

TAKEAWAYS

- We examined where the studies informing the US colonoscopy surveillance guidelines were from.
- Nearly all data originated from North America, Western Europe, or East Asia.
- Study sizes for adenomas, sessile serrated polyps, and hyperplastic polyps were much smaller than those for normal colonoscopies.

CONTACT

Jeffrey Dong, MD
Email: cdong@bidmc.harvard.edu

INTRODUCTION

US surveillance colonoscopy guidelines incorporate international data, but not all regions of the world may be represented equally.

We explored the degree to which data from various regions of the world is incorporated into the US Multi-Society Task Force (USMSTF) guidelines on surveillance colonoscopy.

METHODS

We included all studies cited by the 1997-2020 USMSTF guidelines on surveillance colonoscopy intervals.

We categorized studies as pertaining to the following findings:

- Normal colonoscopy
- Adenomas
- Sessile serrated polyps (SSPs)
- Hyperplastic polyps (HPs)

Studies could contribute to multiple categories.

For each category, we calculated:

- The total number of studies per region
- The total number of patients from each region
- Trends in the number of studies from each region over time

Any duplicate studies were removed, and we replaced each meta-analysis with the studies that it included.

RESULTS

There were 18 studies (9,052,886 patients) for normal colonoscopy, 54 studies (226,730 patients) for adenomas, 7 studies (20,993 patients) for SSPs, and 5 studies (22,645 patients) for HPs.

38 studies (49%) were from North America, 24 (31%) from Western Europe, 11 (14%) from East Asia, and 4 (5%) were from other regions, specifically 2 from Israel, 1 from Australia, and 1 from Argentina (**Figure 1**).

North America contributed the largest number of studies for all categories, though studies from other regions increased over time (**Figure 2**).

By patient count, North America contributed the largest number of patients for normal colonoscopies (50%) and HPs (100%), while Western Europe contributed the largest number of patients for adenomas (61%) and East Asia the largest number for SSPs (51%).

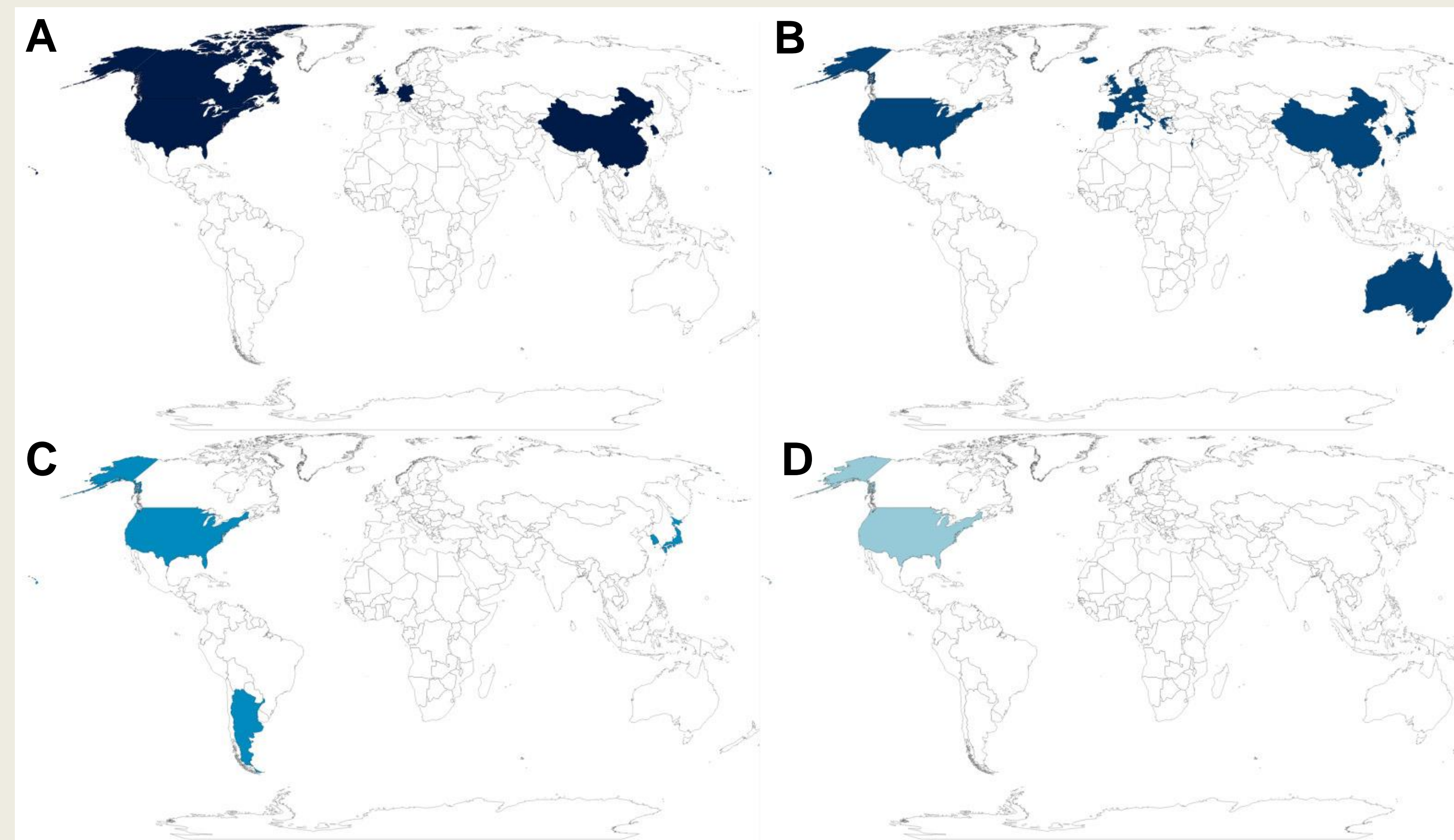


Figure 1. Regions with studies included on A) normal colonoscopies, B) adenomas, C) sessile serrated polyps, and D) hyperplastic polyps.

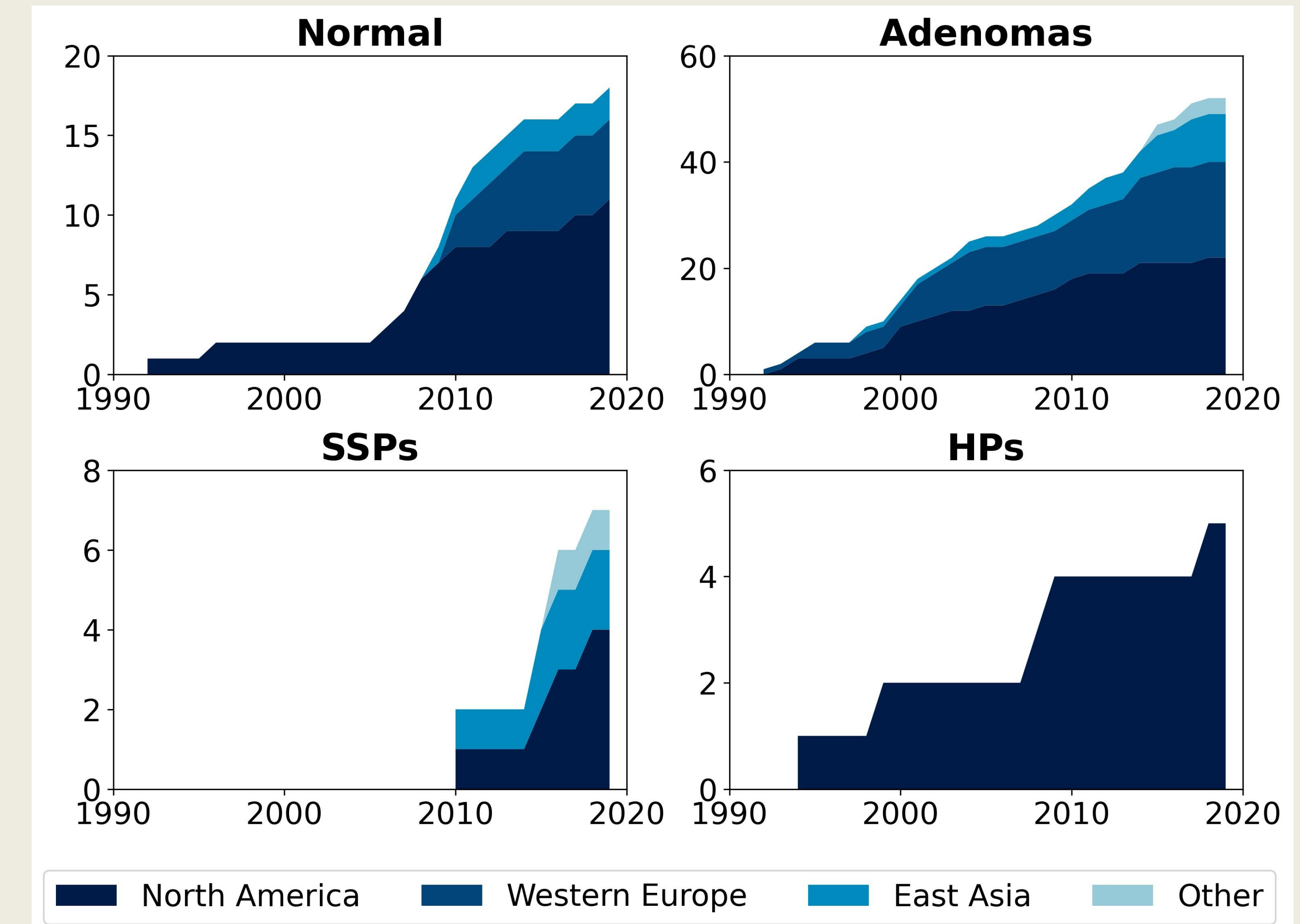


Figure 2. Trends in the number of studies on surveillance intervals per region over time.

DISCUSSION

Nearly all data were drawn from patients in North America, Western Europe, or East Asia. Given the multicultural nature of the US, incorporating research from other regions could improve the generalizability of current guidelines.

The number of patients for adenomas, SSPs, and HPs were an order of magnitude less than that of normal exams. The smaller study sizes could cause clinicians to have lower confidence in certain recommendations for SSPs and HPs.

Limitations include the fact that we did not distinguish between adenoma, SSP, and HP subtypes in our study (since newer USMSTF guidelines makes different recommendations for different subtypes) and that the guideline authors may not have put equal weight in each study.