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Impact of Being on Parental Health Insurance Plan on Ever Testing for HIV Among Young MSM, 2019

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The Ohio State University

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Abstract

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By Ishwarya Ravichandran

Background: Young MSM have had consistently low rates of HIV testing compared to other demographics. Investigating factors as to why that is can help lead the way for better implementation methods to increase testing. One factor in particular that may play a part in low testing rates for young MSM could be parental health insurance. There are no studies currently examining whether young MSM are avoiding HIV testing due to the stigma tied to sexual conduct and the potential lack of privacy from parental insurance. This analysis provides better insight into whether there is an association between using parental health insurance and HIV testing which can then inform what can be done to overcome this issue.

Methods: A cross-sectional analysis was done on participants of the 2019 American Men's Internet Survey (AMIS) dataset; the data was subset to those who have some form of insurance, are 15-25 years of age, and have had anal sex in the last year (n = 2043). A Poisson regression GEE model was used to calculate adjusted prevalence ratios (aPR) and 95% confidence intervals (CI) for the association between ever HIV testing and parental health insurance. Supplemental analyses were also conducted to explore whether the association existed for HIV testing in the last year and stratified by age group (15-20 or 21-25 years).

Results: Most of the 2,042 participants were non-Hispanic white, 21-24 years old, homosexual/gay-identified, and did not live alone. Overall, 72.9% (1488/2042) of participants in the study were on parental health insurance and 72.8% (1083/1488) had been HIV tested at least once in their life. There were no significant differences in ever HIV testing between those on parental health insurance (72.8%; 1083/1488) versus other insurance (74.7%; 414/554; aPR: 1.01 95% CI: .89,1.15) while controlling for housing status, age, number of partners in last year, age, and sexual identity. There were still no associations between parental health insurance and HIV testing in all supplemental analyses.

Conclusion: In our sample of young and insured MSM, being on parental health insurance did not appear to be a barrier to HIV testing. This may be because young MSM are unfamiliar with the potential disclosure of their testing to their parent as the primary policy-holder, are unconcerned with those potential disclosures, or they are accessing free/low-cost HIV testing that doesn't require insurance. Regardless, future work should include implementation of safer, private testing methods for young MSM such as at-home testing and state legislation to create privacy protections for dependents on parental insurance.

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Impact of Being on Parental Health Insurance Plan on Ever Testing for HIV Among Young MSM, 2019

Introduction:

In 2018, there were 37,968 new HIV diagnoses in the United States (US); 69% of those diagnoses were amongst men who have sex with men (MSM), with 7,891 (20.7%) being among the 13–24-year-old age group[1]. According to the CDC, HIV testing is one of the most important steps for those who HIV positive to become aware of their status and seek proper care[2]. Early HIV diagnosis allows people to seek treatment, reduce their viral load, and drastically reduce the risk of HIV transmission to others as those who are aware of their status typically tend to reduce sexual behaviors that would transmit HIV[3]. HIV tests are not only crucial for diagnosing HIV infection, but also to begin conversations about practices to maintain HIV negative status[2,4].

Young MSM in particular are at high-risk for HIV due to not practicing proper testing behaviors until later on in their life[5]; typically, as MSM get older they are less likely to engage in risky sex[6]. Despite younger age cohorts of MSM facing a greater risk of HIV infection, many prevention efforts aren't specifically designed to optimize uptake among youth[7]. This causes a gap in intervention for young MSM groups. A study done in California found that the average age for a first HIV test of MSM was at age 26 and by this point, MSM may have already been engaging in high-risk behavior for years. Therefore, there is a higher likelihood that they have an undiagnosed case of HIV[8] by this point. Studies have found that 46% of young MSM had not been tested in the last year or ever been tested[9], and another analysis showed that the majority (54%) of undiagnosed HIV is among 17-24 year-olds[10]. CDC guidelines recommend that everyone aged 13-64 get tested for HIV at least once, and those who belong to higher risk groups such as young MSM get tested at least once a year[2]. HIV testing is a key part of the nationwide strategy 'Ending the HIV Epidemic in the U.S.' with an overall goal of reducing the number of new HIV infections by 90% and have fewer than 3,000 cases a year by the year 2030[11]. Better understanding of barriers to HIV testing will be needed to achieve these goals.

Some of the most common barriers in HIV testing include social factors such as stigma around getting tested, fear, and unwelcoming healthcare environments at testing areas[12]. For instance, in order to eliminate the issue of unwelcoming healthcare providers (HCP) and stigma issues with HCPs, open discussions about sexuality from a young age from HCPs to their patients could help eliminate any fear of judgement as well as fostering a comfortable relationship between MSMs and their HCPs[13]. Young MSM may often feel fearful of having their sexuality revealed by getting tested for HIV with their regular HCP so having that relationship would help build trust and reduce fears. Ensuring that HCPs are properly trained to handle conversations with LGBTQ+ youth could help facilitate disclosure of risk and discussion of medical needs to prevent HIV[14,15]. Identifying positive changes that can be made in the healthcare provider-patient relationship may help increase rates of testing among young MSM. If someone does not have a regular HCP or some way to access HIV testing resources, then it becomes much less likely that they will get tested for HIV[16]. HIV screening is covered by US private health insurance; however, those without health insurance must resort to finding free clinics or paying for an HIV test[2]. With the implementation of the Affordable Care Act, those under the age of 26 are able to remain on their parent's private health insurance[17].

Around 70% of adolescents under the age of 19 in 2018 were enrolled on private insurance plans, with most being parental health insurance[18]. Being a dependent on a parental plan provides access to healthcare and testing. As the primary policyholder, parents in most states receive detailed information on all healthcare expenses on their policy, including those of their family members. If youth are aware of this practice, they may be fearful of their parent(s) discovering their initiative for an HIV test before they themselves are ready to disclose that information[18]. This may lead to a decreased rate of HIV testing for young MSM who are still on parental health insurance. Reducing HIV- and sexuality-related stigma from family members may help reduce barriers to HIV testing for these youth[17]. Structural solutions may also play a role. There is currently legislation in 14 states allowing those on parental health insurance to request confidential communication, health

information, and explanation of benefits (EOB) forms[19]. Four of these states have policies allowing EOBs to be directly sent to the patient themselves; patients are allowed to request insurers to mail EOB directly to themselves rather than policyholder[19].

One of the biggest concerns youths face is fear that having open conversations about their sexual health with their HCP would lead to information being disclosed to their parents against their will. Studies show those who did end up opening up to their providers were more likely to be tested for HIV. This may be more beneficial for the patient since typically insurance will pay for the test when getting tested with a regular healthcare provider (HCP); if the patient has a good relationship with their HCP, then they would ideally feel most comfortable disclosing to their regular HCP[17]. Otherwise, those who do not feel comfortable opening up to their HCP and getting tested with insurance may have to look for alternative ways to get tested such as free clinics or self-pay. Those on a different type of health insurance plan besides parental insurance may feel more comfortable getting tested for HIV due to the additional layer of privacy.

The effect that parental insurance has on the prevalence of HIV testing in young MSM has not been previously reported. We aim to analyze the association between having parental health insurance and ever being tested for HIV while controlling for demographic, lifestyle, and social factors among participants on parental health insurance compared to participants on a different form of health insurance. We hypothesize that those on parental health insurance may be less likely to get tested for HIV.

Methods:

Study Population:

The American Men's Internet Survey (AMIS) is an ongoing study with a goal of recruiting at least 10,000 eligible MSM each year[20]. A man was considered eligible to be a part of the AMIS study if they were over the age of 15, lived in the United States, and identified as gay/bisexual or ever had sex with a man[20].

Participants who qualified provided informed consent and completed an online survey about behavioral health, sexual risk, and demographic information[21]. Participants did not receive any incentives or compensation in order to complete the questionnaire; the AMIS study received approval through Emory University IRB before the study was conducted[21].

Measures:

The outcome measure in the study was if a participant had ever been tested for HIV in their life and was coded dichotomously - either the participant has been tested for HIV or they have not. As CDC recommends all people to be tested for HIV at least once in their life[2], and sexually active MSM should be tested at least annually[3], our outcome variable is looking at the minimum bar for testing among sexually active MSM to see if they are at least getting tested once. In supplemental analyses, we also examined testing for HIV in the last year. Those who had never been tested were also considered to have not been tested in the last year.

The exposure of interest was current type of health insurance. This was also coded dichotomously showing that either the participant had parental insurance or had some other form of health insurance. Any participants' data that was missing or coded as 'I don't know' or 'Prefer not to answer' was not included. The other covariates chosen to be studied in this analysis include general demographics such as age, race/ethnicity, and sexual identity. A current housing situation covariate was split into 3 categories, participants who lived with their parent(s), participants who lived alone, and participants who lived with someone other than their parents.

Whether or not a participant has a regular HCP or has disclosed their sexuality to the HCP could also be of significance to the outcome. Not having an HCP would greatly reduce the chances that they would get tested at their HCP's office or have the means to get tested. Some of the main issues that younger people face when deciding to get tested for HIV include any issues to healthcare testing, such as not having a regular HCP, stigmas, unfriendly test environment, or any issues related to fear[2]. A 3-level variable was created for the HCP

variable: not having a regular HCP in the last year, having one but never disclosing to an HCP that you are MSM, or having a regular HCP in the last year and ever disclosing to an HCP. However, something to note is that the disclosure variable just indicates if a participant had ever disclosed their identity to any HCP, not necessarily the regular provider in the last year.

Another factor that commonly resulted in higher rates of HIV testing among MSM was having a higher number of partners[2], so this was also a covariate in the analysis; the number of male sex partners in the last year were grouped into a categorical variable spanning from 1 partner, 2-4 partners, and 5+ partners. These cut-points were chosen since studies have shown that those who are in longer term relationships with a single partner have been found to have lower rates of testing among MSM[22]. Additionally, there were many people who had more than 5 male sex partners in the study, so in order to create a somewhat evenly distributed variable, any participant with more than 5 partners was put into one category of the variable. Condomless anal sex with male partners in the last year is known as one of the most common HIV transmission methods[23,24] so including this covariate will be important in the analysis; this variable is a dichotomous variable. Finally, a variable investigating the location of where young MSM are getting tested at was included; this may show us that despite being on parental health insurance, participants could be finding other methods of getting tested to maintain a higher level of privacy.

Statistical Analyses:

Analyses were limited to those who had anal sex with a male partner in the last year, currently had some type of health insurance, did not report positive HIV status, and who were 15 to 25 years. This resulted in 2,042 participants in our analyses. Chi-square tests were used to identify any significant associations between parental health insurance and the covariates. An initial multivariable logistic regression model of ever HIV testing was explored using forward elimination (stay criteria $p<.05$) and all started with parental health insurance and all covariates. All possible two-way interactions between parental insurance and other covariates were also

examined using forward elimination. After analyzing for interaction and reconfiguring the model, the final model was left with parental insurance, age, sexual identity, number of partners, and housing situation with a Hosmer and Lemeshow Goodness-of-Fit of .5096. These variables were used in a GEE model with a Poisson distribution and robust variance to produce adjusted prevalence ratios and 95% confidence intervals.

Additionally, we modeled HIV testing in the last year as the outcome using the same procedures to determine whether parental health insurance influenced more recent HIV testing behaviors. Since descriptive analyses showed that the prevalence of HIV testing was substantially higher among those 21-25 years, models stratified by the two age groups (15-20 and 21-25 years) were explored. Statistical significance for all of the analyses was set at alpha = 0.05. All analyses were conducted using SAS Version 9.4 (SAS Institute, Cary, NC).

Results:

Of the 2042 participants, most participants were 21-24 years old, homosexual/gay-identified, white non-Hispanic, and did not live alone (Table 1). There were few participants that did not identify as either homosexual/gay-identifying or bisexual. Most participants had 2-4 sexual partners in the last year. The majority of the participants had condomless anal sex in the last year. Overall, 72.9% (1488/2042) of the participants were on their parent's health insurance. Most covariates significantly differed by health insurance type (Table 1). Compared to those on other insurance, those on parental health insurance were younger, more likely to disclose to a regular HCP, be White-non-Hispanic, and live with their parent(s).

The overall prevalence of ever having an HIV test was 73.31% (1497/2042) and did not significantly vary by type of health insurance in crude analyses or when controlling for other important covariates (Table 2). Among those with parental health insurance, the prevalence of ever HIV testing was 72.8% (1083/1488) and 79.9% (866/1083) of those ever HIV tested had been tested in the last year. Among those with other health

insurance, the prevalence of ever HIV testing was 74.7% (414/554) and 78.0% (323/414) of those ever HIV tested had been tested in the last year. Overall, 42.2% (631/1497) of participants had their most recent test at a private doctor's office, 30.7% (459/1497) at a community clinic, 15.1% (226/1497) at an STI specialty clinic, and 12.1% (181/1497) at some other location. There was increased prevalence of ever HIV testing among those who were older and those who had more male sex partners in the last year (Table 2). Additional models examining HIV testing in the last year and stratification by age group did not identify any significant associations between parental health insurance and HIV testing (data not shown).

Table 1. Characteristics of 2042 Young Men Who Have Sex with Men by Current Health Insurance Type, American Men's Internet Survey, 2019

	Parental Health Insurance (N=1488)		Other Health Insurance (N=554)		
	n	*%*	*n*	*%*	p-value[1]
Age					<.0001
15-20 years	432	29.0%	93	16.8%	
21-25 years	1056	70.9%	461	83.2%	
Sexual Identity					0.301
Homosexual/Gay	1205	80.9%	432	77.9%	
Bisexual	246	16.5%	105	18.9%	
Other	37	2.5%	17	3.1%	
Regular Healthcare Provider and Disclosure					0.0001
Does Not Have Regular HCP	613	41.2%	277	50.0%	
Has Regular HCP and Disclosed	732	49.2%	248	44.8%	
Has Regular HCP and Never Disclosed	143	9.6%	29	5.2%	
Race/ethnicity					<.0001
Black, Non-Hispanic	89	5.9%	65	11.7%	
Hispanic	232	15.6%	127	22.9%	
White, Non-Hispanic	1016	68.3%	284	51.3%	
Other or Multiple Races	129	8.7%	59	10.6%	
Housing Situation					<.0001
Live with Parent(s)	589	39.6%	134	24.2%	
Live Alone	267	17.9%	145	26.2%	
Live with Other	632	42.4%	275	49.6%	
Number of Male Sex Partners in Last Year					
1 Partner	201	13.5%	66	11.9%	0.13
2-4 Partners	563	37.8%	193	34.8%	
5+ Partners	373	25.1%	160	28.9%	
Anal Sex with Male Partner without Condom in Last Year					0.16
No	311	20.9%	100	18.1%	
Yes	1177	79.1%	453	81.8%	

1. Chi-square test for differences in participant characteristics by insurance

Table 2. Associations Between Ever HIV testing and Health Insurance Type among US Men Who Have Sex with Men, American Men's Internet Survey, 2019

		n/N (%)	cPR[1] (95% CI[2])	aPR[3] (95% CI)
Insurance Type				
	Parental Insurance	1083/1488 (72.7%)	Ref.	Ref.
	Other Insurance	414/554 (74.7%)	.97 (.87,1.09)	1.01 (.89,1.15)
Age				
	15-20 years old	276/525 (52.5%)	Ref.	Ref.
	21-25 years old	1221/1517 (80.4%)	2.34 (1.81,3.04)	1.46 (1.25,1.69)
Sexual Identity	Gay	1222/1637 (76.4%)	Ref.	Ref.
	Bisexual	237/351 (67.5%)	.93 (.83,1.04)	.87 (.74,1.02)
	Other	38/54 (70.37%)	.87 (.70,1.08)	.76 (.55,1.03)
Housing Situation	Living Alone	317/412 (76.9%)	1.08 (1.02,1.14)	1.04 (.89,1.23)
	Living with Parent	477/723 (65.9%)	Ref.	Ref.
	Living with Other	703/907 (77.5%)	1.17 (1.04,1.31)	1.10 (.79,1.51)
Number of Male Sex Partners in Last Year	1 Partner	156/267 (58.4%)	Ref.	Ref.
	2-4 Partners	562/756 (74.3%)	1.22 (1.12,1.33)	1.27 (1.06,1.51)
	5+ Partners	473/533 (88.7%)	1.49 (1.26,1.76)	1.60 (1.12,2.29)

1. cPR: Crude prevalence ratio: calculation for a cross-sectional study that calculates ratio of the proportion of persons w/outcome over proportion with the exposure
2. CI: Confidence interval: Provides level of certainty regarding the calculated estimate; if confidence interval contains '1' then result is not statistically significant
3. aPR: Adjusted prevalence ratio: calculation while adjusting for age, sexual identity, housing situation, and number of partners

Discussion:

The objective of this study was to investigate the association between being on parental insurance and ever getting tested for HIV among young US MSM who are sexually active and insured. Nearly three-quarters of young MSM in this study had been tested for HIV at least once in the past and this prevalence of testing did not significantly differ by type of health insurance. There were significant associations between if a participant had ever been tested for HIV and the covariates of participant, age, and number of male sex partners. These associations are consistent with previous literature findings.[4,7,11,16,22,26] The participants in our study had a high HIV testing prevalence compared previous studies with young MSM likely due to the analytic criteria of being insured and having anal sex in the past year [16].

One potential reason that parental health insurance was not significantly associated with testing in our study could be due to participants using alternate HIV testing options/locations that did not require health insurance. The majority of our participants had been tested somewhere other than at a private doctor's office. When considering the age range included in our sample, it can be implied that many participants included would have independence as a young adult. Participants may have resources to access testing in other ways besides parental insurance. For college students, it is common for many college campuses to have free or low-cost HIV testing at student health centers[2728]. Community and public health clinics also offer free or low-cost HIV testing without requiring health insurance[29].

The options for young MSM to get an HIV test are also expanding beyond typical clinical settings requiring health insurance. Young MSM with the ability to pay for testing can get an over-the-counter HIV self-test online or through local pharmacies[30]. Some health departments

also offer free or low-cost mailed at-home specimen collection for HIV testing at laboratories. Researchers have found that potential benefits to promoting more at-home testing methods would include an increase in those who are aware of their HIV status, an ease to getting tested regularly, and a way to reduce stigma of getting tested by making accessibility to at-home tests normal[31].

While there has been substantial research stating that those at risk would be more interested in doing self-testing, there are still barriers to keep in mind Currently, cost is a large barrier since the self-test kits cost around $40-$50 which can be a burden on those who are highest at risk[10]. However, those who stated they were interested also said they would be more willing to test themselves around 4 times a year if the cost was not as steep[10]. This must be kept in mind when considering young MSM on parental health insurance. These options may increase privacy over clinic-based testing and are preferred by some MSM. However, for those young MSM who do live at home with a parent, privacy or adequate funding may still stand in the way of regularly testing themselves with at-home tests. Still, all of these potential alternative ways for young MSM to get tested for HIV without using their parental health insurance may have contributed to the lack of significance between parental insurance and HIV testing. In future studies it may be interesting to ask participants if they are using a free/low-cost method or using their insurance and what their motivation for either method of testing is.

Parental insurance may not be affecting HIV testing among young MSM due to an increase in acceptance of their sexuality. While coming out to a parent is a big fear for many LGBTQ+ youth and adolescents, around 79% of sexual minority youth have disclosed their status to at least one of their parents which typically happens around age 19[32]. This early disclosure to at least one parent may also help with higher rates of testing. If a participant's

parents are already aware of their sexuality, then it is likely that they would be less concerned about health insurance disclosures of their HIV testing. It has been found that parent-child communication interventions regarding HIV/STIs typically reduce related health disparities and lead to better sexual health outcomes[33]. It has also been shown that despite their initial reaction, positive or negative, parents typically become more accepting of their child's sexuality over time[32].

Parental insurance may not be affecting HIV testing because young MSM may not be aware of the EOB disclosures of their healthcare utilization or are using the additional confidentiality protections afforded in a few states[34]. There is very little legislation that protects a dependent's information and health records from the policyholder; EOBs are typically accessible to the policyholder as well as the dependent.[19,34]. Different states and insurance policies have different requirements on how to handle EOBs. The majority of U.S states offer little to no protection over a dependents' EOBs, leaving their health results vulnerable to the policyholder of their plan. While there are few options available to dependents when requesting that an EOB be sent to the patient rather than the policyholder, this is not always allowed. Currently, there are only 14 states in the country that give dependents protections including allowing EOBs to be mailed directly to the patient and protecting any minor who wants to get any STI testing[19].

Some states allow for minors to request privacy regarding topics such as HIV testing but may still require the HCP to disclose this information to the policyholder/parent[34]. In those cases, the dependent may not even be aware that their privacy would be violated and get tested regardless which would not make a difference on HIV testing.

While protections do exist in 14 states, the remaining 36 states have very little control over EOBs and even if there is some information able to be kept confidential, policyholders still

do have access to some amount of detail on the changes and services done with the patient.[19,34] The ability to protect their own confidentiality if they are on their parental insurance plan gives protections to those seeking any sort of STI test or treatment, including HIV[19];this is the benefit to having protections in the 14 states previously mentioned. However, one issue here is the ability to get confidentiality often falls onto the patient; the patients must know their rights in order for them to be used. Future analyses should consider the participant's residency state to see if there is a relationship between states that have these protections and testing rates.

Another study of HIV pre-exposure prophylaxis (PrEP) with these same participants did find that being on parental health insurance was associated with significantly lower prevalence of PrEP use[35]. Of those young MSM who were on parental health insurance but were not taking PrEP, 41.1% were worried about having privacy on parental health insurance. This finding may further support the theory as to why there was a null association in this analysis; while there are many different options to circumvent getting tested for HIV while on parental health insurance (free clinics, college campuses, at-home testing, etc.), those options are much scarcer with PrEP usage.[35] It also may be due to the fact that there could be more stigma associated with PrEP usage and if that private information were disclosed to anyone then they could draw conclusions about the patient being an MSM, whereas the CDC recommends everybody between 13-64 to get tested for HIV[2]. Another strength of this study is that it included questions specifically about whether there was any avoidance to PrEP uptake due to fear regarding parental insurance; this is something that was missing in our analysis of HIV testing but drawing conclusions from the results from this analysis shows us that fear surrounding a lack of confidentiality while on parental insurance is real[35].

In order for this issue of confidentiality within insurance to be addressed, there needs to be a push for legislation and policy allowing dependents control over their EOBs while also educating minors on their rights regarding their privacy. Even in the states that do have this protection, there may be those who do not even realize that this privacy is within their right.

Limitations

This analysis and our data have many limitations. The AMIS study is a convenience sample, and while there is a large sample size, the study population still may not be representative of the MSM population overall, and not all MSM may have the ability to access the study. There may also be self-selection bias in this survey – since this was an internet-based convenience sample gathered from social media type websites, it is not considering those who may not have proper internet access or may not have seen any advertisement to participate if they do not have social media. By not including these groups of people, we could be missing out on an important connection.

This study also has potential for recall bias because participants are self-reporting events from the last year, and there is a chance participants could easily forget potentially important details from the last year. Due to the intimate nature of some of the study questions, such as how many partners they have had, there may also be an underreporting of some factors due to social acceptability bias.

Additionally, there were not any questions regarding a participant's past use or desire to use a free/low-cost method of HIV testing and their motivation behind their selected testing location. Having this information may give us more insight into testing habits for those on parental insurance and their motivation for choosing the method they do.

Since both the exposure and outcome are collected at the same time, it may be difficult to establish proper temporality with certain variables we chose to work with in this study; insurance coverage is something that may have changed since HIV testing (potentially due to job or financial status). However, it is not as likely that there was as much temporal disconnect with the outcome as we ran an analysis on both if a participant had ever been tested and if they had been tested in the last year and both did not have an association.

Conclusion

Although the analysis from this study shows that there is a null association between parental insurance and HIV testing in young MSM, this does not detract from the fact that there is an increased need for young MSM to be able to have privacy and confidentiality when they are interested in getting tested for HIV. There also needs to be a push to reduce stigma around HIV testing, as well as more funding to address accessibility for at-home testing to increase the rates of testing among higher risk groups. There is still a lower rate of young MSM in the general population outside of this study who are getting tested for HIV and this needs to increase in order to curb the HIV epidemic in this country.

One of the items of greatest concern is the need for increased privacy and confidentiality for those getting HIV testing. This is not a possibility for most on parental health insurance as the policyholder is able to see every test or health service that is performed. While there are a few states that have these protections in place, people who reside in those states may not be aware of their rights regarding protections. Protecting patient rights to confidentiality will not only encourage HIV testing but will also have additional positive impacts regarding PrEP uptake[19,34,35].

Potential interventions include increase accessibility in at-risk communities, disseminating education materials regarding HIV testing and monogamous relationships, and increasing private options of HIV testing for young MSM living with a parent. Decreasing the cost of at-home HIV testing should be one of our top priorities. Educational materials should emphasize the importance of getting tested in a monogamous relationship; normalizing getting tested within a relationship and outside of a relationship will help decrease stigma issues within any communities at higher risk for HIV.

Further analysis is required to determine which social factors are playing a part in why young MSM are not getting tested, as well as to the strength of the potential association between parental health insurance and HIV testing. This analysis was not exhaustive and may have overlooked or excluded an important factor relating to low testing rates. It is important to examine why young MSM are not getting tested and whether or not privacy protecting legislation would be a motivating force in this matter. Future research should further investigate more motivations and barriers to testing in young MSM.

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