NATIONAL SUPPLY ESTIMATES OF SPECIFIC ALLIED HEALTH OCCUPATIONS USING DIFFERENT DATA SOURCES



DATA SNAPSHOT: Occupational Therapists

Identifying and analyzing available data resources is a crucial step in assessing the supply and distribution of allied health occupations, their demographic and socioeconomic characteristics, and the adequacy of the supply to meet industry and population needs. The report *Leveraging Data to Monitor the Allied Health Workforce: National Supply Estimates Using Different Data Sources*¹ (the background report for this Data Snapshot) compared national estimates of the supply and characteristics of nine allied health occupations using four national data sources: the American Community Survey (ACS) and the Current Population Survey (CPS), both data from the U.S. Census Bureau; the Occupational Employment Statistics (OES) from the U.S. Bureau of Labor Statistics, and the National Provider Identifier (NPI) Registry from the Centers for Medicare and Medicaid Services' National Plan and Provider Enumeration System. Using the most recent comparable data available from these sources, this Data Snapshot summarizes the national supply size and demographic, educational attainment, and employment information for occupational therapists.

Who are occupational therapists? Occupational therapists work with ill, injured, disabled individuals using therapeutic means to restore individuals' maximum possible levels of independence to carry out day-to-day activities and more. Most occupational therapists work in offices of occupational therapy or in hospitals. Occupational therapists also work in schools, nursing homes, and home health services. Occupational therapists are required to be licensed by states.²

How are occupational therapists identified across data sources? Occupational therapists, in the ACS and CPS surveys, are identified by the four-digit SOC code, 3150, and in the OES dataset by the occupation code 29-1122, or could be pulled directly from the OES website, data section. In the

Estimated national supply of occupational therapists from the ACS, OES, CPS, and NPI data sources

Occupational Therapists

102,576

ACS 2014

CPS 2015

Data sources: American Community Survey (ACS), Current Population Survey (CPS), Occupational Employment Statistics (OES), National Provider Identifier Registry (NPI)

NPI Registry, occupational therapists are identified using the following taxonomy codes: Occupational Therapist - 225X00000X, Driving and Community Mobility - 225XR0403X, Environmental Modification - 225XE0001X, Ergonomics - 225XE1200X, Feeding, Eating & Swallowing - 225XF0002X, Gerontology - 225XG0600X, Hand - 225XH1200X, Human Factors - 225XH1300X, Low Vision - 225XL0004X, Mental Health - 225XM0800X, Neurorehabilitation - 225XN1300X, Pediatrics - 225XP0200X, Physical Rehabilitation - 225XP0019X.

National estimates of occupational therapists across data sources: Data to estimate the supply of occupational therapists were available in the ACS, CPS, OES, and NPPES NPI Registry. Demographic and socioeconomic data were available in the ACS and CPS data, and the OES had salary data. The NPI Registry had information only on the sex of the providers. The figure provides information on the estimated supply of occupational therapists as derived from these four data sources. The supply estimate of occupational therapists from the the CPS was 119,434 (±31,363), from the OES was 114,660 (±2,945), and from the ACS was 102,576 (±7,371), and from the NPI Registry was 78,734. Because the NPI Registry represents the entire population of providers in the Registry, margins of error are not relevant. As described in the background report, lower supply estimates from the NPI Registry are to be expected because they represent the providers who obtain NPIs for billing or information exchange purposes.

Demographic and socioeconomic characteristics: The table below provides information on demographic and socioeconomic characteristics of occupational therapists as estimated from the ACS, CPS and OES data sources. The mean age of occupational therapists ranged from 41.2 to 42.6 years, with a slightly older population captured in the CPS. The majority of this workforce were women, between 88.4 to 89.0%. A similar proportion, about 90%, of occupational therapists were female when estimated from the NPI Registry (results not shown). Among non-White racial groups, Blacks were the second largest racial group among occupational therapists identified in the CPS (6.1%), while "other" race formed the second-largest group identified in the ACS data. Marital status was also comparable between the datasets. Between 66.1 to 66.7% of occupational therapists were married; between 11.6 to 12.1% were divorced or separated or widowed, and between 21.2 to 22.3% were single. In terms of educational attainment, a high proportion (more than 90%) of occupational therapists had either a bachelor's degree or a master's degree or more. The mean annual earnings, adjusted to 2015 U.S. dollars, was lowest in the CPS (\$52,819) and highest in OES (\$81,690) estimates. The mean hours worked per week were similar in the CPS and ACS data, 36.9 to 38.0 hours, respectively. Both the ACS and CPS reported similar percentages (78.5% and 78.0%) of full-time workers.

REFERENCES:

 Skillman SM, Dahal A, Frogner BK, Stubbs BA. Leveraging Data to Monitor the Allied Health Workforce: National Supply Estimates Using Different Data Sources. Center for Health Workforce Studies, University of Washington, Dec 2016.

Demographic and socioeconomic characteristics of occupational therapists

	ACS 2014	CPS 2015	OES 2015
Age (mean years)	41.2	42.6	
Female	89.0%	88.4%	
Race/Ethnicity			
White, not Hispanic	84.1%	84.5%	
Black, not Hispanic	4.4%	6.1%	
Other, not Hispanic	7.0%	4.4%	
Hispanic	4.5%	5.0%	
Marital Status			
Married	66.1%	66.7%	
Divorce/Separated/Widowed	11.6%	12.1%	
Single	22.3%	21.2%	
Educational Attainment			
High school or less	1.0%	0.0%	
Some college	6.0%	9.4%	
Bachelor's degree	41.9%	42.4%	
Master's degree or more	51.1%	48.2%	
Employment			
Annual earning (mean)*	\$57,729	\$52,819	\$81,690
Usual hours worked per week (mean)	38.0	36.9	
Full-time workers**	78.5%	78.0%	

^{*} ACS 2014 earnings were adjusted to 2015 real dollar values based on the Consumer Price Index. ACS and CPS wage and salary earnings include reported income from all sources. OES wage earnings are annualized to represent a full-time average wage.

 ${\it Data sources: American Community Survey (ACS), Current Population Survey (CPS), Occupational Employment Statistics (OES)}$

2. Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition, Physical Therapists.* http://www.bls.gov/ooh/healthcare/physical-therapists.htm Accessed October 31, 2016.

FUNDING

This study was supported by the National Center for Health Workforce Analysis (NCHWA), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement # U81HP27844. The information, conclusions and opinions expressed in this presentation are those of the authors and no endorsement by NCHWA, HRSA or HHS is intended or should be inferred.

SUGGESTED CITATION

Skillman SM, Dahal A, Frogner BK, Stubbs BA. *National Supply Estimates of Specific Allied Health Occupations Using Different Data Sources: Data Snapshot – Occupational Therapists*. Center for Health Workforce Studies, University of Washington, Dec 2016.

^{**}Full-time indicates 32 or more weekly work hours.