

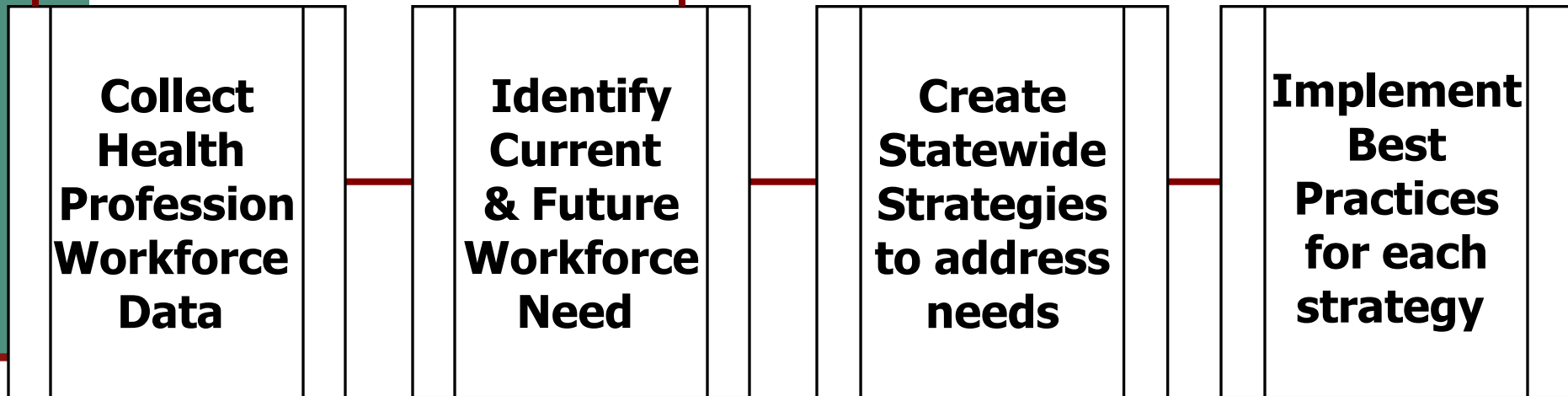
A Critical "Match"

Health Professionals to Meet Nebraska's Future Needs

University of Nebraska Board of Regents
May 16th, 2008

Keith J. Mueller, Ph.D.
Associate Dean for Academic Affairs
College of Public Health
University of Nebraska Medical Center

Workforce Assessment & Analysis



Workforce Planning & Development

Phase I Estimate Current Supply of Health Professions Nebraska 2007-2008

- Physicians
- Non Physician Clinicians
- Dentists, Dental Hygienists
- Pharmacists
- Mental Health Practitioners
- Allied Health Professionals

Data Sources

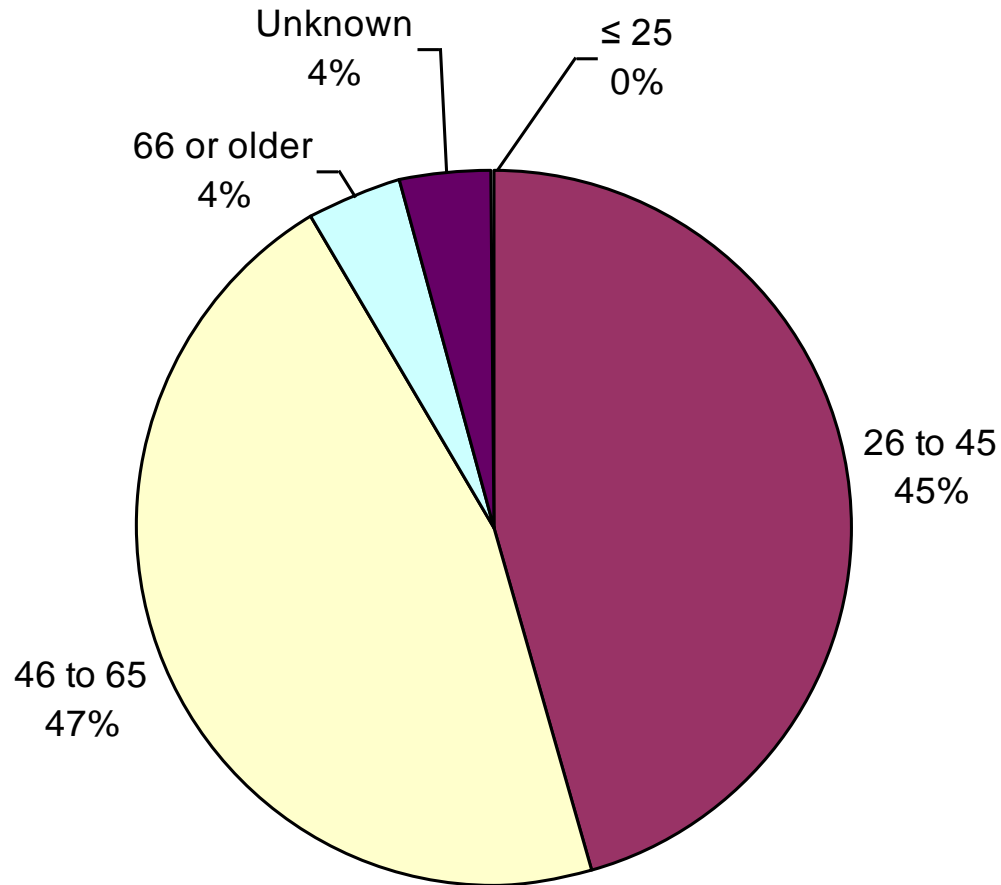
- UNMC Health Professions Tracking Center
- NE Center for Nursing
- NE DHHS, Dept. of Regulation & Licensure
- NE DHHS, Division of Public Health

Total Number of Actively Practicing Physicians, Nebraska 2007

Allopathic Physician (MD)	3402
Osteopathic Physician (DO)	123
Residents and House Officers	531
Total Physicians	4056

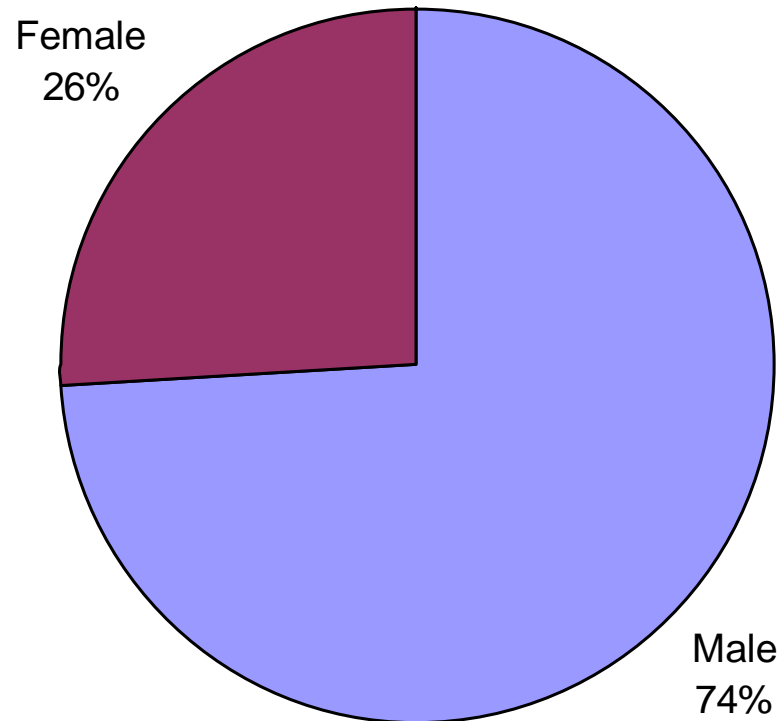
Source: UNMC Health Professions Tracking Center, December 2007

Age of Actively Practicing Physicians, Nebraska 2007 (n = 4,056)



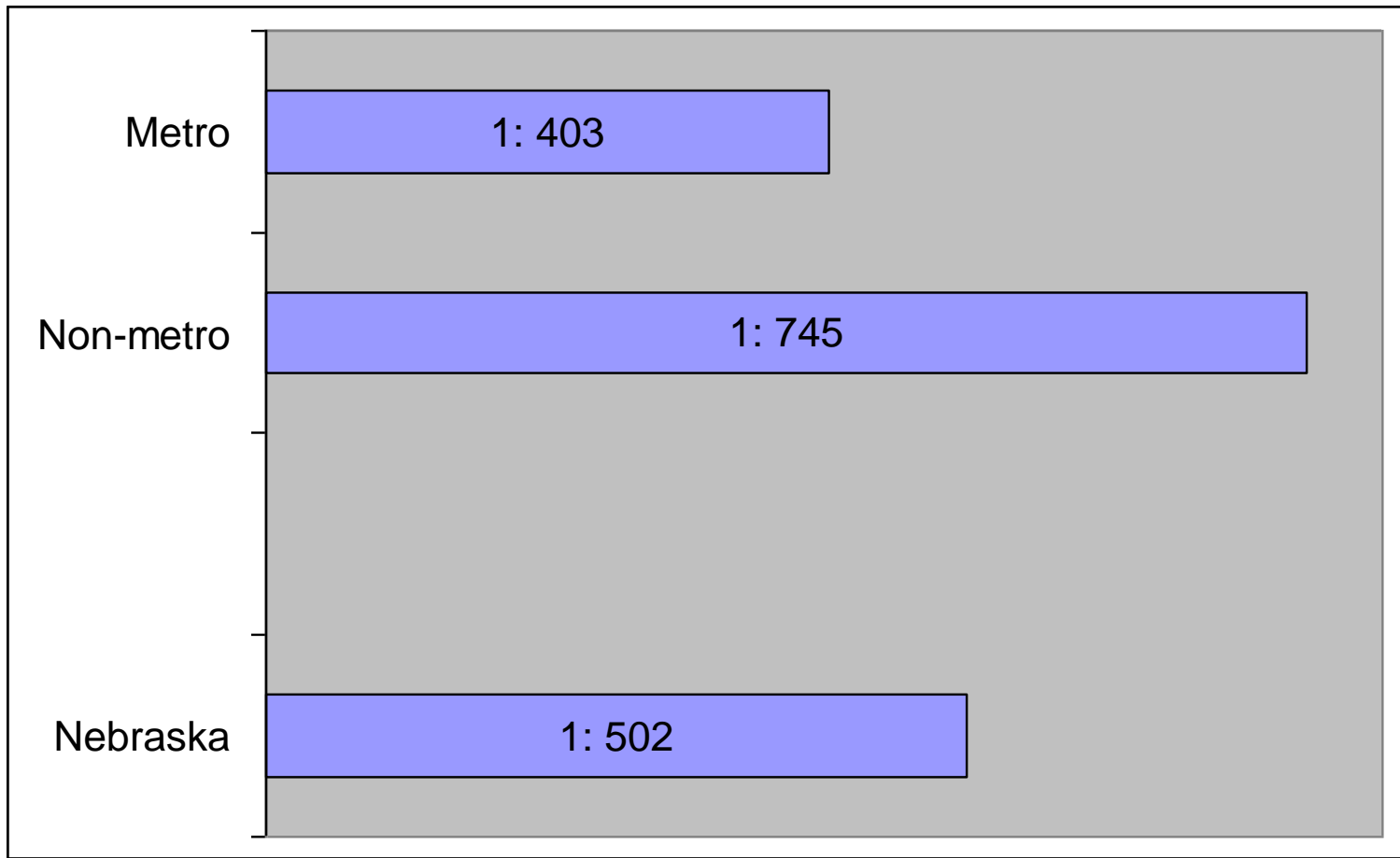
Source: UNMC Health Professions Tracking Center, December 2007

Gender of Actively Practicing Physicians, Nebraska 2007
(n = 4,056)



Source: UNMC Health Professions Tracking Center, December 2007

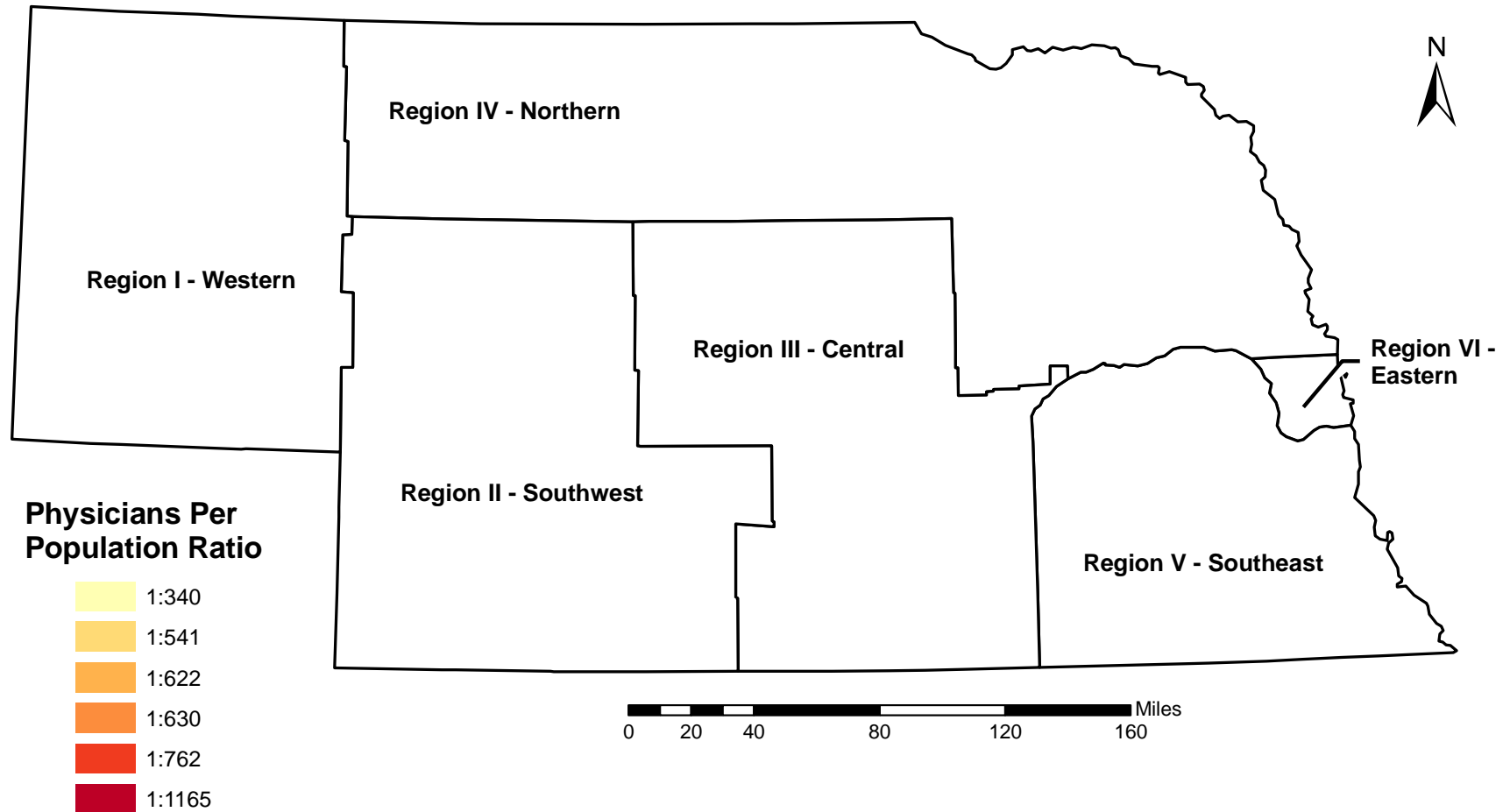
Physician-to-Population Ratio, Nebraska 2007



Source: UNMC Health Professions Tracking Center physician data; U.S. Census Bureau 2006 Census data for NE

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 physician data

Physician-to-Population Ratio by Health Planning Region, Nebraska 2007

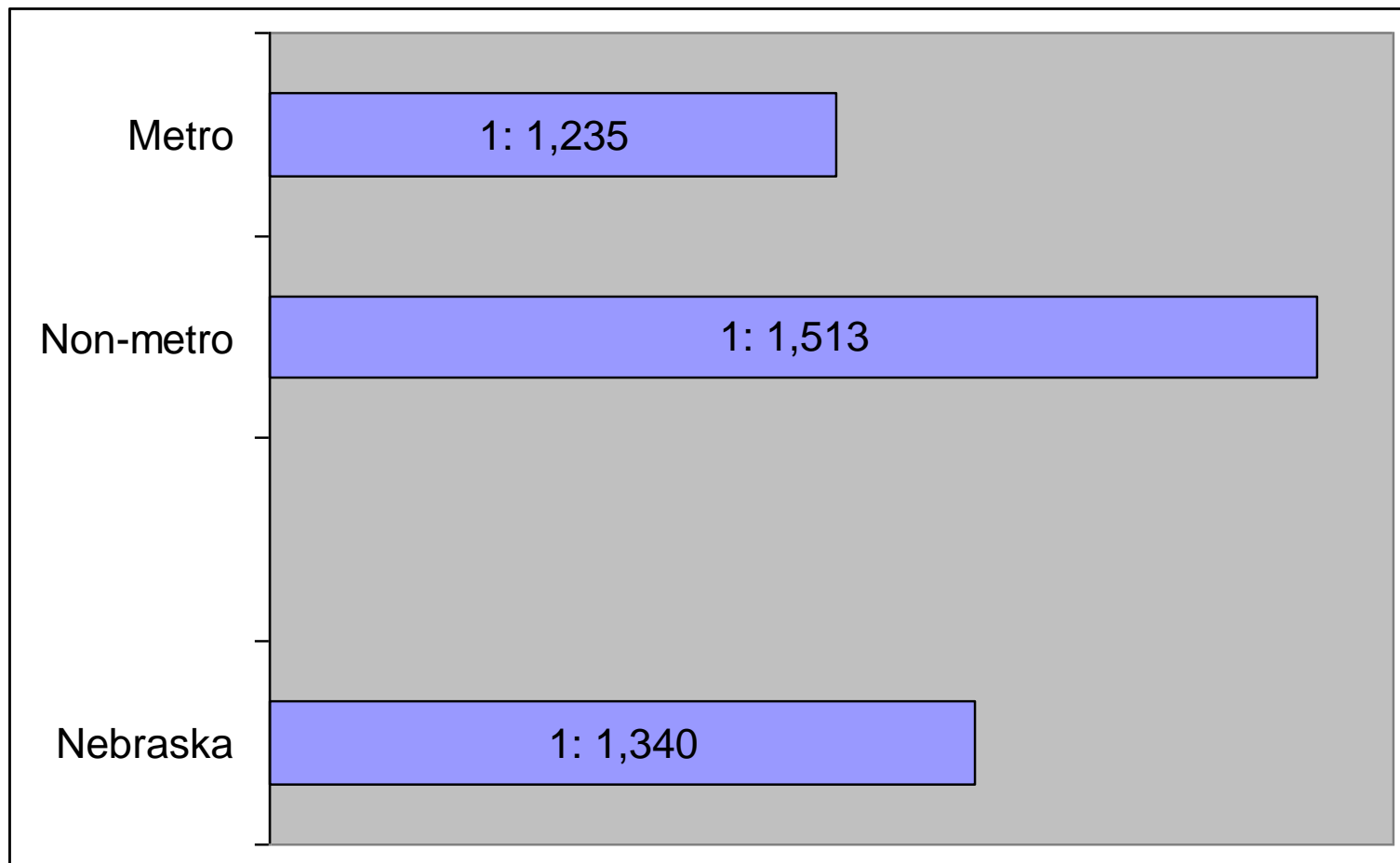


Data: Health Professions Tracking Center, UNMC, 2007.

Cartography: Department of Health Services Research and Administration, UNMC, 2008.

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 physician data

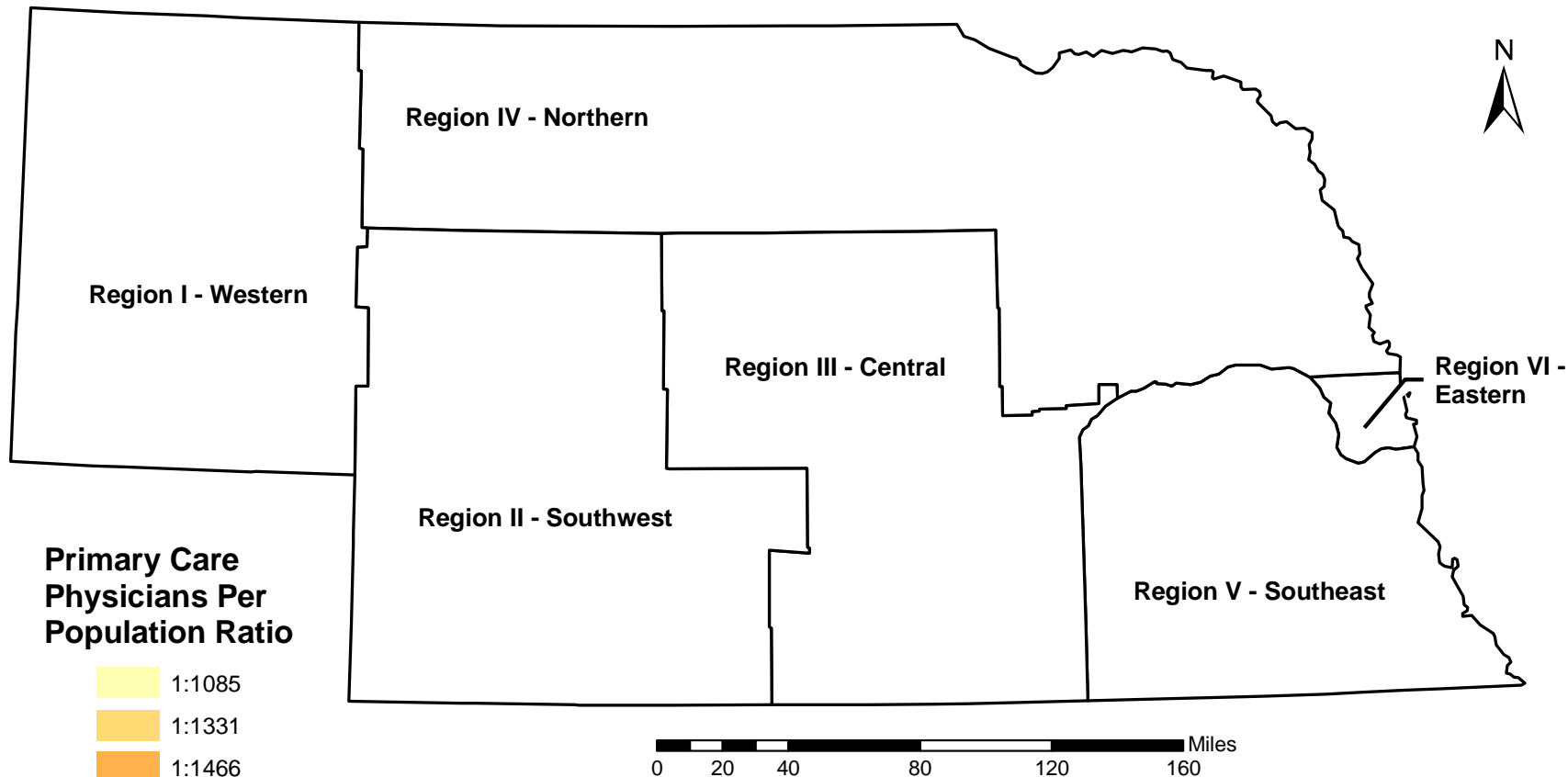
Primary Care Physician-to-Population Ratio, Nebraska 2007



Source: UNMC Health Professions Tracking Center physician data; U.S. Census Bureau 2006 Census data for NE

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 physician data

Primary Care Physician-to-Population Ratio by Health Planning Region, Nebraska 2007



Data: Health Professions Tracking Center, UNMC, 2007.

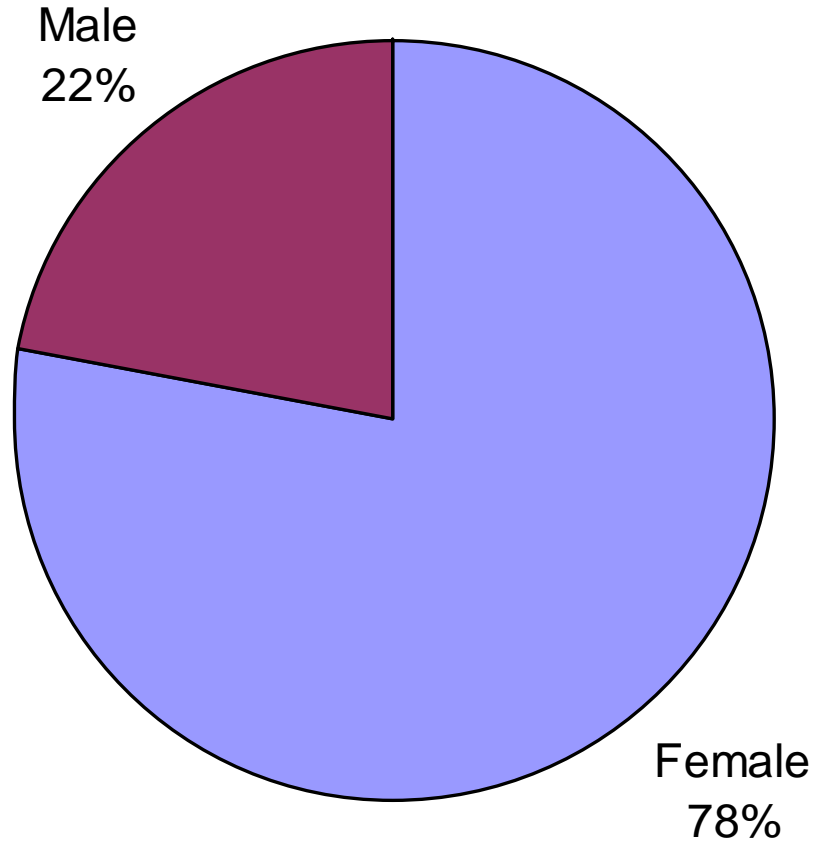
Cartography: Department of Health Services Research and Administration, UNMC, 2008.

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 physician data

Number of Active Primary Care Non-Physician Clinicians, Nebraska 2007

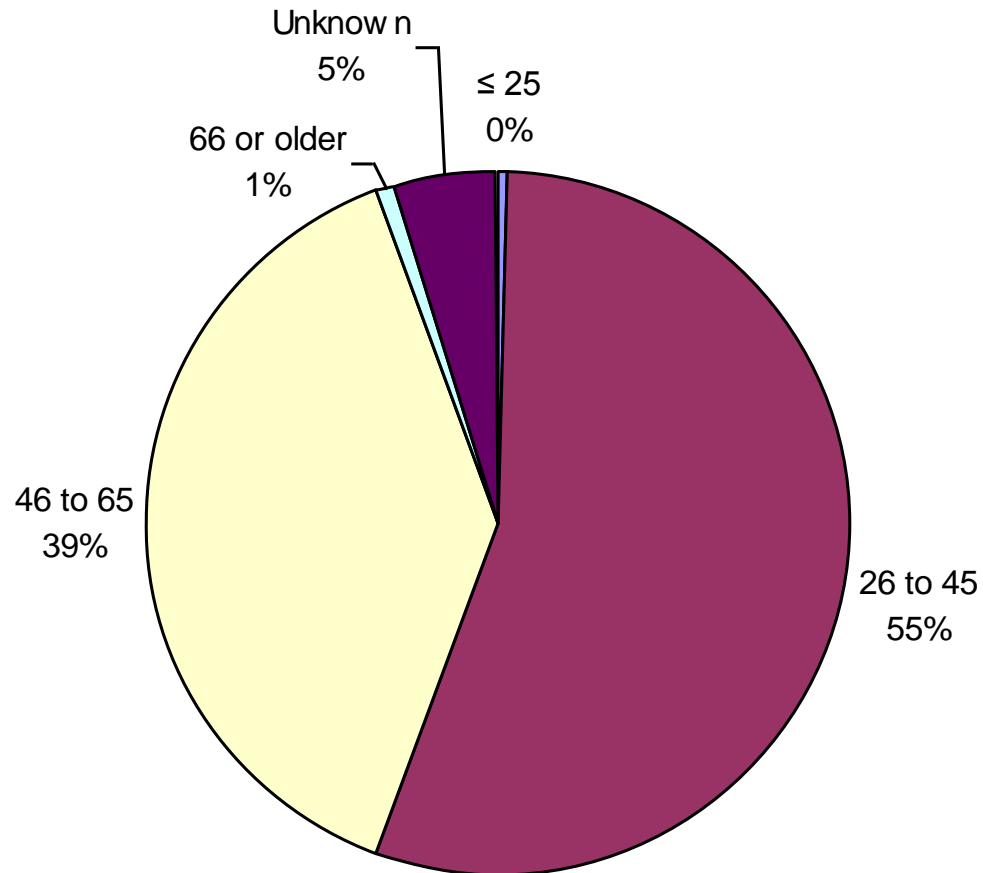
Physician Assistants	560
Nurse Practitioners	517
Certified Nurse Midwives	22
Total	1,099

Gender of Primary Care Non-Physician Clinicians (n = 1,077)



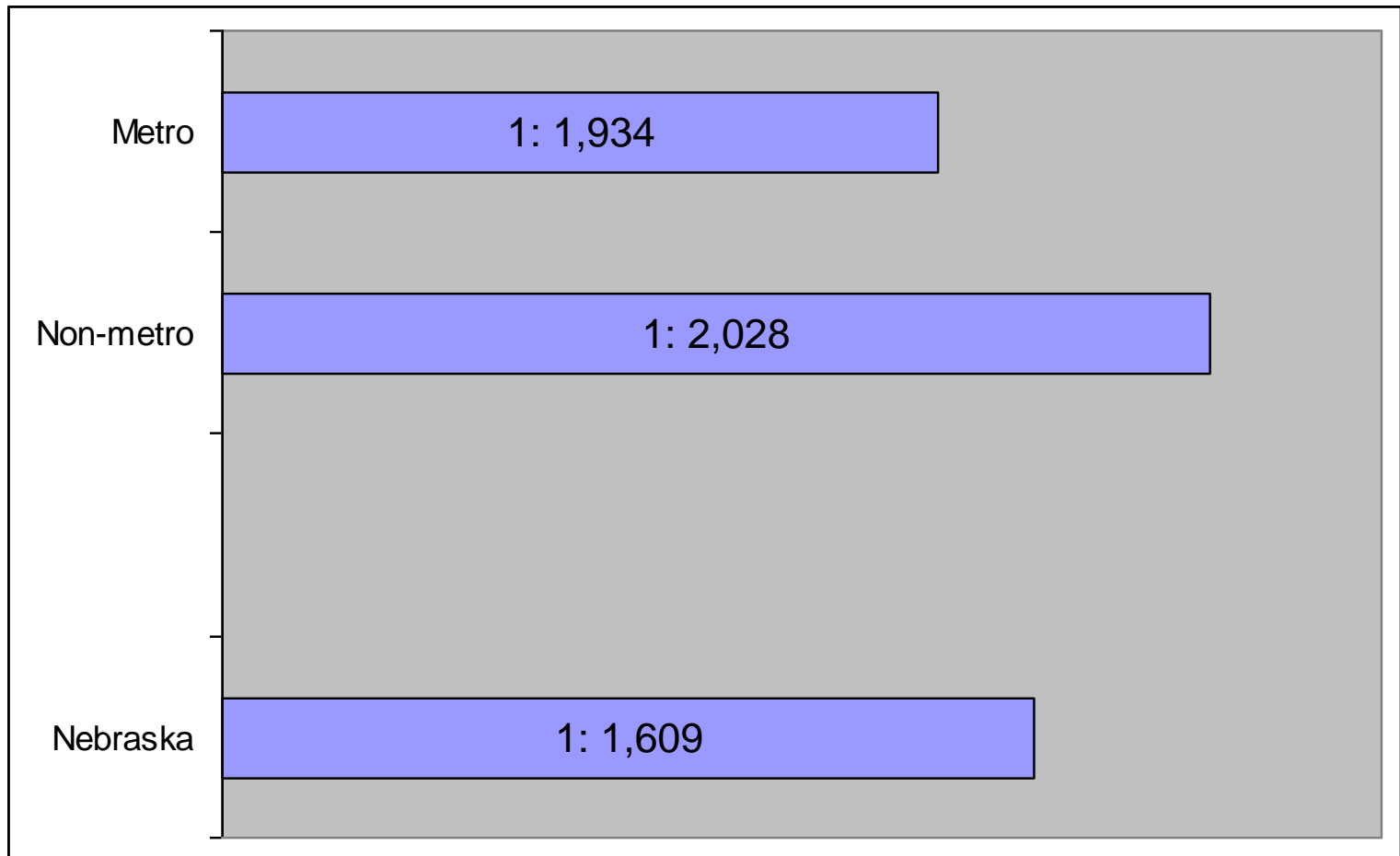
Source: UNMC Health Professions Tracking Center, December 2007

Age of Primary Care Non-Physician Clinicians (n = 1,077)



Source: UNMC Health Professions Tracking Center, December 2007

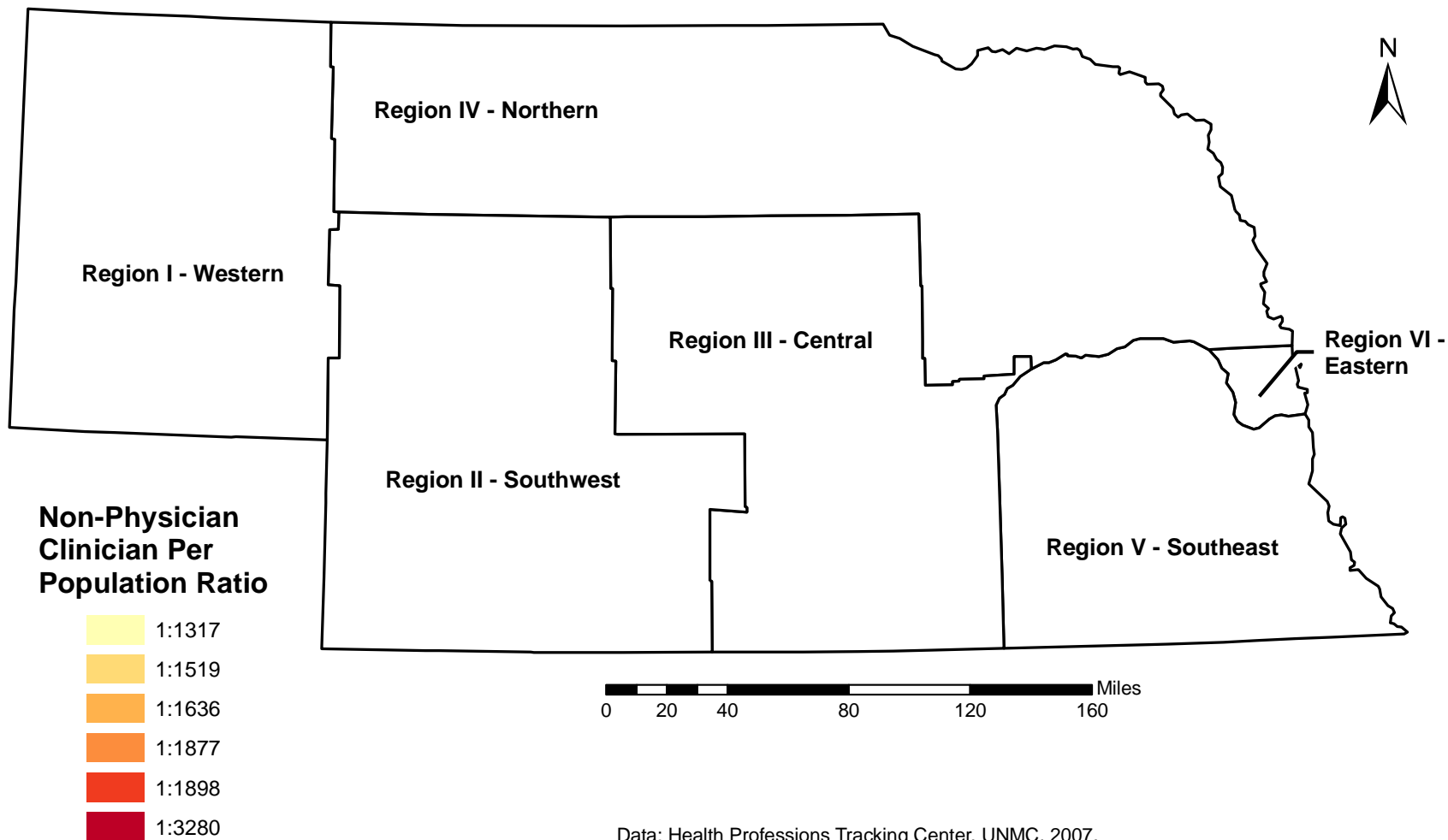
Primary Care Non-Physician Clinician-to-Population Ratio, Nebraska 2007



Source: UNMC Health Professions Tracking Center data; U.S. Census Bureau 2006 Census data for NE

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 HPTC data

Primary Care Non-Physician Clinician-to-Population Ratio by Health Planning Region, Nebraska 2007

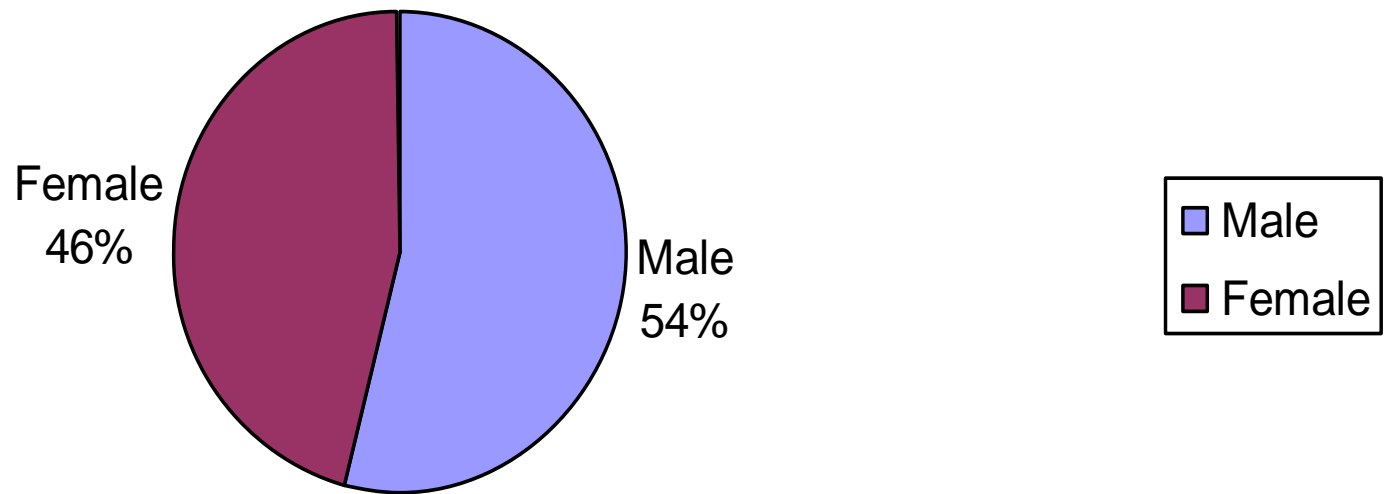


Data: Health Professions Tracking Center, UNMC, 2007.

Cartography: Department of Health Services Research and Administration, UNMC, 2008.

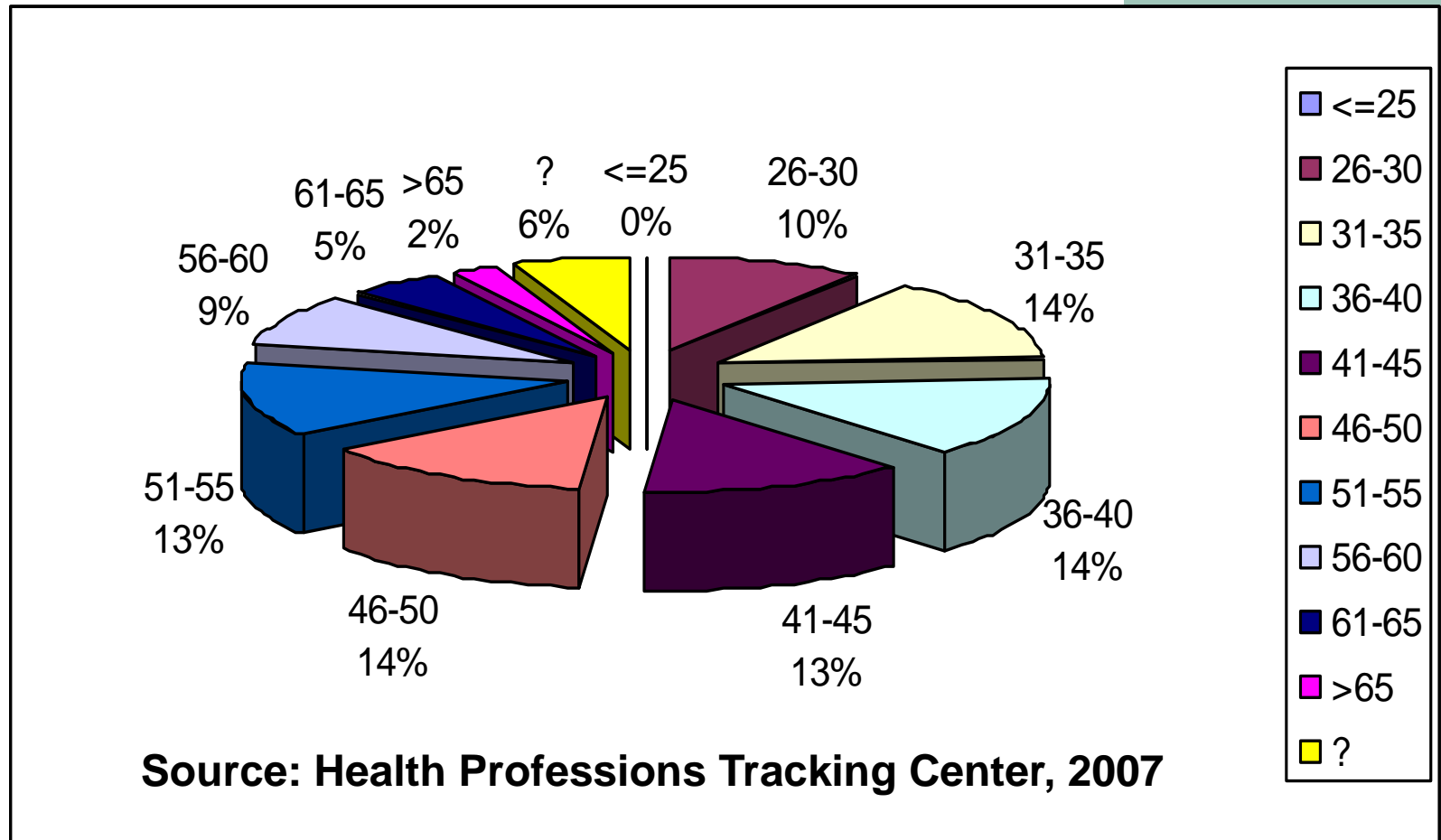
Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 HPTC data

Gender Distribution of Primary Care Providers



Source: Health Professions Tracking Center, 2007

Age Distribution of Primary Care Providers



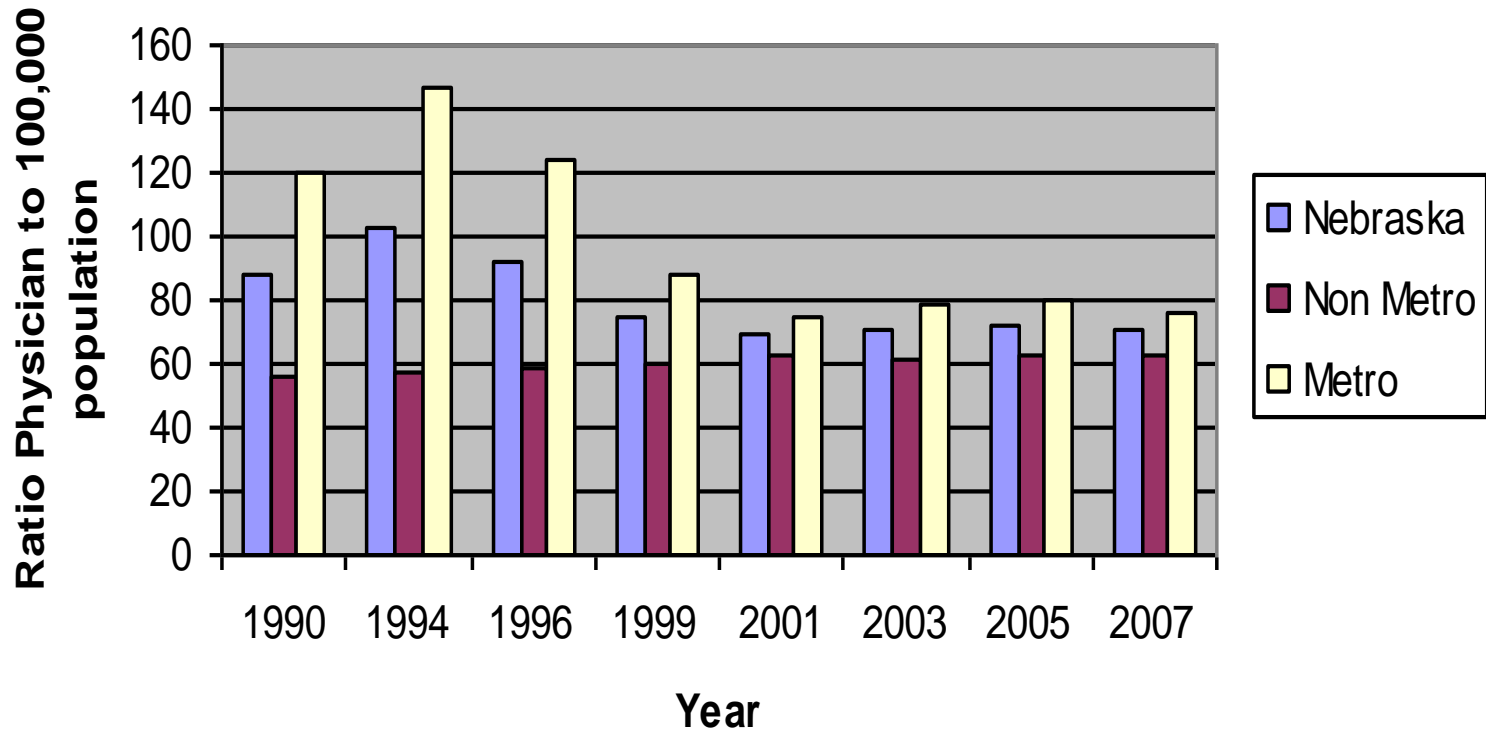
Number of Primary Care Providers by Profession

	Count	Percentage
DO	60	3%
MD*	1,245	61%
Resident	237	12%
Nurse Practitioner	229	11%
Physician Assistant	286	14%
Total	2,057	100%

Source: Health Professions Tracking Center, 2007

*Specialties

Primary Care Physician to Population ratio



Source: Nebraska State Office of Rural Health

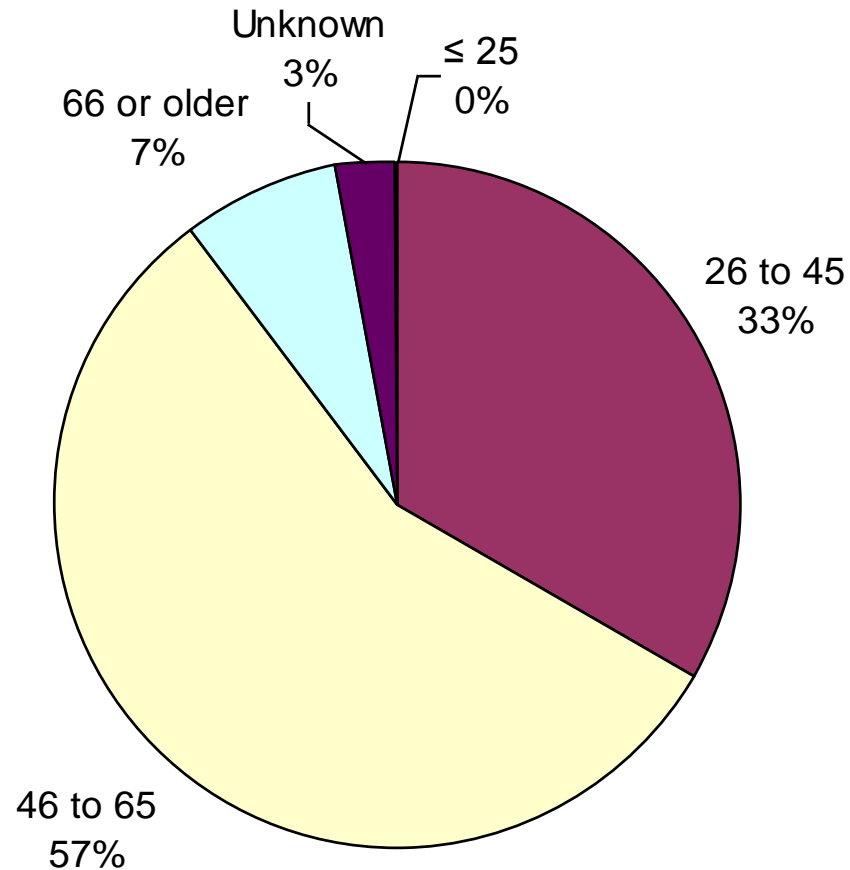
Number of Active Dental Professionals, Nebraska 2007

Dentist ⁽¹⁾	1,011
Dental Hygienist ⁽²⁾	1,027
Total	2,038

(1) All professionals tracked by the UNMC HPTC possess an active license and are actively practicing.

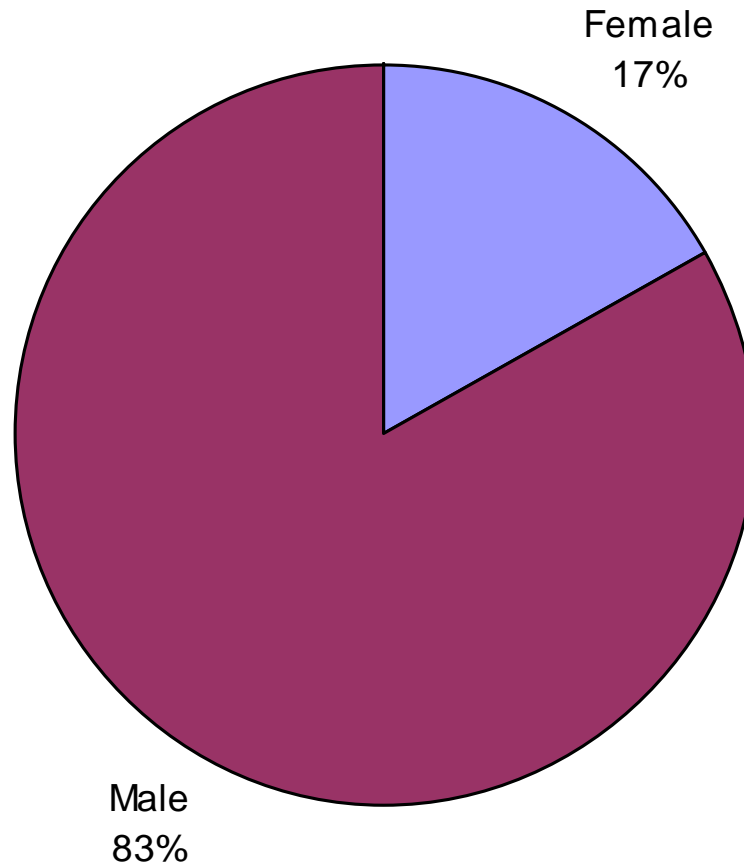
(2) All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Age of Actively Practicing Dentists, Nebraska 2007 (n = 1,011)



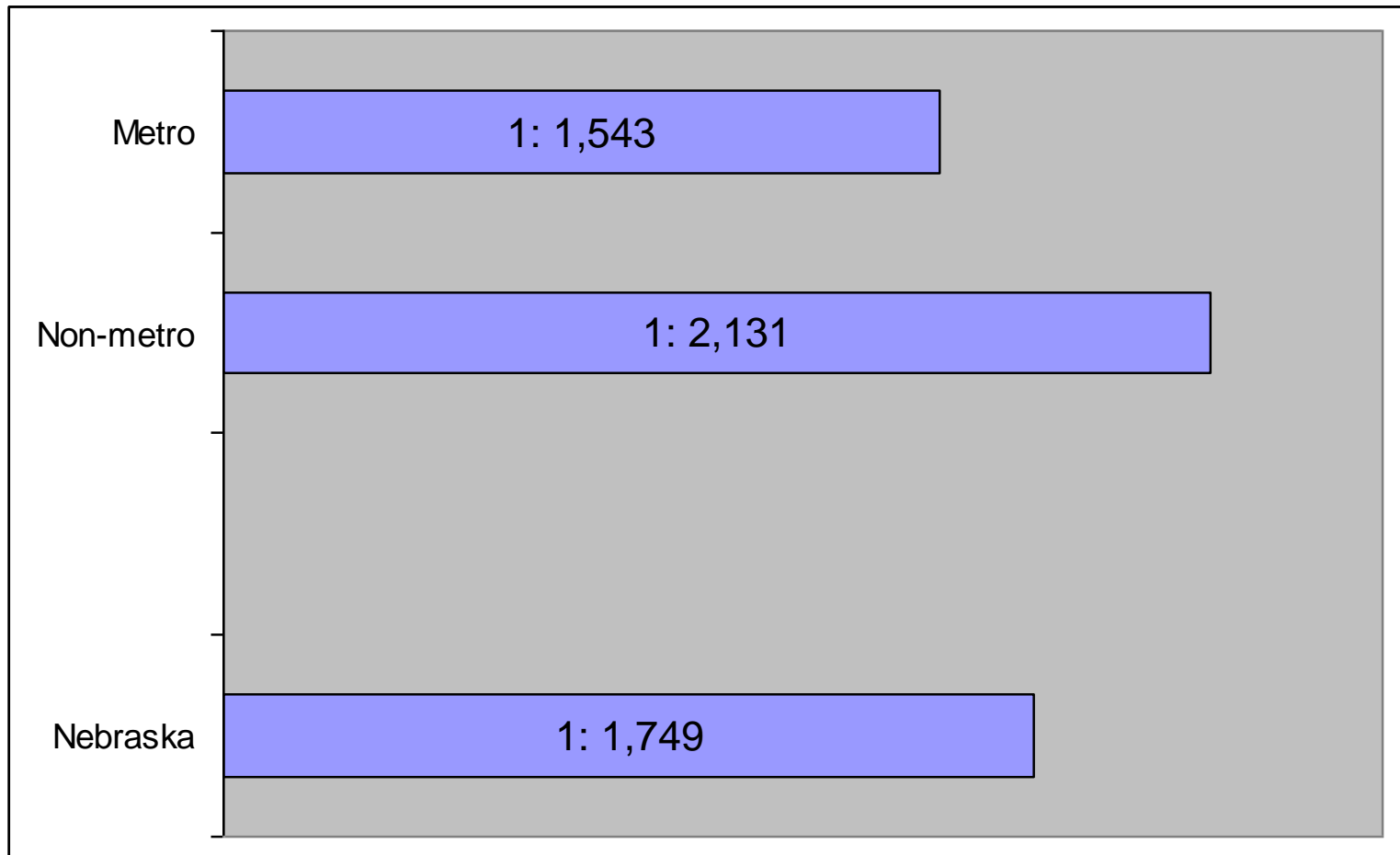
Source: UNMC Health Professions Tracking Center, December 2007

Gender of Actively Practicing Dentists, Nebraska 2007
(n = 1,011)



Source: UNMC Health Professions Tracking Center, December 2007

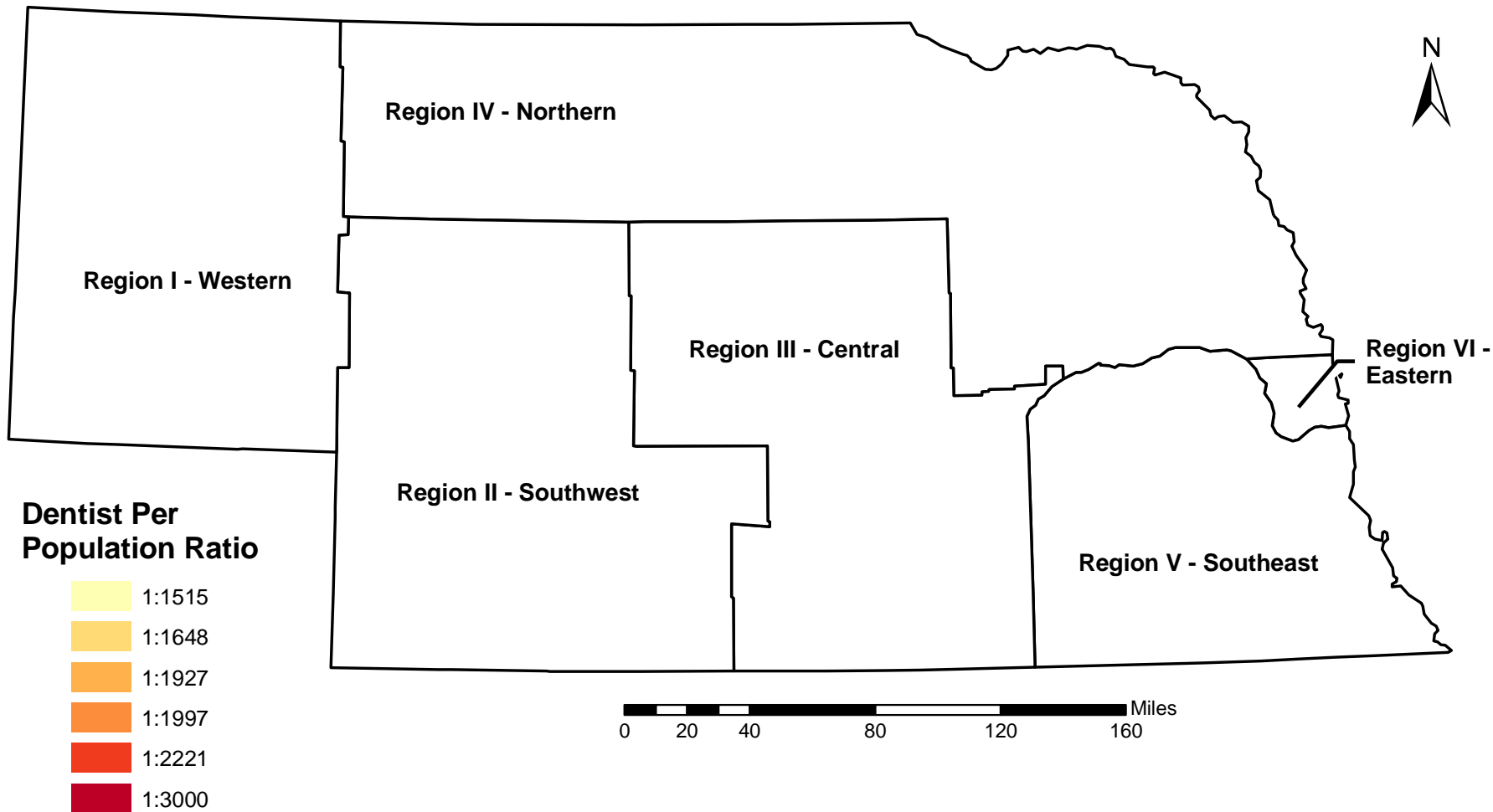
Dentist-to-Population Ratio, Nebraska 2007



Source: UNMC Health Professions Tracking Center data; U.S. Census Bureau 2006 Census data for NE

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 data

Dentist-to-Population Ratio by Health Planning Region, Nebraska 2007

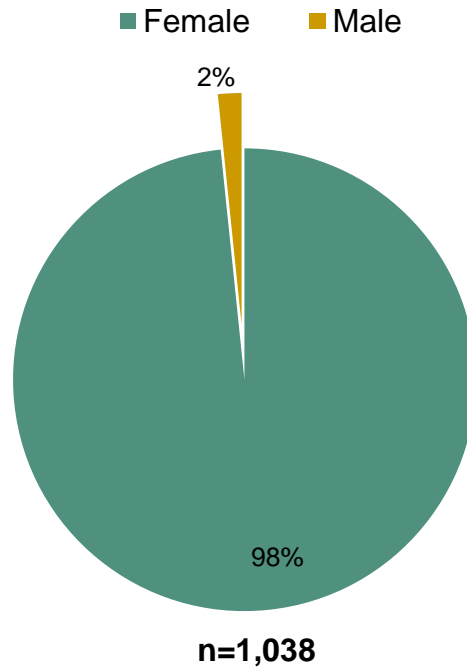


Data: Health Professions Tracking Center, UNMC, 2007.

Cartography: Department of Health Services Research and Administration, UNMC, 2008.

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 HPTC data

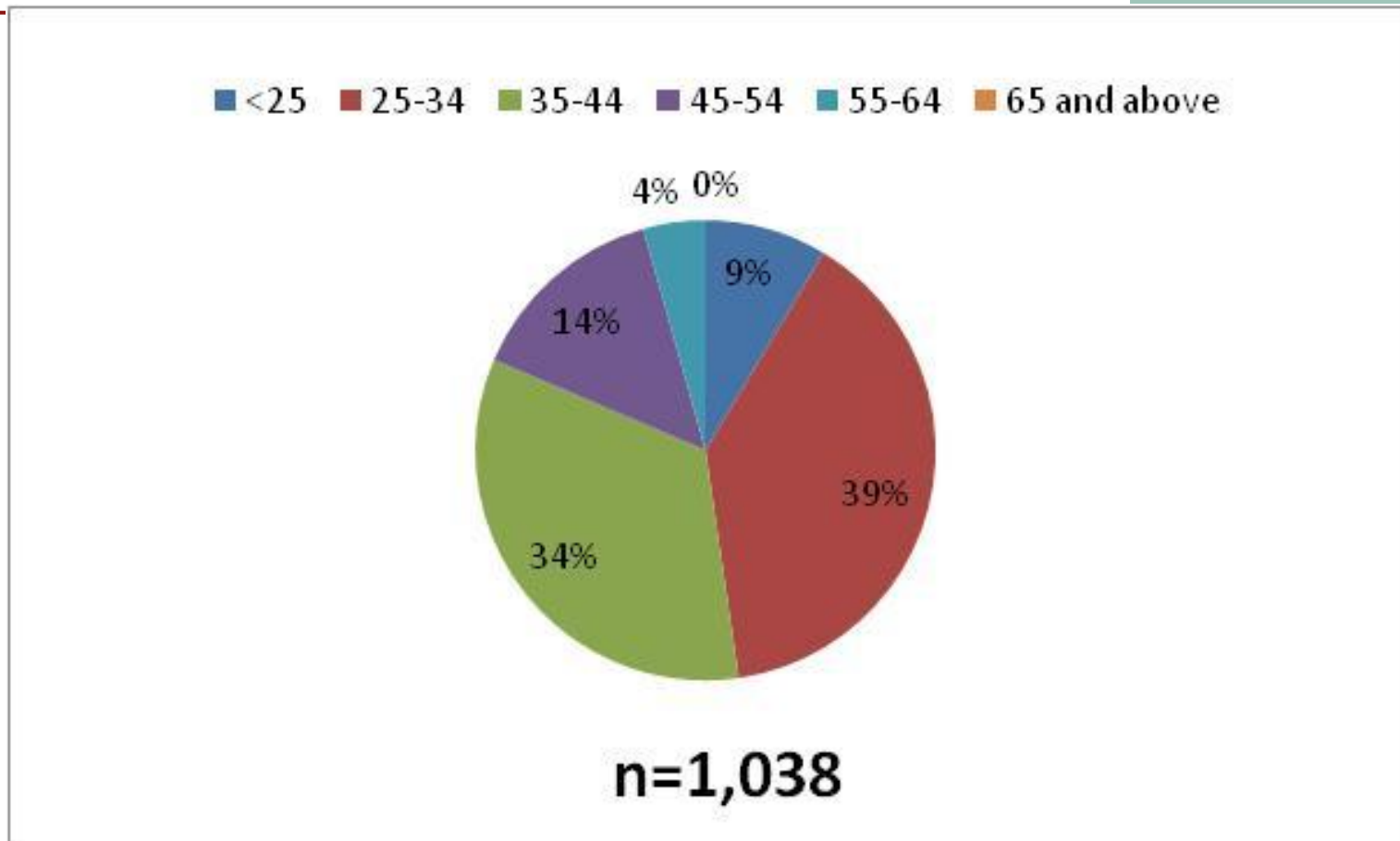
Gender Distribution of Dental Hygienists, Nebraska 2008



Source: NE DHHS, Dept of Regulation and Licensure, February 29, 2008

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

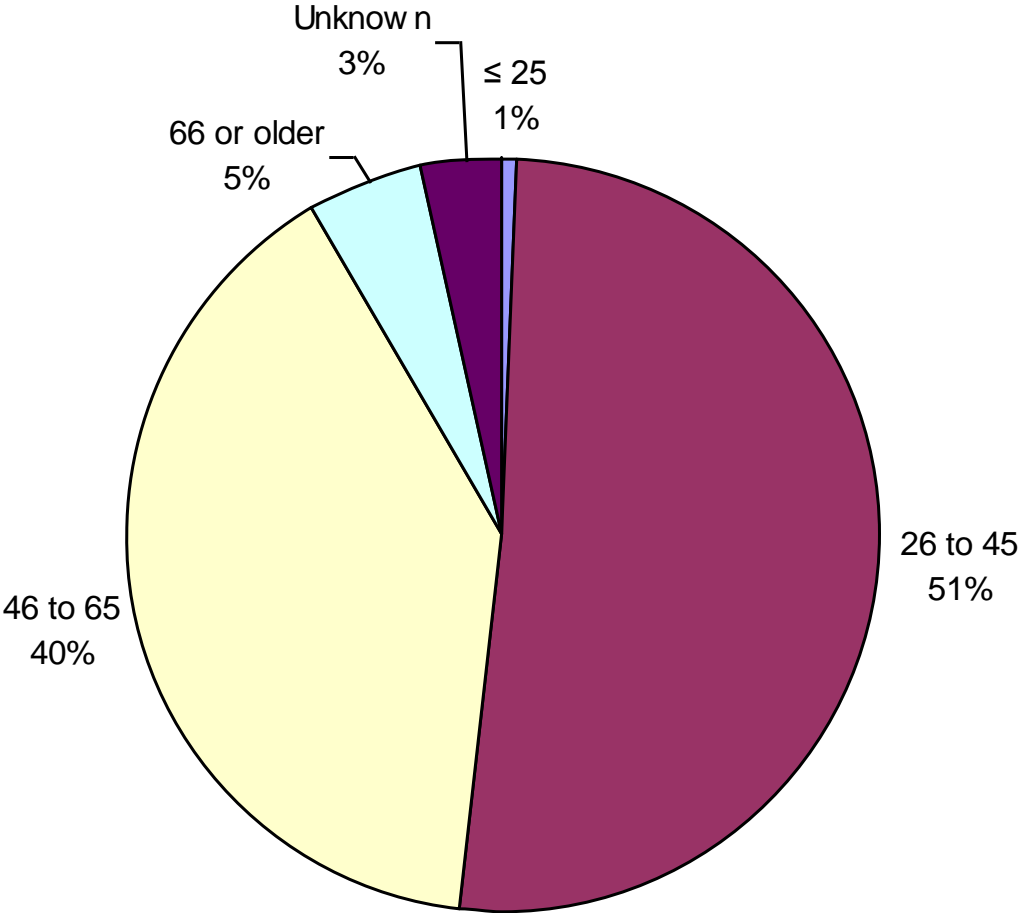
Age Distribution of Dental Hygienists, Nebraska 2008



Source: NE DHHS, Dept of Regulation and Licensure, February 29, 2008

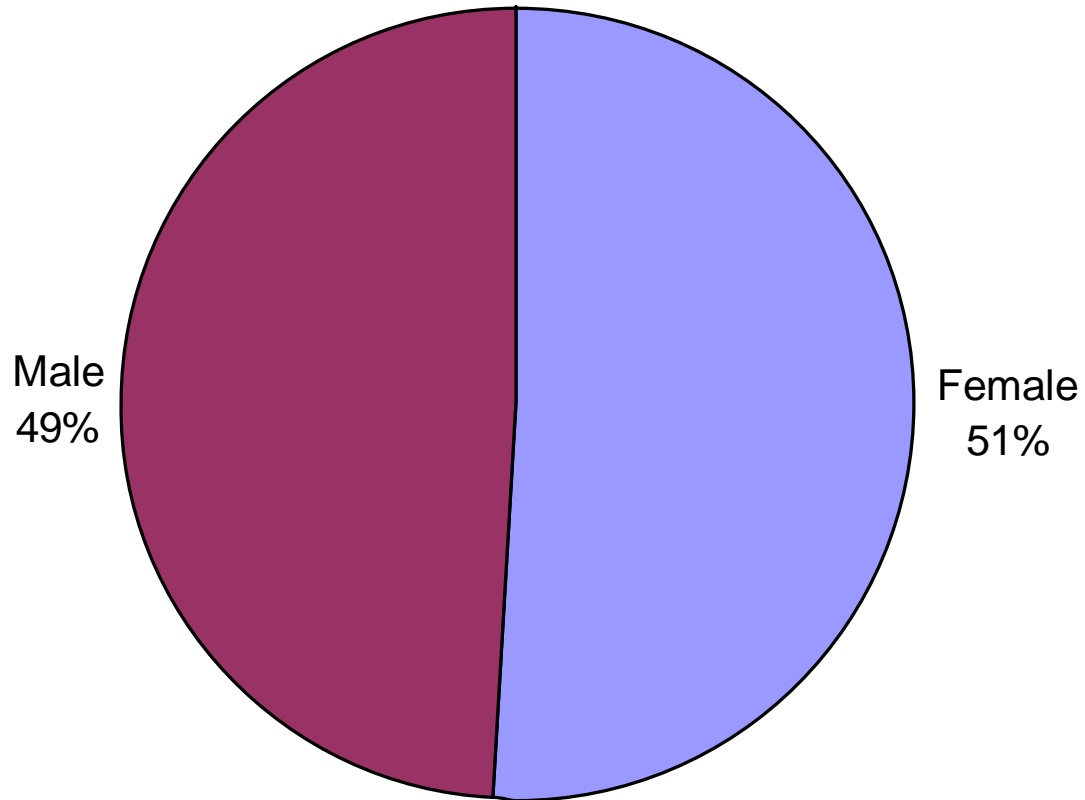
Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Age of Actively Practicing Registered Pharmacists, Nebraska 2007 (n = 1,682)



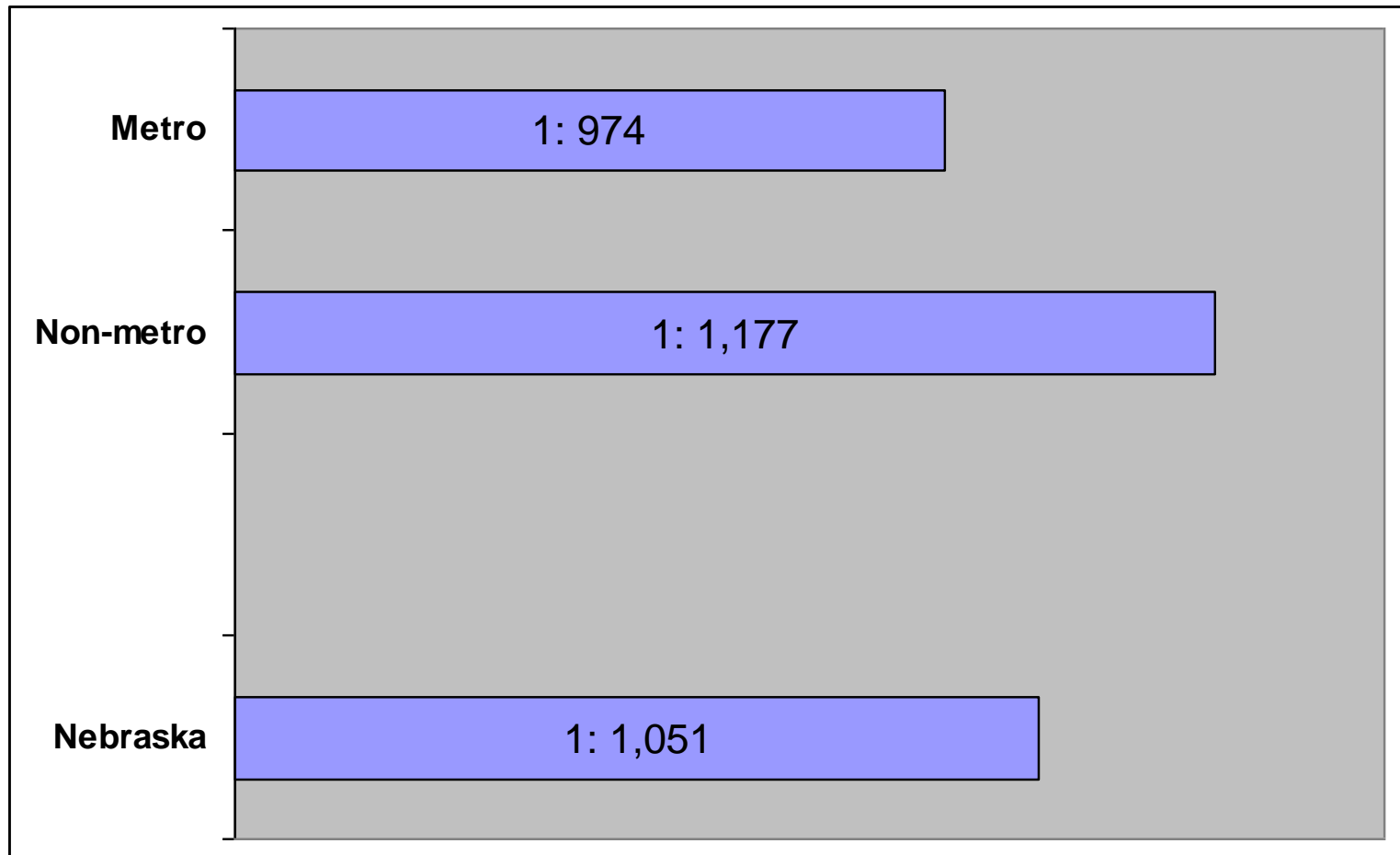
Source: UNMC Health Professions Tracking Center, December 2007

**Gender of Actively Practicing Registered Pharmacists,
Nebraska 2007 (n = 1,682)**



Source: UNMC Health Professions Tracking Center, December 2007

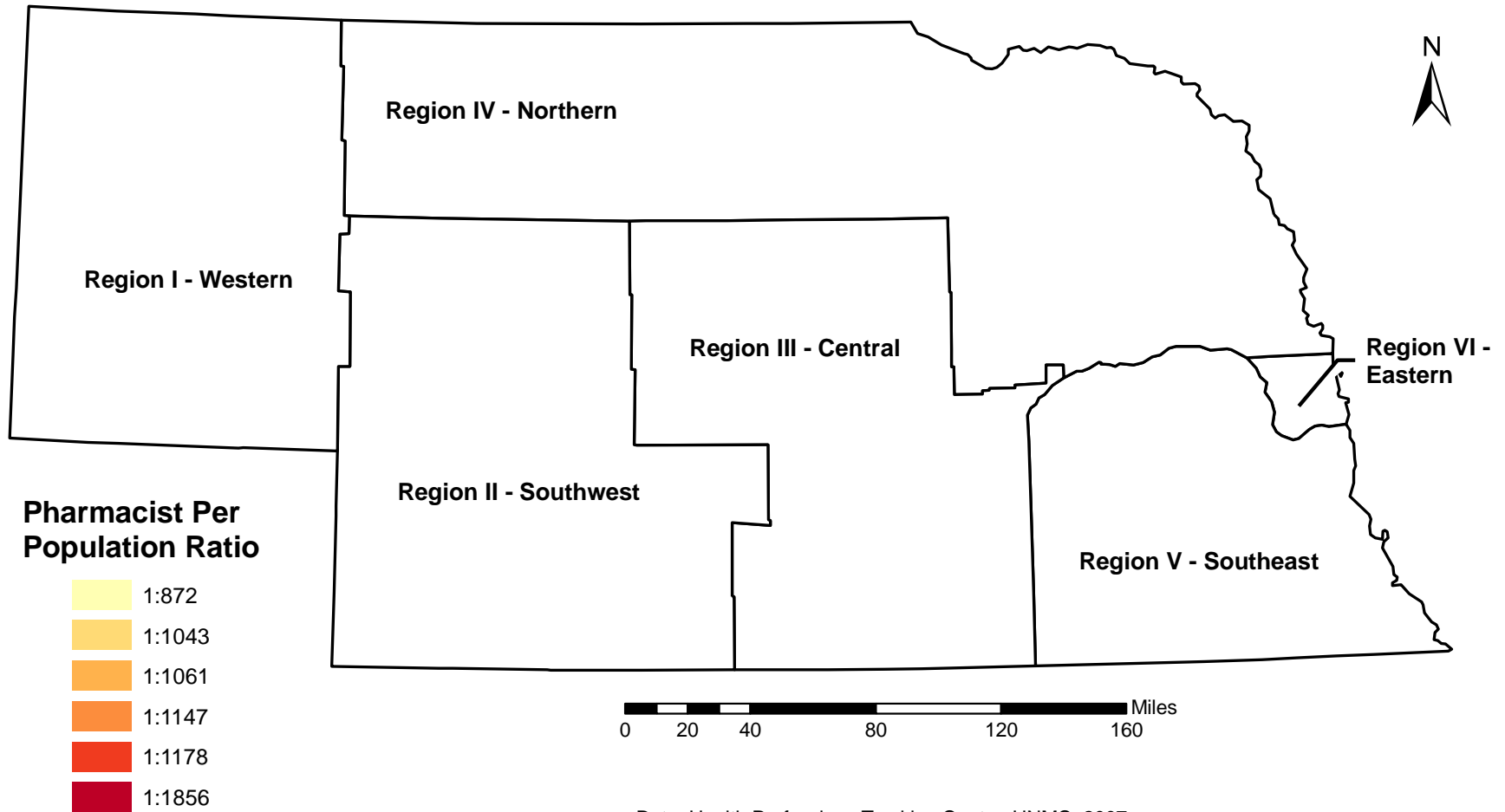
Pharmacist-to-Population Ratio, Nebraska 2007



Source: UNMC Health Professions Tracking Center data; U.S. Census Bureau 2006 Census data for NE

Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 data

Pharmacist-to-Population Ratio by Health Planning Region, Nebraska 2007



Data: Health Professions Tracking Center, UNMC, 2007.

Cartography: Department of Health Services Research and Administration, UNMC, 2008.

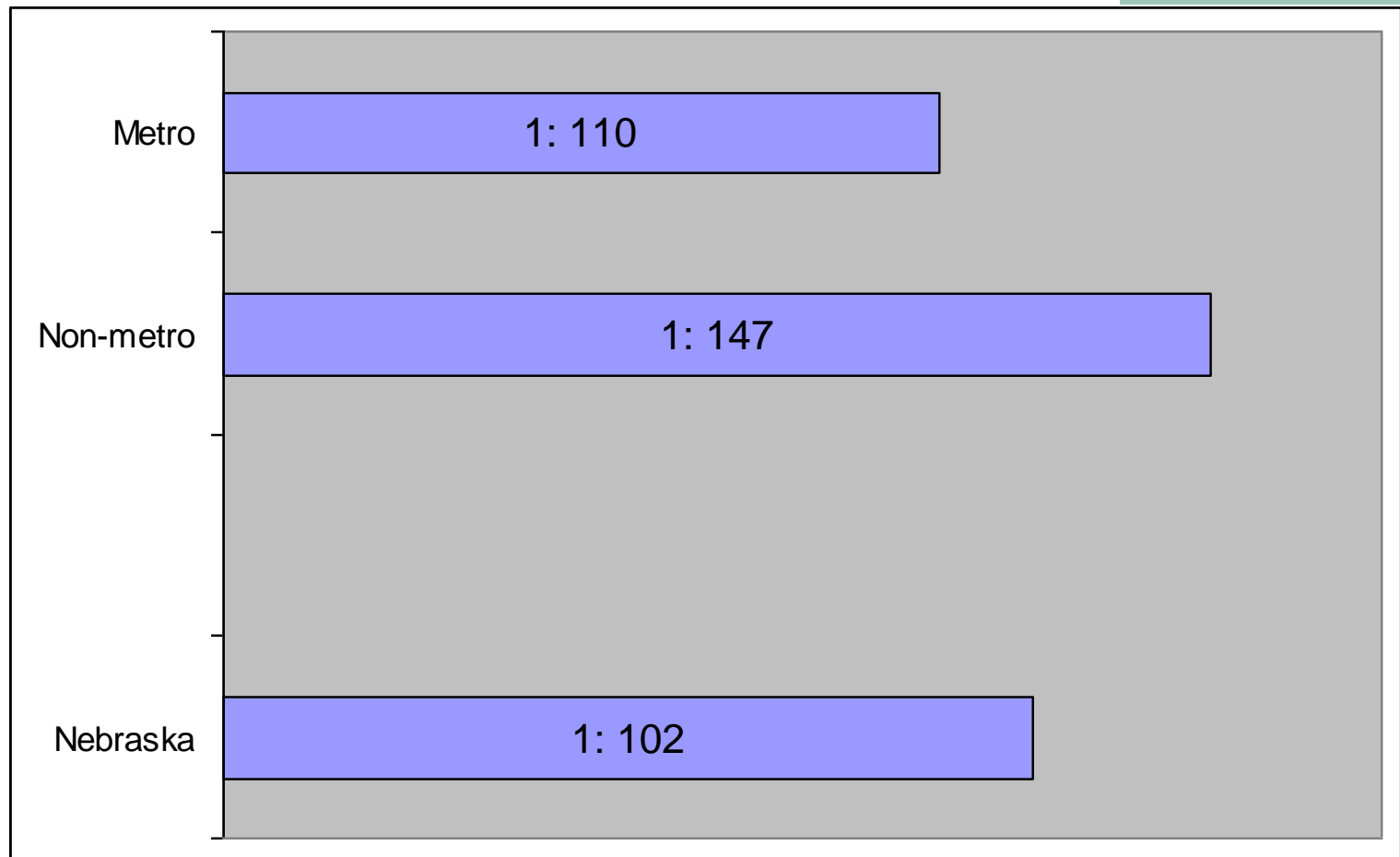
Note: This ratio the numerator used 2006 Census population estimates and the denominator used 2007 HPTC data

Number of Actively Practicing Nurses, Nebraska 2005-2006

Registered Nurse	17,422
Licensed Practical Nurse	5,944
Total	23,366

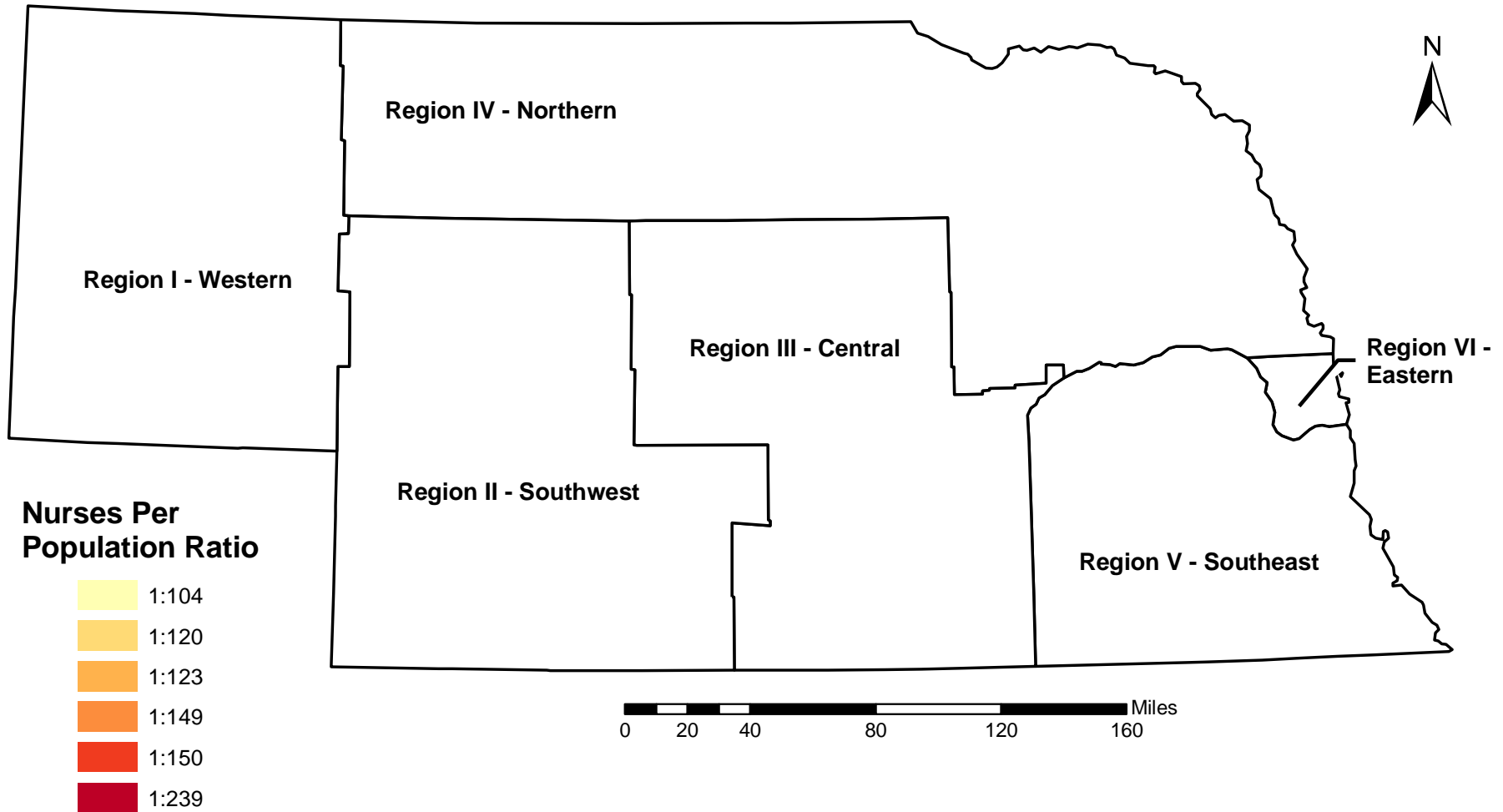
Source: Nebraska Center for Nursing, 2007 Annual Report for RN and 2006 Annual Report for LPN.

RN-to-Population Ratio, Nebraska 2006



Source: NE Center for Nursing, RN Survey Report 2007; U.S. Census Bureau 2006 Census data for NE

RN-to-Population Ratio by Health Planning Region, Nebraska 2006



Data: NE Center for Nursing, 2007

Cartography: Department of Health Services Research and Administration, UNMC, 2008.

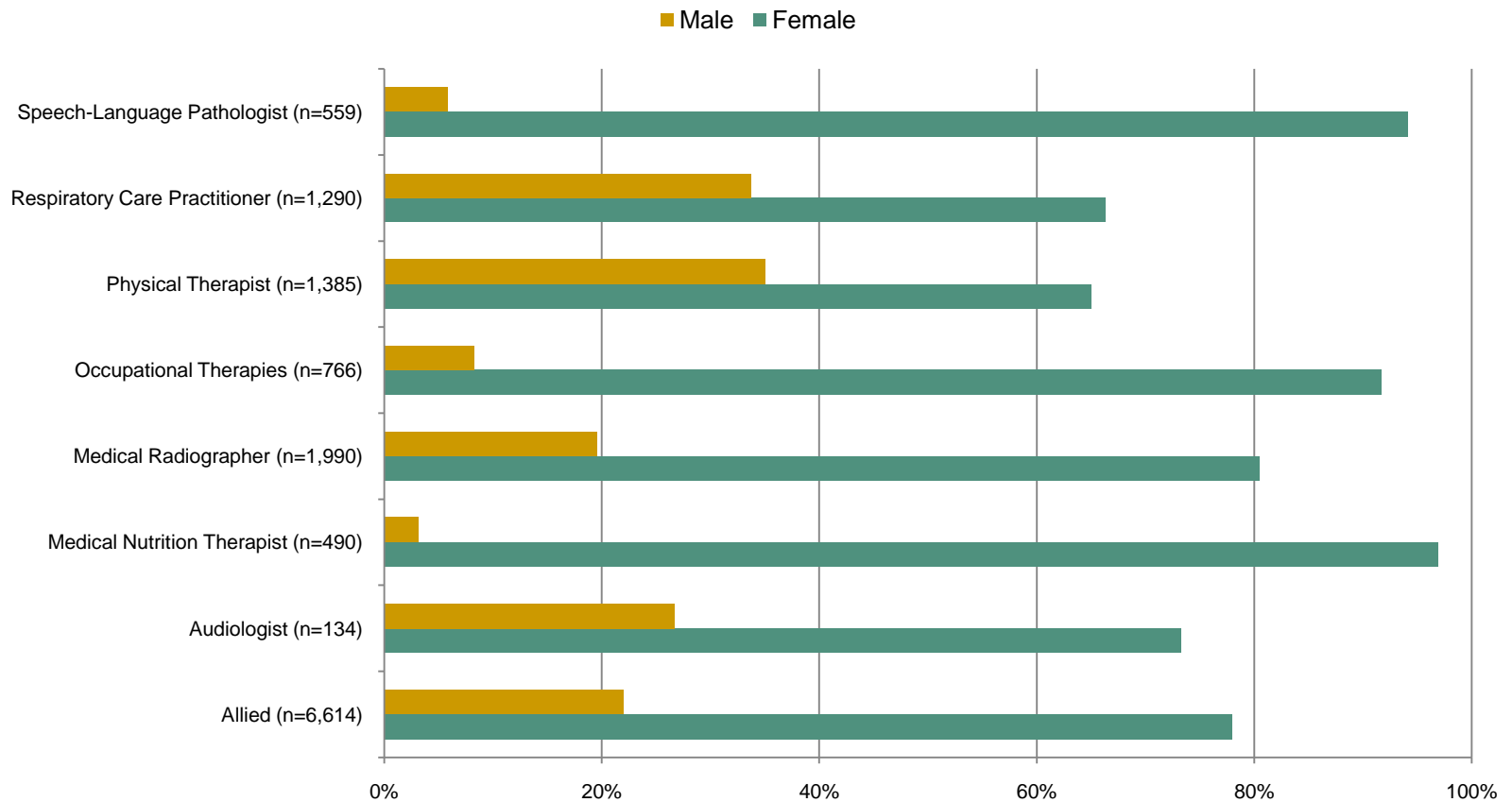
Number of Active Licensed Allied Health Professionals, Nebraska 2008

Physical Therapist	1,385
Occupational Therapist	766
Medical Nutrition Therapist	490
Medical Radiographer	1,990
Respiratory Care Practitioner	1,290
Audiologist	134
Speech Language Pathologist	559
Total	6,614

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Source: NE DHHS, Dept of Regulation and Licensure, October 10, 2007

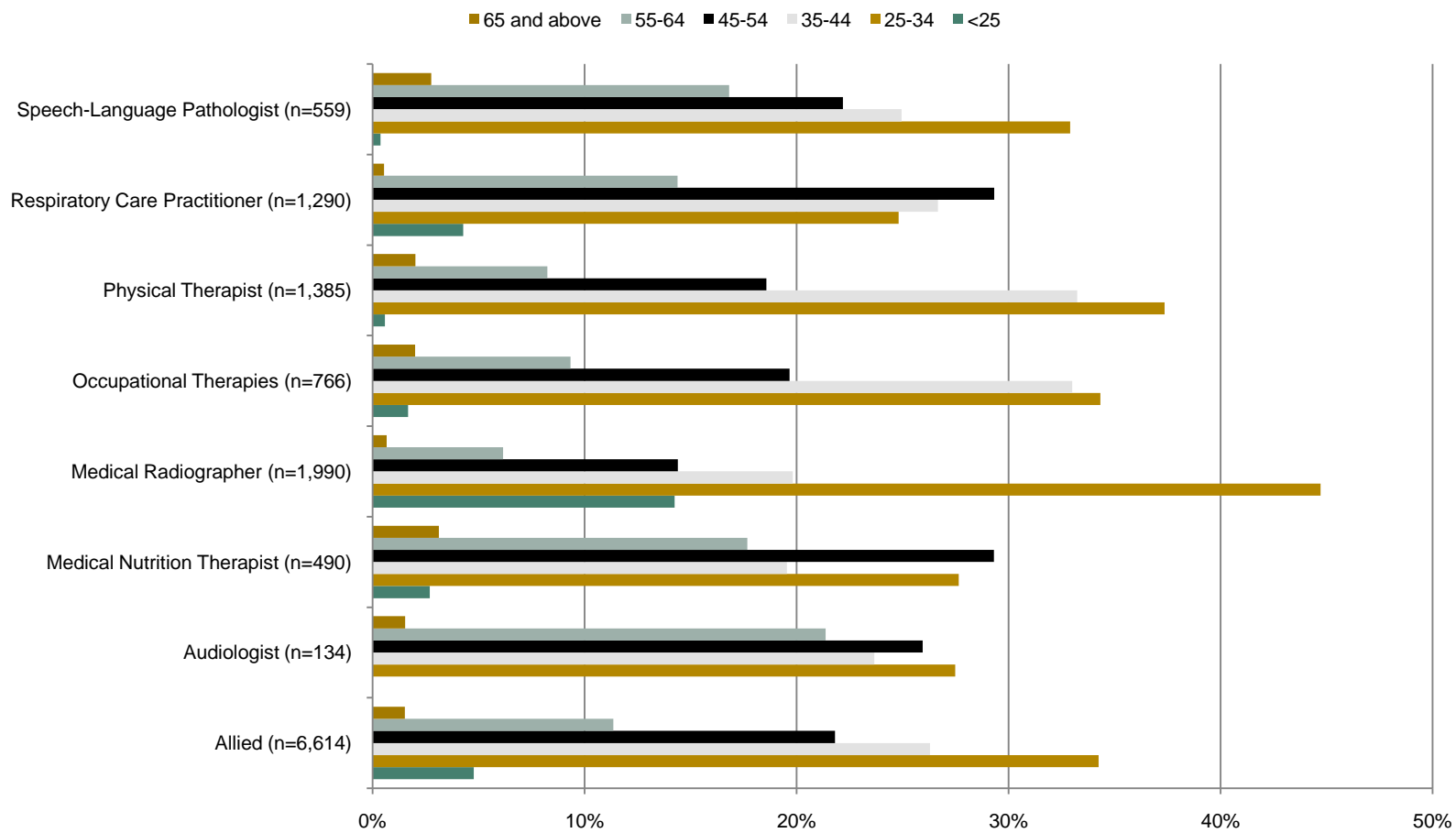
Gender Distribution of Allied Health Professionals, Nebraska 2008



Source: NE DHHS, Dept of Regulation and Licensure, February 29, 2008

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Age Distribution of Allied Health Professionals, Nebraska 2008



Source: NE DHHS, Dept of Regulation and Licensure, February 29, 2008

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Number of Active Licensed Behavioral Health Professionals, Nebraska 2007

Mental Health Practitioner	2,477
Professional Counselor	1,047
Master Social Worker	758
Psychologist	428
Alcohol and Drug Counselor	425
Marriage and Family Therapist	90
Total	5,225

Source: NE DHHS, Dept of Regulation and Licensure, January 23, 2008

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

Number of Public Health Professionals, Nebraska 2007

NE Division of Public Health	198
Local Health Departments	598
Total	796

Source: NE DHHS, Division of Public Health; GPPLI 2007

Note: Local Health Department counts include all levels of employees

Number of Active Licensed EMT Professionals, Nebraska 2007

EMT-Paramedic	814
EMT-Intermediate	163
EMT-Basic	6,538
EMS First Responder	936
EMS Total	8,451

Source: NE DHHS, Dept of Regulation and Licensure, October 10, 2007

Note: All professionals tracked by NE DHHS possess an active license but are not necessarily practicing.

UNMC Graduates Practicing in Nebraska

	Total Active with a Primary Practice in NE	UNMC Graduates			Graduation Institution Unknown	
Physicians	3250	1732	53%	29	1%	
Nurse Practitioners	460	257	56%	23	5%	
Physician Assistants	510	371	73%	17	3%	
Dentists	962	649	67%	7	1%	
Pharmacists	1553	919	59%	88	6%	

	Total Non-Metro		UNMC Graduates Non-Metro		Total Rural		UNMC Graduates Rural	
Physicians	923	28%	558	60%	332	10%	235	71%
Nurse Practitioners	137	30%	81	59%	52	11%	28	54%
Physician Assistants	212	42%	158	75%	134	26%	99	74%
Dentists	385	40%	329	85%	213	22%	185	87%
Pharmacists	629	41%	408	65%	327	21%	218	67%

Note: Limited to Primary Practice Sites only

MD/DO - Excludes Residents, House Officers, and Temporary Licenses

Includes Locum Tenens

MD/DO-DDS dual licenses included with MD/Dos

Pharmacists - Excludes Residents, House Officers, and Temporary Licenses

Non-Metro: Excludes Douglas, Lancaster, and Sarpy counties

Rural: Excludes counties where population > 25,000

Excluded counties:

Adams	Buffalo	Dodge
Douglas	Hall	Lancaster
Lincoln	Madison	Platte
Sarpy	Scotts Bluff	

Of RHOP medical graduates who have completed residency training,

- 67% have remained in Nebraska
- 53% are practicing in a rural community in Nebraska
- 10% are practicing in rural communities in other states

Of RHOP physician assistant graduates,

- 71% have remained in Nebraska
- 64% are practicing in a rural community in Nebraska
- 18% are practicing in rural communities in other states

Of RHOP dentistry graduates,

- 71% have remained in Nebraska
- 63% are practicing in a rural community in Nebraska
- 16% are practicing in rural communities in other states

Of RHOP pharmacy graduates,

- 69% have remained in Nebraska
- 44% are practicing in a rural community in Nebraska
- 6% are practicing in rural communities in other states

Phase II Projections of Supply & Demand thru 2020

- Physicians
- Mental Health Professionals
- Dentists
- Pharmacists

Phase II Assessment of Regional Shortages Using Geospatial Analytic Techniques

- Primary Care Providers
- Dentists
- Mental Health Providers

Phase III Strategic Plan

- Disseminate the results of Current supply and Needs Analysis to key stakeholders in the State
- Strategic Plan by region – a blueprint for the state