Beyond “Red Man Syndrome”: A Case for American Indian Health Equity

Joseph Burns, MD,ab and Allison Empey, MDcd

Sitting in the lecture hall, the first-year medical student, an American Indian first-generation college graduate, was shocked and dismayed when learning about antimicrobial agents and their side effects as the professor described “red man syndrome” (RMS). The student was relieved when other students in the course discussed the racial insensitivity of this term and cited recent articles calling for the removal of this language. However, this feeling of isolation and damage was already inflicted. Unfortunately, this experience is not rare. Minority medical trainees experience microaggressions and bias daily.1 As a medical community, we must do better.

Konold et al present a strong example of using rapid-cycle quality improvement methodology to purge the antiquated, racially insensitive term RMS from the medical record.2 They describe how the documentation of 274 pediatric patients who had been diagnosed with RMS within their hospital was successfully removed from charts.2 In addition, the success of this intervention is supported by the reduction of the use of this language 3 months after the intervention, with only 29 of 65 charts with vancomycin allergies listed citing RMS. Importantly, the rate of use revealed a statistically significant difference preintervention and postintervention (P < .001).2 This approach is used to substitute more medically descriptive and correct terminology, “vancomycin flushing reaction” or “vancomycin infusion reaction”, as recently recommended by the Infectious Diseases Society of America and Pediatric Infectious Diseases Society.3–5

The quality improvement project by Konold et al serves as a simple and disseminatable action that other hospitals can emulate.2 They describe how others can use electronic medical records to address the racial injustice of terminology with further education to continue to make positive changes toward equality in the hospital setting.2 An important component of the quality improvement project was buy-in from the hospital leadership and accountability, which are vital priorities in addressing systemic racism.

Further support of this shift may be bolstered by similar position statements from the American Academy of Pediatrics and American College of Physicians, and it is hoped that such guidance is forthcoming. Beyond these actions, rectifying this terminology in medical education is paramount in assuring that this wording is eliminated from the vocabulary of health care providers in future generations and respect American Indian (AI) and Alaskan Native (AN) patients. Konold et al acknowledge a lack of an educational component as a limitation of their study but hint at the proactivity of trainees in making this amendment of their own volition, perhaps indicating the possibility of embracing this change in the years to come.1 As this movement gains

www.hospitalpediatrics.org
DOI: https://doi.org/10.1542/hpeds.2021-006233
Copyright © 2021 by the American Academy of Pediatrics

Address correspondence to Allison Empey, MD, Department of Pediatrics, CDRC-P, School of Medicine, Oregon Health & Science University, 3181 SW Sam Jackson Park Rd, Portland, OR 97239. E-mail: empey@ohsu.edu

HOSPITAL PEDIATRICS (ISSN Numbers: Print, 2154-1663; Online, 2154-1671).

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

Drs Burns and Empey conceptualized and designed the study, drafted the initial manuscript, reviewed and revised the manuscript, and approved the final manuscript as submitted.
momentum, it is expected that clinicians and trainees will similarly prevent further trauma from the use of this and other insensitive terms.

However, it is important to recognize that although RMS was erased from the medical records, the historical and current health inequities have not been erased. Curricula on the health of AI and AN people are severely lacking in the current American medical education system. Along with education around removing RMS, an emphasis on a patient-centered, culturally competent approach to the health of AI and AN people from the historical and strength-based perspective is imperative to transform care for these groups for years to come. Understanding historical trauma, cultural practices, and modern-day health inequities for AI and AN children in the area served by each hospital is important given the diversity of tribes across the United States. Additionally, the hospital experience for many families is stressful and intimidating, but for some of our patients of color, it can be traumatizing. Current research has revealed, even within the field of pediatrics, implicit biases exist, leading to worse health outcomes in children of color. Making the hospital a safer and more welcoming environment for patients and families of color is imperative. Using trauma-informed, culturally appropriate care modalities will help to create such an environment.

The change in language away from RMS is one of many recent advances in caring for AI and AN children. Foremost among these is the recent release of an American Academy of Pediatrics Policy Statement, “Caring for American Indian and Alaska Native Children and Adolescents.” In this document, the authors outline the many health inequities facing this vulnerable population and offer clinical and advocacy recommendations to proactively address the social, biological, and environmental determinants of health in a culturally conscious manner. AI and AN children have a rate of mortality between ages 1 and 4 that is 3 times that of the general population, with accidents accounting for 52% of all deaths and homicide for 8%. Native American children are also more likely to be obese or overweight, with 39% of this demographic with a BMI in the >85th percentile. In addition, 79% of AI and AN preschool children were found to have dental caries. Native American children also display increased prevalence of mental health disorders, with a significantly higher risk of substance use relative to white children. In addition, >25% of AI and AN households experience poverty and have the highest rate of violence in children relative to any other ethnic group in the United States. All of these disparities are related to the social determinants of health and structural racism. AI and AN populations have struggled for centuries to maintain an ethnic identity and a physical location to grow families and culture. The struggle for land rights persists to this day, from mass migrations in the 19th century to the case for sovereignty and respect at the core of the fight against the Dakota Access and Keystone XL Pipelines. In addition, ethnocide propagated by settler colonialism and manifested in the boarding school system and erasure of AI and AN history in public education continue to contribute to the erasure of a distinct, proud AI and AN identity in the United States.

Aside from providing recommendations for caring for AI and AN children, it is critical to improve representation of the AI and AN populations among health professionals. Recent evidence suggests that the number of AI and AN applicants and matriculants to medical school has increased, although the rate of graduation is not reflective of this change. The recent opening of the Oklahoma State University Center for Health Sciences at the Cherokee Nation represents a critical opportunity to train AI and AN physicians and others in Native American health as the first tribally affiliated school of medicine in the United States. Other pathway programs, such as the Wy’east Post-Baccalaureate Pathway through the Northwest Native American Center of Excellence at Oregon Health & Science University work to increase the number of AI and AN providers by targeting AI and AN trainees on the cusp of matriculation. The change of RMS to a more physiologic term is also extremely important for learners to feel heard and supported in this historically monocultural profession.

Abandoning RMS is a small but significant step toward health equity for AI and AN populations. The movement toward the use of vancomycin flushing reaction follows the example of granulomatosis with polyangiitis and reactive arthritis in replacing racially charged terms and eponymous conditions named for violators of human rights. This progress serves to ease the burden of stress and trauma associated with hospitalization by reducing involuntary microaggressions associated with such terms.

We encourage all institutions to replace RMS with vancomycin flushing reaction, vancomycin infusion reaction, or another physiologically descriptive term. However, this is just a small first step. Health systems also need to explore ways to improve care for AI and AN communities, and teaching institutions need to develop recruitment and retainment strategies to increase AI and AN representation within the health profession.

Acknowledgments
We acknowledge and thank the original caretakers of the land that our centers occupy and are built on: the Multnomah, Kithlamet, Clackamas, Tumwater, and Watlala bands of the Chinook and the Tualatin Kalapuya, Molalla, Wasco, and the many Indigenous nations of the Willamette Valley and the Columbia River Plateau of Oregon, as well as the Matinecock, Manhasset, Lenape, Montaukett, Unkechaug, Shinnecock, Mericoke, Massapequa, Nissequo, Secatague, Setauket, Patchoag, Corchaug, and the many original inhabitants of Queens and Long Island, New York.

REFERENCES
training experiences in the workplace. *JAMA Netw Open.* 2018;1(5):e182723


Beyond "Red Man Syndrome": A Case for American Indian Health Equity
Joseph Burns and Allison Empey
Hospital Pediatrics 2021;11;e343
DOI: 10.1542/hpeds.2021-006233 originally published online October 21, 2021;

<table>
<thead>
<tr>
<th>Updated Information &amp; Services</th>
<th>including high resolution figures, can be found at: <a href="http://hospps.aappublications.org/content/11/11/e343">http://hospps.aappublications.org/content/11/11/e343</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementary Material</td>
<td>Supplementary material can be found at: <a href="http://hospps.aappublications.org/content/11/11/e343#BIBL">http://hospps.aappublications.org/content/11/11/e343#BIBL</a></td>
</tr>
<tr>
<td>References</td>
<td>This article cites 8 articles, 3 of which you can access for free at: <a href="http://hospps.aappublications.org/content/11/11/e343#BIBL">http://hospps.aappublications.org/content/11/11/e343#BIBL</a></td>
</tr>
<tr>
<td>Subspecialty Collections</td>
<td>This article, along with others on similar topics, appears in the following collection(s): Native American Child Health <a href="http://www.hospps.aappublications.org/cgi/collection/native_american_child_health_sub">http://www.hospps.aappublications.org/cgi/collection/native_american_child_health_sub</a></td>
</tr>
<tr>
<td>Permissions &amp; Licensing</td>
<td>Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="http://www.hospps.aappublications.org/site/misc/Permissions.xhtml">http://www.hospps.aappublications.org/site/misc/Permissions.xhtml</a></td>
</tr>
<tr>
<td>Reprints</td>
<td>Information about ordering reprints can be found online: <a href="http://www.hospps.aappublications.org/site/misc/reprints.xhtml">http://www.hospps.aappublications.org/site/misc/reprints.xhtml</a></td>
</tr>
</tbody>
</table>
Beyond "Red Man Syndrome": A Case for American Indian Health Equity
Joseph Burns and Allison Empey
Hospital Pediatrics 2021;11:e343
DOI: 10.1542/hpeds.2021-006233 originally published online October 21, 2021;

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://hosppeds.aappublications.org/content/11/11/e343