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## Chapter 5: Health Resources

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## Chapter 5

### Health Resources

Listed in this chapter are sources of statistics on health resources. These have been divided into four broad categories: (1) General Resources (2) Health Facilities, (3) Health Personnel, and (4) Health Professional Education. Because of the complex array of health care providers, there is no comprehensive source of information on all types of health resources.

Both public and private organizations collect and publish data on health resources. Major public sources of information are the U.S. National Center for Health Statistics and agencies such as the Agency for Healthcare Research and Quality (AHRQ), Bureau of Labor Statistics (BLS), the Centers for Disease Control and Prevention (CDC), the Centers for Medicare & Medicaid Services (CMS), the Health Resources and Services Administration (HRSA), the National Institutes of Health (NIH) and its sub-agencies such as the National Institutes of Mental Health (NIMH), the Substance Abuse and Mental Health Administration (SAMSHA), and the U.S. Census Bureau.

Additional sources of statistics include professional associations, certifying and accrediting bodies, ratings services, mapping, planning, and policy organizations, and foundations such as the Henry J. Kaiser Family Foundation and the Robert Wood Johnson Foundation. Many large websites include data from multiple private and public sources. Increasingly, health resources statistics are presented as online spreadsheets or data files rather than as published reports.

#### (1) General Health Resources Statistics

**5.1 *America's health rankings.* United Health Foundation. 1990- .**  
<http://www.americashealthrankings.org/>

This annual state-by-state report and comparison includes statistics on primary care physicians, and dentists. Statistics come from a variety of public and private sources.

**5.2 Centers for Disease Control and Prevention (U.S). National Health Care Surveys.**  
<http://www.cdc.gov/nchs/dhcs.htm>

The National Health Care Surveys include ten periodic provider-based surveys, grouped according to the setting in which the care was delivered. This website lists publications and data products based on the National Health Care Surveys. The survey titles are: Physician Offices and Community Health Centers, Hospital Emergency and Outpatient Departments, Ambulatory Surgery Centers, Hospital Inpatient Care, Nursing Homes, Nursing Assistants, Home and Hospice Care Agencies, Home Health and Hospice Aides, Residential Care Facilities, and National Study of Long-Term Care Providers.

**5.3 Centers for Medicare & Medicaid Services (U.S). *CMS Statistics Reference Booklet*. 2003- . Annual.**

<http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMS-Statistics-Reference-Booklet/index.html>

The *CMS Statistics Reference Booklet* has numbers of participating hospitals by type, bed count, and CMS region. It includes time trends, number of nonparticipating hospitals, and numbers of long-term care and other participating facilities, by type. It also gives numbers of participating physicians and suppliers by specialty.

**5.4 Centers for Medicare & Medicaid Services (U.S). Medicare.gov. Forms, Help, & Resources. “Find & compare doctors, hospitals, & other providers.”**

<http://www.medicare.gov/forms-help-and-resources/find-doctors-hospitals-and-facilities/quality-care-finder.html>

**5.5 Centers for Medicare & Medicaid Services (U.S). “Research, Statistics, Data & Systems.”** <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research-Statistics-Data-and-Systems.html>

This site links to Medicare and Medicaid data files, research reports, statistics, and information systems. The CMS Data Navigator helps locate specific information. Includes Health Insurance Marketplace statistics. A Provider of Service (POS) file lists Medicare-approved providers individually.

**5.6 County health rankings and roadmaps.**

<http://www.countyhealthrankings.org/>

These county-level U.S. data are produced by a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Data on primary care physicians, mental health providers, and dentists come from a variety of national sources, and include clickable city/county maps. Users can customize and compare data.

**5.7 Dartmouth Atlas of Health Care. Dartmouth Institute for Health Policy and Clinical Practice.** <http://www.dartmouthatlas.org/>

This series of interactive atlases and reports illustrates geographic variations in U.S. health care services. Geographic distributions of physicians and healthcare facilities are mapped. Users can also search by hospital for selected facilities. A distinctive feature of the *Dartmouth Atlas* is its use of population-based small-area analysis based on primary care and other service areas. Data sources include AHA, AMA, CMS, and others.

**5.8 Health Resources and Services Administration. Bureau of Health Workforce. U.S. Department of Health and Human Services. “Area Health Resources Files (AHRF) 2014-2014.”**

<http://ahrf.hrsa.gov/>

The *Area Health Resources Files* are a family of health data resource products from more than fifty public and private sources. Data categories include “Health Care Professions” and “Hospitals and Healthcare Facilities.” One data file covers the national and state level; another is for county and local data. The state/national file can be used with Excel; the county/local file requires SAS, SPSS, or a high-level programming language. Data files can be used to produce maps, tables, and other custom products and to compare resources at the county or state level.

### 5.9 Healthgrades.com

<http://www.healthgrades.com/>

Healthgrades.com is a commercial rating service for hospitals and healthcare providers. It locates and compares doctors, dentists, and hospitals according to online patient satisfaction questionnaires and other criteria.

### 5.10 National Center for Health Statistics (U.S). *Health, United States*. Hyattsville, MD: National Center for Health Statistics, 1975- . Annual.

<http://www.cdc.gov/nchs/hus.htm>

Health resources data in *Health, United States* include U.S. healthcare employment and wages, selected occupations; hospital, community health, and nursing home beds, and occupancy rates; Medicare-certified providers and suppliers; time trends. This annual publication also has first-year enrollment and graduates of U.S. health professions schools, and number of schools, by selected profession, and time trends.

### 5.11 National Center for Health Statistics (U.S). “Health Indicators Warehouse.”

<http://www.healthindicators.gov/>

The Health Indicators Warehouse provides a single source of data for many offices within the U.S. Department of Health and Human Services. Data on health care resources (health provider, hospital, and institutional supply) are given at the national, state, county, and hospital referral region level.

### 5.12 Office of the Assistant Secretary for Planning and Evaluation. U.S. Department of Health and Human Services. “Health System Measurement Project.”

<https://healthmeasures.aspe.hhs.gov/>

Developed by HHS’s Office of the Assistant Secretary for Planning and Education, the Health System Measurement Project brings together data on a limited set of key health system measures from nine U.S. government sources. Among its indicators are data on the primary care workforce, hospital market concentration, and providers’ use of health information technology.

### 5.13 *ProQuest statistical abstract of the United States*. Lanham, MD: Bernan, 2012- . Annual.

This statistical compendium replaces and follows the same format as the U.S. Census Bureau’s *Statistical abstract of the United States*, published 1878-2012. Includes data on employment in the health service industries, including physicians, physicians by specialty; nurses; hospitals and other healthcare facilities such as nursing homes, hospices, and substance abuse facilities. A

convenient one-stop shop for basic statistics, with historical comparisons. Available in print and continuously updated online versions.

**5.14 Rural Health Information Hub.** <https://www.ruralhealthinfo.org/>

Established in 2002 as a rural health and human services information portal, the Rural Health Information Hub lists data sources on health education, health facilities, and the health workforce in the rural U.S. by topic and state. Formerly called the Rural Assistance Center.

**5.15 “State Health Facts. Providers and Service Use Indicators.” Henry J. Kaiser Family Foundation.**

<http://kff.org/state-category/providers-service-use/>

“State Health Facts” provides data on hospitals, nursing facilities, rural health clinics, physicians, nurses, NPs, PAs, healthcare employment, medical school graduates, and dentists from a variety of public and private sources. Data can be viewed “as is” for ready reference or can be customized to produce downloadable tables and maps.

## **(2) Health facilities**

The American Hospital Association is the major private publisher of directory and statistical information on hospitals and related facilities in its *AHA guide to the health care field* and other publications. Other private organizations, such as the Federation of American Hospitals, also publish useful statistics; some are fee-based downloads or custom reports which must be obtained from the organization. Additional sources of statistics include accrediting bodies, of which the Joint Commission is the best-known, and the U.S. Center for Medicare & Medicaid Services.

### *Hospitals*

**5.16 American Hospital Association. *AHA guide to the health care field*. Chicago: American Hospital Association, 1972--. Annual.**

The *AHA Guide* is an annual directory of hospitals in U.S. and related areas, based on survey data, arranged geographically by state. It includes general, special, rehabilitation/chronic, and psychiatric hospitals. Each entry gives the type of hospital, selected services, certifications, key personnel, types of arrangements with physicians, affiliation with health care systems, and control. Summary utilization data for each hospital are included. Separate sections include a directory of health care systems and alliances; a list of health care organizations, agencies, and alliances; and other health care providers such as ambulatory surgery centers. Title varies; 1974-1997 editions were called *American Hospital Association guide to the health care field*. The *AHA guide* is also available on CD; for related products, see *AHA hospital statistics* and *AHA Data and Directories* <http://www.aha.org/research/rc/stat-studies/data-and-directories.shtml>

**5.17 *Almanac of Hospital Financial and Operating Indicators*. Optum360, 1992- . Annual; title/publisher varies.**

This guide lists financial measures and trend data for selected U.S. hospitals, compiled from audited hospital financial statements of 2100 hospitals, strategic operating indicator data submitted by annual survey of 700 hospitals, and financial and operating indicators based on Medicare cost reports from approximately 5000 hospitals. Order at

<https://www.optumcoding.com/Product/43409/>

Available in print or online.

**5.18 *American Hospital Directory*. American Hospital Directory, Inc.**

<http://ahd.com/>

The online American Hospital Directory provides custom fee-based reports; most compiled from publicly-available Medicare and AHRQ data. Free sections include brief hospital profiles and state and national hospital Medicare cost reports.

**5.19 *Centers for Medicare & Medicaid Services (U.S). “Hospital Compare.”***

<http://www.medicare.gov/hospitalcompare/search.html>

Locate and compare quality measures at more than 4,000 Medicare-certified U.S. hospitals. Hospitals can be searched by zip code, city, or state; users can then select hospitals to view and compare data. Hospitals are assigned an overall rating of up to five stars.

**5.20 *Children’s Hospital Association. Children’s Hospital Directory*.**

<https://www.childrenshospitals.org/>

The Children’s Hospital Directory locates member hospitals of Children’s Hospital Association and lists bed size. The Children’s Hospital Association also collects members-only data.

**5.21 *Federation of American Hospitals. Directory of Investor-Owned Community Hospitals, Hospital Management Companies and Health Systems, Residential Treatment Facilities and Centers, and Key Management Personnel*. Little Rock, Arkansas: Federation of American Hospitals, 1982-. Annual. Title varies. 2013- available from:**

<http://fah.org/membership/directory-of-investor-owned-hospitals>

The Federation of American Hospitals publishes an annual directory with information and data on investor-owned facilities. This publication may be purchased directly from the publisher.

**5.22 *Joint Commission Quality Check*.**

<http://www.qualitycheck.org/Consumer/SearchQCR.aspx>

Locate and compare Joint Commission-accredited healthcare facilities in the United States. View summary accreditation and certification reports, and attainment of National Patient Safety and Quality Improvement goals. Quality Check also includes reports for specialized services.

**5.23 *U.S. News Best Hospitals*.**

<http://health.usnews.com/best-hospitals/rankings>

*U.S. News & World Report* publishes an annual ranking of best hospitals and best children's hospitals, by specialty, region, and overall "honor roll." Rankings are based on hospital data and physician surveys.

### ***Behavioral Health Facilities***

**5.24 Substance Abuse and Mental Health Services Administration (U.S). *Behavioral health, United States, 2012.* Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.**

<http://store.samhsa.gov/product/Behavioral-Health-United-States-2012/SMA13-4797>

*Behavioral health, United States* has statistics on the mental health, substance abuse, and child/adolescent psychiatry treatment workforce and numbers and rate per 100,000 population, by discipline and state. It enumerates inpatient and outpatient facilities by number and type, and gives numbers of substance abuse facilities. Data come from the National Mental Health Services Survey, 2010, and other sources.

**5.25 Substance Abuse and Mental Health Services Administration (U.S). *National Mental Health Services Survey (N-MHSS), 2010: Data on mental health treatment facilities.* Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.**

[http://www.samhsa.gov/data/sites/default/files/NMHSS2010\\_Web/NMHSS2010\\_Web/NMHSS2010\\_Web.pdf](http://www.samhsa.gov/data/sites/default/files/NMHSS2010_Web/NMHSS2010_Web/NMHSS2010_Web.pdf)

The *National Mental Health Services Survey* includes data from more than 12,000 U.S. psychiatric hospitals, non-federal general hospitals with psychiatric units, VA medical centers, outpatient, day treatment, or partial hospitalization centers, residential treatment facilities, and multi-setting mental health facilities. Data include facility size, types of services offered, payment, utilization, client characteristics, and regional differences. Part of SAMHSA Mental Health Facilities Data <http://www.samhsa.gov/data/mental-health-facilities-data-nmhss/reports>

### ***Long-Term Care***

**5.26 American Health Care Association. "Trends and Statistics."**

[http://www.ahcancal.org/research\\_data/trends\\_statistics/Pages/default.aspx](http://www.ahcancal.org/research_data/trends_statistics/Pages/default.aspx)

This site has data collected by the American Health Care Association, a national association of long-term and post-acute care providers. Some data are freely available; detailed reports are members-only.

**5.27 MetLife National Study of Adult Day Services: Providing Support to Individuals and their Family Caregivers, October 2010. MetLife Mature Market Institute, 2013.**

<https://www.metlife.com/assets/cao/mmi/publications/studies/2010/mmi-adult-day-services.pdf>

This survey of a random sample taken from 4,601 U.S. adult day services, by the MetLife Mature Market Institute, gives numbers and characteristics of adult day services, staffing, funding, schedules, services, profiles of attendants, reasons for enrollment/disenrollment, and trends.

**5.28 *Nursing home statistical yearbook*. Cowles Research Group, 2014. Annual, 1994- .**

The *Nursing home statistical yearbook*, available for purchase from [http://www.longtermcareinfo.com/nursing\\_home\\_yearbook.html](http://www.longtermcareinfo.com/nursing_home_yearbook.html) , uses Centers for Medicare and Medicaid data to give detailed statistics on nursing home characteristics such as acuity and dependence level, certification, deficiencies, staffing, and other data.

**5.29 National Center for Health Statistics (U.S.). *Comparison of Home Health and Hospice Care Agencies by Organizational Characteristics and Services Provided: United States, 2007*, by Eunice Y. Park-Lee and Frederic H. Decker. National Health Statistics Reports no. 30. Hyattsville, MD: National Center for Health Statistics, 2010.**

<http://www.cdc.gov/nchs/data/nhsr/nhsr030.pdf>

Home health agencies and hospices are compared as to numbers, services offered, and type of control. This report is based on data from the 1996, 2000, and 2007 National Home and Hospice Care Survey.

**5.30 National Center for Health Statistics (U.S.). *Differences in Adult Day Services Center Characteristics by Center Ownership: United States, 2012*, by Lisa L. Dwyer, Lauren D. Harris-Kojetin, and Roberto H. Valverde. NCHS Data Brief no. 165. Hyattsville, MD: National Center for Health Statistics, 2014.**

<http://www.cdc.gov/nchs/data/DataBriefs/db165.htm>

This report is based on data from the 2012 National Study of Long-Term Care Providers conducted by the CDC. It includes numbers of adult day services, type of control, services, enrollment, and trends.

**5.30a National Center for Health Statistics (U.S.) *Long-term care providers and services users in the United States: data from the National Study of Long-Term Care Providers, 2013-2014*, by Lauren D. Harris-Kojetin, Manisha Sengupta, Eunice Park-Lee, et al.**

**5.31 National Center for Health Statistics (U.S.). *Long-term care services in the United States: 2013 overview*, by Lauren Harris-Kojetin, Manisha Sengupta, Eunice Park-Lee, and Roberto Valverde. National health care statistics reports; no 1. Hyattsville, MD: National Center for Health Statistics, 2013.**

[http://www.cdc.gov/nchs/data/nsltcp/long\\_term\\_care\\_services\\_2013.pdf](http://www.cdc.gov/nchs/data/nsltcp/long_term_care_services_2013.pdf)

This is the first overview report of the CDC's National Study of Long-Term Care Providers [http://www.cdc.gov/nchs/nsltcp/nsltcp\\_products.htm](http://www.cdc.gov/nchs/nsltcp/nsltcp_products.htm) It includes data on 58,500 paid, regulated services for frail older people and other adults with functional limitations. Types of facilities

covered include adult day services centers, home health agencies, hospices, nursing homes, assisted living, and similar care communities.

**5.31a National Center for Health Statistics (U.S.). “National Study of Long-Term Care Providers.”**

[http://www.cdc.gov/nchs/nsltcp/nsltcp\\_rdc.htm](http://www.cdc.gov/nchs/nsltcp/nsltcp_rdc.htm)

Data files and information for residential care communities, adult day services centers, home health agencies, nursing homes, and hospices.

**5.32 National Center for Health Statistics (U.S.). *Residential care communities and their residents in 2010: a national portrait*, by Galina Khatutsky, Catherine Ormond, Joshua Wiener, Angela M. Greene, Ruby Johnson, E. Andrew Jessup, and Emily Vreeland. DHHS Publication No. 2016-1041. Hyattsville, MD: National Center for Health Statistics, 2016.**

[http://www.cdc.gov/nchs/data/nsrcf/nsrcf\\_chartbook.pdf](http://www.cdc.gov/nchs/data/nsrcf/nsrcf_chartbook.pdf)

This publication gives data on numbers, type of control, facility size, types of services, and workforce offered by residential care facilities such as assisted living and personal care homes (excludes nursing homes). Statistics come from the 2010 National Survey of Residential Care Facilities.

**5.32a National Center for Health Statistics (U.S.). *Variation in adult day services center participant characteristics, by center ownership: United States, 2014*, by Eunice Park-Lee, Lauren D. Harris-Kojetin, Vincent Rome, and Jessica P. Lendon. NCHS Data Brief No. 227, December 2015.**

<http://www.cdc.gov/nchs/data/databriefs/db227.pdf>

*Medicare and Medicaid*

**5.33 Centers for Medicare & Medicaid Services (U.S.). “CMS Program Statistics.” 2013- .**

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSProgramStatistics/index.html>

Replaces the Statistical Supplement. See also the Medicare Enrollment Dashboard at

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/Medicare-Enrollment/Enrollment%20Dashboard.html>

**5.33a Centers for Medicare & Medicaid Services (U.S.). *Medicare and Medicaid Statistical Supplement*. Annual. Washington, DC: Centers for Medicare & Medicaid Services, 2001-2013.**

<http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/index.html>

The *Statistical Supplement* gives numbers of participating short-stay hospitals by urban vs. rural, bed size, type of control, teaching vs. non-teaching, as well as numbers of skilled nursing facilities and swing-bed hospitals by bed size, and numbers of hospices and time trends.

**5.34 Medicare Payment Advisory Commission (U.S).** *Health care spending and the Medicare program: a data book*. Washington, DC: Medicare Payment Advisory Commission, 2003- . Irregular.

<http://www.medpac.gov/-documents-/data-book>

This publication gives numbers and trends in Medicare-participating facilities, including inpatient psychiatric facilities, acute-care hospitals and hospital employment, hospices, home health agencies, inpatient rehabilitation facilities, skilled nursing facilities, dialysis facilities, and hospices.

### **(3) Health personnel**

Like health facilities statistics, data on U.S. health personnel come from both public and private sources. Major government sources include U.S. Health Resources and Services Administration (HRSA), the Bureau of Labor Statistics (BLS), and the U.S. Census Bureau. Professional associations such as the American Medical Association (AMA) also produce statistics on health personnel. Some statistics are freely available on association websites; others are fee-based or members-only.

Unfortunately, no single source has adequate data on all health personnel. Some reports, such as HRSA's supply and demand estimates, incorporate statistics from several public and private sources.

#### *General*

**5.35 Agency for Healthcare Research and Quality (U.S).** **2015 CAHPS Clinician & Group Survey Database.** *2015 Chartbook: What Patients Say About Their Experiences with their Health Plans and Medical Care.* December 2015.

<https://www.cahps.ahrq.gov/cahps-database/about/2015cahpshealthplanchartbook.pdf>

The *2015 Chartbook* provides data on aspects of patient satisfaction with their health plans and adult and child health providers. Most providers surveyed are physicians or physician specialists; a few nurse practitioners are included.

**5.36 Bureau of Labor Statistics (U.S).** **U.S. Department of Labor.**

<http://www.bls.gov/home.htm>

The Bureau of Labor Statistics (BLS) website has several useful series of health workforce statistics. "Industries at a Glance. Health Care and Social Assistance: NAICS 62"

<http://www.bls.gov/iag/tgs/iag62.htm> gives an overview. *Current Employment Statistics* is a monthly national survey of businesses and government agencies to determine employment, hours, and earnings. It includes data for ambulatory care, hospitals, nursing, residential care, and

other health-related industries, classified by NAICS (the Federal government's North American Industry Classification System) code <http://www.census.gov/eos/www/naics/>. *Employment Projections* has 10-year national projections of labor and jobs, and is updated every other year. It includes individual occupations, industries, labor force, aggregate economy, education, and training. Data are published on the Bureau of Labor Statistics website and in the *Monthly Labor Review*. Short-term and long-term state projections may be found at <http://www.projectionscentral.com/> classified by Standard Occupational Classification (SOC) <http://www.bls.gov/soc/>. *Occupational Employment Statistics* are annual employment and wages estimates for more than 800 occupations, for the nation, states, and metropolitan and nonmetropolitan areas, grouped by SOC.

**5.37 Bureau of Labor Statistics (U.S). U.S. Department of Labor. *Occupational Outlook Handbook*. “Healthcare Occupations.”**  
<http://www.bls.gov/ooh/healthcare/home.htm>

Updated every two years by the U.S. Bureau of Labor Statistics, the *Occupational Outlook Handbook* is based on Bureau of Labor Statistics projections and other data. It provides career information, earnings, and job outlook, as well as links to associations and government agencies where statistical reports may be found. It is a “one-stop shop” for current reference information about careers. Some specialized careers are not listed separately.

**5.38 Bureau of the Census (U.S). “Government Employment & Payroll.”**  
<http://www.census.gov/govs/apes/>

The Census Bureau produces an annual report on federal, state, and local government employees, as the Bureau of Labor Statistics' *Occupational Employment Statistics* does for the private sector. Figures on the numbers of civilian employees and gross payroll are included. Breakdowns by categories of employees such as “Health” and “Hospital” are available. Users can produce custom data tables.

**5.39 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis.**  
<http://bhpr.hrsa.gov/healthworkforce/>

The Health Resources and Services Administration publishes estimates of supply and demand, workforce projections, and related reports for dentistry, medicine, nursing, pharmacy, and other health professions.

**5.40 Health Resources and Services Administration (U.S). Bureau of Health Professions. National Center for Health Workforce Analysis. *Compendium of federal data sources to support federal health workforce analysis*. Washington, DC: Health Resources and Services Administration, April 2013.**  
<http://bhpr.hrsa.gov/healthworkforce/data/compendiumfederaldatasources.pdf>

The *Compendium* is a directory of 19 agencies, surveys, and other U.S. government sources of health workforce statistics. Free customized assistance is available for locating statistics, data sources, and maps.

**5.41 Health Resources and Services Administration (U.S). U.S. Department of Health and Human Services. *National Practitioner Data Bank. NPDB Research Statistics.***

<http://www.npdb.hrsa.gov/resources/npdbstats/npdbStatistics.jsp>

The *NPDB* has statistics on adverse actions and malpractice payments for U.S. health practitioners, available by type of practitioner, state, and year.

**5.42 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *Projecting the Supply and Demand for Primary Care Practitioners through 2020.* Rockville, MD: U.S. Department of Health and Human Services, 2013.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/primarycare/projectingprimarycare.pdf>

This publication projects the supply of primary care physicians, nurse practitioners, and physician assistants through 2020, using data from HRSA and several professional associations

**5.43 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *Sex, Race, and Ethnic Diversity of U.S. Health Occupations (2010-2012).* Rockville, MD: Health Resources and Services Administration , 2015.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/diversityushealthoccupations.pdf>

This publication gives data for 32 U.S. health occupations by gender, race, Hispanic/Latino ethnicity, using numbers from the U.S. Census Bureau's American Community Survey 2010-2012 Public-Use Microdata Sample.

**5.44 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *The U.S. Health Workforce: Chartbook.* November 2013.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/chartbook/index.html>

Data on 35 health occupations as of 2010 are presented, representing 14 million individuals or about 10% of the workforce. Numbers are derived mostly from 2008-2010 Census Bureau American Community Survey data on self-reported occupations and from IPEDS statistics on 2010 graduates. Occupations are classified by SOC (Standard Occupational Classification). Data are broken down by sex, age, race, ethnicity, work setting, number by state, and number per 100,000 by state.

**5.45 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *The U.S. Health Workforce – State Profiles.* Rockville, Maryland: Health Resources and Services Administration, 2014.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/stateprofiles/usworkforcestateprofiles.pdf>

The *State Profiles* are a companion publication to the *U.S. Health Workforce: Chartbook*, listing data for each state separately. State 2008-2010 workforce data and 2010 graduates for 35 health occupations are given.

**5.46 O\*Net OnLine. National Center for O\*Net Development.**

<http://www.onetonline.org/>

Sponsored by U.S. Department of Labor, Employment and Training Administration, and targeted to job-seekers, O\*Net allows users to search by keyword or SOC. To find health occupations, the user may browse the career cluster “Health Science;” or select the industry “Health Care and Social Assistance.” Finally the user may interact with detailed job information to produce a custom report including data such as tasks most often performed, wages and employment, job openings, and links to similar and related jobs.

*Dentists*

**5.47 American Dental Association. Health Policy Institute.**

<http://www.ada.org/en/science-research/health-policy-institute>

The Health Policy Institute of the American Dental Association produces statistical reports on dental practitioners, costs, and services. The Health Policy Institute was formerly called the Survey Center. The American Dental Association also produces members-only data and provides custom statistical reports and services upon request.

**5.48 American Dental Association. Health Policy Institute. “Dental practice.”**

<http://www.ada.org/en/science-research/health-policy-institute/data-center/dental-practice>

“Dental Practice” is a set of Excel-format tables containing annual dental practice data from the ADA Survey of Dental Practice, formerly issued in PDF format. Data include time trends. Statistics include income, gross billings, expenses, characteristics of private dental practices, and employment of dental personnel.

**5.49 American Dental Association. Health Policy Institute. “Supply of dentists.”**

<http://www.ada.org/en/science-research/health-policy-institute/data-center/supply-of-dentists>

“Supply of dentists” is an Excel file of data on U.S. practicing dentists, 2001 to 2015, derived from the American Dental Association Masterfile. Numbers of dentists are broken down by state, per 100,000 population for each state and time trends, by general practice or type of specialty, and by age range and gender.

**5.50 Bureau of Labor Statistics (U.S). Occupational Employment Statistics. *Occupational Employment and Wages*, May 2014. 29-1021 Dentists, General.**

<http://www.bls.gov/oes/current/oes291021.htm#st>

The Bureau of Labor Statistics produces this detailed annual report on employment and wages of general dentists, from employer surveys.

**5.51 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *National and State-Level Projections of Dentists and Dental Hygienists in the U.S., 2012-2025*. Rockville, Maryland, 2015.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/dentistry/nationalstatelevelprojectionsdentists.pdf>

This publication gives national and state-level supply and demand projections for dentists and dental hygienists, using the HRSA Health Workforce Simulation Model. Baseline data come from the American Dental Association Masterfile and the U.S. Census Bureau's American Community Survey.

### *Physicians*

**5.52 American Board of Medical Specialties (ABMS). “Board Certification Report.”**

<http://www.abms.org/board-certification/abms-board-certification-report/>

The annual ABMS “Board Certification Report” contains statistics on certificates issued by 24 U.S. member boards representing 150 specialties and subspecialties. Numbers are supplied by the boards and by data from the ABMS certification database of 800,000 specialist physicians.

**5.53 *The Complexities of Physician Supply and Demand: Projections from 2013 to 2025*. Washington, DC: Association of American Medical Colleges, 2015.**

<https://www.aamc.org/download/426242/data/ihsreportdownload.pdf>

This publication gives time trends and projected number and need for physicians from 2013 to 2025, using different scenarios. It was prepared by IHS Inc. using 2013 AMA Physician Masterfile data on students completing their graduate medical education as a baseline.

**5.54 “Medscape Physician Compensation Report, 2015.”**

<http://www.medscape.com/features/slideshow/compensation/2015/public/overview>

This report contains the results of an independently-administered online compensation survey of more than 19,000 U.S. physicians in 26 specialties. It gives total earnings, time trends, earnings, earnings by region, top-earning and low-earning states, percent self-employed, practice details by gender and age, hours of work, time per patient, attitudes, career satisfaction, insurance, payment models, and specialties by gender. Free registration may be required.

**5.55 *MGMA Physician Compensation and Production Survey Report*. Engelwood, CO: Medical Group Management Association, 1992- .**

This description is based on the 2015 annual Medical Group Management Association report, using 2014 data. This publication gives “data from 66,299 physicians and nonphysician

providers in 4,197 medical organizations.” The MGMA also produces other publications and custom reports; more information is available at <http://www.mgma.com/>

**5.56 *Physician characteristics and distribution in the U.S.* Chicago: American Medical Association, 1981- . Annual.**

This annual American Medical Association publication includes data on more than 1 million physicians from the AMA Physician Masterfile, including more than 70,000 osteopaths. It gives numbers, trends, personal characteristics, self-designated specialty; group practices; data are also given by region. This publication is available in print or electronic form.

**5.57 *2014 Physician Specialty Data Book.* Association of American Medical Colleges. November 2014.**

[https://members.aamc.org/eweb/upload/14-086%20Specialty%20Databook%202014\\_711.pdf](https://members.aamc.org/eweb/upload/14-086%20Specialty%20Databook%202014_711.pdf)

The Physician Specialty Data Book provides numbers of U.S. physicians and personal characteristics by specialty, compiled from the 2014 AMA Physician Masterfile, U.S. Census data, and the 2013 AAMC/AMA National GME Census. A 2012 edition was also published.

**5.58 *State Medical Licensure Requirements and Statistics.* Chicago: American Medical Association, 1982- . Annual.**

This annual AMA publication gives state medical licensing requirements and fees and examination pass/fail percentages. Data are compiled from state boards of medical and osteopathic examiners. It is available in print or electronic form.

**5.59 *State Physician Workforce Data Book.* Association of American Medical Colleges, 2007- . Biennial.**

<https://www.aamc.org/data/workforce/>

The *State Physician Workforce Data Book*, available online as a PDF file, has statistics on distribution and characteristics of U.S. physicians and osteopaths by state. It uses AMA Physician Masterfile data, U.S. Census population estimates, AAMC student records, American Association of Colleges of Osteopathic Medicine figures, and National GME Census statistics. It includes figures on medical and osteopathic education and graduate medical education. An online supplement at <https://www.aamc.org/data/workforce/reports/profiles/> has state snapshots.

**5.60 WWAMI Rural Health Research Center. *The Aging of the Rural Primary Care Physician Workforce: Will Some Locations Be More Affected than Others?* By Meredith A. Fordyce, Mark P. Doescher, and Susan M. Skillman. Final Report #127. Seattle, WA: WWAMI Rural Health Research Center. University of Washington. Sep 2013.**

[http://depts.washington.edu/uwrhrc/uploads/RHRC\\_FR127\\_Fordyce.pdf](http://depts.washington.edu/uwrhrc/uploads/RHRC_FR127_Fordyce.pdf)

This publication gives data, graphs, maps, and tables illustrating regional variations in the percentage of nonmetropolitan area primary care physicians who were 56 or older in 2005, from American Medical Association and American Osteopathic Association Masterfile data.

## *Nurses and nursing personnel*

**5.61 Bureau of Labor Statistics (U.S). Occupational Employment Statistics. *Occupational Employment and Wages*. May 2014. 29-1141 Registered Nurses.**

<http://www.bls.gov/oes/current/oes291141.htm>

This annual publication gives detailed employment and wage data collected from employer surveys. Separate reports cover Nurse Anesthetists, Nurse Midwives, and Nurse Practitioners.

**5.62 Census Bureau (U.S). *Men in nursing occupations: American Community Survey highlight report*. February 2013.**

[https://www.census.gov/people/io/files/Men\\_in\\_Nursing\\_Occupations.pdf](https://www.census.gov/people/io/files/Men_in_Nursing_Occupations.pdf)

This report, compiled using the U.S. Census Bureau's American Community Survey data, gives the percentages of LPNs, RNs, all nurses, nurse practitioners, and nurse anesthetists who are male, salaries of male nurses, and time trends, 1970-2011.

**5.63 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025*. Rockville, Maryland: Health Resources and Services Administration, 2014.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/index.html>

This report gives ten-year estimates of the state and national RN and LPN supply, using American Community Survey data as a baseline. Demand for nurses is estimated by data from the American Community Survey, National Nursing Homes Survey, and Behavioral Risk Factors Surveillance System. Implications of possible supply/demand imbalances are discussed.

**5.64 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. *Highlights From the 2012 National Sample Survey of Nurse Practitioners*. Rockville, MD: U.S. Department of Health and Human Services, 2014.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/nursepractitionersurvey/>

The National Sample Survey of Nurse Practitioners was conducted by HRSA in 2012, and highlights were published in 2014. Data came from a mail sample survey across 51 state licensing boards. Statistics cover the number of NPs, demographics, education, certification, practice patterns, services provided, presence of physicians, specialty, practice setting, and perceptions of NPs.

**5.65 Health Resources and Services Administration (U.S). Bureau of Health Professions. U.S. Department of Health and Human Services. *The registered nurse population: Findings from the 2008 National Sample Survey of Registered Nurses*. 2010.**

<http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf>

The 2008 National Sample Survey of Registered Nurses provides a snapshot of the U.S. nursing workforce, including education, licensing, certification, employment characteristics, job titles,

job satisfaction, hours, earnings, demographics, internationally-educated nurses, nurse practitioners, nurse midwives, nurse anesthetists, clinical nurse specialists, nurses not working in nursing, and recent graduates. Data were collected in a multimode survey from a sample of registered nurses taken from state licensing records.

**5.66 Health Resources and Services Administration (U.S.). Bureau of Health Professions. National Center for Workforce Analysis. U.S. Department of Health and Human Services. *The U.S. Nursing Workforce: Trends in Supply and Education*. April 2013.**  
<http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>

This 2013 HRSA publication uses data from the U.S. Census Bureau's American Community Survey, 2008-2010 and the Census of Population 2000 long form. It includes data on the total RN workforce and RNs per 100,000 per state, rural vs. urban, by type of work setting, time trends, highest degree held, demographics, hours worked, NCLEX-RN and NCLEX-PN takers and passers, post-licensure education, advanced practice nurses, and internationally-educated nurses.

**5.67 National Council of State Boards of Nursing. National Nursing Workforce Study.**  
<https://www.ncsbn.org/workforce.htm>

This site gives highlights of the 2015 National RN Workforce Survey. Results of the Council's 2013 survey are also linked to this site. These two surveys update HRSA's National Sample Survey of Registered Nurses, last conducted in 2008. Results will be published in the April 2015 issue of *Journal of Nursing Regulation*.

**5.68 *The National Nursing Database: a profile of nursing licensure in the U.S.* National Council of State Boards of Nursing.**  
<https://www.ncsbn.org/national-nursing-database.htm>

The National Nursing Database is the most comprehensive database of RN and PN/LVN nursing licensure statistics for U.S. and its territories, compiled from the Nursys.com database by participating boards of nursing. Numbers of active RN/PN licenses are listed by state and nationally. A few states do not participate; check website for current details. Employers, nurses, and others can check licensure status of individual nurses. The database is also used to facilitate and record movement of nurses between states.

**5.69 "The 2013 National Nursing Workforce Survey of Registered Nurses." 2013. *Journal of Nursing Regulation* 4(2) supplement, S3-S65. DOI: [http://dx.doi.org/10.1016/S2155-8256\(15\)30136-8](http://dx.doi.org/10.1016/S2155-8256(15)30136-8)**  
<http://www.journalnursingregulation.com/article/S2155-8256%2815%2930136-8/pdf>

The 2013 National Nursing Workforce Survey of Registered Nurses was undertaken from January through March 2013, using a random sample of 42,294 RNs in the U.S. and its territories. This survey was a collaborative effort between the National Council of State Boards of Nursing (NCSBN) and the Forum of State Nursing Workforce Centers (FSNWCs). The sample was mostly drawn from the NCSBN's Nursys® database. This survey updates *The*

*registered nurse population: Findings from the 2008 National Sample Survey of Registered Nurses*, published by the Health Resources and Services Administration (2010). Highlights of the results also appear on the NCSBN website.

## *Pharmacists*

### **5.70 American Association of Colleges of Pharmacy. Pharmacy Workforce Center.**

<http://www.aacp.org/resources/research/pharmacyworkforcecenter/Pages/default.aspx>

The Pharmacy Workforce Center is a nonprofit corporation comprised of pharmacy-related organizations. It produces data on the pharmacy workforce and related areas, and has links to pharmacy manpower surveys, the Aggregate Demand Index (a national index of overall demand for pharmacists) <http://www.pharmacymanpower.com/>, and a list of major pharmacy manpower data resources. The Pharmacy Workforce Center was formerly called the Pharmacy Manpower Project, Inc.

### **5.71 American Association of Colleges of Pharmacy. Pharmacy Workforce Center. 2014 NABP E-Profile Aggregate Data: a report for the Pharmacy Workforce Center. November 2014.**

[http://www.aacp.org/advocacy/WhatDoesAACPAAdvocateFor/BudgetandAppropriations/Documents/FINAL\\_NABP%20E-profile%20Aggregate%20Analysis%20Report%202014.pdf](http://www.aacp.org/advocacy/WhatDoesAACPAAdvocateFor/BudgetandAppropriations/Documents/FINAL_NABP%20E-profile%20Aggregate%20Analysis%20Report%202014.pdf)

The *2014 NABP E-Profile Aggregate Data* offers a recent snapshot of demographics and practice information for U.S. pharmacists, from the National Association of Boards of Pharmacy online records.

### **5.72 Bureau of Labor Statistics (U.S). Occupational Employment Statistics. Occupational Employment and Wages, May 2014. 29-1051, Pharmacists.**

<http://www.bls.gov/oes/current/oes291051.htm>

This annual BLS publication gives detailed pharmacist employment and wage data collected from employer surveys.

### **5.73 Health Resources and Services Administration (U.S). Bureau of Health Professions. U.S. Department of Health and Human Services. The Adequacy of Pharmacist Supply: 2004 to 2030. Health Resources and Services Administration. December 2008.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/pharmacy/pharmsupply20042030.pdf>

This 2008 HRSA report projecting the supply of and demand for U.S. pharmacists, 2004-2030, uses 2004 National Pharmacist Workforce Survey as baseline; projections according to several scenarios using a HRSA-developed model.

### **5.74 Health Resources and Services Administration (U.S). National Center for Health Workforce Analysis. U.S. Department of Health and Human Services. Health workforce projections: pharmacists, 2012-2025.**

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/projections/pharmacists.pdf>

This HRSA fact sheet uses the HRSA Health Workforce Simulation Model to estimate supply and demand for pharmacists through 2025.

**5.75 Health Resources and Services Administration (U.S). Bureau of Health Professions. U.S. Department of Health and Human Services. *Report to Congress. The Pharmacist Workforce: A Study of the Supply and Demand for Pharmacists. December 2000.***  
<http://bhpr.hrsa.gov/healthworkforce/supplydemand/pharmacy/pharmacistsupplydemand.pdf>

This influential 2000 report projected an increased U.S. demand for pharmacists resulting in future shortages. It includes data on factors influencing demand, expanded roles of pharmacists, quality of care, and supply and training of pharmacists.

#### **5.76 IMS Health**

<http://www.imshealth.com/en/thought-leadership/ims-institute/reports>

IMS Health produces data on the U.S. and world prescription drug industry. The IMS Institute for Healthcare Informatics produces a report series available for download with registration. A recent report: Medicines Use and Spending Shifts: Review of the Use of Medicines in the U.S. in 2014.

**5.77 Midwest Pharmacy Workforce Consortium. *2014 National Pharmacist Workforce Survey: Final Report of the 2014 National Sample Survey of the Pharmacist Workforce to Determine Contemporary Demographic Practice Characteristics and Quality of Work-Life*, by Caroline A. Gaither, Jon C. Schommer, William R. Doucette, David H. Kreling, and David A. Mott. Minneapolis, MN: Pharmacy Workforce Center, 2015.**  
<http://www.aacp.org/resources/research/pharmacyworkforcecenter/Documents/FinalReportOfTheNationalPharmacistWorkforceStudy2014.pdf>

The National Pharmacist Workforce Survey is a survey of U.S. pharmacists commissioned by Pharmacy Workforce Center. It includes data on pharmacist demographics, work activities and history, earnings and debt, and quality of life.

**5.78 National Community Pharmacists Association. *NCPA Digest. Annual. Alexandria, VA: National Community Pharmacists Association, 2008- .***  
<http://www.ncpanet.org/docs/default-source/default-document-library/2013-ncpa-digest-sponsored-by-cardinal-health.pdf>

The *NCPA Digest* gives average annual sales of community pharmacies, percent profit and time trends, wages, services offered, long-term care services, technology, and third-party prescriptions. This description is based on the 2013 edition. Latest edition requires login on NCPA website.

**5.79 Pedersen, C. A., Schneider, P. J., & Scheckelhoff, D. J. (2015). ASHP national survey of pharmacy practice in hospital settings: Dispensing and administration--2014. *American Journal of Health-System Pharmacy: AJHP*, 72(13), 1119-1137. doi:10.2146/ajhp150032**

This article presents results of the annual American Society of Health-System Pharmacists Summary data for 2013 may be viewed at <http://www.ashp.org/DocLibrary/MemberCenter/SPPM/2013-ASHP-Staffing-Survey.pdf> and additional statistics appear in the ASHP members-only area.

### *Other health professions*

#### **5.80 American Academy of Physician Assistants. *AAPA Annual Survey Report.***

<https://www.aapa.org/research/>

The *AAPA Annual Survey Report* includes data from member and nonmember physician assistants (PAs). It presents statistics on demographics, practice settings, practice characteristics, job satisfaction, and salaries. Other data reports and services are available on the AAPA website; some are free and some are fee-based.

#### **5.81 Association of State and Territorial Health Officials. *ASTHO Profile of State Public Health. Volume 3. Washington, DC, 2014.***

<http://www.astho.org/profile/>

The *ASTHO Profile* has statistics on personnel in state health departments. A few states have missing or partial data. Profiles for responding states are included also. Data include numbers of employees, occupational classifications, age, employee length of service, gender, race, ethnicity, and vacancies. The *ASTHO Profile* has been published every 2-3 years since 2007.

#### **5.82 National Association of County & City Health Officials. *National Profile of Local Health Departments.***

<http://nacchoprofilestudy.org/reports-publications/>

This local public health data report, by the National Association of County & City Health Officials (NACCHO), complements the *ASTHO* state-level public health workforce data and is also called the “Profile Study.” 2530 of estimated 2800 U.S. local health departments are included; only one level is included for large multilevel health departments. This publication lists local health department employee demographics, length of service, and educational level of leaders, numbers of FTEs, occupational classifications of employees, median number of employees, demographics, and other data. Past reports and other data are available on the NACCHO website. This publication has been updated irregularly since 1989-1990, and is available online or in print copy.

#### **5.83 National Commission on Certification of Physician Assistants. *Statistical Report on Certified Physician Assistants. Annual.***

<http://www.nccpa.net/Research>

This annual report is compiled from a national database of certified PAs by the National Commission on Certification of Physician Assistants (NCCPA). NCCPA is the certifying body for physician assistants in the U.S. This publication gives data on PA demographics, the number of PAs by state and per 100,000 population, languages spoken, practice areas, primary and non-

primary care by state, and income. A separate report gives data for recently certified PAs. Other statistical reports are available; some data are fee-based or for NCCPA members only.

**5.84 National Center for Health Statistics (U.S).** *An Overview of Home Health Aides: United States, 2007*, by Anita Bercovitz, Abigail Moss, Manisha Sengupta, Eunice Y. Park-Lee, Adrienne Jones, and Lauren D. Harris-Kojetin. National health statistics reports; no 34. Hyattsville, MD: National Center for Health Statistics, 2011.  
<http://www.cdc.gov/nchs/data/nhsr/nhsr034.pdf>

*An Overview of Home Health Aides* gives data on estimated 160,700 home health aides, from the 2007 National Home Health Aide Survey. It includes demographics, training, work environment, pay and benefits, and injuries. See also Occupational Outlook Handbook at <http://www.bls.gov/ooh/healthcare/home-health-aides.htm> for updated information on this large occupational group.

**5.85 Spetz, Joanne, Laura Trupin, Timothy Bates, and Janet M. Coffman. 2015.** “Future Demand for Long-Term Care Workers Will Be Influenced by Demographic and Utilization Changes.” *Health Affairs*, 34 (6), 936-945. doi: 10.1377/hlthaff.2015.0005

This study uses data from several sources, including the 2013 National Study of Long-Term Care Providers, the Medical Expenditure Panel Survey (MEPS) 2009-2011, Johns Hopkins’ National Health & Aging Trends Study (NHATS) and U.S. Census statistics, to make projections about the future demand for several types of long-term care workers in 5-year increments through the year 2030. It is estimated that more than 2 million additional workers will be needed.

**5.85a UCSF Health Workforce Research Center on Long-Term Care.** *Profile of the Licensed Practical Nurse/Licensed Vocational Nurse Workforce, 2008 and 2013*.  
[http://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/Report-Profile\\_of\\_the\\_Licensed\\_Practical\\_Nurse\\_Licensed\\_Vocational\\_Nurse\\_Workforce\\_2008\\_and\\_2013.pdf](http://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/Report-Profile_of_the_Licensed_Practical_Nurse_Licensed_Vocational_Nurse_Workforce_2008_and_2013.pdf)

“Licensed practical nurses (LPNs), referred to as licensed vocational nurses (LVNs) in some states, are the second-largest health care occupation that requires postsecondary education. More LPNs work in long-term care (LTC) than in any other sector. Demand for LPNs among long-term care providers is expected to increase substantially over the next several decades. Thus, there is a need to better understand recent trends in the LPN workforce and their implications for the future supply of LPNs available to provide long-term care. This report updates previous studies of the LPN workforce by presenting the latest national data available on LPN employment patterns with emphasis on employment in long-term care. The report also describes trends in the demographic characteristics and educational attainment of LPNs. - See more at: <http://healthworkforce.ucsf.edu/publication/profile-licensed-practical-nurse/licensed-vocational-nurse-workforce-2008-and-2013#sthash.R24uwSmE.dpuf> “

**5.86 University of Michigan Center of Excellence in Public Health Workforce Studies.** *Public Health Workforce Enumeration, 2012*. University of Michigan. Ann Arbor, MI, 2013.

[http://www.phf.org/resourcestools/Documents/UM\\_CEPHS\\_Enumeration2012\\_Revised\\_July\\_2013.pdf](http://www.phf.org/resourcestools/Documents/UM_CEPHS_Enumeration2012_Revised_July_2013.pdf)

This 2013 publication from the University of Michigan gives numeric estimates of 2012 U.S. public health workforce based on six data sources.

#### **(4) Health professional education**

Statistics on U.S. health professional education are compiled by both U.S. government agencies and private organizations. A major public source of data is the Integrated Postsecondary Education Survey (IPEDS) conducted by the U.S. National Center for Education Statistics. Many types of health education in the U.S. are accredited by independent organizations that often keep separate statistics. Professional associations, accrediting and certifying organizations, and associations of specialized schools and colleges are good places to look for statistics. Many associations post basic statistics on their websites; many also have members-only data or produce data or reports available for purchase.

##### *Dental education*

#### **5.87 American Dental Association. Health Policy Institute. “Dental Education.”**

<http://www.ada.org/en/science-research/health-policy-institute/data-center/dental-education/>

The Dental Education Series includes annual ADA survey reports for predoctoral dental education (in Excel format) for (1) Academic Programs, enrollment, and graduates (2) Tuition, admission, and attrition (3) Finances and (4) Curriculum (alternate years). The Survey of Advanced Dental Education covers nine recognized dental specialty programs and five postdoctoral general dentistry programs. Reports include program information, demographics, enrollment, graduates, tuition, and stipends.

#### **5.88 American Dental Education Association. “Data Analysis and Research.”**

<http://www.adea.org/data/>

The American Dental Education Association (ADEA) collects data from ADEA’s annual surveys and research on trends in dental education. The ADEA website has statistics on dental school applicants, enrollees, and graduates, faculty, and dental school seniors. Some reports are members-only; some are published in the Journal of Dental Education.

#### **5.89 National Center for Education Statistics (U.S). *Digest of Education Statistics*. Number of postsecondary institutions conferring doctor's degrees in dentistry, medicine, and law, and number of such degrees conferred, by sex of student: Selected years, 1949-50 through 2012-2013. Table 324.40. National Center for Education Statistics. Washington, DC, 1975- . Annual.**

[https://nces.ed.gov/programs/digest/d14/tables/dt14\\_324.40.asp](https://nces.ed.gov/programs/digest/d14/tables/dt14_324.40.asp)

The *Digest of Education Statistics* includes data on the numbers of graduates in dentistry and medicine from the National Center for Education Statistics Integrated Postsecondary Education Data Systems Survey (IPEDS) “Completions survey” and preceding surveys. The description is based on the 2014 *Digest*.

*Medical education*

**5.90 AAMC Data Book: Medical Schools and Teaching Hospitals by the Numbers, by Susannah Rowe and Stephanie Wisniewski. Washington, DC: Association of American Medical Colleges, 2015. Annual since 1990; title varies.**

<https://www.aamc.org/data/databook/>

The AAMC Data Book is a statistical abstract of U.S. medical schools, teaching hospitals, students, faculty, and graduates. It includes characteristics of applicants, students, and graduates; medical school finances, tuition, financial aid, and student debt; graduate medical education; teaching hospitals; healthcare financing and research expenditures; physicians; medical school faculty compensation; price indices; federal expenditures; historical and trend data. The *AAMC Data Book* may be purchased in print copy; the data tables have limited availability on the AAMC website.

**5.91 Association of American Medical Colleges. Center for Workforce Studies. *Results of the medical school enrollment survey*. Association of American Medical Colleges. Center for Workforce Studies, 2010- . Annual.**

<https://members.aamc.org/eweb/upload/Results%20of%20the%202014%20Medical%20School%20Enrollment%20Survey.pdf>

The Association of American Medical Colleges (AAMC) annual survey gives enrollment data and trends for U.S. schools of medicine and osteopathy. Description based on 2014.

**5.92 Barzansky, B., & Etzel, S. I. (2015). Medical Schools in the United States, 2014-2015. *JAMA*, 314(22), 2426-2435. doi:10.1001/jama.2015.15546**

<http://jama.jamanetwork.com/article.aspx?articleid=2020353>

This JAMA statistical report on medical education in the U.S. is published annually. Data are compiled from questionnaires sent to deans of accredited medical schools in U.S. and Puerto Rico. Total numbers, breakdowns by gender, trends by year, first-year positions by state and percentage of in-state residents for each school are given. Examination and program details and enrollment breakdowns by school are also listed. The publication details for the JAMA medical education issue vary by year; users may check the publisher website, the JAMA annual index, or PubMed for more information.

**5.93 Brotherton, S. E., & Etzel, S. I. (2015). Graduate Medical Education, 2014-2015. *JAMA*, 314(22), 2436-2454. doi:10.1001/jama.2015.10473**

JAMA publishes an annual report giving detailed data on U.S. specialty graduate medical education and resident physicians, in addition to its report on medical schools. Totals, statistics

by specialty for U.S. graduates, international medical graduates (IMGs), Canadian graduates (who are not considered IMGs), osteopaths, female physicians, and program totals are given. Total numbers are broken down by state and region. Figures on citizenship status of IMGs are listed. Details on race and ethnicity of graduate physicians are given, as total numbers and breakdowns by specialty. The numbers projected openings for next academic year are estimated.

**5.94 National Center for Education Statistics (U.S). *Digest of Education Statistics*. Number of postsecondary institutions conferring doctor's degrees in dentistry, medicine, and law, and number of such degrees conferred, by sex of student: Selected years, 1949-50 through 2012-2013. Table 324.40. National Center for Education Statistics. Washington, DC, 1975- . Annual.**

[https://nces.ed.gov/programs/digest/d14/tables/dt14\\_324.40.asp](https://nces.ed.gov/programs/digest/d14/tables/dt14_324.40.asp)

Compiled by the National Center for Education Statistics, Integrated Postsecondary Education Data Systems Survey (IPEDS) "Completions survey" and preceding surveys. This description is based on the 2014 *Digest*.

### *Nursing education*

**5.95 2014-2015 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC: American Association of Colleges of Nursing, 2015. Annual, 1991- .**

Data for *Enrollments and Graduations* are collected by the AACN (American Association of Colleges of Nursing) Annual Survey of Enrollment and Graduate Programs in Nursing. Statistics include U.S. baccalaureate and graduate nursing student enrollments, personal characteristics of nursing students, graduations, time trends, program offerings, and regional data. This publication also provides enrollment and graduation data for NP and CNS programs by specialty. It is available in print copy from the American Association of Colleges of Nursing at <http://www.aacn.nche.edu/research-data/standard-data-reports>

**5.96 National Council of State Boards of Nursing. "Exam Statistics and Publications. NCLEX pass rates."**

<https://www.ncsbn.org/exam-statistics-and-publications.htm>

This annual statistical report gives quarterly and annual summary data on numbers and percentages of candidates taking and passing the NCLEX-RN (National Council Licensure Examination – Registered Nurse) or the NCLEX-PN nursing examination (National Council Licensure Examination – Practical Nurse) for the first time or repeat attempts; by type of program (diploma, baccalaureate, associate degree) and by U.S.- vs. internationally-educated students. More detailed reports are available to subscribers.

**5.97 National League for Nursing. "Nursing Education Statistics."**

<http://www.nln.org/newsroom/nursing-education-statistics>

The National League for Nursing produces an online statistical report that includes diploma, associate degree, baccalaureate, and masters programs. Details include data on admissions, applications, enrollments, graduations, geography, student demographics, historically black colleges, nurse educators, and numbers of nursing schools. Graphs may be downloaded in custom formats. This online report was formerly published in print as *Nursing Data Review* (title varies), 1985- .

**5.98 *Nurse Licensee Volume and NCLEX Examination Statistics*. Washington, DC: National Council of State Boards of Nursing, 2004- . NCSBN Research Briefs. Annual.**  
[https://www.ncsbn.org/15\\_2014\\_NCLEXExamStats\\_vol64.pdf](https://www.ncsbn.org/15_2014_NCLEXExamStats_vol64.pdf)

This annual online statistical report from the National Council of State Boards of Nursing gives the numbers of newly-licensed RNs and LPNs/VNs and active licenses by state/jurisdiction for U.S. and territories; detailed NCLEX-RN and NCLEX-PN examination statistics for first-time and repeat test-takers; by state and by U.S. - vs. internationally-educated. It also enumerates advanced practice registered nurses with authority to practice by role (Certified Nurse Midwife; Certified Registered Nurse Anesthetist, Clinical Nurse Specialist, Certified Nurse Practitioner). Statistics for internationally-educated test-takers are broken down by country of education; totals and numbers/percentages passing are listed by country of education. This report was formerly issued in print as *Licensure and Examination Statistics* (title varies), 1984- .

**5.99 *2014-2015 Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: American Association of Colleges of Nursing, 2015. Annual, 1997- .**

This annual print publication, available from the American Association of Colleges of Nursing, gives data on nursing faculty salaries, age profile, demographics, and faculty role (administrative, instructional, practitioner, clinical nurse faculty). This description is based on the 2014 edition. A similar annual report, *Faculty Salaries in Baccalaureate and Graduate Programs in Nursing*, was published by the AACN from 1991 to 1996. Order at <http://www.aacn.nche.edu/research-data/standard-data-reports>

**5.100 *2014-2015 Salaries of Deans in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: American Association of Colleges of Nursing, 2015. Annual, 1993- .**

This annual print publication, available from AACN, gives statistics on salaries of baccalaureate and graduate nursing school deans. Order at <http://www.aacn.nche.edu/research-data/standard-data-reports>

### ***Pharmacy education***

**5.101 American Association of Colleges of Pharmacy. Resources. Research. Office of Institutional Research and Effectiveness.**  
<http://www.aacp.org/resources/research/institutionalresearch/Pages/default.aspx>

The American Association of Colleges of Pharmacy (AACP) collects statistics on colleges and schools of pharmacy accredited by the Accreditation Council for Pharmacy Education. Some data are freely available on the AACP website; some are members-only or issued only in print.

**5.102 American Association of Colleges of Pharmacy. Office of Institutional Research and Effectiveness. *Graduating student survey information and summary reports.***

<http://www.aacp.org/resources/research/institutionalresearch/Pages/GraduatingStudentSurvey.aspx>

The annual online *Graduating Student Survey* from the American Association of Colleges of Pharmacy gives data on pharmacy student evaluations and satisfaction with learning experiences, demographics, outside employment while in school, type of program, previous education, career plans, and student debt.

**5.103 *Fall 2014 Profile of Pharmacy Students.* American Association of Colleges of Pharmacy, 2015. Available from <http://www.lulu.com/> Annual, 1991- .**

The annual *Profile of Pharmacy Students*, compiled by the American Association of Colleges of Pharmacy, and available in print or online, gives data on the pharmacy student application pool, enrollments, and degrees conferred. These statistics are available on AACP website at <http://www.aacp.org/RESOURCES/RESEARCH/INSTITUTIONALRESEARCH/Pages/StudentApplications,EnrollmentsandDegreesConferred.aspx>

**5.104 *2015-2016 profile of pharmacy faculty.* American Association of Colleges of Pharmacy, 2016. Available from <http://www.lulu.com/> . Annual, 1991- .**

This annual print publication, produced by the American Association of Colleges of Pharmacy (AACP), gives data on pharmacy faculty demographics, teaching disciplines, ranks, highest degrees earned, tenure status, types of appointment, and salaries. Summary data for recent years (some members-only) are available on the AACP website.

***Allied health education***

**5.105 American Dental Association. Health Policy Institute. “Dental Education.”**

<http://www.ada.org/en/science-research/health-policy-institute/data-center/dental-education>

The online Dental Education Series includes annual data, in Excel format, for dental hygiene, dental assisting, and dental laboratory technology programs. Statistics on enrollment, students, programs, faculty characteristics, tuition, and clinical instruction are given. These numbers are compiled from American Dental Association survey data.

**5.106 American Speech-Language-Hearing Association. “Communication Sciences and Disorders (CSD) Education Survey Data Reports.”**

<http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/>

The online “Data Reports” are based on annual surveys by American Speech-Language-Hearing Association (ASHA) and Council of Academic Programs in Communication Sciences and

Disorders (CAPCSD). They give statistics on undergraduate and graduate enrollment in communication sciences and disorders programs, degrees granted, research doctoral programs, faculty data, grants and contracts, trends.

**5.107 Commission on Accreditation of Allied Health Education Programs.**

<http://www.caahep.org/>

Voluntary accrediting body for 2000 programs in 24 allied health programs; publishes statistics on accredited programs. Member of the Council for Higher Education Accreditation.

**5.108 Commission on Accreditation of Physical Therapy Education. “Aggregate Program Data.”** <http://www.capteonline.org/AggregateProgramData/>

The “Aggregate Program Data” for physical therapy programs are compiled from annual accreditation reports of the Commission on Physical Therapy Education. This publication gives detailed figures on physical therapy and physical therapy assistant programs, including numbers of programs, program characteristics, admission, enrollment, graduates, faculty characteristics, and faculty salaries.

**5.109 *Dental hygiene education: curricula, program enrollment and graduate information.* October 21, 2014.** <https://www.adha.org/resources-docs/72611-Dental-Hygiene-Education-Fact-Sheet.pdf>

The American Dental Hygienists’ Association (ADHA) compiles data from ADHA and ADA surveys, including this “fact sheet” summarizing facts and statistics on U.S. dental hygiene programs. It gives the total number of programs, statistics for each state, programs by level and type, and programs by type of institution. Data also include enrollment, program details, degree completion, and new programs. Time trends are shown for numbers of students and programs for dental hygiene vs. DDS programs, and entry-level vs. master’s degree programs.

**5.110 ExploreHealthCareers.org. “Allied health professions overview.”**

[http://explorehealthcareers.org/en/Field/1/Allied\\_Health\\_Professions](http://explorehealthcareers.org/en/Field/1/Allied_Health_Professions)

ExploreHealthCareers is an interactive health career website coordinated by the American Dental Education Association and the Federation of Associations of Schools of the Health Professions, and is a joint initiative of the Federation of Associations of Schools of the Health Professions. As well as directory information, it includes average salary and salary range, length of study, financing of study, and career outlook.

**5.111 National Center for Education Statistics. *Digest of Education Statistics.* National Center for Education Statistics. Washington, DC, 1975- . Annual.**

[http://nces.ed.gov/programs/digest/current\\_tables.asp](http://nces.ed.gov/programs/digest/current_tables.asp)

The *Digest of Education Statistics* includes tables of degrees conferred by U.S. schools and universities, by discipline: Table 320, certificates; Table 321, associate’s degrees; Table 322, bachelor’s degrees; Table 323, master’s degrees; Table 324, doctor’s degrees. Description is based on the 2014 edition.

**5.112 Physician Assistant Education Association. *Annual Report on Physician Assistant Educational Programs in the United States. 1984- .***

<http://www2.paeaonline.org/index.php?ht=d/sp/i/243/pid/243>

The most recent report is members-only. This online report lists data on characteristics of applicants and enrolled students, curriculum, and financial data for U.S. physician assistant educational programs. Numbers are based on an annual survey of member programs.