

SEEDING HOPE: CULTIVATING RURAL ONCOLOGY TRAINING FOR RURAL AND COMMUNITY CARE

RTT Collaborative 2024 Annual Meeting

Asheville, NC

April 11, 2024

RURALS CANCER.ORG



Rural Cancer

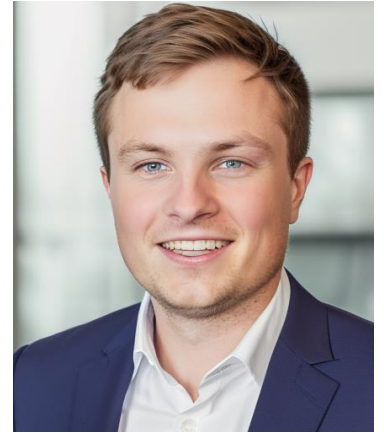
An Independent Research
and Advocacy Group

Wade Swenson, MD, MPH, MBA

Emily Westergard, DO

Zack Schroeder, BA

Abby Swenson, BA



**NEW
FRAMEWORK
FOR
CANCER CARE DELIVER**

NEJM Catalyst

April 17, 2024, published
online

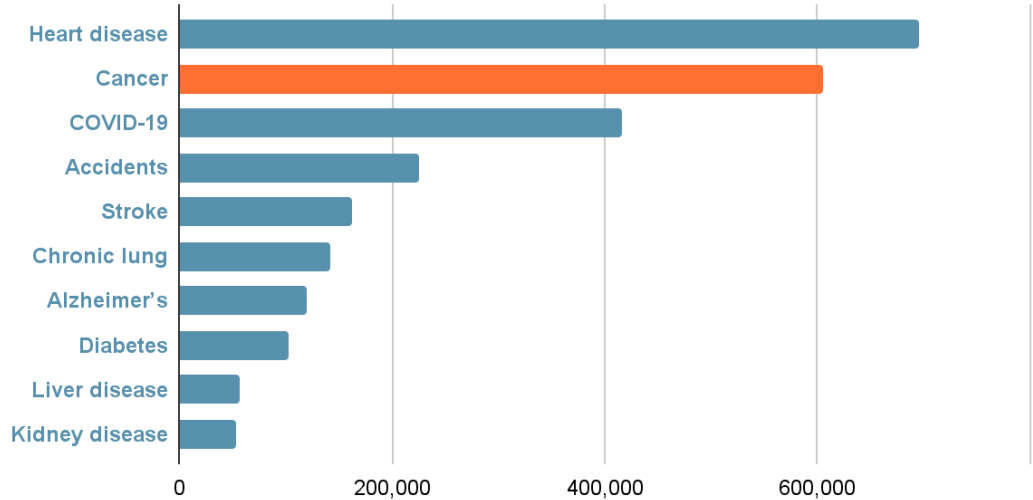
**The Case for Decentralizing
Cancer Care:**

The Rural Oncology Home

THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Leading causes of death U.S., 2021

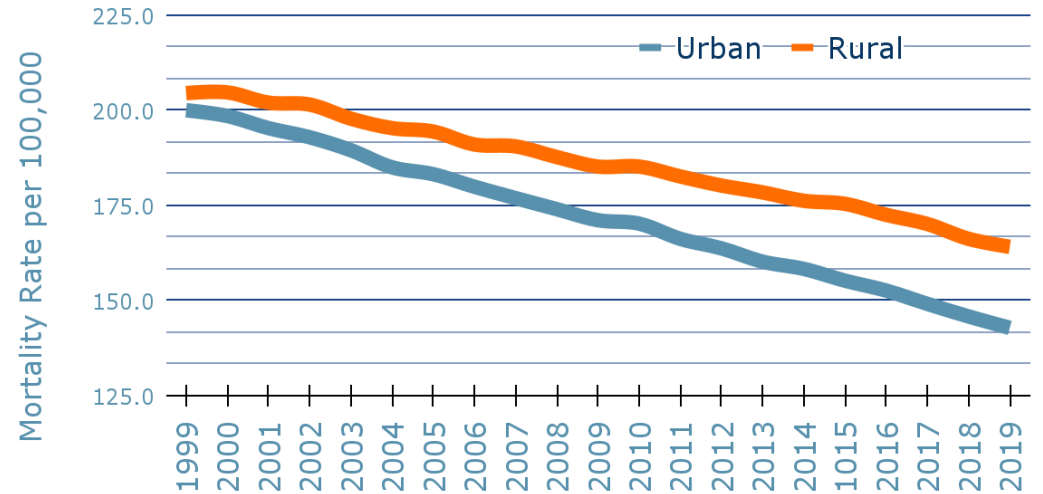
Source: CDC/National Center for Health Statistics



THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

U.S. Cancer Death Rates Urban/Rural, 1999–2019

Source: National Center for Health Statistics, National Vital Statistics System,





CAUSES OF THE RURAL CANCER GAP

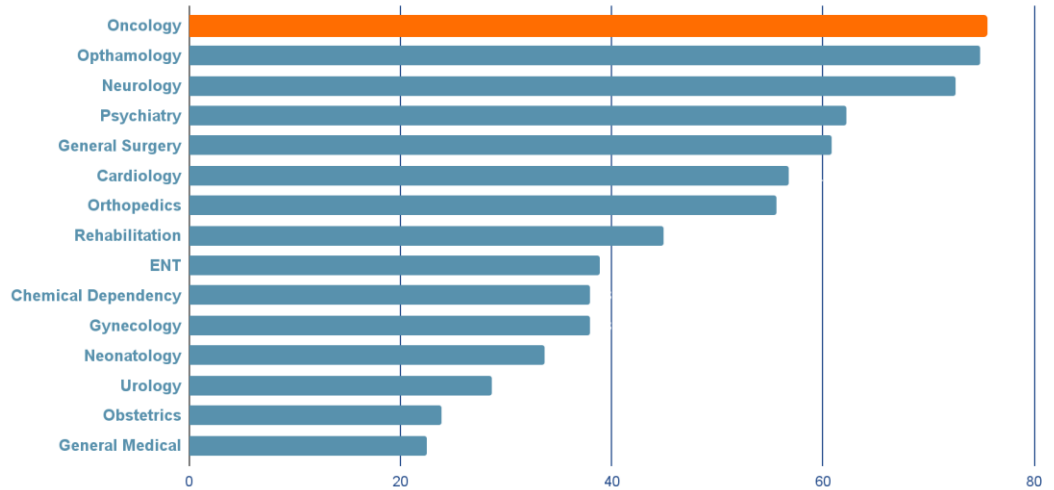


Barriers to multidisciplinary care
Limited access to specialized services
Increased travel requirements
Increase financial burdens
Inadequate clinical trial infrastructure
Economic, social, and structural barriers
Less likely cancer-preventive activities
Fatalistic views about cancer prevention

THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Distance in Miles Traveled by Rural Minnesota Residents by Service Line

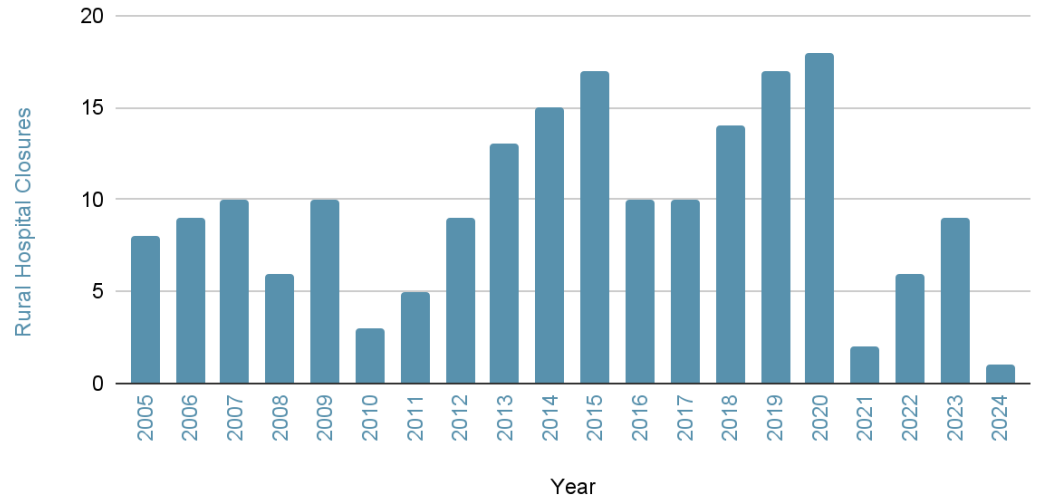
Source: Minnesota Hospital Association claims data analysis from January 2013 to March 2019



THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Rural Hospital Closures by Year in U.S.

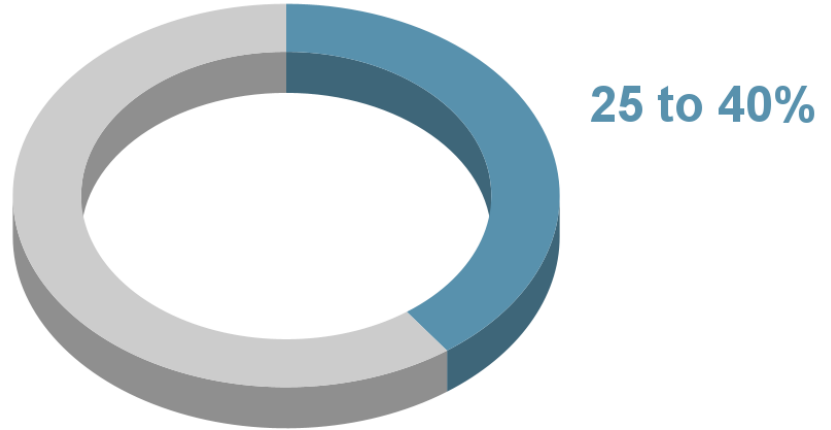
Source: NC Rural Health Research Program



THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Source: Chartis, Star Tribune, October
28, 2021

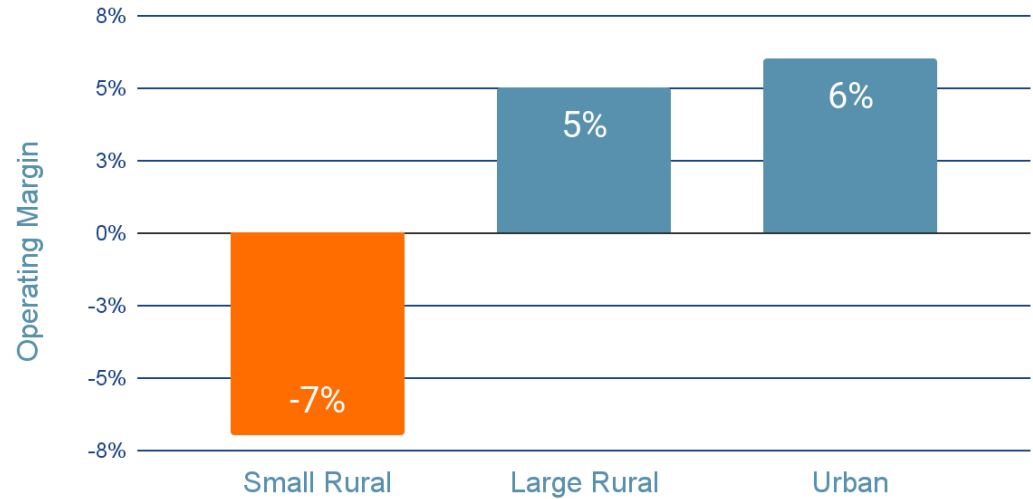
Estimated Contribution of Cancer Services to U.S. Health System Profit Margins



THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Median Hospital Operating Margin on Patient Services

Source: CMS Healthcare Cost Report Information System, 2021-22 Data



THE CASE FOR DECENTRALIZATI ON OF CANCER CARE

Cancer is a common disease in Rural America

- Second leading cause of death

Rural cancer disparities

- **Widening rural cancer gap**

Rural patient travel burden

- Patients and families

Rural hospital closures

- **Narrow rural hospital operating margins**
- **Missed cancer care revenue**



Care Management



Palliative Care



Financial Navigation



Community Support

**RURAL
ONCOLOGY
HOME
MODEL
NEJM
CATALYST
MAY 2024**

STRATEGIES TO ADDRESS SHORTAGE

01

1) Increasing the number of oncology fellowship training positions

02

2) Increasing the use of nonphysician clinicians in patient care

03

3) Increasing the role of primary care physicians in the care of patients in remission

Institute of Medicine (US) National Cancer Policy Forum. Ensuring Quality Cancer Care through the Oncology Workforce. Washington (DC): National Academies Press (US); 2009.

MEDICAL ONCOLOGISTS

A workforce study by ASCO determined that 10% of practicing oncologists in the United States live in only three counties.

The demand for medical oncologists is expected to rise, driven by the aging and growth of the population, improvements in cancer survival rates, and an aging oncology workforce.

JCO Oncol Pract. 2021;17(1):30.; J Oncol Pract. 2007;3(2):79-86.; Institute of Medicine (US) National Cancer Policy Forum. Ensuring Quality Cancer Care through the Oncology Workforce.. Washington (DC): National Academies Press (US); 2009.

MEDICAL ONCOLOGISTS

Because of lifestyle and work productivity preferences, younger oncologists are unlikely to fill the void left by retiring oncologists.

The oncology workforce challenges are especially noted in rural America.

JCO Oncol Pract. 2021;17(1):30.

Institute of Medicine (US) National Cancer Policy Forum. Ensuring Quality Cancer Care through the Oncology Workforce.: Washington (DC): National Academies Press (US); 2009.

MEDICAL ONCOLOGY FELLOWSHIP PROGRAMS

U.S. ACGME

- 177 Hem-Med Onc
- 3 Med Onc

Recent trends

- Number of programs has increased
- Size of the programs has decreased

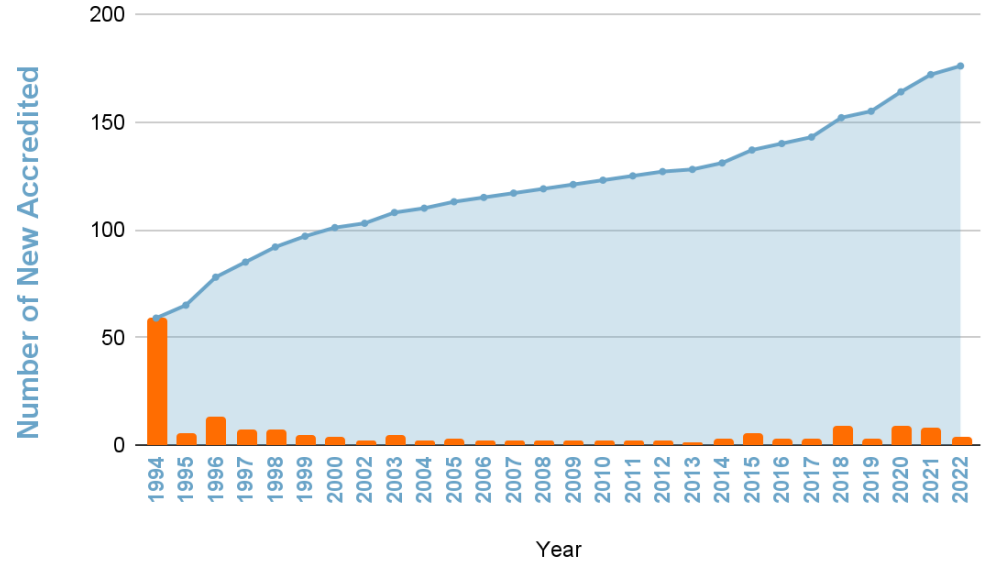
**MEDICAL
ONCOLOGY
FELLOWSHIP
POSITIONS
BY
METROPOLITAN
STATISTICAL
AREA**

N	Percent	MSA
245	11.8%	New York
117	5.6%	Boston
96	4.6%	Houston
96	4.6%	Chicago
82	3.9%	Philadelphia
74	3.6%	Los Angeles
54	2.6%	Washington
48	2.3%	Durham
47	2.3%	Baltimore
45	2.3%	Detroit

MEDICAL ONCOLOGY FELLOWSHIP PROGRAMS

Newly Accredited ACGME Fellowship Programs by Year

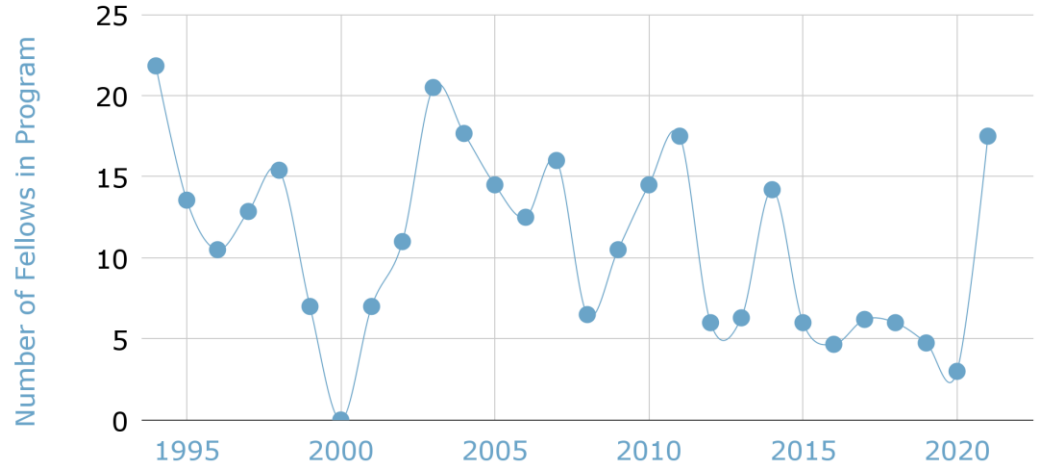
Source: ACGME, Combined Hematology-Medical Oncology Programs



MEDICAL ONCOLOGY FELLOWSHIP PROGRAMS

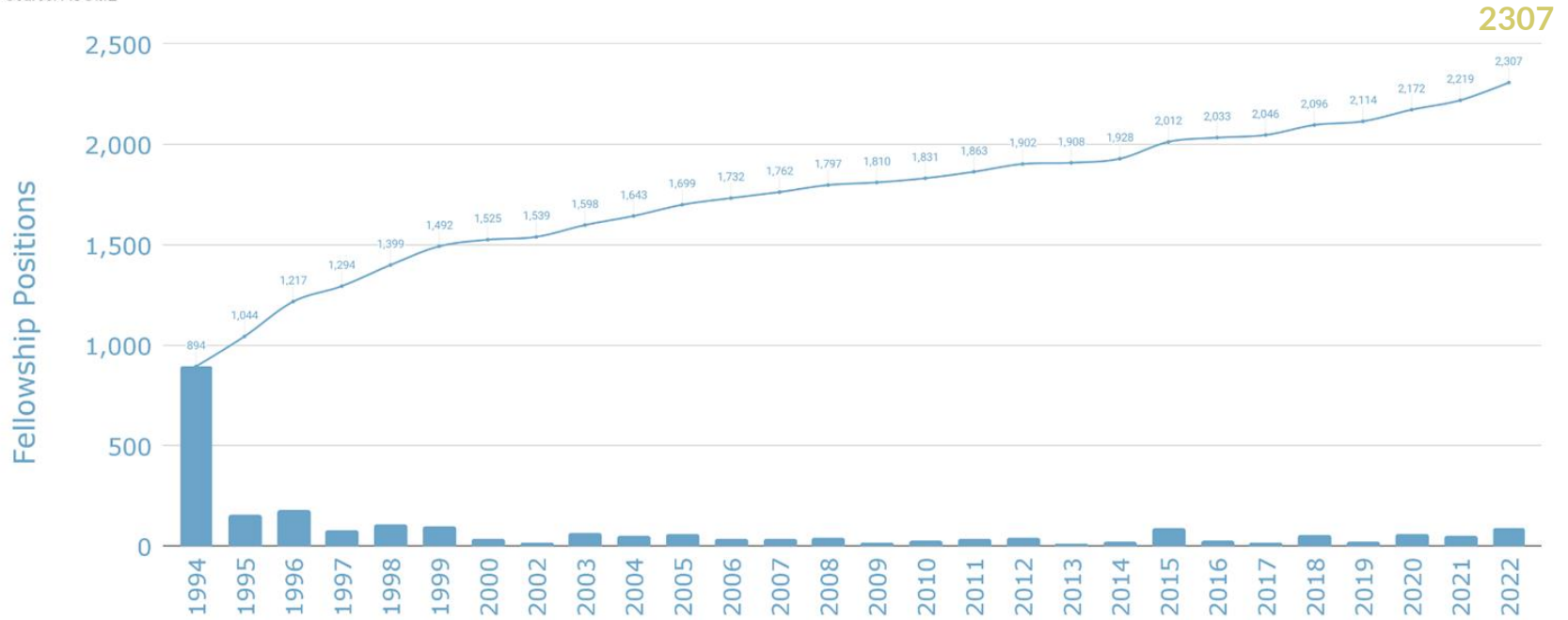
Average Size of New ACGME Fellowship Positions by Year

Source: ACGME



New Accredited ACGME Hematology-Medical Oncology Fellowship Positions By Year

Source: ACGME



CONCLUSIONS

2023 AAMC Health Workforce Research Conference

To address the workforce shortage in rural and community settings, fellowship training sites should be developed in non-urban and community settings.

HYBRID FELLOWSHI PS

Conventional hematology/oncology fellowship training is designed to foster careers in academic practice through intensive exposure to clinical and laboratory research.

Improving the representation of hematologists/oncologists in the community setting is a national priority.

HYBRID FELLOWSHI PS

Academic-Community hybrid (ACH) to support the evolution in contemporary models of cancer care.

62% of programs are embedded within academic medical centers

6% are based in the community or regional medical centers

JCO Oncol Pract. 2023;19(6):e927-e934.

Traditional vs Academic-Community Hybrid

Year 1

Clinic training in academia

Years 2-3

- **Clinical training in academia**
 - **Laboratory-Based Research**
 - **Clinical Research**
 - **Medical Educator Track**
 - **Publish, Grant Writing**

JCO Oncol Pract. 2023;19(6):e927-e934.

Year 1

Clinic training in academia

Years 2-3

Clinical training in the community

Cancer Care Equity

Medical Education

Patient Safety, Quality

Improvement

Business Operations

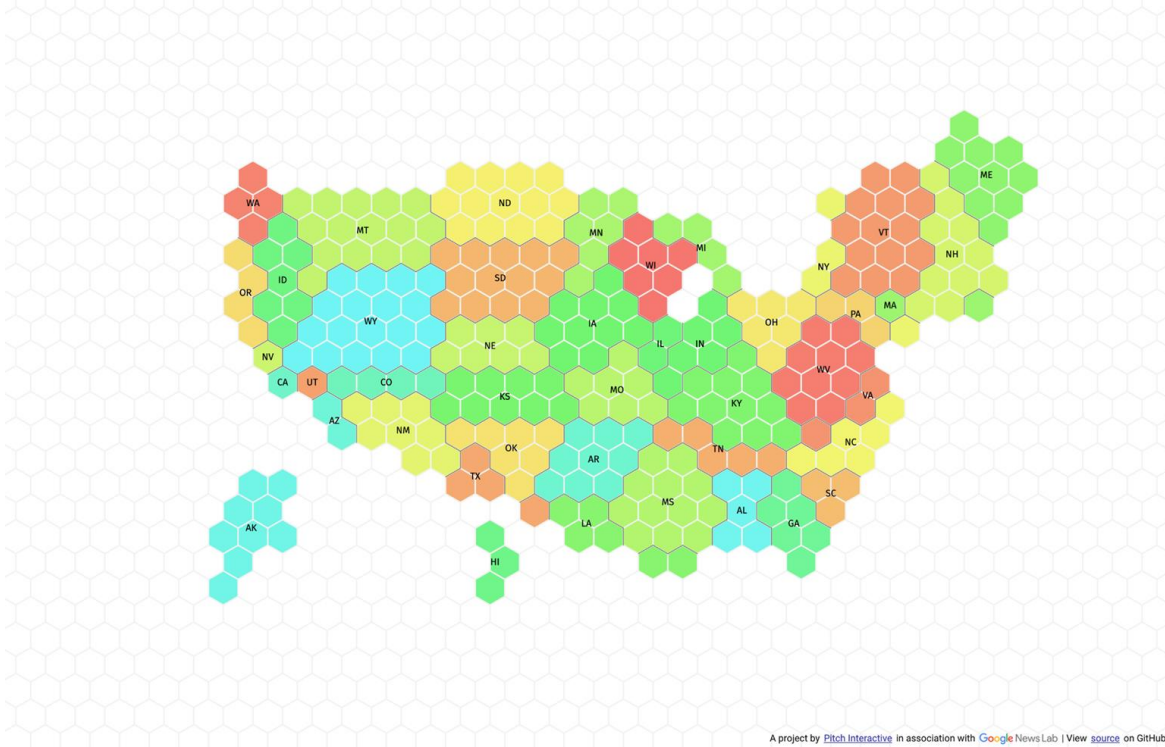
Professional Organizations

Health Policy

WHICH STATE IS MOST RURAL?



WHICH STATE IS MOST RURAL?

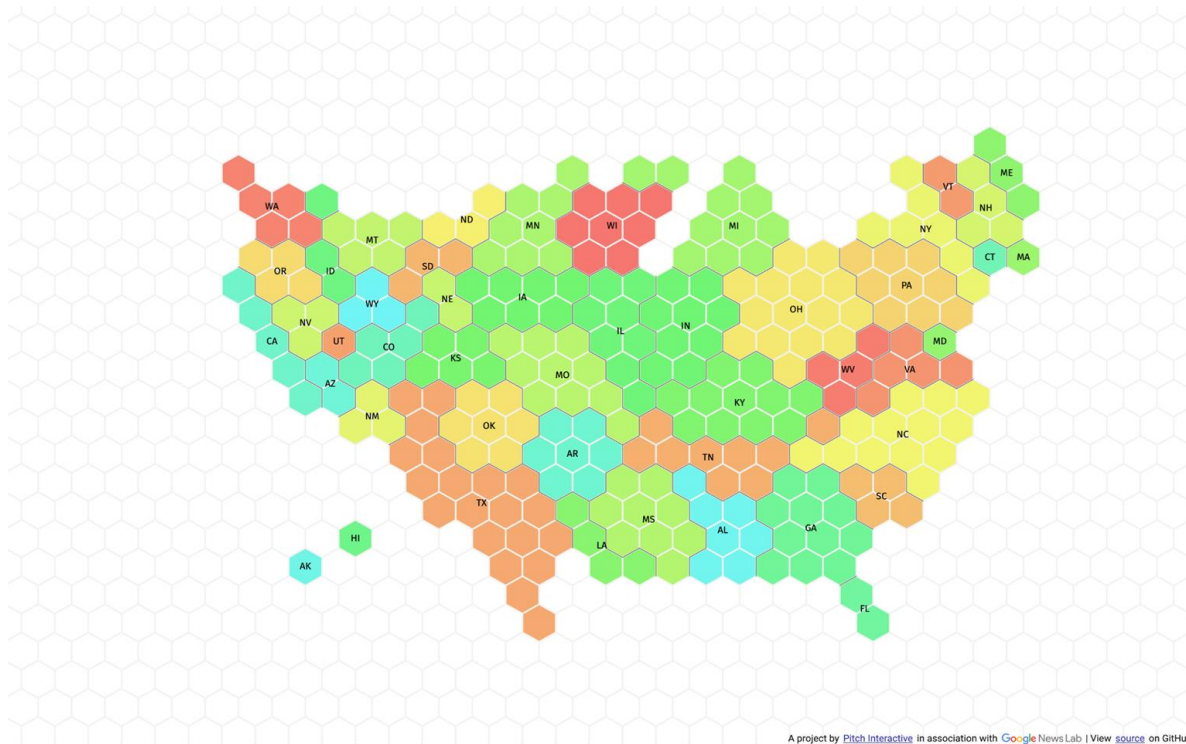


A project by [Pitch Interactive](#) in association with [Google News Lab](#) | View [source](#) on GitHub

Percent Rural

Vermont
64.9%

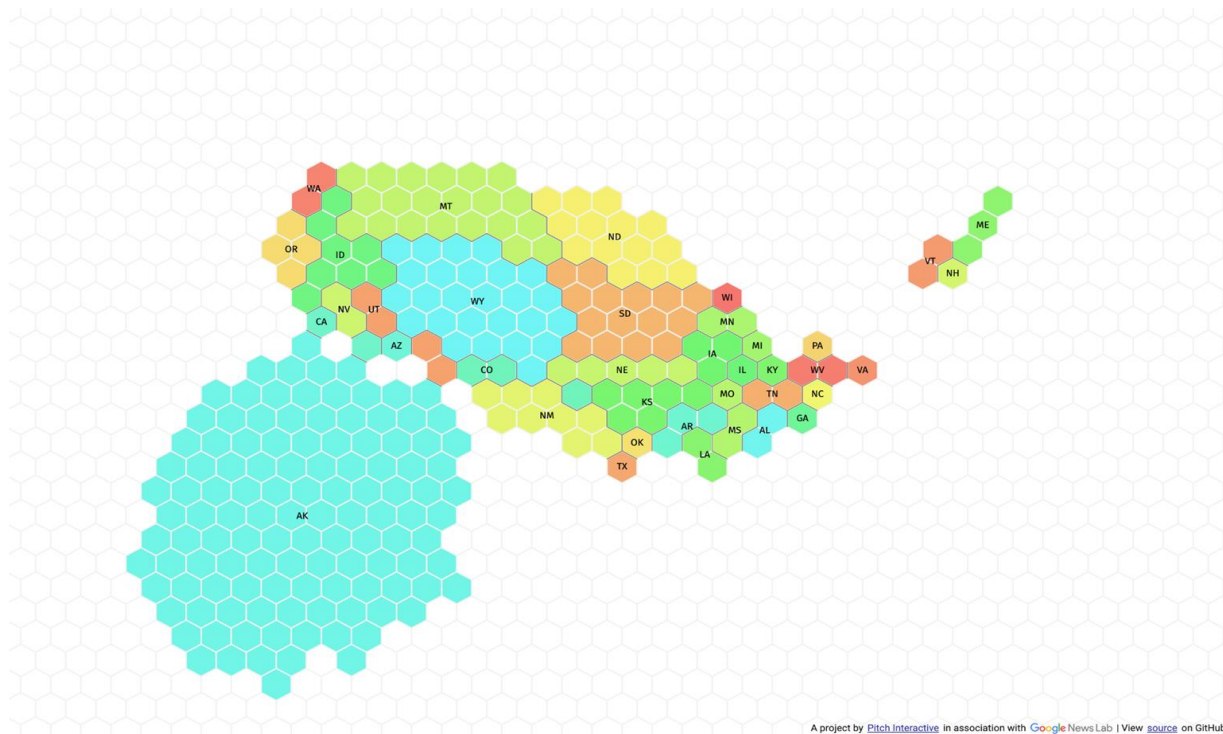
WHICH STATE IS MOST RURAL?



Total Rural
Population

Texas
3.8M

WHICH STATE IS MOST RURAL?



Population
Density

Alaska
1.3 p/m²

Because the challenges to delivering oncology care to rural areas are **diverse and community dependent, multiple strategies are needed** to decrease nationwide rural disparities in cancer care.

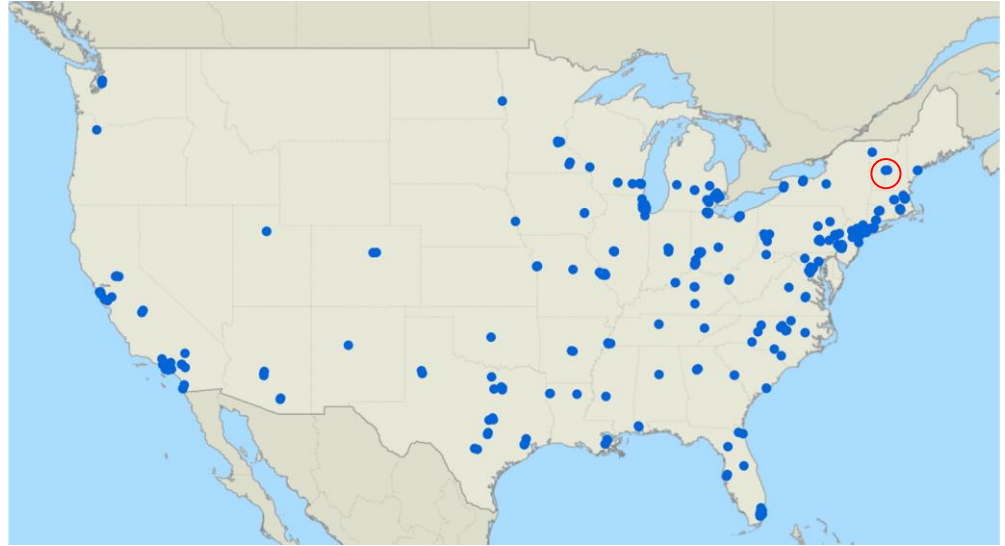


JCO Oncol Pract. 2020;16(7):422-430.

177 ACGME
MEDICAL ONCOLOGY-
HEMATOLOGY
FELLOWSHIPS

Lebanon, New Hampshire -
Population: 14,282
Micropolitan SA: 221,211

Dartmouth Hitchcock Medical Center
Program started in 1960
3 fellows per year
18 months clinical, 18 months unstructured



Micropolitan Statistical Area: defined by the Office of Management and Budget (OMB), are labor market and statistical areas centered on an urban cluster with a population of at least 10,000 but fewer than 50,000.

177 ACGME MEDICAL ONCOLOGY- HEMATOLOGY FELLOWSHIPS

University of North Dakota
Program started in 2022
2 fellows per year

University of Vermont
Program started in 1975
Produced over 50 oncologists
2 fellows per year



UNIVERSITY OF VERMONT

Dr Maura Barry, Program Director

Planning stages of first-in-the-nation **rural
oncology medical oncology fellowship track**



UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE

Dr Matthew Tinguely, Program Director
Second cohort of fellows

F1 Year

- 2 months Hematology Inpatient Consults
- 2 months Oncology Inpatient Consults
- 2 months Hematology Clinic
- 2 months Oncology Clinic
- 1 month Palliative Care
- 1 month BMT rotation
- 2 month Elective focus

F2 Year

- 3 months research
- 1 month Hem Path
- 1 month Rad Onc
- 1 month Hematology Inpatient Consults
- 1 month Oncology Inpatient Consults
- 2 months Oncology Clinic
- 2 months Hematology Clinic
- 1 month Transfusion-Coagulation testing

F3 Year

- 1 month Hematology clinic
- 1 month Oncology Clinic
- 1 month Hematology Inpatient Consults
- 1 month Oncology Inpatient Consults
- 1 month Research
- 1 month Gyn Onc
- 6 month Elective focus

UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE

Program Mission

The University of North Dakota's Hematology and Oncology Fellowship aims to **educate, mentor, and develop** hematology and oncology physicians who will provide excellent healthcare to cancer and blood disorder patients **in our rural and local communities** while providing research to expand the knowledge of neoplastic and hematologic disease processes of all patients.

**ADVANCED
PRACTICE
PROFESSIONALS**

**NURSE
PRACTITIONERS
PHYSICIAN
ASSISTANTS**



APP ONCOLOGY FELLOWSHIPS

- Stanford
- UCSF
- Mayo Florida
- U Miami
- Emory
- Mayo
- MSK
- Atrium
- Rochester
- Utah
- Ohio State
- Oregon
- Vanderbilt
- MD Anderson
- Washington
- MCW
- Cleveland
- Marshall
- UT SW

12 months
NP/PA
1-2 trainees/yr
1250-2000 hr

STARTING AN ONCOLOGY APP FELLOWSHIP

Clinical Journal of Oncology Nursing
February 2023

CJON 2023, 27(1), 13-16.
DOI: 10.1188/23.CJON.13-16

Implementing an Oncology Nurse Practitioner Fellowship: Reflections and Lessons Learned

Heather J. Jackson, PhD, FNP-BC, NEA-BC, FAANP, Kathryn Kennedy, MSN, ACNP-BC, AOCNP®, and Karen Hande, DNP, ANP-BC, CNE, FAANP, ANEF

As oncology nurse practitioner (NP) fellowships expand across the United States, institutions note improved transitions to specialty practice and better patient outcomes. These fellowships may further serve as a strategy to address provider shortages, as well as improve retention and prevent burnout. This article provides key lessons learned from a three-year oncology NP fellowship program at an academic comprehensive cancer center.

AT A GLANCE

- Demonstrating the financial benefits of an NP fellowship ensures allocated resources and support.
- Collaboration among advanced practice leadership, fellowship directors, and coordinators streamlines communication and directs placement of the fellow's clinical rotations.
- Reflection and adaptability of the NP fellowship program may foster improvements to incorporate in subsequent years.



cross the United States, the need for complex cancer treatments and providers to care for a growing oncology population is rising (Yang et al., 2014). As patients live longer and aging oncology specialists retire, the demand for oncology specialty providers within inpatient and outpatient settings has also increased (Jackson & Hande, 2021). Nurse practitioners (NPs) are essential to ensure an adequate supply of oncology providers. However, specialty training is needed for clinical competency and skill in cancer care following completion of graduate programs and board certification (Hande et al., 2022). Given the vast number of specialties within a cancer care center, NP fellowships provide one year of didactic and clinical training to support the transition from generalist to specialist as an oncology provider (Kramer & Valente, 2020). This article reviews lessons learned from leaders of an oncology NP fellowship within an academic comprehensive cancer center. Reflections from the program's three cohorts may inform improvement strategies and provide guidance for other specialty NP fellowships.

Vanderbilt-Ingram Cancer Center NP Fellowship Program

The division of hematology-oncology at the Vanderbilt-Ingram Cancer Center (VICC) in Nashville, Tennessee, supported initiation of an NP fellowship program in 2018. Conception and development of this program was

IMPLEMENTING AN APP FELLOWSHIP PROGRAM

CJON 2023, 27(1), 13-16.



Make the case



Receive institutional support



Identify fellowship coordinator



Collaborate with APP leadership



Coordinate rotations and support



Transition to practice



ASCO CERTIFICATION PROGRAMS

- American Society of Clinical Oncology (ASCO)
- Association of Physician Assistants in Oncology (APAO)
- Advanced Practitioner Society for Hematology and Oncology (APSHO)
- Hematology/Oncology Pharmacy Association (HOPA)
- Created a series of certificate programs for APPs

**ASCO APP
ONCOLOGY
CERTIFICATE
PROGRAMS**

Basics 101

- Supportive Care I and II
- Common Anti-Cancer Therapies
- Chemotherapy Administration
- Pharmacology

Basics 102

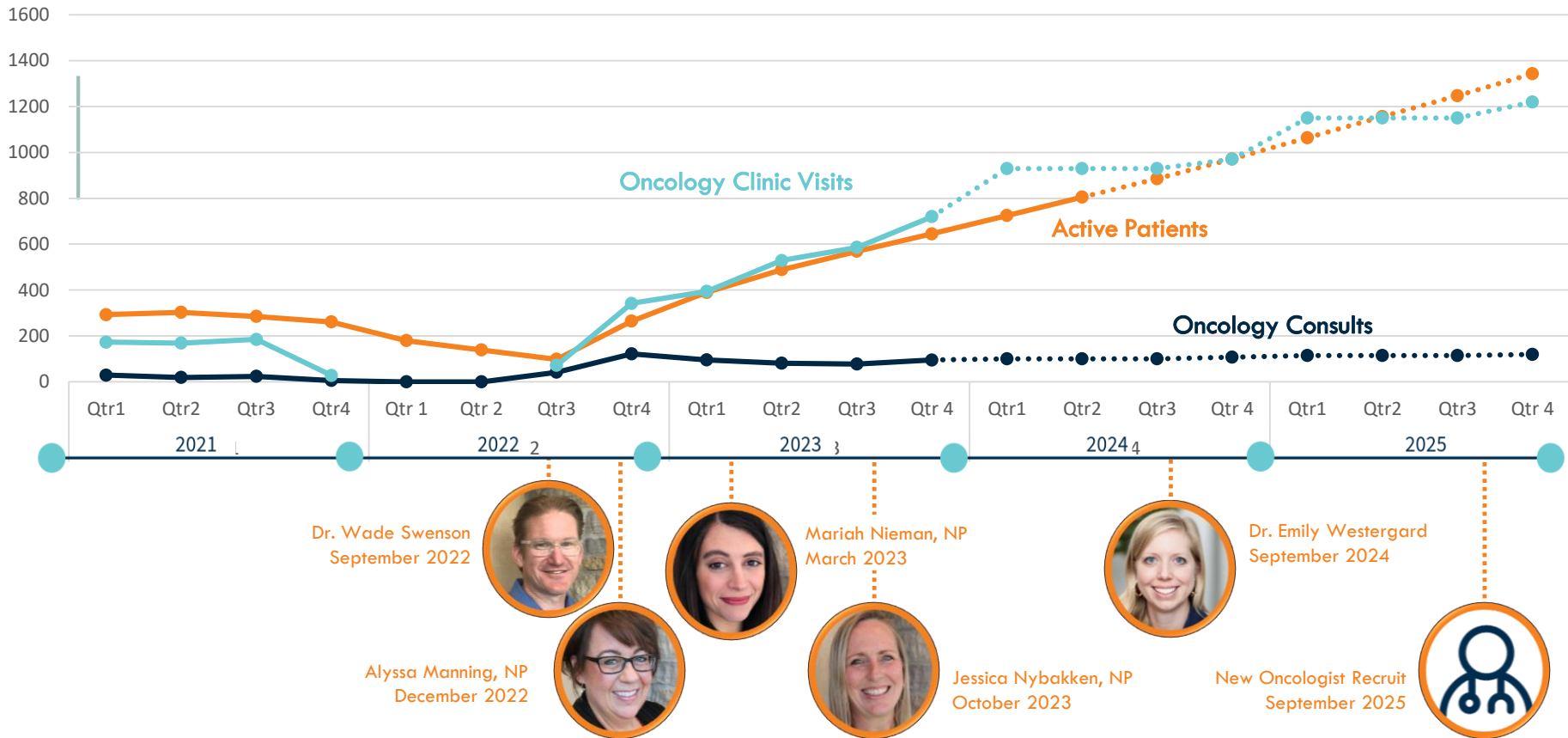
- Pain Management
- Radiation Oncology Primer
- Survivorship
- Screening and Prevention

Advanced 201

- Immuno-Oncology
- Cancer Genetics
- Tumor Genomics
- Team-Based Care

THE LAKEWOOD EXPERIENCE





LAKEWOOD ONCOLOGY OVER TIME

LAKWOOD NURSE PRACTITIONER EDUCATION

12 month plan

Start with common cancers

Start with common therapies

3, 6, 9, 12 month plan

RURAL APP ONCOLOGY FELLOWSHIP

Seeking funding

Considering
developing a
rural fellowship



Executive **Summary** 2023

→ LAKEWOOD HEALTH SYSTEM & RURALCANCER.ORG

The Proposal:

Lakewood Health System, in partnership with RuralCancer.org, seeks financial and collaborative support to establish the nation's first Rural Cancer Institute intended to improve access to care and quality of care for rural patients with cancer.

QUESTIONS?
