Proposed Changes to the Race and Ethnicity Stratification for HEDIS®[1] MY 2026:
Alignment with Updated Federal Standards for Race and Ethnicity

NCQA seeks comments on the proposed alignment of the HEDIS race and ethnicity stratification (RES) with 2024 updates to the Office of Management and Budget (OMB) Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity (SPD 15).[2]

NCQA requires health plans to report race and ethnicity as defined by the OMB; to remain aligned with the federal standards for race and ethnicity data collection and reporting, NCQA proposes to update the HEDIS RES from the previous 1997 OMB standard to the revised March 2024 standard. The planned updates are as follows:

- Add Middle Eastern or North African (MENA) as a minimum reporting category.
- Update terminology in SPD 15.
- Combine race and ethnicity into a single reporting unit that allows multiple responses.

The revisions are tailored to organizations that collect race and ethnicity data and require collection of detailed categories as a default. Due to the nature of HEDIS reporting, NCQA will not change reporting categories to reflect the more granular format required of entities collecting these data. However, we are evaluating opportunities to encourage organizations to transition to detailed race and ethnicity data collection through educational materials, standards and other avenues.

NCQA will postpone updating Table RES-A-D-1/2/3 in *General Guideline: Race and Ethnicity Stratification* pending updates from the Centers for Medicare and Medicaid Services, Health Level 7 International® and the Centers for Disease Control and Prevention; our team will revise these tables prior to finalizing specifications as these agencies release plans to update direct reference codes and value sets to align with OMB revisions. Additionally, NCQA intends to include mapping guidance for organizations that have data in the prior OMB format during the transition period. This guidance will be developed in conjunction with the anticipated updates to Table RES-A-D-1/2/3 which will be incorporated after the NCQA public comment period closes.

Scope of Changes

Planned OMB alignment updates will impact the following areas in HEDIS MY 2026:

- *General Guideline:* Race and Ethnicity Stratification.
- *Race/Ethnicity Diversity of Membership* (RDM) measure.
- The 23 measures stratified by race and ethnicity as of MY 2025.
  - NCQA is not expanding the RES to additional measures in MY 2026 to reduce organizational burden while implementing proposed OMB updates.

Proposed Revisions

Add MENA Minimum Reporting Category: Prior to the 2024 OMB update, MENA was classified under the White category. However, the OMB recognized that this framing does not accurately reflect the lived experiences and perceptions of MENA individuals. Per the OMB update, MENA is now a distinct minimum reporting category, separate from White. As such, NCQA proposes to add MENA as a minimum reporting category for the RES, separate from White.

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[1] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2] Revisions to OMB's Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Notice 2024–06469, 84 FR 22182 (2024). https://www.federalregister.gov/d/2024-06469

Update Terminology in SPD 15: In the 2024 update, OMB made changes to modernize how race and ethnicity are reflected in society and to improve clarity for respondents. NCQA proposes to make the following terminology updates to category definitions and supporting language in HEDIS:

- Remove "majority" and "minority" except when statistically accurate.

- Use the term "race and/or ethnicity" in the question stem.

- Use "Multiracial and/or Multiethnic" in tabulations to include those who identify with multiple options.

- Use at least six example groups when presenting category definitions to illustrate the diversity of categories.

- For American Indian or Alaska Native, remove the phrase "who maintains tribal affiliation or community attachment."

- For American Indian or Alaska Native, update language from "including Central America" to listing "Central America" equally with North and South America.

- For Asian, remove the term "Far East" and "Indian Subcontinent" and add "Central or East Asia" and "South Asia."

- For Black or African American, remove the term "Negro."

- For Hispanic or Latino, the definition will read as follows, "Includes individuals of Mexican, Puerto Rican, Salvadoran, Cuban, Dominican, Guatemalan, and other Central or South American or Spanish culture or origin."

- For Native Hawaiian or Other Pacific Islander, remove "Other" from the title.

Combine Race and Ethnicity Into a Single Unit That Allows Multiple Responses: Prior to the 2024 OMB update, SPD 15 used two separate questions for race and ethnicity data collection and reporting. With the update, the OMB combined these categories into a single question, and race and ethnicity are now treated equally, with the expectation that organizations will report them as "race and/or ethnicity" categories. NCQA will update the RES to combine race and ethnicity into a single reporting unit and include a "Multiracial/Multiethnic" reporting category to capture the quality of care provided to multiracial/multiethnic individuals.

NCQA seeks general feedback on the proposed changes and specific feedback on the following questions:

1. Do you support the proposed revisions to the HEDIS RES to align with OMB 2024 standards?

2. The OMB SPD 15 update requires federal agencies to comply with updates no later than March 28, 2029. How is this deadline informing your organization's strategy? What resources would be beneficial to support the transition to the new standards during the intermediary period (when both standards are in use)?

Supporting documents include example measure specification, updated general guidelines and literature review summaries supporting changes to add the MENA and Multiracial/Multiethnic reporting categories.

NCQA acknowledges the contributions of the Health Equity Expert Work Group and the Technical Measurement Advisory Panel.

Measure title	Prenatal Immunization Status*	Measure ID	PRS-E
Description	The percentage of deliveries in the measurement period in which persons received influenza and tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccinations.		
Measurement period	January 1–December 31.		
Copyright and disclaimer notice	*Developed with support from the Department of Health and Human Services (DHHS), Office of the Assistant Secretary for Health (OASH), National Vaccine Program Office (NVPO).* Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org Submit policy clarification support questions via My NCQA (https://my.ncqa.org).		
Clinical recommendation statement and rationale	Advisory Committee on Immunization Practices (ACIP) clinical guidelines recommend that all women who are pregnant or who might be pregnant in the upcoming influenza season receive inactivated influenza vaccines. ACIP also recommends that pregnant women receive one dose of Tdap during each pregnancy, preferably during the early part of gestational weeks 27–36, regardless of prior history of receiving Tdap.		
Citations	Murthy, N., A.P. Wodi, V.V. McNally, M.F. Daley, S. Cineas. 2024. "Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older—United States, 2024." *MMWR Morb Mortal Wkly Rep* 73:11–15. DOI: http://dx.doi.org/10.15585/mmwr.mm7301a3		
Characteristics			
Scoring **Type** **Product lines**	Proportion. Process. • Commercial. • Medicaid. • Multiracial and/or Multiethnic. • Two or More Races. • Asked But No Answer. • Unknown.		
Risk adjustment	None.		
Improvement notation	Increased score indicates improvement.		
Guidance	**Data collection methodology:** ECDS. Refer to the *General Guideline: Data Collection Methods* for additional information. **Date specificity:** Dates must be specific enough to determine that the event occurred in the period being measured.		

	Which services count? When using claims, include all paid, suspended, pending and denied claims.
	Other Guidance: The denominator for this measure is based on deliveries. When using SNOMED-CT codes to identify a history of a procedure, the date of the procedure must be available.

Definitions	

Pregnancy episode	Calculate pregnancy start date by subtracting the gestational age (in weeks) at the time of delivery from the delivery date. Use the last gestational age assessment or diagnosis within 1 day of the delivery date.
Initial population	*Measure item count:* Episode.
	Attribution: Enrollment.
	• *Benefit:* Medical.
	• *Continuous enrollment:* From 28 days prior to the delivery date through the delivery date.
	• *Allowable gap:* None.
	Ages: None.
	Event:
	Deliveries (Deliveries Value Set) during the measurement period that have a gestational age assessment (SNOMED CT code 412726003; value is not null) or gestational age diagnosis within 1 day of the start or end of the delivery. A code from any of the following value sets meets criteria for gestational age diagnosis:
	• Weeks of Gestation Less Than 37 Value Set.
	• 37 Weeks Gestation Value Set.
	• 38 Weeks Gestation Value Set.
	• 39 Weeks Gestation Value Set.
	• 40 Weeks Gestation Value Set.
	• 41 Weeks Gestation Value Set.
	• 42 Weeks Gestation Value Set.
	• 43 weeks gestation (ICD-10-CM code Z3A.49).
	− Include deliveries that occur in any setting.
	− Determine the delivery date using the date as of the end of the delivery procedure.
	− If a person has more than one delivery in a 180-day period, include only the first eligible delivery. Then, if applicable include the next delivery that occurs after the 180-day period. Identify deliveries chronologically, including only one per 180-day period.
	Note: Removal of multiple deliveries in a 180-day period is based on eligible deliveries. Assess each delivery for exclusions and participation before removing multiple deliveries in a 180-day period.

Denominator exclusions	• **Persons with a date of death.** Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. • **Persons in hospice or using hospice services.** Persons who use hospice services (Hospice Encounter Value Set; Hospice Intervention Value Set) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file. • **Deliveries that occur at less than 37 weeks of gestation.** Length of gestation in weeks is identified by one of two methods: – Gestational age assessment (SNOMED CT code 412726003; value <37 weeks), *or* – Gestational age diagnosis (Weeks of Gestation Less Than 37 Value Set).
Denominator	The initial population minus denominator exclusions.
Numerator	**Numerator 1—Immunization Status: Influenza** • Deliveries where persons received an adult influenza vaccine (Adult Influenza Immunization Value Set; Adult Influenza Vaccine Procedure Value Set) on or between July 1 of the year prior to the measurement period and the delivery date, or • Deliveries where persons had anaphylaxis due to the influenza vaccine (SNOMED CT code 471361000124100) on or before the delivery date. **Numerator 2—Immunization Status: Tdap** • Deliveries where persons received at least one Tdap vaccine (CVX code 115; Tdap Vaccine Procedure Value Set) during the pregnancy (including on the delivery date), *or* • Deliveries where persons had any of the following: – Anaphylaxis due to the diphtheria, tetanus or pertussis vaccine (Anaphylaxis Due to Diphtheria, Tetanus or Pertussis Vaccine Value Set) on or before the delivery date. – Encephalitis due to the diphtheria, tetanus or pertussis vaccine (Encephalitis Due to Diphtheria, Tetanus or Pertussis Vaccine Value Set) on or before the delivery date. **Numerator 3—Immunization Status: Combination** Deliveries that met criteria for numerator 1 and numerator 2.
Summary of changes	– Removed the definitions of participation and participation period. These definitions have been integrated into the measure where applicable. – Updated the race and ethnicity stratification to align with OMB SPD 15 2024.
Data element tables	Organizations that submit data to NCQA must provide the following data elements.

Table PRS-E-A-1/2 Data Elements for Prenatal Immunization Status

Metric	Data Element	Reporting Instructions
Influenza	InitialPopulationByEHR	Repeat per Metric
Tdap	InitialPopulationByCaseManagement	Repeat per Metric
Combination	InitialPopulationByHIERegistry	Repeat per Metric
	InitialPopulationByAdmin	Repeat per Metric
	InitialPopulation	(Sum over SSoRs)
	ExclusionsByEHR	Repeat per Metric
	ExclusionsByCaseManagement	Repeat per Metric
	ExclusionsByHIERegistry	Repeat per Metric
	ExclusionsByAdmin	Repeat per Metric
	Exclusions	(Sum over SSoRs)
	Denominator	Repeat per Metric
	NumeratorByEHR	For each Metric
	NumeratorByCaseManagement	For each Metric
	NumeratorByHIERegistry	For each Metric
	NumeratorByAdmin	For each Metric
	Numerator	(Sum over SSoRs)
	Rate	(Percent)

Table PRS-E-B-1/2: Data Elements for Prenatal Immunization Status: Stratifications by Race and Ethnicity

Metric	Race and/or Ethnicity	Data Element	Reporting Instructions
Influenza	AmericanIndianOrAlaskaNative	InitialPopulation	For each Stratification, repeat per Metric
Tdap	Asian	Exclusions	For each Stratification, repeat per Metric
Combination	BlackOrAfricanAmerican	Denominator	For each Stratification, repeat per Metric
	HispanicOrLatino	Numerator	For each Metric and Stratification
	MiddleEasternOrNorthAfrican	Rate	(Percent)

Table PRS-E-C-1/2: Data Elements for Prenatal Immunization Status: Stratifications by Ethnicity

	Metric	Race and/or Ethnicity	Data Element	Reporting Instructions
		NativeHawaiianOr~~Other~~PacificIslander	Numerator	For each Metric and Stratification
		White	Rate	(Percent)
		SomeOtherRaceAndOrEthnicity		
		~~TwoOrMoreRaces~~MultiracialAndOrMultiethnic		
		AskedButNoAnswer		
		Unknown		

General Guideline: Race and Ethnicity Stratification

This guideline provides instructions on how organizations categorize Medicare, Medicaid and commercial members by the race and ethnicity stratification (RES) when it is included in a measure. Refer to *Appendix 7: Logical Measure Groups* for measures that include RES by logical measure group.

Reporting categories	NCQA requires reporting race and ethnicity as defined by the Office of Management and Budget (OMB) 2024 Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity.[1,2]

Race and ethnicity values must be rolled up into the OMB categories specified in this guideline. NCQA supports efforts to collect more detailed race and ethnicity data, beyond the minimum OMB reporting categories. If more detailed race andor ethnicity data are collected, data must be aggregated and reported in the OMB categories provided. For health plans using the CMS classification scheme for race and ethnicity, refer to Table RES-A-1/2/3 for a crosswalk to HEDIS reporting. Report member race and ethnicity together separately. If a combined race/ethnicity category question is used to collect data, data must be disaggregated, and race and ethnicity categories must be reported separately. When using the combined race/ethnicity data format for collection, refer to Table RES-B-1/2/3 for a crosswalk of reporting categories.

Tables RES-C-1/2/3 and RES-D-1/2/3 crosswalk the HEDIS reporting categories to code values specified by the Race and Ethnicity extensions of the HL7 US Core Implementation Guide. Organizations must use or map to the documented direct reference codes and value sets described here. Code values originate from two code systems:

- "Race & Ethnicity – CDC" (CDCREC) is used to report distinct OMB race and ethnicity categories.

- "Some Other Race," "Asked But No Answer" and "Unknown" use the HL7 version 3 NullFlavor code system.

Determining race and ethnicity reporting category

For each product line, report members in only one of the elevennine race stratifications listed below and the total.

- *American Indian or Alaska Native*: Identification with any of the original peoples of North, Central and South America (including Central America) and who maintain tribal affiliation or community attachment. Examples of these groups include, but are not limited to,It includes people who identify as "American Indian" or "Alaska Native" and includes groups such as Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government and Nome Eskimo Community.

- *Asian*: Identification with one or more nationalities or ethnic groups originating in any of the original peoples of Central, Eastthe Far East, Southeast or South Asia or the Indian subcontinent. Examples of these

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[1] Office of Management and Budget Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. https://www.govinfo.gov/content/pkg/FR-2024-03-29/pdf/2024-06469.pdf https://www.govinfo.gov/content/pkg/FR-1997-10-30/pdf/97-28653.pdf

[2] Improvements to the 2020 Census Race and Hispanic Origin Question Designs, Data Processing, and Coding ProceduresOMB Statistical Policy Directive No. 15 on Race and Ethnicity Data Standards: Categories and Definitions: https://spd15revision.gov/content/spd15revision/en/2024-spd15/categories-definitions.html https://www.census.gov/newsroom/blogs/random-samplings/2021/08/improvements-to-2020-census-race-hispanic-origin-question-designs.html

groups include, but are not limited to, Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese,. The category also includes groups such as Pakistani, Cambodian, Hmong, Thai, Bengali or Mien.

- *Black or African American*: Identification with one or more nationalities or ethnic groups originating in any of the Black racial groups of Africa. Examples of these groups include, but are not limited to, African American, Jamaican, Haitian, Nigerian, Ethiopian, and Somali,. The category also includes groups such as Ghanaian, South African, Barbadian, Kenyan, Liberian and Bahamian.

- *Hispanic or Latino*: Identification with one or more nationalities or ethnic groups originating in Mexico, Puerto Rico, Cuba, Central and South America and other Spanish cultures. Examples of these groups include, but are not limited to, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican and Colombian.

- *Middle Eastern or North African*: Identification with one or more nationalities or ethnic groups originating in the Middle East or North Africa. Examples of these groups include, but are not limited to, Lebanese, Iranian, Egyptian, Syrian, Iraqi and Israeli.

- *Native Hawaiian or Other Pacific Islander*: Identification with one or more nationalities or ethnic groups originating in Hawaii, Guam, Samoa, or other Pacific Islands. Examples of these groups include, but are not limited to, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, and Marshallese,. The category also includes groups such as Palauan, Tahitian, Chuukese, Pohnpeian, Saipanese and or Yapese.

- *White*: Identification with one or more nationalities or ethnic groups originating in Europe, the Middle East or North Africa. Examples of these groups include, but are not limited to, German, Irish, English, Italian, Lebanese, Egyptian, Polish, French, Iranian, Slavic and, Cajun and Chaldean.

- *Some Other Race and/or Ethnicity*: People whose race information has been collected but does not fit into any of the other seven race categories. This category includes people who may be Mulatto, Creole and Mestizo or another race not specified in the Census "Race" categories.

- *Two or More Races Multiracial and/or Multiethnic*: People with any combination of races, including "Some Other Race and/or Ethnicity."

- *Asked But No Answer:* People who the organization asked to identify race/ethnicity but who declined to provide a response.

- *Unknown:* People for whom the organization did not obtain race or ethnicity information and for whom the organization did not receive a declined response (i.e., "Asked But No Answer").

- *Total:* Total of all categories above.

Determining ethnicity reporting category	For each product line, report members in only one of the four ethnicity stratifications listed below and the total.
	- *Hispanic or Latino*: Identification with one or more nationalities or ethnic groups originating in Mexico, Puerto Rico, Cuba, Central and South America and other Spanish cultures. Examples of these groups include, but are not limited to, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican and Colombian. "Hispanic, Latino or

Spanish origin" also includes groups such as Guatemalan, Honduran, Spaniard, Ecuadorian, Peruvian or Venezuelan.

- *Not Hispanic or Latino*: People not of Hispanic, Latino or Spanish culture or origin.

- *Asked But No Answer:* People who the organization asked to identify ethnicity but who declined to provide a response.

- *Unknown:* People for whom the organization did not obtain ethnicity information and for whom the organization did not receive a declined response (i.e., "Asked But No Answer").

- *Total:* Total of all categories above.

Data source

Reporting the data collection source is only required for the Race/Ethnicity Diversity of Membership (RDM) measure.

Approved data sources include data collected directly from members and data obtained through imputation methods. In cases where a plan has a race or ethnicity value but no data source, the plan must report using the "unknown" data source category. In cases where the race or ethnicity value and the source are missing, plans must record this as no data. NCQA strongly encourages plans to report directly collected data when available and emphasizes the importance of improving completeness of directly collected member race and ethnicity data. Additionally, NCQA strongly encourages plans to track the source of their race and ethnicity data in order to facilitate valid disparities assessments.

For the RDM measure, plans will report each race and ethnicity value by data source. Plans will report the number of members in the eligible population from the direct, imputed, unknown and no data source categories, and the number of members in the numerator from the direct, imputed, unknown and no data source categories. IDSS will calculate the total number of members in the eligible population and numerator (combining direct, imputed, unknown and no data sources).

Supplemental data may be used as a data source for the race and ethnicity stratification.

Direct data

Data collected directly from members method reflects members' self-identification and is the preferred data source.

Directly collected data include any source for which the member self-identified race or ethnicity. This includes member self-reported data collected directly from members under the full control of the health plan (i.e., no data were obtained through an intermediary), as well as third-party data collected directly from a member by another entity (e.g., the state, CMS, Health Information Exchanges [HIE] or clinical feeds). Direct sources may include, but are not limited to:

- Surveys.
- Health risk assessments.
- Disease management registries.
- Case management systems.
- EHRs.
- CMS/state databases.

- Enrollment information furnished by enrolling entities (e.g., state Medicaid agencies, employers).
- CCDs.
- HIEs.

Note: The "Asked But No Answer" category is only reported using direct data.

Imputed data   Plans may choose to report race and ethnicity data supplemented by imputed methods. Imputed assignment of race and ethnicity values include using an alternate data source (e.g., nationally representative data obtained from databases like the American Community Survey) to assign a race or ethnicity value to a member based on their primary location of residence. Some commonly used imputed methods combine geographic data with additional imputation methods such as surname analysis.

NCQA reiterates that directly collected race and ethnicity is considered the gold standard and is highly preferred to imputed race and ethnicity. For plans choosing to use imputed methods to report the HEDIS race and ethnicity stratification, NCQA emphasizes the following:

- When applying imputed methods that involve assignment of race or ethnicity based on geographic data and member's location of residence, the smallest geographic unit possible is preferred. For example, geographic assignment at the census block level is likely to be more accurate than assignment using census tract or ZIP code-level data.
- Imputed data sources and methods should be evaluated for reliability and validity and selection of a source and method should be prioritized based on demonstrated validity and reliability for the population in which it will be applied (e.g., age group, geography, product line).
- Imputed methods of race and ethnicity assignment are to be used for population-level reporting and analysis but are not appropriate for member-level intervention.

Unknown data   When the reported value for race or for ethnicity is known, but the source is unknown (i.e., cases where an organization has a race or ethnicity value on file from a legacy system but does not know the source).

No data   When both the race or ethnicity value and the source are missing.

Note: The "unknown" category is only reported using the "no data source" category because unknown values cannot be attributed to a particular data source.

Sampling   For measures collected using the Hybrid Method with the race and ethnicity stratification, follow the guidelines for sampling outlined in *Guidelines for Calculation* and *Sampling Guidelines for the Hybrid Method.* The race and ethnicity stratifications are applied to the eligible population and denominator after hybrid sampling.

Reporting   Reporting of the race and ethnicity stratification follows the parameters for denominator size outlined in General Guideline: *Reporting*.

Table RES-A-1/2/3: CMS Categories Crosswalked to HEDIS/OMB Race and Ethnicity

CMS Category	HEDIS/OMB Race	HEDIS/OMB Ethnicity
American Indian/Alaska Native	American Indian or Alaska Native	Unknown
Asian/Pacific Islander	Asian	Unknown

CMS Category	HEDIS/OMB Race	HEDIS/OMB Ethnicity
Black	Black	Unknown
White	White	Unknown
Hispanic	Unknown	Hispanic or Latino
Other	Some Other Race	Unknown
Unknown	Unknown	Unknown
(No equivalent category)	Native Hawaiian or Other Pacific Islander	Unknown
(No equivalent category)	Two or more races	Unknown

Table RES-B-1/2/3: Combined Categories Crosswalked to HEDIS/OMB Race and Ethnicity

Race/Ethnicity Combined Category	HEDIS/OMB Race	HEDIS/OMB Ethnicity
American Indian/Alaska Native	American Indian or Alaska Native	Not Hispanic or Latino
Asian	Asian	Not Hispanic or Latino
Black	Black	Not Hispanic or Latino
Native Hawaiian and Other Pacific Islander	Native Hawaiian or Other Pacific Islander	Not Hispanic or Latino
White	White	Not Hispanic or Latino
Hispanic/Latino/Black	Black	Hispanic or Latino
Hispanic/Latino/White	White	Hispanic or Latino
Other	Some Other Race	Unknown
Multiple races marked	Two or More Races	Unknown
Unknown	Unknown	Unknown

Table RES-C-1/2/3: HEDIS/OMB Race Crosswalked for Use With HEDIS Reporting Categories

HEDIS/OMB Race	CDCREC OMB Category: Direct Reference Code*	CDCREC Detailed Category: Value Set
American Indian or Alaska Native	1002-5	American Indian or Alaska Native Detailed Race Value Set
Asian	2028-9	Asian Detailed Race Value Set
Black	2054-5	Black or African American Detailed Race Value Set
Native Hawaiian or Other Pacific Islander	2076-8	Native Hawaiian or Other Pacific Islander Detailed Race Value Set
White	2106-3	White Detailed Race Value Set
Some Other Race	OTH**	NA
Two or More Races	NA***	NA
Asked But No Answer	ASKU**	NA
Unknown	UNK**	NA

*Codes to identify race and ethnicity are from the CDC Race and Ethnicity code system developed by the U.S. Centers for Disease Control and Prevention (CDC). They resemble, but are not, LOINC codes.

**HL7 v3 Code System NullFlavor.

***This value is defined by the measure calculation logic as the presence of two or more distinct CDCREC category codes and does not map to a specific direct reference code or value set.

Table RES-D-1/2/3: HEDIS/OMB Ethnicity Crosswalked for Use With HEDIS Reporting Categories

HEDIS/OMB Race	CDCREC OMB Category: Direct Reference Code*	CDCREC Detailed Category: Value Set
Hispanic or Latino	2135-2	Hispanic or Latino Detailed Ethnicity
Not Hispanic or Latino	2186-5	NA
Asked But No Answer	ASKU**	NA
Unknown	UNK**	NA

*Codes to identify race and ethnicity are from the CDC Race and Ethnicity code system developed by the U.S. Centers for Disease Control and Prevention (CDC). They resemble, but are not, LOINC codes.

**The NullFlavor concepts "Asked But No Answer" and "Unknown" are not included in the terminology binding for the US Core Ethnicity FHIR extension on which this digital logic is structured. NCQA allows these concepts to express ethnicity data to align with bound values for the US Core Race extension.

Note

- *Race and ethnicityis are social constructs, not biological; stratifying HEDIS measures by race and ethnicity is intended to be used to further understanding of racial and ethnic disparities in care and to hold health plans accountable to address such disparities, with the goal of achieving equitable health care and outcomes. Data are not to be used to further bias in health care or suggest that race and ethnicity are biological determinants of health.*

- *When multiple sources of data are used for race and ethnicity, there may be disagreements in the data collected. When this happens, data sources should be prioritized based on evaluation of anticipated accuracy. This includes use of specific categories over nonspecific categories, most frequent or consistently reported category and selection of data with clear provenance (source, method of collection) over data without clear provenance. Known data sources should be prioritized over unknown data sources, and data collected directly by the organization should be prioritized over all other data sources.*

- *Race and ethnicity data may come from different categories of data source (direct, imputed, unknown, no data). In such cases, use the data source that applies to the data element (race, ethnicity). If the same data element is received from two different data sources, prioritize data sources based on the second bullet above.*

Race and Ethnicity Stratification:
Workup on the Addition of Middle Eastern or North African Category

Background

Historically, Middle Eastern or North African (MENA) individuals were classified as "White" under federal race and ethnicity data collection, reporting and maintenance standards. However, MENA individuals often do not perceive themselves to be White, nor do their shared experiences and societal perceptions identify them as White (Maghbouleh et al., 2022). Due to a lack of federal reporting standards, there is variability in how MENA individuals are defined in administrative datasets, self-reported datasets and surveys. Only two publicly available, nationally representative data sets allow separation of MENA individuals from other non-Hispanic White individuals: the National Health Interview Survey (NHIS) and American Community Survey (ACS). Both surveys have indirect methodologies for identifying MENA individuals, the NHIS through a "place of birth" question and the ACS through "place of birth" and "ancestry" questions, which can underrepresent the number of MENA identifying individuals (Kindratt et al., 2022).

The Office of Management and Budget (OMB) 2024 changes now allow standardized, direct identification of MENA individuals in official record keeping, such as the Census, ACS and NHIS. Standardized definitions and direct reporting will allow health care quality improvement and research to empirically identify health disparities, provide culturally and linguistically appropriate care and address other areas of need locally and nationally.

To continue promoting health equity within HEDIS®[1], NCQA will continue stratification of HEDIS measures by race and ethnicity according to updated OMB guidelines. NCQA conducted a literature review to summarize recent knowledge on the current state of health outcomes, behaviors, disparities and social determinants of health (SDOH) experienced by MENA individuals and communities to highlight areas where stratification can be most impactful. Refer to Table 1 in the appendix.

Findings

Limited Areas of Research

The studies in this review identified key areas of health disparities experienced by MENA individuals and advocated for disaggregation from White in federal race and ethnicity data reporting guidelines. Studies focused on disparities in morbidity, maternal and infant health, mental and cognitive health and health behaviors. A 2024 scoping review of Arab and MENA health disparities research by Fleischer and Sadek noted, "Arab/MENA health disparity research remains at the detection phase" (Fleischer & Sadek, 2024). Relative to other racial and ethnic minority groups in the United States, there is a lack of widely available research investigating health disparities experienced by MENA individuals. An older literature review from Abuelezam et al. in 2018 discussed that the majority of research samples come from convenience sampling within distinct ethnic enclaves, particularly in Dearborn, Michigan, and in Minnesota, which limits the ability of researchers to generalize findings (Abuelezam et al., 2018).

Limitations in Nationally Representative Datasets

The data sources used by studies in this review confirm that few studies could capture nationally representative samples of MENA-identifying individuals. Six studies utilized the NHIS to compare health outcomes for samples of foreign-born MENA immigrants in the United States to foreign-born White immigrants and US-born White individuals (Kindratt et al., 2022; Dallo et al., 2024; Kindratt et al., 2023; Kindratt, Dallo, et al., 2024; Kindratt, Zahodne, et al., 2024; Samari et al., 2020). Researchers identified

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MENA individuals through the NHIS question asking for place of birth, limiting its capacity to identify non-MENA-country born individuals who identify racially and ethnically as being from the region. These studies also noted that their US-born White samples include MENA-identifying individuals, due to the NHIS use of the 1997 OMB race and ethnicity data standards.

One study investigated differences in health insurance coverage among children using both the NHIS and ACS, with the ACS having some capacity to identify US-born MENA individuals through a combination of place of birth and ancestry questions (Dallo et al., 2024). Refer to Healthcare Utilization Disparities. Another study used the ACS in conjunction with state disease surveillance databases to identify the burden of COVID-19 among MENA individuals (Dallo et al., 2023). Studies leveraging the Centers for Disease Control and Prevention (CDC) Restricted-Use Detail Natality Data and unedited ACS race responses characterize national estimates for birth outcome disparities and demographic factors associated with MENA racial self-identification respectively (Moustafa et al., 2024; Ennis et al., 2024).

A Canadian study highlighted the need for detailed race and ethnicity reporting for MENA individuals (Sharif et al., 2023). COVID-19 infection rates were compared across sociodemographic groups in Toronto, noting that MENA individuals were overrepresented in the proportion of confirmed cases to the city's population share. This finding provided support for targeted government COVID responses among communities at higher risk for COVID-19 infection. Similar targeted interventions are not currently possible across the US due to the previous lack of federally recognized MENA racial identification in data collection and reporting. The aggregation of MENA within the broader White race category obfuscates racial disparities in health outcomes and access.

Despite the limited number of nationally representative datasets that include MENA identifiers and reliance on oversampling within ethnic enclaves, studies have found health-related disparities experienced by MENA individuals compared to White individuals and other race groups within the US.

Healthcare Utilization Disparities

Studies in the review evaluated insurance status, health care utilization and health outcomes, with a focus on maternal and infant health and cognitive health. Four studies focused on health care utilization; the first found that MENA adults had higher prevalence of being uninsured in the past year in a California sample, compared to non-Hispanic White adults (23.8% vs. 11.9%) (Abuelezam et al., 2019). The second used an NHIS sample and found that foreign-born MENA children had 1.50 times higher odds (OR, 1.50; 95% CI, 1.10–2.05) of being uninsured than US-born, non-Hispanic White children. The same study conducted analyses in an ACS sample and found foreign-born MENA children had 2.11 times higher odds (OR, 2.11; 95% CI, 1.88–2.37) of being uninsured than US-born, non-Hispanic White children. US-born MENA children had no statistically significant difference in odds of being uninsured compared to US-born, non-Hispanic White children.

The study also examined the proportion of children with commercial private insurance, or any public insurance, including Medicaid, Children's Health Insurance Coverage (CHIP) or any other government program. US-born MENA children had 1.32 times higher odds (OR, 1.32; 95% CI, 1.27–1.36) and foreign-born MENA children had 1.63 times higher odds (OR, 1.63; 95% CI, 1.51–1.77) of having any public insurance, compared to US-born, non-Hispanic White children. US-born MENA children had 1.43 times lower odds (OR, 0.70; 95% CI, 0.67–0.72) and foreign-born MENA children had 2.38 times lower odds (OR, 0.42; 95% CI, 0.38–0.45) of having private commercial insurance than US-born, non-Hispanic White children (Dallo et al., 2024).

The third study found, in an NHIS sample of MENA immigrant adults, that White-identifying MENA immigrant adults had 2.94 times lower odds (OR, 0.34; 95% CI, 0.14–0.81) of delaying care in the past 12 months, compared to non-White MENA immigrants (Samari et al., 2020).

The final study, focused on utilization, found that MENA men between the ages of 18–34 had lower HPV vaccine initiation rates compared to White and Black men (23.2% vs 44.5% and 46.2% respectively) (Harper, Rego, et al., 2022).

Maternal and Infant Health Disparities

Beyond overall health care utilization, a major area of outcomes-based health disparities research for MENA individuals is in the field of maternal and infant health. This search yielded six studies focused in this area. All studies identified health disparities experienced by MENA women and infants, with MENA women having 3.03 times lower odds (OR, 0.33; 95% CI, 0.15–0.70) of completing both cervical and colorectal cancer screenings, 2.55 times higher odds (OR, 2.55; 95% CI, 1.04–6.27) of miscarriage during IVF treatment and 1.16 times higher odds (OR, 1.16; 95% CI, 1.05–1.27) of giving birth to a low-birthweight infant, and 1.37 times lower odds (OR, 0.73; 95% CI, 0.60–0.89) of completing a well-woman visit, compared to White women (Kindratt, Dallo, et al., 2024; Moustafa et al., 2024; Salem et al., 2017; Harper et al., 2021; Abuelezam et al., 2020).

A 2022 study investigated previously held beliefs that religious, cultural or same-sex concordance between MENA women and physicians improved completion and uptake of routine health exams. The researchers found that patient and physician gender and religious concordance—previously identified facilitators of exam uptake—may be significantly associated with avoidance of routine physical exams and increased feelings of discomfort undergoing health exams (Harper, Sen, et al., 2022). This study, using a small cross-sectional convenience sample in Michigan, identifies that not all MENA individuals are homogenous in their beliefs, health outcomes and health care utilization, reinforcing the need for detailed reporting criteria on MENA individuals nationally and locally to best identify and address disparities in health care access and outcomes.

COVID-19 Disparities

Two studies investigated disparities in COVID-19 burden among MENA individuals compared to non-Hispanic White individuals. The first found that MENA individuals had nearly twice the proportion of confirmed COVID-19 cases than non-Hispanic White individuals (16.78% vs. 7.50%) and that MENA individuals, after adjusting for age and sex, had 2.48 times higher odds (OR, 2.48; 95% CI, 2.45–2.51) to test positive for Covid-19 than non-Hispanic White individuals. This study extrapolated Covid-19 rates from Michigan, indicating possible overestimation due to the large proportion of MENA individuals in the state (Dallo et al., 2023). The second study was conducted in Toronto, where MENA is recognized as a minimum racial reporting category. Researchers found that MENA individuals had a 3.51 infection rate ratio of reported COVID-19 cases, relative to White individuals (Sharif et al., 2023).

Cognitive Health Disparities

The last area of concentrated research in MENA health outcomes found from this search is in the field of cognitive and psychological health. Three studies were identified that focused on this topic, with MENA immigrants at increased odds of reporting a cognitive limitation, having undiagnosed Alzheimer's disease and related dementias and psychological health concerns, compared to US-born, non-Hispanic White adults (Kindratt et al., 2022, 2023; Kindratt, Zahodne, et al., 2024).

Commonalities in Research

Despite the limited number of studies in relatively few research topic areas examining health outcomes and disparities experienced by MENA populations, nearly all researchers captured in this review note similar needs for the future of health equity work for MENA communities. Researchers commonly cite the need for disaggregation of MENA from White in race and ethnicity reporting to properly identify health disparities, allow larger sample analysis through standardized self-reported race identification and properly target future interventions at communities with the greatest need.

Aggregation of those two racial groups conflicts with socially and self-perceived categorizations of "Whiteness" and biases population health outcomes toward null values when performing between group comparisons (Awad et al., 2022). For example, a 2019 study found that, when disaggregating MENA from White in a California sample, MENA individuals had 2.03 times higher odds (OR, 2.03; 95% CI, 1.23–3.34) of self-reported diabetes and 1.56 times lower odds (OR, 0.64; 95% CI, 0.50–0.83) of hypertension than White individuals (Abuelezam et al., 2019). Keeping these distinct racial groups aggregated in population health research artificially alters disparities that are not identified due to lack of measurement. Researchers additionally state that the ability to systematically identify MENA individuals allows more stratified and detailed analyses of outcomes research by examining the intersectional nature of race, socioeconomic status, educational attainment and other SDOH (Maghbouleh et al., 2022; Awad et al., 2022).

Conclusions

This targeted literature review yielded relatively few articles (n = 21) investigating health outcomes, behaviors and disparities experienced by MENA individuals and communities in the United States. Several articles found were published by the same research teams, leading to a focus on outcomes related to cognitive, maternal and infant health. Studies were unable to have standardized, direct identification methodologies for gathering samples. In some large, nationally representative, public health surveys, place of birth or ancestry questions have been used as a proxy for MENA race identification. Studies conducted based on smaller, convenience samples allowed more flexibility for racial self-identification questionnaires to gather a sample of interest; however, this limited their ability to make claims outside the overrepresented ethnic enclaves where these studies typically occurred.

The OMB's March 2024 updates to Statistical Policy Directive 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity (SPD 15) (Revisions to OMB's Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, 2024), which add MENA as a required minimum reporting category, alleviates many methodological concerns experienced by researchers in identifying MENA populations, and expands the ability of other researchers to identify health disparities experienced by these populations. Including a new required minimum reporting category will allow researchers to identify MENA health disparities and outcome performance without having to use specialized methodologies to identify the population, expanding the breadth of understanding of MENA health experiences in the United States. This much needed step, previously referred to as the "detection phase" of health disparities, builds the foundational understanding of how MENA individuals are impacted by the health system, and where future intervention and equity efforts can have the most targeted impact in reducing gaps in care (Fleischer & Sadek, 2024).

This review confirmed that the lack of a distinct MENA reporting category obfuscates the true experiences and outcomes of MENA individuals as distinct from White individuals. When researchers are able to directly compare behaviors and outcomes of MENA individuals to non-MENA White individuals, they find worse outcomes related to maternal, infant and cognitive health, lower vaccination and preventive screening rates and increased odds of being uninsured. By updating HEDIS stratifications, health plans and researchers will have the ability to identify disparities in care and outcomes experienced by MENA populations, compare their performance to national performance metrics and target areas for focused quality improvement.

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Appendix

Table 1: Detailed List of Studies Included in Review

Study	Sample Size (n)	Sampling Method	Geography	Design	Area of Interest
Abuelezam et al. (2018)	247 articles for review	Varied by study	Varied, but all within the United States	Comprehensive Literature Review	Health related outcomes including tobacco use, cardiovascular disease, stroke, cancer, diabetes, maternal and child health, depression, mental health, trauma, substance abuse and general mental and physical health
Abuelezam et al. (2019)	1,359 Arab Americans and 192,868 non-Hispanic White Americans	California Health Interview Survey (CHIS) respondents	Single State: California	Retrospective cross-sectional study	• Health Behaviors: Flu vaccination, soda consumption, smoking, alcohol intake and binge drinking, sexual partners, ER visits, contemplating suicide • Health Outcomes: Self-rated health, diabetes, hypertension, heart disease, obesity
Abuelezam et al. (2020)	8,901 Arab American mothers and 343,566 non-Arab American mothers	Massachusetts Standard Certificate Live Birth record review from 2012-2016	Single State: Massachusetts	Retrospective cross-sectional study	• Maternal Health Behaviors: Initiation of prenatal care, breastfeeding initiation, alcohol consumption, smoking • Maternal Health Outcomes: Gestational diabetes • Infant Health Outcomes: Pre-term birth, birth weight, low birth weight and size for gestational age
Awad et al. (2022)	NA	NA	NA	Editorial	Identifying areas of need for MENA health research
Dallo et al. (2023)	7,617,576 COVID-19 cases, age 18 and older	Michigan Department of Health and Human Services Disease Surveillance System (MDHHS MDSS) and American Community Survey Public Use	Single State: Michigan	Retrospective cross-sectional study	COVID-19 burden among Arab Americans

Study	Sample Size (n)	Sampling Method	Geography	Design	Area of Interest
		Microdata Samples (ACS PUMS)			
Dallo et al. (2024)	311,961 children from the NHIS and 1,892.255 children from the ACS	National Health Interview Survey (NHIS) and ACS	National	Retrospective cross-sectional study	Health insurance coverage among foreign-born MENA children, US-born White children, US-born MENA children
Ennis et al. (2024)	604,500 respondents	ACS	National	Retrospective cross-sectional study	Investigate how people of MENA ancestry report their race in unedited ACS race responses
Fleischer and Sadek (2024)	43 articles for review	Varied by study	Varied, but all within the United States.	Scoping review	Physical and mental health disparities
Harper et al. (2021);	394 women aged 50–65 years old	Survey implemented via convenience sampling and online recruiting within the local community	Within a single state: Southeast Michigan	Cross-sectional study	Cervical and colorectal cancer screening and cancer risk perception and communication behavior
Harper, Sen, et al. (2022)	97 MENA women aged 30–65 years old	Community survey conducted at sites within the Arab American community	Within a single state: Southeast Michigan	Cross-sectional study	Avoidance of routine physical or women's health exam due to religious/ cultural issues
Harper, Rego, et al. (2022)	507 men aged 18–34 years old	Community survey administered via random phone dial, online, or in targeted MENA communities	Within a single state: Southeast Michigan	Cross-sectional study	HPV vaccination initiation prevalence in southeast Michigan among adult males
Kindratt et al. (2022)	24,827 adults aged 65 years and older	NHIS and Medical Expenditure Panel Survey (MEPS)	National	Cross-sectional retrospective study	Prevalence of cognitive limitations among MENA immigrants compared to US-born and foreign-born non-Hispanic White individuals
Kindratt et al. (2023)	23,981 adults aged 65 years and older	NHIS and MEPS	National	Cross-sectional retrospective study	Estimating undiagnosed Alzheimer's disease and related dementias among MENA adults compared to non-Hispanic White adults
Kindratt, Zahodne, et al. (2024)	108,695 adults aged 18 years and older	NHIS and MEPS	National	Cross-sectional retrospective study	Estimate the prevalence of modifiable risk factors for ADRD among MENA

Study	Sample Size (n)	Sampling Method	Geography	Design	Area of Interest
					immigrants compared to US and foreign-born White adults
Kindratt, Dallo, et al. (2024)	411,709 adult women aged 18 years and older and 311,961 children	NHIS	National	Cross-sectional retrospective study	• Maternal Health Behaviors: Well-visits, dentist visits, smoking • Infant Health Outcomes: Birth weight
Maghbouleh et al. (2022)	417 non-Hispanic White adults and 171 MENA adults	Convenience sampling with two online survey experiments	Non-representative national sample	Cross-sectional experimental study	Perception of racial identification among non-MENA White and MENA adults
Moustafa et al. (2024)	575,509 adult mothers aged 18–44 years old	Restricted-Use Detail Natality Data accessed through the National Center for Health Statistics (NCHS)	National	Cross-sectional retrospective study	Risk of giving birth to a low-birth-weight infant among foreign-born non-Hispanic White mothers by MENA/non-MENA status
Neumayer et al. (2017)	588 Arab adults aged 18 years and older (Arab BRFS) and 7,709,196 adults aged 18 years and older (MiBRFS)	Michigan Behavioral Risk Factor Survey (MiBRFS) and Arab Behavioral Risk Factor Survey (Arab BRFS)	Single State: Michigan	Cross-sectional study	Statewide estimates in demographics, risk behaviors, clinical preventative practices, chronic conditions, adverse childhood experiences of Arab adults compared to non-Arab adults in Michigan
Salem et al. (2017)	190 MENA and 200 non-Hispanic White adult women undergoing their first IVF cycle	Cohort sampling with 1:1 matching on race	Single academically affiliated private fertility clinic in Michigan	Retrospective cohort study	Investigate IVF outcome disparities among MENA and non-Hispanic White women
Samari et al. (2020)	1,013 Americans born in the Middle East	NHIS	National	Cross-sectional retrospective study	Health care utilization outcomes: currently insured, lacking usual source of care, ED visit, doctor visit, delaying healthcare, forgoing care due to costs, being rejected as a new patient
Sharif et al. (2023)	119,018 confirmed COVID-19 cases	Infection registry data from Ontario Ministry of Public Health Case and Contact Management Solution and Integrated Public Health System	Single city: Toronto	Cross-sectional retrospective study	COVID-19 burden and infection rate among MENA populations compared to non-MENA populations

Race and Ethnicity Stratification:
Workup on the Multiracial/Multiethnic Reporting Category

Background

The multiracial population has experienced a 276% increase since 2010, growing from 9 million people to 33.8 million. This dramatic increase is likely attributed to a combination of demographic changes and to the introduction of census questionnaires that allow people to accurately reflect their identity (Jones et al., 2021). Despite the growth of this population, limited health research exists detailing outcomes and disparities experienced by multiracial individuals. Challenges in studying this population may be due to researchers' lack of a systematic identification method for multiracial individuals. For example, limitations in health databases require individuals to only select a single race option, creating misalignment between how individuals may perceive themselves and how they may be characterized in public databases. This limitation also highlights the question of whether self-identity should be considered separately or in conjunction with parental heritage (Charmaraman et al., 2014).

Office of Management and Budget (OMB) 2024 changes support collecting race and ethnicity data utilizing a single question, as well as allowing multiple responses and requiring collection of data beyond the minimum reporting categories (Revisions to OMB's Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, 2024). Requirements to collect more granular data, and prompt individuals to select all racial and ethnic identities they identify with, will allow health researchers and health care organizations to improve health care quality for multiracial/multiethnic populations—referred to as "multiracial," going forward—by accurately identifying health disparities in outcomes, utilization and access, and targeting interventions to address these needs.

To continue promoting health equity within HEDIS®,[1] NCQA intends to continue stratification of HEDIS measures by race and ethnicity according to updated OMB standards. NCQA conducted a literature review to summarize recent knowledge on the current state of health outcomes, behaviors, disparities and social determinants of health (SDOH) experienced by multiracial individuals and communities to highlight particular areas where stratification can be most impactful. Refer to Table 1 in the appendix for a complete list of included studies.

Findings

Limited Areas of Research

The studies in this review highlight the limited areas of existing health research that focus on multiracial individuals. In particular, studies of multiracial individuals in nationally representative datasets is lacking due to aforementioned limiting data collection requirements. A 2019 study by Veenstra et al., investigating disparities between Black, White and mixed race Black-White individuals, noted that while literature on the Black and White health disparities is growing, the health-related experiences of multiracial people is neglected by the research community, despite an increasing number of multiracial individuals (Veenstra, 2019).

The majority of identified research focuses on the mental and behavioral health of multiracial individuals, particularly for adolescent and pediatric multiracial individuals. Studies on other health outcomes primarily focused on the American Indian and Alaska Native population, a group that is disproportionately burdened by poor health outcomes and contributes to one of the largest multiracial groups in the US (American Indian and White) (Running Bear et al., 2020).

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Commonalities in Research

Studies analyzed for this review had several common refrains when discussing and attempting to analyze outcomes for multiracial individuals. The first was that in studies not specifically recruiting multiracial individuals, or not explicitly supporting collection of multiple race identities, sample sizes of multiracial individuals are frequently too low for meaningful analysis. Some studies combine the multiracial and "Other" race reporting groups to meet minimum sample thresholds, or if still too small relative to other groups, this catch-all category is excluded from analysis. When multiracial and "Other" race groups are combined during data analysis, this further limits the capacity of researchers to make meaningful interpretations that adequately explain the impact of inequities in care or outcomes experienced by multiracial individuals (Choi & Reichman, 2019; Gutman et al., 2023; Shaff et al., 2024; Weller et al., 2022).

A study by Choi and Reichman, investigating the health of biracial children in the US, found no significant difference between the rates of poor overall health for children with Black mothers and White fathers, children with same-race White parents or children with White mothers and Black fathers. The authors noted this lack of significant difference was likely attributable to the relatively small sample size—202 children with Black mothers and White fathers, compared to 752 children with White mothers and Black fathers and 42,858 children with same-race White parents (Choi & Reichman, 2019).

Studies also highlight the heterogeneity of the multiracial population and the differences experienced by individuals within this large group. Health outcomes and daily experiences of multiracial individuals vary by their own unique self-identity, which makes researching broad generalizations for this group difficult and often not actionable when attempting to develop interventions and programs aimed at reducing identified disparities. Studies found that subgroups within the multiracial group can experience differing levels of disparities, or even improved outcomes, relative to other multiracial subgroups or monoracial control groups.

In a study investigating self-rated health among young adults 24–34 years, when aggregating all multiracial adults, there was no significant difference in reporting fair/poor self-rated health status compared to monoracial White adults (OR: 0.84; 95% CI, 0.52–1.36); however, when analyzing specific multiracial subgroups, health ratings varied greatly. When investigating specific subgroups, Asian-White adults had 12.5 times lower odds (OR: 0.08; 95% CI, 0.014–0.51) of reporting fair/poor self-rated health compared to monoracial White adults, while the other multiracial subgroups had no significantly different odds of reporting fair/poor self-rated health compared to monoracial White adults. Further analysis in this study compared multiracial subgroups with each monoracial group that comprise the multiracial subgroups and found differing directionality of outcomes by subgroup. For example, the Native American-White subgroup had 6.25 times lower odds (OR: 0.16; 95% CI, 0.05–0.51) of reporting fair/ poor self-rated health compared to monoracial Native American adults; however, the same subgroup had no statistically significant difference in odds of reporting fair/poor self-rated health compared to monoracial White adults (OR: 0.68; 95% CI, 0.34–1.37). Additionally, the Asian-White subgroup had 25 times lower odds (OR: 0.04; 95% CI, 0.004–0.038) of reporting fair/poor self-rated health compared to monoracial Asian adults; and the previously mentioned 12.5 times lower odds of reporting fair/poor self-rated health compared to monoracial White adults. This study highlights the complexities of reporting and collating all multiracial individuals into a single category, which often needs minimum analytic sample size requirements; however, this aggregation can mask within-group differences, such as some multiracial groups experiencing improved outcomes relative to their monoracial counterparts (i.e., Asian-White adults compared to monoracial Asian or White adults), while some groups experience outcomes similar to one of their monoracial counterparts (i.e., Native American-White adults having no difference from monoracial White adults, but significantly improved outcomes compared to Native American monoracial adults) (Tabb et al., 2019).

Overall Health Outcomes and Chronic Conditions

While studies focusing on other non-White racial groups, such as Black and Asian, have found disparities and outcomes and chronic disease prevalence, few studies focus explicitly on inequities in multiracial groups, indicating the need for foundational research among these groups. One of the first studies to document these outcome disparities is from 2017, where researchers identified that multiracial adults had 1.22 times higher odds (OR: 1.22; 95% CI, 1.07–1.39) of obesity; 1.57 times higher odds (OR: 1.57; 95% CI, 1.21–2.04) of diabetes; 1.44 times higher odds (OR: 1.44; 95% CI, 1.25–1.66) of reporting poor/fair health; and 1.54 times higher odds (OR: 1.54; 95% CI, 1.35–1.75) of physical disability compared to non-Hispanic White adults. These increased odds, relative to White adults, mirror disparities reported by other racial groups, such as Black adults, with 1.31 times higher odds (OR: 1.31; 95% CI, 1.18–1.45) of reporting poor/fair health than White adults (Subica et al., 2017).

As mentioned above, certain subgroups of multiracial individuals can experience differential health outcomes and conditions, and grouping all multiracial individuals into a single category can obfuscate meaningful differences within the population. A study investigating access, chronic diseases and general health in a sample comprising single-race American Indian/Alaska Native (SR AIAN), single-race White and multiracial American Indian/Alaska Native (MR AIAN) individuals found significant differences between the SR AIAN and MR AIAN groups and between these two groups and the single-race White group. Of note, one was that the SR AIAN group had 1.61 times lower odds (OR: 0.62) of reporting they couldn't see a doctor in the past year due to cost, compared to the MR AIAN group, and MR AIAN individuals had 1.61 times higher odds (OR: 1.61) of reporting they couldn't see a doctor in the past year due to cost than the single-race White group, with no significant difference between SR AIAN and single-race White groups (Running Bear et al., 2020).

Another study, emphasizing the importance of disaggregating multiracial subgroups, examined obesity among a sample of multiracial Asian and Pacific Islander individuals compared to non-Hispanic White individuals. The study found that when comparing Asian and Pacific Islander, Asian and White, and Pacific Islander and White groups individually to the non-Hispanic White group, there was no statistically significant difference in odds of obesity; however, the multiracial Asian, Pacific Islander and White group had 1.80 times higher odds (OR: 1.80; 95% CI, 1.37–2.38) of obesity than the White group (Bacong et al., 2024).

Adolescent Research

A population of interest for researchers is multiracial youth, as these individuals may not follow the patterns of monoracial youth due to their distinct experiences and self-identities associated with the multiracial experience (Goodhines et al., 2020). Studies on multiracial adolescents focus primarily on behavioral health, mental health and comparative outcomes relative to monoracial adolescents. A previously mentioned study investigated the overall health of children born to same race parents compared to different race parents. Researchers found children with Black parents had 2.08 times higher odds (OR: 2.08; β/se = 14.84) of having poor overall health than children with White parents. The researchers additionally found that children with a White mother and Black father had 1.48 times higher odds (OR: 1.48; β/se = 3.07) of having poor overall health compared to children with White parents, but did not find a statistically significant difference in the odds between children with a Black mother and White father and children with White parents, although, as noted, this may be due to low sample size (Choi & Reichman, 2019).

A study from 2012 may have been the first study to investigate multiracial adolescent health care disparities in a national sample. In a broad secondary analysis of the 2003 National Survey of Children's Health researchers identified disparities for multiracial adolescents, including, but not limited to, the highest proportion of respiratory allergies (22.7% compared to 18.8% for White children) and 1.57 times higher odds (OR: 1.57; 95% CI, 1.07–2.30) of not receiving preventive dental care compared to White children (Lau et al., 2012).

In a study on a sample of multiracial adolescents, researchers developed a statistical model to investigate the relationship between adverse childhood experiences, particularly household dysfunction, and mental

health conditions. This model had a good fit (RMSEA 0.000; 90% CI, 0.000–0.053; CFI = 1.000), and household dysfunction was significantly, positively associated with depression (β = 0.504; 95% CI, 0.355–0.653), anxiety (β = 0.606; 95% CI, 0.479–0.733), behavioral problems (β = 0.578; 95% CI, 0.441–0.715) and ADHD (β = 0.536; 95% CI, 0.382–0.691) (Weller et al., 2022).

Two studies investigated alcohol use among multiracial adolescents, with previous studies hypothesizing that these youth may be at higher risk for alcohol use compared to monoracial individuals. One study, which performed a systematic review of literature, found that multiracial youth had 1.98 times higher odds (number of studies (k) = 4; OR: 1.98; 95% CI, 1.62–2.44) of participating in binge drinking compared to Black youth, and 2.82 times higher odds (k = 4; OR: 2.82; 95% CI, 2.28–3.48) than Asian youth; however, multiracial youth had 1.33 times lower odds (k = 5; OR: 0.75; 95% CI, 0.70–0.81) of participating in binge drinking than White youth and 1.28 times lower odds (k = 3; OR: 0.78; 95% CI, 0.71–0.85) than American Indian/Alaska Native youth (Dobani et al., 2024). These findings conflict with an older study indicating that associations between discrimination experiences and subsequent negative emotional affects in monoracial youth compared to multiracial youth are not significantly associated with drinking frequency in the past year, but are associated with insomnia severity in the past year for multiracial individuals (Goodhines et al., 2020).

Mental and Behavioral Health Outcomes

The largest areas of existing research for multiracial individuals are in the domains of mental and behavioral health. Results from the 2022 National Survey on Drug Use and Health found that multiracial people 12 and older had a higher percentage of use of tobacco products in the past month (32.4%) than White (24.7%), Black (23.6%), Hispanic (17.7%) and Asian (10.0%) people. Additionally, among adults 18 or older, Multiracial adults (35.2%) were more likely to have had any mental illness (AMI) in the past year, compared with White (24.6%), Hispanic (21.4%), Black (19.7%), American Indian or Alaska Native (19.6%) or Asian adults (16.8%), but the percentage of adults 18 or older with AMI in the past year who received mental health treatment in the past year was lower among Asian (36.1%), Black (37.9%) or Hispanic adults (39.6%) than among Multiracial (56.0%) or White adults (56.1%) (Substance Abuse and Mental Health Services Administration, 2023).

Other studies found that, relative to multiracial adults, Black adults with adverse childhood experiences had 1.08 times lower odds (OR: 0.93; 95% CI, 0.86–0.99) of anxiety, Asian adults had 1.15 times lower odds (OR: 0.87; 95% CI, 0.82–0.94) of anxiety and American Indian/Alaska Native adults had 1.12 times lower odds (OR: 0.89; 95% CI, 0.81–0.97) of anxiety; when comparing an aggregate multiracial group to an aggregate group of monoracial individuals, regardless of race, monoracial individuals have 1.70 times lower odds (β = -0.53; se = -0.26) of depression than multiracial individuals; and the prevalence of life dissatisfaction was 24% higher for multiracial adults compared to White adults (Lam-Hine et al., 2023; Miller et al., 2019; Town et al., 2024).

Conclusions

This literature review identified two major themes to keep in mind when considering the multiracial population. The first focused on the need for researchers to recognize that while it is a rapidly growing demographic group in the United States, the experiences, challenges and outcomes of any individual subgroup should not be considered the de facto standard for which all multiracial individuals should be held, nor should aggregated results for multiracial individuals, without consideration of their unique racial combinations be applied homogeneously to all multiracial individuals.

Studies additionally noted challenges in achieving adequate sample sizes for any aggregate group of multiracial individuals. While this challenge may be due to previous data reporting and collection practices, it is still an important consideration when performing health care quality research; where possible, multiracial groups should not be overly reduced into groups too small for statistically-sound analysis, depending on the sample used in the study.

The second major theme that emerged from this review is the infancy of understanding the health outcomes and utilization of any multiracial population in the literature. The majority of studies focused on mental and behavioral health for adolescent populations. While these areas are important for understanding the experiences of multiracial individuals, greater knowledge in chronic disease prevalence, health care access and utilization and outcomes research is expected to be furthered with the change to federal standards, allowing individuals to select multiple race categories.

At NCQA, the HEDIS race and ethnicity stratification supports equity efforts in health care quality measurement. In order to adequately stratify HEDIS measures while maintaining meaningful interpretability, NCQA requires health plans to report a minimum denominator of 30 members for a stratification rate to be considered reportable. As NCQA begins to implement combined race and ethnicity reporting, in alignment with recent revisions to OMB standards, reporting quality measure rates for all potential multiracial combinations of the OMB minimum reporting categories would likely be infeasible for health plans, and would potentially reduce the usability of HEDIS data to inform meaningful targeted interventions at the health plan level.

NCQA acknowledges that research supports disaggregation of multiracial individuals into specific subgroups (e.g., Asian/White, Black/White) for more meaningful analysis of the quality of care these populations receive; however, input from our expert advisory panels and internal data analysis, audit and measure certification teams support using a general multiracial/multiethnic reporting category for measure reporting at this time, while health plans transition to the 2024 OMB standards. This review identified key areas of health disparities for multiracial individuals and supports the need to transition to a data environment where more granular race/ethnicity reporting can be performed at scale, to allow detailed analysis and targeted interventions to advance health equity for multiracial individuals.

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Appendix

Table 1: Detailed List of Studies Included in Review

Study	Sample Size (n)	Population	Multiracial Definition	Comparator Groups	Area of Focus
Bacong et al (2024)	5,229 adults (1,471 multiracial adults)	Adults 18 years or older from two large health care systems in California and Hawai'i with at least 1 visit for a primary care provider	Self-Identified race and ethnicity from electronic health records (Asian/ Pacific Islander; Asian/Pacific Islander/ White; Asian/White; Pacific Islander/White)	Monoracial White	Obesity
Choi & Reichman (2019)	49,267 children	Non-Hispanic White and non-Hispanic Black children 2–14 years living in two biological/adoptive parent families	Dependent on the race of mother and father	Monoracial White for odds modeling; rate differences measured between all four groups	Overall health status and developmental disability
Dobani et al (2024)	1,555,635 youths	Individuals 10-24 years collected through meta-analyses of literature	Varied by study aggregated, but had to be a distinct reporting group from other racial categories; often self-reported race identification	Monoracial (White/ American Indian or Alaska Native/ Hispanic or Latinx/ Black/ Asian) compared to multiracial	Youth alcohol use
Goodhines et al (2020)	414 adolescents (70 multiracial)	Students at an urban public high school in the northeastern US enrolled in 9, 10 or 11 grades	• Self-identified, single item questionnaire response • Two race categories or three plus race categories	Combined monoracial groups compared to combined multiracial status	Sleep disorders, youth alcohol use, discrimination
Gutman et al (2023)	206 children (17 multiracial)	Convenience sample of parents at a pediatric emergency department	Electronic health record values; parent reported race and ethnicity	Multiracial compared to all monoracial groups	Race and ethnicity data quality reported in electronic health records compared to self-identified race and ethnicity
Lam-Hine et al (2023)	12,372 adults (834 multiracial)	Adults 18–34 years enrolled in the National Longitudinal Study of Adolescent to Adult Health	Self-identified responses	Multiracial as reference group compared to all monoracial groups	Childhood adverse experiences, mental health, behavioral health, asthma, hypertension
Lau et al (2012)	48,742 children (1,609 multiracial)	Children 10-17 years in the 2003 National Survey of Children's Health	Identified by parental response	Monoracial White	Overall physical health, oral health, access to health care, health care utilization

Study	Sample Size (n)	Population	Multiracial Definition	Comparator Groups	Area of Focus
Miller et al (2019)	10,535 adults (437 multiracial)	Adults 18–25 years in the National Longitudinal Study of Adolescent to Adult Health	Self-reported Categorized as either Nonwhite-Nonwhite or White-Nonwhite	Compared aggregated multiracial to aggregated monoracial; compared each multiracial group to aggregated monoracial group	Mental and self-rated health
Running Bear et al (2020)	393,681 adults (5,512 multiracial)	Adults 18 years or older from the 2012 Behavioral Risk Factor Surveillance System	Self-reported, combination of American Indian or Alaska Native and any other race	Compared multiracial to single-race American Indian or Alaska Native and multiracial to single-race White	General health outcomes, access to health care, diagnosed chronic conditions, risk behaviors
Shaff et al (2024)	1,359 multiracial adults	Adults 18 years or older who responded to an online survey who identified as multiracial or multiethnic	Self-reported from 8 available race and ethnicity response options	Compared White/Non-White multiracial group to Non-White multiracial group	Mental health outcomes, associated risk factors
Subica et al (2017)	184,617 adults (4,383 multiracial)	Adults 18 years or older who responded to the California Health Interview Survey	Self-reported from OMB race and ethnicity classifications	Monoracial White	Diabetes, obesity, overall health, physical disability
Tabb et al (2019)	7,880 adults (575 multiracial)	Adults 24–34 years in the National Longitudinal Study of Adolescent to Adult Health	Self-reported race with option to select multiple race categories	• Monoracial White compared to other monoracial groups and specific multiracial subgroups • Compared specific multiracial subgroups to both monoracial counterparts	Health behaviors, chronic health conditions, overall self-rated health
Town et al (2024)	323,877 adults (6,001 multiracial)	Adults 18 years or older from the 2022 Behavioral Risk Factor Surveillance Survey	Self-reported with separate race and ethnicity questions	Monoracial White	SDOH, health-related social needs

Study	Sample Size (n)	Population	Multiracial Definition	Comparator Groups	Area of Focus
Veenstra (2019)	672,148 adults (675 multiracial)	Adults ages 18 years or older who responded to the Canadian Community Health Survey Limited analytic sample to those who identified as Black, White or only Black & White	Self-reported with option to select multiple race categories	Monoracial White	Hypertension, self-rated physical health, mental health
Weller et al (2022)	1,231 multiracial children	Children 12–17 years whose caregivers completed the 2016 National Survey of Children's Health Limited analytic sample to multiracial children	Reported by caregivers	No direct comparison within group, identified correlations with household dysfunction and several mental health conditions	Adverse childhood experiences, mental health