Barriers and Opportunities for Promoting Health Professions Careers among Underrepresented Minorities in the Midwest

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The research team
“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”

Dr. Martin Luther King Jr.
“The laws were calculated to drive the tribes from their possessions and annihilate them as a people; and I presume they would work the same effect upon any other people; for human nature is the same under skins of all colors. Degradation is degradation. **If the white man desired the welfare of his red brethren why did he not give them schools? Why has not the state done something to supply us with teachers and places of instruction?** I trow, all schooling the Marshpee people have ever had they have gotten themselves. There was not even a house on the plantation for the accommodation of a teacher til I arrived among them. We have now a house respectable enough for even a white teacher to lodge in comfortably, and we are in strong hopes that we shall one day soon be able to provide for our own wants, if the whites will only permit us to do so as they have never done yet. If they can but be convinced that we are human beings, I trust they will be our hindrance no longer.”

William Apess (Pequot), the first Native American to write and publish his own autobiography, and “one of the most important intellectuals of his time and ours.”

Lisa Brooks, Professor of English and American Studies, University of Massachusetts, Amherst.
Nebraska Racial and Ethnic Health Disparities

African Americans are 9 times more likely to have HIV/AIDS in comparison to Whites. ¹

The infant mortality rate among African Americans is 2.4 times that of White Nebraskans. ¹

American Indians are 4.4 times more likely to die from diabetes in comparison to Whites. ¹

Latinos are 1.5 times more likely to be obese and 1.4 times more likely to die from diabetes in comparison to Whites. ¹

Institute of Medicine (IOM) Recommendation 5.3. to address health disparities experienced by US Racial and Ethnic Minorities

Recommendation 5.3. “Increase the proportion of underrepresented US racial and ethnic minorities among health professionals. To the extent legally permissible, affirmative action and other efforts are needed to increase the proportion of underrepresented U.S. racial and ethnic minorities among health professionals.”

Institute of Medicine (IOM) Recommendation 5.3.
to address health disparities experienced by US Racial and Ethnic Minorities

Evidence for recommendation 5.3.

Racial and ethnic minority health professionals are more likely than their non minority colleagues to serve in minority and medically underserved communities.¹

Racial concordance of patient and health professional is associated with greater patient participation in care processes, higher patient satisfaction, and greater adherence to treatment.²

Other reasons cited by the IOM to support Recommendation 5.3

Health professionals from racial and ethnic minority groups have generally been more successful in recruiting minority patients to participate in clinical research.

Racial and ethnic diversity of health professions faculty and students helps to ensure that all students will develop the cultural competencies necessary for treating patients in an increasingly diverse nation.

Healthcare professionals from minority and underserved communities may be better poised to tailor preventive health and primary care programs and services to minority populations, thereby reducing associated costs.

Who are US underrepresented minorities?

The traditional definition of underrepresented minority is typically focused on US-born: Americans of African descent, Latinos raised within the continental US, Native Americans, Native Hawaiians, and other Pacific Islander Americans, populations that for generations have experienced historical legacies of oppression and discrimination and have been barred from access to and/or full participation in higher education in the United States. These groups have been identified by the U.S. Department of Education, the National Science Foundation, and the National Institutes of Health as populations that continue to have limited participation at the graduate and faculty levels in higher education.

“Thus, the original list of underrepresented minorities reflects those persons typically born in the United States, that suffered bias owing to skin color or ethnicity. Moreover, the negative bias occurred early enough in their upbringing that it impacted their views of themselves, and external biases from others whether institutional or not.”

Example: Differing Socioeconomic Status and Distinction Between Foreign born Blacks and US Born Blacks in Research

“The term African American describes people of African ancestry who self-identify or are identified by others as African American and are descendants of slaves brought to the United States between the 17th and 19th century. African Americans differ in culture, language, health and migration history from Africans who are 21st century immigrants from Africa or the Caribbean islands.”

- At $33,500, U.S.-born blacks have a 30% lower median household income than foreign born blacks, a full $10,000 less than that among foreign-born black households.

- U.S.-born blacks 25 years and older are less likely to have at least a bachelor’s degree than black immigrants, 19% compared with 26%.

- Among U.S.-born blacks, 28% live below the poverty line while 20% black immigrants live below the poverty line.

- In research Africa Americans and other black are often considered as distinct populations.
  - “Data from African Americans, African Caribbeans, and African immigrants, all of whom may share the “Africa” designation, should be disaggregated due to differences in culture, migration histories, and genetic admixtures, which are important determinants of health.”

Underrepresented minority (URM) definition according to the UNMC Planning Information and Quality Indicators¹

- Black
- Hispanic
- Native American
- Native Hawaiian and Pacific Islander
- Two or More Races

UNMC diversity goals 2011-2019

UNMC Strategic Plan 2011-2014: UNMC Create a Culturally Competent Organization Goal 2

“Improve recruitment and retention of underrepresented faculty, staff, and students, and document successful methods.”


"Increase retention, recruitment, engagement and mentorship of all faculty, students and staff to enhance the diversity and inclusivity across all UNMC and Nebraska Medicine programs and sites.”


UNMC URM Student Representation Compared with Different Populations

- **UNMC URM student representation (2017):** 6.4%
- **All NE higher education URM student representation (IPEDS, fall 2015):** 15.1%
- **UNMC peer institution**
  - **URM student representation (2016):** 13.4%
- **Douglas County URM population (2017 estimates):** 28.1%
- **NE URM population (2017 estimates):** 19.9%
- **US URM population (2017 estimates):** 35.7%

**Sources:**

*UNMC defines underrepresented minority according to the UNMC Planning Information and Quality Indicators as: Native Hawaiian and Pacific Islander, Black, Hispanic, Native American, and Two or More Races.

**UNMC peer institutions per LB 389 include:** Univ. of Colorado Health Sciences Center, Univ. of Illinois-Chicago, Univ. of Iowa, Univ. of Kansas Medical Center, Univ. of Kentucky, Univ. of Minnesota-Twin Cities, Ohio State Univ., Univ. of Oklahoma Health Sciences Center, Univ. of Tennessee-Memphis
Underrepresentation of Latino among Rural Nebraska Primary Care Providers

Using the UNMC Guaranteed Admissions Programs definitions for rural, UNMC Health Professions Tracking (UNMC) data indicate that in 2018:

• Only 1.6% (15/970) of rural Nebraska primary care providers (MD, DO, NP, PA) identified themselves as Latino.

1 M. Deras, UNMC Health Professions Tracking Service, written e-mail communication, March 2019)
Rural Nebraska Projected Population Change 2000-2050
Non-Hispanic White and Hispanic/Latino
Underrepresentation of African Americans and Native Americans in Nebraska’s Primary Care Workforce¹

The UNMC Health Professions Tracking Service reports that African Americans and Native Americans are also underrepresented in the Nebraska health professions workforce, representing 5.1% and 1.5% respectively of the state’s population, but only 1.3% and 0.3% of the primary care workforce.

¹ M. Deras, UNMC Health Professions Tracking Service, written e-mail communication, April 2019)
Outcomes: Number of UN Guaranteed Pipeline Programs Alumni by Race and Ethnicity: Rural and Underrepresented Student-Serving Pipeline Programs

<table>
<thead>
<tr>
<th>Race</th>
<th>RHOP 1991-present</th>
<th>KHOP 2010-present</th>
<th>PHEAST 2011-present</th>
<th>MVP 1992-</th>
<th>NU PATHS 2001-'12</th>
<th>UHOP 2016-present*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI/AN</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NH/PI</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>521</td>
<td>21</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2+ Races</td>
<td>2</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td></td>
<td>0</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>42</td>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>572</td>
<td>26</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 RHOP, KHOP, and PHEAST data as of 09/18/18. M. Deras UNMC Health Professions Tracking Service, written e-mail communication, September, 2018.

*UHOP will not produce any alumni until 2024.
Number of UNMC Rural Guaranteed Pipeline Programs Alumni by Race and Ethnicity

UNMC rural guaranteed admission programs have been in continuous operation since 1991 and have grown from the original partnership between two UNMC (Medicine and Dentistry) and Chadron State College to encompass partnerships between four rural undergraduate institutions and all six UNMC Colleges to now include 10 disciplines.

Among 600 alumni:
• 8 identified themselves as Latino (1.3%)
• 552 identified their race
  • 544 identified as White (98.5%)
  • 4 identified as Native American (0.7%)
  • 2 identified as 2+ races (0.4%)
  • 1 identified as Asian (0.2%)
  • 1 identified as other (0.2%)
  • 0 identified as Black/African American (0%)

1 RHOP, KHOP, and PHEAST data as of 09/18/18. M. Deras UNMC Health Professions Tracking Service, written e-mail communication, September, 2018.
Number of Underrepresented Student-Serving Pipeline Programs Alumni by Race and Ethnicity

There have been three UNMC guaranteed admissions programs focusing on underrepresented students since 1992:

• The Multicultural Vantage Program (MVP) 1992 – date for termination could not be identified
• The Nebraska University to Preadmission in Health Science (NU PATHS) 2001-2012
• The Urban Health Opportunities Program (UHOP) 2016 - present

• The MVP and the NU PATHS programs have been discontinued.

• In 2016, the Urban Health Opportunities Program (UHOP) was established. UHOP is a partnership between the University of Nebraska Omaha and the UNMC College of Medicine

• Outcome data with regard to number of alumni by race, ethnicity or practice location have not been systematically collected for the MVP and NU PATHS.

• UHOP will not produce any alumni until 2024
## Disciplines Presently Represented in Guaranteed Admissions Programs Serving Rural and Underrepresented Urban Students

<table>
<thead>
<tr>
<th>Discipline</th>
<th>RHOP</th>
<th>KHOP</th>
<th>PHEAST</th>
<th>UHOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental hygiene</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Dentistry</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical lab science</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Nursing</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical therapy</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Radiography</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rural Health Opportunities Program (2019), [https://www.unmc.edu/studentservices/rse/enrichment/rural-health-enrichment-programs/rhop/participating-departments.html](https://www.unmc.edu/studentservices/rse/enrichment/rural-health-enrichment-programs/rhop/participating-departments.html)
How can having a diverse faculty influence student recruitment?

A diverse faculty can facilitate the recruitment of diverse students (Vick et al., 2018) and one of the most effective methods for retaining underrepresented minority faculty is the implementation of mentoring and support systems (Zambrana et al., 2015).


## UNMC URM Faculty Data Compared to Other Populations

<table>
<thead>
<tr>
<th>Category</th>
<th>Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNMC URM tenured faculty (2016)</td>
<td>2.7%</td>
</tr>
<tr>
<td>UNMC URM full time faculty (2017)</td>
<td>4.6%</td>
</tr>
<tr>
<td>UNMC peer institution**URM full time and part-time faculty (2016)</td>
<td>7.6%</td>
</tr>
<tr>
<td>Douglas County URM population (2017 estimates)*</td>
<td>28.1%</td>
</tr>
<tr>
<td>NE URM population (2017 estimates)*</td>
<td>19.9%</td>
</tr>
<tr>
<td>US URM population (2017 estimates)*</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

### Sources:

*UNMC defines underrepresented minority according to the UNMC Planning Information and Quality Indicators as: Native Hawaiian and Pacific Islander, Black, Hispanic, Native American, and Two or More Races.

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### Number of Tenured Faculty at UNMC (All Colleges Combined) by Race Ethnicity (2016)\(^1\)

<table>
<thead>
<tr>
<th>Race Ethnicity</th>
<th>Tenured UNMC faculty (2016)</th>
<th>UNMC faculty % tenured by race/ethnicity</th>
<th>Douglas County % of the pop. by race/ethnicity</th>
<th>Nebraska % of the pop. by race/ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American/Black</td>
<td>3</td>
<td>1.1%</td>
<td>11.4%</td>
<td>5.1%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>0</td>
<td>0</td>
<td>1.2%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Latino</td>
<td>3</td>
<td>1.1%</td>
<td>12.7%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Native Hawaiian /Pacific Islander</td>
<td>1</td>
<td>0.4%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>0</td>
<td>0</td>
<td>2.7%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>URM total</strong></td>
<td><strong>7</strong></td>
<td><strong>2.7%</strong></td>
<td><strong>28.1%</strong></td>
<td><strong>19.9%</strong></td>
</tr>
<tr>
<td>Asian</td>
<td>44</td>
<td>16.7%</td>
<td>4.0%</td>
<td>2.6%</td>
</tr>
<tr>
<td>White</td>
<td>212</td>
<td>80.6%</td>
<td>80.6%</td>
<td>79.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>263</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The “2018 UNMC Faculty Recruitment and Retention Committee Report” does not report any recruitment/retention data by race or ethnicity, only by gender.

Purpose and Primary Research Question of Study

URM are underrepresented in UNMC student and faculty bodies, and in the Nebraska health professions workforce. In addition there exists a lack of data from pipeline programs and we could find no published paper on barriers and facilitators for promoting health professions careers among rural and urban URM in a new-destination Midwestern state for Latino immigrants.

The purpose of the study was to:
Examine reasons that help explain the underrepresentation of URM in health professions programs in Nebraska?

The primary research question was:
How can we improve underrepresentation of URM in health professions programs in Nebraska?
## Methods: The Participatory Action Research Process

<table>
<thead>
<tr>
<th>Phase 1: External Consumer Influence</th>
<th>Phase 2: Consumer Empowered Team</th>
<th>Phase 3: The Research Process</th>
<th>Phase 4: Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy makers (Accrediting bodies) &amp; Research funders (Rural Futures Institute)</td>
<td>Community advisory board: consumers, experts, and advocates &amp; Researchers</td>
<td>Formulate research question</td>
<td>Social importance &amp; Ease of implementation</td>
</tr>
<tr>
<td>Identification of real-world problems</td>
<td>Prioritize concerns and develop goals</td>
<td>Shape procedures and methods</td>
<td>Increase in NE URM health professionals &amp; Improved health status of NE URM populations</td>
</tr>
<tr>
<td></td>
<td>Results</td>
<td>Dissemination</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from participatory action research process:

Methods

This qualitative study consisted of six focus groups with Latino and African American high school, college, and health profession students enrolled in academic institutions (urban and rural) in the Midwest, in addition to one focus group with African American health professionals in the Midwest. Six different academic institutions are a part of this study.

We chose focus groups as our method of knowledge generation, as participants with shared experiences or vested interest can provide in-depth perspectives on social norms, beliefs, values, and expectations.¹

Inclusion criteria were self-identified African-American/Latino individuals interested in health professions.

Methods

A semi-structured interview focus group discussion guide was developed in consultation with the community advisory board. The interview guide asked participants to rank the 5 greatest barriers to URM pursuing health professions careers among the following 13 barriers:

1. I have a difficult time connecting with someone who can help me enter a health profession (if you are in high school, this may be someone like a guidance counselor)
2. I don’t feel academically prepared to be in a health profession
3. I don’t feel I am strong enough in math and science to be in a health profession
4. My grades are not good enough to be in a health profession
5. I do not feel like I belong with others who are seeking a health professions career
6. I face discrimination in my school which makes it difficult to pursue health professions education
7. I feel there are better jobs/careers out there
8. I don’t think I could afford a health professions education
9. My parents are unaware of the requirements for pursuing a health professions career
10. My parents are not supportive of me pursuing health professions education
11. I feel that I have to start working to financially support my family instead of spending more years in school
12. There is a lack of exposure to opportunities in health professions career
13. I have other reasons that are not listed
Methods

Two separate teams of two coders analyzed focus groups using NVivo 11 (Latinos) and ATLAS.ti 7 and hand coding (African Americans) for key themes that emerged among Latinos and African Americans respectively.¹

To ensure reliability, two members of each research team coded the focus group data, line-by-line and discussed disagreements until they reached consensus. A few coding categories were later eliminated as they were merged with similar categories, whose definitions we expanded.

Demographics of Participants

- 49 Latino and African Americans in Nebraska participated in the seven focus groups

- There were 27 Latino focus group participants, aged 14-29, among whom 9 identified as men and 18 identified as women

- There were 22 African American focus group participants, aged 16-60, among whom 6 identified as men and 16 identified as women
## Results: Barriers and Facilitators

<table>
<thead>
<tr>
<th>Latinos</th>
<th>African Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprepared academically/poor grades</td>
<td>Narrow knowledge and lack of preparation for health professions</td>
</tr>
<tr>
<td>Cost challenge</td>
<td>Lack of funding</td>
</tr>
<tr>
<td>Ability to connect with others</td>
<td>Lack of support and diversity/isolation</td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>Perceived discrimination</td>
</tr>
<tr>
<td>Early exposure</td>
<td>Early exposure</td>
</tr>
<tr>
<td>Family support and support at academic institution</td>
<td>Early preparation</td>
</tr>
<tr>
<td>Scholarships</td>
<td>Support systems</td>
</tr>
<tr>
<td>Funding</td>
<td></td>
</tr>
</tbody>
</table>

Red = **Barriers** to pursuing health professions  Green = **Facilitators** to pursuing health professions
Results: Lack of academic preparation

“I don’t feel academically prepared. I say that because I just feel like the material in high school doesn’t prepare you at all for like college material. I just feel like the material was so different. Like when they first told me I had to write like an eight-page paper, I was like what?” (Undergraduate student)
Results: Cost of Higher Education as a Challenge

“Hispanic families I’ve seen, they push them to graduate high school and go straight to a job, that sometimes interferes with trying to study, stay in college, and trying to have good grades, because it’s more important to have food on the table than be in school.” (Graduate student)
Results: Lack of Exposure to Health Professions Careers

“I think shadowing opportunities are a really important. I know it’s hard with doctor-patient confidentiality, but I know in high school, I would have loved to be able to shadow a nurse or even be in a clinical setting.” (Undergraduate student)

“And I felt like a lot of non-minority students got more exposure. They were allowed to explore a little bit more than we were because, like she said, we had to work.” (Health professional)
Results: Family

“Reach out to the parents, it’s hard to find material in Spanish. My mom, she still doesn’t know English. Anything that has to do with my education she’s like, you got it. She supports me but I mean she can’t help me in any way.” (Graduate student)

“Although at least one of my parents pursued an advanced degree, it did not mean they knew how to navigate or help me navigate this field. And so my family really did play a big role in being supportive, but that support, I know... it translated to missing deadlines and spending a lot of money that we didn't have to spend because we weren't aware.” (Graduate student)
Results: Ability to Connect with Others

“People that are like us and being a Latino, there’s not very many, it’s hard to find somebody.” (Undergraduate student)

“I don’t really think there’s a whole lot of representation of Latinos in the faculty, I think that representation is extremely important.” (Graduate student)
Results: Isolation and Lack of Diversity

They talked about the Presidential elections and then you’re like the only black kid in there and you’re like, I'm trying to fight the battle by myself here, and it makes you not want to be in the environment… It's in most of my honors classes.” (High school student)

“If you want diversity, go to […]local minority community]. I mean, I think they [institution] are aware of it, but I think for their mindset and maybe to ease the issue of diversity, it's like let's bring international students in and that'll cover us…. There's a lot more we have to do institutionally to ensure that this is a welcoming environment that actually values domestic diversity.” (Graduate student)

"Diversity at […]institution] is a bucket of white paint. How thin can they get it?…You just can't see us anymore [African Americans]. You keep stirring, and it's like, where did they go?“ (Health professional)
Results: Perceived Discrimination

“They send us letters home to donate money or things like that. They don’t include the Hispanic families. White parents, they are included more. Knowing what we should do to get into college, Hispanic families don’t really know. They should include all the parents in the school.” (High school student)

“And then these like AP classes and these honors classes, there are no [African Americans] – it's primarily White, the teacher shows favoritism. It’s very discouraging.” (High school student)

“I don’t feel like they really take you as seriously. Because I talk to the professors and try to get information on what I should do, and I just feel like they don’t take you guys as serious as they would a White person.” (Undergraduate student)

“I can really tell that we all know how to persevere, we have all developed tough skin. I feel like it’s something that you need to have when you’re going through college. Sometimes students or faculty might not believe in you. I’ve been able to ignore that, I know my own abilities. Just looking around campus, I feel like sometimes there is a little bit of discrimination.” (Graduate student)
Conclusions

The novelty in our study mainly relies on the presenting of voices of Midwestern rural and urban URM health professionals and students interested in health professions whose perspectives have not been previously described in the literature.

Our study findings are consistent with the existing body of evidence regarding barriers for URM to pursue health professions careers and lends further depth to existing literature, which indicate that family, peers, school, academic preparation, financial support, isolation, diversity of academic institution, and perceived discrimination play roles in the pursuit of health professions careers.\(^1\)

Conclusions

Outcomes from rural guaranteed admissions programs have been tracked since 1991; however, outcomes data from underrepresented student-serving guaranteed admissions programs have not been tracked in a systematic fashion since 1992.

Ten disciplines are offered in guaranteed admissions programs targeting rural students, while only one discipline is offered in the guaranteed admissions program targeting urban/underrepresented students.

There exists a need to track all guaranteed admissions programs and train architects and implementers of such programs from high school to graduate school about equitable and inclusive programming, and in cultural competency.

There exists a need for reporting recruitment, retention, and advancement of faculty by race and ethnicity.

There exists a need for increased representation of URM teachers, counselors, staff, faculty, and particularly senior administrators in academic settings, from high school to graduate school.

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Conclusions

To address campus climates, leadership of high schools to academic medical centers should vigorously affirm the value of diversity and demonstrate this commitment with action order to improve the institutional climates.

• The literature underscores the importance of institutional commitment to diversity, driven by leadership, with an explicit commitment to workforce and student diversity to achieve success in recruiting, retaining, and advancing URM students and faculty. ¹⁻³

Preliminary Recommendations

- Have rural and urban/underrepresented student serving pipeline programs report to the same person who ensures that
  a. all programs are tracked and have equal oversight and attention paid to them
  b. that working groups on pipeline programs have diverse representation from their inception, including representation of domestic URM
  c. architects and implementers of pipeline programs are convened on a regular basis to assess items a-b

- Train architects and implementers of guaranteed admissions programs about equitable, inclusive, and culturally competent educational programming

- Include underrepresented student serving guaranteed admissions programs as part of revitalization efforts undertaken for rural student-serving guaranteed admissions program in the UNMC Rural Health 2030: 2018-2019 Action Plan Goal B¹

- Establish an external advisory committee that reviews outcomes based upon agreed upon diversity metrics (including outcomes of pipeline programs) on a regular basis

Preliminary Recommendations

- Clarify historical record of and evaluate outcomes of past and present diversity initiatives within NU system
- Address lack of senior URM faculty and administrators
- Implement comprehensive interventions that span the health professions education pipeline. Interventions that engage parents/guardians using culturally and linguistically appropriate strategies to promote health professions careers, at high school, undergraduate, and graduate health professions school levels
- In line with literature\(^1\)-\(^4\), academic institutions should:
  - Engage in targeted recruitment and holistic admissions policies
  - Address the lack of preparation through intensive training opportunities for students (supplemental instruction, academic enrichment programs, transition programs such as summer bridge programs, and pipeline programs)
  - Implement on-going mentoring programs
  - Identify financial support (scholarships)
  - Implement social supports at high school undergraduate, and health professions school, including the creation of inclusive spaces


Next steps

Replicate study with Midwestern Native American students interested in health professions

With input from community advisory board create final report for dissemination to stakeholders across Nebraska and to inform the UNMC Rural Health 2030: 2018-2019 Action Plan.\(^1\) Goal B of the action plan calls for pipeline programs to address the diversity in the state’s changing demographics and for convening a taskforce to use findings from this study to revitalize and improve the diversity of enrolled students in health career pipeline programs.\(^1\)

Prepare and submit manuscripts for publication

- Johansson, P; Tutsch, S; King, K.; Leon, M; Lyden, E.; De Alba, A; Schober, D. “Barriers and Opportunities for Promoting Health Professions Careers Among Latinos in the Midwest.” Journal of Latinos and Education. Status, revise and resubmit.

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– Renaisa Anthony, MD MPH