

## BACKGROUND

Social determinants of health (SDOH) have been shown to be major contributors to health disparities and inequities across different subpopulations and disease states.

Explicitly incorporating SDOH data into HTA to addressing health equity considerations may help highlight health disparities and more accurately reflect the concerns of more diverse populations.

### STUDY OBJECTIVE

The systematic review aims to identify best practices and challenges in incorporating SDOH data into processes and methods for HTA to address equity considerations.

## METHODS

We searched PubMed for English language articles that discussed use of SDOH data in HTA from Jan. 2012 to Dec. 2022. Search strategies included key terms related to “health equity,” “social determinants of health,” “health technology assessment,” “underrepresented populations,” “health economics,” and “economic models.”

Titles and abstracts were screened to exclude articles if they: (1) only documented disparities, (2) did not discuss equity considerations in the context of HTA, and (3) described only non-US based comparisons. Articles included in the full-text review also included key terms of “social determinants of health” Mesh heading and related subheadings in any fields.

Full-text review extracted key information on: (1) key study objectives, (2) types of SDOH used and data sources, (3) how SDOH was incorporated into the analysis, and (4) gaps and challenges identified. SDOH data were extracted based on pre-defined domains and variables used in Healthy People 2023.

Two researchers performed parallel independent screening of abstracts. Discrepancies were discussed and resolved. Full-text review was conducted by a single reviewer using SurveyMonkey to extract SDOH-specific data, and data analysis was conducted using Microsoft Excel® version 2303.

## RESULTS

Of the 1,007 articles identified in the initial search, 13 studies were eligible for full-text review (**Figure 1**).

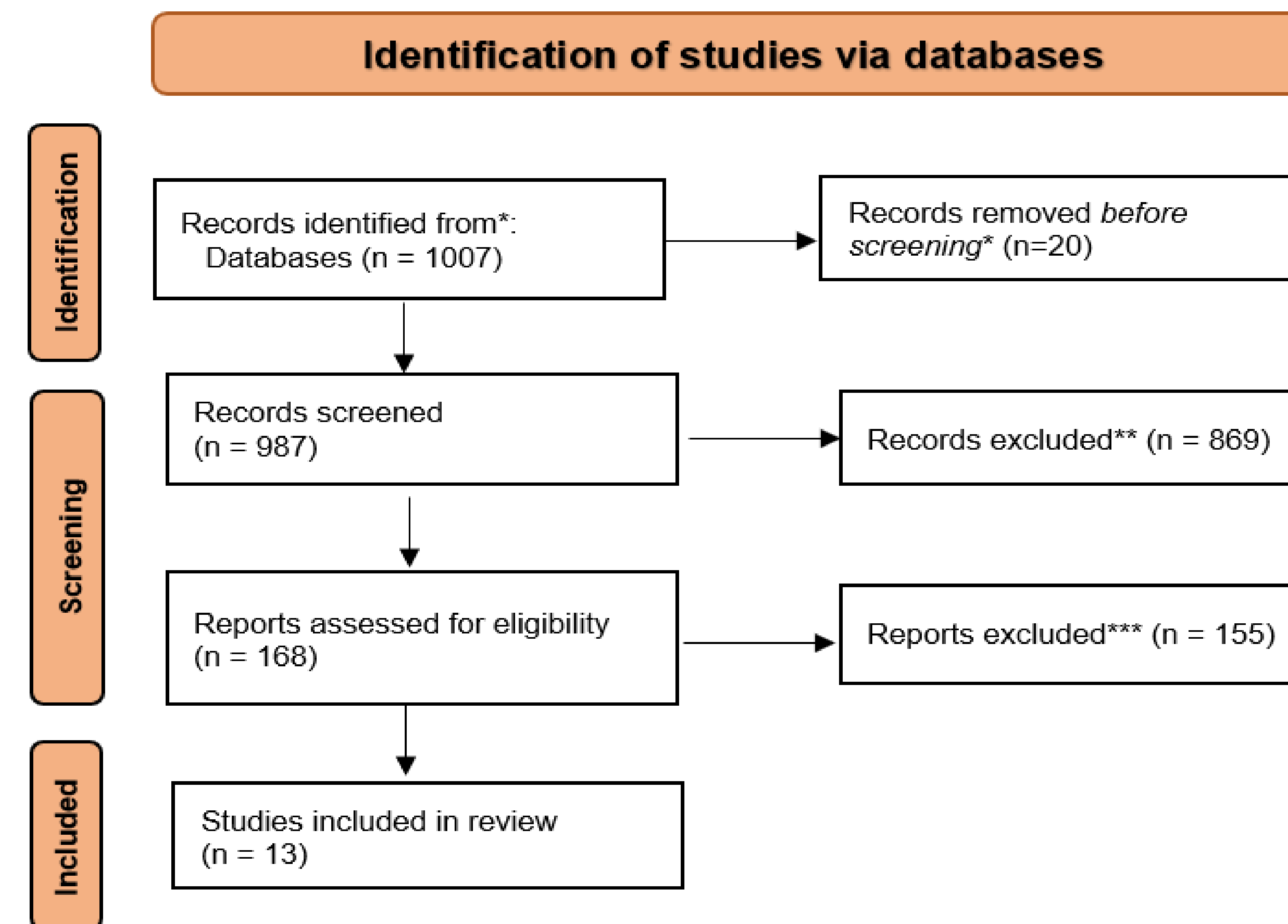
**Figure 2** provides an overview of the types of objectives for the included studies, with the most common being to evaluate a specific health intervention or policy (31%), and test and validate novel methods (31%).

### CONTACT

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**Figure 1. PRISMA Diagram**



- \* Duplicate records removed (n = 1) / Records removed because non-English (n = 19)
- \*\* Reasons to exclude: Documentation only/ no equity consideration in HTA/ non-US based comparison/ uncertain and lack of information
- \*\*\*Reasons to exclude: Not under “social determinants of health” Mesh heading and related subheadings

## RESULTS (continued)

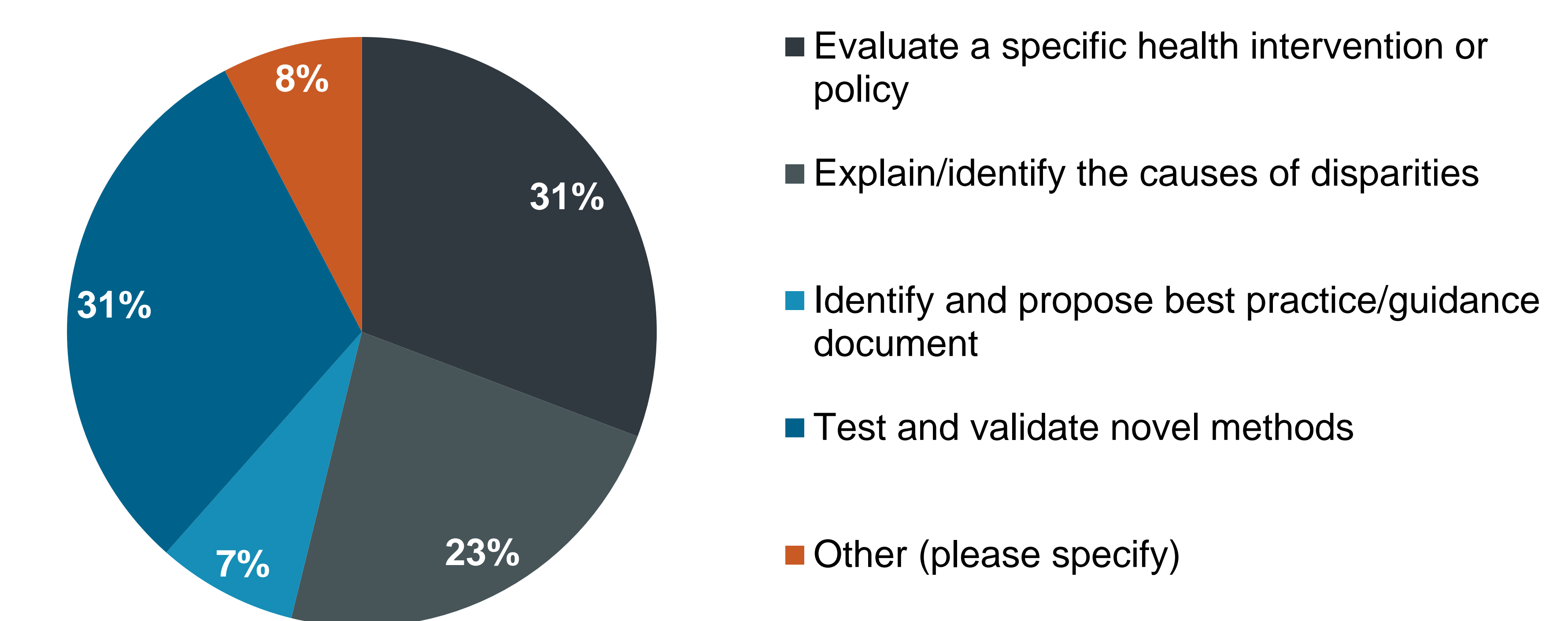
Eight articles considered specific SDOH variables, with income and social status variables being the most frequently addressed. The other 5 articles included general or non-specific SDOH considerations (**Figure 3**).

Among the 8 articles with specific SDOH:

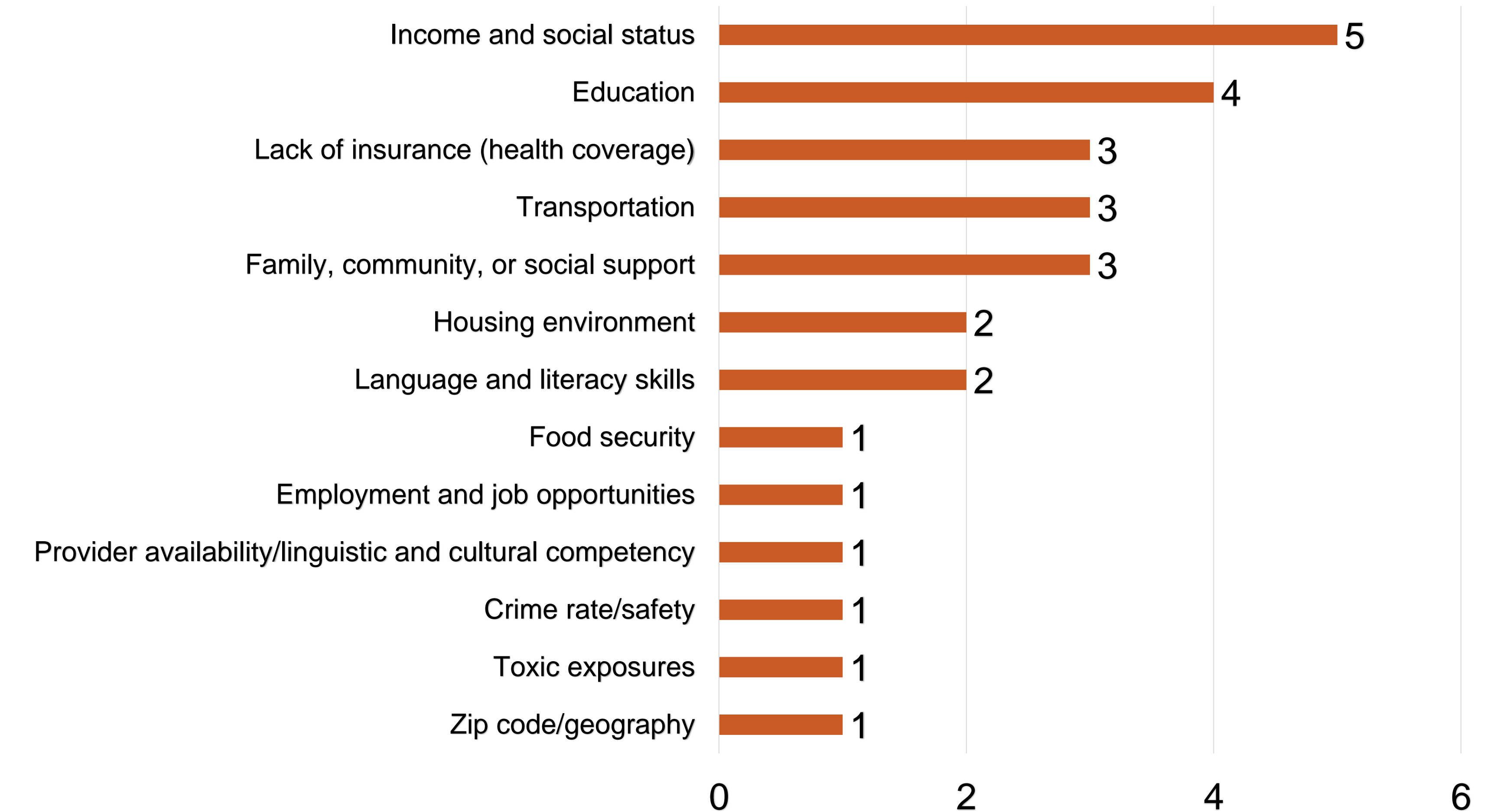
- > Three articles utilized SDOH variables as criteria for their deliberative process,
- > Two in economic modeling, and three as control factors in regression analyses, and
- > One article compared census tract data from two distinct demographic areas using t-tests.

One of the key challenges mostly identified in articles is the difficulty of identifying casual relationship between SDOH data and the outcomes of interest.

**Figure 2. Type of study (main study objective)**



**Figure 3. SDOH Variables**



## CONCLUSIONS

Systematic literature review identified relatively few articles that explicitly incorporated SDOH variables into analyses for addressing equity-related objectives, highlighting the need for further research on how SDOH can be effectively integrated into healthcare research and policies to reduce health disparities.

It is important to increase use of SDOH variables in HTA to improve our understanding of their impacts on health outcomes and to promote efforts to consider health equity.