

The impact of SCHIP enrollment on adolescent-provider communication

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Abstract:

Purpose

Effective communication between physicians and adolescents is critical to convey health information, provide counseling and identify emerging health problems. This article addressed two questions: (a) After an adolescent enrolls in a State Children's Health Insurance Program (SCHIP), is there a change reported in communication between the adolescent and his/her health care provider; and (b) Is there a relationship between respondent's characteristics and change observed within specific content areas?

Methods

Adolescent preventive care guidelines developed by national organizations provided the study framework. Surveys were mailed to 3472 12–19-year-olds in a SCHIP; 1689 responded (response rate = 49%). Frequencies described the study population, chi-square analysis explored differences in adolescent-provider communication before and after enrollment, and multiple linear regressions were used to determine relationships between respondents' characteristics and provider communication topics.

Results

There were substantial increases after enrollment in SCHIP in the general area of communication between adolescents and their health care providers. Specifically, the presence of a special health care need had a significant influence on most communication areas. Further, females were more likely than males to talk about sexual health ($p = .049$) and diet and exercise ($p \leq .001$); older more likely than younger to discuss sexual health ($p = .026$) and mental health feelings ($p = .023$); and white more likely than nonwhite to have better overall communication with the provider after enrollment ($p = .029$) but Whites also were more likely to experience more negative mental health feelings after enrollment in SCHIP ($p = .029$).

Conclusions

Practice guidelines define the content of preventive services; but, it appears that many adolescents do not receive adequate guidance from their physicians. For the group of adolescents in this study who had recently enrolled in SCHIP, there was a reported increase in their communication with their health care provider. The positive changes in communication suggest that encouraging providers and adolescents to discuss risky behaviors is a feasible, achievable goal.

Keywords: Health insurance; Adolescents; Health care providers; SCHIP; Communication

Article:

For adolescents, the largest contributors to morbidity and mortality are lifestyle and behavioral practices [1] and [2]. Specific health-related risk behaviors, including early initiation of sexual activity and lack of contraception use, tobacco use, substance abuse, violence, intentional and unintentional injury, exercise, diet and weight

concerns, and mental health issues, increase adolescent vulnerability for poor health outcomes [2], [3], [4], [5] and [6]. Effective, cost-efficient, clinical preventive services could represent substantial savings to the health care system, adolescents and their families [7]. In keeping with this focus on preventive health for children and adolescents, organizations such as the American Medical Association (AMA), the United States Preventive Services Task Force (USPSTF), the Maternal and Child Health Bureau (MCHB), and the American Academy of Pediatrics (AAP) have developed guidelines for preventive health care services for adolescents [8], [9], [10] and [11]. The American College of Obstetrics and Gynecologists (ACOG) has guidelines specific to female adolescents, and the Society for Adolescent Medicine has called for widespread acceptance and implementation of clinical preventive services for adolescents [7], [12] and [13](Table 1).

Table 1
Recommendations for guidance and confidentiality

Publication	Guidelines for Adolescent Preventive Services (GAPS)	Guide to Clinical Preventive Services, 2nd edition	Guidelines for Health Supervision of Infants, Children, and Adolescents, 2nd edition	Recommendations for Preventive Pediatric Health Care	Primary and Preventive Health Care for Female Adolescents
Developed by	American Medical Association	United States Preventive Services Task Force	Maternal & Child Health Bureau	American Academy of Pediatrics	American College of Obstetrics & Gynecologists
Major Topics for Anticipatory Guidance					
Unintentional injury prevention	X	X	X	X	X
Violence prevention				X	X
Substance abuse	X	X	X		X
Sexual behavior	X	X	X		X
Diet and exercise	X	X	X	X	X
Mental health	X		X		
Confidentiality recommendation	X		X		X

Adolescents typically rely on outpatient services, such as physician offices, clinics, or health centers for their medical care [2]. Most adolescents have a usual source of health care, but having health insurance plays a large role in access to that health care [14], [15], [16] and [17]. Insured adolescents are more likely to have recommended preventive health care visits and have a relationship with a primary care physician than uninsured adolescents [15], [18] and [19]. The availability of health insurance, particularly for poor and near-poor children, has increased in recent years. Medicaid expansions and the advent of the State Children's Health Insurance Program (SCHIP) have been largely responsible for rapid growth in public insurance coverage among adolescents [20]. Thus, there has been a small, but significant decrease in the estimated numbers of uninsured adolescents [21].

Effective communication between physicians and adolescents is critical to convey health information, provide counseling, and identify emerging health problems. There is evidence that adolescents and their parents want far more information on a range of sensitive topics (such as alcohol use, drug use, sexually transmitted diseases, abuse, and eating disorders) [4] K.S. Collins and M. Abrams, Opportunities to improve health care for low-income adolescents, J Urban Health 75 (1998), pp. 660–672.[4], [22] and [23]. Other research suggests that physicians may be ineffectively communicating with their adolescent patients. Only half of all physicians reported that they provided any counseling or education in their encounters with adolescents; specifically, fewer than 3% reported providing counseling or education on sexually transmitted diseases (STDs) or human immunodeficiency virus (HIV) [24]. Only 15% of adolescent boys and 26% of adolescent girls reported that

their provider discussed pregnancy with them and 24% of boys and 28% of girls that their doctor discussed how to prevent STDs or HIV [25].

Central to the implementation of the recommended preventive guidelines is the relationship between adolescents and their health care providers. Whether individuals have access to a health care provider is related to their insurance status [15], [18] and [19]. This article explores communication between newly enrolled adolescents participating in a SCHIP and their health care providers centering on content in the recommended health care guidelines. The professional guidelines provide the framework and categories for this examination. We hypothesized that adolescents' communication with their health care provider about these areas of preventive services will show improvement after enrollment in SCHIP compared with their communication before enrollment. To test that hypothesis we addressed two questions: (a) do adolescents (or their parents) report any change in communication with their health care provider after enrolling in SCHIP as compared with before enrollment; and (b) what is the relationship between characteristics of the respondents and any change observed within specific areas of content?

Methods

Data source

Data for this study are from the Continuous Enrollment Survey and Adolescent Supplement collected as part of a university-based evaluation of Alabama's non-Medicaid SCHIP, ALL Kids. The study protocol and methods were reviewed and approved by the Institutional Review Board for Human Subjects Research at the first author's university. All information was collected through a voluntary mail survey.

The survey examines factors associated with access to health care, as well as satisfaction with health care providers, both before and after enrollment in the program. The adolescent supplement focuses on adolescents' experiences with issues related to communication with their health care provider and confidentiality in the health care setting, unintentional injury prevention, violence prevention, substance abuse, sexual behaviors, diet and exercise, and mental health. Adolescents are asked to reflect on their experiences with their health care providers in the 12 months before enrollment and since enrollment in the SCHIP. General questions in the main continuous enrollment survey were adapted from existing relevant surveys that included the Healthy and Well Kids in Iowa (HAWK-I) survey, the Child Health Questionnaire, and the Consumer Assessment of Health Plans (CAHPS) 2.0 Survey [26], [27] and [28]. Adolescent questions were taken from the Adolescent Health Care Survey and the "How I Feel Scale" [29] Institute for Child Health Policy, Adolescent Health Care Survey, University of Florida, Gainesville, FL (2000).[29] and [30].

Sampling and procedures

Surveys were mailed to adolescents (one per household, randomly selected) between the ages of 12 and 19 years who were enrolled in ALL Kids for at least 12 months and renewed their enrollment for a second year ($n = 3472$). This included adolescents who renewed their enrollment from October 1999 through September 2000. The names of the adolescents were collected from an enrollment data file. The Continuous Enrollment Survey is mailed every 3–4 months. The methodology used in collecting the data includes: (a) mailing an initial survey, (b) mailing a post card reminder, and (c) mailing a second survey. The duration of the three-step data collection is between 4 and 5 months.

Participant characteristics

Of the 3472 households surveyed, 1689 responded; yielding a response rate of 49%. Parents/guardians filled out the main survey, and adolescents were encouraged to complete the supplement. Over 90% of parents filled out the main survey, 79% of parents, or parent and adolescent together filled out the supplement, and 20% of adolescents filled out the supplement alone. Seventy-five percent of the adolescents were aged 12 to 16 years, half were female, 60% white, and 38% black. They mostly lived in families with incomes less than 150% of the federal poverty level (77%) and in urban or metro areas (72%). The person who filled out the main survey typically had a high school education or some college, but 25% had not finished high school. The responders significantly differed from the nonresponders in age and urbanicity. A greater proportion of nonresponders were

older, that is, aged 17 years or greater (18 years is the upper age limit for ALL Kids.) Nonresponders were also more likely than responders to live in a metro area. For all other demographic characteristics, there were no significant differences between groups (Table 2).

Table 2
Demographic characteristics of respondents and nonrespondents, Alabama's ALL Kids

	Respondents n = 1689 n (%)	Nonrespondents n = 1783 n (%)	Significance
Gender			
Male	837 (49.6)	869 (48.7)	$p = .630$
Female	852 (50.4)	914 (51.3)	
Mean age	15.04	15.34	$p \leq .001$
Age (years)			
12–14	687 (40.7)	656 (36.9)	$p \leq .001$
15–16	565 (33.5)	494 (27.8)	
17 or greater	437 (25.9)	629 (35.4)	
Race			
White	1004 (59.8)	1062 (59.6)	$p = .104$
Black	635 (37.8)	624 (35.0)	
Hispanic	15 (0.9)	51 (2.9)	
Other	24 (1.5)	40 (2.3)	
Fee status within SCHIP			
Fee	381 (22.6)	470 (26.4)	$p = .218$
No fee	1308 (77.4)	1307 (73.6)	
Urbanicity			
Metro	914 (54.1)	1077 (60.4)	$p = .001$
Town	299 (17.7)	281 (15.8)	
Rural	476 (28.2)	424 (23.8)	
Who filled out survey			
Youth	332 (19.7)	NA	NA
Youth/parent	451 (26.8)		
Parent	887 (52.6)		
Other	15 (0.9)		
Special health care need			
Has a special need	432 (25.6)	NA	NA
Does not have a special need	1257 (74.4)		
Usual source of care			
Has a usual source of care	1547 (91.6)	NA	NA
Does not have usual source of care	142 (8.4)		
How long in SCHIP			
< 12 months	24 (1.4)	NA	NA
12–24 months	772 (46.6)		
24–36 months	742 (44.8)		
> 36 months	119 (7.2)		
Education of parent			
Not high school graduate	415 (24.8)	NA	NA
High school graduate	749 (44.8)		
Some college	437 (26.1)		
4 or more years of college	41 (7.2)		

Description of variables used

Relevant descriptive variables (adolescent's disability status [with or without a special need] age, race, gender, parental education, family income [exempt or not from paying a program fee], who answered the survey, urbanicity, presence of a usual source of care, and length of time enrolled in SCHIP) were chosen to describe the sample. Based on the topics suggested by the national guidelines for adolescent health care contained in Table 1, measures of adolescent-health care provider communication were selected as outcome variables (general communication, confidentiality and privacy, prevention and healthy living [including diet and exercise], substance abuse, sexual issues [especially, sexually transmitted disease], intentional and unintentional injury, and mental health).

Data analysis

The data analysis centered on the two research questions: (a) do adolescents (or their parents) report any change in communication with their health care provider after enrolling in SCHIP as compared with before enrollment; and (b) what is the relationship between characteristics of the respondents and any change observed within specific areas of content? A description of the study population can be found in Table 2. Chi-square analysis was used to examine whether there were differences in reported adolescent-provider communication before and after enrollment in ALL Kids (Table 3 and Table 4). To determine which characteristics of respondents were related to various aspects of communication with the provider, multiple linear regressions were used. To facilitate the regression analyses, all questions surrounding particular issues were combined into a single composite variable.

Composite variables

Each broad category of communication consisted of 2–8 individual questions. To address the categories of communication suggested by the national guidelines, all questions surrounding particular issues were combined into a single composite variable. Questions were first grouped according to their relevance to a specific topic. Each variable was coded 1 if the issue was discussed with the provider after enrollment and it had not been discussed before, and 0 if there was no change or a negative change. Finally, within each grouping of questions, the mean of the respondents' change variable was determined and became the composite variable and the dependent variable within the linear regression models.

Results

Pre- and postenrollment changes in communication with provider

There were substantial increases after enrollment in SCHIP in the general area of communication between adolescents and their health care providers. Several areas demonstrated a 25% to 35% increase in communications after SCHIP enrollment. These topics included taking responsibility for one's health, receiving reassurance and support, being involved in decision-making, and agreeing with the provider. Notably, as can be seen in Table 3, almost twice as many (74.9%) respondents indicated they always got the help or advice they were seeking after SCHIP enrollment compared with before enrollment (38.6%) Further, the critical areas of privacy and confidentiality showed significant increases of 42% and 24%, respectively.

Table 3

General communication with health care provider (Qs 4, 5, 6, 9, 10a In the last 12 months did you (adolescent) get a chance to speak with a doctor or other health care provider . . .)

Issue	Before (%)	After (%)	% Change	Significance
Called for advice	50.7	68.2	34.5	$p \leq .001$
Always received help	38.6	74.9	94	$p \leq .001$
Discussed responsibility for own health	36.0	47.6	32.2	$p \leq .001$
Received reassurance	38.7	51.7	33.6	$p \leq .001$
Always involved in decisions	43.6	57.3	31.4	$p \leq .001$
No problems agreeing with provider	75.0	91.7	22.3	$p \leq .001$
Spoke with provider privately	41.0	58.2	41.9	$p \leq .001$
Discussed confidentiality	41.3	51.1	23.7	$p \leq .001$

Content of communication

After enrollment in SCHIP, all topics were discussed significantly ($p \leq .05$) more often among the adolescents surveyed than before SCHIP enrollment. The proportion indicating specific issues were discussed by the health care provider increased from 20% to 33% from pre- to postenrollment (Table 4).

Mental health was the specific area that received the least attention from providers and adolescents before and after enrollment (Table 4). Survey respondents were asked to indicate whether the adolescent had experienced a particular mental health issue (e.g., "feeling low, sad, or blue" or "had problems eating") and if so, whether a doctor or other health care professional had discussed the problem with them. Overall, before and after SCHIP

enrollment, less than one-third of respondents reported negative mental health moods, and less than one-fifth of those respondents reported discussing the issue with a health care provider.

Interestingly, significant increases were found in the number of respondents who actually reported negative mental health feelings or problems after enrolling in SCHIP, ranging from 2.6% more adolescents reporting feelings of being sad, low, or blue to 23% more reporting eating problems. Even more meaningful, however, are the increases observed in the proportion of adolescents reporting that their provider discussed these mental health issues with them. The percent increase was about 50% (47% to 58%) for all items.

Table 4
Content of communication

Issue	Before (%)	After (%)	% Change	Significance
Qs 10b–27: In the last 12 months, did a doctor or other health provider talk with you (adolescent) about any of the following? (general issues)				
Healthy living				
Weight	37.3	47.7	27.9	$p \leq .001$
Healthy eating	40.8	52.4	28.4	$p \leq .001$
Physical activity	42.1	56.1	33.3	$p \leq .001$
Substance abuse				
Riding with a DUI driver	20.5	25.7	25.4	$p \leq .001$
Alcohol	28.0	35.5	26.8	$p \leq .001$
Tobacco use	30.4	38.4	26.3	$p \leq .001$
Street drugs	26.0	31.8	22.3	$p \leq .001$
Party drugs	17.8	23.1	29.8	$p \leq .001$
Steroids	17.9	22.5	25.7	$p \leq .001$
Sexually transmitted illness				
HIV/AIDS	26.9	33.4	24.2	$p \leq .001$
STIs	28.0	35.2	25.7	$p \leq .001$
Injury				
Bike helmet	17.9	22.5	25.7	$p \leq .001$
Suicide	13.0	17.0	30.8	$p \leq .001$
Physical abuse	17.9	22.2	24.0	$p \leq .001$
Violence prevention	14.7	18.1	23.1	$p \leq .001$
Guns/weapons	14.0	16.8	20.0	$p \leq .001$
Qs 28–34: In the last 12 months, have you (adolescent) experienced any of the following? /If yes, did a health care professional talk with you? (mental health issues)				
Feeling				
Low, sad, blue	35.0	35.9	2.57	$p \leq 0.001$
Provider discussed	13.4	20.6	53.7	$p \leq 0.001$
Tense/nervous	31.2	32.6	4.49	$p \leq 0.001$
Provider discussed	12.9	20.0	55.0	$p \leq 0.001$
Short-tempered	29.8	30.9	3.69	$p \leq 0.001$
Provider discussed	11.2	16.5	47.3	$p \leq 0.001$
Worried/concerned	32.4	33.0	1.85	$p \leq 0.001$
Provider discussed	12.1	18.1	49.6	$p \leq 0.001$
Problems with				
Coping	14.1	14.7	4.3	$p \leq 0.001$
Provider discussed	8.6	13.6	58.2	$p \leq 0.001$
Sleeping	15.9	17.6	10.7	$p \leq 0.001$
Provider discussed	9.2	13.3	44.6	$p \leq 0.001$
Eating	8.8	10.8	22.7	$p \leq 0.001$
Provider discussed	7.7	11.9	54.6	$p \leq 0.001$
Paying attention	20.4	20.9	2.5	$p \leq 0.001$
Provider discussed	20.4	20.9	2.5	$p \leq 0.001$

Characteristics of respondents related to areas of communication

To explore the relationship of the communication areas to specific descriptive variables (special health care need, gender, age, urbanicity, who responded to survey, race, parental education, family income, length of time in the program, and presence of a usual source of care), these characteristics were regressed on the composite variables of general communication, confidentiality and privacy, healthy living (including diet and exercise), substance abuse, sexual health, injury/violence prevention, and mental health. See Table 5 for the results of the linear regression.

Special health care need emerged as the single characteristic that had a significant influence on every composite, except healthy living and substance abuse. Having a special health care need increased the likelihood that the adolescent's basic communication with the provider around issues such as calling for advice and receiving reassurance improved after enrollment in SCHIP. Further, having a special need also increased the likelihood of discussing most of the specific guidance issues with the provider after enrollment. Additionally, females were more likely than males to receive discussion on sexual health ($p = .049$) and diet and exercise ($p \leq .001$). Older adolescents were more likely than younger adolescents to discuss sexual health ($p = .026$) and their mental health feelings with a health care provider ($p = .023$). Finally, white adolescents, compared with nonwhite adolescents, were more likely to have better overall communication with the provider after enrollment ($p = .029$). However, these adolescents were also more likely to experience greater negative mental health feelings after enrollment in SCHIP ($p = .029$). Of particular interest is the fact that who filled out the survey (that is, parent, adolescent or parent and adolescent together), urbanicity, parental education, and length of time enrolled in SCHIP had no significant effect on the likelihood of reporting more communication with the health care provider after enrollment.

Despite significant increases in levels of communication, the proportion of adolescents talking with their health care providers in specific content areas remained low. Healthy living topics (diet and exercise) were discussed on average for 52% of the adolescents after SCHIP enrollment. The proportion of adolescents talking with their providers about topics in other content areas was even lower: Sexually Transmitted Illnesses (34%), Substance Abuse (30%), Injury Prevention (19%), Negative Mental Health Feelings (19%), and Mental Health Problems (15%).

Discussion

Results of this survey of the adolescent population within Alabama's SCHIP suggest that adolescent-provider communication increased with enrollment in SCHIP. Not only was there a significant improvement in communication in general, but there was also improvement in specific types of discussion between the adolescent and his/her provider. More adolescents received anticipatory guidance. A possible explanation for this finding lies in the design of SCHIP. This is a program designed especially to meet the health care needs of children and adolescents. Because the disease profile of the adolescent population, in particular, is centered on lifestyle and behavioral choices rather than acute illnesses and guidelines are in place for preventive clinical services for adolescents, anticipatory guidance would be expected to play a special role in the health care adolescents should receive through SCHIP. Presumably, at least some of the adolescent providers participating in SCHIP are aware of these needs and seek to carry out the preventive goals, thereby giving those adolescents newly enrolled in SCHIP more opportunities to receive anticipatory guidance and the providers with a means to be compensated for that care. Continuity in receipt of medical care may allow providers and adolescents more time in which to discuss various issues relevant to adolescents' stage of development. On the other hand, the improvements noted in adolescent-provider communication might also be partly attributable to the fact that the adolescents grew older and the relative contributions of the age increases and the enrollment in SCHIP cannot be delineated in this study.

The results of the linear regressions suggest that some groups, such as those with special health care needs, tend to receive more discussion than others postenrollment. Social applicability may account for this. For example, those adolescents with special needs are a vulnerable population that may require more discussion on various issues, such as sexual health or injury prevention, to accommodate their special needs into their everyday lives.

Alternatively, the increased communication may be owing to the observation that adolescents with special health care needs have more contact with providers, which increases their opportunity to discuss important issues. Also, being female was a significant predictor of discussing diet and exercise and sexual health. Both are topics that are typically of major concern and focus for women's health.

Table 5
Results of linear regression, standardized coefficients

Independent variables	Content of communication composites							
	Communication	Confidentiality	Healthy living	Substance abuse	Sexual health	Injury/violence prevention	Mental health	Provider discussion about mental health
Age at program entry	0.042	0.730	0.331	0.646	0.953*	0.764	0.442	0.987*
Male	-0.037	-0.003	-0.111**	-0.009	-0.053*	0.019	-0.038	-0.053
Parent is a high school graduate	-0.031	0.001	-0.017	0.011	-0.018	-0.005	0.009	-0.029
White	0.056*	0.025	0.022	0.035	0.016	0.014	0.058*	0.044
Adolescent answered the survey	-0.016	0.016	-0.022	-0.022	-0.021	0.005	0.006	-0.052
Reside in metro area	0.008	0.018	0.010	0.005	-0.007	0.008	0.039	0.028
Required to pay program fees in SCHIP	-0.051*	0.002	-0.029	-0.019	0.010	-0.002	-0.005	-0.007
Special health care need	0.087*	0.094†	0.044	0.050	0.072*	0.075*	0.088*	0.171**
Usual source of care	0.038	0.004	0.024	0.024	0.048	0.054*	0.016	0.067*
Length of time enrolled in SCHIP	-0.009	-0.007	-0.013	-0.011	-0.024	-0.012	0.046	0.008

* $p \leq .05$; ** $p \leq .001$.

Although this study showed improvements in adolescent-provider communication, especially for some groups, the overall percentage of adolescents receiving guidance in specific topical areas is still very low, ranging from 52% to about 15%. Diet and exercise was most often discussed both pre- and postenrollment, and mental health issues were the least discussed within this adolescent population. These results, however, may reflect the relative importance placed on various issues. As seen in Table 1, diet and exercise is a guidance issue for all national organizations putting forth recommendations; whereas mental health is addressed by only two organizations, the AMA and the MCHB.

As with every survey-oriented study design, there are strengths and limitations. First, using SCHIP to examine the type of health care the adolescent population receives draws upon two underserved populations, adolescents and those accessing health care via public programs. The data derived from this survey have helped to further characterize the adolescent-provider relationship, at least within Alabama's SCHIP population. This study also draws attention to the many guidelines issued by leading national health care organizations while evaluating the level of adherence to these recommendations within a pragmatic setting. The study had a large sample size that was relatively representative of Alabama's SCHIP population. Although there were significant differences in age and urbanicity between responders and nonresponders, the proportional differences in both cases between the two groups was quite minimal and it appears unlikely that there is any clinical significance affecting the results. Finally, the surveys from which the questions were taken for the Continuous Enrollment Survey and the Adolescent Supplement are all valid, reliable measures that are routinely used in public health data collection.

There are also several aspects of this study that limit its generalizability. First, the survey method relies on self-report, and there can be no guarantees as to the veracity of responses. There are a number of reasons why the respondents might have reported events with less than total accuracy including: (a) not understanding the question; (b) not knowing the answer; (c) not being able to recall the answer, though they know it; (d) not wanting to report the answer; and (e) more parents or parents and teens together than teens alone completed the

form, which may lend itself to under- or over-reporting of key issues for the teen [31]. Secondly, the response rate for this study was 49%. This is a good response rate for this type of study and it yielded over 1600 respondents, however, a greater response rate would lend even greater confidence to the results. Third, the adolescents' pre-enrollment experience with healthcare providers and its possible influence on their responses in this study was not known. Finally, we only surveyed enrollees. Those who were eligible but not enrolled were not included. Without this comparison group, generalizability of the results is limited only to other SCHIP enrollees.

Since 1997, the Society for Adolescent Medicine has been advocating the widespread acceptance and implementation of preventive services for adolescents with somewhat limited success [7]. Alabama's SCHIP is improving adolescents' opportunities for communication with their health care providers, but is still failing to reach the goal of 100% of adolescents receiving the anticipatory guidance suggestions put forth by the national organizations. Guidelines appear to be only minimally followed. Lack of knowledge, provider characteristics, financial considerations, time constraints, ambivalence, and shifting priorities within the clinical setting are only a few possible reasons for this low adherence. Alabama's SCHIP currently does not have specific measures in place to improve the likelihood that anticipatory guidance is delivered to its enrollees. However, through their system of reimbursement and ability to establish clinical guidelines, SCHIPs may be in a particularly advantageous position to urge providers in their systems to apply the principles of health promotion and prevention inherent in the national guidelines.

Conclusion

This study sought to more fully characterize the communication that occurs between adolescents and their health care providers. Communication is critical in the receipt of health care services, and adolescents are typically challenging when it comes to communication of any kind. Despite the existence of formal practice guidelines, this study demonstrates that the widespread communication between adolescents and their providers in regard to preventive services continues to experience obstacles. The practice guidelines define the content of preventive services; however, their full implementation is limited by issues such as lack of resources, financing and appropriate reimbursement mechanisms. On the other hand, providing opportunities for adolescents to have better access to care through increased insurance coverage appears to have enhanced communication with their health care provider for adolescents who had been enrolled in Alabama's SCHIP for 12 months or more. The positive changes in communication noted in this study suggest that encouraging providers and adolescents to discuss risky behaviors is a feasible, achievable goal.

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