

## **Tables on Use of Electronic Health Records and Health Information Exchange among Adult Day Services Centers and Residential Care Communities from the 2016 National Study of Long-Term Care Providers**

The Long-Term Care Statistics Branch is pleased to release web tables on the use of electronic health records and health information exchange among adult day services centers and residential care communities, using survey data from the third wave of the National Study of Long-Term Care Providers (NSLTCP) conducted in 2016.

### **Overview of NSLTCP**

NSLTCP is an initiative by the National Center for Health Statistics (NCHS) to provide reliable, accurate, relevant and timely statistical information to support and inform long-term care services policy, research, and practice. The main goals of NSLTCP are to: (1) estimate the supply and use of paid, regulated long-term care services; (2) estimate key policy-relevant characteristics and practices; (3) produce national and state-level estimates, where feasible; (4) compare estimates among sectors; and (5) monitor trends over time.

NSLTCP comprises two components: (1) survey data collected by NCHS on assisted living and similar residential care communities and residents and adult day services centers and participants; and (2) administrative data on nursing homes and residents, home health agencies and patients, and hospices and patients obtained from the Centers for Medicare & Medicaid Services. The restricted 2016 survey data files for residential care communities and adult day services centers are available through NCHS' Research Data Center [https://www.cdc.gov/nchs/nsltcp/nsltcp\\_rdc.htm](https://www.cdc.gov/nchs/nsltcp/nsltcp_rdc.htm). If you would like to learn more about NSLTCP, please visit <https://www.cdc.gov/nchs/nsltcp/index.htm>.

### **2016 Web Tables**

Table 1 provides state estimates of adult day services centers and residential care communities that used electronic health records (EHRs) in 2016 and 95% confidence intervals for those estimates. Table 2 provides national estimates of residential care communities that had computerized support for electronic health information exchange with physicians, pharmacies, and hospitals for 2016, overall and by use of EHRs, and the 95% confidence intervals for those estimates. Table 3 provides national estimates of adult day services centers that had computerized support for electronic health information exchange with physicians, pharmacies, and hospitals for 2016, overall and by use of EHRs, and the 95% confidence intervals for those estimates.

Cases with missing data were excluded from the analyses on a variable-by-variable basis. Footnotes are included in the tables to indicate the weighted number and weighted percentage of cases with missing data that were excluded. Estimates are presented as numbers, percent distributions (i.e., estimates total to 100%), or percentages. Percent distributions and percentages are based on unrounded numbers. Estimates may not add up to totals because of rounding. Estimates were masked if they did not meet confidentiality standards. NCHS's data presentation standards were used to determine reliability of the estimates. For more information about the presentation standards for proportions, please visit [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf).

## **Adult Day Services Center and Residential Care Community Survey Components of NSLTCP**

For the 2016 NSLTCP, the surveys on adult day services centers and residential care communities were conducted between August 2016 and February 2017. NSLTCP used a multi-mode survey protocol with mail, web, and telephone follow-up for nonresponse. Survey data were collected by RTI International under contract to NCHS. The 2016 questionnaires included survey items on provider characteristics such as ownership, size, services offered, and selected practices, in addition to aggregate user characteristics, such as age, sex, race, and the number of users with selected medical conditions and the number of users needing assistance with selected activities of daily living. The 2016 mail questionnaires and survey methodology documentation are available at: [https://www.cdc.gov/nchs/nsltcp/nsltcp\\_questionnaires.htm](https://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm).

### **Contact Us**

If you have any questions, please contact the Long-Term Care Statistics Branch at (301) 458-4747 or [LTCSBFeedback@cdc.gov](mailto:LTCSBFeedback@cdc.gov).

**Table 1. Percentage and 95% confidence intervals for providers that used electronic health records, by sector and state: United States, 2016**

	Adult Day Services Centers <sup>1</sup>		Residential Care Communities <sup>2</sup>	
	Percent	Confidence Interval	Percent	Confidence Interval
<b>United States</b>	<b>23.9</b>	<b>(22.3 - 25.5)</b>	<b>26.0</b>	<b>(24.5 - 27.5)</b>
Alabama	§	§	25.7	(18.4-34.2)
Alaska	§	§	22.9	(14.4-33.5)
Arizona	*39.4	*(15.9-67.2)	11.6	(5.5-20.6)
Arkansas	§	§	26.1	(16.8-37.3)
California	25.9	(22.4-29.7)	12.8	(8.9-17.8)
Colorado	19.5	(9.4-33.6)	29.7	(19.5-41.7)
Connecticut	§	§	17.9	(7.6-33.2)
Delaware	§	§	*70.7	*(44.2-89.8)
District of Columbia	§	§	§	§
Florida	10.6	(5.9-17.1)	19.3	(12.7-27.3)
Georgia	22.9	(13.3-35.1)	15.7	(8.5-25.5)
Hawaii	19.0	(7.6-36.1)	13.0	(6.0-23.4)
Idaho	*19.4	*(6.7-39.6)	47.8	(38.1-57.7)
Illinois	13.7	(5.6-26.3)	37.3	(26.1-49.6)
Indiana	17.3	(6.0-35.4)	47.9	(39.4-56.6)
Iowa	*41.9	*(21.1-65.1)	39.0	(23.0-56.9)
Kansas	§	§	44.0	(32.2-56.3)
Kentucky	15.8	(7.8-27.3)	22.3	(15.6-30.3)
Louisiana	§	§	14.2	(6.3-26.1)
Maine	§	§	50.8	(42.1-59.5)
Maryland	48.6	(37.7-59.6)	28.4	(18.8-39.6)
Massachusetts	32.2	(23.1-42.3)	21.0	(13.6-30.1)
Michigan	20.1	(10.0-34)	26.6	(18.8-35.6)
Minnesota	29.7	(21.3-39.3)	61.4	(50.4-71.6)
Mississippi	§	§	20.8	(11.5-33.1)
Missouri	15.9	(7.9-27.2)	45.9	(32.2-60.2)
Montana	§	§	28.5	(20.4-37.8)
Nebraska	*38.8	*(17.2-64.1)	45.3	(36.9-53.9)
Nevada	§	§	14.8	(9.0-22.6)
New Hampshire	§	§	23.8	(14.3-35.5)
New Jersey	27.8	(18.3-39.0)	45.8	(36.5-55.3)
New Mexico	§	§	38.2	(27.5-49.7)
New York	28.9	(21.7-37.0)	36.5	(25.6-48.5)
North Carolina	22.8	(14.1-33.6)	16.7	(9.2-26.8)
North Dakota	§	§	47.6	(36.2-59.1)
Ohio	22.1	(12.5-34.4)	40.9	(30.9-51.5)
Oklahoma	*24.5	*(10.5-43.9)	38.3	(28.4-49.1)
Oregon	§	§	16.5	(9.8-25.1)
Pennsylvania	25.2	(18.5-32.8)	38.6	(28.4-49.6)
Rhode Island	*50.6	*(21.5-79.3)	*23.8	*(9.6-44.0)

South Carolina	11.6	(4.6-22.8)	35.1	(23.6-48.0)
South Dakota	§	§	40.8	(30.5-51.7)
Tennessee	§	§	22.8	(16.9-29.6)
Texas	22.9	(17.9-28.5)	28.6	(19.8-38.8)
Utah	§	§	54.1	(44.0-63.9)
Vermont	*35.4	(13.2-63.5)	26.6	(15.5-40.3)
Virginia	34.0	(21.2-48.7)	43.1	(30.056.9)
Washington	*41.6	*(15.1-72.3)	17.3	(10.3-26.4)
West Virginia	§	§	28.3	(15.5-44.2)
Wisconsin	20.7	(12.2-31.5)	41.3	(32.7-50.2)
Wyoming	§	§	*20.0	*(6.6-41.2)

§Estimate is not presented because it does not meet confidentiality standards.

\*The estimate is unreliable based on NCHS's data presentation standards for proportions. To review NCHS's data standards for proportions, visit [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)

<sup>1</sup> Among 4,600 adult day services centers, 2.5% were excluded because of missing data on the EHR item. The percent missing ranged from 1.2% in Wisconsin to 14.7% in Alabama.

<sup>2</sup> Among 28,900 residential care communities, 2.4% were excluded because of missing data on the EHR item. The percent missing ranged from .8% in Utah and Alabama to 5.9% in Iowa.

NOTES: An electronic health record is a computerized version of the participant's or resident's health and personal information used in the management of the participant's or resident's health care. Survey documentation for the National Study of Long-Term Care Providers is available at: [https://www.cdc.gov/nchs/nsltcp/nsltcp\\_questionnaires.htm](https://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm). Contact the Long-Term Care Statistics Branch, 301-458-4747 or [LTCSBFeedback@cdc.gov](mailto:LTCSBFeedback@cdc.gov), for more information.

SOURCE: NCHS, National Study of Long-Term Care Providers, 2016.

**Table 2. Number, percent distribution, and 95% confidence intervals for assisted living and similar residential care communities (RCCs) with computerized support for electronic health information exchange with physicians, pharmacies, and hospitals, overall and by use of electronic health records (EHRs): United States, 2016**

		Percent	Confidence Interval	Percent	Confidence Interval
Exchange with physicians <sup>1</sup>	Number	Yes		No	
	Among all RCCs	27,800	10.7	(9.5-12.1)	89.3
Among RCCs that use EHRs	7,300	24.3	(21.3-27.5)	75.7	(72.5-78.7)
Among RCCs that do not use EHRs	20,500	5.9	(4.7-7.3)	94.1	(92.7-95.3)
Exchange with pharmacies <sup>1</sup>					
Among all RCCs	27,800	20.1	(18.6-21.6)	79.9	(78.5-81.4)
Among RCCs that use EHRs	7,300	50.4	(46.9-53.9)	49.6	(46.1-53.1)
Among RCCs that do not use EHRs	20,500	9.3	(8.0-10.7)	90.7	(89.3-92.0)
Exchange with hospitals <sup>1</sup>					
Among all RCCs	27,800	7.2	(6.1-8.4)	92.8	(91.6-93.9)
Among RCCs that use EHRs	7,300	13.6	(11.2-16.5)	86.4	(83.5-88.8)
Among RCCs that do not use EHRs	20,500	4.9	(3.8-6.2)	95.1	(93.8-96.2)

<sup>1</sup> Among 28,900 RCCs, 1,100 RCCs (3.7%) were excluded from the analyses because they had missing data on the EHR item or the exchange with physicians, pharmacies, and hospitals items.

NOTES: Percentages are based on unrounded numbers. Estimates may not add up to totals because of rounding. An electronic health record is a computerized version of the participant's or resident's health and personal information used in the management of the participant's or resident's health care. Survey documentation for the National Study of Long-Term Care Providers is available at:

[https://www.cdc.gov/nchs/nsltcp/nsltcp\\_questionnaires.htm](https://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm). Contact the Long-Term Care Statistics Branch, 301-458-4747 or

LTCsBFeedback@cdc.gov, for more information.

SOURCE: NCHS, National Study of Long-Term Care Providers, 2016.

**Table 3. Number, percent distribution, and 95% confidence intervals for adult day services centers (ADSCs) with computerized support for electronic health information exchange with physicians, pharmacies, and hospitals, overall and by use of electronic health records (EHRs): United States, 2016**

		Percent	Confidence Interval	Percent	Confidence Interval
<b>Exchange with physicians<sup>1</sup></b>		<b>Yes</b>		<b>No</b>	
Among all ADSCs	4,500	7.5	(6.5-8.5)	92.5	(91.5-93.5)
Among ADSCs that use EHRs	1,100	20.0	(17.0-23.3)	80.0	(76.7-83.0)
Among ADSCs that do not use EHRs	3,400	3.6	(2.8-4.4)	96.5	(95.6-97.2)
<b>Exchange with pharmacies<sup>1</sup></b>					
Among all ADSCs	4,500	5.6	(4.7-6.5)	94.4	(93.4-95.2)
Among ADSCs that use EHRs	1,100	15.8	(13.1-18.8)	84.2	(81.2-86.9)
Among ADSCs that do not use EHRs	3,400	2.4	(1.8-3.2)	97.6	(96.8-98.2)
<b>Exchange with hospitals<sup>1</sup></b>					
Among all ADSCs	4,500	4.8	(4.1-5.7)	95.2	(94.3-95.9)
Among ADSCs that use EHRs	1,100	11.8	(9.4-14.5)	88.2	(85.5-90.6)
Among ADSCs that do not use EHRs	3,400	2.7	(2.0-3.5)	97.3	(96.6-98.0)

<sup>1</sup> Among 4,600 ADSCs, 100 ADSCs (3.2%) were excluded from the analyses because they had missing data on the EHR item or the exchange with physicians, pharmacies, and hospitals items.

NOTES: Percentages are based on unrounded numbers. Estimates may not add up to totals because of rounding. An electronic health record is a computerized version of the participant's or resident's health and personal information used in the management of the participant's or resident's health care. Survey documentation for the National Study of Long-Term Care Providers is available at:

[https://www.cdc.gov/nchs/nsltcp/nsltcp\\_questionnaires.htm](https://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm). Contact the Long-Term Care Statistics Branch, 301-458-4747 or [LTCSBFeedback@cdc.gov](mailto:LTCSBFeedback@cdc.gov), for more information.

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