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Original article

## Confidentiality Discussions and Private Time With a Health-Care Provider for Youth, United States, 2016

Stephanie A. Grilo, M.A., M.Phil.<sup>a,\*</sup>, Marina Catalozzi, M.D., M.S.C.E.<sup>b,c,d</sup>, John S. Santelli, M.D., M.P.H.<sup>b</sup>, Hanying Yan, M.P.H.<sup>e</sup>, Xiaoyu Song, Dr.P.H.<sup>f,g</sup>, Jennifer Heitel, M.P.H.<sup>b</sup>, Kristen Kaseeska, M.P.H.<sup>h</sup>, Julie Gorzkowski, M.S.W.<sup>h</sup>, Alexandra E. Dereix, M.P.H.<sup>b</sup>, and Jonathan D. Klein, M.D., M.P.H.<sup>i</sup>

<sup>a</sup> Department of Sociomedical Sciences, Columbia University Mailman School of Public Health, New York, New York<sup>b</sup> Heilbrunn Department of Population & Family Health, Columbia University Mailman School of Public Health, New York, New York<sup>c</sup> Department of Pediatrics, Columbia University Medical Center, New York, New York<sup>d</sup> Morgan Stanley Children's Hospital, New York-Presbyterian Hospital, New York, New York<sup>e</sup> Department of Biostatistics, Columbia University Mailman School of Public Health, New York, New York<sup>f</sup> Population Health Science and Policy, Icahn School of Medicine at Mount Sinai, New York, New York<sup>g</sup> The Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, New York<sup>h</sup> American Academy of Pediatrics, Julius B. Richmond Center of Excellence, Illinois<sup>i</sup> Department of Pediatrics, University of Illinois at Chicago College of Medicine, Chicago, Illinois

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 A B S T R A C T

**Purpose:** The objective of the study was to define factors associated with adolescent and young adult (AYA) experiences with private time and having discussed confidentiality and the impact of these experiences on improving delivery of clinical preventive services.

**Methods:** In 2016, a nationally representative sample of 1,918 US AYAs (13- to 26-year-olds) was surveyed. Survey questionnaire domains were based on prior research and Fishers' information-motivation-behavior skills conceptual model. Data were weighted to represent US households with AYA and analyzed to identify factors independently associated with ever experiencing private time and discussions of confidentiality with a regular health-care provider (HCP). We examined the association of these experiences on AYA attitudes about health care.

**Results:** Fifty-five percent of female and 49% of male AYA reported ever having had private time with an HCP and 55% of female and 44% of male AYA had spoken to an HCP about confidentiality. Independent predictors of having experienced private time and confidentiality included older age, race, higher household income, gender of the provider, amount of years with the provider, and involvement in risk behaviors. AYA who had experienced private time and confidentiality discussions had more positive attitudes about their providers, were more willing and comfortable discussing sensitive topics, and thought that these discussions should happen at younger ages.

**Conclusions:** Although confidentiality and private time are important to AYA, many are not experiencing these components of care. Providing private time and discussions of confidentiality can improve the delivery of health care for young people by enhancing positive youth attitudes about preventive care.

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 IMPLICATIONS AND CONTRIBUTION

This study identifies factors associated with the experiences of private time and confidential discussions including demographics (older age, race, higher household income), provider characteristics (gender and amount of years with the provider), and involvement in risk behaviors. The findings suggest that these experiences enhance youth attitudes about clinical preventive services.

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\* Address correspondence to: Stephanie A. Grilo, M.A., M.Phil., Department of Sociomedical Sciences, Columbia University Mailman School of Public Health, 60 Haven Avenue, B2, New York NY 10032.

E-mail address: sag2179@cumc.columbia.edu (S.A. Grilo).

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Clinical preventive services (CPS), including screening, counseling, and vaccinations, can improve the health status of adolescents and young adults (AYAs) and may reduce risky behaviors [1]. A vital component of effectively delivering CPS which allows for discussion of sensitive topics is private time between the AYA and the provider. Owing to the critical role of private time, medical society guidance recommends that AYA have access to confidential services and time for private discussions with their health-care providers [2–4]. However, previous research has demonstrated that many AYA in the United States have never had a private discussion with their provider [5,6] and are not receiving recommended CPS [7–10]. Although it is clear that many AYAs are not receiving this critical component of care, there is limited research on predictive factors for AYA receipt of private and confidential health care.

It is vital to understand the individual-, family-, and provider-level characteristics that influence the receipt of recommended health services. Research suggests that when confidentiality is not assured, AYAs are less willing to discuss sensitive topics with their regular providers, or may skip care altogether [11,12]. This is especially true for adolescents who report risk behaviors or psychological distress, and thus, a lack of confidentiality may prevent the most vulnerable adolescents from seeking care [13]. A recent examination of the National Survey of Family Growth found that young people, especially women, who were concerned about confidentiality reported lower rates of sexually transmitted infection screenings [14]. Gender differences have also been found, demonstrating that young men desire less parental involvement in their health care and also have less of an understanding of confidential care [15]. In addition, adolescents, parents, and health-care providers may be confused about consent and confidentiality when adolescents receive health care [16].

As part of an Adolescent Health Consortium project to improve the quality and delivery of clinical preventive services, we examined factors associated with experiences with private time and confidentiality discussions among AYA in 2016. Using a nationally representative survey, we attempted to define factors associated with AYA experiences with private time and having discussed confidentiality and the impact of these experiences on improving delivery of clinical preventive services. We hypothesized that characteristics of AYA, risk behavior involvement, and characteristics of regular providers and the health-care system would be associated with receipt of private time and confidentiality. We also hypothesized that receipt of private time and confidentiality would enhance positive youth attitudes toward receiving preventive health care, including attitudes about their regular providers' effectiveness and their comfort discussing sensitive topics. This article also examined the age that AYA report they should begin receiving private time and confidentiality discussions (stratified by those who have experienced these outcomes and those who have not). Identification of correlates of private time and discussions of confidentiality can be helpful in tailoring interventions to populations most at need.

## Methods

In 2016, a representative sample of 1,209 adolescents (13- to 18-year-olds), their parents, and 709 young adults (19- to 26-year-olds) in the United States were surveyed about attitudes

and experiences with clinical preventive services, AYA private time with providers, and confidentiality of care. Respondents were sampled from a pre-enrolled online panel (Knowledge-Panel [17]) from a national market-research firm (GfK) using a household sampling frame via random digit dialing and address-based sampling. The completion rate for the survey was 65%; the final sample was weighted to represent the noninstitutionalized U.S. adolescent and young adult population by age, gender, and race/ethnicity. The 2015 Current Population Survey Supplement was used to calculate appropriate population weights [18]. More detailed methods have previously been described [19]. The study was approved by institutional review boards at Columbia University, the University of Illinois at Chicago, and at the American Academy of Pediatrics. Informed consent was obtained from parents and young adults over age 18 years; parent permission and adolescent assent was obtained for youth younger than 18 years.

### *Independent variables*

Demographic variables include age (13–14, 15–18, 19–22, and 23–26 years), gender (women, men), race and ethnicity (white non-Hispanic, black non-Hispanic, other and multiple races non-Hispanic and Hispanic), sexual orientation (straight, not straight/do not know), and enrollment in school. Household variables include metropolitan statistical area status (metro, nonmetro) and household income (<\$25,000, \$25,000–\$49,999, \$50,000–\$74,999, and >\$75,000). Provider characteristics included AYA report of their regular provider's (defined as the health-care provider that they see for routine care or checkups) gender (male, female, do not know), and the length of time the adolescent or young adult has seen this provider (<2 years, 2–10 years, >10 years, and do not know). AYA self-reported risk behaviors included tobacco use, binge drinking (operationalized as more than five drinks of alcohol within a couple of hours in the past 30 days), and sex (oral, vaginal, or anal) in the last 30 days.

### *Primary outcome variables*

We examined two outcome variables: adolescent or young adult receipt of private time (“Have you ever had a private conversation with a health care provider?”) and if the AYA had ever discussed confidentiality with a provider (“Has a health-care provider ever talked to you about confidentiality?”). These two questions were adapted from the Young Adult Health Care Survey [20].

### *Correlates of outcome variables*

We assessed potential attitudinal correlates of ever having private time and a discussion about confidentiality. These variables included attitudes about their regular provider, attitudes about CPS, attitudes about discussing specific health topics, attitudes about having independent access to care, and comfort discussing topics with their regular provider with and without parents in the room. Most of these correlates were multipart questions; principle component analysis was used to create a weight and a composite score variable for each (described in [Appendix](#)).

## Analysis

All analyses were stratified by gender to capture differences between young men and women in patterns and predictors of private time and confidentiality with providers. Bivariate relationships were tested using t-test for proportion. Survey logistic regression was used to identify independent predictors of receiving private time and discussing confidentiality.

### Principal component analysis

Principal component analysis was used to combine sub-questions for three attitudinal scales into three single scores for each participant: (1) attitudes about their regular provider's effectiveness, (2) attitudes about the importance of discussing topics with their regular provider, and (3) comfort in discussing sensitive topics with their regular provider alone. Those who did not answer these questions were treated as missing (less than 2% missing for each question). Multiple imputation was used for each question before principal component analysis using an R package (Generates Multivariate Imputations by Chained Equations) [21], and principal component analysis was performed on the resulting attitudinal scales [22]. The first principal component demonstrating the largest possible variance for each question was used as the new variable. A table in an appendix describes the original scales, their development, and their original source.

## Results

Of the 1,918 AYA surveyed, 49% identified as women, and 51% identified as men (Table 1). Only slightly more than half of young women reported having ever had private time with their provider (55%) or discussing confidentiality (55%). These numbers were significantly lower for young men with 49% ever having private time with their provider ( $p = .046$ ) and 44% discussing confidentiality ( $p < .001$ ) (Table 2). The percent of AYA who had received private time and discussed confidentiality increased with age, higher income, and not being enrolled in school. AYA who participated in risky behaviors (such as tobacco use in last 30 days, binge drinking in last 30 days, and ever having sex) also reported higher percentages of receiving private time or discussing confidentiality with their providers. Among young women, 66% of AYA reported having a regular provider that was a woman and 38% had been with that provider for less than 2 years. For young men, 67% of AYA reported having a regular provider that was a man and 31% had been with that regular provider for less than 2 years.

Receipt of private time among AYA was strongly influenced by demographic characteristics of AYA and regular providers (Tables 3 and 4). For young women, independent predictors of having received private time included some demographic and behavioral factors such as older age, being other or mixed race, having a higher family income, and reporting ever having sex. Provider characteristics including having a woman provider and length of time with regular provider (more than 2 years but less than 10) were also predictive of receipt of private time. The adjusted model for AYA men predicting ever having private time was very different from the adjusted model for AYA women: for young men, age was the main effect on ever receiving private time, with older age strongly predicting receipt of private time. Tables 3 and 4 show predictors of adolescents and young adults'

**Table 1**

Demographic characteristics, national internet survey, United States, 2016

Demographic characteristics	Young women (n = 939)	Young men (n = 979)
	% <sup>a</sup>	% <sup>a</sup>
<b>Demographic characteristics</b>		
<b>Age (years)</b>		
13–14	13.9	14.2
15–18	28.4	29.2
19–22	27.3	27.1
23–26	30.5	29.5
<b>Race and ethnicity</b>		
White, non-Hispanic	54.2	55.4
Black, non-Hispanic	15.6	12.4
Other and multiple races, non-Hispanic	9.2	9.2
Hispanic	21.0	23.0
<b>Sexual orientation</b>		
Straight	89.1	93.8
Not straight or do not know	10.9	6.2
<b>Residence</b>		
Rural	15.2	13.2
Urban or suburban	84.9	86.8
<b>Household income</b>		
<\$25,000	16.0	17.4
\$25,000–\$49,999	22.2	20.7
\$50,000–\$74,999	16.8	18.7
\$75,000+	45.1	43.1
<b>Enrolled in school</b>		
No	42.9	46.5
Yes	57.1	53.5
<b>Risk behavior involvement</b>		
<b>Tobacco use in past 30 days</b>		
None	91.4	87.7
One or more days	8.6	12.3
<b>Binge drinking in past 30 days</b>		
None	83.3	80.6
One or more days	16.7	19.5
<b>Ever had sex (oral, vaginal, or anal)</b>		
No	54.3	59.5
Yes	45.7	40.6
<b>Characteristics of primary care provider<sup>b</sup></b>		
<b>Gender of regular provider</b>		
Male	32.9	67.1
Female	65.5	31.3
Do not know	1.6	1.5
<b>Length of time with regular provider</b>		
Less than 2 years	37.7	31.2
≥2 years and <10 years	34.5	32.9
Ten years or more	23.4	31.1
Do not know	4.4	4.9

<sup>a</sup> All percentages are based on survey and sampling weights.

<sup>b</sup> The last two items were only asked of those who responded that they had a primary care provider and therefore have different total N's. Gender of regular provider N = 791 (females) and N = 765 (males); Length of time w/regular provider N = 788 (females) and N = 766 (males).

reporting discussions of confidentiality with their regular health-care provider.

Generally, AYA who previously received private time and/or had discussed confidentiality with their regular provider had more positive attitudes about their regular provider. Table 5 presents the bivariate relationships between the attitudinal scales and the two primary outcomes (private time and confidentiality) stratified by gender. Among AYA who have the most positive views of their regular provider, 65.2% of young women and 52.0% of young men had ever had private time, and 67.7% of young women and 49.9% of young men had ever discussed confidentiality. Among AYA who report that discussing a series of

**Table 2**

Receipt of private time and confidentiality among adolescents and young adults, by selected characteristics, United States, 2016

Predictors	Adolescent and young adult women		Adolescent and young adult men	
	Ever had private time % <sup>a</sup>	Ever talked about confidentiality %	Ever had private time %	Ever talked about confidentiality %
Overall	54.9 <sup>b</sup>	55.0	49.2	44.2
Demographic characteristics				
Age (years)				
13–14	22.4	34.8	14.0	26.2
15–18	42.8	51.9	42.5	42.2
19–22	69.0	61.56	62.4	54.5
23–26	68.2	60.3	60.5	45.3
Race and ethnicity				
White, non-Hispanic	62.1	56.3	51.1	41.9
Black, non-Hispanic	54.8	66.7	53.1	42.7
Other and multiple races, non-Hispanic	25.4	38.0	49.4	45.0
Hispanic	49.5	49.1	42.3	50.0
Sexual orientation				
Straight	54.3	54.7	50.1	45.2
Not straight or do not know	66.9	61.7	46.4	36.4
Residence				
Rural	57.9	55.2	51.1	34.9
Urban or suburban	54.4	54.6	48.9	45.6
Household income				
<\$25,000	41.0	46.6	47.0	47.1
\$25,000–\$49,999	55.3	60.1	41.8	41.8
\$50,000–\$74,999	52.9	51.4	48.6	38.3
\$75,000+	60.4	56.2	53.8	46.7
Enrolled in school				
No	67.7	60.3	58.4	48.8
Yes	46.8	51.8	43.1	41.7
Risk behavior involvement				
Tobacco use in past 30 days				
None	53.8	54.5	49.0	44.0
One or more days	80.2	63.7	59.0	51.2
Binge drinking in past 30 days				
None	50.3	53.0	46.5	41.5
One or more days	82.0	68.1	64.7	58.2
Ever had sex (oral, vaginal, or anal)				
No	34.1	46.1	39.4	36.2
Yes	80.6	66.2	65.2	56.6
Gender				
Male	48.1	54.3	52.4	47.2
Female	61.1	58.7	50.6	43.1
Do not know	40.3	46.9	33.5	29.8
Length of time with PCP				
Less than 2 years	59.3	55.6	59.2	53.6
≥2 years and <10 years	69.0	64.8	54.7	46.5
Ten years or more	40.7	50.4	42.4	39.6
Do not know	25.4	52.8	41.3	26.1

PCP = primary care provider.

<sup>a</sup> All percentages are based on survey and sampling weights.<sup>b</sup> Men were significantly less likely to receive private time ( $p = .046$ ) and significantly less likely to receive discussions of confidentiality ( $p < .001$ ).

sensitive topics with their provider is important, 61.7% of young women have ever had private time and 59.7% have ever talked about confidentiality. For young men, these percentages are 54.6% and 52.5%. Finally, among AYA who are comfortable discussing sensitive topics with their regular provider without their parent in the room, 59.5% of young women have ever had private time and 58.2% have ever discussed confidentiality—for young men, these percentages are 53.8% and 49.0%.

On average, AYA who had received private time and discussions on confidentiality reported that other AYA should receive private time at younger ages. This finding is consistent for both young women and men. The suggested weighted mean age that AYA should start private time was significantly lower for adolescent and young adult women who have received private

time (15.4 years) as compared to those who did not or did not know if they received private time (16.2 years;  $p < .001$ ). Similarly, young men, who had received private time thought other AYA should receive private time starting at a weighted mean of 15.4 years, whereas those who had not experienced private time thought other AYA should start at age 16.2 years ( $p < .001$ ).

## Discussion

Despite professional endorsement of AYA receipt of private time and confidentiality, only about half of young women and men reported ever having private time with a provider and discussing confidentiality with their regular provider. Receipt of

**Table 3**

Unadjusted and adjusted predictors of private time and confidentiality with a regular provider for adolescent and young adult women, United States, 2016

Predictors	Unadjusted				Adjusted			
	Ever had private time		Ever talked about confidentiality		Ever had private time, N = 740		Ever talked about confidentiality, N = 740	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
<b>Demographic characteristics</b>								
Age (years)								
13–14	ref	ref	ref	ref	ref	ref	ref	ref
15–18	2.6	<.000	2.0	.001	1.8	.026	2.0	.004
19–22	7.7	<.000	3.0	<.000	3.8	<.000	3.0	.002
23–26	7.5	<.000	2.8	<.000	3.5	.007	2.6	.019
Race and ethnicity								
White, non-Hispanic	ref	ref	ref	ref	ref	ref	ref	ref
Black, non-Hispanic	0.7	.257	1.6	.101	1.2	.637	3.0	.002
Other and multiple races, non-Hispanic	0.2	<.000	0.5	.029	0.3	.003	0.8	.542
Hispanic	0.6	.010	0.7	.148	1.0	.877	1.4	.245
Sexual orientation								
Straight	ref	ref	ref	ref	ref	ref	ref	ref
Not straight or do not know	0.6	.046	0.8	.281	0.5	.051	0.9	.750
Residence								
Rural	ref	ref	ref	ref	ref	ref	ref	ref
Urban or suburban	0.9	.539	1.0	.927	1.0	.967	1.0	.924
Household income								
<\$25,000	ref	ref	ref	ref	ref	ref	ref	ref
\$25,000–\$49,999	1.8	.022	1.7	.027	1.8	.086	1.8	.047
\$50,000–\$74,999	1.6	.081	1.2	.483	1.9	.120	1.5	.216
\$75,000+	2.2	.001	1.5	.086	3.1	<.000	1.9	.023
Enrolled in school								
No	ref	ref	ref	ref	ref	ref	ref	ref
Yes	0.4	<.000	0.7	.041	1.2	.657	1.2	.450
<b>Characteristics of primary care provider</b>								
Gender								
Male	ref	ref	ref	ref	ref	ref	ref	ref
Female	1.7	.007	1.2	.357	1.9	.008	1.2	.420
Do not know	0.7	.669	.74	.672	0.7	.818	0.9	.916
Length of time with PCP								
Less than 2 years	ref	ref	ref	ref	ref	ref	ref	ref
≥2 years and <10 years	1.5	.054	1.5	.077	2.2	.002	1.7	.020
Ten years or more	0.5	.001	0.8	.358	0.9	.687	1.2	.472
Do not know	0.2	.001	0.9	.778	0.4	.210	1.8	.157
<b>Risk behavior involvement</b>								
Tobacco use in past 30 days								
None	ref	ref	ref	ref	ref	ref	ref	ref
One or more days	3.5	<.000	1.5	.234	1.2	.759	1.6	.750
Binge drinking in past 30 days								
None	ref	ref	ref	ref	ref	ref	ref	ref
One or more days	4.5	<.000	1.9	.010	1.4	.399	0.9	.883
Ever had sex (oral, vaginal, or anal)								
No	ref	ref	ref	ref	ref	ref	ref	ref
Yes	8.0	<.000	2.3	<.000	5.0	<.000	1.9	.016

OR = odds ratio; PCP = primary care provider; ref = reference category.

<sup>a</sup>The characteristics of primary care providers were only asked of those who responded that they had a primary care provider, and therefore, the adjusted models have total N's of 740 for both males and females.

private time and discussions of confidentiality among AYA was strongly associated with demographic characteristics (age, race, household income), youth involvement of risk behaviors, and factors related to their regular provider (gender and length of time seeing the adolescent or young adult). AYA who had received private time and confidentiality discussions had more positive attitudes toward their provider and were more willing and more comfortable discussing sensitive topics; all these may enhance adolescent likelihood of receiving needed care. Receiving private time and discussing confidentiality may make adolescents feel comfortable discussing health risks with providers. Similarly, adolescent comfort in discussing sensitive issues could encourage a provider to provide private time.

Surprisingly, roughly 30% of 23- to 26-year-olds reported never having a private discussion with a health-care provider. Although this does not necessarily mean a parent was in the room during all visits—the young adult could have been referring to having someone else in the room (e.g. a romantic partner, friend, and so forth)—the finding is still both unexpected and concerning. If young adults are not given private space to discuss their concerns with health-care providers, they may not be able to express concerns or seek care and advice of their provider confidentially.

Although professional guidelines recommend that private time begin with at age 13 years [3,23], many AYAs report not receiving this component of care. Guidelines also suggest

**Table 4**

Unadjusted and adjusted predictors of private time and confidentiality with a regular provider for adolescent and young adult men, United States, 2016

Predictors	Unadjusted				Adjusted			
	Ever had private time		Ever talked about confidentiality		Ever had private time, N = 724		Ever talked about confidentiality, N = 724	
	OR	p-value	OR	p-value	OR	p-value	OR	p-value
<b>Demographic characteristics</b>								
Age (years)								
13–14	ref	ref	ref	ref	ref	ref	ref	ref
15–18	4.6	<.000	2.1	.002	4.5	<.000	1.8	.011
19–22	10.2	<.000	3.4	<.000	17.5	<.000	3.2	.003
23–26	9.5	<.000	2.3	<.000	18.5	<.000	1.5	.305
Race and ethnicity								
White, non-Hispanic	ref	ref	ref	ref	ref	ref	ref	ref
Black, non-Hispanic	1.1	.696	1.0	.870	0.8	.546	0.6	.181
Other and multiple races, non-Hispanic	0.9	.762	1.1	.586	1.3	.522	1.3	.515
Hispanic	0.7	.028	1.4	.043	0.8	.470	1.5	.138
Sexual orientation								
Straight	ref	ref	ref	ref	ref	ref	ref	ref
Not straight or do not know	1.2	.585	1.4	.193	1.0	.970	1.3	.511
Residence								
Rural	ref	ref	ref	ref	ref	ref	ref	ref
Urban or suburban	0.9	.637	1.6	.024	1.1	.882	2.1	.031
Household income								
<\$25,000	ref	ref	ref	ref	ref	ref	ref	ref
\$25,000–\$49,999	0.8	.316	0.8	.307	0.6	.132	0.7	.349
\$50,000–\$74,999	0.7	.768	0.7	.098	0.8	.567	0.9	.672
\$75,000+	1.0	.140	1	.924	1.2	.514	0.9	.593
Enrolled in school								
No	ref	ref	ref	ref	ref	ref	ref	ref
Yes	0.5	<.000	0.7	.091	1.4	.313	1.2	.487
<b>Characteristics of primary care provider</b>								
Gender								
Male	ref	ref	ref	ref	ref	ref	ref	ref
Female	0.9	.663	0.8	.307	1.2	.346	0.9	.672
Do not know	0.5	.225	0.5	.263	0.7	.737	0.6	.522
Length of time with PCP								
Less than 2 years	ref	ref	ref	ref	ref	ref	ref	ref
≥2 years and <10 years	0.8	.330	0.8	.130	0.7	.286	0.7	.116
Ten years or more	0.5	<.000	0.6	.003	0.7	.131	0.6	.092
Do not know	0.5	.050	0.3	.004	1.4	.503	0.6	.355
<b>Risk behavior involvement</b>								
Tobacco use in past 30 days								
None	ref	ref	ref	ref	ref	ref	ref	ref
One or more days	1.5	.047	1.3	.149	1.0	.909	0.8	.582
Binge drinking in past 30 days								
None	ref	ref	ref	ref	ref	ref	ref	ref
One or more days	2.1	<.000	1.9	<.000	1.2	.709	1.3	.495
Ever had sex (oral, vaginal, or anal)								
No	ref	ref	ref	ref	ref	ref	ref	ref
Yes	2.9	<.000	2.3	<.000	1.5	.209	2.5	.011

OR = odds ratio; PCP = primary care provider; ref = reference category.

<sup>a</sup>The characteristics of primary care providers were only asked of those who responded that they had a primary care provider, and therefore, the adjusted models have total N's of 724 for both males and females.

incorporating private time in the anticipatory guidance delivered to adolescents, before engagement in risk behaviors. Guidelines and recommendations that are laid out for adolescents versus adults are often guided by artificial age divides based on legal definitions rather than development. Regardless of these divides, our analysis clearly shows that the care that both adolescents and young adults are receiving in practice is not meeting the goals. While explaining the gap between guidance and practice is beyond the scope of our study, previous reports have suggested that provider comfort in establishing private time and addressing risk behaviors significantly affects their ability to deliver adolescent care, as well as time constraints limiting the ability of

providers to address all critical topics during preventive visits [24–26].

AYA who had received private time thought that all AYA should receive private time at younger ages. This suggests that AYAs found the conversations useful and believe that they would have benefited from starting this practice earlier. In addition, young women were more likely to have received private time if they had a regular provider who was a woman. It is unclear whether AYA are more comfortable with a same-sex provider, or whether parents are more comfortable leaving AYA alone with a same-sex provider. Some studies have found that women providers are more likely to initiate discussions about sexuality

**Table 5**

Percentage of AYA ever having private time and ever talking about confidentiality with a regular provider and AYA attitudes, United States, 2016

Predictors	Adolescent and young adult women				Adolescent and young adult men			
	Ever had private time %	Never had private time %	Ever talked about confidentiality %	Never talked about confidentiality %	Ever had private time %	Never had private time %	Ever talked about confidentiality %	Never talked about confidentiality %
Attitudes about regular health-care provider's effectiveness								
Least positive	50.5	49.5	49.4	50.6	46.7	53.3	36.9	63.1
In between	52.7	47.3	52.7	47.3	56.4	43.6	50.5	49.5
Most positive	65.2	34.8	67.7	32.3	52.0	48.0	49.9	50.1
Attitudes about discussing topics with HCP								
Unimportant	42.5	57.5	44.8	55.2	38.7	61.3	29.1	70.9
Neutral	41.2	58.8	45.2	54.8	42.9	57.1	34.2	65.8
Important	61.7	38.3	59.7	40.3	54.6	45.4	52.5	47.5
Comfort in discussing sensitive topics with HCP without parent in the room								
Uncomfortable	28.3	71.7	34.7	65.3	27.8	72.2	22.1	77.9
Comfortable	59.5	40.5	58.2	41.8	53.8	46.2	49.0	51.0

AYA = adolescent and young adult; HCP = health-care provider.

with patients of either sex [27]. Provider gender effects have also been reported in adult women [28]. However, our study finds that women providers were more likely to initiate patient discussions with young women but not necessarily with young men. Further research about communication dynamics, gender roles, provider age, and preferences of AYA is needed to better understand these relationships.

Length of relationship with the provider also appeared to influence receipt of health services. Young women who had seen their provider for more than 2 years but less than 10 years (meaning there was some transition, but otherwise a steady relationship) were most likely to have received private time and confidentiality discussions. For young men, this relationship differed—those who had seen their provider for longer were less likely to have received private time or confidentiality. This sex difference may have important implications for transitioning care as AYA age.

AYA who were involved in risk behaviors (specifically, those who ever had sex) were more likely to have had private time and been talked to about confidentiality, even after controlling for age. This finding may reflect screening for risk behavior involvement and/or signify that providers are targeting adolescents they believe are engaging in behaviors that necessitate a private conversation. It is also possible that these findings reflect that providers serving populations at higher risk or with higher rates of these behaviors are more likely to deliver confidential care.

AYAs, who have received private time and discussions about confidentiality with their regular provider also had more positive attitudes about their regular provider's effectiveness, report that discussing sensitive topics with their provider is important and are more comfortable discussing sensitive topics privately. This finding is consistent with previous research that suggests that AYA may be less willing to go to preventive visits or discuss sensitive topics with a provider when confidentiality is not guaranteed [11,12]. AYA with more positive attitudes about both preventive services and their provider are more likely to receive care. [29].

### Limitations

This study has several limitations. In all nationally representative cohorts, there may be problems with sample

coverage and response bias. These data were self-reported by respondents; however, past research has shown that adolescent self-report of health-care services is reliable [30,31]. Because adolescents were surveyed right after parents using the same computer, it is possible that there was underreporting of risk behaviors. Also, owing to the cross-sectional design of this study, we cannot determine causality of significant associations, particularly receipt of private time and attitudes toward providers.

### Implications and Contribution

Confidentiality and private time are essential in providing comprehensive health care for AYA, however, adolescents—particularly those who are younger—are not receiving these components of care with their regular health-care providers. These findings have important clinical implications. Regular providers need to begin discussions of private time and confidentiality with their adolescent patients at earlier ages. The gap between clinical recommendations and practice signifies the need for education for parents, adolescents, and providers on the importance of private time and discussion of confidentiality. Education about private time and confidentiality should be embedded within providers' medical training—in medical school and throughout residency and in-service training. However, it is also clear that education can only move the needle so far, and other system-level changes are necessary. For example, incentivizing private time and creating strong professional norms among all types of providers who see and treat adolescents and their families are potential interventions that might create more lasting change.

Education of adolescents and parents on the importance of private time and confidentiality could be crucial in enhancing preventive health care for AYA. Coordinated messages should be produced and disseminated to providers, parents, and AYAs on these crucial aspects of health care. In addition, to better support implementation of adolescent and young adult care guidelines, robust quality improvement strategies, surveillance that includes measures for whether private time has occurred, and policies to promote accountability for the quality of preventive care delivery are needed. Further research to identify barriers to delivery of

private time from clinicians' perspectives and to test strategies to overcome these barriers, are also needed.

Our data demonstrate that providing private time and discussing confidentiality are associated with AYAs attitudes about health care and CPS. AYA who had experienced private time and who had discussed confidentiality with a provider had more positive attitudes about their provider, greater willingness to discuss sensitive topics, and greater comfort in discussing these topics. Enhancing the provision of private time and discussions of confidentiality can augment the delivery of preventive care to AYA and ultimately improve health outcomes for this population.

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### Supplementary Data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jadohealth.2018.10.301>.

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