

# Oncology Practice Setting Classification: Considerations for Real-World Evidence

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## Background

- Due to variations in treatment utilization and patient characteristics (e.g. disease stage or rarity), practice setting has been considered an important factor in oncology real-world evidence (RWE)
- Standard methodology for classifying oncology practices in the United States (US) has not been established
- We evaluated classification schemes relevant for the conduct of RWE studies

## Methods

- Classification schemes associated with the following organizations were reviewed and summarized:
  - American Society for Clinical Oncology (ASCO)<sup>1</sup>
  - Commission on Cancer (CoC)<sup>2</sup>
  - Alliance of Dedicated Cancer Centers (ADCC)<sup>3</sup>
- Characteristics of the practices within the Flatiron Health Database<sup>A</sup> were summarized with respect to size of patient population, participation in clinical trials, and area-level socioeconomic status

**Table 1. Three examples of classification schemes for oncology practice setting**

ASCO	CoC	ADCC
Academic	ACAD	Member (n=10)
System-owned <sup>a</sup>	NCIP	Others
Physician-owned	NCIN	
	INCP	
	CCCP	
	CCP	
	FCCP	
	HACP	
	VACP	
	PCP	

<sup>a</sup>includes hospital and health system-owned.

Academic categories are shaded purple; community categories are shaded blue.

ACAD, Academic Comprehensive Cancer Program;

NCIP, National Cancer Institute (NCI)-Designated Comprehensive Cancer Center Program;

NCIN, NCI-Designated Network Cancer Program;

INCP, Integrated Network Cancer Program;

CCCP, Comprehensive Community Cancer Program;

CCP, Community Cancer Program;

FCCP, Free Standing Cancer Center Program;

HACP, Hospital Associate Cancer Program;

VACP, Veterans Affairs Cancer Program;

PCP, Pediatric Cancer Program

<sup>A</sup>The US nationwide Flatiron Health EHR-derived de-identified database,<sup>4,5</sup> comprises patient-level data originating from ~280 cancer clinics (~800 sites of care) and majority community oncology settings; relative community/academic proportions may vary depending on study cohort.

Similar to academic sites, some community oncology practices have high patient volume and conduct clinical trials. Researchers should not assume community oncology practices are homogeneous.



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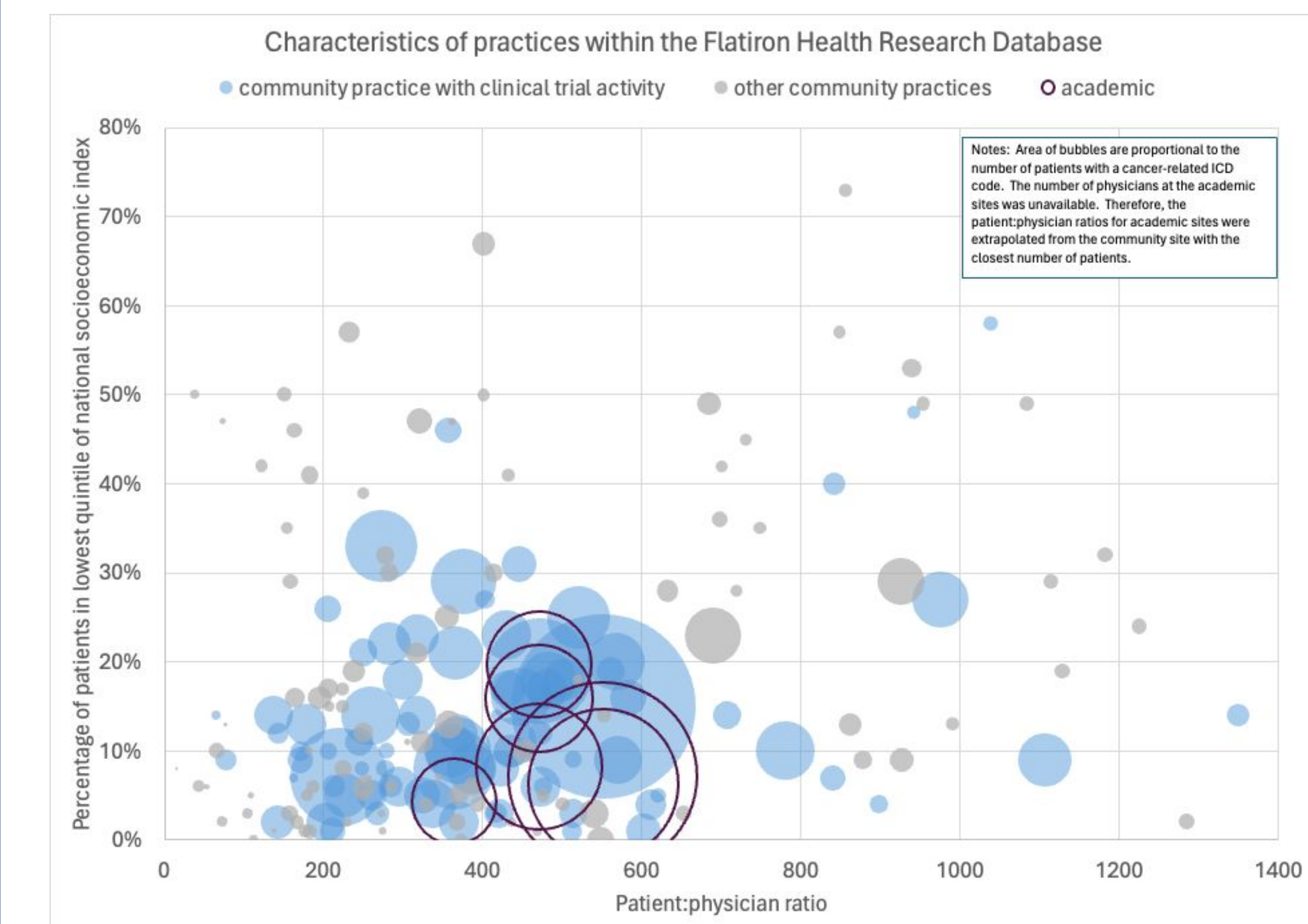
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## Results

- Schemes varied in complexity and design (see **Table 1**)
- The CoC scheme (10 categories) is simplified for analytic purposes
  - Surveillance, Epidemiology, and End Results (SEER) includes CoC designation as a dichotomous flag (yes/no)<sup>6</sup>
  - Researchers also streamline the CoC scheme. For example:
    - academic, NCI, integrated network, community<sup>7</sup>
    - academic, comprehensive community, community<sup>8</sup>
    - academic, other<sup>9</sup>
- Community sites are heterogeneous (see **Figure 1**)
  - Practice size, clinical trial activity, socioeconomic index
- Some community practices have similarities to academic sites

**Figure 1. Characteristics of oncology practices**



## Conclusions

- Classifying oncology practice settings is nuanced
- Guidance is lacking for researchers to classify facilities
- “Community” sites vary across size, socioeconomics & trial activity
- Consolidation, acquisitions, and affiliations further complicate matters
- RWE scientists should ensure that study cohorts reflect the populations of interest
- Further research is needed to understand how factors that vary by practice setting might influence treatment patterns and outcomes.

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