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## Healthcare Access and Utilization for Young Adults With Disability: U.S., 2014–2018

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### Abstract

**Purpose:** Young adults with disability experience barriers to healthcare access and are at risk for not receiving needed services as they transition from pediatric to adult health systems. This study examined patterns of healthcare utilization for young adults with disability and potential barriers to receipt of care.

**Methods:** Data from the 2014 to 2018 National Health Interview Survey were analyzed to examine differences in service utilization, unmet need, care satisfaction, and financial worry between young adults (18–30 years) with and without disability (unweighted n = 15,710). Odds ratios were adjusted for individual, family, and interview characteristics.

**Results:** Compared to those without disability, young adults with disability were more likely to have had an emergency room visit in the past year (39.2% vs. 19.5%). They were also more likely to have a usual source of care when sick (82.2% vs. 75%). Among young adults who affirmed they had a usual place of care, those with disability were more likely to use the emergency room as their usual place of care (5.3% vs. 1.8%). A greater percentage of young adults with disability delayed medical care due to cost (19.1% vs. 8.9%) and reported an unmet medical need (21% vs. 10.2%).

**Conclusions:** Findings highlight gaps in healthcare access for young adults with disability. Differences in healthcare utilization patterns for young adults with disability and factors that may negatively influence health outcomes for this population were found. Further research focused on

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Supplementary Data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jadohealth.2021.08.023>.

the continuity of healthcare services in this age group through the healthcare transition period may provide additional insight into these discrepancies.

## Keywords

Disability; Healthcare transition; Young adults; Healthcare; Health disparities; National Health Interview Survey (NHIS)

As youth age into young adulthood (associated with ages 18–30), they often experience changes in the provision of their healthcare services, commonly described as a period of health-care transition [1,2]. Healthcare transition is characterized as a multifaceted process of movement from a child or pediatric healthcare model to an adult healthcare model, during which many young adults begin to assume responsibility for the assessment of their healthcare needs including self-evaluation of costs, quality, availability, and accessibility of services [2–6]. For some young adults, healthcare transition might involve changes in insurance coverage (e.g., such as in the U.S. where changes are required at the age of 18 years, if covered under Medicaid, or at the age of 26 if covered by a parent's private insurance), shifts in provider networks that might result in changes in one's usual source of care (e.g., new primary care provider), and increases in personal responsibility in initiating care and maintaining relationships with providers [3–6]. For young adults with disability, healthcare transition might also include shifts away from school-based health and therapeutic services toward community providers [7–14].

Previous research has suggested that the likelihood of postponing or not receiving needed medical or mental healthcare increases during this period of healthcare transition, especially for young adults with disability, and that the promotion of a successful healthcare transition is central to avoiding gaps in care [5–12]. Yet, we found scant contemporary research examining healthcare utilization outcomes associated with a successful healthcare transition for young adults at a nationwide scale. In this study, we examine patterns of healthcare utilization that previous research has identified as being associated with successful transition, including having a usual healthcare source, a recent preventive healthcare visit, as well as having health insurance coverage [12,15]. Although we were not able to investigate the extent to which young adults transferred from pediatric to adult healthcare providers, we examine young adult's satisfaction with healthcare services and whether needed healthcare services were delayed or foregone due to cost [12,15]. We aimed to explore the extent to which these indicators are present among young adults with disability compared to same-age peers and to explore potential barriers to healthcare access and use, including worry about cost of care and personal financial instability.

## Methods

We used data from the 2014 to 2018 National Health Interview Survey (NHIS) which is conducted by the National Center for Health Statistics (NCHS). The NHIS is a nationally representative survey of the civilian noninstitutionalized population with data collection occurring continuously throughout the year [16]. Households are sampled and selected to be interviewed in-person by trained Census Bureau interviewers who conduct interviews primarily in-person with the option for follow-up over the phone. Within each household a

roster is taken, and families are subsequently identified and a brief questionnaire on selected demographic and broad health measures are completed. Next, one adult and if any children are present, one child, are randomly selected to be the subject of a more detailed health questionnaire. Between 2014 and 2018, the sample adult response rate ranged from 53.0% in 2017 to 58.9% in 2014 [16]. As a secondary data analysis of a deidentified dataset, this study is exempt from review by the [organization name omitted for review] Research Ethics Review Board.

## Sample

Adults aged 18–30 years who were administered the Adult Functioning and Disability supplement [17] were included in the sample (total 2014–2018 unweighted sample size,  $n = 15,710$ ). Half of the sample adult interviews received these disability questions in 2014–2017, while the full sample received these questions in 2018. Adults who answered at least one disability question in 2014–2018 were included in the analytic sample ( $n = 15,697$ ).

## Measures

**Disability.**—The Washington Group Short Set on Functioning [18] includes six domains of functioning: seeing, hearing, mobility, cognition, self-care, and communication. Respondents are asked about any difficulty they may experience in each domain, whether it be no difficulty, some difficulty, a lot of difficulty, or if they are unable to do the given activity. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six domains was considered to have disability (Table 1;  $n = 597$ , 3.9%) [19].

**Service utilization.**—Respondents were asked about their use of healthcare services over the past 12 months, including preventive visits, emergency room (ER) visits, care at home from a health professional (home care visits), dental visits, and whether they were prescribed medication. Those who responded in the affirmative were asked to identify the place for care from the following choices: clinic/health center; doctor's office or health maintenance organization; hospital ER; hospital outpatient department; some other place; or does not go to one place most often. A recoded variable indicated if an individual used the ER as their usual place of care, with the denominator being only individuals who indicated they had a usual place of care. In addition, respondents who indicated they had health insurance were asked what type of coverage (categorized as private only or any public coverage [e.g., Medicaid, Medicare, military healthcare, state-sponsored health plan]).

**Unmet need and satisfaction.**—Respondents were asked separately whether they delayed or did not get medical care due to cost over the past 12 months. A composite of unmet need was created based on whether the respondent endorsed either item. Respondents were also asked how satisfied they were with the healthcare they received over the past 12 months with the options of very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied, which was dichotomized into *satisfied* and *unsatisfied*.

**Financial worry.**—Respondents were asked how worried they were currently regarding a series of financial matters, including *medical costs* (not being able to pay medical costs of a serious illness or accident, not being able to pay medical costs for normal healthcare)

and *daily costs of living* (not having enough to pay normal monthly bills, not being able to maintain the standard of living currently enjoyed, not being able to pay rent, mortgage, or other housing costs). Response options included very worried, moderately worried, not too worried, or not worried at all. Two composite measures of healthcare worry and daily costs of living worry were created based on whether the respondent endorsed being very worried or moderately worried on any item in the set of questions.

**Individual, family, and geographic characteristics.**—Demographic characteristics measured at the individual level included sex (male, female), age group (18–25 years, 26–30 years), race and ethnicity (non-Hispanic white, non-Hispanic black, non-Hispanic other, Hispanic), and education level (less than high school degree, high school degree or more). Family- and geographic-level characteristics included federal poverty level (<100%, 100%–199%, 200%–399%, 400%), urbanicity (urban, rural), and geographic region (Northeast, Midwest, South, West).

**Interview characteristics.**—Year of survey, use of proxy, and primary language of interview (English only vs. any other language or combination of languages) were captured for each interview.

### Statistical analysis

Weighted percentages of adults with and without disability were calculated and stratified by individual- and geographic-level characteristics (Table 2). Differences between percentages of adults with disability by selected demographic characteristics were first evaluated using chi-squares at the  $p < .05$  level with significant differences within groups subsequently being evaluated using pairwise comparisons via bivariate logistic regressions. Weighted percentages of service utilization, unmet need, satisfaction with healthcare, and financial worry were compared between adults with and without disability. Unadjusted odds ratios (ORs) were first calculated for each outcome, followed by adjusted ORs (AORs) which accounted for individual, family, and geographic characteristics as well as interview characteristics. NCHS imputed data files were used when family poverty level was missing (4.2%). Each year NCHS releases five datasets containing imputed values for the survey year using multiple imputation methodology (see <http://cdc.gov/nchs/data/nhis/tecdoc18.pdf> for more information).

All analyses incorporated complex sample design variables and weights to allow for the calculation of nationally representative estimates using Stata 14.0 SE [20]. A recoded weight variable was created to allow for the analysis of data pooled from 2014 to 2018, which used the Adult Functioning and Disability weight for 2014–2017 and the Sample Adult weight in 2018. As only half the sample received the Adult Functioning and Disability Section in 2014–2017, the average Adult Functioning and Disability weight was double that of the Sample Adult weight. More information about the Adult Functioning and Disability Section is available online [17].

## Results

Among young adults aged 18–30 years, the prevalence of disability in 2014–2018 was 3.9% (95% Korn–Graubard confidence interval [CI] = 3.5–4.3) (Table 1). The prevalence of disability ranged from .4% for self-care and hearing to 2.2% for cognition.

Young adults with disability did not differ significantly from young adults without disability by age, sex, race and ethnicity, or urbanicity (Table 2). However, young adults with disability were less likely to have a high school degree or more (78.3% vs. 89.4%,  $p < .001$ ), live in a family with a federal poverty level at or above 400%, and live in the West (18.3% vs. 25.4%,  $p < .01$ ) when compared to young adults without disability. Additionally, young adults with disability were more likely to have had the interview completed through a proxy (15.2% vs. 1.5%) and completed exclusively in English (95.9% vs. 93.8%) when compared to adults without disability.

### Service utilization

Young adults with disability were more likely to have had a preventive visit (87.3% vs. 75.9%; AOR = 2.08, CI = 1.51–2.85,  $p < .001$ ), ER visit (39.2% vs. 19.5%; AOR = 2.48, CI = 1.94–3.16,  $p < .001$ ), and home care visit from a nurse or other healthcare professional (6.8% vs. .5%; AOR = 7.45, CI = 4.31–12.89,  $p < .001$ ) in the past 12 months than young adults without disability (Table 3). However, they were less likely to have a dental visit (51.8% vs. 61.8%; AOR = .65, CI = .51–.82,  $p < .001$ ) in the past 12 months when compared to young adults without disability. In addition, young adults with disability were more likely to have been prescribed medication in the past 12 months (74.8% vs. 45.2%; AOR = 3.42, CI = 2.62–4.46,  $p < .001$ ) as well as have a usual place of care (82.2% vs. 75.0%; AOR = 1.42, CI = 1.08–1.87,  $p < .01$ ). Yet, among the subset of young adults who indicated having a usual place of care, young adults with disability were almost three times as likely to identify the ER as their usual place of care, than young adults without disability (5.3% vs. 1.8%; AOR = 2.43, CI = 1.26–4.36,  $p < .01$ ). Finally, regarding current health insurance coverage, young adults with disability were more likely to have any public insurance (47.8% vs. 19.7%; AOR = 3.04, CI = 2.31–4.01,  $p < .001$ ), and less likely to have only private insurance (38.8% vs. 64.3%; AOR = .44, CI = .33–.60,  $p < .001$ ), or be uninsured (13.2% vs. 16.0%; AOR = .68, CI = .49–.94,  $p < .05$ ) when compared to young adults without disability.

### Unmet need, satisfaction with care received

Among young adults with disability, 19.1% reported having had to delay medical care due to cost and 11.9% reported not receiving medical care due to cost, significantly more than young adults without disability (8.9% and 6.0%, respectively) (Figure 1). Combined, 21.2% of young adults with disability had an unmet medical care need compared to 10.2% without disability ( $p < .001$ ). After adjustment, these differences remained significant (AOR = 2.29, CI = 1.68–3.12,  $p < .001$ ). Although 86.8% of young adults with disability reported being satisfied with the care they had received over the past 12 months, this was significantly less than those without disability, where the vast majority reported being satisfied with the care received (94.6%) (AOR = .39, CI = .27–.55,  $p < .001$ ) (Appendix A).

## Financial worry

A greater percentage of young adults with disability reported worry about being able to pay for medical costs, including routine medical bills, or in case of a medical emergency or accident (48.9% vs. 40.2%; AOR = 1.59, CI = 1.27–1.99,  $p < .001$ ), as well as being able to pay the daily costs of living (58.3% vs. 37.0%; AOR = 2.41, CI = 1.90–3.06,  $p < .001$ ), such as monthly bills and mortgage payments, when compared to young adults without disability (Figure 2). These differences also remained significant between groups after adjustment (Appendix A).

## Discussion

To our knowledge, this is the first contemporary study from a nationally representative U.S. sample that compares patterns of healthcare access and healthcare utilization for young adults with disability aged 18–30 years to same-age adults without disability. Prevalence of disability among young adults aged 18–30 years, as measured in this study, was 3.9%, which aligns with measures of prevalence of disability among adults aged 18–44 years in reports by the NCHS [21]. Results of the present study provide insight into indicators associated with healthcare access and coverage by young adults with disability as well as factors that may negatively influence health outcomes for this population. The associations of these factors with disability status may help inform providers and researchers of the healthcare experiences of this population of young adults and provide insight into areas that may need support during adolescence when the healthcare transition period may begin.

## Service utilization

Young adults with disability were more likely than same-age peers without disability to report having a preventive healthcare visit in the past 12 months. Although previous research suggests that young adults are overall less likely to follow recommendations for yearly preventive visits compared to children or older adults [5,6], the additional healthcare needs experienced by young adults with disability may result in more frequent contact with healthcare providers (than their same-aged peers) resulting in more preventive care visits [22]. Similar to findings in other national studies of adults with disability, young adults with disability were also more likely than same-age peers to report having public health insurance, which might support access to preventive services [23,24].

Young adults with disability were also more likely to report having a usual place of care than young adults without disability. However, among those with a usual place of care, they were more likely than same-age peers without disability to identify the ER as their usual place of care. Not seeking care in an office-based setting for routine treatments can result in increased risk for health crises and hospitalizations and might reduce the likelihood of comprehensive preventive and promotion services such as cancer screening, HIV testing, influenza vaccination, nutrition guidance, and mental health consultation [25–27].

Compared to young adults without disability, young adults with disability were twice as likely to have had an ER visit in the past 12 months. Identification of causal factors leading to more frequent use of the ER by young adults with disability than same-age peers without



disability was outside the scope of this study; nevertheless, provision of routine or usual care within a comprehensive primary care setting with utilization of specialist settings, as needed, has been shown to reduce utilization of the ER and associated costs as well as to support continuity and timeliness of healthcare services [25–29].

Young adults with disability were also more likely to have received a prescribed medication in the past 12 months than same-age peers without disability. Regular healthcare follow-up has been found to be conducive to the management of medications used in treatment of some disabilities (e.g., mental illness) and chronic health conditions commonly occurring among people with disability (e.g., diabetes) as well as to support medication adherence, especially for young adults with disability [8–10,30–32].

Finally, in terms of service utilization, we found that young adults with disability were less likely than same-age peers without disability to have had a dental visit in the last year, which could be tied to the accessibility of such services [33,34]. These results are consistent with those showing a relationship among absence of routine dental care, poor oral hygiene, and periodontal disease [33], which are associated with systemic conditions such as cardiovascular disease and diabetes that may exacerbate overall risks for negative health outcomes for people with disability [35].

### **Financial worry, unmet need, satisfaction**

In this study, nearly half of young adults with disability reported worry about the ability to pay medical costs, including routine bills, and more than half reported worry about the ability to pay daily costs of living. Approximately one in four young adults with a disability were living below the federal poverty line in the current study, and even after adjusting for poverty level, young adults with disability were more likely to delay or forego healthcare than young adults without disability and to have unmet healthcare needs. Prior work has shown that in general adults with disability are more likely to live below the federal poverty line and lack access to healthcare due to costs [22]. Although our investigation of relationships among disability, financial worry, healthcare utilization, and unmet healthcare needs was limited in scope, other researchers have also found that financial worry can potentially impact health seeking behaviors and may result in delaying or forgoing medical care, dental services, and mental health treatment as well as impact prescription medication adherence [36]. Likewise, for young adults with disability, worry over the costs associated with specialized healthcare services, treatments, supplies, or medications might play a role in healthcare seeking decisions and service utilization [2,23,24]. Foregoing needed healthcare has the potential to elevate risks for preventable health crisis, including mental health crisis, and adverse health outcomes including morbidity and mortality [5,6,9,31,32].

Despite these findings, most young adults with disability reported being satisfied with the care they received over the past 12 months. Yet, this was significantly less than those without disability. Previous research has identified factors which may affect patient satisfaction with healthcare, including patient expectations, clinician communication style, patient's sense of control and involvement in decision-making, and length of time a clinician spends with the patient [37,38]. For adults with disability, disability-specific accommodations that reduce structural barriers to care (e.g., accessible exam tables, ramps) and attitudes about

disability displayed by healthcare providers may also be tied to satisfaction with care [38]. Cognitive disability was the most reported disability among those within our sample (Table 1). Young adults with disability, especially cognitive disability, may experience challenges communicating medical needs and finding healthcare providers who possess expertise to address potentially complex healthcare conditions [13,34,38].

### Strengths and limitations

The NHIS benefits from having a large sample size as well as a high response rate for a national survey. As a result, it is possible to explore health outcomes among a relatively small group of individuals, including young adults with disability. The NHIS is also a nationally representative survey with estimates representative of the population of young adults with disability when weights and the complex survey design variables are incorporated into the analysis as was done in these analyses.

Despite these strengths, the study is subject to at least five limitations. First, the population of young adults with disability is a heterogeneous group, with varying levels of functioning. Limitations in seeing may have a notably different impact than limitations in cognition as they relate to accessing and utilizing healthcare services. Second, approximately one in six young adults with disability used a proxy to help answer questions. Previous research has shown that self-respondents and proxy respondents tend to give different answers to health-related questions and that proxies tend to overestimate functional limitation, especially when the proxy is acting as a caregiver of the respondent's health [39,40]. Third, whether respondents had yet made a transfer of care from pediatric to adult primary and specialty care doctors could not be determined; some young adults reporting a usual source of care might continue to identify a pediatric provider as the primary care source. Fourth, causality among healthcare utilization patterns, sociodemographic characteristics, disability, and other variables cannot be inferred from these cross-sectional data. Finally, the criteria for determining disability utilized in this study relied on respondent report of having a lot of difficulty or being unable to do a task at all. Individuals reporting some difficulty performing a task were classified as having "no disability." The prevalence of disability reported in this study may therefore differ from studies using other approaches to identify disability [19]. However, the Washington Group on Disability Statistics Short Set on Functioning, and its associated methodology for creating a disability indicator, is an endorsed method for disability measurement in population censuses and surveys [19,41,21].

### Implications

This study highlights disparities in self-reported access to preventive care, increased utilization of the ER for routine care, delays in care due to financial insecurity, and gaps in care satisfaction among young adults with disability when compared to young adults without disability. Young adults have increasingly been recognized as a vulnerable population in terms of behavioral health risks, emerging or worsening health conditions, and low use of healthcare [1–6]. Ensuring all young adults have a usual source of primary care, are not lost to follow-up, attend needed preventive visits, including dental, and continue management of co-occurring conditions have been highlighted as having the potential to prevent or slow the onset of secondary conditions associated with disability and reduce unnecessary use of



the ER [3–6,12–15]. Additionally, efforts that support continuity of care from adolescence through young adulthood and throughout the healthcare transition period has potential to reduce preventable health problems and potentially improve health outcomes for this population at risk for health disparities [12–15]. Similarly, provision of comprehensive healthcare coverage, including dental care, through the healthcare transition period has also been shown to support overall health outcomes for young adults with disability [38]. Future studies that more directly measure indicators of successful transition and identify factors in adolescence and young adulthood that support successful healthcare transition might provide insight into strategies that promote health of young adults with disability prior to, during, and after healthcare transition.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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The authors have no financial relationships relevant to this article to disclose.

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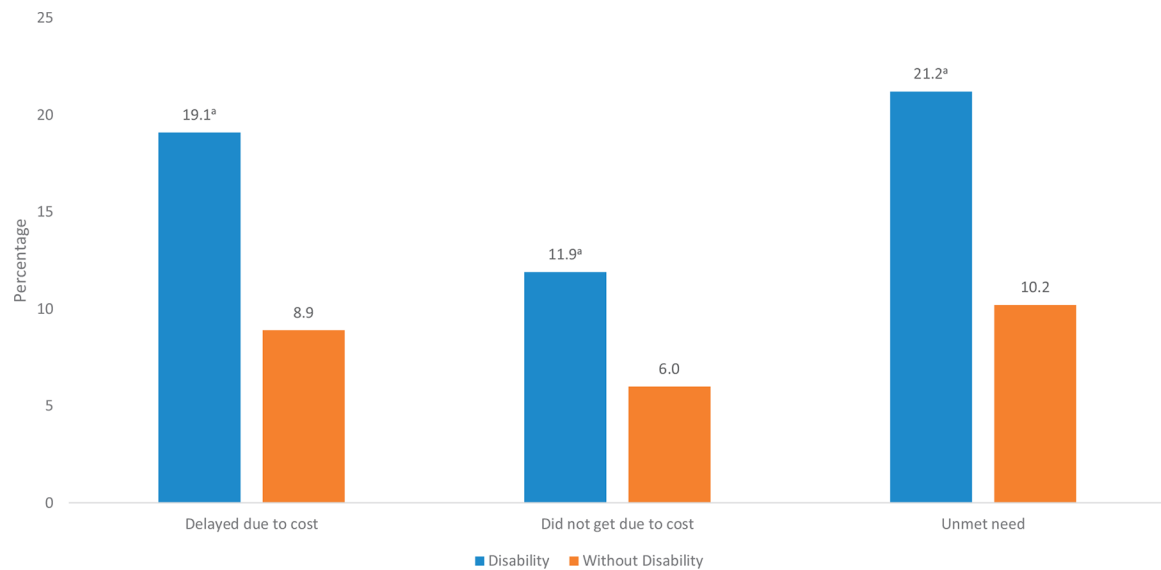
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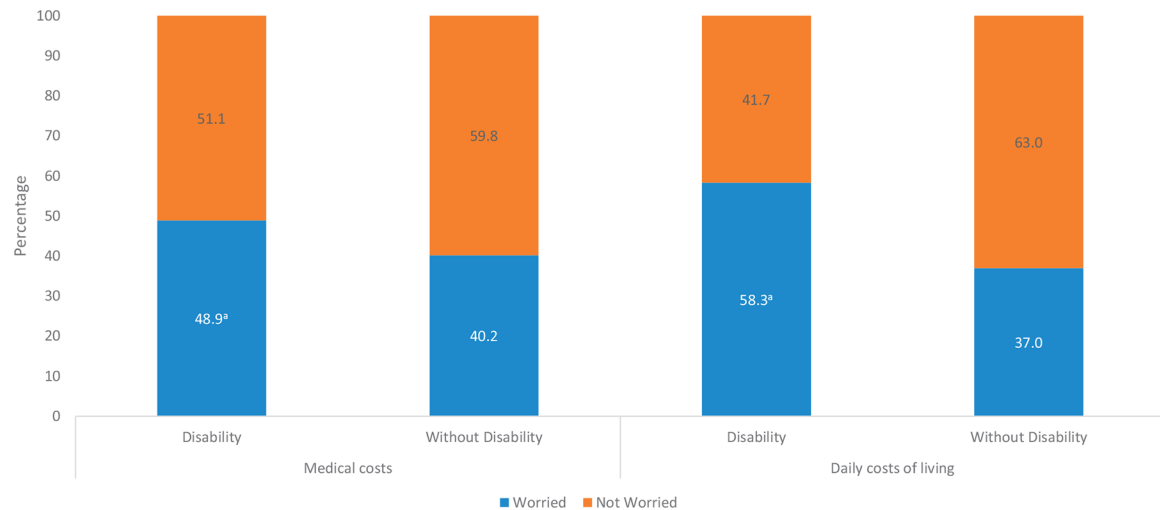
### IMPLICATIONS AND CONTRIBUTION

This study underscores the importance for young adults with disability to have a usual source of primary care and highlights a need for interventions to reduce the use of the emergency room for routine care and address delays in health-care due to cost and other access barriers.



**Figure 1.**

Percentage of young adults who delayed care, did not seek care, and had unmet medical needs due to cost, by disability status: U.S., 2014–2018. Notes: <sup>a</sup>Significantly different from adults without disability, after adjustment for age (18–25, 26–30 years), sex, race/ethnicity (NH white, NH black, NH other, Hispanic), education (less than HS degree, HS degree or more), family federal poverty level, urbanicity (urban, rural), region (Northeast, Midwest, South, West), use of proxy, language of interview (exclusively English, other), and survey year. <sup>b</sup>Disability based on responses to the Washington Group Short Set on Functioning (WG-SS) questions. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six measured domains was considered to have disability. HS = high school; NS = non-Hispanic.



**Figure 2.**

Percentage of young adults worried about ability to pay medical costs and daily costs of living, by disability status: U.S., 2014–2018. Notes: <sup>a</sup>Significantly different from adults without disability, after adjustment for age (18–25, 26–30 years), sex, race/ethnicity (NH white, NH black, NH other, Hispanic), education (less than HS degree, HS degree or more), family federal poverty level, urbanicity (urban, rural), region (Northeast, Midwest, South, West), use of proxy, language of interview (exclusively English, other), and survey year. <sup>b</sup>Young adults were considered to be worried about their ability to pay for medical costs if they indicated they were very worried or worried about being able to pay the medical costs for normal healthcare or in the event of a serious illness or accident. Young adults were considered to be worried about their ability to pay for daily costs of living if they indicated they were very worried or worried about being able to pay costs associated with monthly bills, housing costs, and being able to maintaining a standard of living they enjoy. <sup>c</sup>Disability based on responses to the Washington Group Short Set on Functioning (WG-SS) questions. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six measured domains was considered to have disability. HS = high school; NS = non-Hispanic.



**Table 1**

Weighted prevalence estimates of any disability and functioning domain-specific disability among young adults 18–30 years of age self-identified with a disability in the U.S., 2014–2018

	Unweighted n	% (95% CI)	SE
Any disability <sup>a</sup>	597	3.9 (3.5–4.3)	.21
Hearing	75	.4 (.3–.6)	.07
Seeing	109	.6 (.5–.8)	.08
Mobility	113	.8 (.6–1.0)	.10
Cognition	336	2.2 (1.9–2.5)	.16
Self-care	47	.4 (.3–.6)	.07
Communication	114	.8 (.6–1.0)	.10

CI = Korn-Graubard confidence interval; SE = standard error.

<sup>a</sup>Disability based on responses to the Washington Group Short Set on Functioning (WG-SS) questions. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six measured domains was considered to have any disability. The same cutoff is used to define domain-specific disability.

**Table 2**Demographic characteristics among young adults 18–30 years of age, by disability<sup>a</sup> status: U.S., 2014–2018

	Total (n = 15,697) % (SE)	With disability <sup>b</sup> (n = 597) % (SE)	Without disability (n = 15,100) % (SE)	p-value
Age				.99
18–25 years	60.0 (.57)	60.0 (2.64)	60.0 (.58)	
26–30 years	40.0 (.57)	40.0 (2.64)	40.0 (.58)	
Sex				.14
Male	50.3 (.58)	46.2 (2.80)	50.5 (.59)	
Female	49.7 (.58)	53.8 (2.80)	49.5 (.59)	
Race and ethnicity				.17
Non-Hispanic white	56.3 (.64)	57.4 (2.80)	56.2 (.65)	
Non-Hispanic black	13.3 (.41)	16.5 (2.27)	13.1 (.42)	
Non-Hispanic other	9.2 (.34)	9.0 (1.71)	9.2 (.34)	
Hispanic	21.3 (.55)	17.1 (1.94)	21.4 (.57)	
Region				.01
Northeast	16.0 (.54)	14.5 (1.91)	16.1 (.55)	
Midwest	23.1 (.64)	27.0 (2.72)	22.9 (.64)	
South	35.7 (.71)	40.2 (2.79)	35.6 (.71)	
West	25.1 (.67)	18.3* (1.95)	25.4 (.69)	
Education				<.001
Less than HS degree	11.1 (.37)	21.7* (2.39)	10.6 (.37)	
HS degree or more	88.9 (.37)	78.3* (2.39)	89.4 (.37)	
Urbanicity				.08
Urban	86.0 (.52)	82.5 (2.19)	86.2 (.53)	
Rural	14.0 (.52)	17.5 (2.19)	13.8 (.53)	
Federal poverty level				<.001
<100%	19.0 (.47)	25.0* (2.28)	18.8 (.48)	
100%–199%	20.6 (.47)	25.5* (2.57)	20.4 (.48)	
200%–399%	31.1 (.57)	29.8 (2.60)	31.2 (.58)	
400%	29.2 (.59)	19.7* (2.43)	29.6 (.60)	

HS = high school; NHIS = National Health Interview Survey; SE = standard error.

\*  
\*\*  
\*\*\*  
 $p > .05$   
 $p < .01$   
 $p < .001$ .

<sup>a</sup>Disability based on responses to the Washington Group Short Set on Functioning (WG-SS) questions. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six measured domains was considered to have disability.

<sup>b</sup>Young adults with disability more commonly had the NHIS survey interview completed through a proxy (15.2% vs. 1.5%) and completed exclusively in English (95.9% vs. 93.8%) when compared to adults without disability.

Table 3

Service utilization measures among young adults, by disability<sup>a</sup> status: U.S., 2014–2018

	With disability (n = 597) % (SE)	Without disability (n = 15,100) % (SE)	Odds ratio <sup>b</sup> (95% CI)	Adjusted odds ratio (95% CI)
Healthcare services				
Preventive visit, past 12 mo	87.3 (1.70)	75.9 (.50)	2.18 *** (1.61–2.95)	2.08 *** (1.51–2.85)
Any emergency room visit, past 12 mo	39.2 (2.76)	19.5 (.46)	2.65 *** (2.09–3.35)	2.48 *** (1.94–3.16)
Home care, past 12 mo	6.8 (1.33)	.5 (.08)	14.08 *** (8.58–23.09)	7.45 *** (4.31–12.89)
Dental visit, past 12 mo	51.8 (2.69)	61.8 (.55)	.67 *** (.54–.83)	.65 *** (.51–.82)
Prescribed medication by doctor, past 12 mo	74.8 (2.49)	45.2 (.57)	3.60 *** (2.77–4.67)	3.42 *** (2.62–4.46)
Usual place of care				
Usual place of care when sick	82.2 (1.96)	75.0 (.51)	1.54 ** (1.18–2.00)	1.42 * (1.08–1.87)
Usual place of care is hospital emergency room <sup>c</sup>	5.3 (1.20)	1.8 (.16)	3.15 *** (1.90–5.20)	2.43 *** (1.26–4.36)
Current insurance type				
Private only	38.8 (2.83)	64.3 (.59)	.35 *** (.29–.45)	.44 *** (.33–.60)
Any public	47.8 (2.87)	19.7 (.49)	3.75 *** (2.97–4.74)	3.04 *** (2.31–4.01)
Uninsured	13.2 (1.69)	16.0 (.44)	.80 (.60–1.07)	.68 * (.49–.94)

CI = Korn-Graubard confidence interval; SE = standard error.

\*  $p < .05$ \*\*  $p < .01$ \*\*\*  $p < .001$ .<sup>a</sup>Disability based on responses to the Washington Group Short Set on Functioning (WG-SS) questions. Any respondent who indicated a lot of difficulty or being unable to do an activity in any of the six measured domains was considered to have disability.<sup>b</sup>Odds ratios adjusted for age (18–25, 26–30 years), sex, race and ethnicity (non-Hispanic white, non-Hispanic black, non-Hispanic other, Hispanic), education (less than high school degree, high school degree or more), family federal poverty level (<100%, 100%–199%, 200%–399%, 400%), urbanicity (urban, rural), region (Northeast, Midwest, South, West), use of proxy, language of interview (exclusively English, other), and survey year.<sup>c</sup>Among young adults who indicated they had a usual place of care when sick. Only adults who indicated they had a usual place of care when sick were subsequently asked what type of place they went to most often.