

## Introduction

- The data behind clinical guidelines should ideally be representative of the patient population the guideline is designed for
- Historically many studies have overrepresented white patients, which may lead to inequities in care
- **Objective:** To examine the degree to which racial minorities were represented in the US colorectal cancer (CRC) surveillance guidelines

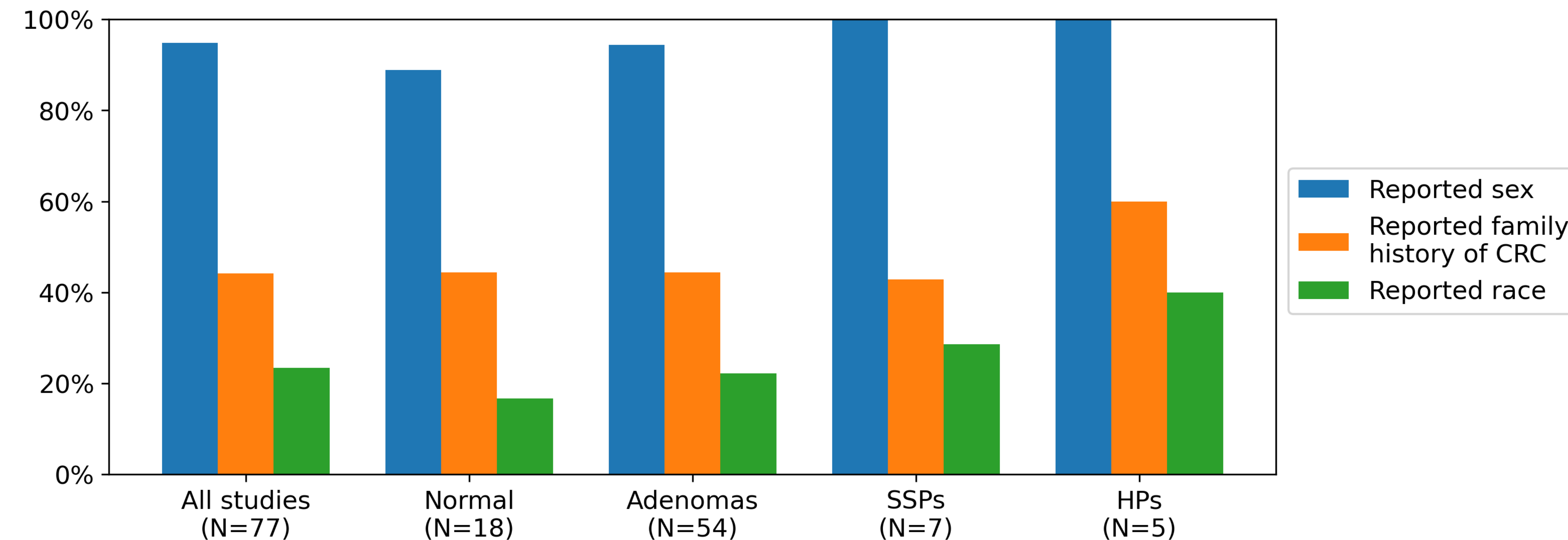
## Methods

- We reviewed all studies cited by the US Multi-Society Task Force (USMSTF) guidelines on surveillance after a baseline colonoscopy between 1997-2020
- Guidelines covered surveillance after no polyps (normal colonoscopy), adenomas, sessile serrated polyps (SSPs), and hyperplastic polyps (HPs)
- We calculated:
  1. The proportion of studies reporting sex, family history, and race
  2. Overall racial distribution of patients for each polyp type
  3. The median proportion of minority patients for studies on each polyp type
- Each study within a meta-analysis was treated as a separate study, and the same study could be included for multiple polyp types
- Statistical testing was performed via Fisher's exact test with Bonferroni correction applied

## Results

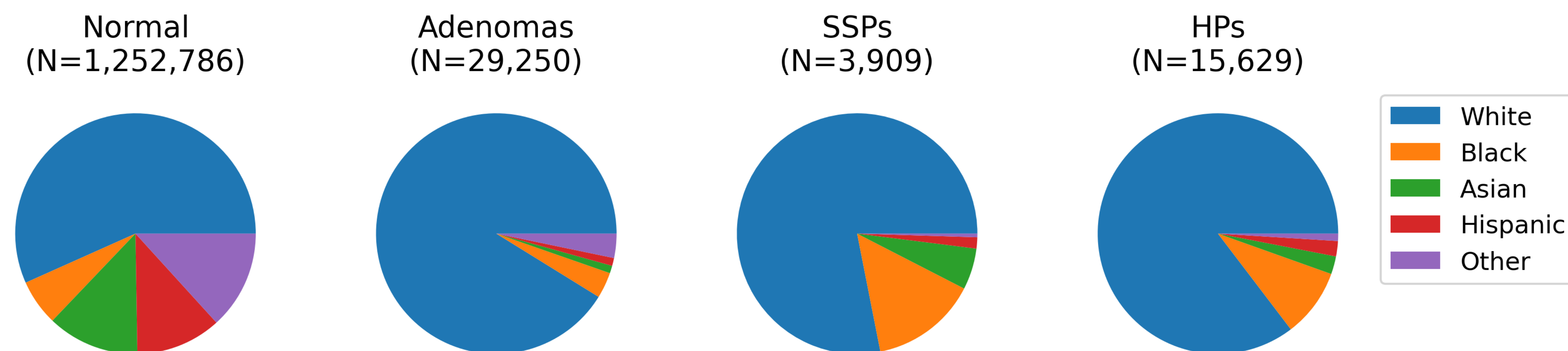
- There were 77 studies overall, of which 35 were from the United States
- In total, 18 studies (23%) reported race, compared to 73 (95%) which reported sex and 34 (44%) which reported family history of CRC ( $p < 0.001$  and  $p = 0.006$  respectively) (**Figure 1**). All 18 studies which reported race were from the United States

**Figure 1: Proportion of studies reporting sex, family history of colorectal cancer, and race**



- Non-white patients comprised of 43% of the study population for normal colonoscopies but only 9% for adenomas, 22% for SSPs, and 15% for HPs ( $p < 0.001$  for all pairwise comparisons) (**Figure 2**). The median proportion of minority patients was 24% for normal colonoscopies, 12% for adenomas, 30% for SSPs, and 13% for HPs

**Figure 2: Aggregate racial distribution of patients by polyp type**



## Discussion

- Many studies on colonoscopy surveillance intervals do not report the race of study participants
- Minority patients are particularly underrepresented in studies of adenoma, SSP, and HPs compared to the general US population
- While an association between race and polyp characteristics has been found in only some studies<sup>1-3</sup>, low minority representation could mean that some studies are underpowered to identify such differences
- Although race may not be necessary to report in non-US based studies, many of these studies originate from countries with predominantly white patients
- Other limitations include:
  - We could not determine how much weight was placed on each study by the USMSTF
  - Adenomas and SSPs are a heterogeneous group of polyps, thus our categorization may not capture the variation in evidence within each group

## References

1. Thornton JG, Morris AM, Thornton JD, Flowers CR, McCashland TM. Racial variation in colorectal polyp and tumor location. *J Natl Med Assoc.* 2007;99(7):723-728.
2. Lieberman DA, Holub JL, Moravec MD, Eisen GM, Peters D, Morris CD. Prevalence of colon polyps detected by colonoscopy screening in asymptomatic black and white patients. *JAMA.* 2008;300(12):1417-1422.
3. Lieberman DA, Williams JL, Holub JL, et al. Race, ethnicity, and sex affect risk for polyps >9 mm in average-risk individuals. *Gastroenterology.* 2014;147(2):351-e14-5.