

# The Health Care Workforce: Trends, Issues, and Resources

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# The Center for Health Workforce Studies at SUNY Albany School of Public Health

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- Established in 1996
- Based at the UAlbany School of Public Health
- Committed to collecting and analyzing data to understand workforce dynamics and trends
- Goal to inform public policies, the health and education sectors and the public
- Broad array of funders supporting our research

# Today's Presentation

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- Current Factors Affecting Health Care
- Current Trends
  - Supply
  - Production
  - Projections
- Licensing Updates
- Shortage Area Designations
  - HPSAs
  - MUAs/Ps
  - Rural Health Clinics
- Service Obligated Programs
- What to Think About
  - Continuing Issues in Health Care
  - Jobs for the Future
- Questions/Discussion

# Current Factors Affecting Health Care

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- Demographic Shift
  - Aging population (especially in rural areas)
  - More diverse population
- Health Care Reimbursement
  - Value based payments
  - Potential federal and state cuts
  - DSRIP
- Health Care Delivery System
  - Mergers, acquisitions, and consolidations
  - Aging health care workforce
  - Shift to outpatient services and focus on preventative services
  - Understanding population health and social determinants of health
  - Potential changes in scope of practice
- Other
  - Increase in minimum wage

# As You Think About the Data

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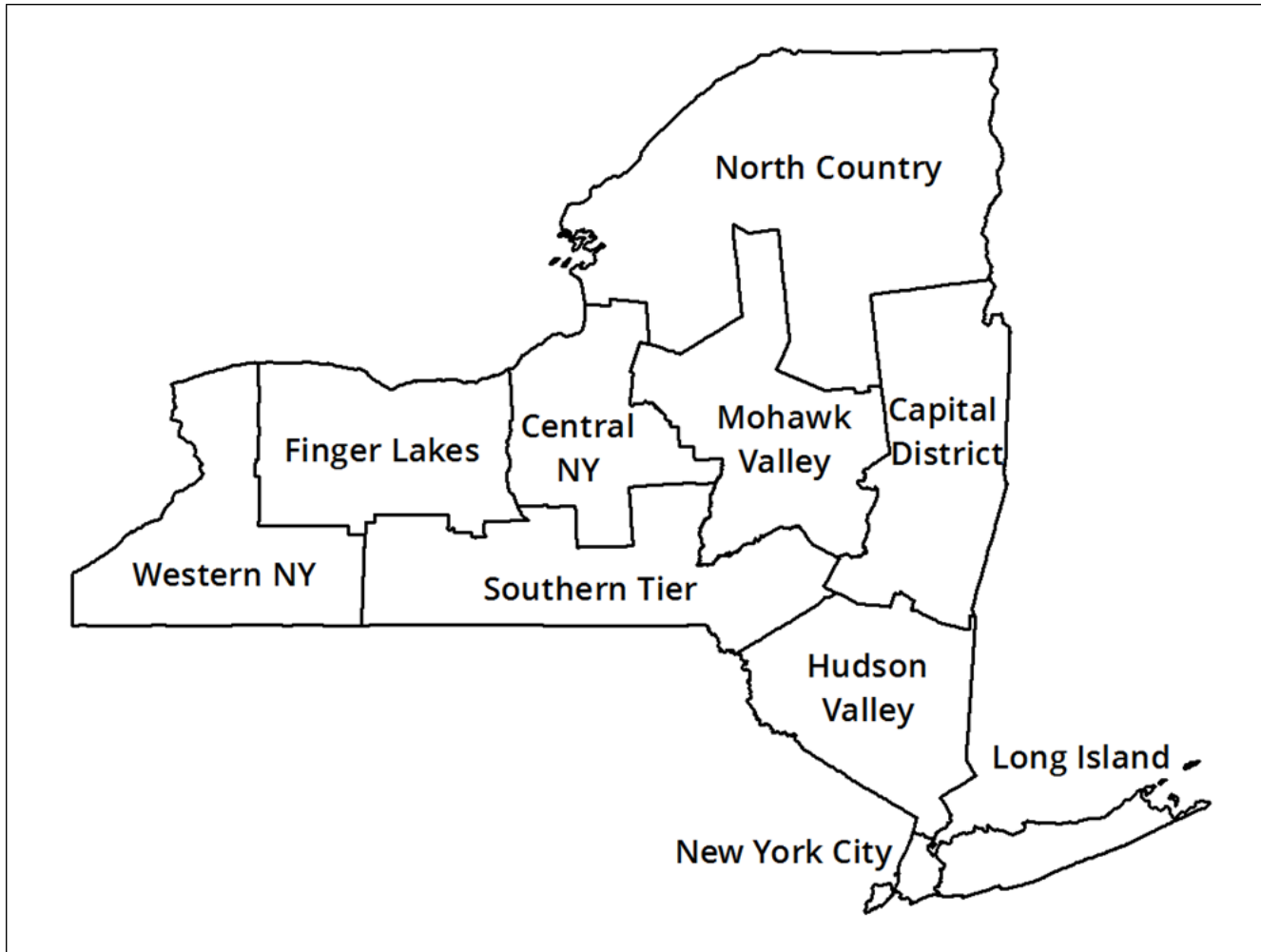
- Geography
  - Does the level of geography make sense?
- Are small problems being masked by large populations?
- How are things defined?
  - Graduation data -- nurse practitioner vs. clinical nurse specialist
  - Clinical data – admissions for all diabetes vs. primary diagnosis of diabetes
- How is the information presented?
  - Rate, ratio, percentage
- What is the population base used for calculation?

# As You Think About the Data

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- What does the data tell me?
- What does the data not tell me?
- Is the question asked, if existing data, what I am trying to answer?
- Does the indicator make sense for my community?
- Are there significant variations in the data that can be explained?

# Regions



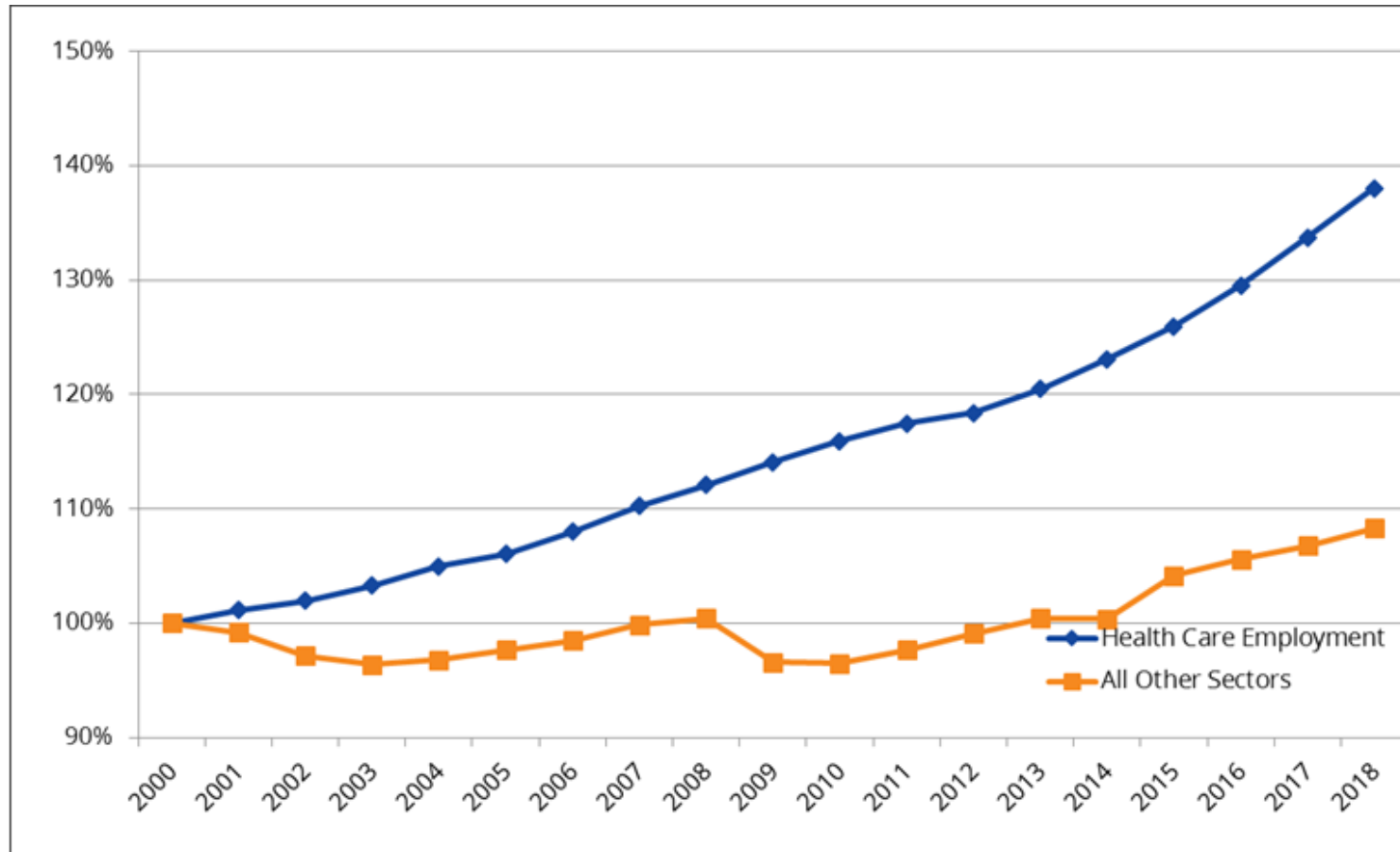
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# Current Trends



# Growth in Health Care Jobs in New York State Outpacing Growth in Jobs in Other Sectors

Employment Growth in New York State, 2000-2018 (Standardized to 2000)

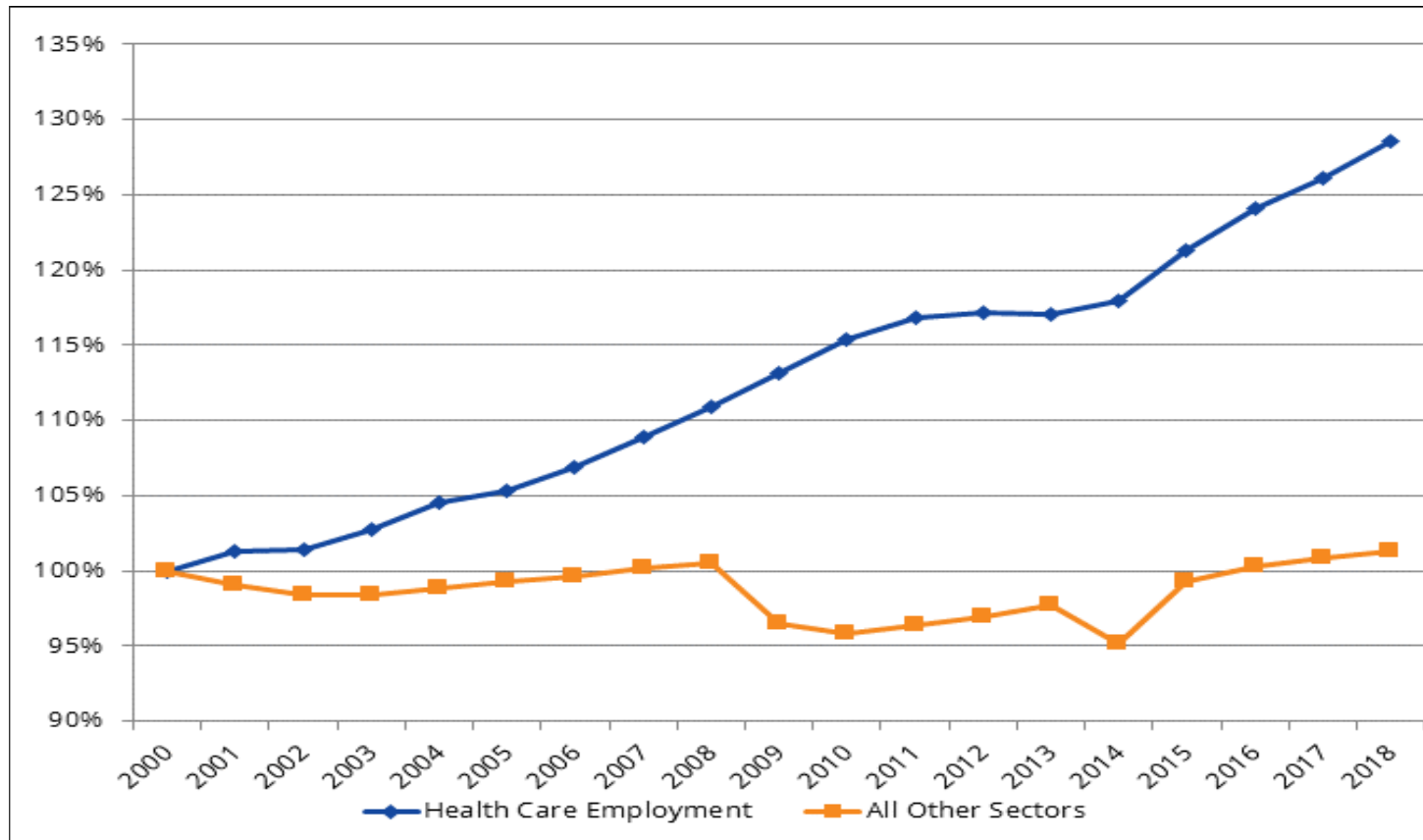


Source: New York State Department of Labor, Quarterly Census of Employment and Wages

<http://chws.albany.edu>

# Difference in Growth in Jobs Even More Dramatic in Upstate New York

## Employment Growth Outside of NYC, 2000-2018 (Standardized to 2000)



Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Health Care Employment

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- Growth in health care employment in rural areas slower than in regions with large urban areas
- Employment in home health care is growing the fastest, though has the least number of jobs
- Growth in hospitals vary by region
- Nursing home employment decreased in many upstate regions
- Employment in ambulatory care settings grew in all upstate regions but one
- Employment in home health care grew the fastest but was inconsistent across regions

# Growth in Health Care in Rural Areas Slower than in Urban Areas

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Capital District	57,226	57,919	58,613	59,764	60,374	3,148	5.5%
Central New York	39,123	39,334	40,075	40,258	40,538	1,415	3.6%
Finger Lakes	64,791	65,592	67,125	68,200	69,298	4,507	7.0%
Hudson Valley	113,251	116,098	118,275	120,732	121,722	8,471	7.5%
Mohawk Valley	26,247	26,659	26,816	27,177	26,984	737	2.8%
North Country	18,215	18,601	18,898	18,976	19,026	811	4.5%
Southern Tier	28,650	28,816	29,062	28,924	29,148	498	1.7%
Western New York	71,039	71,446	72,658	73,287	75,376	4,337	6.1%
<b>Total</b>	<b>418,542</b>	<b>424,465</b>	<b>431,522</b>	<b>437,318</b>	<b>442,466</b>	<b>23,924</b>	<b>5.7%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Growth in Health Care Varies by Setting

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Hospitals	165,771	168,400	171,766	174,826	178,270	12,499	7.5%
Nursing Homes	86,143	87,138	87,022	86,034	85,671	-472	-0.5%
Ambulatory Care	138,056	140,065	142,366	144,757	146,374	8,318	6.0%
Home Health Care	28,602	28,862	30,368	31,701	32,151	3,549	12.4%
<b>Total</b>	<b>418,572</b>	<b>424,465</b>	<b>431,522</b>	<b>437,318</b>	<b>442,466</b>	<b>23,894</b>	<b>5.7%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Growth in Hospitals Vary by Region

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Capital District	23,552	23,887	24,365	24,907	25,225	1,673	7.1%
Central New York	13,715	13,708	13,755	13,931	14,066	351	2.6%
Finger Lakes	30,406	30,977	32,027	32,738	33,911	3,505	11.5%
Hudson Valley	38,157	39,297	40,633	42,007	42,156	3,999	10.5%
Mohawk Valley	11,435	11,585	11,667	11,773	11,838	403	3.5%
North Country	8,957	9,216	9,438	9,507	9,710	753	8.4%
Southern Tier	13,396	13,408	13,505	13,506	13,535	139	1.0%
Western New York	26,153	26,322	26,376	26,457	27,829	1,676	6.4%
<b>Total</b>	<b>165,771</b>	<b>168,400</b>	<b>171,766</b>	<b>174,826</b>	<b>178,270</b>	<b>12,499</b>	<b>7.5%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Nursing Home Employment Decreased in Many Upstate Regions

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Capital District	11,167	11,278	11,203	11,490	11,423	256	2.3%
Central New York	8,589	8,833	8,909	8,522	8,370	-219	-2.5%
Finger Lakes	13,299	13,624	13,757	13,842	13,948	649	4.9%
Hudson Valley	21,118	21,325	21,102	20,310	20,405	-713	-3.4%
Mohawk Valley	6,692	6,881	6,834	6,724	6,418	-274	-4.1%
North Country	3,063	3,023	3,019	2,975	2,887	-176	-5.7%
Southern Tier	6,621	6,631	6,692	6,689	6,738	117	1.8%
Western New York	15,594	15,543	15,506	15,482	15,482	-112	-0.7%
<b>Total</b>	<b>86,143</b>	<b>87,138</b>	<b>87,022</b>	<b>86,034</b>	<b>85,671</b>	<b>-472</b>	<b>-0.5%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Employment in Ambulatory Care Generally Grew in Upstate Regions

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Capital District	19,118	19,476	19,866	19,933	20,226	1,108	5.8%
Central New York	14,677	14,690	15,313	15,622	15,924	1,247	8.5%
Finger Lakes	17,497	17,067	16,863	16,719	16,350	-1,147	-6.6%
Hudson Valley	42,939	44,305	44,693	46,360	47,357	4,418	10.3%
Mohawk Valley	6,755	6,823	6,845	6,968	6,967	212	3.1%
North Country	5,358	5,559	5,637	5,698	5,703	345	6.4%
Southern Tier	7,572	7,697	7,728	7,675	7,796	224	3.0%
Western New York	24,140	24,448	25,421	25,782	26,051	1,911	7.9%
<b>Total</b>	<b>138,056</b>	<b>140,065</b>	<b>142,366</b>	<b>144,757</b>	<b>146,374</b>	<b>8,318</b>	<b>6.0%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages



# Employment in Home Health Care Grew the Fastest but was Inconsistent Across Regions

Region	2014	2015	2016	2017	2018	Change Between	
						Number	Percent
Capital District	3,419	3,278	3,179	3,434	3,500	81	2.4%
Central New York	2,142	2,103	2,098	2,183	2,178	36	1.7%
Finger Lakes	3,589	3,924	4,478	4,901	5,089	1,500	41.8%
Hudson Valley	11,037	11,171	11,847	12,055	11,804	767	6.9%
Mohawk Valley	1,365	1,370	1,470	1,712	1,761	396	29.0%
North Country	837	803	804	796	726	-111	-13.3%
Southern Tier	1,061	1,080	1,137	1,054	1,079	18	1.7%
Western New York	5,152	5,133	5,355	5,566	6,014	862	16.7%
<b>Total</b>	<b>28,602</b>	<b>28,862</b>	<b>30,368</b>	<b>31,701</b>	<b>32,151</b>	<b>3,549</b>	<b>12.4%</b>

Source: New York State Department of Labor, Quarterly Census of Employment and Wages

# Hospitals Recruitment and Retention Issues

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- Clinical Laboratory Technicians
- Clinical Laboratory Technologists
- Experienced RNs
- Nurse Practitioners
- Psychiatric Nurse Practitioners
- Physician Assistants
- Surgical Technicians

# Nursing Home Recruitment and Retention Issues

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- CNAs
- Experienced and New RNs
- Licensed Practical Nurses
- MDS Coordinators
- Nurse Directors/Managers
- Occupational Therapists
- Occupational Therapy Assistants
- Physical Therapists
- Physical Therapy Assistants

# Home Health Care Recruitment and Retention Issues

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- Home Health Aides
- Homemakers
- Personal Care Aides
- Occupational Therapists
- Physical Therapists
- Registered Nurses
- Respiratory Therapists
- Social Workers

# FQHC Recruitment and Retention Issues

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- Case Coordinators
- Dentists
- Licensed Practical Nurses
- Nurse Practitioners, including Psychiatric
- Primary Care Physicians
- Psychiatrists
- Registered Nurses
- Social Workers
- Substance Abuse Counselors

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# Graduations and Degrees

# Lower Percentage of Population in Rural Areas Obtaining College Degrees

Region	Less than High School Graduate	High School Graduate, Including Equivalency	Associates Degree	Bachelor's Degree	Graduate or Professional Degree
Capital District	8.4%	45.5%	12.0%	18.8%	15.3%
Central New York	10.1%	47.6%	12.4%	17.0%	13.0%
Finger Lakes	9.9%	46.1%	12.2%	17.9%	13.9%
Hudson Valley	11.3%	40.8%	8.3%	21.0%	18.7%
Long Island	9.4%	42.5%	8.6%	21.6%	17.8%
Mohawk Valley	11.7%	53.2%	12.5%	13.0%	9.6%
New York City	18.9%	38.0%	6.4%	21.5%	15.2%
North Country	11.5%	55.5%	11.2%	11.5%	10.3%
Southern Tier	9.6%	50.0%	11.9%	14.9%	13.6%
Western New York	9.3%	49.3%	12.2%	16.3%	12.9%
Statewide	13.9%	42.2%	8.7%	19.9%	15.4%

Source: American Community Survey, 5-Year Estimates, 2013 – 2017, Table S1501

# Significant Regional Differences in Graduations by Occupation

Occupation	Capital District	Central New York	Finger Lakes	Hudson Valley	Mohawk Valley	North Country	Southern Tier	Western New York
Dental Assistants	16	56	71	73	0	0	0	22
Dental Hygienists	30	0	31	14	0	29	33	49
Dietetic Technicians	14	7	0	0	3	0	0	1
Dietitians and Nutritionists	0	0	0	0	47	0	0	86
Licensed Practical Nurses	230	186	270	325	142	207	71	367
Medical and Clinical Laboratory Technicians	0	0	17	22	0	0	20	18
Medical and Clinical Laboratory Technologists	19	23	10	28	0	10	1	30
Medical Assistants	170	160	67	165	9	0	101	126
Nurse Practitioners/Clinical Nurse Specialists	43	61	80	63	54	0	39	90
Occupational Therapists	34	0	48	65	62	0	42	128
Occupational Therapy Assistants and Aides	63	0	0	85	0	0	0	35
Pharmacists	200	0	82	0	0	0	0	172
Physical Therapist Assistants and Aides	0	20	28	21	26	14	25	45
Physical Therapists	36	38	54	183	283	25	85	203
Physician Assistants	40	89	60	59	0	19	0	134
Respiratory Therapists	17	8	0	26	22	0	0	20
RNs	1,960	603	1,217	863	519	327	676	1,127
Social Workers	172	90	190	8	0	0	47	203
Totals	3,149	1,496	2,322	2,077	1,199	652	1,157	3,147

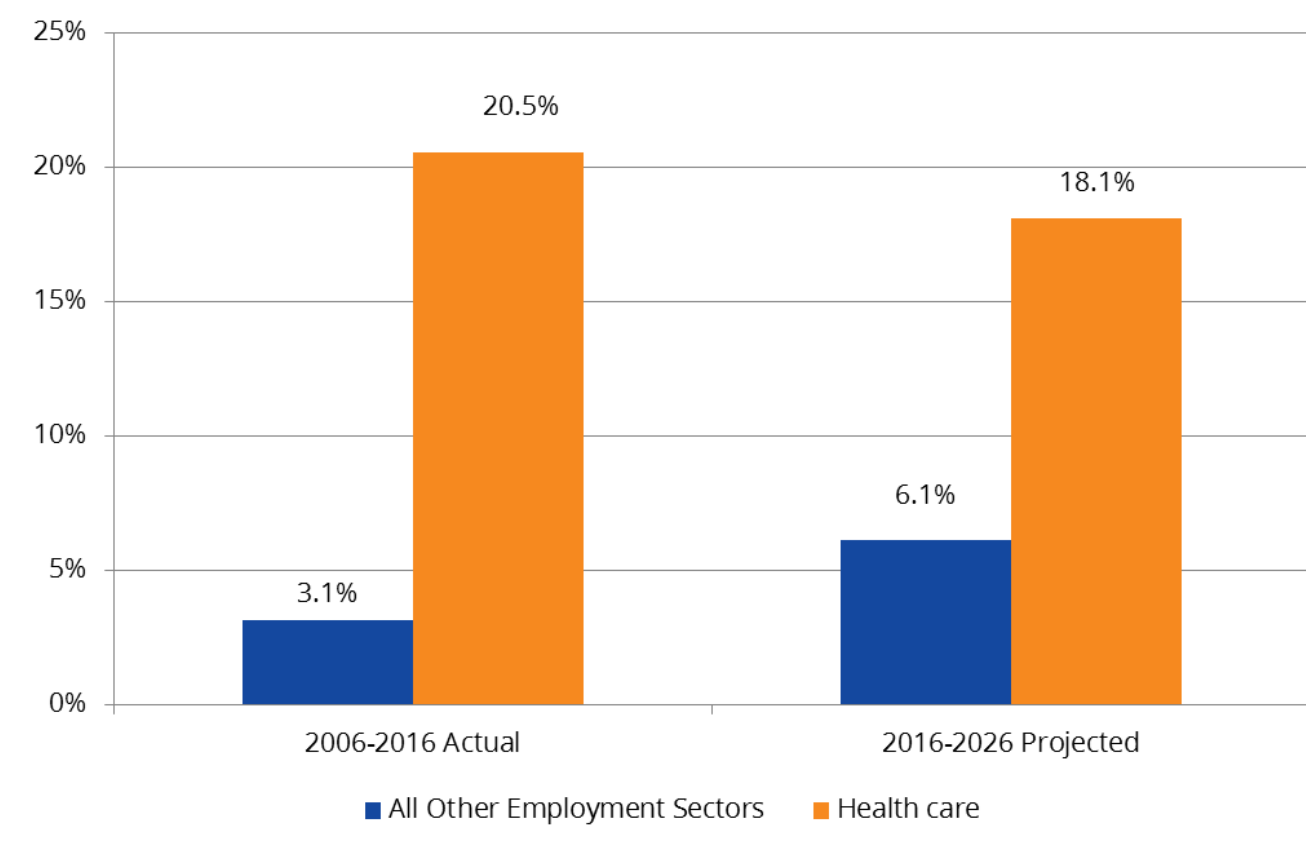
Source: US Education Department, IPEDS, 2016-2017



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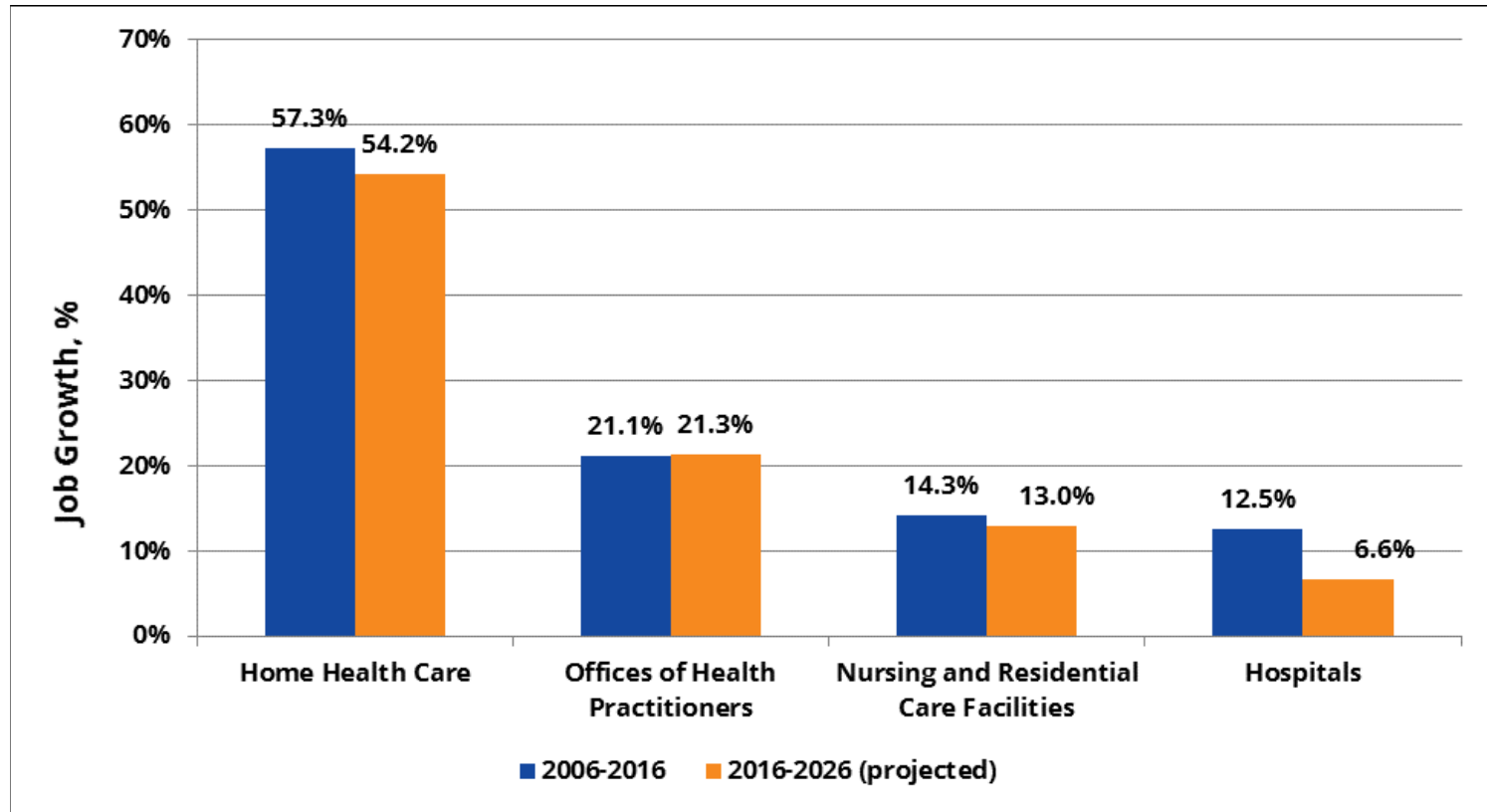
# Federal and State Projections

# Nationally, Employment in Health Care Growing Faster than in Other Sectors



Sources: U.S. Bureau of Labor Statistics, employment projections, 2016-2026: Table 1.9: 2016-26 Industry-occupation matrix data, by industry; Table 2.7: Employment and output by industry, 2006, 2016, and projected 2026; Current Employment Statistics national estimates for employment, hours, and earnings.

# Nationally, Employment in Home Health Care Growing Faster than in Other Health Care Settings



Sources: U.S. Bureau of Labor Statistics, employment projections, 2016-2026: Table 1.9: 2016-26 Industry-occupation matrix data, by industry; Table 2.7: Employment and output by industry, 2006, 2016, and projected 2026; Current Employment Statistics national estimates for employment, hours, and earnings.

# Ambulatory Care Projected to Grow the Fastest

Occupation	Setting	Employment		Percent Change
		2016	2026	
<b>Capital District</b>	Ambulatory Care	25,100	34,980	39.4%
	Hospitals	24,690	26,550	7.5%
	Nursing Homes	18,530	23,240	25.4%
<b>Central New York</b>	Ambulatory Care	18,950	26,000	37.2%
	Hospitals	12,890	13,760	6.7%
	Nursing Homes	12,070	15,040	24.6%
<b>Finger Lakes</b>	Ambulatory Care	23,070	31,900	38.3%
	Hospitals	33,000	36,400	10.3%
	Nursing Homes	20,860	25,380	21.7%
<b>Hudson Valley</b>	Ambulatory Care	61,580	87,620	42.3%
	Hospitals	41,860	45,990	9.9%
	Nursing Homes	40,320	51,160	26.9%
<b>Mohawk Valley</b>	Ambulatory Care	9,190	12,470	35.7%
	Hospitals	12,590	13,450	6.8%
	Nursing Homes	10,340	11,730	13.4%
<b>North Country</b>	Ambulatory Care	6,310	8,440	33.8%
	Hospitals	10,190	11,020	8.1%
	Nursing Homes	6,070	7,260	19.6%
<b>Southern Tier</b>	Ambulatory Care	9,650	12,380	28.3%
	Hospitals	13,750	14,050	2.2%
	Nursing Homes	9,760	11,830	21.2%
<b>Western New York</b>	Ambulatory Care	33,480	44,260	32.2%
	Hospitals	26,360	28,140	6.8%
	Nursing Homes	24,590	28,550	16.1%

Source: New York State Department of Labor, 2016 – 2016 Statewide and Region Long Term Industry Projections

# Annual New Openings, 2016 - 2026

## Vary by Region

Occupation	Capital District	Central New York	Finger Lakes	Hudson Valley	Mohawk Valley	North Country	Southern Tier	Western New York
Healthcare Social Workers	110	60	150	230	50	30	50	110
Mental Health & Substance Abuse Social Workers	90	80	110	200	60	30	50	110
Pharmacists	70	30	50	120	30	20	20	80
Physician Assistants	100	80	90	150	20	30	20	80
Occupational Therapists	40	30	60	100	20	20	20	60
Physical Therapists	100	60	100	160	30	30	30	100
Speech-Language Pathologists	70	30	60	110	20	10	20	110
Registered Nurses	940	560	970	1,750	390	270	390	1,010
Nurse Practitioners	90	70	120	140	30	20	40	90
Laboratory Technologists	60	40	80	80	20	10	20	30
Laboratory Technicians	50	N/A	100	60	10	10	30	30
Dental Hygienists	70	60	100	120	30	30	40	120
EMTs & Paramedics	170	80	140	260	30	30	60	80
Pharmacy Technicians	130	60	120	170	50	30	40	160
Licensed Practical Nurses	400	310	380	680	210	140	170	520
Home Health Aides	980	440	900	2,250	380	220	230	1,030
Nursing Assistants	980	590	920	1,760	440	290	450	960
Dental Assistants	160	130	180	400	50	50	60	170
Medical Assistants	200	140	160	580	50	40	80	320
Personal Care Aides	1,480	1,080	1,920	4,170	1,090	710	1,040	2,170

Source: New York State Department of Labor, 2016 – 2016 Statewide and Region Long Term Occupational Projections

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# Licensing Updates

# Update of Licensing Requirements

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- Provisional Licenses
  - Clinical laboratory technologists
  - Certified Histology Technicians
- Licensing for Pathologists' Assistants
- Continued Exemptions for Mental Health Professions Working at State Facilities
  - OMH, OPWDD, and OASAS
  - Office of Children and Family Services
  - Department of Corrections and Community Supervision
  - Local Government Units
  - Varies based on profession

# Update of Licensing Requirements

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- BSN in 10
  - Effective June 18, 2019
  - RNs with RN diplomas or with associate degrees must obtain BSN within 10 years
  - Conditional registration may be granted for one year and may be extended for “good cause”
- NYS has seen an increase in BSN Completer Programs
  - Number of BSN completer programs has increased
  - Higher percentage of total graduations and baccalaureate graduations are from BSN completers



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# Shortage Area Designations

# Type of Shortage Area Designations

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- Health Professional Shortage Areas
  - Specialties
    - Primary care
    - Dental health
    - Mental health
  - Types
    - Geographic
    - Special population
    - Facilities
      - Other facilities (not-for-profit outpatient)
      - Correctional facilities
      - State and county mental health hospitals
      - Auto HPSAs

# Auto HPSAs

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- Auto HPSAs include
  - Include
    - Federally qualified health centers (FQHCs)
    - FQHC look-alikes
    - Rural health clinics
    - Indian Health Services
  - Do not generally need to apply for designation
  - Scored based on
    - Population in service area
    - Population to provider ratio
    - Nearest source of care
  - Rural health clinics
    - Need to go through NHSC site approval to get Auto HPSA designation

# Type of Shortage Area Designations

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- Medically Underserved Areas/Populations
  - Specialties
    - Primary care
  - Types
    - Geographic
    - Special population
  - Scores based on
    - Physicians per 1,000 population
    - Percent elderly
    - Percent poverty
    - Infant mortality rate

# Our Role

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- Responsible for submitting all shortage area designations
- Provide technical assistance on shortage area designations and service obligated programs
- Update providers as necessary
  - Location/address
  - Specialty
    - Limited to primary care
  - Setting
    - Limited to outpatient/ambulatory care
  - Clinical hours
  - Other hours

# Our Role

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- Supply and update secondary data sources
  - Medicaid claims
  - OASAS for alcoholism and substance abuse
  - Fluoridation
  - Travel times
- Manage Auto HPSA Designation Process
  - Review all requests from Auto HPSAs
  - Review secondary data sources
  - Submit as necessary
  - Manage Points of Contacts

# What Are Designations Used For?

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- HPSAs
  - Federal service obligated programs
    - National Health Service Corps
    - Nurse Corps
    - Visitor Exchange Program
  - State service obligated programs
    - Doctors Across New York
    - Primary Care Service Corps
    - Social Worker Loan Repayment
    - New York State 30 J-1 Visa Waiver Program
  - Appalachian Regional Commission
    - Primary Care
    - Specialty Care
  - Grants
  - Rural Health Clinic Certification

# What Are Designations Used For?

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- MUAs
  - 330 funding for federally qualified health centers
  - Grants
  - State service obligated programs
    - Doctors Across New York
    - New York State 30 J-1 Visa Waiver Program
  - Rural Health Clinic Certification



# Service Obligated Programs

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- Over 20 service obligated programs New Yorkers can use
- CHWS created a web site with programs listed
- Includes information
  - Brief description of program
  - Sponsor
  - Type (loan repayment, scholarship, J-1 Visa Waiver)
  - Length of service or commitment
  - Type of designation required (if required)
  - Minimum HPSA score needed (if needed)
  - Health professionals supported
  - Electronic link to program

# Service Obligated Programs

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- Links to job sites
  - Health Workforce Connector
    - Active NHSC, Nurse Corps, and SUD sites
    - Current score for placement
    - Job Opportunities
  - 3RNet
    - Jobs in rural areas
- Link to HPSA Find
- Link to join our mailing list

# Potential Changes in Health Care

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- Aging population with more residential options
- Individuals sicker, with more comorbidities when finally entering hospitals
- Training in health care needs to consider
  - Career ladders
  - Certifications (in addition to formal degrees)
  - Interdisciplinary training
- Nursing ratios in hospitals
- Expanding scope of practice
  - Community paramedics
  - Dental hygiene therapists
  - Psychologists with prescriptive authority

# Jobs for the Future

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- Home Health Care
  - Home health aides
  - Personal care aides
- Ambulatory Care
  - RNs
  - LPNs (also nursing homes)
  - Medical assistants
  - Emerging titles
    - Case managers
    - Community health workers
    - Health coaches
    - Patient navigators
- Primary Care
  - Physicians
  - Nurse practitioners
  - Physician assistants
- Behavioral Health

# Links to Sites

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- Center for Health Workforce Studies  
<https://www.chwsny.org/>
- Health Careers  
<http://www.healthcareersinfo.net/>
- Service Obligated Programs  
<https://www.chwsny.org/related-sites/service-obligated-programs/>

# Questions?

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- For more information, please email me at:

- Visit us on:

