

INTRODUCTION

Herein, we use Hispanic/Latino (as is specified for reporting on ethnicity by the National Institutes of Health and US Office of Management and Budget) to reference individuals who identify as Hispanic, Latino, Latina, Latinx, or Latine^{1,2}

- Hispanic/Latino individuals are disproportionately affected by several health conditions, stressing the importance of appropriately representing and including this population in clinical trials and extrapolating relevant research findings to improve healthcare access and quality³
- Terminology for representation of Hispanic/Latino individuals should reflect the various identities (eg, nationality, race, nativity status, gender, sex) in this population to allow for accurate and increased representation in medical publications^{3,4}
 - Terms that are unknown or preclude self-identification can reduce representation of this community as a whole^{2,5}
- Recently, the term Latinx was introduced to increase visibility of gender-expansive Hispanic/Latino people; however, its growing use as a gender-neutral, panethnic reference to the Hispanic/Latino population does not reflect the preferences of a large proportion of this population⁴
 - Although the majority of Hispanic/Latino individuals living in the United States do not know the term Latinx, most who are familiar with it do not prefer the term, and some consider its panethnic use an offensive imposition⁴⁻⁶
 - Use of Latinx, regardless of study participants’ gender identities, may additionally obscure distinct representation of certain members of this community (eg, gender-expansive people)^{6,7}
- OBJECTIVE: To identify patterns of use for the terms Hispanic, Latino, Latina, and Latinx since 2016 and investigate current guidelines for reporting ethnicity within medical publications

METHODS

- A PubMed search was conducted to identify articles using terms related to Hispanic/Latino ethnicity and gender/sex; articles published from 2016 (ie, when the first mention of Latinx was used in a PubMed article) to 2022 were incorporated
 - Ethnicity search terms: Hispanic, Latino/Latina, and Latinx
 - Although Latine/Latines was included in the search string, it was not included in analyses as it appears in non-ethnicity-related words (eg, spheno-pa-latine ganglion)
 - Gender- and sex-related search terms: gender expansive, genderqueer, transgender, cisgender, gender transition, agender, gender neutral, gender dysphoria, gender affirming, intersex, non-binary, nonbinary, gender non-conforming, self-identified, gender
- To assess the impact of the panethnic use of Latinx on Hispanic/Latino representation, a best-fit trendline for publications using Hispanic/Latino from 2009 to 2015 was used to extrapolate projected representation of the population had Latinx not been adopted into medical publications from 2016 to 2022
$$y = 27.857x^2 + 95.929x + 3604.3$$
- Appropriate use or misuse of Latinx was estimated as inclusion of Latinx in the presence or absence of terms associated with gender/sex from 2016 to 2022; percentages were based on the number of articles identified with appropriate use or misuse of Latinx over the total number of articles identified using Latinx
- A separate step involving guideline recommendations of select prominent journals and medical communication organizations was conducted to identify guidelines for reporting Hispanic/Latino populations
 - During this step, selection of journals/organizations, determined at the discretion of the authors, was based on those with high visibility/readership

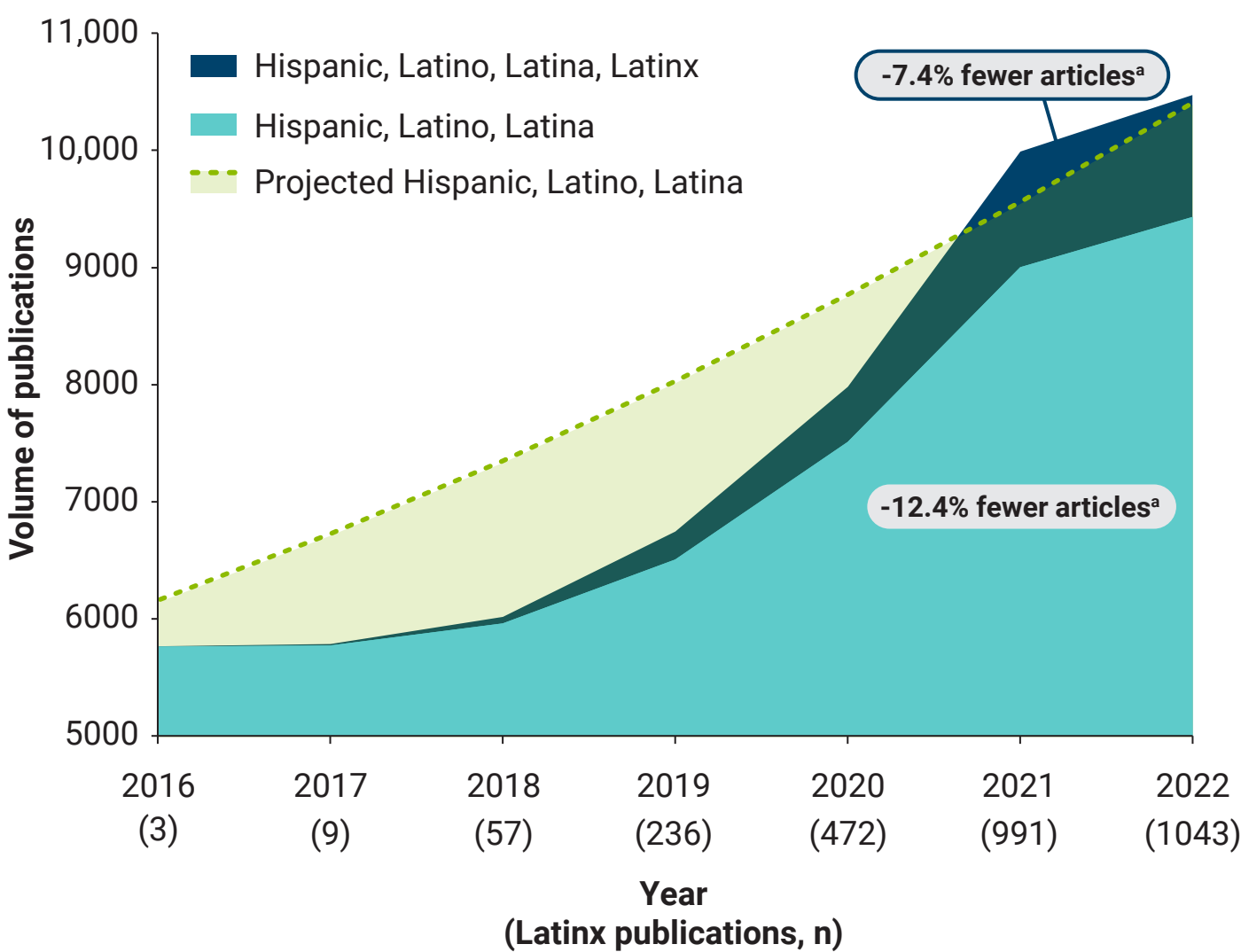
CONCLUSIONS

Unified guidelines for reporting ethnicity of Hispanic/Latino individuals in medical publications can ensure that representative terms reflect preferences and intersectional identities of the study population and prevent misidentification or erroneous homogenization of distinct populations⁷

RESULTS

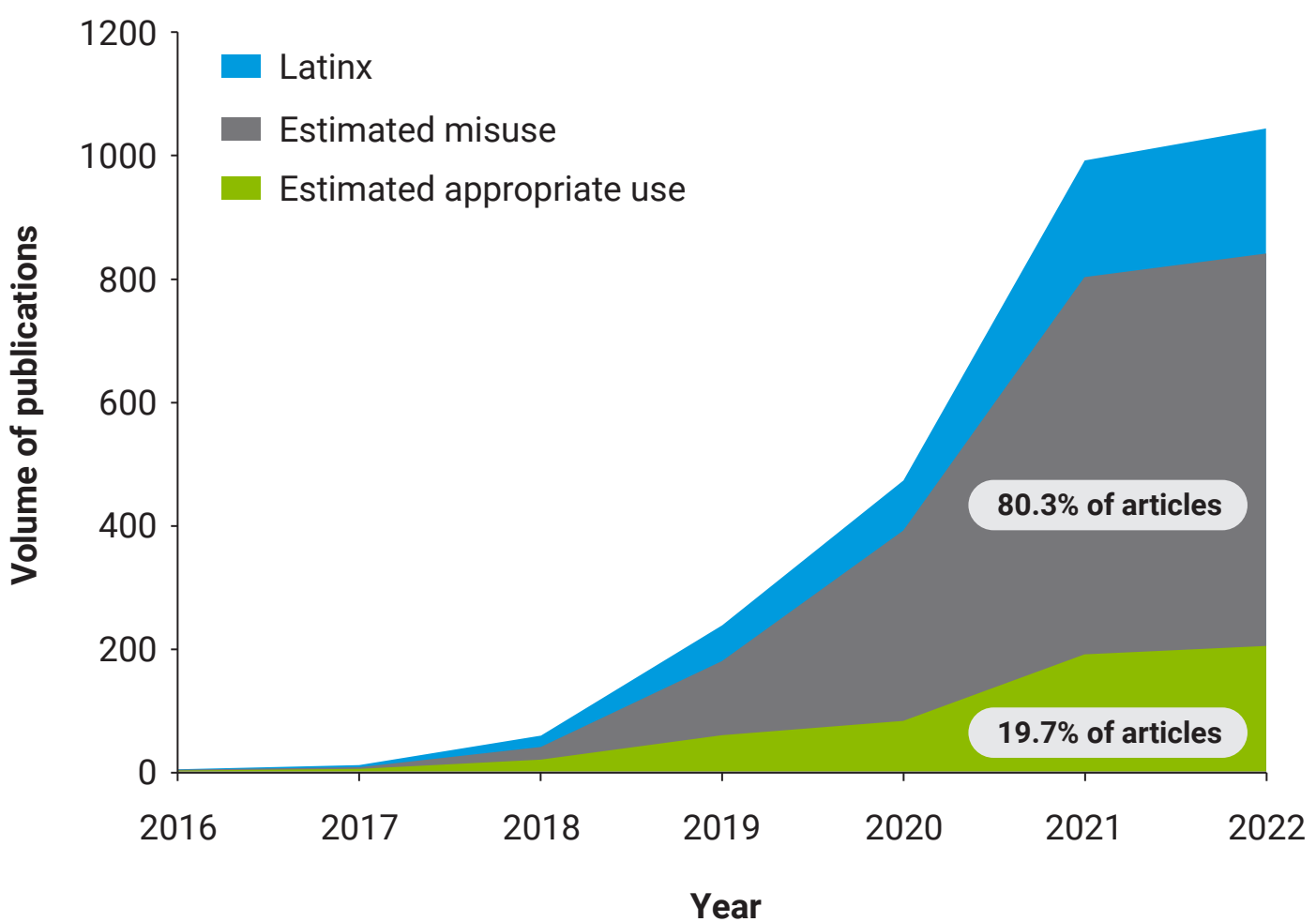
From 2016 to 2022, a total of 53,913 articles were identified; Hispanic (60%; 32,248 articles) was the most frequently used term to represent the Hispanic/Latino population, followed by Latino (35%; 18,855 articles) and Latinx (5%; 2811 articles)

Figure 1
Panethnic use of Latinx may lead to underreporting of Hispanic/Latino individuals within medical publications



The total number of publications representing the Hispanic/Latino population for each group is represented by the shaded area under the curve. There are no duplicates in the number of articles between any of the years presented.
*Reported percentages for fewer articles indicate the percentage difference between the collective number of articles from 2016-2022 for each group of search terms vs the total number of articles projected to represent the Hispanic/Latino population for this time period.

Figure 2
Most publications did not use Latinx in combination with gender-expansive terms



The total number of publications is represented by the shaded area under the curve. There are no duplicates in the number of articles between any of the years presented. Latinx represents all articles identified using Latinx. Estimated appropriate use and misuse, respectively, represent all articles identified using Latinx that include or exclude gender- and sex-related terms.

Most current journal guidelines for terminology validate panethnic use of Latinx despite recognizing that such use can preclude representation of various identities (eg, gender-expansive people) and that the term is unknown, nonpreferred, or offensive to some members of the community

Table
Guidelines for Reporting Hispanic/Latino Individuals in Medical Publications

Journal	Summary	Organization	Summary
JAMA ⁸	Latinx is acceptable as gender-inclusive, nonbinary term, but manner of use should be at the discretion of authors; when possible, region or country of origin should be reported	NIH ¹²	Latinx is a gender-neutral term and should only be used in cases of self-identification; collective reference to minority groups should be avoided
AMA J Ethics ⁹	Latinx should be used panethnically despite representing a heterogeneous population	ICMJE ¹³	Ethnicity should be incorporated when possible with neutral, precise, and respectful language. A definition for each population referenced should be included
Ann Intern Med ¹⁰	Although Latinx is nonpreferred by some and incomprehensible to native Spanish speakers, its use is recommended panethnically and across genders in efforts to be as inclusive as possible	AMWA ^{14,a}	Defer to the preference of the individuals being represented for terminology
N Engl J Med ⁵	Appropriate identification is needed to extrapolate results to specific populations	ISMPP-GPP ¹⁵	Efforts for inclusivity should include recognition of minority groups and cultural differences
PLOS One ¹¹	Categorization methods should be defined; patient-first language and acceptable terminology should be used		

AMWA, American Medical Writers Association; GPP, Good Publication Practice; ICMJE, International Committee of Medical Journal Editors; ISMPP, International Society for Medical Publication Professionals; NIH, National Institutes of Health. ^aBased on commentary blog post.

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REFERENCES: 1. National Institutes of Health. Racial and ethnic categories and definitions for NIH diversity programs and for other reporting purposes. US Department of Health and Human Services; 2015. Notice no. NOT-OD-15-089. 2. Office of Management and Budget. Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Washington, DC: Office of Management and Budget; 1997:58782-58790. Federal register citation 62 FR 58782. 3. Rubin. N Engl J Med [editorial]. 2021;385:1429-1430. 4. Borrell and Echeverria. Soc Sci Med. 2022;302:114977. 5. Noe-Bustamante et al. Pew Research Center. https://www.pewresearch.org/hispanic/2020/08/11/about-one-in-four-u-s-hispanics-have-heard-of-latinx-but-just-3-use-it. Published August 11, 2020. Accessed March 27, 2023. 6. Vidal-Ortiz and Martínez. Lat Stud. 2018;16:384-395. 7. del Rio-González. Am J Public Health. 2021;111:1018-1021. 8. Flanagan et al. JAMA. 2021;326:621-627. 9. De Maio et al. AMA J Ethics. 2022;24:E251-E253. 10. Serchen et al. Ann Intern Med. 2021;174:529-532. 11. PLOS One. https://journals.plos.org/plosone/s/submission-guidelines. Accessed March 21, 2023. 12. National Institutes of Health. https://www.nih.gov/nih-style-guide/race-national-origin. Updated December 8, 2022. Accessed March 21, 2023. 13. International Committee of Medical Journal Editors. https://www.icmje.org/icmje-recommendations.pdf. Updated May 2022. Accessed March 21, 2023. 14. Walker. American Medical Writers Association. https://blog.amwa.org/equity-inclusion-tips. Published April 26, 2021. Accessed March 21, 2023. 15. DeTora et al. Ann Intern Med. 2022;175:1298-1304.