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Policy Changes and Improvements in Health Insurance Coverage Among MSM: 20 U.S. Cities, 2008–2014

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Abstract

Recent policy changes have improved the ability of gay, bisexual, and other men who have sex with men (MSM) to secure health insurance. We wanted to assess changes over time in self-reported health insurance status among MSM participating in CDC's National HIV Behavioral Surveillance (NHBS) in 2008, 2011, and 2014. We analyzed NHBS data from sexually active MSM interviewed at venues in 20 U.S. cities. To determine if interview year was associated with health insurance status, we used a Poisson model with robust standard errors. Among included MSM, the overall percentage of MSM with health insurance rose 16 % from 2008 (68 %) to 2014 (79 %) (*p* value for trend <0.001). The change in coverage over time was greatest in key demographic segments with lower health insurance coverage all three interview years, by age, education, and income. Corresponding with recent policy changes, health insurance improved among MSM participating in NHBS, with greater improvements in historically underinsured demographic segments. Despite these increases, improved coverage is still needed. Improved access to health insurance could lead to a reduction in health disparities among MSM over time.

Keywords

Health insurance; Men who have sex with men; Health disparities

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The members of the NHBS Study Group are listed in Acknowledgments.

Disclaimer The findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention (CDC).

Compliance with Ethical Standards

Conflict of Interest None declared.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

Informed Consent Activities for NHBS were approved by local institutional review boards for each participating city. Informed consent was obtained from all participants prior to participation.

Introduction

Historically, gay, bisexual, and other men who have sex with men (MSM) have experienced health disparities compared to men in heterosexual relationships [1–3]. Barriers to accessing healthcare, including lack of health insurance, can fuel disparities [2], and persons without health insurance are at greater risk for poor health status [4]. Research shows that partnered MSM were less than half as likely as men in heterosexual marriages to obtain employer-sponsored dependent health insurance [5]. Improved access to healthcare may help eliminate health disparities among MSM [1].

Two recent policy changes have improved the ability of MSM to secure health insurance. Marriage equality, as achieved by U.S. Supreme Court rulings in 2013 and 2015, allows partnered MSM access to employer-sponsored dependent health insurance [6]. The Affordable Care Act (ACA), signed into law in 2010, established plans for comprehensive health insurance reforms intended to provide more Americans with access to quality health insurance [7]. These reforms include steps to improve consumer protection and coverage affordability [7]. The ACA prohibits discrimination due to sexual orientation [6, 7] and against persons with pre-existing conditions, including HIV infection [7, 8]. It improves coverage affordability by providing options to purchase subsidized coverage via competitive health insurance exchanges and by expanding Medicaid eligibility.

CDC's National HIV Behavioral Surveillance (NHBS) is a recurring cross-sectional survey designed to help state and local health departments in 20 cities with high AIDS prevalence monitor HIV-associated behaviors among populations at increased risk for HIV infection, including MSM [9]. Our objective was to assess changes in self-reported health insurance status among MSM participating in NHBS in 2008, 2011, and 2014.

Methods

Methods for NHBS have been described elsewhere [9]. Briefly, data were obtained via anonymous, in-person interviews with MSM recruited using venue-based, time-space sampling in 2008, 2011, and 2014. Activities for NHBS were approved by local institutional review boards for each participating city. Persons 18 years or older who were born male and identified as male, had not previously completed the current NHBS survey, resided in a participating city, were able to complete the survey in English or Spanish, and were capable of providing consent were eligible to participate. Because we were interested in exploring changes in coverage specifically among *sexually active* MSM (due to increased risk for HIV), we limited the analysis to men who reported at least one male sex partner in the 12 months before interview (1852/29,651 MSM excluded).

Self-reported health insurance status was the outcome for this analysis. In 2008, the question read, "Do you currently have health insurance or coverage? This includes Medicaid or Medicare." The question was modified in 2011 and 2014 to read, "Do you currently have health insurance or health care coverage?" We combined American Indian, Alaska Native, Asian, Native Hawaiian, other Pacific Islander, and multiple-race participants due to small sample sizes.

We compared the percentages reporting health insurance in 2008, 2011, and 2014. To determine if health insurance status changed over time, we used a Poisson model with generalized estimating equations clustered on recruitment event to calculate adjusted prevalence ratios (aPRs), 95 % confidence intervals (CIs), and *p*-values [10]. Year was included in the model as an ordinal variable. Each aPR measures adjusted change in insurance coverage for each 3-year increase in interview year (i.e., 2008–2011 or 2011–2014). The model was adjusted for race/ethnicity, age group, education, income, city, and self-reported HIV status; we included individual interaction terms for each covariate by year to examine changes over time by subgroup. All analyses were performed in SAS 9.3 (SAS Institute, Inc., Cary, NC).

Results

Among included MSM (8897 in 2008; 9248 in 2011; 9624 in 2014), the demographic composition of the sample did not change substantially over time (not shown). The overall percentage of MSM with health insurance rose 16 % from 2008 (68 %) to 2014 (79 %) (*p*-value for trend <0.001) (Table 1). The percent difference in coverage was greater for 2014 versus 2011 than for 2011 versus 2008 for all subgroups.

Changes in health insurance from 2008 to 2011 to 2014 did not vary significantly by race ($p = 0.2$). Coverage rose from 63 to 68 to 75 % among black or African American MSM (aPR 1.07, CI: 1.05–1.09) and from 74 to 77 to 84 % among white MSM (aPR 1.06, CI: 1.04–1.07). Among Hispanic or Latino MSM, 61 % reported coverage in both 2008 and 2011, versus 74 % in 2014 (aPR 1.07, CI: 1.05–1.10).

In all three interview years, a higher percentage of older MSM reported health insurance coverage; the same was true for MSM with higher education and income. Unlike race/ethnicity, there were differences in the change in coverage over time according to age, education, and income category ($p < 0.001$ for all three interactions). The change in coverage over time was more substantial for younger MSM (18–29 years: 62 to 64 to 74 %, aPR 1.08, CI: 1.07–1.10; 30–39 years: 66 to 70 to 78 %, aPR 1.08, CI: 1.06–1.10) compared to older age groups. By education, the change in coverage was greater for MSM with no more than a high school education (51 to 56 to 66 %, aPR 1.13, CI: 1.10–1.16). By income, the change in coverage was greatest for MSM reporting an annual income less than $20,000 (49 to 55 to 67 %, aPR 1.15, CI: 1.12–1.18).

Changes in health insurance did not differ significantly by HIV status ($p = 0.6$). Among self-reported HIV-negative MSM, coverage rose from 68 to 70 to 78 % (aPR 1.06, CI: 1.05–1.08); it rose from 76 to 79 to 85 % among self-reported HIV-positive MSM (aPR 1.07, CI: 1.05–1.09).

Discussion

Health insurance improved overall and among all subgroups from 2008 to 2014 among MSM participating in NHBS. An improvement in coverage was also documented for the general U.S. population from 2008 to 2014 [11]. The U.S. Census Bureau documented an

increase in health insurance among the general population from 85 % in 2008 to 90 % in 2014 [11].

Improvements in coverage among MSM participating in NHBS were greatest in key demographic segments with lower health insurance coverage all three interview years, by age, education, and income. Improvement in coverage could reflect progress due to recent policy changes, impacting populations that have been historically underinsured according to our data. As health insurance coverage continues to evolve among MSM, it will be important to also monitor progress in HIV prevention and treatment outcomes and to address continued barriers to coverage.

This analysis is subject to several limitations. First, study findings may be generalizable only to MSM who attend venues in large urban areas. Recruiting participants at venues may result in selection bias, and these data are not weighted to account for such bias. This analysis excludes MSM without male sex partners in the 12 months before interview; nevertheless, when the analysis was run to include them, the results were unchanged. Because health insurance status was self-reported, social desirability bias may affect estimates. Finally, this study is cross-sectional and cannot be linked to any particular policy change, thus causality cannot be established.

Corresponding with recent policy changes, health insurance improved among MSM participating in NHBS, with greater improvements in historically underinsured demographic segments. While the finding of increased insurance coverage among MSM is encouraging, 21 % of MSM participating in NHBS in 2014 were uninsured; our analysis demonstrates that improved health insurance coverage among MSM is still needed. Improved access to health insurance could lead to a reduction in health disparities among MSM over time.

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Table 1

Factors associated with having health insurance among men who have sex with men—National HIV Behavioral Surveillance, 20 U.S. Cities, 2008, 2011, 2014

	2008		2011		Change[b] 2008–2011 (%)	2014		Change[b] 2011–2014 (%)	aPR[c]	95 % CI[c]	*p*-value for interaction[d]
	No. insured[a]	(%)	No. insured[a]	(%)		No. insured[a]	(%)				
Race/ethnicity											0.2
Black or African American	1354	(63)	1682	(68)	(8)	1975	(75)	(10)	1.07	(1.05, 1.09)	
Hispanic or Latino[e]	1370	(61)	1468	(61)	(0)	1860	(74)	(21)	1.07	(1.05, 1.10)	
White	2857	(74)	2817	(77)	(4)	3082	(84)	(9)	1.06	(1.04, 1.07)	
Other or multiple races	457	(69)	491	(73)	(6)	607	(82)	(12)	1.09	(1.06, 1.12)	
Age group (years)											**<0.001**
18–29	2271	(62)	2621	(64)	(3)	2997	(74)	(16)	1.08	(1.07, 1.10)	
30–39	1635	(66)	1532	(70)	(6)	1947	(78)	(11)	1.08	(1.06, 1.10)	
40–49	1421	(74)	1424	(76)	(3)	1386	(82)	(8)	1.04	(1.03, 1.06)	
≥50	716	(83)	895	(82)	−(1)	1234	(89)	(9)	1.03	(1.01, 1.05)	
Education											**<0.001**
≤High school	1345	(51)	1527	(56)	(10)	1638	(66)	(18)	1.13	(1.10, 1.16)	
>High school	4698	(75)	4945	(76)	(1)	5926	(83)	(9)	1.05	(1.04, 1.06)	
Annual household income											**<0.001**
≤$19,999	1297	(49)	1596	(55)	(12)	1961	(67)	(22)	1.15	(1.12, 1.18)	
$20,000–$39,999	1387	(62)	1496	(66)	(6)	1708	(75)	(14)	1.08	(1.06, 1.10)	
$40,000–$74,999	1739	(80)	1760	(80)	(0)	2007	(86)	(8)	1.03	(1.02, 1.04)	
≥$75,000	1528	(88)	1530	(88)	(0)	1795	(91)	(3)	1.02	(1.01, 1.03)	
Self-reported HIV status											0.6
HIV-negative	4612	(68)	4954	(70)	(3)	5776	(78)	(11)	1.06	(1.05, 1.08)	
HIV-positive	802	(76)	987	(79)	(4)	1351	(85)	(8)	1.07	(1.05, 1.09)	
Unknown	599	(58)	515	(60)	(3)	420	(70)	(17)	1.08	(1.04, 1.12)	
Total	6043/8897[f]	(68)	6472/9248[f]	(70)	(3)	7564/9624[f]	(79)	(13)	1.07	(1.06, 1.08)	**<0.001**

Bold values indicate statistical significance ($p < 0.05$)

aPR Adjusted Prevalence Ratio, *CI* Confidence Interval

[a] Includes public, private, other, and multiple insurances

[b] Percent change was estimated by dividing the difference in percent insured between two interview years by the percent insured for the earlier year

[c] A Poisson model with generalized estimating equations clustered on recruitment event was used for this analysis. The overall model was adjusted for race/ethnicity, age group, education, income, HIV status, and city. The model for each covariate was adjusted for race/ethnicity, age group, education, income, HIV status, city, and an interaction term for that individual covariate by year (2014 vs 2008). Each aPR measures adjusted increase in insurance coverage for each 3-year increase in interview year (i.e., 2008–2011 or 2011–2014)

[d] *p*-value for interaction indicates presence or absence of difference in changes over time by sub-group

[e] Hispanics or Latinos can be of any race

[f] Thirty additional participants who did not respond to the question, "Do you currently have health insurance or health care coverage?" were excluded from this analysis (6 from 2008; 8 from 2011; 16 from 2014)