



SLP Health Care SURVEY 2017

Survey Methodology, Respondent Demographics, and Glossary

For additional information, please contact
Jeanette Janota, Surveys & Analysis
American Speech-Language-Hearing Association
Rockville, MD 20850
800-498-2071, ext. 8738
jjanota@asha.org

Contents

Executive Summary 1

Survey Methodology 2

 Stratified Random Sample 2

 Experimental Design 3

 Fielding Costs 4

 Response Rate 4

 Data Entry 5

Demographics 5

 Years of Experience 6

 Highest Degree 6

 Employment Status 6

 Primary Employment Facility 6

 Excluding *Other* 7

 Primary Employment Function 7

 Salary Basis 8

 Geographic Region 8

 Population Density 9

 Private Practice 10

 Respondents Compared With Population 10

Glossary 11

 Types of Facilities 11

 Response Rate 11

 Measures of Central Tendency 12

 Regions of the Country 13

Survey Reports 14

Suggested Citation 14

Resources 14

Additional Information 14

Thank You 14

Figures

 Figure 1: Primary Employment Facility 6

 Figure 2: Clinical Service Providers 7

 Figure 3: Salary Basis 8

 Figure 4: Geographic Region 9

 Figure 5: Population Density 9

 Figure 6: Private Practice 10

Tables

 Table 1: Sampling Design 2

Table 2: Survey Fielding3
Table 3: Calculation of Response Rate.....4
Table 4: Overall Response Rates, by Group and Mode5
Table 5: Comparison of Respondents With Population 10



Executive Summary

The American Speech-Language-Hearing Association (ASHA) conducted a survey of speech-language pathologists (SLPs) in the spring of 2017. The survey was designed to provide information about health care-based service delivery and to update and expand information gathered during previous SLP Health Care Surveys. The results are presented in a series of reports.

Data are drawn from six types of health care facilities: general medical, Veterans Affairs (VA), and long-term acute care (LTAC) hospitals; rehabilitation (rehab) hospitals; pediatric hospitals; skilled nursing facilities (SNFs); home health agencies or clients' homes; and outpatient clinics or offices.

Highlights

- ◆ 52% was the response rate.
- ◆ Mean number of years of experience was 18; the median was 15.
- ◆ Mean number of years with their current employer was 9; the median was 6.
- ◆ 2% held a doctoral degree.
- ◆ 66% of SLPs worked full time.
- ◆ 25% of the respondents were employed in SNFs.
- ◆ Across settings, 88%–94% of SLPs were employed as clinical service providers.
- ◆ 82% of SLPs in SNFs received an hourly wage.
- ◆ 41% of SLPs worked in the South.
- ◆ 42% of SLPs worked in urban areas.
- ◆ 26% of SLPs worked full or part time as a private practice owner, co-owner, or employee.

Survey Methodology

The survey was fielded to a stratified, random sample of 4,000 ASHA-certified SLPs who were employed full time or part time in health care settings in the United States. The sample was stratified by type of facility and by private practice. Disproportional random samples were drawn from each facility from among SLPs who did *not* work in private practice (7%–19%) and from those who *did* work in private practice (7%–87%), oversampling small groups like pediatric hospitals (see Table 1).



Stratified Random Sample

Facility	Private Practice	Population	Sample
General Medical/Veterans Affairs (VA)/long-term acute care (LTAC) hospital	No	6,596	480
	Yes	491	200
Home health/clients' homes	No	3,644	360
	Yes	2,201	320
Outpatient clinic or office	No	3,636	360
	Yes	7,371	500
Pediatric hospital	No	1,552	300
	Yes	161	140
Rehabilitation (rehab) hospital	No	3,243	340
	Yes	204	160
Skilled nursing facility (SNF)	No	9,636	640
	Yes	536	200
Total		39,271	4,000

Experimental Design

An experiment was designed to test whether mode would have an effect on response rates. The control group consisted of 1,500 members of the sample who were randomly selected from each of the 12 groups described in Table 1. This group was to receive postal mail surveys. The experimental group consisted of the remaining 2,500 members of the sample, and they were to receive electronic surveys via Survey Monkey.

By the end of the fielding, both the control and experimental groups had become mixed mode, but with an emphasis on either postal (control group) or electronic (experimental) delivery. Both groups were contacted multiple times. As individuals responded, they were removed from subsequent contacts (see Table 2).

Mode	Date	Control	Experimental
Survey Monkey	Feb. 14		2,500
Postal	Feb. 15	1,500	
BOLO	Feb. 15	1,500	
Survey Monkey	Feb. 19		2,135
Survey Monkey	Feb. 26		1,902
Postal	March 8	1,269	1,843
Postal	April 5	921	1,425
Survey Monkey	May 2	805	1,256

Each postal mail packet consisted of a personalized cover letter, a numbered survey, and a #10 postage-paid business return envelope inserted into a #11 window envelope with an ASHA return address. Metered postage was at the full, first-class rate.

All postal mail surveys had 41 questions on 25.5 in. × 11 in. paper folded to 8.5 in. × 11 in. and printed on five pages of a six-page, fold-out survey instrument. The final page contained a message about the ASHA 2017 Health Care Connect conference as well as a thank-you note and contact information should respondents have questions.

Questions on the Survey Monkey instrument were an exact replica of the postal mail version except for the addition of one screening question.

A be-on-the-lookout (BOLO) message was e-mailed to the control group the day that their packet was delivered to the post office.

Fielding Costs

A total of 3,690 surveys were mailed to the 1,500 members of the control group – that is, 2.5 times the number in that group. A total of 3,268 surveys were mailed to the 2,500 members of the experimental group – that is, 1.3 times the number in that group. From a cost basis (printing of surveys, stuffing of envelopes, and postage), the more cost-effective method of fielding is supplementing with postal mailings after first making several contacts via Survey Monkey.

Response Rate

Of the original 4,000 SLPs in the sample, 128 were ineligible. The number of respondents was 2,019, resulting in a 52.1% response rate (see Table 3).

Disposition	Total	Control	Experimental
Original (gross) sample size	4,000	1,500	2,500
No longer employed in the field	13	10	3
Not working in health care	94	42	52
Undeliverable addresses	7	3	4
Retired	11	5	6
Ineligible for other reasons	3	3	-
Net sample size	3,872	1,437	2,435
Number of respondents	2,019	732*	1,283*
Response Rate	52.1%	50.9%	52.7%

*Note. Four respondents ripped off their identification numbers, so it is unknown whether they were from the control group or experimental group.

Table 3 shows that there was a 1.8% increase in the unit response rate when Survey Monkey was the primary mode of fielding the *2017 Health Care Survey*. However the difference in response rates between the control and experimental groups was not significant ($z = 1.08$; $p = .203$).

Table 4 further examines the response rates in three ways: overall, by group, and by mode.

- The control group received three postal mailings, at 3- to 4-week intervals, followed by one Survey Monkey contact (see Table 2). Of their responses, 88% (646 of 732) were via postal mail.
- The experimental group received three Survey Monkey contacts, followed by two postal mail contacts and a fourth Survey Monkey contact. Of their responses, 64% (823 of 1,283) were electronic.
- Looking at mode only, 55% of the responses were from postal mail, and 45% were from Survey Monkey.

Table 4: Overall Response Rates, by Group and Mode

Condition	<i>n</i>	%
Group and Mode		
Control group, postal mail	646	32.0
Control group, Survey Monkey	86	4.3
Experimental group, postal mail	460	22.8
Experimental Group, Survey Monkey	823	40.8
Unknown; ripped off ID	4	0.2
Total	2,019	100.0
Group Only		
Control group	732	36.3
Experimental group	1,283	63.5
Unknown; ripped off ID	4	0.2
Total	2,019	100.0
Mode Only		
Postal mail	1,110	55.0
Survey Monkey	909	45.0
Total	2,019	100.0

Data Entry

To ensure the highest quality data reasonably possible, each of the 1,110 completed postal mail surveys was checked, and erroneous responses were corrected or deleted by the ASHA staff member with primary responsibility for the survey. The forms were then sent to an outside firm for two-pass (key and verify) data entry. This process was completed by May 2, 2017.

**Demo-
graphics**

Not only is it typically the case that some individuals who receive a survey do not complete it (unit nonresponse), but it is likewise true that some who return theirs do not answer every question (item nonresponse) and thus do not qualify for inclusion in portions of a report. They may be excluded from analyses because they did not answer a question at all or because one or more of their answers disqualified them (such as stating that they were employed part time when a particular analysis was limited to full-time employees). For example, among the 2,019 respondents, only 1,831 were included in reporting on their primary employment facility because they

- indicated that they were employed full time or part time or
- identified the type of employment facility where they worked.

As is our practice, we do not report data for categories with fewer than 25 respondents.

Years of Experience

The median number of years of experience was 15, and the mean was 18. The median number of years ranged from 12 in pediatric hospitals to 17 in home health agencies or clients' homes. Means ranged from 15 years in pediatric hospitals to 19 years in home health agencies or clients' homes and in outpatient clinics or offices ($p = .003$).

The median number of years with their current employer was 6, and the mean was 9. The median number of years ranged from 4 in SNFs to 8 in pediatric hospitals and outpatient clinics and offices. Means ranged from 6 years in SNFs to 11 years in pediatric hospitals ($p = .000$).

Highest Degree

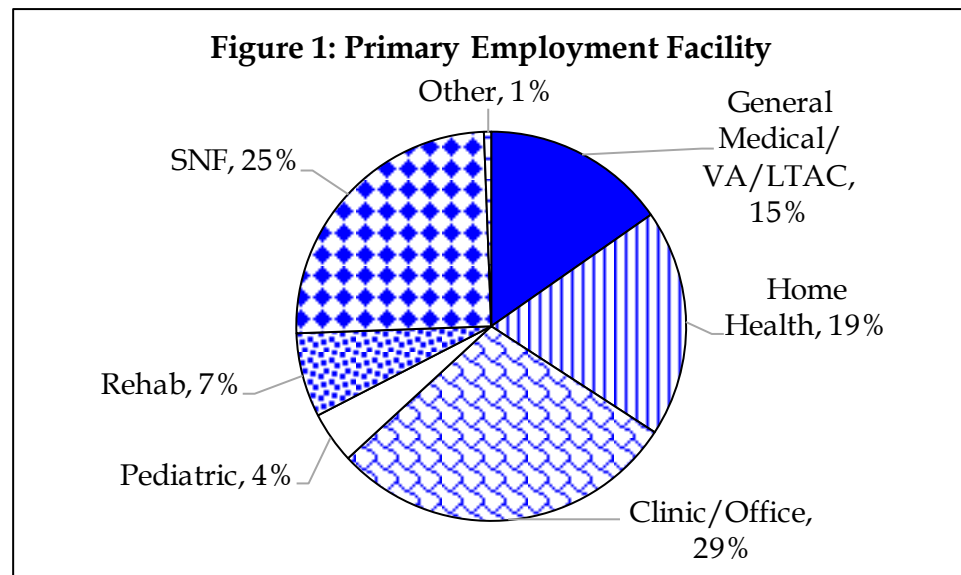
Only 2% ($n = 28$) of the SLPs reported having received a doctoral degree. The type of facility where they worked had no effect on their response.

Employment Status

Of the SLPs in the survey who were employed, 66% worked full time and 34% worked part time. SLPs in home health agencies or clients' homes were more likely than those in other types of facilities to be employed part time (45%), and SLPs in pediatric hospitals and SNFs were the most likely groups to be employed full time (75%; $p = .000$).

Primary Employment Facility

Most of the respondents worked in outpatient clinics or offices (29%) and in SNFs (25%; see Figure 1). Keep in mind that because a disproportional random sample was drawn from each facility, this distribution does not reflect the distribution of SLPs within the Association.



Note. $n = 1,840$.

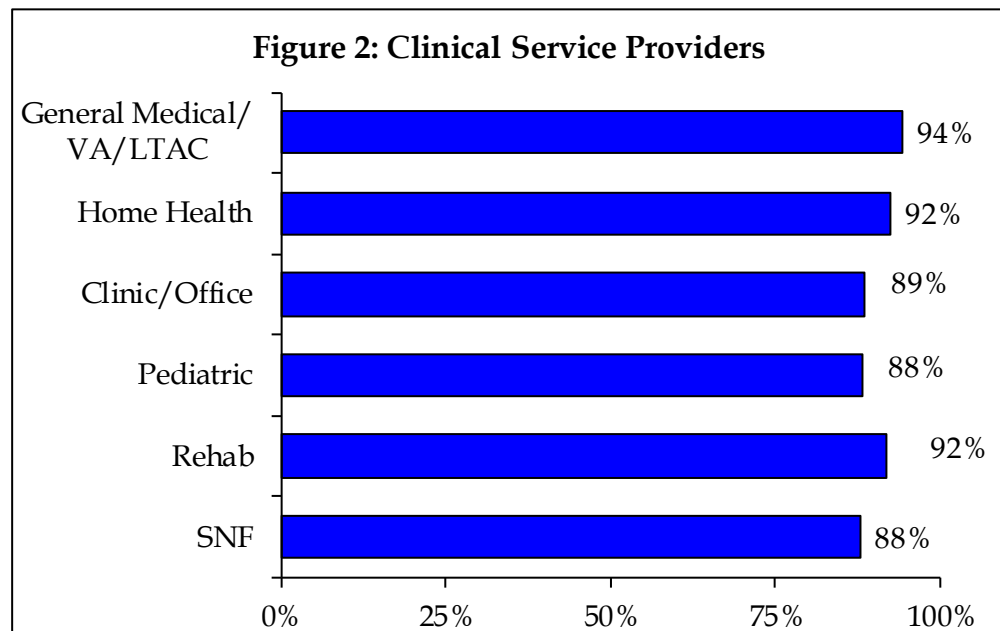
Excluding
Other

The 10 individuals who reported working in an *other* type of facility have been included in the 2017 *Health Care Survey Reports* only as part of the total, not as a separate category of *facility*, because of the ambiguous nature of this small group of individuals. Also included as part of the total throughout the report are 55 respondents who were employed full or part time but who did not answer the question about their type of facility.



Primary
Employment
Function

Overall, 90% of respondents in all types of facilities were clinical service providers. Slightly more than 90% of SLPs in general medical/VA/LTAC hospitals, home health agencies or clients' homes, and rehab hospitals were clinical service providers (see Figure 2). Slightly fewer than 90% of SLPs in outpatient clinics or offices, pediatric hospitals, and SNFs were clinical service providers ($p = .034$).



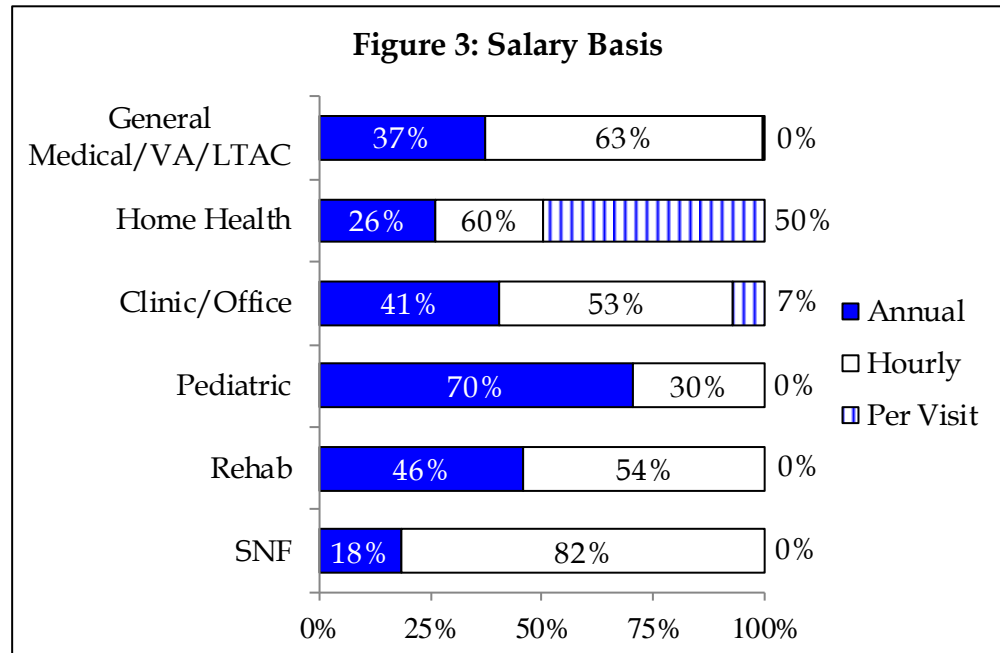
Note. $n = 1,776$.

Salary Basis

As a group, 55% of the SLPs received an hourly wage; 34%, an annual salary; and 12%, a per home-visit payment. (Total does not equal 100% due to rounding.)



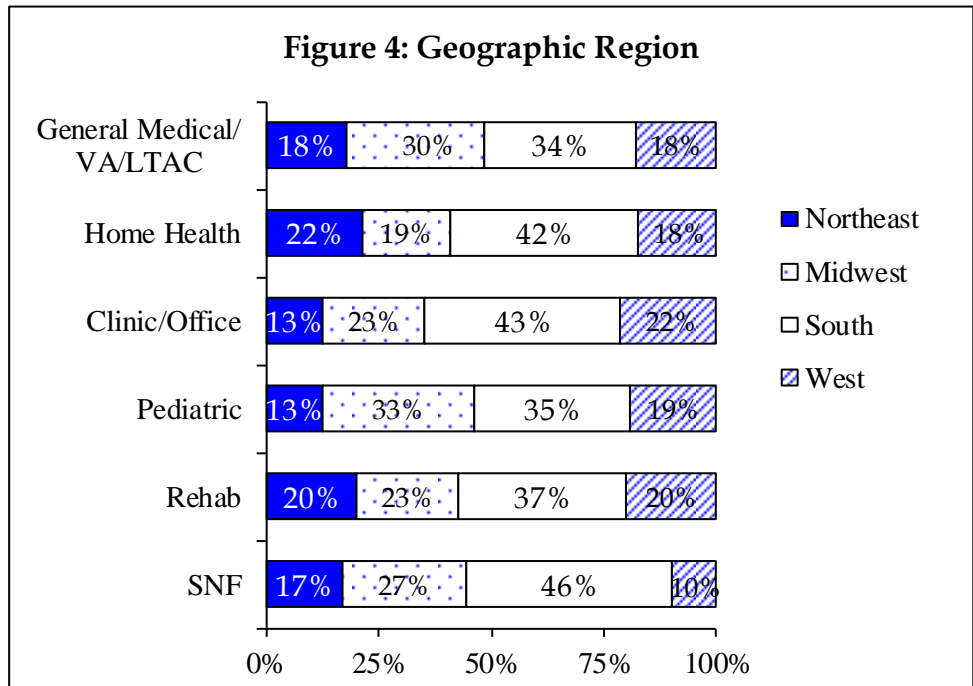
Individuals in pediatric hospitals were the most likely group to be paid an annual wage. More than half of the SLPs in general medical/VA/LTAC hospitals, rehab hospitals, outpatient clinics and offices, rehab hospitals, and SNFs received an hourly wage. Half of the SLPs in home health agencies and clients' homes received a per home-visit wage ($p = .000$; see Figure 3).



Note. $n = 1,828$.

Geographic Region

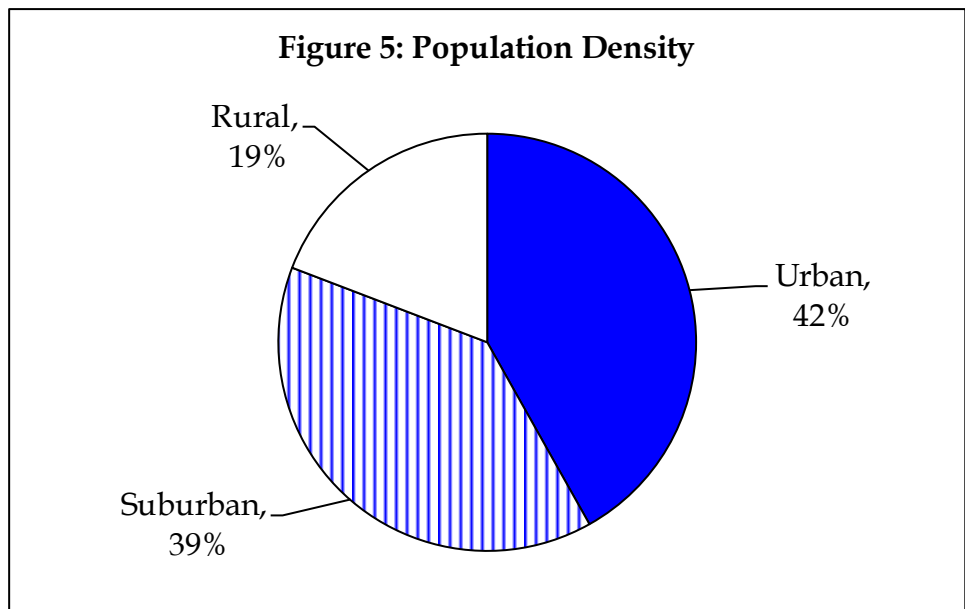
More than one third (41%) of the SLPs worked in the South. The rest were fairly evenly distributed, with 17% working in the West, 17% working in the Northeast, and 25% working in the Midwest (not shown in any table). The region where SLPs worked varied by the type of facility in which they were employed ($p = .000$; see Figure 4). State-by-state listings for each of the geographic areas can be found on page 13.



Note. n = 1,827.

Population Density

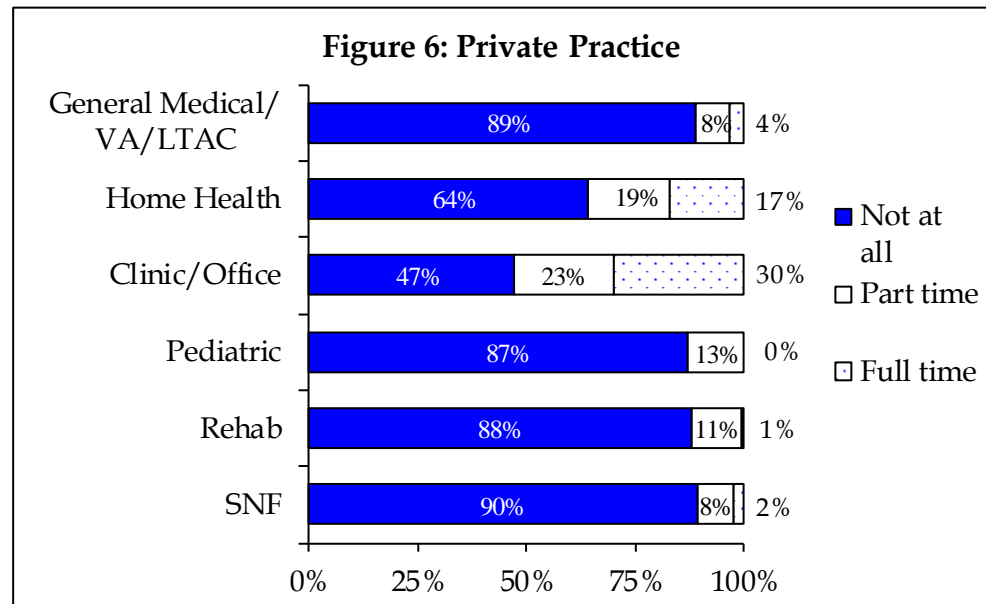
Most SLPs worked in either cities or suburbs, with a few in rural areas (see Figure 5). More than half of the SLPs in pediatric hospitals (71%), general medical/VA/LTAC hospitals (57%), and rehab hospitals (55%) worked in cities and urban areas. Nearly half of the SLPs in outpatient clinics and offices (45%), home health agencies or client’s homes (44%) and SNFs (38%) worked in suburban areas. The range in rural settings was from 1% of SLPs in pediatric hospitals to 30% in SNFs ($p = .000$; not shown in any table).



Note. n = 1,797.

Private Practice

The representation of private practice owners, co-owners, and employees in the 2017 *Health Care Survey* was higher than in the Association because they were oversampled for this survey. More than one quarter of the respondents said that they worked either full time (13%) or part time (13%) in private practice. SLPs in clinics and offices (23%) and in home health agencies or client’s homes (19%) were the most likely groups to work part time in private practice ($p = .000$; see Figure 6).



Note. $n = 1,819$.

Respondents Compared With Population

It is valuable to know how closely respondents’ demographics correspond to those of the population of ASHA SLPs working in health care facilities in the United States – that is, the group from which they were drawn. Table 5 shows the comparison for the three characteristics that were available from both the membership database and the survey.

Characteristic	ASHA’s Population	Survey Respondents
Clinical service provider	86%	88%
Doctoral degree	2%	1%
Region of the country:		
Northeast	19%	17%
Midwest	22%	25%
South	42%	41%
West	17%	17%

Glossary

A glossary of terms used in the 2017 SLP Health Care Survey Reports is included below.



Types of Facilities

Facility: General medical, Veterans Affairs (VA), or long-term acute care (LTAC) hospital
 Rehabilitation (rehab) hospital
 Pediatric hospital
 Skilled nursing facility (SNF)
 Home health agency or client's home
 Outpatient clinic or office
 Other

Respondents self-identified the primary employment facility from the list above.

Response Rate

The response rate was calculated using the following equation:

$$RR = \frac{(C + P)}{S - (Ret + I)}$$

where

- RR = Response rate
- C = Number of completed surveys
- P = Number of partial surveys
- S = Sample size
- Ret = Ineligible because of retirement
- I = Ineligible for other reasons (e.g., does not work in health care, no longer in the field, on leave of absence)

$$RR = \frac{2,019}{4,000 - (11 + 117)} = 52.1\%$$

Measures of
Central
Tendency

Mean: Add the total of all the values, and divide by n (the number of items).

Median: Arrange the values in order, from lowest to highest. Select the value in the middle position.

Mode: The *mode* is the value that occurs more often than any other.

Example: Sample data set

1, 1, 7, 34, 88

Mean: $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$

Median: 7

Mode: 1

Medians are the most commonly presented statistic in the *2017 SLP Health Care Survey Reports* because they are more stable and less sensitive to extreme values than are means.



Regions of the
CountryNortheast

- ◆ Middle Atlantic
 - New Jersey
 - New York
 - Pennsylvania
- ◆ New England
 - Connecticut
 - Maine
 - Massachusetts
 - New Hampshire
 - Rhode Island
 - Vermont

South

- ◆ East South Central
 - Alabama
 - Kentucky
 - Mississippi
 - Tennessee
- ◆ South Atlantic
 - Delaware
 - District of Columbia
 - Florida
 - Georgia
 - Maryland
 - North Carolina
 - South Carolina
 - Virginia
 - West Virginia
- ◆ West South Central
 - Arkansas
 - Louisiana
 - Oklahoma
 - Texas

Midwest

- ◆ East North Central
 - Illinois
 - Indiana
 - Michigan
 - Ohio
 - Wisconsin
- ◆ West North Central
 - Iowa
 - Kansas
 - Minnesota
 - Missouri
 - Nebraska
 - North Dakota
 - South Dakota

West

- ◆ Mountain
 - Arizona
 - Colorado
 - Idaho
 - Montana
 - Nevada
 - New Mexico
 - Utah
 - Wyoming
- ◆ Pacific
 - Alaska
 - California
 - Hawaii
 - Oregon
 - Washington

Survey Reports

Results from the *ASHA 2017 SLP Health Care Survey* are presented in a series of reports at www.asha.org:

- Survey Summary
- Caseload Characteristics
- Workforce
- Practice Issues
- Annual Salaries
- Hourly and Per Home-Visit Wages
- Survey Methodology, Respondent Demographics, and Glossary

Suggested Citation

American Speech-Language-Hearing Association. (2017). *ASHA 2017 SLP Health Care Survey: Survey methodology, respondent demographics, and glossary*. Available from www.asha.org

Resources

Agresti, A., & Finlay, B. (2008). *Statistical methods for the social sciences* (4th ed.). Upper Saddle River, NJ: Pearson.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York, NY: Wiley.

Additional Information

For additional information regarding the *2017 SLP Health Care Survey Report*, please contact Gennith Johnson, associate director, Health Care Services, at 800-498-2071, ext. 5681, or gjohnson@asha.org; Monica Sampson, associate director, Health Care Services, at ext. 5686, or msampson@asha.org; or Janet Brown, director, Health Care Services, at ext. 5679, or jbrown@asha.org.

Thank You

ASHA would like to thank the SLPs who completed the *ASHA 2017 SLP Health Care Survey*. Reports like this one are possible only because people like *you* participate.

Is this information valuable to you? If so, please accept invitations to participate in other ASHA-sponsored surveys and focus groups. You are the experts, and we rely on you to provide data to share with your fellow members. ASHA surveys benefit *you*.