

# THE LANCET

## Diabetes & Endocrinology

### Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Hassan S, Gujral UP, Quarells RC, et al. Disparities in diabetes prevalence and management by race and ethnicity in the USA: defining a path forward. *Lancet Diabetes Endocrinol* 2023; published online June 22. [https://doi.org/10.1016/S2213-8587\(23\)00129-8](https://doi.org/10.1016/S2213-8587(23)00129-8).

## Appendix 1

### *Protocol and Eligibility Criteria*

We performed a narrative literature review of peer-reviewed studies conducted in the last decade on diabetes related disparities. Additional articles prior to 2012 were included where relevant and important to the narrative review. We designed the literature search using the Participants, Interventions, Comparators, Outcomes, Study Design (PICOS) model for evidence-based medical research questions, as shown in Table 1.(16)

Table 1: PICO Model for Evidence-Based Medical Research Questions

ELIGIBILITY CRITERIA		
PICOS COMPONENT	INCLUSION CRITERIA	EXCLUSION CRITERIA
Population	<ul style="list-style-type: none"><li>Adults, adolescents, children in the US and US territories</li></ul>	<ul style="list-style-type: none"><li>Non-US based</li><li>Type I diabetes</li><li>Gestational diabetes</li></ul>
Intervention	<ul style="list-style-type: none"><li>Age (lifespan approach), race, disaggregated race, ethnicity, disaggregated ethnicity, diabetes phenotype, social determinants of health</li></ul>	<ul style="list-style-type: none"><li>none</li></ul>
Comparison	<ul style="list-style-type: none"><li>not applicable</li></ul>	<ul style="list-style-type: none"><li>not applicable</li></ul>
Outcomes	<ul style="list-style-type: none"><li>Diabetes type II prevalence and prevalence of diabetes-related complications (cardiovascular disease, chronic kidney disease, end-stage renal disease, retinopathy, neuropathy, amputation, mortality, quality of life)</li><li>Diabetes type II management</li></ul>	<ul style="list-style-type: none"><li>none</li></ul>
Type of Study (e.g., observational, experimental, qualitative)	<ul style="list-style-type: none"><li>All</li></ul>	<ul style="list-style-type: none"><li>none</li></ul>
Publication Type (e.g., peer-reviewed literature, "grey" literature such as conference proceedings and abstracts)	<ul style="list-style-type: none"><li>Peer-reviewed literature in PubMed</li></ul>	<ul style="list-style-type: none"><li>Grey literature, conference proceedings</li></ul>
Date range to search	<ul style="list-style-type: none"><li>2012-2022</li></ul>	<ul style="list-style-type: none"><li>Before the year 2012</li></ul>
Languages to include	<ul style="list-style-type: none"><li>English</li></ul>	<ul style="list-style-type: none"><li>not applicable</li></ul>

### *Search Strategy and Data Analysis*

We limited our search to a time frame between January 2012 and January 2022 to reflect the last decade of innovation and discovery in the diabetes disparities literature. We searched for relevant articles in January 2022, using the PubMed databases.

Our search was designed to identify relevant literature across three main themes: diabetes disparities across the lifespan; diabetes disparities within racial and ethnic groups; and diabetes phenotypes. As

this is a narrative review our objective was to use this search to provide key articles that together could yield a more nuanced understanding of diabetes disparities.

We collected citations identified by the search strategy and removed duplicates. The remaining titles and abstracts were uploaded to the Covidence systematic review platform (Veritas Health Innovation, Melbourne, Australia). Articles were divided between 3 authors (SH, LS, and JO) who discarded irrelevant articles and categorized remaining articles into one of our five thematic areas: disparities in the burden of diabetes; disparities in complications of diabetes; disparities across the lifespan; within race/ethnicity differences; and pathophysiology of diabetes and diabetes disparities.