



# Improving and expanding Medical Subject Headings (MeSH) during times of social change: The Hispanic/Latinx Inclusive Terminologies Project

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## Abstract

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In the summer of 2020, the Latinx Caucus of the Medical Library Association focused on addressing bias in medical subject heading terminologies by establishing the Hispanic/Latinx Inclusive Terminologies Project. Two project teams were formed. The Medical Subject Headings (MeSH) Project Team's objective was to recommend inclusive and expanded language within existing medical subject headings to better represent Hispanic/Latinx populations in the United States. From January 2021 to June 2021, the MeSH Project Team conducted a scoping assessment of Hispanic/Latinx terminologies from various sources. The scoping assessment included a review of federal sources, biomedical and health databases, style guides, social media, news articles, and academic literature to review the historical use of *Hispanic* and *Latino* and usage trends of gender-neutral terms like *Latinx* and *Latine*. In reviewing the scoping assessment and existing MeSH structure for *Hispanic* and *Mexican Americans*, the MeSH Project Team recommended two new MeSH terms, *Latin Americans* and *Brazilian Americans*, and additional entry terms for existing headings. Team recommendations were submitted to the United States National Library of Medicine (NLM) between June and October 2021. The team also contacted NLM's MeSH Division for guidance on the terms creation and submission process. By systematically evaluating various resources using a scoping assessment as the primary tool and reviewing gaps within medical subject headings, the MeSH Project Team members could propose four recommendations for enhancing Hispanic/Latinx terminologies and influencing changes to existing terms.

**Keywords:** controlled vocabularies; Hispanic/Latinx; medical subject headings; MeSH; United States

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## Introduction

In the summer of 2020, members of the Latinx Caucus, the Hispanic/Latinx affinity group of the Medical Library Association (MLA), headquartered in Chicago, Illinois, United States, began conversations about their perspectives as medical and health science librarians who commonly used PubMed/MEDLINE<sup>1</sup>, a comprehensive source of biomedical research and health-related literature. PubMed/MEDLINE uses Medical Subject Headings (MeSH)<sup>2</sup>, a thesaurus developed by the U.S. National Library of Medicine (NLM), and serves as a standardized vocabulary for indexing, cataloging, searching, and retrieving biomedical and health-related information. The



conversation focused on the limitations of MeSH terms used to describe the Hispanic/Latinx diaspora in the United States. The group observed that there were exclusions for specific ethnicities and races within the Hispanic/Latinx diaspora, inconsistencies, and inaccuracies, including missing entry terms, spellings, and improper identifiers.

These conversations were byproducts of significant health and social justice events unfolding in the United States and beyond, including the murder of George Floyd at the hands of four police officers during the summer of 2021 and the COVID-19 global pandemic from 2020 to 2023. The pandemic disproportionately impacted Black, Indigenous, and People of Color (BIPOC) individuals and their families' access to health care, vaccination treatments, and the option to work remotely (Flagg et al., 2021). Motivated by these health and social injustices and a series of calls to action (Weeks et al., 2020), the Latinx Caucus of the MLA pursued the MeSH Project and the Search Hedge Project to address biases within controlled vocabularies and natural language terms. The MeSH Project team focused on expanding the selection of medical subject headings. In contrast, the Search Hedge Project team focused on creating and validating a search hedge, or filter, of U.S.-based Hispanic/Latinx terms (Weeks & Hoskins, 2022).

### Biases of Controlled Vocabularies

At a macro level, controlled vocabularies reflect a society's systems, rules, and values. These “systems of classification and representation enable different traditions or fragments of traditions to be retrieved and reformulated in different contexts as discourses” (Smith, 2021, p. 51). At a micro-level, librarians and other information professionals directly decide how to represent and organize information. As Olson (2002) contends, “The library catalogue is not a neutral tool ... it is constructed. Hence, it does not just passively reflect the dominant values of society in some neutral or objective manner, but selects those values for expression” (p. 2). Therefore, librarians and information professionals pass on their biases to the mechanisms used to form controlled vocabularies in constructing how information is organized and identified. Smith (2021) and Olson (2002) posit that this manifests in explicit and implicit ways, from blatant biases to the more common subtle marginalizations.

Since the early 1990s, researchers have noted the outdated and sometimes offensive terms used in MeSH to describe population groups and advocated for change (Aspinall, 2005; Efthimiadis, 1996; Sankar, 2003). Aspinall (2005) discusses some revisions to the 2004 MeSH database that attempted to address comments about racial and ethnic terms and their scope notes. Similar discussions have taken place in other types of libraries. The U.S. Library of Congress, which maintains its own classification system that is frequently used in academic libraries, made the news in 2016 when they announced that the subject heading “illegal aliens” would be replaced by two subject headings: “noncitizens” and “unauthorized immigration” (Library of Congress, 2016). This project builds on recent scholarship discussing the problematic nature of MeSH and, more broadly, on the ways in which medical libraries have upheld racism (Excellent et al., 2024; Pun et al., 2023).

The MeSH Project Team focused on the need for inclusive and culturally relevant terms by recommending terminologies within medical subject headings that expanded the representation of Hispanic/Latinx populations in the United States. The objectives of the MeSH Project Team were to review existing MeSH terms administered by the NLM and determine ways to address gaps and limitations within the existing schema while also acknowledging the diversity of the diaspora and recognizing the fluidity of evolving identities. This work is significant because MeSH

terms are included in the NLM catalog, other library catalogs, and databases such as PubMed/MEDLINE, Embase (Elsevier), and the Cumulative Index in Nursing and Allied Health Literature (CINAHL/EBSCO).

### Theoretical Framework

The MeSH Project team used archivist Jessica Tai's (2021) theoretical framework of cultural humility, adapted from the concepts of Tervalon and Murray-García (1998). Although Tai's work was written from an archivist's perspective on reparative archival description, the concepts are transferable to other areas of librarianship that intersect with description and controlled vocabularies. Tai begins by differentiating between the concepts of cultural competency and cultural humility:

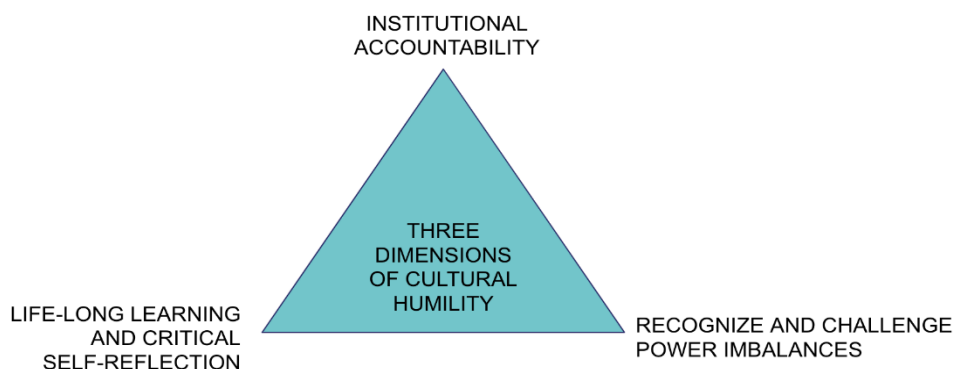
... Archival literature ... introduces cultural competency as a skill that provides library and information science professionals with the working knowledge and understanding to engage with diverse communities. Cultural humility posits that building such a skill set should be approached as a *lifelong process*. (2021, p. 2, emphasis added)

Instead of a goal to be achieved, cultural humility is an ongoing, interactive process for the learner. Tai (2021) elaborates that:

... of critical importance to this process is the implementation of redescription initiatives that aim to audit and revise harmful and oppressive ... description ... [Working] within a framework of cultural humility, archivists [or other information professionals] understand that redescription is not just about revising language but about implementing a practice of critical self-reflection, as well as recognizing and shifting power imbalances. (p. 3)

Tai (2021) posits that “instituting a framework of cultural humility is critical for archivists to produce description and redescription that is transparent, iterative, and rooted in language communities use to describe themselves” (p. 17). The three equally important tenets of cultural humility described by Tai (2021) include life-long learning and critical self-reflection, institutional accountability, and recognizing and challenging power imbalances (Figure 1).

Figure 1. “Three Dimensions of Cultural Humility” in *Cultural Humility as a Framework for Anti-Oppressive Archival Description* (Tai, 2021, quoted in Tai, 2019)



This work was dynamic, necessitating the need for descriptive work to be viewed as ongoing and iterative. The MeSH Project Team researched a variety of sources, both academic and non-academic, to purposefully include a variety of viewpoints and perspectives and prioritize language used by the communities being described. The team was mindful to make recommendations while also being cognizant that there is not always agreement within particular communities on preferred terminologies.

## Methods

This paper focuses on the MeSH Project's work, findings, and impact on medical subject headings. To that end, the MeSH Project Team identified three objectives: (1) review existing medical subject headings, (2) gather information from a variety of sources on Hispanic/Latinx terminologies in use, and (3) recommend new subject headings and entry terms to address gaps within the existing schema. The team's subject matter expert recommended a scoping assessment to record different usages of Hispanic/Latinx terminologies from relevant databases, academic literature, popular media, style guides, and other resources. The approach of using a scoping assessment to begin this project made discovery and exploration of the varied usage of terms accessible and manageable to librarians and academic professionals who were unsure of how to approach such a large task.

The scoping assessment included a range of resources to obtain a broad but nuanced overview of Hispanic/Latinx terminologies currently in use. In order to have a wide breadth of resources and ontologies relevant to a US-based Hispanic/Latinx population, the project team selected primarily English-based resources with national or international prominence and authoritativeness. This data pool included a selection of U.S. federal agencies, library databases and their controlled vocabularies, classification schemas, social media platforms, national style guides, Google Ngram<sup>3</sup>, and a mixture of academic and non-academic resources. The scoping assessment began with an overview of the federal government's use of the term *Hispanic* and then expanded to capture similar terms located within each resource (Figure 2). The project team members recorded their findings using Google Docs.

Figure 2. Sources consulted for scoping assessment

### **Biomedical and Consumer Health Databases**

- Embase
- CINAHL
- PubMed/MEDLINE
- MedlinePlus

### **Classification Systems/Schemas**

- University of California Berkeley Chicano Thesaurus
- U.S. Library of Congress Subject Headings
- WorldCat

### **Controlled Vocabularies**

- CINAHL Subject Headings
- Embase Emtree Subject Headings

- U.S. National Library of Medicine Medical Subject Headings

**United States Governmental Health Agencies/Organizations**

- U.S. Center for Disease Control (CDC)
- U.S. Department of Health and Human Services (HHS)
- U.S. National Institutes of Health (NIH)
- U.S. National Library of Medicine (NLM)
- U.S. Office of Management and Budget (OMB)

**Social Media**

- Twitter (now known as X)
- Instagram

**Style Guides**

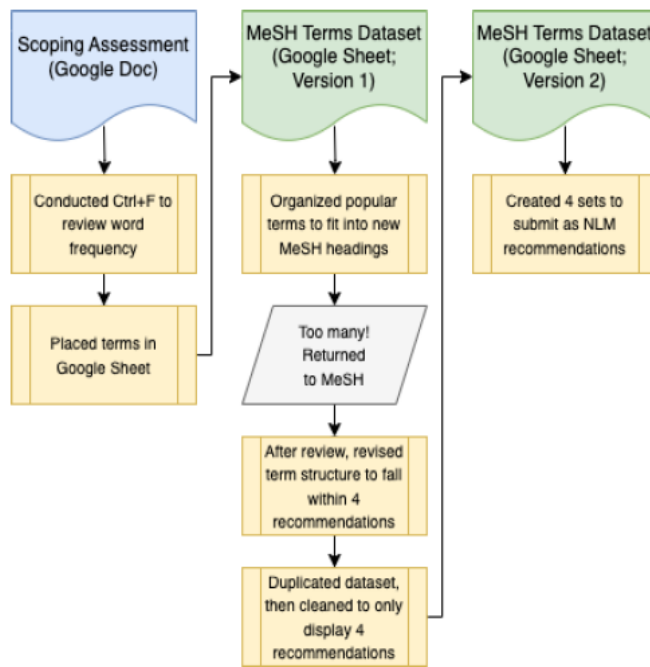
- American Medical Association (AMA)
- American Psychological Association (APA)
- Associated Press (AP)

**Other Resources**

- Google Ngram
- Op/Ed cultural essays, scholarly articles, news articles, and websites

After completing the scoping assessment, the next task was translating the information gathered into MeSH recommendations (Figure 3). One of the project co-leaders translated the scoping assessment into a list of possible new MeSH terms and entry terms for review by the MeSH Project Team. The process began by reviewing the word frequency for the number of times a Hispanic/Latinx term appeared in the document and copying those terms into a Google Sheet. Initially, all nationality terms were included as a new MeSH record. The MeSH Project Team discussed the preliminary results and, noting the large number of potential terms, decided to reexamine the existing MeSH records of *Hispanic Americans* and *Mexican Americans* to determine how to incorporate recommended changes into existing MeSH terminology. Upon further review, the MeSH Project Team concluded that many of the terms could be listed as new entry terms within existing MeSH and that there was an opportunity to introduce two new terms.

Figure 3. Scoping assessment workflow



The dataset was revised to list four distinct recommendations, which are discussed further in the results section of this paper. Each MeSH record was listed with an accompanying set of entry terms, including whether the entry term currently existed elsewhere within MeSH or was an entirely new term. Each entry term included a source or explanation for why it was recommended. The following image is an example of the term *Latin Americans* (Figure 4).

Figure 4. Example of a MeSH record for *Latin Americans*

MESH Record	Status	Entry Terms	Status	Source
Latin Americans	Proposed	Latinos	Current	Currently in MeSH as entry term for Hispanic Americans
		Latino	Current	Currently in MeSH as entry term for Hispanic Americans
		Latinas	Current	Currently in MeSH as entry term for Hispanic Americans
		Latina	Current	Currently in MeSH as entry term for Hispanic Americans
		Cuban Americans	Current	Currently in MeSH as entry term for Hispanic Americans
		Americans, Cuban	Current	Currently in MeSH as entry term for Hispanic Americans
		Cuban American	Current	Currently in MeSH as entry term for Hispanic Americans
		Americans, Mexican	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Mexican American	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Chicanas	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Chicana	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Chicanos	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Chicano	Current/Proposed	Currently in MeSH as entry term for Mexican Americans
		Chicanx	Proposed	Keywords for Latino/a Studies -- Chicana, Chicano, Chican@, Chicanx (Contreras 2017)
		Latino Americans	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans
		Americans, Latino	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans
		Latino American	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans
		Latin Americans	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans
		Americans, Latin	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans
		Latin American	Proposed	Library of Congress Subject Headings (LCSH) -- Hispanic Americans



## Results

The scoping assessment revealed a range of terms used to describe Hispanic populations in the United States. The MeSH Project Team began by researching the origins and history of the federal definitions of *Hispanic* and *Latino* since the NLM is part of the United States federal government.

The U.S. Office of Management and Budget's 1997 Statistical Policy Directive 15 uses the term *Hispanic* or *Latino*, noting that there are regional differences across the United States - *Hispanic* being more commonly used in the eastern portion of the United States while *Latino* is widely used in the western portion (Executive Office of the President, Office of Management and Budget (OMB), Office of Information and Regulatory Affairs, 1997, p.58786). This term was selected "to encourage survey response rates by the population" (Executive Office of the President, Office of Management and Budget (OMB), Office of Information and Regulatory Affairs, 1997, p.58786).

### Medical Subject Headings (MeSH)

The MeSH Project Team found two MeSH terms listed in the MeSH Database used to describe the diaspora: *Hispanic Americans* and *Mexican Americans*<sup>4</sup>. The former term represents the pan-ethnic federal label, and the second refers to the largest Hispanic/Latinx ethnic population in the United States. No other pan-ethnic labels and/or nationalities derived from Central America, South America, or the Caribbean were listed as separate subject headings.

### Biomedical and Consumer Health Databases

The MeSH Project Team searched four biomedical and consumer health databases using subject and keyword search strategies. The top three terms in PubMed with the most search results included *Hispanic*, *Hispanics*, and *Hispanic American*. The Cumulative Index to Nursing and Allied Health Literature (CINAHL) included one subject heading for Hispanic/Latinx populations: *Hispanics*. Using keyword searches instead of controlled vocabulary retrieved additional results. Embase, searched via the OvidSP platform, had the most significant results for *Hispanic* and *Mexican American*. A unique term found was *Latin American medicine*. MedlinePlus is a free online consumer health resource managed by the National Library of Medicine. The website provides a variety of health information, including diseases and treatment, drugs and supplement information, genetics, and medical testing, and includes a medical encyclopedia. The site provides resources in English and Spanish, with hyperlinks leading to multilingual health resources provided by the National Institutes of Health and independent health organizations, associations, and patient advocacy groups. MedlinePlus includes a webpage dedicated to Latino and Hispanic American health, which contains terms for our scoping assessment<sup>5</sup>.

### Controlled Vocabularies and Dictionaries/Thesauri

A review of the Library of Congress Subject Headings (LCSH), University of California Berkeley's Chicano Thesaurus, and WorldCat found some overlap between the terms. The LCSH term *Hispanic Americans* is used for *Hispanics*, *Latino Americans*, *Latinos*, *Latinxs*, *Spanish-speaking people*, and *Spanish-surnamed people*. UC Berkeley's Chicano Thesaurus had a broader range of terms, including *Afro-Hispanics*, *Chicanas*, *Españoles*, *Ethnic Groups*, *Heritage Spanish Speakers*, *Latin Americans*, *Costarricences*, *Spaniards*, and *Spanish Americans*. A general search of WorldCat in the "search everything" box with no limits included variations of *Latin* (*Latina*, *Latinas*, *Latine*, *Latines*, *Latinx*, etc.), *Hispano/s*, *Hispanic* (*Hispanics*, *Hispanic American*, and

*Hispanic Americans*), and *Spanish American/s*. After *Latin*, the most prevalent terms were *Latina*, *Hispanic American/s*, and *Hispanic*.

### United States Governmental Health Agencies/Organizations

The Centers for Disease Control and Prevention (CDC) webpages needed more consistency and guidance in terms used to describe Hispanic populations. The primary terms used were the singular and plural forms of *Hispanic or Latino* and *Hispanic/Latino* (Weeks et al., 2021). The term *Latinx* was rarely used and only in specific instances like events, letters, or referenced publications (Weeks et al., 2021). The U.S. National Institutes of Health (NIH) used *Hispanic, Latino, Hispanic, and/or Latino* (Weeks et al., 2021). The NIH Hispanic and Latino Engagement Committee (HLEC) stated: “We are Mexican, Puerto Rican, Cuban, Central and South American, and an array of other persons of Spanish culture and origin, regardless of race” (National Institutes of Health, Office of Diversity, Equity & Inclusion, 2021, para. 2). The U.S. Department of Health and Human Services (HHS) Office of Minority Health (OMH) used the term *Hispanic/Latino Americans* (U.S. Department of Health and Human Services, Office of Minority Health, 2021).

### Social Media

Social media, specifically Instagram and Twitter (now known as X), provided more insight into the popular usage of *Hispanic, Latino, Latinx*, and other terms. The MeSH Project Team could not locate conclusive information on social media platforms such as Tumblr or the blogosphere, which require multiple metadata tools to scrape information.

On January 25, 2021, the MeSH Project Team used the website <https://hashtagify.me/> to review worldwide usage of the following hashtags: #hispanic, #latinx, #latino, #latina, #hispano, #latin, #latine, and #latino. U.S.-based X users predominantly used the hashtags #hispanic (90%) and #latinx (89.2%), followed by #latino (49.74%), #latina (49.32%), #hispano (43.6%), and #latin (31.3%). Inclusive term variants of #latino and #latine were more prevalent in countries that used them as native terms, such as Spain and France.

An Instagram search conducted on February 18, 2021, found that the top Hispanic/Latinx term was #latina (15,000,000), followed by #latino (7,300,000), #latin (4,400,000), #hispanic (1,200,000), and the first inclusive term, #latinx in the fifth spot at 775,000 posts.

### Style Guides

The American Medical Association (AMA), American Psychological Association (APA), and Associated Press (AP) style guides all recommend using the most specific terms possible, such as Mexican or Cuban American. The AMA Manual of Style notes that Hispanic and Latino are not interchangeable, as some consider the term Latino to exclude individuals of Mexican or Caribbean ancestry (JAMA Network editors, 2020). The AMA Style Insider blog shared that “the manual’s committee will continue to explore changing trends in the usage of other racial and ethnic terms as well, such as Latinx” (AMA Style Insider, 2020). The AP Stylebook mentions that “some prefer the recently coined gender-neutral term Latinx” (Associated Press Stylebook, 2020). The APA recommends that “authors ... consult with their participants to determine the appropriate choice” (American Psychological Association, 2022).

## Google Ngram Viewer

A Google Ngram Viewer search was conducted for the years 1980-2019. Google Ngram Viewer allows users to compare terms in published works aggregated on the Google Books platform and how their usage trends over time. The term *Hispanic* was compared ten times with variant terms and was more prominent 70% of the time (7 out of 10). The term *Latino* was compared eight times with different variant terms and was more prominent 63% of the time (5 out of 8). *Latinx* was compared sixteen times with different variant terms and was more prominent 31% of the time (5 out of 16). Case sensitivity appeared to play a role in term prominence.

## Scholarly Publications & News Media Sources

Our scoping assessment discovered multiple scholarly publications and news media articles. Collectively, all publication sources had repeating themes on topics related to Hispanic/Latinx terminologies. The MeSH Project Team identified four key themes: issues with pan-ethnic identities, the emergence of gender-neutral terms, the controversy over *Latinx*, and the difficulty applying Hispanic/Latinx identity labels within health-related research.

## Final MeSH Recommendations

Based on the scoping assessment results, the team recommended two new MeSH terms (Latin Americans and Brazilian Americans) and new entry terms for existing MeSH terms: Hispanic Americans and Mexican Americans to NLM. One of the authors packaged each term recommendation into a PDF document, including an introductory letter and a copy of the scoping assessment. Submissions were submitted to the NLM Help Desk via the NLM website in July, August, and September 2021.

Table 1 summarizes the existing entry terms as of 2021, those found in other MeSH records (primarily in Hispanic Americans and Mexican Americans), entirely new proposed terms, and the sum of total terms for each record. Many of the proposed terms submitted were mixed racial/ethnic, inclusive, and native language terms<sup>6</sup>.

Table 1. Number of New MeSH Records and Overall Entry Terms Proposed to NLM

	Entry Terms from MeSH Record	Entry Terms from other MeSH Records	New Entry Terms Proposed	Total Terms
<b><u>Current MeSH Records</u></b>				
Hispanic Americans	17	7	26	50
Mexican Americans	7	2	6	15

**New MeSH Records**

Latin Americans	0	13	172	185
Brazilian Americans	0	4	32	36

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**Discussion**

Historically, the NLM's approach to updating MeSH is an internal process with the option for external stakeholders to submit recommendations to their indexing team. Whether a recommendation was integrated into the controlled vocabulary is up to the NLM, and requesters would not know until late fall when a new list of MeSH terms would be announced through the NLM Technical Bulletin (National Library of Medicine, 2021). The decision-making process for selecting or changing new terms felt arguably unclear, but this is not uncommon for a governmental agency. In order to ensure that our changes were considered and addressed, the authors sought guidance from members of NLM, systematically submitted recommendations, and made clear that these changes were important. While staggering the submissions over the course of the summer and early fall of 2021, the authors noted corresponding changes that took place prior to NLM's normal announcement cycle, including the revision of *Hispanic Americans* to *Hispanic* or *Latino* in order to match the federal minimum reporting categories from OMB's Statistical Policy Directive 15. Federal agencies, including NLM, must abide by the policy to use the same race and ethnic terms for national data collection and reporting. The authors later learned that our submissions did influence those changes (Weeks & Williams, 2022). In addition, this project resulted in opportunities for the author team to present before the National Institutes of Health (NIH) Interest Group for Adding Ethnic Minorities to MeSH (Medical Subject Headings) in 2021 and the Interagency Technical Working Group on Race and Ethnicity Standards (ITWG) in 2022.

While this project specifically targeted MeSH terms used by information professionals in the health sciences field, this does have implications for the broader field of librarianship and its work with controlled vocabularies. Critical cataloging, under the broader umbrella of critical librarianship, focuses on mitigating bias in description and metadata (Dahl & MacLeod, 2023). Applying subject headings is a part of the cataloger's professional responsibility, as it assists researchers in discovering relevant materials. Therefore, it is critical to have culturally relevant and sensitive subject headings to assist researchers in their work rather than impeding access to information or potentially causing unnecessary harm through the use of offensive or outdated subject headings. While this particular project focused on inclusive Hispanic/Latinx terminologies in Medical Subject Headings, the scoping assessment and methodology could be applied to similar projects targeting other specific demographics or controlled vocabularies.

This project had its limitations. Though the scoping assessment was extensive, it was not exhaustive and covered only some possible sources that could have been used to observe trends over time and across geographical regions within the United States. This includes our approach to examining social media sites. The authors did not conduct extensive exploration of sites that made it difficult to view hashtags and trends without more sophisticated tools used to extract large amounts of metadata across sites such as Tumblr, Wordpress, Blogger, Medium, etc. Additional insights discovered included using Hispanic, Latino, Latina, Latinx, and other terms in

social media. In particular, the prominent use of the feminine-ending term Latina on Instagram made the authors wonder what factors influence the usage of different pan-ethnic terms on social media platforms. In addition, the summary of themes from scholarly publications and news media articles only scrapes the surface of the discussions centering on the adoption and controversies of pan-ethnic gender-neutral terms. The authors note that terminologies evolve rapidly, new terms will emerge, and sentiments will change based on community preferences and discourse within the population.

The authors also note the limitations of the federal government-level adoption of terms. These terms are subject to the institutional systems and government bureaucracies that mandate the terms used by federal entities. During the project, the authors learned that changes to racial and ethnic categories must first occur at the federal level, as OMB mandates the terms used by federal agencies for demographic reporting and population studies. Because of this, changes submitted to the NLM on MeSH racial and ethnic categories cannot be adopted on demand. The authors recognize that the stewards of MeSH controlled vocabulary are federal employees subject to rules and regulations that must be followed, which at times can conflict with the desire to implement necessary changes of evolving identifiers in a heterogenous population influenced by region, immigration status, generation, and sociopolitical demographics.

Future considerations for those pursuing similar projects include critical labor practices. At the beginning of the project, Hispanic/Latinx information professionals were intentionally selected as project leaders. Project contributors and subject matter experts/mentors in residence also included Hispanic/Latinx information professionals. Other project contributors included the Medical Library Association and professional librarian/academic colleagues, including those without medical librarianship backgrounds who could offer varying perspectives and expertise to the project. This was a volunteer effort completed without grants or other sources of funding. Acknowledging and considering the emotional demand and minority tax<sup>7</sup>, on project leaders and contributors from historically marginalized groups is paramount. Centering those whose lived experience informs how best to adopt cultural humility practices and allyship from white folks to do this work will set up a project's success. Monetary compensation should be a priority when undergoing an extensive effort that utilizes project members' expertise and lived experience.

Another consideration is the ongoing work necessary to review and continue monitoring changes in terminologies. Controlled vocabularies are iterative and should change as different demographics' needs change and evolve. This is especially critical in a field such as health sciences, where researchers and information professionals need up-to-date information. As linked data continues to evolve, controlled vocabularies are increasingly important for enhancing access and discoverability of resources and information. There is promising evidence of this by way of the Medical Subject Funnel established in 2023 to build on the work of the MeSH project (Fox & Balek, 2023). The Funnel will help library stakeholders submit proposals for changes and updates to controlled vocabularies, including the NLM's MeSH terms and the Library of Congress Subject Headings<sup>8</sup>. In addition, this type of work is gaining momentum as evidenced by the recent publication of numerous scholarly articles on the effects of controlled vocabularies and classification systems on research in the medical field. These include Pun et al.'s (2023) work on medical library history and its connection to racial science; controlled vocabulary and health equity (Bass et al., 2022), and racial equity in systematic reviews (Excellent et al., 2024).

## Conclusion

The origins of this project involved a group of librarians and scholars recognizing the power that scholarly databases, such as PubMed, and library catalogs, have in using subject headings to index terms and enable and enhance searchability for researchers. This critical endeavor aimed to improve the discoverability of information resources by updating outdated terminologies. In turn, this project had a positive impact in supporting those improvements and empowering librarians at the national level. This project centered Hispanic/Latinx voices and lived experiences and was supported by allies across the field of librarianship and academia. By continually engaging with the communities and individuals with whom librarians work and evaluating the resources researchers use, librarians continue to engage in critical self-reflection of these platforms.

## Endnotes

<sup>1</sup> To learn more about PubMed, visit: <https://pubmed.ncbi.nlm.nih.gov/about/>

<sup>2</sup> MeSH stands for Medical Subject Headings, which are terms used to index abstracts on PubMed/Medline and managed by the National Library of Medicine: <https://www.nlm.nih.gov/mesh/meshhome.html>

<sup>3</sup> Google Ngram is a visual search engine that allows users to view usage trends by comparing words and phrases found within the Google Books repository. To learn more about this resource, visit: <https://books.google.com/ngrams/info>

<sup>4</sup> The MeSH Database includes the National Library of Medicine's controlled vocabulary used for indexing articles in PubMed/Medline. To view a list of terms including "Hispanic or Latino" (formerly "Hispanic American") and "Mexican American," visit: <https://www.ncbi.nlm.nih.gov/mesh/>

<sup>5</sup> MedlinePlus Latino and Hispanic Health: <https://medlineplus.gov/latinoandhispanicamericanhealth.html>

<sup>6</sup> To view a list of all terms submitted to the National Library of Medicine, visit: <https://osf.io/9mgwq/wiki/home/>

<sup>7</sup> Minority tax is a derivative term for "cultural taxation" coined by Amado M. Padilla in his work, "Ethnic Minority Scholars, Research, and Mentoring: Current and Future Issues" (1994) which refers to the overwhelming burden that marginalized and racially minoritized communities carry when doing diversity, equity, and inclusion work particularly in academic and post-secondary spaces. <https://www.jstor.org/stable/1176259>

<sup>8</sup> To view more on the Library of Congress subject funnels, visit: <https://www.loc.gov/aba/pcc/saco/funnelsaco.html>

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