

The Oncology Workforce: Trends Affecting Care and Evidence Gaps

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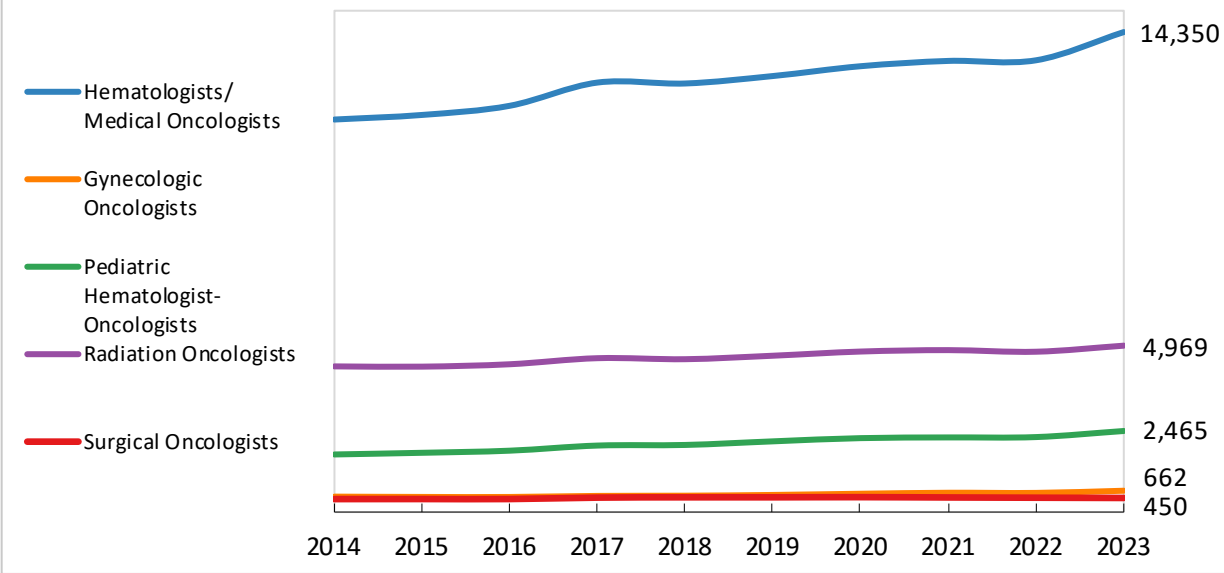
Tracking Supply of and Demand for Oncologists: ASCO's Workforce Information System (WIS) and Interactive Map of Oncology

Data sources

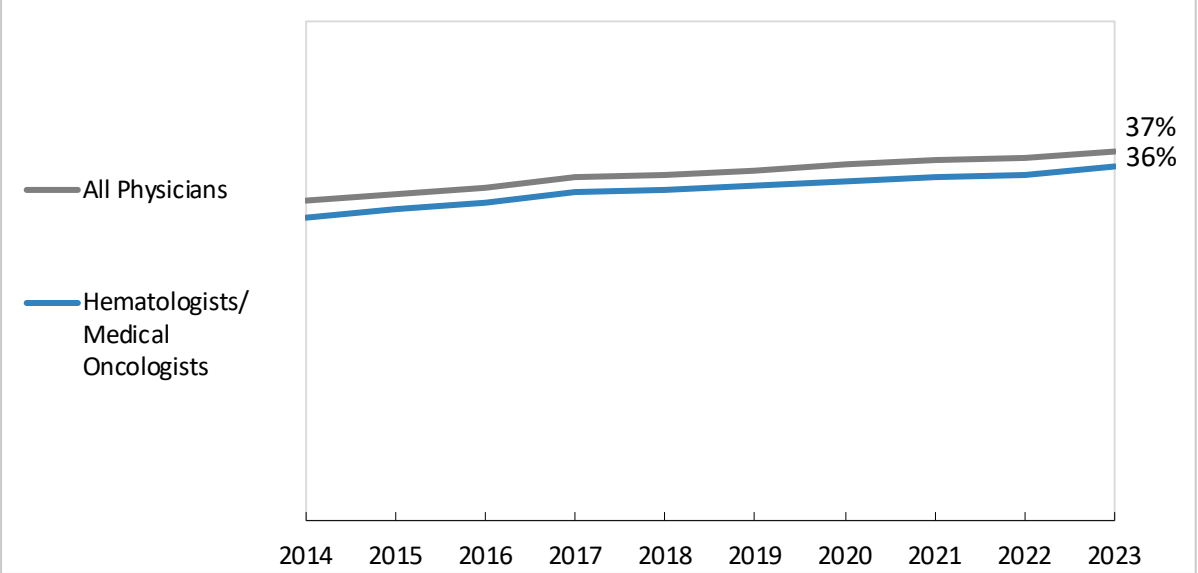
- American Medical Association's Physician Masterfile (with permission)*
 - AMA's Census of Physicians (self reported)
- Centers for Medicare & Medicaid Services' Medicare Care Compare dataset
 - Medicare Fee-for-Service claims based
- AAMC/AMA National GME Census (ACGME programs only)
- National Residency Match Program
- American Board of Internal Medicine
- US Census Bureau
- US Department of Agriculture

** The use or a reference to any data of the American Medical Association (AMA) should not be construed as an endorsement of by the AMA. The ideas and opinions expressed herein do not necessarily reflect the views of the AMA.*

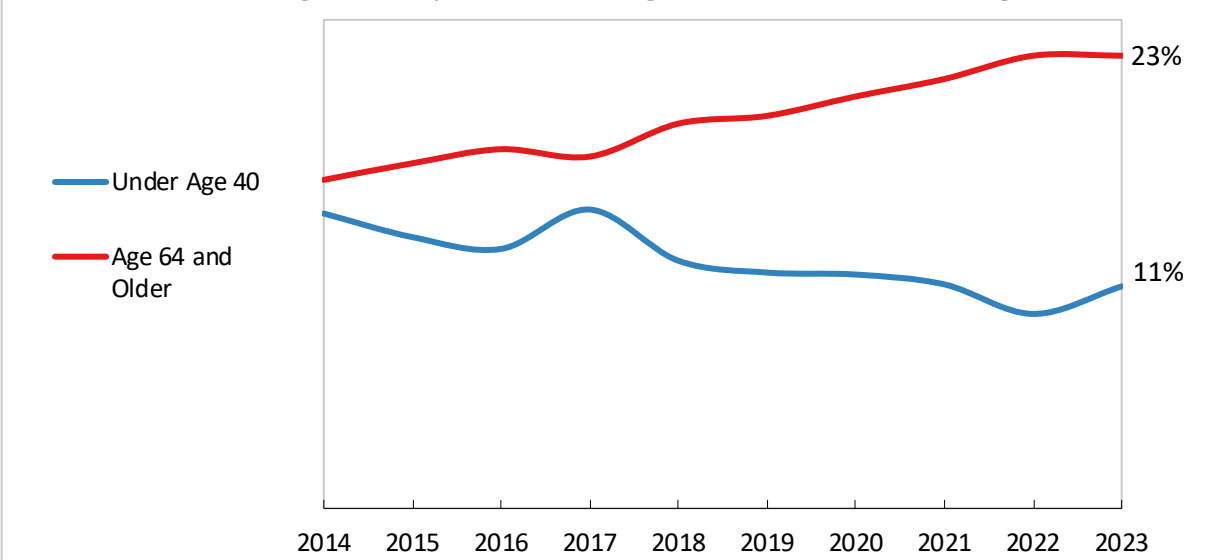
Number of Oncologists Engaged in Patient Care



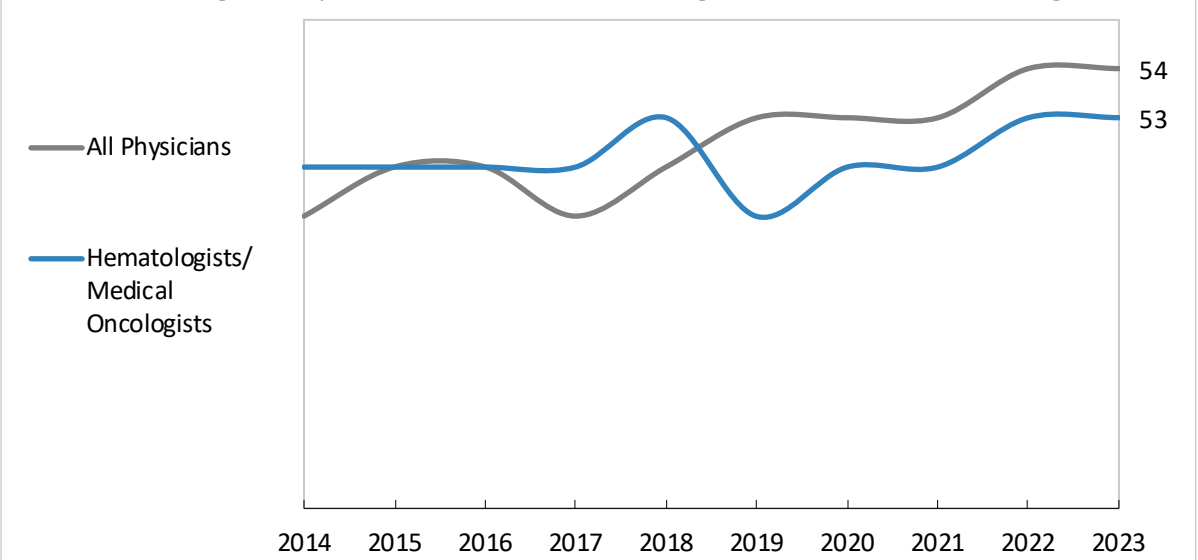
% Female: Physicians and Hematologists/Medical Oncologists



% Age Group: Hematologists/Medical Oncologists

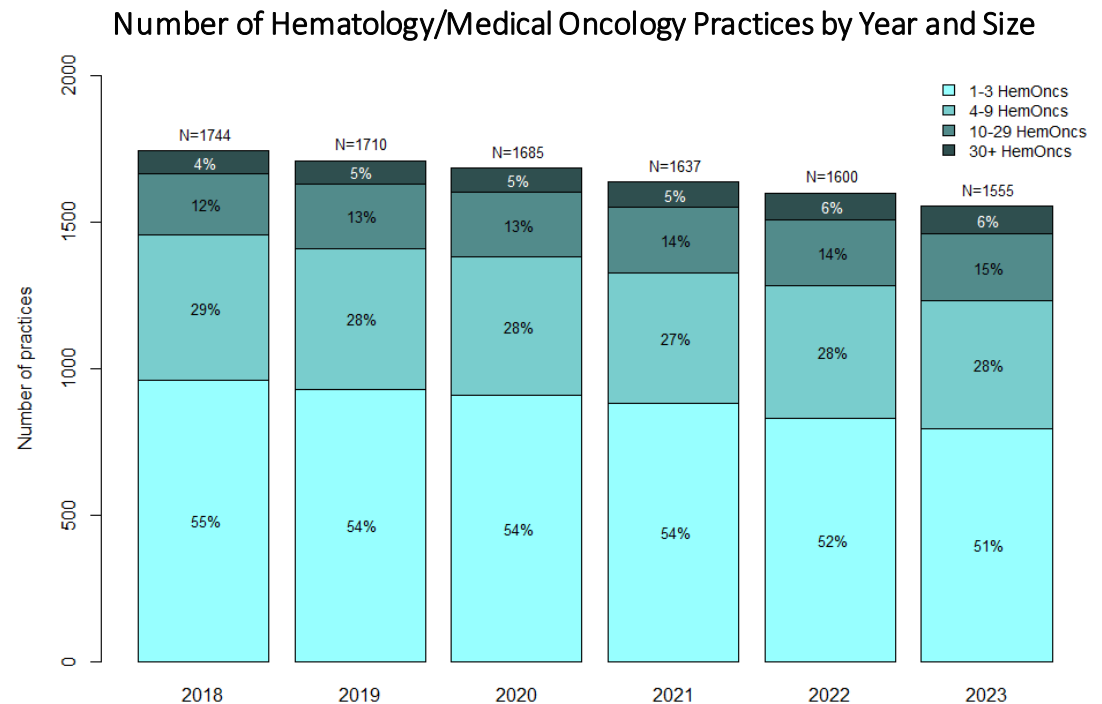
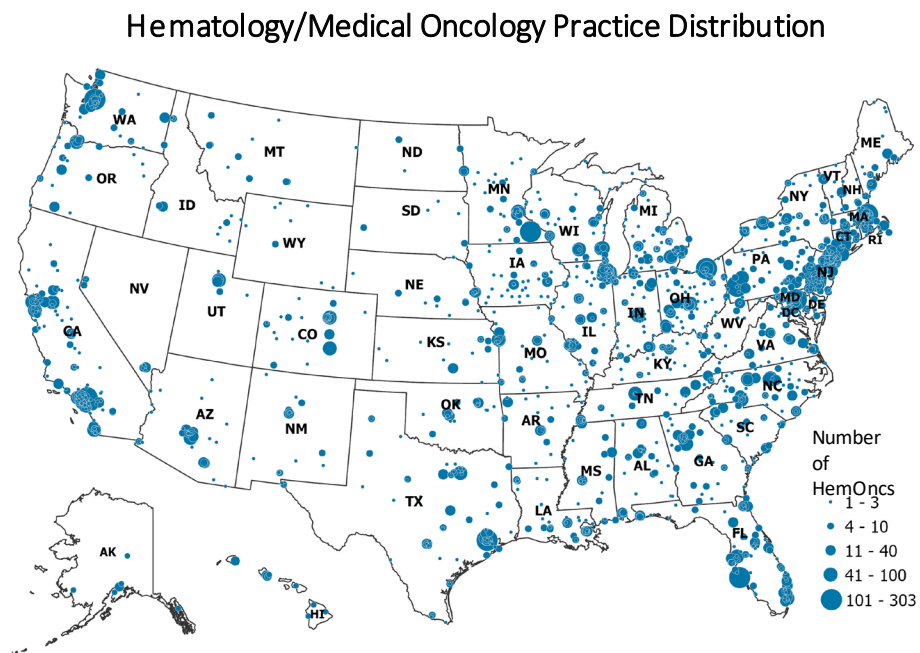


Median Age: Physicians and Hematologists/Medical Oncologists



Source: American Society of Clinical Oncology (ASCO) Workforce Information System; Data source: AMA Masterfile

Geographic Distribution and Practice Size



Source: ASCO internal analysis; Data source: CMS Care Compare

Oncology Workforce in Rural America¹²

1 in 6

Americans live
in a rural area

66%

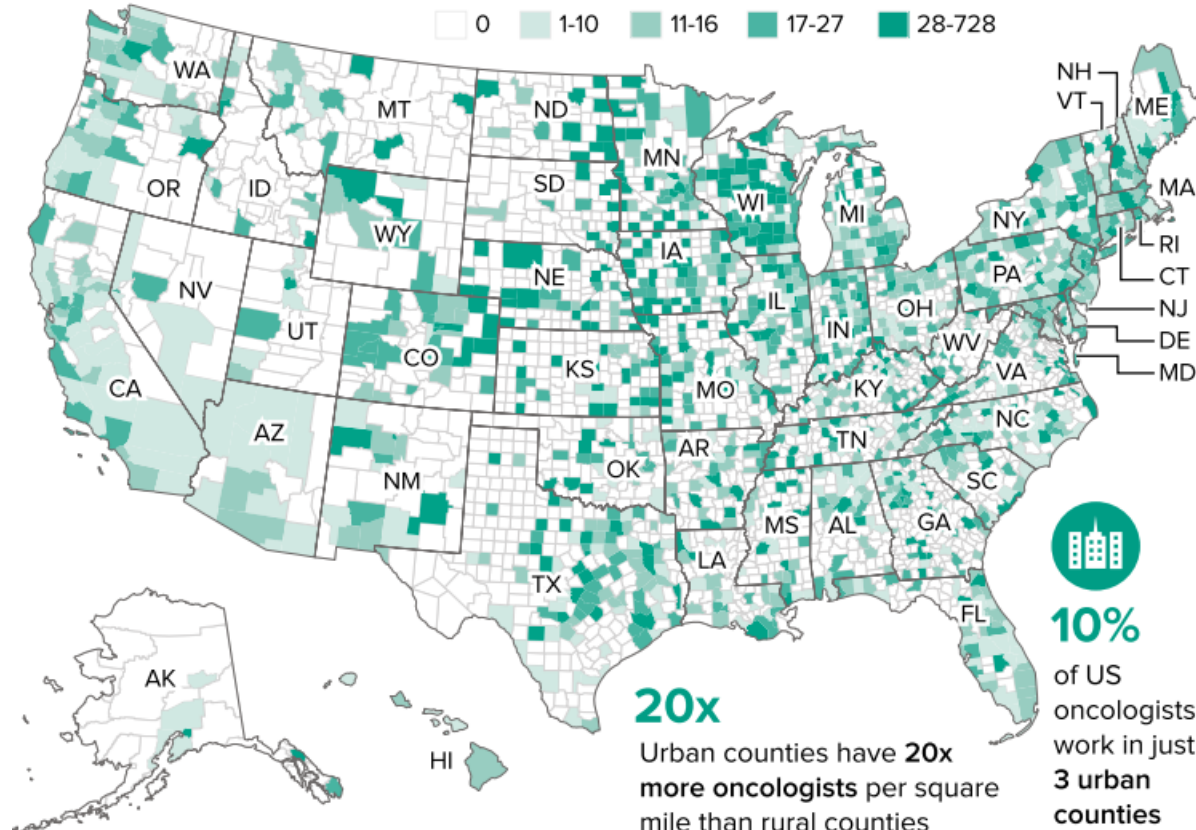
of rural counties have
no oncologist

32 million

Americans live in counties
without an oncologist

ONCOLOGISTS PER 100,000 RESIDENTS 55 OR OLDER

0 1-10 11-16 17-27 28-728



4 in 10

Americans living in rural areas who have
or had cancer say there **aren't cancer**
specialists near their home.¹³

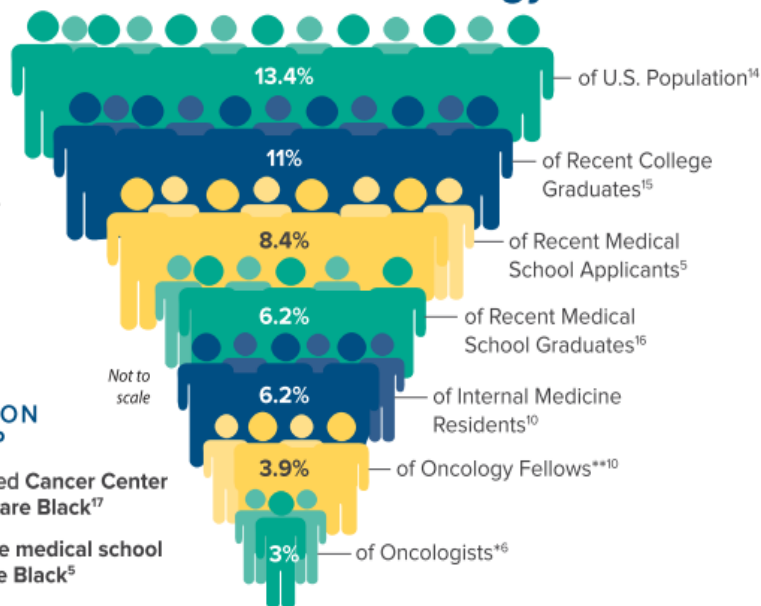
Source: ASCO, "2020 Snapshot: State of the
Oncology Workforce in America," *JCO Oncology*
Practice, DOI: 10.1200/OP.20.00577

IN FOCUS

Black Representation in the Oncology Workforce

People who are Black comprise:

At each step towards becoming an oncologist, the percentage of Black participants decreases.



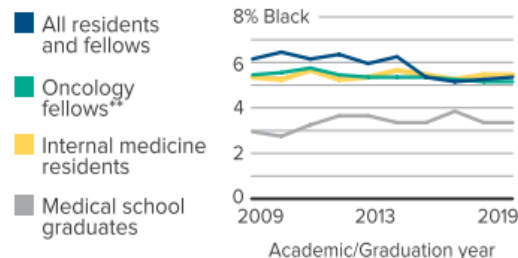
REPRESENTATION IN LEADERSHIP

1.2% of Surveyed Cancer Center Directors are Black¹⁷

3.6% of full-time medical school faculty are Black⁵

REPRESENTATION IN MEDICAL EDUCATION

Percentages of Black medical school graduates, residents, and fellows have remained low.^{10,12,13,16}



REPRESENTATION BY GENDER

The percentage of male oncologists who are Black has remained steady, while the percentage of female oncologists who are Black has declined.^{5,12}

Black male oncologists/hematologists



Black female oncologists/hematologists



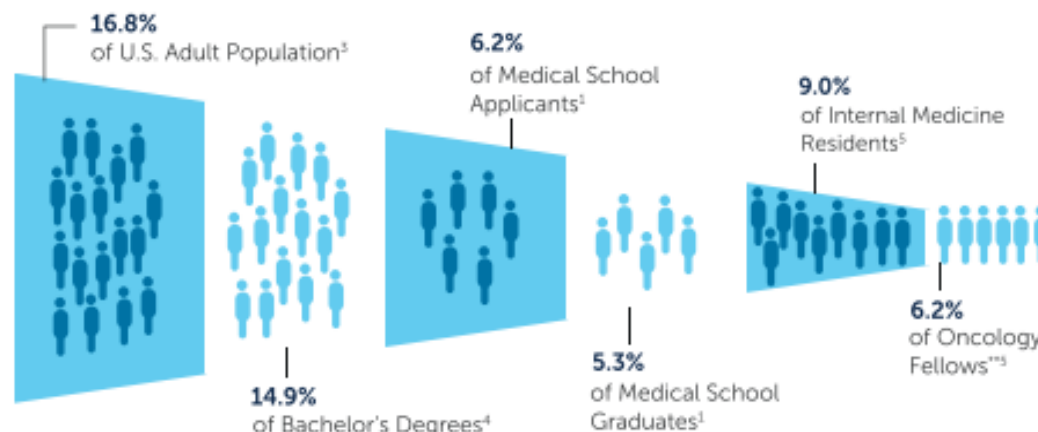
IN FOCUS

Hispanic/Latinx Oncologists and Patients

People who identify as Hispanic or Latinx comprise:

Only **4.7%** of U.S. oncologists **vs.** **9.3%** of new cancer cases^{10,11}

Hispanic/Latinx participation decreases at nearly every step in the path to becoming an oncologist.



LIMITED REPRESENTATION IN

Leadership

9.9% Cancer center directors⁹

4.5% Cancer center deputy/associate directors⁹

Academia***

3.2% full-time U.S. medical school faculty¹

Of Hispanic/Latinx full professors:

70% male vs. 30% female¹

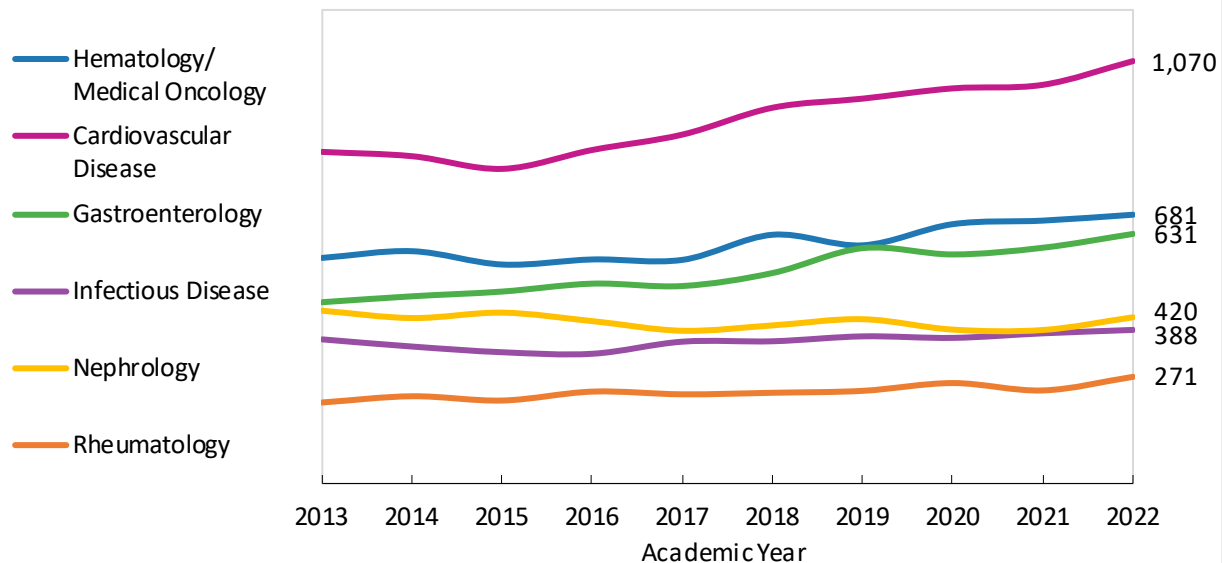
Research***

3.1% say research is a major professional activity¹

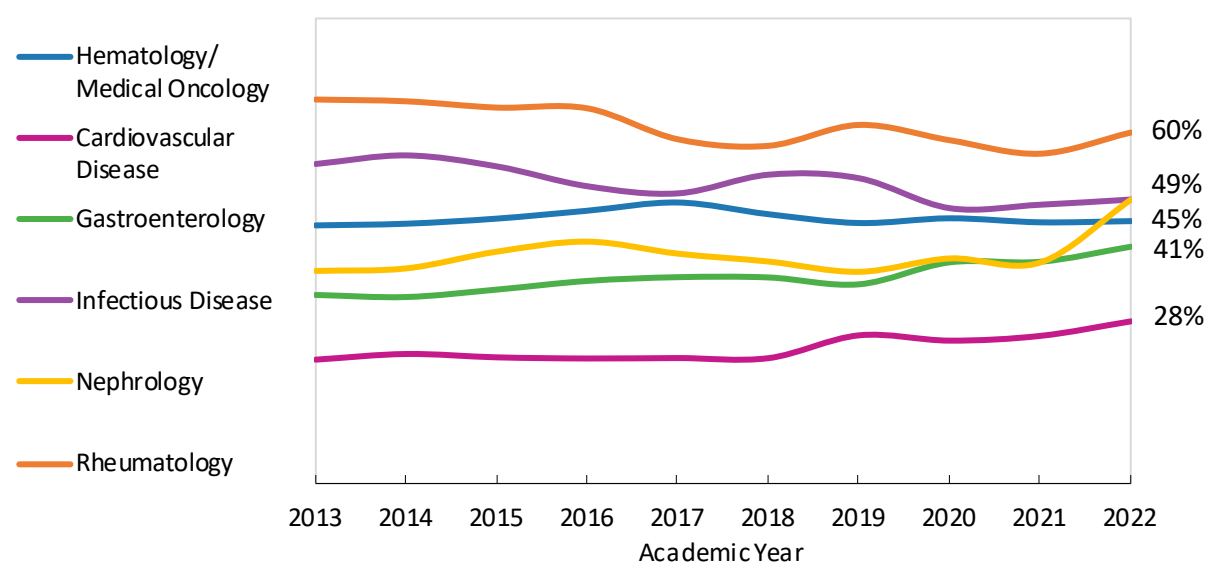
Source: ASCO, "2021 Snapshot: State of the Oncology Workforce in America," *JCO Oncology Practice*, DOI: 10.1200/OP.21.00166

Source: ASCO, "2022 Snapshot: State of the Oncology Workforce in America," *JCO Oncology Practice*, DOI: 10.1200/OP.22.00168

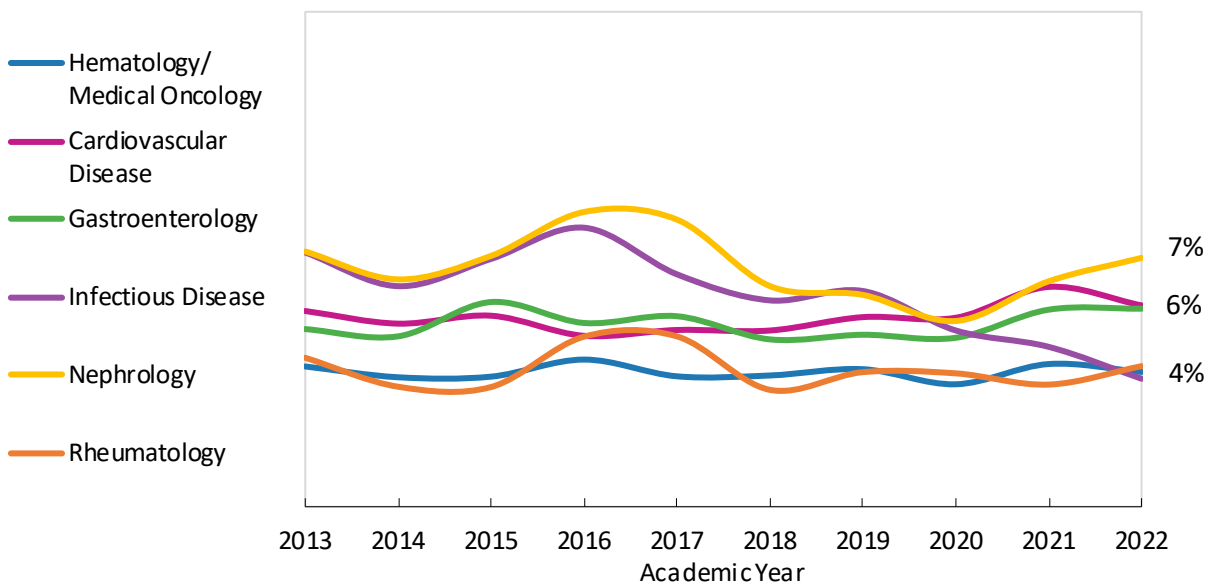
Number of First Year Internal Medicine Subspecialty Fellows



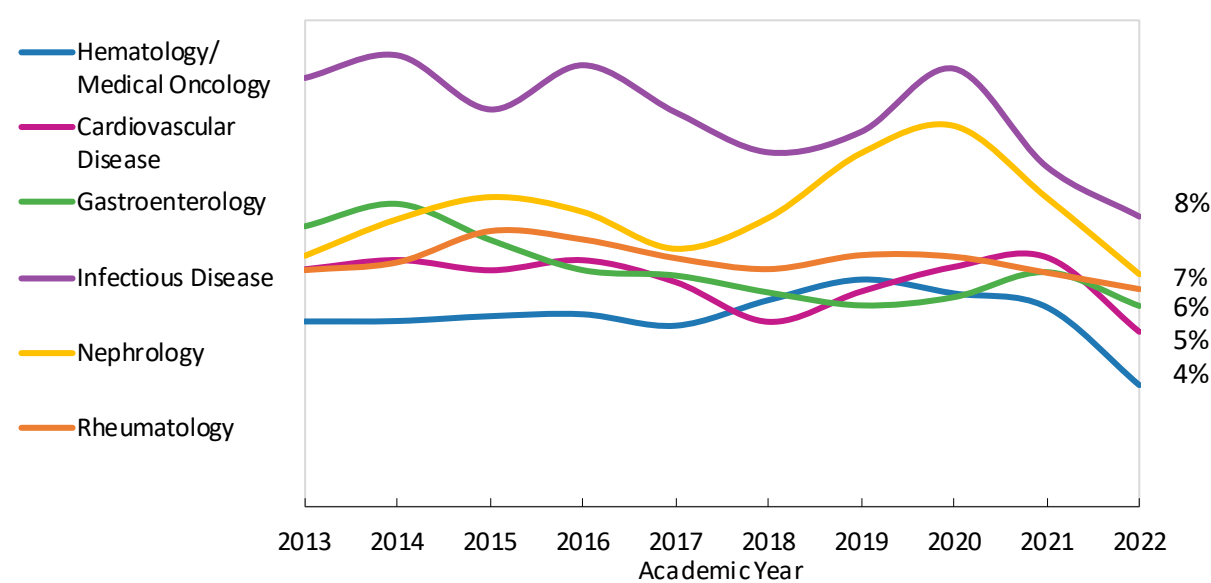
% Female: Internal Medicine Subspecialty Fellows

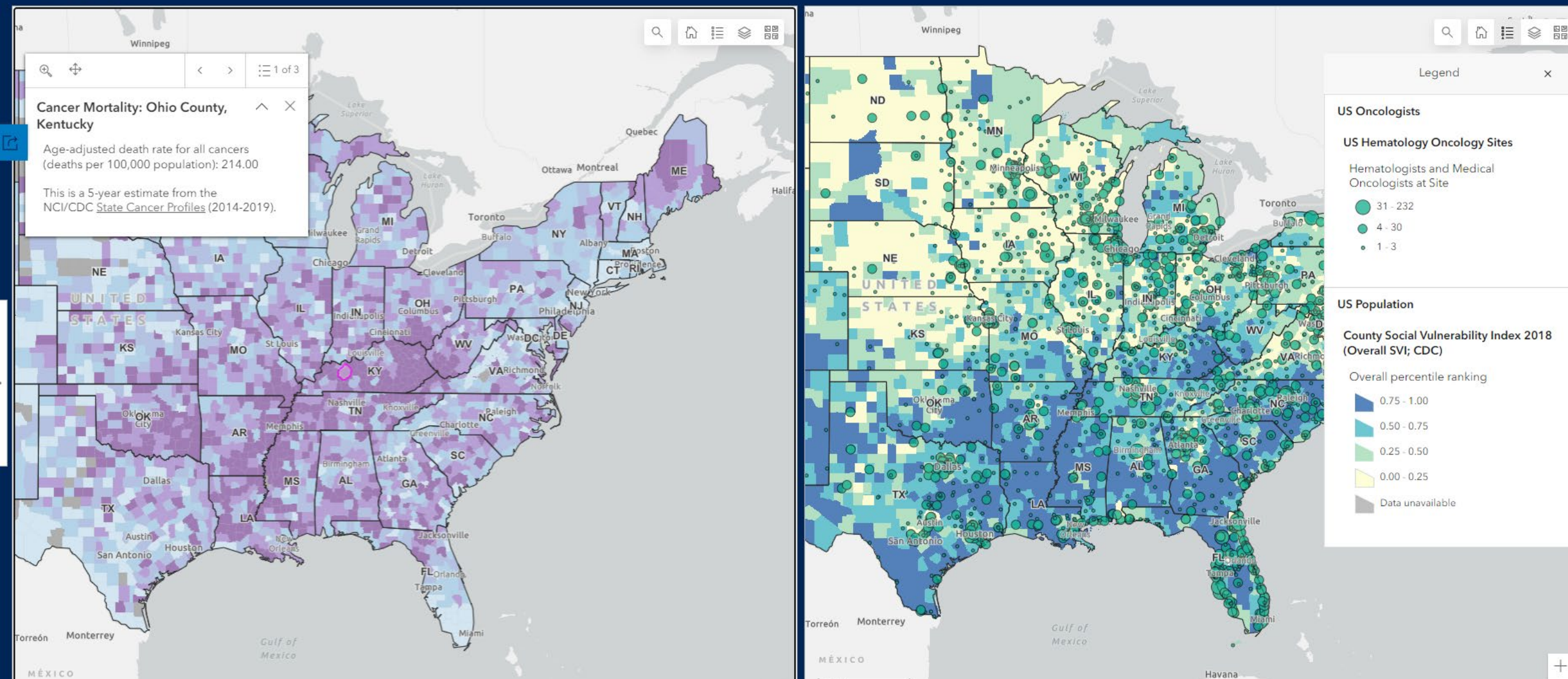


% Black/African American: Internal Medicine Subspecialty Fellows



% Hispanic/Latinx: Internal Medicine Subspecialty Fellows



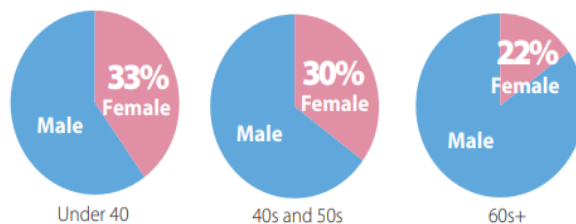
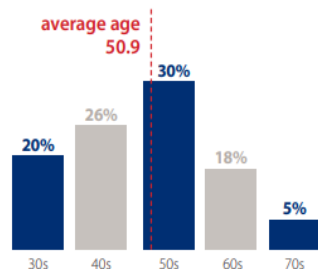


THE RADIATION ONCOLOGY WORKFORCE

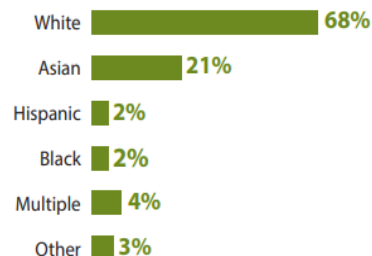
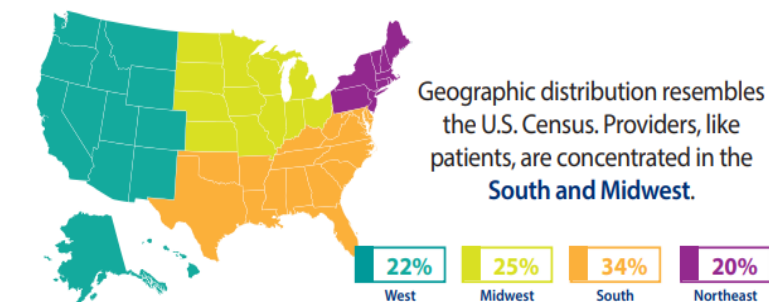
A large workforce of doctors treats patients across the country using radiation therapies. The American Society for Radiation Oncology (ASTRO) workforce study took a closer look at these physicians, as well as trends in clinical practice and technology use. The 2017 study, which was published in the *International Journal of Radiation Oncology • Biology • Physics*, drew responses from 1,174 radiation oncologists representing 726 practices.

WHO ARE AMERICA'S RADIATION ONCOLOGISTS?

4K+
practicing physicians

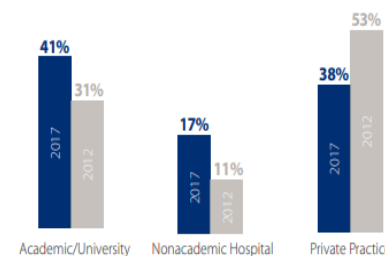


GENDER BY AGE

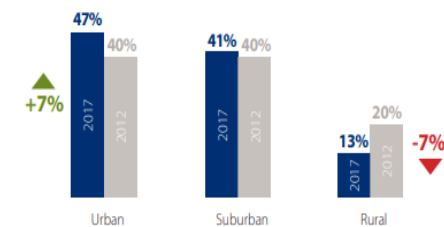


HOW IS THE RADIATION ONCOLOGY WORKFORCE CHANGING?

Radiation oncologists are **shifting from private practice** to academic centers and hospitals.



Nearly 9 in 10 radiation oncologists work in urban or suburban communities. Urban practices have grown over time, while **rural access may be under threat**.



Twice as many radiation oncologists in rural communities plan to retire or reduce hours in the next five years, compared to urban/suburban physicians.



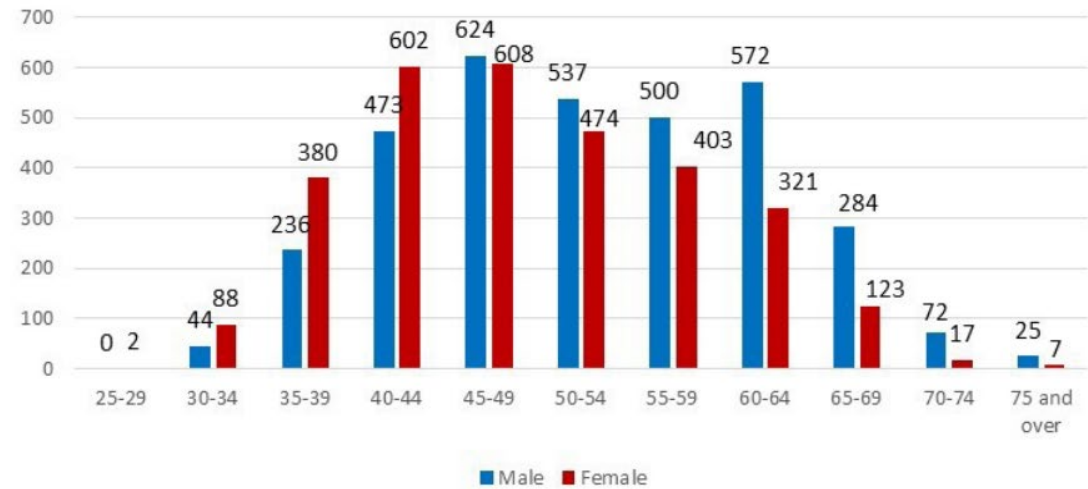
ASTRO
TARGETING CANCER CARE

www.astro.org

A Snapshot of Active Hospice and Palliative Medicine Physicians



Exhibit 3. Distribution by Age and Gender



Source: AMA Masterfile, January 2016

Exhibit 5. Race and Ethnicity of HPM Fellows 2015-2016

Race/Ethnicity	Number	Percent
White, non-Hispanic	157	57.3
Asian or Pacific Islander	50	18.2
Hispanic/Latino	21	7.7
Black, non-Hispanic	13	4.7
Native American/Alaskan	0	0.0
Other	16	5.8
Unknown	17	6.2
Total	274	100%

Source: ACGME Resource Data Book, 2015-2016

Trends & Challenges in Oncology Nursing



- Growing workforce
 - Aging population has increased demand for nurses in all settings
- Retiring baby boomer RNs
 - Loss of accumulated knowledge and expertise
- National projections
 - Expansion in nursing school enrollment
 - Possible small surplus
 - Uneven distribution
- Ongoing challenges in measuring adequate nursing staffing
- National changes in nursing education
 - Fewer schools with oncology concentration
- Nursing faculty shortages
 - Decline in nurses entering PhD programs

Other Specialists and Factors Impacting the Workforce



Advanced Practitioner
Society for Hematology
and Oncology



- Oncology nurse practitioners and physician assistants
 - Limited data on this workforce in oncology
- Complex general surgical oncology
 - Downward trend in applicants and match rates
- GYN oncology
 - Mismatch between GYN oncologist density and GYN oncology patients
- Pediatric hematology oncology
 - Demographics are mirroring pediatrics; sub-subspecialization is increasing
- Pediatric radiation oncology
 - Challenges in workforce education

Evidence Gaps

- Lack of comprehensive demographic data for the entire oncology workforce
 - Reliance on self-reporting
- Absence of high-quality team-centered data
 - Advanced practice providers
 - Pediatric specialties
- Challenges in incorporating claims data for providers and patients
- Inability to comprehensively track the newest impacts on the workforce including practice consolidation, telemedicine and COVID