DIVERSIFYING THE HEALTHCARE WORKFORCE:
IMPLICATIONS FOR BIRTH OUTCOMES

AUGUST 2021

PREPARED AND PRESENTED BY:
MICHIGAN COUNCIL FOR MATERNAL AND CHILD HEALTH

A **diverse healthcare workplace** is one that includes employees of different ages, genders, racial and ethnic backgrounds, sexual orientation, socioeconomic status, and personality bringing a multitude of lived experiences to institutions and organizations.

INTRODUCTION

Starting in the 1970s, the federal government invested resources that supported the development of initiatives for underrepresented groups from disadvantaged backgrounds to join the healthcare workforce (3). Yet, nearly 50 years later, a diverse health care workforce remains aspirational, particularly in specialty fields that serve women, children and families (5).

A diverse maternal and child health workplace is one that has employees of different ages, genders, racial and ethnic backgrounds, sexual orientation, socioeconomic status, and personality bringing a multitude of lived experiences to institutions and organizations. The benefits of having a diverse workforce are far-reaching and include improvements to innovation, increased productivity, increased team communication and engagement (1-3).

Overall, the U.S. population continues to become more diverse, and, in some states, there is a majority-minority population. This occurs when 50% or more of the population is composed of racial and ethnic minorities (3). While the population has continued to diversify, the healthcare workforce has not kept pace. These continued changes in the racial and ethnic make-up of the general population makes it likely that health professionals will engage with patients that have different cultural backgrounds from their own. The lack of diversity in the workforce across all health professions has revealed a national public health issue that needs attention. Initiatives and sustainable strategies for all local, state and federal levels and within public and private sectors will help better ensure that the healthcare workforce meets the needs of the diverse patient population and reflects the racial and ethnic diversity across the nation and in Michigan.

Throughout this brief, structural barriers and racism are highlighted. In Michigan, mandates and policies have focused strong efforts on reducing health disparities by incorporating implicit bias training for existing providers. While this is helpful in taking a step towards a more inclusive and informed workforce, it does not equate to changing admissions and hiring practices that are ingrained within local, state and federal institutions. This document covers pipeline programs, mentorships, financial incentives, and other factors that may contribute to an individual's ability to enter the maternal and child healthcare workforce, however there are deeply rooted and widespread implicit and explicit biases that have prohibited meaningful changes to the workforce in the past.

DIVERSIFYING THE HEALTHCARE WORKFORCE

THE ISSUE

According to 2019 U.S. population estimates, the general population identify as the following race and ethnic origin: Hispanic or Latino 18.5%, Black or African American 13.4%, American Indian and Alaska native 1.3%, Asian 5.9%, two or more races 2.8% and White 76.3% (8). For the same time period, the total percent of physicians did not reflect the general population (5, 7, 8).

The table at right demonstrates the current diversity in medical education by racial and ethnic characteristics for the percent of United States medical school (MD) graduates in 2020. This table highlights the Michigan rates compared to the United States for race/ethnicity in six categories. A majority of those who chose Hispanic also identified with another race or ethnic group, most notably White race. In addition, in 2019 almost 80% of the men and women who identified as American Indian, Alaska Native or Native Hawaiian or other Pacific Islander also identified with another race or ethnic group; nevertheless, these groups were underrepresented (5-9).

This graphical representation below depicts the distribution of medical school graduates from 2015 to 2020. In 2015, White graduates accounted for 61% of the total distribution of MDs in Michigan, while only 5% of Black and 1% of Hispanic individuals graduated in the same year. In the years 2016 – 2019 there was a modest decrease for Black graduates (4%) but the rate rose to 7% in 2020. Individuals that identified as multiple race/ethnicities had a steady increase from 6% in 2015 to 8% in 2020. According to this dataset, there were zero individuals who identified as American Indian/Alaska Native that graduated medical school from 2015-2020. Other racial and ethnic groups, such as Native Hawaiians and Pacific Islanders (not displayed), followed the same underrepresented trends as American Indian/Alaska Native in medicine.

Overall Distribution of Medical School (MD) Graduates in Michigan by Race/Ethnicity: White, Black, Hispanic, Asian & American Indian/Alaska

	Michigan	United States
White	56%	53%
Black	7%	7%
Hispanic	3%	6%
Asian	21%	22%
American Indian/ Alaska Native	0%	0%
Multiple Race/ Ethnicity	8%	9%

Notes: Allopathic medical school graduates receive an MD upon completion of their program. Allopathic graduates are trained in how to treat symptoms and diseases using drugs, radiation, or surgery with a focus on maintaining health through the application of acute and preventive care. Osteopathic medical school graduates receive a DO upon completion of their program. Osteopathic graduates are trained to use all of the tools of modern medicine with an emphasis on helping each patient to attain wellness by focusing on health education, injury prevention, and disease prevention. Table does not include graduates from schools of osteopathic medicine. For counts of osteopathic graduates by race/ethnicity, please see Distribution of Osteopathic Medical School Graduates by Race/Ethnicity. The "Multiple Race/Ethnicity" category includes those who selected more than one race/ethnicity response.

Sources: Association of American Medical Colleges (AAMC), Data and Analysis, Total Graduates by U.S. Medical School and Race and Ethnicity, 2016-2020 (9).

Distribution of Medical School (MD) Graduates in Michigan by Race/Ethnicity: White, Black, Hispanic, Asian & American Indian/Alaska

Graph Key:
○ White
□ Black
▽ Hispanic
◇ Asian
△ American Indian/ Alaska Native
○ Multiple Race/ Ethnicity

Source:
Kaiser Family Foundation's Health Facts (9).

Similar data is represented for the nursing education sector. According to a 2017 survey conducted by the National Council of State Boards of Nursing (NCSBN) and The Forum of State Nursing Workforce Centers, nurses from minority backgrounds represent 19.2% of the registered nurse (RN) workforce. Considering racial/ethnic backgrounds, the population of RNs is comprised of 80.8% White/Caucasian; 6.2% African American; 7.5% Asian; 5.3% Hispanic; 0.4% American Indian/Alaskan Native; 0.5 Native Hawaiian/Pacific Islander; 1.7% two or more races; and 2.9% other nurses (12).

While it is important to note the maternal and child healthcare workforce expands beyond clinician enrollment and attainment, this data demonstrates the disparities across racial and ethnic groups. The table and graph highlight disparities in medical education that have been prevalent for over 50 years in the United States, as well as in Michigan. The uneven distribution of healthcare staff is prevalent in medical education overall; it is also similar in health care educators, public health matriculation, and those working in peer-to-peer and/or community based social services.

These data and trends highlight that achieving the goal of a truly representative healthcare workforce will require a greater degree of policy change, resource allocation, and commitment to create a healthcare system that truly values diversity, reflects the communities it serves, and puts more resources towards inclusivity.

The National Academy of Medicine found that increasing racial and ethnic diversity in the healthcare setting has been associated with improved access to care for racial and ethnic minority patients (5,6). Having racial and/or ethnic concordance between providers and patients has been associated with improvements in clinical outcomes (14,15). However, prior studies have identified differential experiences within the learning environment that identify lack of social supports, and implicit bias in evaluations as barriers to the academic interests and successes of individuals that are underrepresented in medicine (13). Simply put, the current workforce does not reflect the current census, which is negatively affecting the health of families.

While we are still facing this problem, it's important not to diminish prior initiatives that have been attempted to ameliorate this public health issue. Over the past 50 years, there have been many efforts to improve workforce diversity. However, to date, current university/college admission rates still do not match the general population. Overall, there needs to be a more effective and sustainable systematic initiative that focuses on the multifaceted, multi-level healthcare system that serves women, families and children.

OPPORTUNITIES TO IMPROVE

Increasing diversity in the healthcare workforce is cited as a strategy for reducing racial and ethnic health disparities (3). A racially and ethnically diverse maternal and child health care workforce remains a distant goal that is contingent on improving the educational pipeline from elementary to advanced education, the reduction of financial barriers, as well as psychological and skill building services from mentorship programs.

The maternal and child healthcare workforce is robust and employs a wide array of professionals from specialized surgeons to peer-to-peer lactation consultants, nurse midwives, doulas, public health professionals, among others. Some of the specialties require decades of traditional schooling while other professions rely heavily on lived experiences and peer-to-peer support. All of these professionals are valuable for women and families throughout their entire lives. More specifically, when the workforce becomes more inclusive and diverse in each of these fields more families will have access to fulfill their physical and emotional healthcare needs specific to their lived experiences. For example, community health workers who live and work in the areas they serve allows for a mutual understanding of the structural barriers faced within specific communities. This information is essential in reducing disparities.

Improving the Pipeline

An educational pipeline is designed to provide academic and career supports to those entering health professions programs. The pipeline is needed to improve workforce diversity but structural barriers may impede the successful completion of schooling and science, technology, engineering, and mathematics (STEM) courses that provide the basis for a career in the healthcare field. This pipeline requires health sciences curriculum starting in middle and high school and includes, but is not limited to, medical education, nursing school, public health professionals, social workers, doulas, home visitors, and individuals with on-the-job training. These educational opportunities should start in every school, as early as elementary school and continue until individuals fulfill their medical career pathway.

While there are traditional students that have a successful completion of middle, high school, college and advanced degrees, many students do not take a traditional trajectory. For example, there are students who have financial responsibilities that make it challenging to work a full-time job while obtaining the required education or may take care of sick family members or young children that limit time for extracurricular activities. These challenges coupled with structural barriers make it nearly impossible for some students to obtain a post-secondary degree. One solution is to offer sustained support services such as guidance counselors and academic mentors. The role of guidance counselors, as allies, can impact student achievement by reducing barriers and offer a culture of caring for students of color who choose to pursue an advanced education in healthcare (17, 18).

Academic Institutions

One of the ways identified as central to this mission is strengthening college/university diversity through recruitment, admissions and student support practices. Partnering with outside organizations and educational institutions to help identify improvements that funnel towards the educational pipeline is paramount. Improved and increased exposure to the health professions during multiple points along the educational path is necessary to achieve this goal (2). An example would be developing programs and systems that increase the visibility of health professions where racial and ethnically diverse students attend at the K-12 level. Among all other professions that serve women and families, there is a need to attract students from underrepresented groups--specifically men and individuals from African American, Hispanic, American Indian, and Alaskan Native backgrounds. This is a high priority for nursing professionals.

Another leading initiative is adopting a holistic review and admissions policy to balance admissions between candidate experience, individual attributes and academic qualifications (2,4,5). In a 2014 report from Urban Universities for Health Report, the authors concluded that a holistic review of admission practices is an effective strategy to increase diversity of applicants and matriculation for some racial and ethnic groups (10). Unfortunately, a more recent study found that holistic admissions progress had not affected the application or matriculation rates for Black or African American male students (10,11).

Current admissions system relies heavily on historically racist standardized test scores and science course grade point averages for which disadvantaged students often have lower overall scores (3). While standardize testing may provide some helpful individualized information for admissions, additional Information pertaining to a student's work and lived experience, leadership, and cross-cultural abilities would improve the success and enrollment of a diverse student body. Individuals working directly in their community, caring for those who might be marginalized, have unique lived experiences that do not show up on a standardized test or in the core science curriculum; these skills allow for a more robust understanding and diverse experiences that will benefit recipients of healthcare services in the future.

An academic institution's successful enrollment to increase underrepresented populations is the first step in this multifactorial conundrum. Admissions is only the first hurdle; students often face challenges that reach far beyond the classroom setting. The complexities students face can be ameliorated by additional academic and social supports such as tutoring, counseling, mentorships, and guidance on financial management and navigating available support services.

Mentorship

Improving the educational pipeline goes beyond college and university admissions. There is a need for the recruitment, retention and support of underrepresented populations. Providing students with psychological and skill building services to improve their success in pursuing a healthcare career is imperative. As such, communities of color require the support of mentors and guidance counselor allies. Allies are people from a dominant, racial/ethnic, and socio-political groups who seek to end oppression and reduce health disparities (18). These individuals possess self-awareness, personal knowledge of and connection to communities of color, and the skills of rapport building and engaging in critical conversations while also participating in action on behalf of their students.

Allyship is important for mentoring students, however, this type of mentorship might be more useful if there were more faculty members that had the same racial and ethnic backgrounds as the students they serve; there is still an under representation of diverse racial and ethnic faculty members, which has contributed to an ineffectiveness of past programs (2). Underrepresented faculty members taking leadership roles is a step towards successful implementation of improved admissions procedures and initiatives aimed at supporting students. Encouraging these faculty members to take on leadership roles is important; however this can add considerable burden to the faculty's workload that may end in compassion fatigue. Such involvement should have career promoting incentives and systemic support throughout an entire institution.

For example, the need to attract diverse nursing students is paralleled by the need to recruit more faculty from minority populations. Few nurses from racial/ethnic minority groups with advanced nursing degrees pursue faculty careers. According to 2017 data from AACN's annual survey, only 16% of full-time nursing school faculty come from minority backgrounds, and only 6.2% are male (16). Mentorship programs should reflect the study body they are intended to serve, while also hiring mentors that have passion and a culture of caring to assist students when life challenges arise throughout their schooling. Not only are mentorship programs important to be woven into medical academic settings, but also in public health agencies, home visiting programs, social work and social service institutions.

FINANCIAL BARRIERS AND SOLUTIONS

Over the past 50 years, the public service loan forgiveness programs that have been proposed and implemented have overwhelmingly failed. There have been many ineffective loan repayment programs in Michigan, as well as across the nation.

Prior financial assistance programs have focused on cost reduction through subsidies, private donations, and grants, but have not been sufficient in that the availability does not match the need and there is limited sustainability attached to these programs. Students' loans and the increasing cost of education, especially medical education, is a heavy debt burden for individuals contemplating entering the maternal and child health profession. Students with higher amounts of debt have reported higher levels of stress, delay having children, and express concerns that educational debt will impact their specialty choice (19, 20). Students were also less likely to practice in underserved locations and were less likely to choose primary care specialties including pediatrics and obstetrics (19).

The average accumulated debt for all students finishing MD programs is more than $200,000, but the educational debt disproportionately affects Black or African American, Hispanic or Latino and American Indian or Alaska Native individuals (18, 21). These students experience higher amounts of educational debt; 84.8 % of American Indians, 87.2 % of Latinos, and 93.4 % of Black medical students have debt (21). This financial debt from advanced education is a contributing factor to lack of diversity in medical schools (18).

> In a 2014 survey, the number of students matriculating from families with lower incomes had decreased; Black, Hispanic and Native American students were overrepresented in the lower income bracket due to lasting wealth inequalities from a history of racially discriminatory labor and housing laws (18, 19).

SUMMARY

Institutions that serve women, families and children need to redouble efforts to diversify their workforce as a critical component of addressing racial disparities in birth outcomes.

Approaches such as loan repayment and mentor programs have been promoted for decades, but have fallen short, as demonstrated by data showing little change in the percentage of professionals who identify as Black or African American, Hispanic or Latino and American Indian or Alaska Native individuals.

Willingness to try innovative approaches, informed by lived experiences and challenges with current structures, will be key to realizing a perinatal workforce that reflects the race and ethnicities of those it serves. Linking these initiatives to specific measures, assessments and payment structures that recognize outcomes, career mobility, and financial stability can contribute to a system that elevates the importance and priority of improving workforce diversity.

Specific efforts that focus on recruiting diverse academic faculty, building strong social supports to address non-academic challenges and facilitating cross-cultural communication can positively affect the educational experience for underrepresented racial/ethnic learners and contribute to their academic success (13). There is a need for more institution-level initiatives that foster a culture of caring and inclusion beyond implicit bias training and focus on nurturing each student or new professional as an individual. These attributes, coupled with adequate financial resources, can build a culture of trust within the programs that over time will yield a more diverse workforce and allows those individuals to serve as role models as faculty and mentors.

This brief discusses institutional challenges along with opportunities to enhance diversity in the healthcare workforce. To fully realize how such efforts may positively impact the perinatal workforce specifically they must also be coupled with consistent efforts to overcome institutional and societal bias, not truly addressed here in much detail, towards specialties and fields that serve women and children.

REFERENCES

1. Gomez, L. E., & Bernet, P. (2019). Diversity improves performance and outcomes. Journal of the National Medical Association, 111(4), 383-392.

2. Mitchell, D. A., & Lassiter, S. L. (2006). Addressing health care disparities and increasing workforce diversity: the next step for the dental, medical, and public health professions. American Journal of Public Health, 96(12), 2093-2097.

3. Camacho, A., Zangaro, G., & White, K. M. (2017). Diversifying the health-care workforce begins at the pipeline: a 5-year synthesis of processes and outputs of the Scholarships for Disadvantaged Students program. Evaluation & the health professions, 40(2), 127-150.

4. Glazer, G., Tobias, B., & Mentzel, T. (2018). Increasing healthcare workforce diversity: urban universities as catalysts for change. Journal of Professional Nursing, 34(4), 239-244.

5. Morris, D. B., Gruppuso, P. A., McGee, H. A., Murillo, A. L., Grover, A., & Adashi, E. Y. (2021). Diversity of the national medical student body—four decades of inequities. New England Journal of Medicine, 384(17), 1661-1668.

6. Bristow, L. R., Butler, A. S., & Smedley, B. D. (Eds.). (2004). In the nation's compelling interest: Ensuring diversity in the health-care workforce.

7. Data, US Physician Workforce. (2020). "Diversity in Medicine: Facts and Figures 2019."

8. United States Census Bureau (2020). QuickFacts United States. https://www.census.gov/quickfacts/fact/table/US/PST045219

9. Kaiser Family Foundation. Association of American Medical Colleges (AAMC), Data and Analysis, Total Graduates by U.S. Medical School and Race and Ethnicity (Alone), 2016-2020.

10. Glazer, G., Bankston, K., Clark, A., & Ying, J. (2014). Holistic admission in the health professions: Findings from a national survey. Urban Universities for Health Report.

11. Grbic, D., Morrison, E., Sondheimer, H. M., Conrad, S. S., & Milem, J. F. (2019). The association between a holistic review in admissions workshop and the diversity of accepted applicants and students matriculating to medical school. Academic Medicine, 94(3), 396-403.

12. Smiley, R. A., Lauer, P., Bienemy, C., Berg, J. G., Shireman, E., Reneau, K. A., & Alexander, M. (2018). The 2017 national nursing workforce survey. Journal of Nursing Regulation, 9(3), S1-S88.

13. Diaz, T., Navarro, J. R., & Chen, E. H. (2020). An institutional approach to fostering inclusion and addressing racial bias: implications for diversity in academic medicine. Teaching and learning in medicine, 32(1), 110-116.

14. Takeshita, J., Wang, S., Loren, A. W., Mitra, N., Shults, J., Shin, D. B., & Sawinski, D. L. (2020). Association of Racial/Ethnic and Gender Concordance Between Patients and Physicians With Patient Experience Ratings. JAMA network open, 3(11), e2024583-e2024583.

15. Shen, M. J., Peterson, E. B., Costas-Muñiz, R., Hernandez, M. H., Jewell, S. T., Matsoukas, K., & Bylund, C. L. (2018). The effects of race and racial concordance on patient-physician communication: a systematic review of the literature. Journal of racial and ethnic health disparities, 5(1), 117-140.

16. American Association of Colleges of Nursing. (2019). Fact Sheet: Enhancing Diversity in the Nursing Workforce. https://www.aacnnursing.org/Portals/42/News/Factsheets/Enhancing-Diversity-Factsheet.pdf

17. Welton, A. D., & Martinez, M. A. (2014). Coloring the college pathway: A more culturally responsive approach to college readiness and access for students of color in secondary schools. The Urban Review, 46(2), 197-223.

18. "Loan Interest Deferment To Improve Access To Medical Education, " Health Affairs Blog, January 21, 2021. DOI: 10.1377/hblog20210119.542196

19. Rohlfing, J., Navarro, R., Maniya, O. Z., Hughes, B. D., & Rogalsky, D. K. (2014). Medical student debt and major life choices other than specialty. Medical education online, 19(1), 25603.

20. Fritz, E. M., Van Den Hoogenhof, S., & Braman, J. P. (2019). Association between medical student debt and choice of specialty: a 6-year retrospective study. BMC medical education, 19(1), 1-7.

21. Toretsky, C., Mutha, S., & Coffman, J. (2019). Reducing Educational Debt Among Underrepresented Physicians and Dentists. Healthforce Center at UC San Francisco. https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/Reducing%20Educational%20Debt%20Among%20Underrepresented%20Physicians%20and%20Dentists.pdf

SPECIAL THANKS TO OUR PARTNERS

MCMCH is proud to share the **Birth Equity Education Project** series, to increase knowledge and foster discussion about opportunities to improve maternal and infant outcomes through equitable strategies. We thank the many community members, providers and other partners including the Institute for Health Policy at MSU for their input and partnership in this work.

Michigan Council for Maternal & Child Health

110 W. Lenawee Street, Lansing, Michigan 48933

e: info@mcmch.org | **p:** 517-482-5807

www.mcmch.org