

2012 National Study of Long-Term Care Providers: Tables on Use of Electronic Health Records and Health Information Exchange among Adult Day Services Centers and Residential Care Communities

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 data from the first wave of the National Study of Long-Term Care Providers (NSLTCP) conducted in 2012.

Overview of NSLTCP

NSLTCP is a new 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 providers; (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 adult day services centers; and (2) administrative data on nursing homes, home health agencies, and hospices obtained from the Centers for Medicare & Medicaid Services. The restricted 2012 survey data files for RCCs and ADSCs are available through NCHS' Research Data Center (http://www.cdc.gov/nchs/nsltcp/nsltcp_new_data_release.html).

Web Tables

Table 1 provides state estimates of adult day services centers and residential care communities that used electronic health records (EHRs), and Table 1b provides the standard errors for those estimates. Table 2 provides national estimates of residential care communities with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of EHRs, and Table 2b provides the standard errors for those estimates. Table 3 provides national estimates of adult day services centers with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of EHRs, and Table 3b provides the standard errors for those estimates.

Data are presented in the web tables only if they meet NCHS' reliability and confidentiality standards. Footnotes are included in the tables to indicate if estimates do not meet NCHS' standard of reliability or precision, or confidentiality standards. Estimates are presented as numbers, percent distributions (i.e., estimates total to 100%), or percentages. There are 18 states in Tables 1 and 1a where estimates and its standard errors for the use of EHRs among adult day services centers and residential care communities, respectively, are not presented because they do not meet NCHS' data reliability and confidentiality standards.

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

The surveys on adult day services centers and residential care communities were conducted between September 2012 and February 2013. NSLTCP used a multi-mode survey protocol with mail, web, and telephone follow-up for nonresponse. The questionnaires included survey items on provider characteristics such as ownership, size, number of years in operation, 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 2012 mail questionnaires are available at: http://www.cdc.gov/nchs/nsltcp/nsltcp_questionnaires.htm. Survey data were collected by RTI International under contract to NCHS. Survey documentation is available at:

http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf.

Using a sampling frame obtained from the National Adult Day Services Association and additional centers that self-identified during data collection, a total of 5,254 adult day services centers were included in the survey. About 9% (476) of the centers were found to be invalid or out of business. All remaining centers (4,778) were assumed eligible; of these adult day services centers, 3,212 completed the survey, resulting in a response rate of 68%. The sampling frame for residential care communities was constructed from lists of licensed residential care communities acquired from the licensing agencies in each of the 50 states and the District of Columbia. A sample of 11,690 residential care communities was selected from the sampling frame of 39,779 residential care communities. Of the 7,840 in-scope and presumed in-scope residential care communities, 4,694 of them completed the survey questionnaire, for a weighted response rate (for differential probabilities of selection) of 55.4% (this is calculated by using AAPOR¹'s Response Rate 4²).

Contact Us

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

¹ American Association for Public Opinion Research

² Response Rate 4= completed questionnaires / (eligible questionnaires)+(eligibility rate*cases of unknown eligibility)

Table 1. Percentage of providers that used electronic health records, by provider type and state: United States, 2012

	Adult Day Services Centers ¹	Residential Care Communities ²
United States	20.0	20.0
Alabama	*	13.2
Alaska	*	15.8
Arizona	27.4	*
Arkansas	—	*
California	22.9	12.4
Colorado	17.5	*
Connecticut	*	14.9
Delaware	62.3	31.4
District of Columbia	*	—
Florida	10.2	*
Georgia	18.0	*
Hawaii	*	*
Idaho	*	44.2
Illinois	29.3	*
Indiana	20.7	21.6
Iowa	33.6	23.5
Kansas	*	25.6
Kentucky	13.7	19.7
Louisiana	*	18.8
Maine	*	35.8
Maryland	38.7	*
Massachusetts	24.3	19.4
Michigan	30.9	*
Minnesota	15.0	47.6
Mississippi	*	29.1
Missouri	16.6	*
Montana	*	10.7
Nebraska	34.9	28.6
Nevada	*	11.8
New Hampshire	*	18.5
New Jersey	22.0	17.4
New Mexico	*	24.3
New York	18.4	*
North Carolina	14.9	*
North Dakota	55.6	25.8
Ohio	18.5	30.3
Oklahoma	21.8	18.6
Oregon	—	*
Pennsylvania	21.0	27.9
Rhode Island	*	19.5
South Carolina	10.1	*

South Dakota	*	24.4
Tennessee	23.1	14.8
Texas	20.1	*
Utah	—	38.9
Vermont	*	20.1
Virginia	28.0	*
Washington	*	*
West Virginia	—	14.2
Wisconsin	10.6	37.6
Wyoming	—	*

— Quantity zero.

*Estimate is not presented because estimate does not meet NCHS standard of reliability or precision (the sample size is less than 30) or does not meet NCHS confidentiality standards.

¹ Overall, 6.4% of adult day services centers were excluded because of missing data. The percent missing ranged from 1.3% in Wisconsin to 20.0% in New Mexico.

² Overall, 9.0% of residential care communities were excluded because of missing data. The percent missing ranged from 1.7% in Vermont to 17.4% in Oregon.

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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCsBFeedback@cdc.gov, for more information.

SOURCE: CDC/NCHS, National Study of Long-Term Care Providers, 2012.

Table 1a. Standard errors for percentage of providers that used electronic health records, by provider type and state: United States, 2012

	Adult Day Services Centers ¹	Residential Care Communities ²
United States	0.43	0.76
Alabama	*	2.31
Alaska	*	2.46
Arizona	5.09	*
Arkansas	—	*
California	1.17	2.47
Colorado	3.13	*
Connecticut	*	3.49
Delaware	8.74	7.45
District of Columbia	*	—
Florida	1.61	*
Georgia	2.83	*
Hawaii	*	*
Idaho	*	3.34
Illinois	2.70	*
Indiana	3.83	2.28
Iowa	3.23	3.20
Kansas	*	1.64
Kentucky	1.85	3.15
Louisiana	*	3.82
Maine	*	2.12
Maryland	3.13	*
Massachusetts	2.30	2.67
Michigan	2.65	*
Minnesota	1.75	4.18
Mississippi	*	3.68
Missouri	2.64	*
Montana	*	1.79
Nebraska	5.55	1.78
Nevada	*	2.28
New Hampshire	*	2.63
New Jersey	2.17	2.47
New Mexico	*	2.99
New York	1.33	*
North Carolina	1.63	*
North Dakota	13.28	2.60
Ohio	2.06	3.74
Oklahoma	3.33	2.80
Oregon	—	*
Pennsylvania	1.58	4.19
Rhode Island	*	4.52
South Carolina	1.70	*

South Dakota	*	2.02
Tennessee	4.00	1.57
Texas	1.58	*
Utah	—	3.05
Vermont	*	3.03
Virginia	2.74	*
Washington	*	*
West Virginia	—	3.43
Wisconsin	1.62	4.51
Wyoming	—	*

— Quantity zero.

* The standard error is not presented because estimate does not meet NCHS standard of reliability or precision (the sample size is less than 30) or does not meet NCHS confidentiality standards.

¹ Overall, 6.4% of adult day services centers were excluded because of missing data. The percent missing ranged from 1.3% in Wisconsin to 20.0% in New Mexico.

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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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCSBFeedback@cdc.gov, for more information.

SOURCE: CDC/NCHS, National Study of Long-Term Care Providers, 2012.

Table 2. Number and percent distribution of assisted living and similar residential care communities (RCCs) with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of electronic health records (EHRs): United States, 2012

	Number	Percent		
		Yes	No	Missing
Exchange with physicians				
Among all RCCs ¹	22,200	13.3	76.1	10.7
Among RCCs that use EHRs	4,000	25.7	72.5	1.8
Among RCCs that do not use EHRs	16,200	11.4	85.2	3.5
Exchange with pharmacies				
Among all RCCs ¹	22,200	20.3	69.1	10.6
Among RCCs that use EHRs	4,000	41.0	57.1	1.9
Among RCCs that do not use EHRs	16,200	17.1	79.6	3.3

¹ Among 22,200 RCCs, 9% or 2,000 RCCs nationally were excluded from the analyses below because of missing data on the EHR item.

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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCSBFeedback@cdc.gov, for more information.

SOURCE: CDC/NCHS, National Study of Long-Term Care Providers, 2012.

Table 2a. Standard errors for number and percent distribution of assisted living and similar residential care communities (RCCs) with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of electronic health records (EHRs): United States, 2012

	Number	Percent		
		Yes	No	Missing
Exchange with physicians				
Among all RCCs ¹	209	0.8	0.9	0.7
Among RCCs that use EHRs	160	2.0	2.0	0.5
Among RCCs that do not use EHRs	245	0.9	1.0	0.5
Exchange with pharmacies				
Among all RCCs ¹	209	0.8	1.0	0.7
Among RCCs that use EHRs	160	2.1	2.1	0.5
Among RCCs that do not use EHRs	245	1.0	1.0	0.5

¹ Among 22,200 RCCs, 9% or 2,000 RCCs nationally were excluded from the analyses below because of missing data on the EHR item.

NOTES: Estimates may not add to totals because of rounding. Percentages are based on unrounded numbers. 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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCSBFeedback@cdc.gov, for more information.

SOURCE: CDC/NCHS, National Study of Long-Term Care Providers, 2012.

Table 3. Number and percent distribution of adult day services centers (ADSCs) with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of electronic health records (EHRs): United States, 2012

	Number	Percent		
		Yes	No	Missing
Exchange with physicians				
Among all ADSCs ¹	4,800	7.5	87.8	4.7
Among ADSCs that use EHRs	900	20.0	79.1	0.9
Among ADSCs that do not use EHRs	3,600	4.8	94.2	1.1
Exchange with pharmacies				
Among all ADSCs ¹	4,800	5.9	89.3	4.9
Among ADSCs that use EHRs	900	17.2	81.8	1.0
Among ADSCs that do not use EHRs	3,600	3.4	95.4	1.2

¹ Among 4,800 ADSCs, 6% or 300 ADSCs nationally were excluded from the analyses below because of missing data on the EHR item.

NOTES: Estimates may not add to totals because of rounding. Percentages are based on unrounded numbers. 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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCSBFeedback@cdc.gov, for more information.

SOURCE: CDC/NCHS, National Study of Long-Term Care Providers, 2012.

Table 3a. Standard errors for number and percent distribution of adult day services centers (ADSCs) with computerized support for electronic health information exchange with physicians and pharmacies, overall and by use of electronic health records (EHRs): United States, 2012

	Number	Percent		
		Yes	No	Missing
Exchange with physicians				
Among all ADSCs ¹	4	0.3	0.3	0.2
Among ADSCs that use EHRs	19	1.0	1.0	0.2
Among ADSCs that do not use EHRs	22	0.3	0.3	0.1
Exchange with pharmacies				
Among all ADSCs ¹	4	0.2	0.3	0.2
Among ADSCs that use EHRs	19	0.9	0.9	1.0
Among ADSCs that do not use EHRs	22	0.2	0.3	0.1

¹ Among 4,800 ADSCs, 6% or 300 ADSCs nationally were excluded from the analyses below because of missing data on the EHR item.

NOTES: Estimates may not add to totals because of rounding. Percentages are based on unrounded numbers. 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. For general information about survey methodology, readers can refer to Survey Methodology and Documentation for the 2012 National Study of Long-Term Care Providers (http://www.cdc.gov/nchs/data/nsltcp/NSLTCP_survey_methodology_and_documentation.pdf). Contact the Long-Term Care Statistics Branch, 301-458-4747 or LTCSBFeedback@cdc.gov, for more information.

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