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Intercepting Binge Drinkers in Medical Settings: A View from California

Suzanne E. Spear, Ph.D.^a and Martin Y. Iguchi, Ph.D.^b

^aProject Director, University of Southern California, School of Social Work, Los Angeles, CA

^bDean and Professor, Georgetown University, School of Nursing and Health Studies, Washington, DC

Abstract

The argument for universal alcohol screening in primary care is based on the assumption that most heavy drinkers routinely visit a doctor. This study examines whether drinking status is associated with higher or lower odds of visiting a doctor in the past year among California adults. As a point of comparison, the study also examines whether drinking status is associated with the odds of visiting an emergency room. Data came from the 2007 California Health Interview Survey. Multivariate logistic regression was used to examine the odds of visiting a doctor and an emergency room for abstainers, moderate drinkers, monthly binge drinkers, and weekly binge drinkers. After controlling for demographics, health coverage, and health status, binge drinkers had the same odds of visiting a doctor and the emergency room as moderate drinkers. Among binge drinkers, female gender, health coverage, and high blood pressure were associated with visiting a primary care doctor.

Keywords

access to health care; alcohol abuse; early intervention; screening; secondary prevention

Excessive alcohol use is a leading cause of preventable death in the United States (Mokdad et al. 2004), and its reduction is a public health priority for the United States. Excessive alcohol use is defined as drinking more than the recommended safe limits, which in the United States are no more than four drinks per day or 14 drinks per week for men under 65 years of age and no more than three drinks per day or seven drinks per week for women of any age and men over 65 years (Willenbring, Massey & Gardner 2009). Screening and brief counseling interventions for alcohol use have been shown to be effective for reducing heavy drinking and alcohol-related problems (D'Onofrio & Degutis 2010; Madras et al. 2009; U.S. Preventive Services Task Force 2004; Fleming et al. 1997). Screening and brief interventions are designed to be delivered in medical settings by physicians, nurses, or health educators. Over the past decade, a great deal of research focused on developing brief questionnaires to facilitate their use in busy medical settings, resulting in validated one-item screens for alcohol and illicit drug use (Dawson, Compton & Grant 2010; Smith et al. 2010). Brief interventions consist of personalized feedback to patients about their alcohol use and short (e.g., five to 15 minutes) motivational interviews (Henry-Edwards et al. 2003; Fleming et al. 1997).

Please address correspondence to Suzanne E. Spear, Ph.D., USC School of Social Work, 1149 S. Hill St., Suite 360, Los Angeles, CA 90015-2245; spearse@usc.edu.

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Despite widespread support for using screening and brief interventions in primary care, routine screening for substance use is limited (Edlund, Unutzer & Wells 2004). For example, a recent study by Weisner and Matzger (2003) found that only 24% of dependent and problem drinkers had their drinking addressed in routine primary care visits. Two studies have suggested that lack of access to health care is not the primary reason for low screening rates because the majority of heavy drinkers have health coverage (Town et al. 2006; Weisner & Matzger 2003). The more likely reason for low screening rates, researchers argue, is the limited uptake of screening and brief interventions by health providers (Town et al. 2006; Weisner & Matzger 2003). At the same time, there are some populations that may not be reached in primary care. In their study of 2002 data from the Behavioral Risk Factor Surveillance System, Town and colleagues (2006) found that excessive drinkers who were young and middle-aged adults, men, and less educated had lower rates of checkups compared with nonexcessive drinkers and nondrinkers. Similarly, Mulia and colleagues (2011) found in their analysis of National Alcohol Survey data that African American at-risk drinkers and Spanish-speaking Hispanic at-risk drinkers had lower odds of receiving primary care compared with Whites.

The purpose of this article is to examine the potential for intercepting adult binge drinkers in primary care and emergency room (ER) settings using population data from California. A study by Banta and colleagues (2006) found that millions of California adults engaged in binge drinking at least once in the past month. Weisner and Matzger (2003) examined rates of health utilization among drinkers in Northern California and found that two-thirds of problem drinkers assessed in the population-based survey reported having a medical visit in the past year; however, the data were from 1995–1996. This study extends the work of Weisner and Matzger (2003) and Town and colleagues (2006) by examining data that is more recent (from 2007) and that reflects the status of adults in California as a whole.

Our aim was to determine whether binge drinking is independently associated with lower or higher odds of seeking care. We wanted to examine access to primary care and ER settings among binge drinkers in the broader context of health care utilization. We used Andersen's Behavioral Model of Health Services Use (Andersen 1995) to identify predictors of visiting a doctor's office or an ER for one's health. According to the Andersen model, predictors of health care utilization can be categorized as predisposing factors (e.g., demographics), enabling factors (e.g., health insurance), and factors related to one's immediate need (e.g., medical conditions). For example, given the association between health coverage and access to primary care among heavy drinkers (Carey et al. 2003; Weisner & Matzger 2003), it is necessary to account for health coverage as a determinant of health care utilization in addition to drinking status. Based on findings by Town and colleagues (2006) and Weisner and Matzger (2003), we hypothesized that binge drinkers in California would have similar odds of visiting a doctor as moderate drinkers and abstainers. Given the high prevalence of alcohol-related injuries in trauma centers and ERs reported by Gentilello and colleagues (1999) and Cherpitel and colleagues (2003), however, we hypothesized that binge drinkers would have higher odds of visiting an ER compared with moderate drinkers and abstainers. Lastly, based on findings by Weisner and Matzger (2003), we hypothesized that binge drinkers who are younger would have lower odds of seeking care in both settings.

METHODS

Data

The data used in this study are from the California Health Interview Survey (CHIS). CHIS is a population-based, random digit-dial survey conducted by the UCLA Center for Health Policy Research (UCLA CHPR 2009). The CHIS has been conducted every other year since 2001 and is one of the largest health surveys in the nation. The survey collects extensive

information for all age groups on health status, health conditions, health-related behaviors, health insurance coverage, access to health care services, and other health and health-related issues. Minority groups are oversampled in CHIS to allow for reliable population estimates.

CHIS is conducted in five languages: English, Spanish, Chinese (Mandarin and Cantonese dialects), Vietnamese, and Korean. The adult interview takes approximately 35 minutes to complete. Adults are defined by CHIS as individuals 18 years and older. The 2007 sample, which included 51,408 adults, had a completion rate of 18.7%. The completion rate is similar to that of other telephone surveys (UCLA CHPR 2009). CHIS includes a sampling weight to adjust for differential probabilities of selection and bias due to nonresponse rates. In addition, CHIS includes 80 post-stratification replication weights, which help ensure that the estimates from the sample are representative of the total population. By using the replication weights, one can assume that the statistics based on the survey respondents are representative of the estimated 26,769,450 adults in California in 2007.

Public use data from the 2007 adult survey were used. The public use file is available through the CHIS website (www.chis.ucla.edu). Excluded from the public use file are confidential information that identify where respondents live (e.g., county), highly sensitive variables (e.g., sexual behavior), and household identifiers that link the adult, child, and adolescent files (UCLA CHPR 2009). Because the study used public use data, it was exempt from review by the UCLA Institutional Review Board.

Measures

There are two outcome variables in this study, and both are both binary: (1) having visited a doctor in the past 12 months and (2) having visited an ER for one's health in the past 12 months. A doctor's visit refers to a visit to any type of primary care setting; the question in CHIS regarding this is, "During the past 12 months, how many times have you seen a medical doctor?" We dichotomized this question to reflect any doctor visits in the past 12 months. The question in CHIS about ER visits is, "During the past 12 months, did you visit a hospital emergency room for your own health?"

Drinking status, the main independent variable, consists of four categories: abstainers, moderate drinkers, monthly binge drinkers, and weekly binge drinkers. Abstainers are individuals who reported no alcohol use in the past 12 months. Moderate drinkers are individuals who reported drinking other than binge drinking or occasional binge drinking, e.g., once or a few times in the past 12 months. Monthly binge drinkers are individuals who reported binge drinking (five or more drinks for men and four or more drinks for women) on one to three occasions in the past month. Weekly binge drinkers reported binge drinking on a weekly or daily basis.

Covariates were selected based on their identification as salient predictors of health care utilization. Predisposing factors included in the present analysis were gender, age, self-identified race/ethnicity, employment status (full- or part-time employment), married or living with a partner, educational level, and poverty status (having income less than 200% of the federal poverty level). Age was dichotomized at the median split of 44 years. The race/ethnicity measure includes the following categories: White, Latino, African American, Asian, and "other." The "other" race category included American Indians/Alaska Natives, Pacific Islanders, and individuals of other single and mixed races. The groups included in the "other" category had too few respondents for separate analysis. Education was measured with three categories: less than high school, high school education, and some college or more education.

Having health insurance in the past 12 months was the main enabling factor included in the models. We added another measure of health care access, number of doctor visits in the past year, in our analysis of ER visits. Our assumption in adding this measure was that more access to care in primary care settings would be associated with lower usage of ERs. Health-related or immediate factors included self-reported health status of *excellent* or *very good* (versus *good*, *fair*, or *poor*), psychological distress in the past month as measured by a score of 13 or higher on the Kessler 6 scale, having asthma, having diabetes, having high blood pressure, and smoking (smoking every day or most days). One interaction term with drinking status and age was included in the models. All independent variables were categorical, with the exception of number of doctor visits, which was continuous.

Analyses

The first set of analyses included descriptive analyses of sociodemographics, health coverage, smoking, and the two outcome variables within the four drinking groups. All variables included in the preliminary analyses were categorical. The Pearson design-based F test was used to test for significant differences across the drinking groups. Next, we conducted two multivariate logistic regressions to predict the odds of visiting the doctor and the ER in the past 12 months (main models). Then, to examine whether certain types of binge drinkers had higher or lower odds of seeking care in primary care or the ER, we ran two additional analyses with only the monthly and weekly binge drinkers and all of the same predictors, except for drinking status. Monthly and weekly binge drinkers were combined in the subgroup analysis to increase the sample size. Only 1,210 adults in the sample reported weekly or daily binge drinking.

Predictors were entered into all of the models simultaneously. The Wald test was used to test whether parameters associated with race/ethnic groups, educational groups, and drinking status were zero. All analyses were conducted with weighted data using the replication weights and the jack-knife procedure to estimate variances. Given the large sample size ($N = 51,048$), statistical significance was set in the main models at an alpha level of .001. All analyses were conducted in STATA v.11.

RESULTS

Eleven percent of adults in California report binge drinking at least monthly. The majority of adults report moderate drinking (58%). Binge drinkers differ from moderate drinkers and abstainers on several sociodemographic characteristics. Binge drinkers are more likely to be male, White, and younger (18–43 age range). Latinos have the second highest rate of binge drinking after Whites. More monthly and weekly binge drinkers are employed compared with moderate drinkers and abstainers. Moderate drinkers and monthly binge drinkers have the highest levels of educational attainment; 63.3% of moderate drinkers and 59.8% of monthly binge drinkers have received at least some college education, compared with 43.4% for abstainers and 50.1% for weekly binge drinkers. Abstainers are more likely to have incomes that are 200% lower than the poverty level (46.9%), compared with 24.1% for moderate drinkers, 19.6% for monthly binge drinkers, and 26.9% for weekly binge drinkers.

More than three-quarters of all adults reported visiting a doctor in the past 12 months. For most adults, access to primary care does not appear to be lacking. Over three-quarters of all adults report having health insurance in the past 12 months. The largest difference in health coverage rates is between moderate drinkers (86.3%) and weekly binge drinkers (75.2%). The rates of ER usage are significantly lower than the rates of visiting a doctor's office. Weekly binge drinkers and moderate drinkers have the highest rates of visiting an ER for their health in the past 12 months (24.6% and 18.2%, respectively). In terms of other health behaviors, significant differences were found with smoking. Weekly binge drinkers have the

highest rates of smoking (46.7%), compared with 10.6% for abstainers, 13% for moderate drinkers, and 27.3% for monthly binge drinkers. Individual characteristics by drinking status are presented in Table 1.

Doctor Visits in the Past 12 Months

In the first model, being female is the only predisposing factor associated with visiting a doctor (see Table 2). Females have more than two times the odds of visiting a doctor as men (OR = 2.3, 95% CI: 2.1, 2.6). The only difference by race/ethnicity is that Asians have lower odds of visiting a doctor compared with Whites (OR = .7, 95% CI: .6, .8). Individuals living below the poverty line have lower odds of visiting a doctor (OR = .7, 95% CI: .6, .8). Current health coverage, an enabling factor, is the strongest overall predictor of having had a doctor's visit (OR = 3.1, 95% CI: 2.7, 3.5).

Several immediate factors related to chronic diseases are statistically significantly associated with having a doctor visit. Adults with asthma, diabetes, or high blood pressure have two times the odds of visiting a doctor compared with adults without these illnesses. Drinking status did not reduce or increase one's odds of seeking care. After controlling for demographics and health status, binge drinkers have the same odds of visiting a primary care doctor as moderate drinkers and abstainers. The odds of visiting a primary care doctor for monthly and weekly binge drinkers were not statistically significant (for monthly binge drinkers, OR = 1.1, 95% CI: .9, 1.4; for weekly binge drinkers, OR = 1.1, 95% CI: .8, 1.5). The interaction of drinking status and age is not predictive of going to a doctor.

ER Visits in the Past 12 Months

Results from the model predicting an ER visit show different results from the doctor's visit model. Women have lower odds of visiting an ER compared with men (OR = .8, 95% CI: .8, .9). As with Model 1, Asians have lower odds of visiting an ER. African Americans have 50% higher odds of going to an ER compared with Whites (OR = 1.5, 95% CI: 1.2, 1.8). Being married or living with a partner is associated with lower odds of visiting an ER (OR = .7, 95% CI: .7, .8).

Having health coverage is not associated with the odds of visiting an ER, but the number of times participants reported seeing a doctor in the past year is positively associated with visiting an ER. With every additional doctor visit, the odds of visiting an ER increases by 30% (OR = 1.3, 95% CI: 1.3, 1.31). Several immediate factors are associated with visiting an ER. Similar to Model 1, adults with asthma have higher odds of visiting the ER (OR = 1.7, 95% CI: 1.4, 1.9). Psychological distress is associated with higher odds of seeking care in an ER (OR = 1.7, 95% CI: 1.4, 2.0). Being a smoker increases one's odds of visiting an ER by 30% (OR = 1.3, 95% CI: 1.2, 1.5). After controlling for the other predictors in the model, drinking status is not associated with visiting an ER. The interaction between drinking status and age, however, is significant for abstainers. Abstainers who are older have 50% higher odds of visiting an ER compared with moderate drinkers who are younger (OR = 1.5, 95% CI: 1.2, 1.8).

Differences in Healthcare Utilization Among Binge Drinkers

The same two models were run for monthly and weekly binge drinkers as one subgroup (see Table 3). In the first model predicting a doctor's visit, being female is the only significant predisposing factor. Women have 2.2 times the odds of visiting a doctor compared with men (95% CI: 1.6, 3.0). Health coverage is the strongest predictor of visiting a doctor among binge drinkers (OR = 3.3, 95% CI: 2.3, 4.6). Lastly, the only health condition predictive of going to a doctor for binge drinkers is having high blood pressure; adults with high blood

pressure have almost three times the odds of visiting a doctor, compared with adults without high blood pressure (OR = 2.9, 95% CI: 2.0, 4.1).

Results for the ER model are again different. No predisposing factors are associated with visiting the ER. Health coverage is not significant, but the number of doctor visits in the past 12 months is associated with higher odds of visiting the ER (OR = 1.3, 95% CI: 1.3, 1.4). With respect to immediate health factors, only psychological distress is associated with visiting the ER. Adults who are binge drinkers and who report psychological distress in the past year have two times the odds of visiting an ER compared with binge drinkers who do not report psychological distress (OR = 2.1, 95% CI: 1.5, 3.0).

DISCUSSION

The results from this study support prior findings that most binge drinkers do have access to primary care, as evidenced by the rates of health insurance and utilization of primary care settings (Town et al. 2006; Weisner & Matzger 2003). In California, binge drinkers have the same odds of visiting a doctor's office or the ER as do moderate drinkers. Therefore, routine screening in primary care and ER settings is likely to reach many heavy drinkers. Our hypothesis that binge drinkers would have higher odds of seeking care in ER settings was not supported. While alcohol-related injuries and health problems are commonly found in ERs and trauma centers around the country (D'Onofrio & Degutis 2010; Gentilello et al. 1999), being a binge drinker, even a weekly binge drinker, did not increase one's odds of presenting to an ER. Chronic diseases such as diabetes and high blood pressure are strong predictors of health care utilization.

Health coverage, female gender, and chronic health conditions are the strongest predictors of visiting a doctor. Being married or living with a partner is protective against using the ER for one's health. These findings suggest that binge drinkers who are men, healthy, or uninsured may be harder to reach in primary care settings. These findings also suggest that providers may find binge drinking among their patients with high blood pressure. Patients with high blood pressure should be routinely screened for alcohol use as heavy drinking elevates blood pressure and increases one's risk for heart disease (Cook & Cherpitel 2012). In the ER, binge drinking may be a contributing factor to a patient's psychological distress, given that psychological distress is a predictor of visiting an ER among binge drinkers.

Limitations

Our study demonstrates some weaknesses. First, the CHIS collects information on households; therefore, the results do not reflect access to care for individuals who are homeless or live in an institutional setting. Second, our analysis of health care utilization was limited to primary care and ER settings. Examining the utilization of mental health services by binge drinkers would be very useful as mental health clinics are a potential setting for substance use screening and brief interventions (Spear et al. 2009). The CHIS does include data on mental health care; however, these data are only included in the confidential dataset, which we could not access due to limited resources. Given the high prevalence of substance use disorders among patients in mental health treatment (Clark et al. 2008), future analysis with the full CHIS dataset could test whether mental health providers have a better chance of intercepting heavy drinkers than do other health providers.

The results from this study are based on a representative sample of adults in California. Given the racial and ethnic diversity found in California, as well as the diversity with respect to urban and rural counties, these findings may be generalizable beyond California. Our findings support the prevailing notion in the literature on alcohol screening, which is that low rates of screening in primary care settings are the result of missed opportunities to

provide screening and not lack of access to care among drinkers. However, our findings also suggest that there are some subgroups whose members may not make an annual visit to the doctor and, therefore, may not benefit from screening and brief interventions in that setting. The significant association between having current health coverage and visiting a doctor suggests that the uninsured may be missed by screening and brief intervention programs in primary care. Multiple channels may be needed to provide men, individuals without health insurance, and individuals with extremely limited incomes with screening and brief interventions (Mulia et al. 2011).

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TABLE 1

Estimated Characteristics of California Adults in 2007 by Drinking Group, California Health Interview Survey, Weighted Data (N = 26,873,738)

Characteristic by Drinking Group	Abstainers (n = 8,322,797)	Moderate Drinkers (n = 15,600,205)	Monthly Binge Drinkers (n = 2,147,212)	Weekly Binge Drinkers (n = 803,525)
Female	31.0	58.1	8.0	3.0
Age 18–43 Years	61.2	50.2	27.5	23.2
Age 44–85 Years	45.0	48.8	71.9	65.8
Employed Full/Part Time Last Week	55.0	51.2	28.1	34.2
White	48.0	67.4	78.1	73.7
Hispanic	36.0	54.6	55.8	63.6
African American	26.5	19.0	20.2	17.8
Asian American	7.4	5.5	3.5	4.3
Other Race/Ethnicity	17.7	11.3	7.7	4.2
High School Education	12.4	9.7	12.8	10.2
Some College Education or Higher	29.8	24.5	29.8	37.2
Married or Living with Partner	43.4	63.3	59.8	50.1
Less Than 200% Poverty Level	59.3	65.8	54.1	49.6
Any Health Insurance, Past 12 Months	46.9	24.1	19.6	26.9
Current Smoker	81.8	86.3	79.4	75.2
Visited Doctor in Past 12 Months	10.6	13.0	27.3	46.7
Visited Emergency Room in Past 12 Months	80.6	82.4	76.5	76.1
	21.1	18.2	17.0	24.6

Note: Percentages calculated within drinking group; percentages may not add up to 100% due to rounding. All cross-tabs significant at $p < .001$ based on Pearson design-based F test

TABLE 2

Results from Logistic Regression Predicting Past Year Doctor and ER visits, CHIS Adult 2007 Sample (N = 51,048), Weighted Data (Estimated Population = 26,873,738)

	Model 1: Doctor Visits OR (95% CI)	Model 2: ER Visits OR (95% CI)
Predisposing Factors		
Female (vs. Male)	2.3 (2.1, 2.6)	.8 (.8, .9)
Age 44 Years+ (vs. <44 Years)	1.1 (1.0, 1.3)	.8 (.7, .9)
Employed (vs. Unemployed)	.9 (.8, 1.0)	.9 (.9, 1.0)
Married/Living With Partner (vs. No)	1.2 (1.1, 1.3)	.7 (.7, .8)
Hispanic/Latino (vs. White)	.8 (.7, 1.0)	1.0 (.9, 1.1)
African American (vs. White)	1.1 (.9, 1.5)	1.5 (1.2, 1.8)
Asian (vs. White)	.7 (.6, .8)	.7 (.6, .8)
Other Race (vs. White)	.9 (.7, 1.0)	1.1 (.9, 1.3)
High School Education (vs. Less Than HS)	1.1 (.9, 1.3)	1.1 (.9, 1.3)
Some College (vs. Less Than HS)	1.4 (1.1, 1.6)	1.1 (.9, 1.2)
Poverty <200% FPL (vs. No)	.7 (.6, .8)	1.1 (1.0, 1.2)
Enabling Factors		
Currently Insured (vs. No)	3.1 (2.7, 3.5)	1.2 (1.0, 1.4)
# Of Doctor Visits in Past 12 Months	---	1.3 (1.3, 1.31)
Immediate Factors		
Very Good/Excellent Health Status (vs. < Very Good)	.8 (.8, .9)	.9 (.8, 1.0)
Psychological Distress Past Year (vs. No)	1.4 (1.1, 1.7)	1.7 (1.4, 2.0)
Asthma	2.0 (1.6, 2.5)	1.7 (1.4, 1.9)
High Blood Pressure	2.7 (2.1, 3.5)	1.1 (1.0, 1.3)
Diabetes	2.1 (1.8, 2.4)	1.1 (1.0, 1.3)
Current Smoker	.8 (.7, .9)	1.3 (1.2, 1.5)
Abstainer (vs. Moderate Drinker)	.9 (.8, 1.0)	.8 (.7, 1.0)
Monthly Binge Drinker (vs. Moderate Drinker)	1.1 (.9, 1.4)	1.0 (.8, 1.2)
Weekly Binge Drinker (vs. Moderate Drinker)	1.1 (.8, 1.5)	1.2 (.9, 1.7)
Abstainer & Age 44+ (Vs. Moderate Drinker & Under 44)	1.1 (.9, 1.2)	1.5 (1.2, 1.8)
Monthly Binge Drinker & Age 44+ (Vs. Moderate Drinker & Under 44)	.7 (.5, 1.0)	.7 (.5, 1.0)
Weekly Binge Drinker & Age 44+ (Vs. Moderate Drinker & Under 44)	1.1 (.6, 1.8)	1.2 (.7, 2.0)

Note: Sample reduced to 50,880 due to missing data on the psychological distress scale (168 interviews done by proxy). Significant odds ratios in bold based on adjusted Wald tests, $p < .001$.

TABLE 3

Results from Logistic Regression Predicting Past Year Doctor and ER Visit for Binge Drinkers Only, CHIS Adult 2007 Sample (N = 4,294), Weighted Data (Estimated Population = 2,949,701)

	Model 1: Doctor Visits OR (95% CI)	Model 2: ER Visits OR (95% CI)
Predisposing Factors		
Female (vs. Male)	2.2 (1.6, 3.0)	.6 (.5, .9)
Age 44 Years+ (vs. <44 Years)	.9 (.7, 1.2)	.8 (.5, 1.1)
Employed (vs. Unemployed)	.9 (.7, 1.3)	.8 (.5, 1.1)
Married/Living with Partner (vs. No)	1.1 (.8, 1.5)	.8 (.6, 1.0)
Hispanic/Latino (vs. White)	.8 (.5, 1.2)	.9 (.5, 1.4)
African American (vs. White)	.8 (.3, 2.0)	1.2 (.6, 2.5)
Asian (Vs. White)	.6 (.3, 1.0)	.5 (.2, 1.1)
Other Race (vs. White)	.7 (.4, 1.2)	1.1 (.6, 1.7)
High School Education (vs. Less Than HS)	1.0 (.6, 1.8)	1.3 (.7, 2.6)
Some College (vs. Less Than HS)	1.3 (.8, 2.0)	1.7 (.9, 3.2)
Poverty <200% FPL (vs. No)	.7 (.5, 1.1)	1.0 (.7, 1.5)
Enabling Factors		
Currently Insured (vs. No)	3.3 (2.3, 4.6)	1.0 (.7, 1.6)
# Of Doctor Visits in Past 12 Months	---	1.3 (1.3, 1.4)
Immediate Factors		
Very Good/Excellent Health Status (vs. < Very Good)	1.0 (.7, 1.4)	.8 (.7, 1.1)
Psychological Distress Past Year (vs. No)	2.1 (1.2, 3.4)	2.1 (1.5, 3.0)
Asthma	3.0 (1.5, 6.0)	1.2 (.7, 1.9)
High Blood Pressure	2.9 (2.0, 4.1)	.9 (.7, 1.3)
Diabetes	4.1 (1.1, 5.7)	.4 (.2, .8)
Current Smoker	1.0 (.7, 1.4)	1.6 (1.2, 2.2)

Note: Binge drinkers include monthly and weekly binge drinkers. Significant odds ratios in bold based on adjusted Wald tests, $p < .001$.