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Strategies to address structural and institutional barriers to success among students of color in nursing programs

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ABSTRACT

The COVID-19 pandemic and the significant disparities experienced by Black, Indigenous, and people of color (BIPOC) in infections, hospitalizations, and deaths associated with the Coronavirus have underscored the imperative to increase the size and diversity of the healthcare workforce, including nursing. Academically focused pipeline development programs have led to some advances in minority recruitment and retention; however, emerging research highlights the importance of extra-academic factors that reduce the sense of belonging and persistence among underrepresented and minority students. The purpose of this manuscript is to describe the diversity, equity, and inclusion goals and activities of a college of nursing located in a minority-serving institution. Here, we emphasize the description of a range of activities aimed at meeting our diversity goals. Further, we highlight the actions initiated in response to emergent “extra-academic” student needs over the past year related to the COVID-19 pandemic and police brutality. The strategies described have implications for improving diversity, equity, and inclusion among higher education institutions in nursing.

Introduction

As of September 2021, more than 40.2 million Americans have been diagnosed with Coronavirus, and 656,386 Americans have died due to the coronavirus pandemic (Centers for Disease Control and Prevention (CDC), 2017). Nurses have served as essential frontline workers throughout the entire course of this national health crisis. The COVID-19 pandemic has put a strain on the whole healthcare system; however, it has also shed light on the long-standing nursing shortage. Before the current pandemic, estimates suggested there would be more than a million job openings for nurses by 2024 (Juraschek, Zhang, Ranganathan, & Lin, 2012). Currently, it is unclear what impact the additional strain associated with the pandemic will have on the recruitment and retention of nurses (Deliktas Demirci, Oruc, & Kabukcuoglu, 2021). In addition to an overall shortage in the nursing workforce, the presence of Black, Indigenous, and People of Color (BIPOC) and other historically excluded students and faculty in nursing is persistently low relative to national and student demographics (AACN, 2017; Lin, 2018). Indeed,

the current pandemic has shown a stark light on the persistent health and health care inequities experienced by BIPOC in the United States (U. S.) (Bibbins-Domingo, 2020; Yancy, 2020). As such, the calls by several national organizations for targeted efforts to increase both the number (AACN, 2019a, 2019b) and diversity (AACN, 2017) of highly trained nurses in the workforce are timely and require innovative methods to achieve stated workforce development goals.

Diversifying the nursing workforce is essential for several reasons. Currently, 90% of the nursing workforce is cisgender women, and 75% are white, suggesting the nursing workforce's relative homogeneity persists despite the significant increase in the diversity of the U.S. population (Davis & Fry, 2019). Indeed, by 2040, it is estimated that more than 50% of the U.S. population will identify as a racial or ethnic minority (Vespa, Medina, & Armstrong, 2020). Further, the disproportionate impact of the COVID-19 epidemic among U.S. racial/ethnic minorities underscores the urgent need to not only increase but to diversify the health care delivery workforce (AACN, 2019a, 2019b; Matthews et al., 2021). Research findings have consistently shown that

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patient/provider racial/ethnic concordance is associated with better patient satisfaction, perceived quality of health care services received, a lowered likelihood of unmet needs, and in the case of maternal health, reduced infant mortality rates (CDC, 2017; LaVeist & Carroll, 2002; Greenwood, Hardeman, Huang, & Sojourner, 2020). Nursing programs must embrace evidence-based strategies to ensure that an adequate number of nursing students are recruited in our programs, succeed academically, and persist to graduation.

Nursing pipeline development programs

Baccalaureate Nursing (BSN) programs are responsible for recruiting, enrolling, and retaining a large and diverse group of students (Phillips & Malone, 2014). However, the average nursing programs experience attrition rates up to 50% (Salamonson et al., 2014), with higher rates reported among underrepresented minority (URM) students (Harris, Rosenberg, & Grace O'Rourke, 2014). The National Institutes of Health (NIH) have expended considerable resources to increase the national workforce size and diversity across the biomedical and allied health care professions (USDHHS, 2009). The overall purpose of pipeline programs is to help undergraduate institutions implement and study innovative approaches to engaging and retaining students from diverse backgrounds in biomedical research (Taylor et al., 2019). Nationally funded pipeline development programs in the health sciences have resulted in some successes (Katz, Barbosa-Leiker, & Benavides-Vaello, 2016); however, demographic disparities in all levels of the healthcare workforce remain.

Several factors are known to reduce the benefits of or contribute to the “leakiness” of traditional pipeline development programs (Alexander, Chen, & Grumbach, 2009; Committee for the Assessment of NIH Minority Research Training Programs, 2005; Freeman, Landry, Trevino, Grande, & Shea, 2016). In addition to limited pre-entry preparation in STEM courses (Chang, Sharkness, Hurtado, & Newman, 2014; Lisberg & Woods, 2018; Riegle-Crumb, King, & Irizarry, 2019), studies show that minority nursing students face numerous barriers to successful completion of nursing education, including insufficient academic advising, program mentoring, technical support, and professional socialization (Loftin, Newman, Dumas, Gilden, & Bond, 2012). Although pipeline development programs have primarily focused on academic readiness and professional development, several extra-academic factors also predict high dropout rates among underrepresented students. For example, White and Fulton (2015) conducted an integrative review examining social, emotional, and contextual factors linked to increased dropout and student dissatisfaction among Black nursing students enrolled in majority White institutions. Specific extra-academic factors noted were the fear of appearing unintelligent, difficulties in managing issues of visibility and belonging, social isolation, the lack of role models, and experiences with microaggressions.

Further, structural barriers to higher education also impact student matriculation and success, including poverty, poor high school education, and parental education (Naylor & Mifsud, 2020). In addition, there are limited supports in place to assist students who are differentially impacted by societal events such as the global pandemic and civil unrest, which exacerbate these baseline vulnerabilities (Laurencin & Walker, 2020; McCoy, 2020). Together, these results highlight challenges faced by BIPOC and other marginalized students in higher education.

Given the negative impact of previously mentioned extra-academic factors on the success of URM students in nursing programs, nursing programs need to identify and address institutional and faculty level issues that serve as barriers to the success of URM students. Further, pipeline development programs need to move beyond academic readiness and begin instilling in students the skills necessary to navigate and persist in the face of structural barriers (Byars-Winston et al., 2011). The establishment of institution wide-initiatives that begin to address emotional, social, and contextual factors (i.e., social isolation, microaggressions) as well students' mindset and response to perceived

stressors will help improve the effectiveness of pipeline development programs and overall outcomes of URM students (Matthews et al., 2021).

The University of Illinois Chicago College of Nursing

The University of Illinois College of Nursing is among the most diverse campuses in the nation, and proudly, the student body in the College of Nursing (CON) reflects that diversity. The mission of the CON is to transform health, healthcare, and policy through knowledge generation and translation and the education of future leaders from diverse backgrounds. Our efforts to recruit and retain students from underrepresented groups go hand in hand with our drive to eliminate health disparities and advance health equity. At the CON, diversity is more than a concept or a core value; it is a conscious and consistent behavior by which we strive to ensure that our students, faculty, staff, and community partners feel a sense of belonging. Further, we view diversity as an essential element to achieving institutional excellence. To that end, the CON is committed to inclusivity, advocating for equity and social justice for all people, and incorporating teaching, practice, and scholarship focused on the moral principles that found the nursing profession. Consistent with this assertion, the CON has shown leadership in increasing equity and inclusion in clinical education and training with the ultimate goal of contributing to the diversification of the national nursing workforce and its leadership (Zerwic, Scott, McCreary, & Corte, 2018).

The sections below describe our values, activities, and accomplishments associated with diversity, equity, and inclusion. Specifically, we describe ongoing activities to meet and sustain our diversity goals and highlight specific activities implemented during 2020–2021 to improve coping, persistence, and equity in outcomes in the face of the dual pandemics of COVID-19 and racial violence. The ultimate goal is to provide information about our practices, recommendations, and critical lessons learned to other nursing schools and colleges.

Diversity strategic plan

Establishing clear goals and objectives for equity and inclusion was the first pillar of our diversity plan. The CON's strategic plan has provided a clear roadmap for achieving our diversity, equity, and inclusion goals for the past five years. In collaboration with the CON Committee for Equity and Inclusion, we established benchmarks for our college's overall racial/ethnic diversity and specific criteria for URM students, including Latinx, Black, and male students. Overall diversity goals, inclusive of all students who identify as non-Hispanic White, were established at 50% of the total student body. These broad diversity goals included URM as defined by the National Institutes of Health and students of color who are not under-presented in the health sciences (i.e., Asian Americans). In addition, the diversity strategic planning committee set diversity goals for URM students in nursing (Black, Latinx, and males) at 15% of the overall student body. The committee used a variety of recruitment and retention initiatives to meet our stated diversity goals. For example, the college established outreach and engagement activities with minority-serving public high schools in the immediate community areas adjacent to the University. Residents in these surrounding community areas are primarily low-income, Black, or immigrant populations from Mexico or China. In addition, we established an innovative pipeline program with a health science-focused community college in the area. Students apply for our RN-BSN program, and if accepted, they are concurrently enrolled in both the CON and the community to take classes at both institutions. After students complete their associate's degree, they have fewer courses to complete and attain their BSN. Finally, we conducted active outreach to the University of Illinois Chicago's Cultural Understanding and Social Centers to engage students and provide information about nursing as a career. There are seven cultural centers (African American, Arab American, Asian

American, Disability, Gender and Sexuality, Latino, and Women's Leadership and Resource Center) that help ensure students, faculty, and staff's engagement, success, and well-being. We developed targeted recruitment and outreach activities with each cultural center annually to increase student interest, familiarity, and assistance in applying to the nursing program.

Holistic admissions

The second pillar of our diversity plan was to reduce institutional barriers to admission to the CON. To minimize the role of implicit bias in selecting students into our program, we instituted holistic review and admission policies. A holistic review and admission process occurs when universities aim to assess the “whole” applicant, including contextual factors that may inform their likelihood of program success (Relf, 2016). Indeed, holistic admission procedures weigh indicators of leadership abilities, persistence to achieve long-term goals, and community engagement outside of the standard academic measures of success. Holistic review and admission processes have been proven effective in identifying the strengths and skills of URM applicants overlooked in traditional review processes (Association of American Medical Colleges, 2014; AACN, 2019a, 2019b). The ultimate desired outcome of holistic reviews and admissions processes is to admit applicants who can succeed in the profession beyond the educational program and add to the student body's diversity (Urban Universities for HEALTH, 2014).

Previously, the CON based admission exclusively on student grade point averages, college entrance exam scores, and personal essays. Current research indicates that standardized college admissions tests (such as the Scholastic Aptitude Test (SAT) and the American College Test (ACT) in the U.S.) account for no more than about 20% of the variance in first-year GPA (Linn, 1989) and point to the importance of non-cognitive indicators of success (Tepper & Yourstone, 2018). With the introduction of holistic admissions, the college began including an interview portion that offered applicants an opportunity to describe non-academic indicators of leadership, persistence, and commitment to nursing (AACN, 2016; DeWitty, 2018; Morrow, 2021).

After implementing a “holistic admissions” strategy in 2014, we evaluated the outcomes. Consistent with other programs (Wross & Noone, 2018), the CON increased the diversity of admitted students without experiencing a drop in academic metrics. Specifically, we did not find any statistically significant changes in student outcomes, including average science GPA at admission, overall GPA, two-year graduation rate, or first-time NCLEX pass rates of the first two graduating classes of bachelor's degree students under the new admissions policy (Zerwic et al., 2018). The authors also found that we admitted Latinx students at much higher rates after implementing holistic admissions – from 8.2% in 2013 to 18.9% in 2016. As reported, the key to the successful implementation of holistic admissions is that members of the selection committee be fully committed to the process. Onboarding and continuing education activities among all faculty, staff, and students involved in the admissions process have been instrumental in maintaining fidelity to the principles of holistic admissions. Consistent with our values of knowledge generation, we published the results of our holistic admissions processes and outcomes in two separate articles, contributing critical scholarship to an emerging area of nursing inquiry (Scott & Zerwic, 2015; Zerwic et al., 2018).

Urban health program

The third pillar of our diversity plan is to increase resources and supports for enhancing student success among all students. Once admitted, we engage in intensive community building and educational support for URM students via our Urban Health Program (UHP). Our UHP focuses on increasing underrepresented minority students in nursing and other health sciences. The College of Nursing UHP aims to recruit and retain student groups underrepresented in nursing through

graduation, specifically African Americans, Latinos, and Native Americans. Further, the UHP seeks to expand educational and research opportunities for these populations at all academic levels (including pre-college) to develop underrepresented minority healthcare professionals, faculty, and researchers with the goals of eliminating health disparities and advancing health equity. Activities sponsored by the CON UHP include outreach and recruitment, assistance with preparation of the CON application, and the offering of mock interviews. In addition, students are offered support services in the following areas: academic advising and tutoring, professional development and networking activities, summer educational enrichment opportunities, financial sponsorship to attend local and national conferences, assistance in identifying and applying for scholarships, and social support from other UHP peers. Retention activities include strengthening academic skills and achievement, providing a supportive psychosocial environment, and increasing awareness of nursing opportunities and issues/trends in nursing and healthcare.

The Seminars for Excellence in Nursing Sciences Program is one of UHP's retention activities designed to give incoming nursing students a head-start to the rigors of the nursing sciences. The SENS program is a mini-foundational course series whose purpose is to promote the success of incoming non-traditional nursing students, particularly students of color. The CON UHP developed SENS to a) facilitate socialization and transition to the upper-division CON program; b) introduce online learning skills; c) enhance student learning skills; and d) introduce students to the rigor essential to successful learning. Since 2010, we have offered several undergraduate and graduate students different courses, including math, writing skills, pathophysiology, clinical skills, physiology, statistics and epidemiology, and philosophy of science. These subjects are considered essential to the first courses taken by incoming students and contribute to their socialization. The UHP offered each SENS course over five weeks during the summer semester, with most subjects being offered twice per week. The SENS program utilizes a variety of learning strategies, including the virtual classroom and asynchronous instruction. There have been 975 participants in the CON SENS program, with approximately 70–90 students participating each year. Table 1 shows the number of participants enrolled each year and by course. Upon finishing the SENS program, each student completes a course evaluation survey. Generally, most students have provided positive feedback each year, especially pre-licensure students (BSN and Graduate Entry Advanced Generalist Masters).

Additional mentorship programming

The UHP offered a new mentorship program for URM graduate students to respond to the additional stressors experienced by students during the 2020–2021 academic year. The UHP Mentorship Program—Optimizing Your Future Series was a customized support network for graduate nursing students at the CON. The lead instructor (RJ) designed the weekly mentorship series to maximize URM graduate students' success. The series focused on distributing academic and professional development resources with a practical approach specific to the URM experiences. Educational success resources emphasized the values of mentorship and psychosocial well-being and were offered in a safe and supportive learning environment.

Professional development resources focused on articulating, promoting, and illustrating their nursing achievement and credentials for local, national, and global employment opportunities. We framed the program's tenet around the concept of URM student persistence (Tinto, 1975) by facilitating opportunities for integration and interactions with URM students, faculty, and peers within our academic setting. Due to the COVID-19 pandemic, a virtual platform was used instead of in-classroom meetings, ensuring student's and faculty's safety and enabling more access points for students' engagement. For example, nursing students across each of the Five College campuses had access to this program.

The mentorship program instructor offered weekly sessions for twelve weeks. Each hour-long session consisted of a short presentation

Table 1
Summary of Seminars for Excellence in Nursing Sciences (SENS) enrollment.

| Subject | Years Offered | Numbers of Students | Female % | African American % | Latinx % | Asian % | White % | Other % |
|---|---------------|---------------------|----------|--------------------|----------|---------|---------|---------|
| Philosophy of Science (Ph.D. students) | 2010-present | 31 | 87.0 | 22.6 | 25.8 | 22.6 | 22.6 | 6.4 |
| Physiology (AGMS students) | 2010-present | 159 | 91.2 | 27.0 | 18.6 | 16.3 | 33.1 | 5.0 |
| Math (BSN & Grad Entry students) | 2010–2011 | 28 | 92.8 | 32.1 | 39.2 | 10.7 | 14.3 | 3.7 |
| Writing (BSN & Grad Entry students) | 2010–2011 | 26 | 84.6 | 38.5 | 30.7 | 11.6 | 15.3 | 3.9 |
| Statistics & Epidemiology (DNP students) | 2012-present | 128 | 91.4 | 25.0 | 8.7 | 21.1 | 42.9 | 2.3 |
| Pathophysiology (BSN & Grad Entry students) | 2012-present | 332 | 85.2 | 22.8 | 33.7 | 15.1 | 27.5 | 0.90 |
| Clinical Skills (BSN & Grad Entry students) | 2012-present | 241 | 83.4 | 24.4 | 36.9 | 12.8 | 24.9 | 0.82 |
| Navigating Resources aka Strategies for Increasing Student Success (All students) | 2020-present | 18 | 94.4 | 33.3 | 38.9 | 11.2 | 16.6 | 0 |

*Advanced Generalist Master of Science.

**Doctor of Nursing Practice.

to students, fostering dialogue and sharing experiences between the facilitator and fellow URM students. In addition, supplemental resources such as short videos, reports, publications, and announcements were collated and shared on a web-based platform made available throughout the program series. A sample of the topics featured in the weekly sessions and the virtual resource center include the values of attaining advanced degree training; professional career success strategies; building and maintaining a mentorship network; employment marketability; nursing career opportunities in global health; leadership skills to be a better preceptor, and the value of self-care—reducing the risks of burnout and fatigue. Among these sessions, the instructor presented resources to illustrate their application in clinical, practice, and academic-oriented settings. We also added professional development tools based on URM students' input (e.g., resume/cv building, job interviews, salary negotiation, public speaking).

The mentorship curriculum had several cross-cutting tenets that appeared in all the sessions: added values of being a URM nursing professional, celebrating URM nursing contributions, and building URM-centered resilience and perseverance. In addition, real-world issues were integrated (i.e., working on the frontlines of a pandemic) as motivational reflection points linked to the significance of their academic performance and successful professional nurses. Ultimately, a catalog of didactical sessions and resources was created to provide more information about the topics and offer more in-depth opportunities to foster success. Students were also encouraged to consult trusted professionals to garner industry insights into workforce trends. For example, the series facilitator, a tenured African American male faculty with more than twenty years of global health practice and research experiences, routinely engaged in one-on-one consultation meetings.

UHP mid-term evaluation sought to assess students' impressions about the series' approach, shared resources, and appropriateness of weekly sessions. Here are a few summative reactions:

Overall Impression of the Series:

"I appreciate this opportunity; it has been a nice compliment to some of my other courses and my development efforts. It has given me a lot to think about, and I appreciate the instructor's perspective."

–Student A

"This series has allowed me to reflect and share my professional development in a safe space where I can ask questions and gain a lot of support and information about how to guide my career. This is a unique learning experience that is not present when you are in the workplace."

–Student B

"It has given me more motivation and guidance towards my future."

–Student C

The following scenario offers a perfect example of the series impact. A recently enrolled master-level student was reflecting upon her desire to apply for a prestigious fellowship program. Her discussion embodied many typical thoughts among URM students—feeling inadequate, unsuitable, not competitive enough, not understanding the fellowship's impact on her career plans, and the potential to expand her professional network. While discussing her feelings, an advanced doctoral student acknowledged that they also felt that same way at some point in their lives, but this fellowship transformed their thinking about their values. Ultimately, the advanced nursing student offered several advice points to encourage her to complete the application because it greatly impacted her career. This scenario reinforces the values of a safe space for URM students to be candid about their feelings and experiences and how such actions can transcend URM persistence and success.

Impact of institutional efforts

An analysis of the CON data related to diversity highlights the success of the above-combined initiatives (see Figure 1). In 2015, students of color represented 47.8% of the overall student population across degree programs in the CON. In 2021, that percentage was 54.7%, representing a 14.4% increase in broad diversity among students across all programs in the CON. In the undergraduate program, the CON has met or exceeded strategic plan benchmarks for overall diversity (55% of all undergraduate students are students of color), Latinx students (23.8% of all undergraduates), and males (16.9% of all undergraduates). The



Fig. 1. DEI. Roadmap for Nursing Educational Programs.

benchmark goal for each group was 15%, representing an increase of 10%, 53%, and 9%, respectively. The only URM subgroup that did not meet the diversity goals were Black/African American students (9.0%); however, Black students in the CON are on par with overall university percentages (10%). Nevertheless, the CON recognizes the need to increase efforts to recruit and retain Black students to ensure equity in educational opportunities. Various factors could contribute to the CON not meeting diversity goals among Black students, and these factors will be discussed in the following sections.

Additional programs implemented, and other relevant measurements of success

Since instituting the Diversity Strategic Plan in 2015, several significant changes have occurred to help achieve our diversity goals and strengthen our ability to serve the needs of our diverse student body. In January of 2020, after a national search, the CON appointed the first Associate Dean for Equity and Inclusion in the CON. The Associate Dean joined the Office of Equity and Inclusion, including the Associate Dean, the CON Equity and Inclusion Committee, and the UHP. The central goal of the Office of Equity and Inclusion is to increase the diversity of the students, faculty, and staff and enhance the overall safety of the social climate and educational environment. In addition, the Associate Dean is tasked with enhancing student success by providing educational resources to each of our stakeholder groups - faculty, staff, and students improving the educational climate, skill-building across each of our stakeholder groups, and providing students with specific supports to increase coping and persistence in the nursing program. Finally, based on our enrollment data, the recruitment and retention of Black students have been made a priority.

A specific emphasis of the Office of Equity and Inclusion is to extend beyond the traditional programs aimed at increasing diversity that focus almost exclusively on academic readiness, mentorship, and professional development. We know that many extra-academic factors (e.g., social, emotional, and contextual factors) contribute to high attrition rates among URM students in education. For example, findings from the U.S. National Longitudinal Survey of Freshmen demonstrated that racial bias significantly impacts attrition rates of URM students in health science majors (Beasley & Fischer, 2012). Further, McGee and Bentley (2016) found that racism causes URM students to question their abilities within health science majors, even among high achieving URM students. Despite the relevance, few pipeline programs address the extra-academic factors that hinder the performance and retention of URM in nursing. However, never before has the importance of extra-academic factors on the experiences of students been more evident. Over the past year, the Coronavirus has contributed to losing over 656,000 lives in the U.S. In Chicago, we have witnessed how the social determinants of health—poverty, poor access to health care, social exclusion—have increased vulnerability among communities of color to COVID-19. Each week in Chicago, our students also witnessed the negative consequences of racism and gun violence. We know from research that has taken place at the University of Illinois Chicago (UIC) that violent encounters with the police have profound direct and indirect effects on the health and life chances of individuals living in segregated communities of color. The students we serve at UIC are from many communities that are negatively impacted by the dual pandemics of COVID-19 and gun violence. Interviews conducted with students in the CON suggest that many are experiencing significant distress. For example, in a survey of CON students ($N = 169$), 63% reported a decreased motivation to do schoolwork, 57% expressed anxiety about their ability to maintain their grades, and 56% reported struggling to balance school and family demands. A minority of students also reported difficulties accessing enough food to eat (3%) or a consistent place to live (5%).

In the face of the dual pandemics of COVID-19 and racial violence, the College leadership took several actions to communicate the CON community's support to students. First, the Dean of the CON and the

Associate Dean for Equity and Inclusion sent direct messages to all students, faculty, and staff declaring our values and positions on police violence and systemic racism. They drafted an equity and inclusion statement formally adopted by the faculty executive committee, which “condemns racism in all of its forms.” We also displayed a message of our collective values and vision related to equity and inclusion on our CON homepage (“*The University of Illinois Chicago College of Nursing stands in solidarity with the efforts of Black Lives Matter to eliminate structural and anti-Black racism and to create a more just and equal society for all*”). A recent study conducted by Knopf et al. (2021) reviewed the nursing position statements on racism following the murder of George Floyd and other Black Americans issued by three national professional bodies – the American Academy of Nursing, the American Association of Colleges of Nursing, and the American Nursing Association- about racism as a public health crisis. The authors identified six themes across those professional bodies' position statements and then looked for statements issued by 32 top U.S. schools of nursing and whether/how these statements addressed the key themes from the national bodies' messages. The University of Illinois Chicago was one of 10 colleges of nursing whose diversity statement was congruent with all six national themes (Knopf et al., 2021). The authors included specific excerpts from our position statement as examples under Theme 1, Condemnation of Police Brutality, Theme 2, Acknowledgement of the effects of racism on health, and Theme 3, Calls to stand with or support those working against racism. A full description of our position statement can be found at <http://nursing.uic.edu/about/diversity-inclusion/#official-statement-on-equity-and-inclusion>

In addition, we have developed a portfolio of activities across three separate domains that ensure the success and well-being of all students: by providing resources to faculty, students, and staff with the goals of improving the educational climate; skill-building across each of our stakeholder groups; and providing students with the specific supports to increase coping and persistence in the nursing program. The focus on faculty is essential to student success because feelings of exclusion may result from experiences with microaggressions (i.e., subtle indignities) and overt forms of discrimination and prejudice from faculty, staff, and peers (Metzger et al., 2020). Lack of belonging is prevalent among URM in nursing education. Sedgwick, Oosterbroek, and Ponomar (2014) found that positive interactions between URM students, instructors, and peers enhanced the student's sense of belonging. Alternatively, negative experiences with instructors and peers severely impacted their sense of belongingness. Similar findings have been reported among various diverse groups of baccalaureate students (Ackerman-Barger & Hummel, 2015; Honda et al., 2016).

Equity and inclusion committee

The Equity and Inclusion Committee is a standing committee at the College of Nursing. It is composed of three elected faculty representatives from each department in Chicago and one elected faculty from each regional campus, two student representatives from undergraduate and graduate programs, one representative from the staff committee, one representative from the Global Health Leadership Office, and one representative from the Urban Health Program. In addition, the Associate Dean for equity and inclusion, Associate Dean for Academic Affairs, and the Assistant Dean for Advancement are also members of the committee ex officio, with voice but no vote. The main objectives of the committee are to 1) establish goals and strategies for the College to cultivate and maintain a more diverse student body, staff, and faculty in line with the College's diversity strategic plan; 2) develop benchmarks and collect data to measure progress toward our goals; 3) develop diversity forums, and training for faculty, staff, and students; 4) collaborate with departments, regional campuses, information technology office, Office of Academic Programs, and the business office to ensure each unit is in line with the college's diversity strategic plan; and 5) lead in diversity initiatives at the university and national levels.

Examples of our work over the past academic year include providing twice a month “Meet & Learn” sessions that showcase the work of faculty and their research/community partners related to equity and inclusion. The sessions consisted of diverse topics such as restorative justice, the power of storytelling, engaging in anti-racism work, and community and academic partnerships for social justice and policy. We also provided training for faculty, students, and staff in survivor-centered advocacy under the mandate of Title IX, Land Acknowledgement and support for Indigenous communities, and implicit bias. The sessions have been very successful, with an average attendance rate of 40 participants (see Table 2). To encourage attendance, we provided continuing education credit for attendees. Similarly, and to foster meaningful connections within the CON community, we organized every other month a “Virtual Coffee Hour” session where one faculty member and one staff member meet with students in a virtual setting to share experiences and lessons learned and to get to know one another outside of the formal classroom or work environment.

Time to talk presentations

Activities associated with improving the “Educational Climate” for our students, faculty, and staff have included the following: “Time to Talk” lectures offered by the Associate Dean (N = 7 presentations, e.g., Micro-aggressions), “Meet and Learn” series by the Equity and Inclusion Committee (N = 8 presentations, e.g., Restorative Justice), and the development of a resource document for faculty on how to manage instances of micro-aggressions in the classroom setting (see Tables 3 and 4). Skill-building activities across our stakeholder groups have included individual and group consultations by the Associated Dean on emergent issues related to issues of equity and inclusion, distribution of information about diversity-related training opportunities offered on campus (i.e., Anti-Racism workshops), collaborating with diversity units across campus to provide specific diversity training for CON community (e.g., Ally Training). Finally, via our Student Success Program, we increased the availability of supportive services for students. For example, we included a five-week module offered as part of our summer educational enrichment program focused directly on increasing persistence in the nursing program. In addition, we added tutoring sessions, specific “Time to Talk” lectures developed for subgroups of students (e.g., URM, International, mothers of URM children), and established a physical space for students to gather in the CON. Although ongoing evaluations are taking place following programming activities, the Office of Equity and Inclusion will be conducting a complete climate survey to evaluate the impact of these combined activities on the experiences of students, faculty, and staff. We will compare the new survey results against the climate survey conducted in 2018 and use the results to guide next-step initiatives.

Discussion

Nursing educational programs are central to meeting the demands for a more knowledgeable, culturally aware, and diverse nursing workforce. Although pipeline development programs have

Table 2
Summary of mentorship topics.

| Schedule | Topics |
|------------|--|
| Week One | What are the roles of mentor and mentee |
| Week Two | Building your mentorship team Pillars of Success: Setting Professional and Personal Goals |
| Week Three | Strategies to operationalize your goals |
| Week Four | Are you considering other graduate degrees? |
| Week Five | Promoting your achievements: CV vs. Resume Building |
| Week Six | Navigating the job market: Job opportunities with federal programs |
| Week Seven | How to navigate multiple job offers |
| Week Eight | Self-Care Practices |
| Week Nine | Paying it Forward |

Table 3
Sample of meet and learn sessions.

| Presenter(s) | Title | Participants | Very satisfied | Very relevant to job |
|--|---|--------------|----------------|----------------------|
| CON Faculty | The power of the portable story. | 45 | 78.5% | 78.5% |
| CON Faculty and Community Partner | Sex work and COVID-19 | 47 | 76.0% | 68.0% |
| CON Faculty | Lessons learned from engaging anti-racism: Readings and reflections on white privilege workshop | 31 | 72.2% | 72.2% |
| UIC Diversity Staff | Beyond compliance: Survivor centered advocacy under the mandate of Title IX | 34 | 73.7% | 61.5 |
| CON Faculty and Community Partners | Community and academic partnership for social justice and policy change | 30 | 88.8% | 66.6% |
| UIC Diversity Staff | Whose land are you on? Native history, contemporary issues, and land acknowledgment | 27 | 83.3% | 75.0% |
| UIC Diversity Staff and Community Partners | Anti-Asian Racism | 57 | 75.0% | 83.3% |
| UIC Diversity Staff | Implicit bias training | 39 | 75.0% | 100% |
| CON Faculty and Community Member | Count me in campaign: Confirming MENA as an identity | 18 | 87.5% | 87.5% |
| CON Faculty | Diversification of the nursing workforce | 29 | 82.7% | 79.3% |

demonstrated benefits for increasing the success of URM students, exclusive reliance on pipeline programs has limitations for ensuring the success and well-being of all students. Institutional change is required to address the systemic barriers that historically excluded disadvantaged students from educational attainment in nursing (Thompson, 2021). Institutional change requires a commitment from the leadership to infuse the values of equity and inclusion throughout the tripartite mission of the college and continuously conduct the work to ensure the institution's actions align with the values present (Kruse & Calderone, 2020). The growing trend in nursing to establish officers for diversity, equity, and inclusion within colleges of nursing is an important step. However, there is a tendency to place all the responsibilities of “diversity” at the feet of individuals (Crooks et al., 2021b). That is tokenism, and the moral and ethical urgency of this moment in time requires more from our nursing educational institutions than “diversity box-checking” (Crooks et al., 2021a).

What direct actions need to be taken by all our nursing institutions? First, each institution must take an unequivocal stance against oppression in all forms (Knopf et al., 2021). This anti-bias position statement should be prominently placed on the school’s web page. It must condemn anti-black racism and acknowledge the direct influence of racism on the health inequalities experienced by Black individuals. A statement about valuing the diversity and humanity of all people without demanding social justice for Black Americans is inadequate in the face of four hundred years of evidence that Black lives do not carry the same value as other lives. Next, college leadership must establish a Diversity, Equity, and Inclusion (DEI) strategic plan that articulates the specific equality objectives, milestones, strategies for achieving those milestones, specific evaluation approaches, and endpoints for the

Table 4
Time to talk presentations.

| | Strongly agree | Somewhat agree | Neutral | Somewhat disagree | Strongly disagree |
|--|----------------|----------------|---------|-------------------|-------------------|
| Increasing coping skills (N = 47) | | | | | |
| Evaluation questions | | | | | |
| Facilitated dialogue about coping | 68.1% | 27.6% | 4.3% | 0% | 0% |
| Facilitated dialogue about causes of stress | 93.6% | 4.3% | 2.1% | 0% | 0% |
| Provided resources for coping | 78.7% | 14.9% | 6.4% | 0% | 0% |
| Refocused on reaching goals | 78.7% | 14.9% | 4.3% | 0% | 2.1% |
| Increased support to complete program | 59.7% | 29.7% | 6.4% | 2.1% | 2.1% |
| Increased motivation complete program | 61.7% | 25.5% | 8.6% | 2.1% | 2.1% |
| Helped to build community with peers | 53.2% | 25.5% | 12.8% | 6.4% | 2.1% |
| Overall, the program was beneficial | 64.0% | 34.0% | 2.1% | 0% | 0% |
| Addressing micro-aggressions in the classroom (N = 27) | | | | | |
| Established safety ground rules | 84.6% | 11.5% | 3.9% | 0% | 0% |
| A better understanding of diversity in the classroom | 73.0% | 15.4% | 11.6% | 0% | 0% |
| A better understanding of micro-aggressions | 77.0% | 15.4% | 7.6% | 0% | 0% |
| I know what to do if a micro-aggression occurs | 69.2% | 23.1% | 7.7% | 0% | 0% |
| I know how to reduce micro-aggressions | 73.1% | 19.2% | 7.7% | 0% | 0% |
| Overall, the program was beneficial | 73.1% | 19.2% | 7.7% | 0% | 0% |

college. Deans of nursing schools must conduct a DEI climate survey with faculty, students, and staff that asks for input on the institution's strengths, weaknesses, and evident failures about our three key stakeholders and our tripartite mission. If not already in place, create a standing committee of faculty, students, and staff to assist the diversity officer in systematically addressing the needs identified in the climate survey. All faculty, staff, and students should receive ongoing training on micro-aggressions, communicating across differences, allyship, anti-racist thinking and behaviors, and dismantling racism and different forms of oppression. These diversity training sessions should be viewed as foundational learning for all students, faculty, and staff and included in the orientation of all new hires and incoming classes of students. Additionally, efforts are required that build comfort, skill, and experience in communicating across different social identity groups. Intergroup dialogue is an evidence-based experiential training approach with known benefits for increasing intergroup understanding, relationships, collaborations, and action (Thakral et al., 2016), but has not been extensively used in the nursing context for improving peer and patient interactions. Nursing colleges should invest in training several faculty members in intergroup dialogue skills and pilot test this approach to increase diversity-related outcomes among nursing students.

Diversification of the nursing workforce is essential for achieving health and social equity and driving innovation and excellence in nursing (AACN, 2017). Unfortunately, despite the many programs to increase diversity in the biomedical workforce, including nursing, we are still not meeting stated goals. Holistic admission processes are evidence-based approaches for diversifying incoming classes of nursing students at all levels (Scott & Zerwic, 2015). Contrary to critiques of holistic admissions (Feeny, 2021), this approach does not result in decrements in students' academic endpoints (Zerwic et al., 2018). However, faculty must be trained in the principles of holistic admissions and activities mentored closely to ensure fidelity to best practices (e.g., enforce multiple reviews of the same application, ensure integrity with reviewer training sessions) (Zerwic et al., 2018). In addition, awareness of and direct efforts to counter the implicit bias inherent when describing students admitted under holistic admissions approaches as "in need of remediation," "disadvantaged," or "requiring additional academic support" is critical to creating an educational environment that is safe and supportive and sees the full potential of all students admitted into the program. The language we use matters because it reflects the implicit assumptions that inform our expectations, investment, and behaviors toward undervalued students (Glock & Böhmer, 2018).

Once admitted, all students should be linked with an academic advisor and a peer mentor. Results from our pilot mentorship program and others support the benefits of targeted mentorship programs for URM and first-generation students to provide skills, resources, and

support to overcome the unique challenges of attendance in predominantly white colleges of nurses (Ureña et al., 2021). All faculty should be explicitly trained in the mentorship of students from diverse backgrounds (Lin, 2018), so minority faculty members do not carry the disproportionate burden of diversity-related activities and mentorship (Rodríguez, Campbell, & Pololi, 2015). As noted earlier, diversity, equity, and inclusion activities cannot be located within an individual but should be infused throughout the entire culture of an institution. As such, the evaluation of all faculty members should include endpoints associated with Diversity, Equity, and Inclusion. Indeed, many institutions, including the University of Illinois at Chicago have added Diversity, Equity, and Inclusion criteria to hiring, tenure, and promotion norms and expectations. Finally, systematic procedures are needed to evaluate the successes and areas of improvement for all the individual and combined activities initiated (e.g., climate surveys).

The climate of an educational setting plays a critical role in retaining students from historically excluded groups. The recruitment and retention of faculty that reflect the increasing diversity of nursing students are essential. Many nursing institutions with a predominately white faculty and leadership team may struggle to recruit faculty from diverse backgrounds, and that is expected because it is hard to thrive in an environment in which an individual represents the "only one" or "one of only a few" (DeWitty & Murray, 2020; Whitfield-Harris, Lockhart, Zoucha, & Alexander, 2017). Contrary to the established tropes of their not being "an adequate pool of minority applicants," several minority-serving institutions have highly rated nursing programs (e.g., Howard University, xxx). Further, several non-minority serving schools have notable success in graduating students of color (e.g., <https://bestvalueschools.com/rankings/minorities>). Appropriate applicants are available to fill vacancies in doctoral and faculty positions. However, these individuals will have choices, and nursing institutions will make themselves more attractive to individuals from diverse backgrounds.

Several approaches can be used to build the diversity of the faculty over time. The first is to "grow your own," that is, investigate promising students of color by offering postdoctoral training opportunities. In addition to retaining highly competitive students who contribute to the diversity mission of the college, the University of Illinois at Chicago has established a model called bridges to the faculty in which two-year postdoctoral training opportunities are offered to new Ph.D. awardees from either inside or outside of the university, with the explicit goal of hiring them as assistant professors after completion of the postdoctoral experience. In concert with both strategies is the concept of cluster hiring, that is, the process of hiring new postdoctoral fellows or faculty members in groups rather than individuals. Cluster hiring aims to reduce isolation and increase the available support and connections of incoming individuals from diverse backgrounds (Matthews et al., 2021).

There are many ways to initiate and carry out cluster hiring initiatives as part of an institution's diversity and inclusion goals (Sgoutas-Emch, Baird, Myers, Camacho, & Lord, 2016), and nursing colleges and schools across the country should conduct pilot programs and establish best practices related to hiring and retention.

Conclusions

The nursing workforce should reflect better the increased diversity in nurses from underrepresented minority groups to meet the demand for greater access to and provision of health care for these populations. The key to the success of diversifying the nursing workforce is to address institutional barriers to success. The current manuscript provides an overview of activities associated with Diversity, Equity, and Inclusion of a predominately white nursing college in the minority-serving institution. We recognize the intense need of our college to modify approaches taken to recruit, retain, and bolster the success of URM students, and we have much more to accomplish. However, we are committed to advancing social justice, health equity, and excellence in nursing through diversifying the workforce and leadership in nursing.

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