Resonance Imaging Technologists	36	40	3	9%	Insf. Data	28	\$33.94	\$20.57
21-1013	Marriage and Family Therapists	12	23	11	89%	Insf. Data	25	Insf. Data	\$20.21
31-9092	Medical Assistants	851	956	105	12%	57%	1,384	\$16.95	\$14.16

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
21-1023	Mental Health and Substance Abuse Social Workers	124	138	15	12%	45%	132	\$23.83	\$19.38
29-1217	Neurologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2033	Nuclear Medicine Technologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$30.09
29-1151	Nurse Anesthetists	68	73	5	8%	19%	42	\$90.85	\$25.79
29-1161	Nurse Midwives	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1171	Nurse Practitioners	141	199	58	41%	20%	145	\$50.93	\$25.68
31-1131	Nursing Assistants	1,329	1,380	51	4%	73%	2,150	\$16.16	\$11.94
29-1218	Obstetricians and Gynecologists	22	22	0	2%	Insf. Data	<10	\$88.54	\$86.07
29-1122	Occupational Therapists	122	161	40	33%	26%	124	\$36.01	\$30.66
31-2011	Occupational Therapy Assistants	53	82	29	55%	76%	134	\$28.14	\$19.87
29-1241	Ophthalmologists, Except Pediatric	18	19	0	2%	Insf. Data	<10	\$75.36	\$0.00
29-1041	Optometrists	44	46	3	6%	Insf. Data	18	\$48.08	\$37.72
29-1022	Oral and Maxillofacial Surgeons	15	17	2	16%	Insf. Data	<10	\$129.05	\$0.00
31-1132	Orderlies	56	59	3	6%	57%	95	\$14.06	\$12.10
29-1023	Orthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1242	Orthopedic Surgeons, Except Pediatric	21	22	1	4%	Insf. Data	<10	\$91.58	\$108.22
29-2043	Paramedics	89	89	(1)	(1%)	42%	51	\$19.38	\$14.59
29-1221	Pediatricians, General	60	61	1	2%	Insf. Data	21	\$67.58	Insf. Data
29-1243	Pediatric Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	290	315	25	9%	19%	153	\$61.75	\$49.68
29-2052	Pharmacy Technicians	447	483	37	8%	47%	463	\$16.21	\$12.73
31-9097	Phlebotomists	69	73	5	7%	71%	109	\$14.83	\$12.29
31-2021	Physical Therapist Assistants	106	160	54	51%	64%	243	\$27.65	\$16.98
29-1123	Physical Therapists	253	346	94	37%	20%	230	\$38.07	\$34.23

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1071	Physician Assistants	189	235	46	24%	22%	168	\$51.70	\$41.55
29-1229	Physicians, All Other	286	301	14	5%	11%	110	\$94.30	\$75.33
29-1222	Physicians, Pathologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	14	16	3	19%	Insf. Data	<10	\$113.50	\$99.17
19-3039	Psychologists, All Other	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$42.56
29-1124	Radiation Therapists	58	61	3	5%	18%	33	\$27.38	Insf. Data
29-2034	Radiologic Technologists and Technicians	208	223	15	7%	21%	144	\$27.54	\$20.54
29-1224	Radiologists	40	41	1	3%	Insf. Data	15	\$90.21	\$76.25
29-1141	Registered Nurses	3,265	3,490	225	7%	24%	2,329	\$34.51	\$25.49
21-1015	Rehabilitation Counselors	128	171	43	33%	53%	179	\$17.76	\$12.52
29-1126	Respiratory Therapists	129	150	21	16%	21%	99	\$29.22	\$24.34
19-3034	School Psychologists	58	57	(1)	(3%)	32%	45	\$36.95	\$39.93
21-1029	Social Workers, All Other	62	67	6	9%	39%	66	\$23.57	\$23.14
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	255	318	63	25%	46%	326	\$28.32	\$18.77
29-1249	Surgeons, All Other	29	29	0	2%	Insf. Data	<10	\$121.46	\$106.56
29-2055	Surgical Technologists	154	166	12	8%	26%	128	\$22.38	\$21.30
		14,267	16,213	1,945	14%	44%	16,686		

Region 3

Occupation Table

65 Occupations in Region 3

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26001	Alcona County, MI
26007	Alpena County, MI
26031	Cheboygan County, MI
26039	Crawford County, MI
26069	Iosco County, MI
26119	Montmorency County, MI
26129	Ogemaw County, MI
26135	Oscoda County, MI
26137	Otsego County, MI
26141	Presque Isle County, MI
26143	Roscommon County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	45	51	5	12%	25%	24	\$109.86	\$0.00
29-1212	Cardiologists	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	Insf. Data
29-2031	Cardiovascular Technologists and Technicians	27	26	(1)	(3%)	Insf. Data	20	\$28.49	Insf. Data
21-1021	Child, Family, and School Social Workers	378	438	60	16%	36%	439	\$25.61	\$19.95

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3033	Clinical and Counseling Psychologists	28	32	4	16%	Insf. Data	25	\$35.87	\$33.89
29-2018	Clinical Laboratory Technologists and Technicians	92	97	4	5%	31%	78	\$28.49	\$21.73
21-1094	Community Health Workers	29	36	6	21%	41%	42	\$18.06	\$16.56
31-9091	Dental Assistants	166	177	10	6%	51%	266	\$17.78	\$16.00
29-1292	Dental Hygienists	136	144	8	6%	23%	106	\$31.44	\$29.13
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	\$0.00	\$0.00
29-1021	Dentists, General	56	59	4	7%	Insf. Data	23	\$76.54	\$87.31
29-1213	Dermatologists	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	\$0.00
29-2032	Diagnostic Medical Sonographers	26	29	3	14%	Insf. Data	20	\$30.72	\$24.49
29-2042	Emergency Medical Technicians	173	226	52	30%	46%	222	\$12.56	\$12.31
29-1214	Emergency Medicine Physicians	39	42	3	7%	Insf. Data	18	\$105.58	\$73.79
29-1215	Family Medicine Physicians	43	51	8	18%	Insf. Data	25	\$83.13	\$87.98
29-1216	General Internal Medicine Physicians	32	35	4	11%	Insf. Data	16	\$82.89	\$52.33
21-1022	Healthcare Social Workers	69	77	8	11%	46%	76	\$24.95	\$19.62
31-1128	Home Health and Personal Care Aides	1,377	1,724	347	25%	77%	2,735	\$12.49	\$9.01

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3032	Industrial-Organizational Psychologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2061	Licensed Practical and Licensed Vocational Nurses	253	274	21	8%	47%	247	\$24.39	\$17.15
29-2035	Magnetic Resonance Imaging Technologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$22.63
21-1013	Marriage and Family Therapists	24	32	8	31%	Insf. Data	30	\$26.00	\$19.94
31-9092	Medical Assistants	257	332	75	29%	66%	495	\$17.35	\$11.57
21-1023	Mental Health and Substance Abuse Social Workers	48	56	8	17%	37%	55	\$28.31	\$21.11
29-1217	Neurologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2033	Nuclear Medicine Technologists	0	0	0	0%	0%	0	\$0.00	Insf. Data
29-1151	Nurse Anesthetists	28	33	5	16%	Insf. Data	21	\$100.12	\$27.14
29-1161	Nurse Midwives	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1171	Nurse Practitioners	57	90	33	58%	24%	71	\$51.21	\$27.28
31-1131	Nursing Assistants	664	703	39	6%	83%	1,095	\$15.37	\$10.49
29-1218	Obstetricians and Gynecologists	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	Insf. Data
29-1122	Occupational Therapists	49	54	5	11%	28%	36	\$36.55	\$29.32
31-2011	Occupational Therapy Assistants	15	18	3	22%	77%	30	\$23.59	\$18.90

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1241	Ophthalmologists, Except Pediatric	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$0.00
29-1041	Optometrists	13	16	3	19%	Insf. Data	<10	\$43.41	\$35.74
29-1022	Oral and Maxillofacial Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
31-1132	Orderlies	20	19	(1)	(5%)	66%	31	\$13.83	Insf. Data
29-1023	Orthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1242	Orthopedic Surgeons, Except Pediatric	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	\$0.00
29-2043	Paramedics	125	155	30	24%	32%	117	\$19.33	\$12.25
29-1221	Pediatricians, General	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$71.58
29-1243	Pediatric Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	178	181	3	1%	22%	83	\$59.96	\$54.85
29-2052	Pharmacy Technicians	263	279	16	6%	51%	268	\$17.05	\$13.95
31-9097	Phlebotomists	72	71	(1)	(1%)	73%	108	\$15.28	\$11.34
31-2021	Physical Therapist Assistants	60	70	10	16%	69%	103	\$24.91	\$18.30
29-1123	Physical Therapists	105	115	10	10%	23%	63	\$39.79	\$36.17
29-1071	Physician Assistants	65	87	22	34%	27%	67	\$51.17	\$39.50
29-1229	Physicians, All Other	74	84	10	14%	Insf. Data	38	\$116.77	\$73.69

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1222	Physicians, Pathologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$85.98
19-3039	Psychologists, All Other	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1124	Radiation Therapists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$0.00
29-2034	Radiologic Technologists and Technicians	116	117	0	0%	26%	76	\$28.09	\$22.71
29-1224	Radiologists	20	23	3	16%	Insf. Data	11	\$100.06	\$0.00
29-1141	Registered Nurses	1,127	1,142	15	1%	27%	732	\$35.03	\$26.84
21-1015	Rehabilitation Counselors	54	63	10	18%	41%	66	\$17.85	\$28.88
29-1126	Respiratory Therapists	67	70	3	4%	23%	43	\$28.86	\$22.19
19-3034	School Psychologists	24	24	(0)	(2%)	Insf. Data	19	\$34.10	\$33.19
21-1029	Social Workers, All Other	45	51	6	14%	38%	52	\$27.38	\$20.55
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	141	180	39	28%	38%	188	\$28.59	\$19.62
29-1249	Surgeons, All Other	20	22	2	8%	Insf. Data	<10	\$138.16	\$0.00
29-2055	Surgical Technologists	35	35	0	1%	30%	27	\$22.47	\$18.33
		6,758	7,676	918	14%	48%	8,353		

Region 4

Occupation Table

65 Occupations in Region 4

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 - QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26005	Allegan County, MI
26015	Barry County, MI
26067	Ionia County, MI
26081	Kent County, MI
26085	Lake County, MI
26105	Mason County, MI
26107	Mecosta County, MI
26117	Montcalm County, MI
26121	Muskegon County, MI
26123	Newaygo County, MI
26127	Oceana County, MI
26133	Osceola County, MI
26139	Ottawa County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	348	354	6	2%	15%	118	\$142.90	\$144.09
29-1212	Cardiologists	97	103	6	6%	14%	37	\$120.60	\$104.26
29-2031	Cardiovascular Technologists and Technicians	386	440	55	14%	25%	328	\$29.65	\$22.07
21-1021	Child, Family, and School Social Workers	2,904	3,201	297	10%	49%	3,111	\$24.92	\$22.77

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3033	Clinical and Counseling Psychologists	437	497	60	14%	31%	364	\$31.25	\$32.50
29-2018	Clinical Laboratory Technologists and Technicians	1,591	1,793	201	13%	33%	1,392	\$22.32	\$21.11
21-1094	Community Health Workers	287	345	58	20%	72%	401	\$21.31	\$17.51
31-9091	Dental Assistants	1,725	1,904	179	10%	71%	2,815	\$18.26	\$17.40
29-1292	Dental Hygienists	1,414	1,540	126	9%	35%	1,110	\$29.73	\$27.65
29-1029	Dentists, All Other Specialists	10	11	1	11%	Insf. Data	<10	\$95.28	\$69.94
29-1021	Dentists, General	628	688	60	10%	14%	254	\$77.38	\$83.36
29-1213	Dermatologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$87.89
29-2032	Diagnostic Medical Sonographers	455	553	98	21%	21%	375	\$30.65	\$27.10
29-2042	Emergency Medical Technicians	590	843	253	43%	34%	814	\$13.76	\$12.57
29-1214	Emergency Medicine Physicians	301	318	17	6%	13%	113	\$137.70	\$106.50
29-1215	Family Medicine Physicians	297	319	22	7%	13%	116	\$93.60	\$86.23
29-1216	General Internal Medicine Physicians	328	352	24	7%	13%	128	\$92.58	\$71.59
21-1022	Healthcare Social Workers	723	833	110	15%	45%	836	\$28.77	\$22.43
31-1128	Home Health and Personal Care Aides	11,927	14,907	2,979	25%	95%	23,230	\$13.32	\$9.41

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3032	Industrial-Organizational Psychologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2061	Licensed Practical and Licensed Vocational Nurses	1,818	2,009	191	11%	59%	1,763	\$23.30	\$19.44
29-2035	Magnetic Resonance Imaging Technologists	195	225	31	16%	24%	158	\$30.87	\$25.89
21-1013	Marriage and Family Therapists	111	161	50	45%	40%	159	\$22.33	\$17.23
31-9092	Medical Assistants	3,305	3,722	416	13%	72%	5,370	\$17.35	\$13.69
21-1023	Mental Health and Substance Abuse Social Workers	568	674	105	19%	47%	668	\$23.98	\$20.41
29-1217	Neurologists	41	44	2	6%	Insf. Data	16	\$99.01	\$102.05
29-2033	Nuclear Medicine Technologists	97	109	12	12%	19%	69	\$36.73	\$29.57
29-1151	Nurse Anesthetists	221	247	26	12%	20%	146	\$85.03	\$28.92
29-1161	Nurse Midwives	72	74	2	3%	25%	44	\$62.34	\$28.85
29-1171	Nurse Practitioners	978	1,344	365	37%	26%	962	\$49.22	\$28.68
31-1131	Nursing Assistants	7,333	7,721	387	5%	96%	11,779	\$14.60	\$11.67
29-1218	Obstetricians and Gynecologists	122	128	6	5%	14%	45	\$83.80	\$121.23
29-1122	Occupational Therapists	876	956	80	9%	27%	623	\$35.93	\$30.60
31-2011	Occupational Therapy Assistants	357	391	34	10%	68%	620	\$23.96	\$19.19
29-1241	Ophthalmologists, Except Pediatric	65	68	3	5%	19%	23	\$101.21	\$98.42

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1041	Optometrists	166	197	31	19%	12%	86	\$59.10	\$34.38
29-1022	Oral and Maxillofacial Surgeons	106	114	8	7%	17%	39	\$107.00	\$84.63
31-1132	Orderlies	308	346	38	12%	54%	549	\$14.09	\$11.67
29-1023	Orthodontists	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	Insf. Data
29-1242	Orthopedic Surgeons, Except Pediatric	62	64	2	3%	Insf. Data	21	\$101.36	\$133.56
29-2043	Paramedics	422	567	145	34%	22%	415	\$21.43	\$12.23
29-1221	Pediatricians, General	280	290	10	3%	14%	100	\$80.59	\$72.10
29-1243	Pediatric Surgeons	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1051	Pharmacists	1,491	1,640	149	10%	20%	777	\$62.22	\$51.48
29-2052	Pharmacy Technicians	2,575	2,738	163	6%	49%	2,597	\$16.73	\$12.62
31-9097	Phlebotomists	478	548	70	15%	78%	808	\$17.32	\$13.08
31-2021	Physical Therapist Assistants	655	732	77	12%	61%	1,058	\$23.82	\$19.17
29-1123	Physical Therapists	1,423	1,554	130	9%	20%	808	\$38.02	\$36.61
29-1071	Physician Assistants	1,089	1,342	252	23%	32%	951	\$50.58	\$40.45
29-1229	Physicians, All Other	1,226	1,346	120	10%	13%	496	\$102.36	\$104.94
29-1222	Physicians, Pathologists	115	126	11	9%	16%	48	\$86.52	\$103.94

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	128	151	23	18%	12%	63	\$113.60	\$90.38
19-3039	Psychologists, All Other	156	196	40	26%	11%	163	\$32.57	\$35.28
29-1124	Radiation Therapists	56	65	9	16%	Insf. Data	36	\$34.22	\$30.16
29-2034	Radiologic Technologists and Technicians	1,010	1,150	140	14%	23%	737	\$28.69	\$25.90
29-1224	Radiologists	203	217	14	7%	14%	81	\$95.86	\$106.09
29-1141	Registered Nurses	17,551	20,076	2,525	14%	28%	13,386	\$35.89	\$28.16
21-1015	Rehabilitation Counselors	635	751	116	18%	67%	751	\$15.07	\$17.93
29-1126	Respiratory Therapists	912	1,099	187	20%	21%	716	\$28.11	\$23.78
19-3034	School Psychologists	239	263	23	10%	27%	218	\$37.17	\$32.13
21-1029	Social Workers, All Other	201	232	31	15%	45%	234	\$24.18	\$19.39
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1,337	1,706	368	28%	44%	1,778	\$25.34	\$19.70
29-1249	Surgeons, All Other	146	151	5	3%	15%	50	\$34.49	\$86.31
29-2055	Surgical Technologists	765	871	106	14%	27%	663	\$22.67	\$19.82
		74,356	85,419	11,063	15%	51%	85,628		

Region 5

Occupation Table

65 Occupations in Region 5

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26011	Arenac County, MI
26017	Bay County, MI
26035	Clare County, MI
26051	Gladwin County, MI
26057	Gratiot County, MI
26073	Isabella County, MI
26111	Midland County, MI
26145	Saginaw County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	83	62	(22)	(26%)	23%	22	\$122.88	\$131.54
29-1212	Cardiologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2031	Cardiovascular Technologists and Technicians	153	168	15	10%	25%	124	\$29.42	\$25.69
21-1021	Child, Family, and School Social Workers	884	935	50	6%	40%	895	\$26.08	\$24.21
19-3033	Clinical and Counseling Psychologists	113	133	20	18%	45%	100	\$35.31	\$31.09

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2018	Clinical Laboratory Technologists and Technicians	539	593	55	10%	26%	452	\$24.19	\$21.30
21-1094	Community Health Workers	81	102	21	26%	48%	122	\$22.06	\$14.87
31-9091	Dental Assistants	508	537	29	6%	65%	785	\$18.05	\$16.66
29-1292	Dental Hygienists	428	447	19	5%	31%	310	\$30.77	\$26.96
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	\$66.65
29-1021	Dentists, General	183	195	11	6%	14%	66	\$65.25	\$75.74
29-1213	Dermatologists	0	<10	Insf. Data	Insf. Data	0%	<10	\$0.00	Insf. Data
29-2032	Diagnostic Medical Sonographers	174	198	23	13%	19%	132	\$32.78	\$26.57
29-2042	Emergency Medical Technicians	247	236	(11)	(4%)	37%	214	\$13.34	\$12.07
29-1214	Emergency Medicine Physicians	69	75	6	9%	Insf. Data	27	\$134.84	Insf. Data
29-1215	Family Medicine Physicians	182	189	7	4%	14%	64	\$112.85	\$83.19
29-1216	General Internal Medicine Physicians	109	114	6	5%	13%	39	\$91.09	\$56.24
21-1022	Healthcare Social Workers	302	342	40	13%	47%	341	\$28.77	\$23.56
31-1128	Home Health and Personal Care Aides	7,074	9,199	2,124	30%	90%	14,598	\$11.65	\$9.11
19-3032	Industrial-Organizational Psychologists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-2061	Licensed Practical and Licensed Vocational Nurses	714	801	87	12%	49%	706	\$22.80	\$19.34

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2035	Magnetic Resonance Imaging Technologists	154	163	9	6%	19%	105	\$31.81	\$25.05
21-1013	Marriage and Family Therapists	29	46	16	55%	91%	45	\$26.34	\$21.68
31-9092	Medical Assistants	1,459	1,627	168	12%	68%	2,319	\$16.92	\$12.47
21-1023	Mental Health and Substance Abuse Social Workers	284	293	9	3%	48%	278	\$24.41	\$20.83
29-1217	Neurologists	47	47	1	1%	Insf. Data	14	\$104.26	\$82.96
29-2033	Nuclear Medicine Technologists	117	126	8	7%	18%	72	\$31.43	\$39.67
29-1151	Nurse Anesthetists	54	58	4	7%	21%	35	\$104.98	\$28.39
29-1161	Nurse Midwives	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1171	Nurse Practitioners	383	506	123	32%	23%	350	\$48.75	\$29.58
31-1131	Nursing Assistants	2,768	2,868	100	4%	86%	4,366	\$14.29	\$11.62
29-1218	Obstetricians and Gynecologists	21	23	2	10%	Insf. Data	<10	\$126.78	\$106.16
29-1122	Occupational Therapists	276	302	26	9%	29%	210	\$36.33	\$30.74
31-2011	Occupational Therapy Assistants	91	103	12	14%	96%	167	\$23.34	\$19.13
29-1241	Ophthalmologists, Except Pediatric	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1041	Optometrists	29	29	1	3%	Insf. Data	11	\$56.97	\$38.55
29-1022	Oral and Maxillofacial Surgeons	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$78.43

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
31-1132	Orderlies	121	115	(5)	(4%)	53%	191	\$14.48	\$11.64
29-1023	Orthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1242	Orthopedic Surgeons, Except Pediatric	24	26	2	7%	Insf. Data	<10	\$106.05	\$150.12
29-2043	Paramedics	158	144	(14)	(9%)	25%	94	\$17.76	\$12.16
29-1221	Pediatricians, General	25	28	2	9%	Insf. Data	10	\$85.95	Insf. Data
29-1243	Pediatric Surgeons	0	<10	Insf. Data	Insf. Data	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	495	495	(1)	(0%)	19%	210	\$59.32	\$51.52
29-2052	Pharmacy Technicians	850	813	(37)	(4%)	47%	771	\$15.62	\$12.73
31-9097	Phlebotomists	396	429	34	9%	55%	625	\$17.23	\$12.08
31-2021	Physical Therapist Assistants	299	334	35	12%	83%	498	\$23.78	\$20.18
29-1123	Physical Therapists	443	509	66	15%	23%	298	\$38.36	\$38.13
29-1071	Physician Assistants	250	298	48	19%	26%	205	\$48.29	\$41.17
29-1229	Physicians, All Other	482	516	34	7%	15%	181	\$100.02	\$102.43
29-1222	Physicians, Pathologists	17	20	3	16%	Insf. Data	<10	\$90.65	Insf. Data
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	24	29	5	22%	Insf. Data	14	\$102.28	\$76.50

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3039	Psychologists, All Other	13	17	4	35%	Insf. Data	15	\$31.40	\$39.88
29-1124	Radiation Therapists	18	22	4	24%	Insf. Data	13	\$34.92	Insf. Data
29-2034	Radiologic Technologists and Technicians	461	469	8	2%	22%	291	\$28.22	\$25.18
29-1224	Radiologists	94	91	(3)	(4%)	15%	31	\$105.66	\$103.84
29-1141	Registered Nurses	5,644	6,077	433	8%	23%	3,857	\$35.75	\$29.46
21-1015	Rehabilitation Counselors	231	297	66	28%	66%	311	\$17.82	\$19.30
29-1126	Respiratory Therapists	309	354	45	15%	18%	221	\$28.84	\$25.62
19-3034	School Psychologists	85	83	(2)	(2%)	29%	68	\$36.17	\$32.36
21-1029	Social Workers, All Other	119	126	7	6%	42%	126	\$32.30	\$25.95
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	562	661	99	18%	47%	663	\$28.63	\$21.91
29-1249	Surgeons, All Other	13	14	1	10%	Insf. Data	<10	\$117.57	Insf. Data
29-2055	Surgical Technologists	230	257	27	12%	26%	192	\$23.85	\$19.43
		28,929	32,754	3,825	13%	53%	35,891		

Region 6

Occupation Table

65 Occupations in Region 6

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26049	Genesee County, MI
26063	Huron County, MI
26087	Lapeer County, MI
26147	St. Clair County, MI
26151	Sanilac County, MI
26155	Shiawassee County, MI
26157	Tuscola County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	64	65	0	0%	Insf. Data	20	\$136.31	\$125.74
29-1212	Cardiologists	54	53	(1)	(2%)	Insf. Data	15	\$165.56	\$100.44
29-2031	Cardiovascular Technologists and Technicians	129	123	(6)	(5%)	21%	85	\$29.51	\$22.88
21-1021	Child, Family, and School Social Workers	845	895	50	6%	40%	854	\$25.32	\$23.59
19-3033	Clinical and Counseling Psychologists	152	171	19	13%	34%	125	\$30.77	\$30.01
29-2018	Clinical Laboratory Technologists and Technicians	524	509	(15)	(3%)	27%	374	\$28.05	\$22.68
21-1094	Community Health Workers	113	127	14	12%	52%	145	\$19.38	\$17.15

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
31-9091	Dental Assistants	814	788	(25)	(3%)	78%	1,158	\$20.61	\$15.70
29-1292	Dental Hygienists	598	581	(17)	(3%)	36%	393	\$29.34	\$27.85
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$75.38
29-1021	Dentists, General	334	324	(10)	(3%)	15%	95	\$75.71	\$90.08
29-1213	Dermatologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2032	Diagnostic Medical Sonographers	177	185	8	5%	17%	107	\$29.72	\$26.25
29-2042	Emergency Medical Technicians	418	379	(39)	(9%)	48%	332	\$14.20	\$13.82
29-1214	Emergency Medicine Physicians	126	124	(2)	(2%)	12%	36	\$148.74	\$98.58
29-1215	Family Medicine Physicians	150	153	3	2%	11%	47	\$97.69	\$79.11
29-1216	General Internal Medicine Physicians	216	208	(8)	(4%)	12%	62	\$76.97	\$22.92
21-1022	Healthcare Social Workers	393	402	9	2%	43%	381	\$28.43	\$24.58
31-1128	Home Health and Personal Care Aides	5,996	6,910	914	15%	94%	10,648	\$13.10	\$9.39
19-3032	Industrial-Organizational Psychologists	0	0	0	0%	0%	0	\$0.00	Insf. Data
29-2061	Licensed Practical and Licensed Vocational Nurses	760	799	39	5%	49%	677	\$26.40	\$20.17
29-2035	Magnetic Resonance Imaging Technologists	125	118	(6)	(5%)	20%	73	\$25.83	\$22.36
21-1013	Marriage and Family Therapists	32	46	14	43%	51%	44	\$25.93	\$21.29
31-9092	Medical Assistants	1,788	1,892	103	6%	59%	2,667	\$16.44	\$12.58
21-1023	Mental Health and Substance Abuse Social Workers	184	201	17	9%	41%	192	\$27.18	\$20.60
29-1217	Neurologists	20	20	0	0%	Insf. Data	<10	\$91.86	Insf. Data

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2033	Nuclear Medicine Technologists	20	20	0	2%	Insf. Data	11	\$34.33	\$28.12
29-1151	Nurse Anesthetists	139	143	4	3%	18%	74	\$101.13	\$31.50
29-1161	Nurse Midwives	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1171	Nurse Practitioners	411	542	131	32%	20%	374	\$48.74	\$31.18
31-1131	Nursing Assistants	2,704	2,722	18	1%	85%	4,140	\$16.12	\$11.81
29-1218	Obstetricians and Gynecologists	67	67	(1)	(1%)	Insf. Data	20	\$60.43	\$119.43
29-1122	Occupational Therapists	247	255	9	4%	26%	155	\$36.92	\$30.54
31-2011	Occupational Therapy Assistants	113	126	14	12%	82%	200	\$26.98	\$19.46
29-1241	Ophthalmologists, Except Pediatric	26	26	(0)	(1%)	Insf. Data	<10	\$113.27	\$64.39
29-1041	Optometrists	73	76	3	3%	Insf. Data	26	\$56.29	\$46.76
29-1022	Oral and Maxillofacial Surgeons	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
31-1132	Orderlies	88	84	(4)	(5%)	49%	136	\$15.08	\$11.74
29-1023	Orthodontists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1242	Orthopedic Surgeons, Except Pediatric	13	13	0	0%	Insf. Data	<10	\$117.83	Insf. Data
29-2043	Paramedics	228	219	(9)	(4%)	31%	135	\$19.48	\$13.93
29-1221	Pediatricians, General	88	87	(2)	(2%)	12%	26	\$40.49	\$65.85
29-1243	Pediatric Surgeons	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1051	Pharmacists	588	468	(120)	(20%)	17%	211	\$60.09	\$53.02
29-2052	Pharmacy Technicians	975	693	(282)	(29%)	41%	749	\$16.69	\$12.99
31-9097	Phlebotomists	153	149	(4)	(3%)	55%	220	\$18.27	\$13.17
31-2021	Physical Therapist Assistants	230	263	33	14%	70%	378	\$27.69	\$20.60
29-1123	Physical Therapists	434	464	29	7%	21%	231	\$38.44	\$36.16
29-1071	Physician Assistants	278	328	50	18%	23%	219	\$48.95	\$40.64
29-1229	Physicians, All Other	815	796	(20)	(2%)	12%	239	\$93.10	\$94.67

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1222	Physicians, Pathologists	32	33	1	5%	Insf. Data	12	\$100.00	\$104.62
29-1024	Prosthodontists	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	\$0.00
29-1223	Psychiatrists	21	22	1	3%	Insf. Data	<10	\$102.40	\$80.89
19-3039	Psychologists, All Other	45	50	4	10%	40%	37	\$41.26	Insf. Data
29-1124	Radiation Therapists	10	10	0	3%	Insf. Data	<10	\$34.36	\$31.22
29-2034	Radiologic Technologists and Technicians	350	350	(0)	(0%)	18%	201	\$28.30	\$22.30
29-1224	Radiologists	28	32	4	13%	Insf. Data	13	\$122.00	\$75.76
29-1141	Registered Nurses	6,489	6,359	(130)	(2%)	22%	3,813	\$37.39	\$31.34
21-1015	Rehabilitation Counselors	230	274	45	19%	58%	274	\$18.96	\$20.56
29-1126	Respiratory Therapists	314	329	15	5%	18%	183	\$29.33	\$24.63
19-3034	School Psychologists	79	74	(5)	(6%)	25%	58	\$35.80	\$28.88
21-1029	Social Workers, All Other	49	57	8	16%	34%	58	\$24.98	\$18.53
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	454	543	89	19%	43%	549	\$23.46	\$17.98
29-1249	Surgeons, All Other	108	102	(6)	(5%)	13%	29	\$120.76	\$146.05
29-2055	Surgical Technologists	238	231	(7)	(3%)	22%	163	\$22.62	\$18.99
		30,170	31,097	927	3%	49%	31,506		

Region 7

Occupation Table

65 Occupations in Region 7

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26037	Clinton County, MI
26045	Eaton County, MI
26065	Ingham County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	63	60	(3)	(5%)	Insf. Data	18	\$111.19	\$109.19
29-1212	Cardiologists	38	37	(1)	(3%)	Insf. Data	11	\$126.45	\$98.43
29-2031	Cardiovascular Technologists and Technicians	47	48	1	3%	Insf. Data	33	\$36.08	\$26.68
21-1021	Child, Family, and School Social Workers	778	871	93	12%	32%	851	\$24.32	\$21.42
19-3033	Clinical and Counseling Psychologists	76	79	4	5%	23%	54	\$37.74	\$27.13
29-2018	Clinical Laboratory Technologists and Technicians	526	545	19	4%	25%	395	\$28.71	\$19.35
21-1094	Community Health Workers	222	257	35	16%	46%	294	\$23.80	\$22.64
31-9091	Dental Assistants	471	469	(1)	(0%)	70%	691	\$18.68	\$17.03
29-1292	Dental Hygienists	365	366	0	0%	33%	252	\$30.82	\$28.96

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	\$80.35
29-1021	Dentists, General	173	172	(1)	(1%)	13%	54	\$80.19	\$99.78
29-1213	Dermatologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	Insf. Data
29-2032	Diagnostic Medical Sonographers	94	105	11	12%	16%	66	\$30.61	\$26.74
29-2042	Emergency Medical Technicians	105	117	12	11%	30%	98	\$17.56	\$13.95
29-1214	Emergency Medicine Physicians	96	96	1	1%	11%	28	\$123.17	\$98.92
29-1215	Family Medicine Physicians	123	119	(3)	(3%)	11%	35	\$126.60	\$89.59
29-1216	General Internal Medicine Physicians	109	109	(0)	(0%)	11%	32	\$2995	\$28.10
21-1022	Healthcare Social Workers	247	273	25	10%	37%	267	\$29.65	\$28.05
31-1128	Home Health and Personal Care Aides	3,524	4,293	770	22%	78%	6,644	\$13.47	\$10.15
19-3032	Industrial-Organizational Psychologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2061	Licensed Practical and Licensed Vocational Nurses	360	392	32	9%	50%	337	\$24.15	\$21.40
29-2035	Magnetic Resonance Imaging Technologists	36	37	1	3%	Insf. Data	23	\$36.27	\$23.05
21-1013	Marriage and Family Therapists	64	83	19	30%	42%	78	\$31.66	\$23.42
31-9092	Medical Assistants	1,017	1,068	51	5%	61%	1,509	\$17.97	\$13.55
21-1023	Mental Health and Substance Abuse Social Workers	351	368	17	5%	37%	341	\$23.06	\$24.65
29-1217	Neurologists	31	31	(1)	(2%)	Insf. Data	<10	\$83.25	\$99.18
29-2033	Nuclear Medicine Technologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$29.58

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1151	Nurse Anesthetists	67	70	3	5%	17%	37	\$101.14	\$32.19
29-1161	Nurse Midwives	0	0	0	0%	0%	0	\$0.00	Insf. Data
29-1171	Nurse Practitioners	188	239	51	27%	19%	162	\$49.89	\$32.12
31-1131	Nursing Assistants	1,434	1,481	46	3%	81%	2,223	\$14.87	\$12.38
29-1218	Obstetricians and Gynecologists	39	37	(1)	(3%)	Insf. Data	11	\$102.57	\$111.31
29-1122	Occupational Therapists	181	196	16	9%	23%	125	\$37.95	\$32.56
31-2011	Occupational Therapy Assistants	32	37	5	16%	73%	59	\$26.17	\$20.34
29-1241	Ophthalmologists, Except Pediatric	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	Insf. Data
29-1041	Optometrists	63	60	(3)	(5%)	Insf. Data	19	\$51.93	\$41.93
29-1022	Oral and Maxillofacial Surgeons	42	41	(0)	(1%)	Insf. Data	13	\$124.56	Insf. Data
31-1132	Orderlies	76	80	4	5%	43%	125	\$14.82	\$12.33
29-1023	Orthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1242	Orthopedic Surgeons, Except Pediatric	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2043	Paramedics	98	110	12	13%	20%	69	\$18.40	\$13.96
29-1221	Pediatricians, General	61	59	(1)	(2%)	Insf. Data	17	\$50.28	\$86.49
29-1243	Pediatric Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	337	366	29	9%	18%	167	\$61.86	\$53.28
29-2052	Pharmacy Technicians	596	651	55	9%	45%	618	\$14.81	\$13.14
31-9097	Phlebotomists	229	235	6	3%	63%	335	\$18.10	\$14.55
31-2021	Physical Therapist Assistants	105	124	19	18%	62%	179	\$28.84	\$22.48
29-1123	Physical Therapists	318	350	32	10%	19%	179	\$45.69	\$36.26

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1071	Physician Assistants	226	262	36	16%	22%	175	\$58.82	\$45.56
29-1229	Physicians, All Other	401	409	8	2%	9%	125	\$82.67	\$98.15
29-1222	Physicians, Pathologists	32	32	1	2%	Insf. Data	<10	\$91.77	\$99.41
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	30	31	1	4%	Insf. Data	11	\$123.24	\$65.60
19-3039	Psychologists, All Other	85	98	13	16%	15%	77	\$31.40	\$36.47
29-1124	Radiation Therapists	55	58	2	4%	Insf. Data	28	\$31.72	\$34.19
29-2034	Radiologic Technologists and Technicians	234	241	7	3%	18%	138	\$28.79	\$23.06
29-1224	Radiologists	61	61	(0)	(0%)	Insf. Data	18	\$101.69	\$99.06
29-1141	Registered Nurses	3,751	3,972	221	6%	21%	2,429	\$37.55	\$31.86
21-1015	Rehabilitation Counselors	157	217	60	38%	31%	228	\$22.76	\$20.07
29-1126	Respiratory Therapists	158	177	20	12%	18%	107	\$29.62	\$25.33
19-3034	School Psychologists	68	70	2	3%	21%	56	\$36.46	\$27.44
21-1029	Social Workers, All Other	113	124	12	10%	30%	122	\$31.31	\$22.18
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	558	651	93	17%	41%	649	\$28.71	\$25.60
29-1249	Surgeons, All Other	63	62	(2)	(2%)	Insf. Data	16	\$31.54	\$127.05
29-2055	Surgical Technologists	160	167	7	4%	22%	118	\$22.82	\$20.14
		18,936	20,771	1,834	10%	43%	20,766		

Region 8

Occupation Table

65 Occupations in Region 8

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26021	Berrien County, MI
26023	Branch County, MI
26025	Calhoun County, MI
26027	Cass County, MI
26077	Kalamazoo County, MI
26149	St. Joseph County, MI
26159	Van Buren County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	117	93	(23)	(20%)	16%	32	\$144.49	\$99.18
29-1212	Cardiologists	38	38	(0)	(0%)	Insf. Data	15	\$134.09	Insf. Data
29-2031	Cardiovascular Technologists and Technicians	168	165	(3)	(2%)	24%	114	\$27.93	\$25.22
21-1021	Child, Family, and School Social Workers	1,061	1,194	133	13%	46%	1,174	\$25.82	\$23.24
19-3033	Clinical and Counseling Psychologists	167	202	35	21%	35%	160	\$31.56	\$32.33
29-2018	Clinical Laboratory Technologists and Technicians	561	587	26	5%	30%	431	\$23.62	\$21.60
21-1094	Community Health Workers	128	164	36	28%	62%	197	\$22.76	\$18.21

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
31-9091	Dental Assistants	634	661	27	4%	67%	978	\$18.91	\$16.27
29-1292	Dental Hygienists	554	579	24	4%	33%	410	\$30.74	\$28.28
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$112.51
29-1021	Dentists, General	187	197	10	5%	13%	70	\$75.92	\$60.08
29-1213	Dermatologists	0	<10	Insf. Data	Insf. Data	0%	0	\$0.00	Insf. Data
29-2032	Diagnostic Medical Sonographers	242	247	5	2%	19%	150	\$33.63	\$27.04
29-2042	Emergency Medical Technicians	183	210	27	15%	37%	186	\$16.00	\$17.03
29-1214	Emergency Medicine Physicians	158	145	(13)	(8%)	15%	49	\$154.09	\$96.47
29-1215	Family Medicine Physicians	122	125	3	2%	11%	46	\$81.45	\$73.58
29-1216	General Internal Medicine Physicians	102	101	(1)	(1%)	12%	35	\$67.26	\$22.84
21-1022	Healthcare Social Workers	392	440	48	12%	48%	435	\$28.42	\$23.29
31-1128	Home Health and Personal Care Aides	7,121	8,341	1,220	17%	92%	13,131	\$13.10	\$9.60
19-3032	Industrial-Organizational Psychologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$0.00
29-2061	Licensed Practical and Licensed Vocational Nurses	1,021	1,185	164	16%	55%	1,068	\$26.98	\$18.86
29-2035	Magnetic Resonance Imaging Technologists	47	46	(1)	(2%)	22%	29	\$38.68	\$24.42
21-1013	Marriage and Family Therapists	73	116	43	59%	39%	120	\$24.63	\$20.15
31-9092	Medical Assistants	1,525	1,613	88	6%	67%	2,324	\$17.06	\$13.36
21-1023	Mental Health and Substance Abuse Social Workers	418	515	96	23%	57%	521	\$23.28	\$17.10

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1217	Neurologists	23	24	1	3%	Insf. Data	<10	\$74.41	\$87.48
29-2033	Nuclear Medicine Technologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$28.40
29-1151	Nurse Anesthetists	105	102	(3)	(3%)	25%	60	\$93.40	\$29.24
29-1161	Nurse Midwives	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1171	Nurse Practitioners	373	499	126	34%	24%	350	\$46.83	\$29.09
31-1131	Nursing Assistants	2,674	2,995	320	12%	97%	4,620	\$15.25	\$11.93
29-1218	Obstetricians and Gynecologists	54	51	(2)	(4%)	Insf. Data	18	\$97.60	\$124.39
29-1122	Occupational Therapists	312	347	36	11%	28%	229	\$36.24	\$31.45
31-2011	Occupational Therapy Assistants	70	87	17	25%	85%	140	\$25.89	\$18.61
29-1241	Ophthalmologists, Except Pediatric	18	19	0	1%	Insf. Data	<10	\$108.47	\$86.30
29-1041	Optometrists	64	59	(5)	(8%)	Insf. Data	19	\$57.27	\$49.46
29-1022	Oral and Maxillofacial Surgeons	86	88	2	2%	18%	27	\$116.19	\$0.00
31-1132	Orderlies	189	180	(9)	(5%)	62%	285	\$15.78	\$11.71
29-1023	Orthodontists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$113.85
29-1242	Orthopedic Surgeons, Except Pediatric	63	56	(6)	(10%)	16%	18	\$108.87	Insf. Data
29-2043	Paramedics	246	273	27	11%	29%	171	\$20.96	\$16.11
29-1221	Pediatricians, General	75	78	3	4%	Insf. Data	25	\$30.88	\$91.85
29-1243	Pediatric Surgeons	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1051	Pharmacists	643	645	1	0%	21%	270	\$60.15	\$52.93
29-2052	Pharmacy Technicians	1,092	1,098	6	1%	52%	1,020	\$16.92	\$12.69
31-9097	Phlebotomists	269	282	13	5%	70%	408	\$17.38	\$12.65
31-2021	Physical Therapist Assistants	210	246	36	17%	84%	356	\$23.83	\$21.06
29-1123	Physical Therapists	497	556	59	12%	23%	293	\$37.95	\$34.27

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1071	Physician Assistants	304	355	51	17%	27%	240	\$48.60	\$40.97
29-1229	Physicians, All Other	647	633	(14)	(2%)	11%	197	\$67.63	\$94.27
29-1222	Physicians, Pathologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-1024	Prosthodontists	0	0	0	0%	0%	0	\$0.00	\$0.00
29-1223	Psychiatrists	48	52	5	10%	Insf. Data	20	\$38.40	\$82.32
19-3039	Psychologists, All Other	79	102	23	30%	Insf. Data	88	\$28.62	\$22.96
29-1124	Radiation Therapists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$33.72
29-2034	Radiologic Technologists and Technicians	425	434	9	2%	24%	255	\$28.15	\$23.62
29-1224	Radiologists	52	39	(13)	(26%)	Insf. Data	14	\$106.97	\$98.32
29-1141	Registered Nurses	7,111	7,356	245	3%	28%	4,424	\$35.91	\$29.43
21-1015	Rehabilitation Counselors	209	277	68	32%	62%	290	\$20.32	\$21.57
29-1126	Respiratory Therapists	277	307	30	11%	21%	182	\$28.60	\$25.13
19-3034	School Psychologists	154	163	10	6%	26%	136	\$37.33	\$33.10
21-1029	Social Workers, All Other	94	108	15	16%	39%	111	\$28.11	\$23.20
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	855	1,144	289	34%	49%	1,224	\$23.91	\$17.88
29-1249	Surgeons, All Other	41	40	(1)	(2%)	Insf. Data	12	\$39.41	\$127.14
29-2055	Surgical Technologists	287	294	7	3%	29%	208	\$23.41	\$21.08
		32,701	35,992	3,292	10%	54%	37,422		

Region 9

Occupation Table

65 Occupations in Region 9

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26059	Hillsdale County, MI
26075	Jackson County, MI
26091	Lenawee County, MI
26093	Livingston County, MI
26115	Monroe County, MI
26161	Washtenaw County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	233	256	23	10%	14%	96	\$161.39	\$108.80
29-1212	Cardiologists	33	40	7	20%	Insf. Data	17	\$171.42	\$82.46
29-2031	Cardiovascular Technologists and Technicians	328	339	11	3%	23%	230	\$31.43	\$25.28
21-1021	Child, Family, and School Social Workers	1,160	1,319	159	14%	41%	1,303	\$24.42	\$24.67
19-3033	Clinical and Counseling Psychologists	391	415	24	6%	28%	292	\$36.97	\$34.87
29-2018	Clinical Laboratory Technologists and Technicians	1,228	1,325	97	8%	27%	996	\$27.10	\$25.61
21-1094	Community Health Workers	143	178	36	25%	59%	211	\$20.19	\$19.21

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
31-9091	Dental Assistants	1,118	1,223	105	9%	63%	1,810	\$21.56	\$17.44
29-1292	Dental Hygienists	732	795	62	9%	30%	575	\$36.24	\$30.80
29-1029	Dentists, All Other Specialists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$75.84
29-1021	Dentists, General	430	469	39	9%	13%	172	\$69.04	\$52.12
29-1213	Dermatologists	<10	13	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	Insf. Data
29-2032	Diagnostic Medical Sonographers	363	421	57	16%	18%	270	\$36.37	\$25.65
29-2042	Emergency Medical Technicians	547	657	110	20%	33%	574	\$13.58	\$14.10
29-1214	Emergency Medicine Physicians	265	283	18	7%	12%	102	\$161.71	\$87.00
29-1215	Family Medicine Physicians	256	296	39	15%	10%	126	\$98.48	\$70.79
29-1216	General Internal Medicine Physicians	384	416	32	8%	13%	149	\$36.38	\$59.77
21-1022	Healthcare Social Workers	792	860	68	9%	44%	841	\$30.12	\$22.56
31-1128	Home Health and Personal Care Aides	9,453	11,993	2,540	27%	92%	18,688	\$13.34	\$10.00
19-3032	Industrial-Organizational Psychologists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$54.18
29-2061	Licensed Practical and Licensed Vocational Nurses	1,317	1,441	124	9%	48%	1,261	\$27.54	\$21.15
29-2035	Magnetic Resonance Imaging Technologists	159	166	7	5%	23%	105	\$36.18	\$22.55
21-1013	Marriage and Family Therapists	44	74	30	68%	35%	78	\$27.68	\$20.23
31-9092	Medical Assistants	2,934	3,522	588	20%	59%	5,119	\$18.34	\$13.52
21-1023	Mental Health and Substance Abuse Social Workers	646	698	52	8%	39%	664	\$28.40	\$22.00
29-1217	Neurologists	28	33	5	18%	Insf. Data	14	\$86.28	\$77.09

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-2033	Nuclear Medicine Technologists	70	74	5	7%	20%	42	\$36.38	\$28.61
29-1151	Nurse Anesthetists	313	360	47	15%	20%	214	\$133.52	\$28.51
29-1161	Nurse Midwives	73	79	5	7%	28%	45	\$55.36	\$28.70
29-1171	Nurse Practitioners	923	1,332	409	44%	20%	990	\$57.23	\$28.60
31-1131	Nursing Assistants	4,917	4,916	(2)	(0%)	81%	7,439	\$18.01	\$12.55
29-1218	Obstetricians and Gynecologists	74	84	10	14%	Insf. Data	34	\$43.87	\$129.56
29-1122	Occupational Therapists	578	659	81	14%	27%	442	\$37.99	\$29.91
31-2011	Occupational Therapy Assistants	154	204	50	32%	78%	330	\$29.00	\$18.96
29-1241	Ophthalmologists, Except Pediatric	74	83	10	13%	15%	31	\$124.19	\$86.27
29-1041	Optometrists	107	126	19	18%	16%	56	\$60.08	\$40.48
29-1022	Oral and Maxillofacial Surgeons	59	64	5	8%	Insf. Data	22	\$109.14	\$92.19
31-1132	Orderlies	243	254	11	5%	53%	398	\$14.91	\$12.48
29-1023	Orthodontists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$113.30
29-1242	Orthopedic Surgeons, Except Pediatric	23	29	6	29%	Insf. Data	13	\$110.45	\$128.27
29-2043	Paramedics	295	351	56	19%	22%	230	\$22.40	\$14.08
29-1221	Pediatricians, General	244	267	23	9%	14%	97	\$36.38	\$74.57
29-1243	Pediatric Surgeons	<10	<10	Insf. Data	Insf. Data	Insf. Data	0	Insf. Data	\$0.00
29-1051	Pharmacists	1,023	1,065	42	4%	20%	455	\$61.62	\$51.19
29-2052	Pharmacy Technicians	1,630	1,603	(26)	(2%)	53%	1,479	\$17.33	\$13.06
31-9097	Phlebotomists	446	484	38	9%	61%	699	\$18.09	\$13.60
31-2021	Physical Therapist Assistants	307	408	101	33%	69%	603	\$28.75	\$20.80
29-1123	Physical Therapists	932	1,128	196	21%	23%	653	\$45.31	\$36.28
29-1071	Physician Assistants	821	1,006	185	22%	24%	703	\$57.64	\$41.15
29-1229	Physicians, All Other	1,313	1,426	113	9%	11%	514	\$94.36	\$86.68

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1222	Physicians, Pathologists	63	69	6	10%	Insf. Data	27	\$103.87	\$84.47
29-1024	Prosthodontists	<10	<10	Insf. Data	Insf. Data	Insf. Data	<10	Insf. Data	\$0.00
29-1223	Psychiatrists	145	156	11	7%	15%	54	\$71.72	\$68.85
19-3039	Psychologists, All Other	264	289	25	9%	16%	218	\$35.42	\$41.73
29-1124	Radiation Therapists	70	74	4	5%	17%	37	\$37.89	\$35.27
29-2034	Radiologic Technologists and Technicians	758	810	52	7%	21%	481	\$28.93	\$22.66
29-1224	Radiologists	170	185	15	9%	24%	71	\$96.64	\$89.11
29-1141	Registered Nurses	13,126	13,932	806	6%	24%	8,586	\$37.69	\$28.77
21-1015	Rehabilitation Counselors	273	325	52	19%	67%	331	\$23.08	\$21.25
29-1126	Respiratory Therapists	633	711	78	12%	21%	430	\$29.52	\$25.15
19-3034	School Psychologists	131	134	3	2%	24%	108	\$36.10	\$35.51
21-1029	Social Workers, All Other	202	226	24	12%	36%	225	\$33.33	\$22.37
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	915	1,137	222	24%	41%	1,179	\$24.64	\$19.10
29-1249	Surgeons, All Other	195	203	8	4%	12%	67	\$36.38	\$145.89
29-2055	Surgical Technologists	411	434	22	5%	25%	310	\$23.27	\$20.22
		54,984	61,936	6,952	13%	46%	61,322		

Region 10

Occupation Table

65 Occupations in Region 10

Lightcast Q2 2023 Data Set

May 2023

Parameters

Timeframe: 2022 - 2032

Datarun: 2023.2 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Regions: See table below

Code	Description
26099	Macomb County, MI
26125	Oakland County, MI
26163	Wayne County, MI

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1211	Anesthesiologists	324	326	2	1%	12%	102	\$140.76	\$127.92
29-1212	Cardiologists	271	277	6	2%	12%	85	\$143.13	\$67.81
29-2031	Cardiovascular Technologists and Technicians	917	924	7	1%	25%	607	\$30.30	\$23.16
21-1021	Child, Family, and School Social Workers	4,881	5,138	258	5%	45%	4,872	\$23.94	\$24.19
19-3033	Clinical and Counseling Psychologists	867	966	99	11%	35%	718	\$36.18	\$29.09
29-2018	Clinical Laboratory Technologists and Technicians	3,720	3,740	20	1%	30%	2,622	\$28.40	\$19.99
21-1094	Community Health Workers	672	755	83	12%	60%	854	\$22.58	\$17.89
31-9091	Dental Assistants	5,303	5,775	472	9%	67%	8,456	\$18.09	\$15.49
29-1292	Dental Hygienists	3,339	3,639	300	9%	31%	2,588	\$30.86	\$30.51
29-1029	Dentists, All Other Specialists	83	83	0	0%	Insf. Data	26	\$71.99	\$59.66

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
29-1021	Dentists, General	2,244	2,344	100	4%	9%	778	\$79.83	\$63.36
29-1213	Dermatologists	32	35	3	10%	Insf. Data	14	\$140.10	\$80.60
29-2032	Diagnostic Medical Sonographers	1,338	1,441	103	8%	21%	852	\$31.99	\$27.75
29-2042	Emergency Medical Technicians	1,095	1,167	72	7%	46%	995	\$15.10	\$15.18
29-1214	Emergency Medicine Physicians	743	757	14	2%	13%	229	\$167.01	\$68.38
29-1215	Family Medicine Physicians	722	738	16	2%	10%	247	\$106.47	\$75.16
29-1216	General Internal Medicine Physicians	1,145	1,156	11	1%	13%	343	\$100.75	\$69.49
21-1022	Healthcare Social Workers	2,286	2,396	109	5%	49%	2,286	\$29.31	\$25.49
31-1128	Home Health and Personal Care Aides	40,396	46,791	6,395	16%	81%	72,036	\$13.33	\$10.07
19-3032	Industrial-Organizational Psychologists	22	28	6	25%	Insf. Data	23	\$40.64	\$51.77
29-2061	Licensed Practical and Licensed Vocational Nurses	4,167	4,303	137	3%	50%	3,589	\$28.25	\$22.18
29-2035	Magnetic Resonance Imaging Technologists	708	715	8	1%	24%	428	\$36.32	\$25.08
21-1013	Marriage and Family Therapists	318	478	160	50%	15%	477	\$28.82	\$23.56
31-9092	Medical Assistants	10,502	11,522	1,020	10%	69%	16,358	\$17.87	\$13.23
21-1023	Mental Health and Substance Abuse Social Workers	1,522	1,670	147	10%	43%	1,594	\$23.98	\$20.84
29-1217	Neurologists	177	178	2	1%	14%	52	\$105.39	\$68.19
29-2033	Nuclear Medicine Technologists	301	302	1	0%	20%	159	\$37.88	\$30.43
29-1151	Nurse Anesthetists	982	1,034	53	5%	21%	547	\$106.16	\$32.86
29-1161	Nurse Midwives	75	78	3	4%	23%	43	\$52.36	\$32.74
29-1171	Nurse Practitioners	2,663	3,502	839	32%	24%	2,412	\$50.30	\$32.81

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
31-1131	Nursing Assistants	16,281	15,651	(630)	(4%)	89%	23,881	\$17.31	\$12.40
29-1218	Obstetricians and Gynecologists	200	203	3	2%	11%	64	\$113.55	\$117.57
29-1122	Occupational Therapists	1,983	2,234	252	13%	31%	1,477	\$37.67	\$31.74
31-2011	Occupational Therapy Assistants	694	861	167	24%	96%	1,373	\$25.10	\$22.93
29-1241	Ophthalmologists, Except Pediatric	248	252	4	2%	13%	72	\$123.52	\$67.90
29-1041	Optometrists	791	956	166	21%	10%	440	\$60.17	\$50.91
29-1022	Oral and Maxillofacial Surgeons	216	228	12	6%	12%	75	\$92.45	\$90.73
31-1132	Orderlies	780	769	(11)	(1%)	60%	1,191	\$14.94	\$12.41
29-1023	Orthodontists	89	88	(0)	(0%)	Insf. Data	31	\$100.07	\$103.29
29-1242	Orthopedic Surgeons, Except Pediatric	172	177	5	3%	12%	51	\$141.80	\$129.59
29-2043	Paramedics	912	974	62	7%	31%	609	\$22.77	\$15.23
29-1221	Pediatricians, General	379	385	6	2%	12%	118	\$100.54	\$68.33
29-1243	Pediatric Surgeons	22	22	(0)	(1%)	Insf. Data	<10	\$93.95	\$110.93
29-1051	Pharmacists	4,882	4,930	47	1%	20%	1,973	\$61.10	\$53.67
29-2052	Pharmacy Technicians	6,496	6,641	144	2%	50%	6,059	\$17.82	\$13.22
31-9097	Phlebotomists	916	1,024	108	12%	71%	1,485	\$17.60	\$13.18
31-2021	Physical Therapist Assistants	1,513	1,897	384	25%	81%	2,775	\$23.71	\$20.72
29-1123	Physical Therapists	3,671	4,270	599	16%	25%	2,352	\$39.02	\$37.65
29-1071	Physician Assistants	1,751	2,085	334	19%	27%	1,410	\$52.00	\$42.59
29-1229	Physicians, All Other	6,663	6,724	61	1%	13%	1,961	\$31.94	\$68.44
29-1222	Physicians, Pathologists	117	125	8	7%	9%	43	\$127.75	\$71.84
29-1024	Prosthodontists	19	21	2	13%	Insf. Data	<10	\$84.57	Insf. Data
29-1223	Psychiatrists	194	208	14	7%	11%	72	\$114.73	\$84.71

SOC	Description	2022 Jobs	2032 Jobs	2022 - 2032 Change	2022 - 2032 % Change	2022 Turnover Rate	2022 - 2032 Openings	2021 Median Hourly Earnings	2011 Median Hourly Earnings
19-3039	Psychologists, All Other	933	1,056	123	13%	4%	813	\$34.68	\$37.52
29-1124	Radiation Therapists	161	166	5	3%	18%	77	\$38.35	\$32.26
29-2034	Radiologic Technologists and Technicians	2,582	2,601	19	1%	22%	1,427	\$29.64	\$25.08
29-1224	Radiologists	304	325	21	7%	10%	111	\$153.71	\$69.37
29-1141	Registered Nurses	42,302	42,600	298	1%	26%	24,598	\$37.83	\$32.66
21-1015	Rehabilitation Counselors	778	824	46	6%	47%	827	\$18.96	\$12.96
29-1126	Respiratory Therapists	2,024	2,152	128	6%	21%	1,211	\$29.54	\$25.67
19-3034	School Psychologists	393	373	(20)	(5%)	28%	291	\$37.92	\$31.52
21-1029	Social Workers, All Other	731	798	68	9%	26%	783	\$29.06	\$23.71
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	4,322	4,987	665	15%	43%	4,961	\$22.94	\$21.94
29-1249	Surgeons, All Other	742	733	(9)	(1%)	15%	197	\$127.36	\$151.27
29-2055	Surgical Technologists	1,741	1,735	(6)	(0%)	28%	1,174	\$23.33	\$19.89
		197,816	211,336	13,520	7%	48%	208,386		

Data Sources and Calculations

Occupation Data

Lightcast occupation employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Lightcast earnings by industry.

State Data Sources

This report uses state data from the following agencies: Michigan Department of Technology, Management and Budget.

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