DATA SNAPSHOT: Speech-Language Pathologists

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 speech-language pathologists.
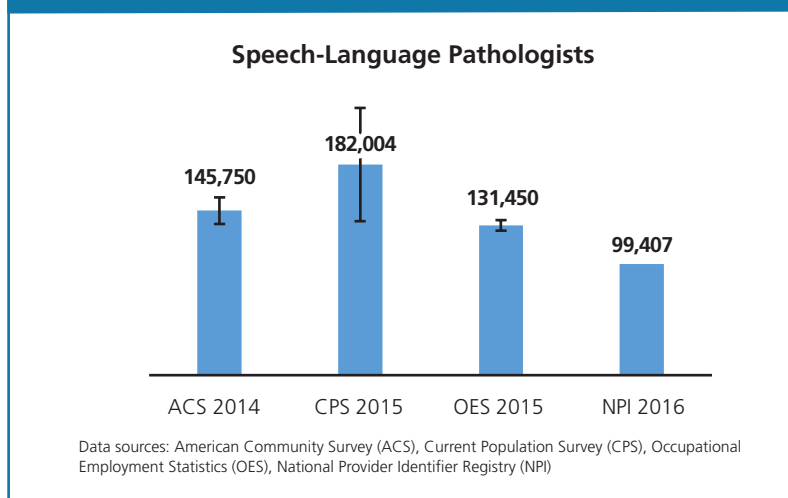
Who are speech-language pathologists? Speech-language pathologists or speech therapists specialize in diagnosis and treatment of communication and swallowing disorders, which are associated with illnesses such as stroke, brain injury, hearing loss, autism, and developmental delay, among others. Most states require that speech-language pathologists be licensed to practice.[2]

How are speech-language pathologists identified across data sources? Speech-language pathologists, in the ACS and CPS datasets, were identified by the four-digit SOC code, 3230, and in the OES dataset by the occupation code 29-1127, or could be pulled directly from the OES website, data section. In the NPI Registry, speech-language pathologists were identified using the following taxonomy codes: Speech-Language Pathologist - 235Z00000X.

Estimated national supply of speech-language pathologists from the ACS, OES, CPS, and NPI data sources

Speech-Language Pathologists

- ACS 2014: 145,750
- CPS 2015: 182,004
- OES 2015: 131,450
- NPI 2016: 99,407

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

National estimates of speech-language pathologists across data sources: Data to estimate the supply of speech-language pathologists 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. As shown in the figure, the supply estimate of speech-language pathologists from the CPS was 182,004 (±44,495), from the ACS was 145,750 (±9,072), from the OES was 131,450 (±3,116), and from the NPI Registry was 99,407. 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 the demographic and socioeconomic characteristics of speech-language pathologists in the ACS, CPS and OES data sources. The mean age of speech-language pathologists was similar in the ACS and CPS: approximately 42 years. The percentage of speech-language pathologists who were reported to be women was very high in both datasets, between 96.6 to 99.1%. Likewise, about 96% of speech-language pathologists were female in NPI Registry (results not shown in the table). The majority of speech-language pathologists were White,

not Hispanic (between 85.0 to 91.1%), and about 5% were Hispanic (5.6% in the ACS and 5.3% in the CPS). The marital status of speech-language pathologists as reported in in the ACS and CPS was similar: CPS showed a slightly lower percentage being married (65.8% compared with 67.2%) and a slightly higher percentage being single (23.3% compared with 21.2%). The majority (84.0% in the ACS and 93.1% in the CPS) of speech-language pathologists had a master's or higher degree. The mean annual earnings, adjusted to 2015 U.S. dollars, was lowest as estimated in the CPS ($53,495) and highest in the OES ($76,900) data sources. The mean hours worked per week was about 39 hours in both ACS and CPS. The percent of speech-language pathologists working full-time as estimated in the ACS was 76.6%, and 82.5% in the CPS.

REFERENCES:

1. 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.

2. Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition, Speech-Language Pathologists*. http://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm Accessed November 09, 2016.

Demographic and socioeconomic characteristics of speech-language pathologists

	ACS 2014	CPS 2015	OES 2015
Age (mean years)	41.5	42.1	--
Female	96.6%	99.1%	--
Race/Ethnicity			
White, not Hispanic	85.0%	91.1%	--
Black, not Hispanic	4.8%	2.1%	--
Other, not Hispanic	4.7%	1.4%	--
Hispanic	5.6%	5.3%	--
Marital Status			
Married	67.2%	65.8%	--
Divorce/Separated/Widowed	11.6%	11.0%	--
Single	21.2%	23.3%	--
Educational Attainment			
High school or less	0.8%	1.0%	--
Some college	2.1%	1.2%	--
Bachelor's degree	13.1%	4.8%	--
Master's degree or more	84.0%	93.1%	--
Employment			
Annual earning (mean)*	$54,618	$53,495	$76,900
Usual hours worked per week (mean)	38.6	39.3	--
Full-time workers**	76.6%	82.5%	--

* 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.

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

Data sources: American Community Survey (ACS), Current Population Survey (CPS), Occupational Employment Statistics (OES)

SUGGESTED CITATION

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