# Age Cohort and Health Service Utilization Among Gay Men

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#### **Abstract**

Gay men report unique health disparities and service utilization trends compared to their heterosexual peers including a lack of health-care participation which may lead to chronic health conditions. Limited research has been conducted analyzing group differences among gay men such as the influence of one's age cohort on disparities. The aim of this study was to examine the association age cohort has on health service utilization among gay men. A sample of 383 self-identified gay men was collected by the San Francisco Department of Public Health. Older men were less likely to have visited a medical provider in the past 12 months compared to middle-aged men (OR = 0.10; 95% CI [2.47, 39.8]) and younger men (OR = 0.35; 95% CI [1.28, 10.42]). However, older men were more likely to have a usual source of medical care compared to younger men (OR = 4.0; 95% CI [.05, .84]). Age cohort differences in health-care service utilization appear to exist among gay men. This study highlights additional areas for exploration including the impact HIV and socioeconomic status have on health-seeking behavior and health service utilization.

## **Keywords**

gay men, age, health care, service use

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Physical health disparities and unique health-seeking behavior exist among gay men (Fredriksen-Goldsen et al., 2011; Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013; Lick, Durso, & Johnson, 2013). For example, gay men tend to be more reluctant to seek health services compared to their heterosexual counterparts (Mayer et al., 2008). It has been suggested this reluctance may be due to both heteronormative attitudes within the health-care system (Alencar Albuquerque et al., 2016; Heck, Sell, & Gorin, 2006) and internalized homophobia hindering individuals from accessing appropriate care (Alencar Albuquerque et al., 2016; Herrick et al., 2013). In addition, gay men are at an elevated risk of cardiovascular disease, experience higher rates of acute and chronic health conditions, and are more likely to receive a cancer diagnosis and die of cancer when compared to heterosexual men (Dean et al., 2000; Koblin 2006; Sandfort, Bakker, Schellevis, Vanwesenbeeck, 2009; Wang, Häusermann, Vounatsou, Aggleton, & Weiss, 2007). Additionally, gay men generally rate their overall physical health more poorly than heterosexual men (Fredriksen-Goldsen, Kim, & Barkan, 2012; Frost, Lehavot, & Meyer, 2011).

A factor commonly attributed to the physical health disparities among gay men is the avoidance of health-care settings (Petroll & Mosack, 2011). Avoidance of health-care systems refers to a lack in receiving health-care services due to a specific phenomenon such as the presence of real or perceived stigma. Although research

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to explain the factors driving health-care avoidance is limited, findings suggest discrimination within the healthcare system may play a role (Petroll & Mosack, 2011). Heteronormative attitudes within the health-care system are associated with a reluctance in seeking care primarily due to a fear of stigma and/or discrimination by the system (Alencar Albuquerque et al., 2016; Heck et al., 2006; Petroll & Mosack, 2011). For example, Hoffman, Freeman, and Swann (2009) found that younger sexual minority individuals feel that health-care providers tend to focus primarily on their sexual health rather than whole-body well-being. This was suggested to be a result of perceived culturally charged bias toward homosexuals. This example provides insight into the dynamic impact heteronormativity may have on gay men seeking health services.

Internal stressors may emerge in the form of internalized homophobia, expectations of rejection or discrimination, and/or concealment of sexual identity as a result of stigma and discrimination felt by individuals (IOM, 2011; Meyer, 2003). For example, fearing discrimination, some men may conceal their sexual orientation from their health-care provider (Bergeron & Senn, 2003; Eliason & Schope, 2001; Hutchinson, Thompson, & Cederbaum, 2006). Although concealment may be viewed as a positive short-term coping strategy, it is linked to deleterious physical health implications due in part to the potential for unmet physical health-care needs specific to gay men such as anal pap spears and early colon cancer screens (Bergeron & Senn, 2003; Cochran et al., 2001; Petroll & Mosack, 2011).

Although health-related disparities among gay men have been reported, less information exists concerning generational differences among this population as it relates to health utilization. If stigma and discrimination play a role in health-care utilization, one might expect differences between younger and older cohorts of men when considering major social and historical situations that have occurred during the lifetime of an individual (Choi & Meyer, 2016). For example, the experiences of those who participated or were impacted by the Stonewall Riots of 1969 may view or perceive events differently than those who grew up post-LGBT liberation which emerged following this event. Prior to the Stonewall Riots, gay men rarely had the opportunity or access to LGBT specific care. Additionally, gay men who lived through the AIDS pandemic and who may have experienced the surge in anti-gay sentiment which followed may have differing perspectives toward the heteronormative health-care system than Millennials who grew up during the post-gay era of the LGBT rights movement when civil equalities began to actualize (Fredriksen-Goldsen, 2014; Morrow, 2001). Uncovering generational differences among gay men as they relate to health-care

utilization and health-care-seeking behavior has the potential to improve the understanding of how gay men, throughout the life span, perceive health-care services as well as how they interact with those services.

Research on the impact age may have on health-care service utilization and health-care-seeking behavior among gay men is expanding. Studies exist on specific subpopulations of gay men based on age (e.g., gay adolescent men versus heterosexual adolescent men, gay older men versus straight older men) but rarely do these studies compare differences between age cohorts among gay men specifically (Erdley, Anklam, & Reardon, 2014; Fredriksen-Goldsen, 2014; Newman, Passidomo, Gormley, & Manley, 2014). One study found that age, when dichotomized, does not significantly impact health-care service utilization for gay men (Kessler, Agines, & Bowen, 2015), while others suggest that age for gay men is a significant factor in whether an individual seeks services (David & Knight, 2008). A recent study exploring mental health inequalities of gay men across the life course found unique differences between age groups when separating age beyond a dichotomy augmenting the need to explore the health and wellbeing of gay men at various stages of life (Hickson, Davey, Reid, Weatherburn, & Bourne, 2017). While studies have been consistent about what health and mental health concerns exist among age groups (e.g., gay youth report higher rates of suicidality, while older gay men tend to face isolation and depression at increased rates; Erdley et al., 2014; Newman et al., 2014), no study to these authors' knowledge has examined how age may influence health-care service utilization when comparing a trichotomy of generational cohorts across the life course (younger, middle-age, and older-age) among gay men specifically. This study aims to uncover potential differences in health service utilization among three generations of gay men by exploring two research questions. The first, does one's age cohort status impact the likelihood of seeking health services and second, does one's age cohort status impact the likelihood of having a usual source of health care. Understanding age cohort differences as it relates to health-care-seeking will provide researchers and practitioners additional knowledge on how to best reduce the health disparity felt across this population while suggesting age cohort-specific disparities influencing healthcare-seeking behavior.

## **Methods**

### **Participants**

Participants eligible for this cross-sectional data collection were men who identified as men who have sex with men (MSM). Other criteria included age (over 18) and identifying as a resident of the San Francisco metropolitan area.

Participants were reduced to only those who self-identified as gay/homosexual for the current study. The total sample size for this dataset is 383. The age ranges for the dataset include: younger adults (18-34) n = 174; middle aged (35-54) n = 121; and older adults (55+) n = 88. After agreeing to participate, men completed an interviewer-administered survey on tablet computers. Interviewers were administered by National HIV Behavioral Surveillance (NHBS) staff hired by the San Francisco Department of Public Health. Participants were provided a \$50 incentive for participating. Surveys took on average 45 min to complete.

## Data Collection and Recruitment

NHBS began administering this survey in 2003–2004 and has since sampled participants in 2008, 2011, and 2014 respectively. The study uses a time location sampling technique, sometimes referred to as venue-based technique to sample participants (MacKellar et al., 2007; Raymond, Chen, & McFarland, 2015). Venue-based sampling is considered the gold standard for sampling both sexual minorities including gay men and people living or at-risk of infectious diseases (Raymond, Chen, & McFarland, 2015). This technique is also used to sample MSM for HIV behavioral risk surveys (Gallagher, Sullivan, Lansky, & Onorato, 2007). Venues were randomly chosen from a list of locations known to serve this community including bars, clubs, health clinics, stores, and other community places. Potential participants were then approached and asked to complete the survey. Data collection had IRB approval from the University of California, San Francisco. A full explanation of the methods for NHBS is described in MacKeller et al. (2007).

## Survey Measures

The NHBS includes a wide range of questions relating to one's risk for HIV infection. The survey asks participants over 150 questions. A large portion of the survey is dedicated to understanding participant's sexual history including sexual contact within the past year, number of sexual partners, condom use, and sexuality of partners. Other areas of interest included in the survey are barriers to health care, substance use, health-care utilization, partner selection preferences, and pre-exposure prophylaxis use among the most at-risk men (Gallagher et al., 2007).

### Variable Operationalization

Age cohort groups (older = 55+, middle = 35–54, and younger = 18–34) were determined based on previous literature. Due to the diversity of age cohort groups present in the literature, age ranges for this study are based on empirical studies specific to the LGBT population (Daley

et al., 2017; Fredriksen-Goldsen, 2014; Gibbs & Goldbach, 2015; MacKellar et al., 2007; Wight, LeBlanc, de Vries, & Detels, 2012), which identifies older adulthood beginning between 50 and 55 years. Older adults were used as the reference variable based on previous literature which states this group experiences significant disparities in health care (Daley et al., 2017). Additional variables included were race/ethnicity, education level, employment status, insurance status, sexual identity disclosure to health-care provider, HIV status, and the presence of down, depressed, or hopeless feelings.

Two dependent variables were examined in this study. The first used the assessment question: "Is there a place that you usually go when you are sick or you need advice about your health?" Do not include Internet websites or talking with people who are not health-care providers." This question provides insight into accessibility of health-care organizations and included answer options: No and Yes. No changes were made to this question. The second used the assessment question: "In the past 12 months, have you seen a doctor, nurse, or other health-care provider?" This question measures health-care utilization and included answer options: No and Yes. No changes were made to this question.

# **Analysis**

Two multivariate logistic regression analyses were used to assess the associations between health service utilization (seeking medical services in the past 12 months and having a usual source of medical care), age (older adults, middleaged adults, and younger adults), and various control variables (i.e., race/ethnicity, education, employment status, income, insurance status, history of discrimination, presence of depressive symptoms, HIV status, and sexual identity disclosure to primary medical provider) using SAS software. All independent and control variables were selected and included, regardless of bivariate association, based on theoretical considerations and empirical findings (Hendricks & Testa, 2012; Meyer, 2003). The complete set of independent and control variables were entered in the model simultaneously. A Firth-adjusted analysis was employed to correct for separability and potential bias in the second model (i.e., having a usual source of medical care). Associations were considered significant at the p < .05 level for both models. In addition, multicollinearity was assessed. No interaction effects were found for either model.

## Results

# Sample Characteristics

Demographics characterizing the sample on variables of age, race/ethnicity, education level, and employment

Table I. Demographics.

	Younger Gay Men (18–34)		Middle-Aged Gay Men (35–54)		Older Gay Men (55+)	
	Obs.	%	Obs.	%	Obs.	%
Age	187	45.43	129	31.59	94	22.98
Participation in health care						
Visit PCP in past 12 months	162	86.6	124	96.1	79	84.0
Have a regular place of care	141	75.8	119	92.3	91	96.8
Has disclosed identity to PCP	154	88.51	116	97.48	85	96.59
Education status						
College degree or above	140	80.46	109	90.08	79	89.77
Less than a college degree	34	19.54	12	9.92	9	10.23
Employment status						
Employed full-time	123	70.69	73	60.33	41	46.59
Employed part-time	22	12.64	24	19.83	11	12.50
Retired	0	0	1	0.83	12	13.64
Unemployed	21	12.07	9	7.44	9	9.57
Other employed	2	1.15	14	11.57	14	15.91
Income status (USD)						
Low-income (\$0-29,999)	70	40.23	30	25.00	20	22.99
Middle-income (\$30,000–59,999)	48	27.59	25	20.83	25	28.74
High-income (above \$60,000)	56	32.18	65	54.17	42	48.28
Insurance status						
Insured	152	87.36	109	90.08	85	96.59
Race/ethnicity						
White	124	73.81	96	81.36	77	88.51
Black or African American	26	15.48	8	6.78	6	6.90
Asian & other	18	10.71	5	4.24	4	4.60
Latino/Hispanic	53	30.46	35	28.93	11	12.50
Identity discrimination						
History of identity discrimination	13	7.47	12	10.00	6	6.82
Depressive symptoms						
Present depressive symptoms	82	48.24	59	50.00	38	43.18
HIV status						
HIV positive	24	13.95	37	31.36	31	35.23
HIV negative or unknown	148	86.05	81	68.64	57	64.77

status are reported in Table 1. Younger adults make up the largest percentage of the sample (45.4%), followed by the middle-age group (31.6%) and the older-age group (23.0%). The majority of the sample identifies as White (79.6%) with the second-most reported race being African American/Black (10.7%). Over a quarter of the sample identifies as Latino (25.9%). A majority of the sample is considered highly educated having completed some college or more (85.6%). Over half of the sample is employed full-time (61.9%) followed by part-time workers (14.9%) and unemployed participants (10.2%). These data are generally consistent with the larger San Francisco population

with the exception of race. White participants in this study make up the majority of the sample while in San Francisco 53.5% of the population identifies as White. African Americans in San Francisco make up 5.6% of the population, while this sample consisted of almost double the percentage at 10.7% (U.S. Census Bureau, 2016).

Having access to a usual source of care, participating in medical care in the past year, insurance status, and identity disclosure to medical provider are used to measure health access and engagement. In this sample, the majority of participants stated having a usual source of care (85.8%) and most participants have seen a medical provider in the past year (90.3%). A

Table 2. Bivariate Associations.

	Seen PCP in Past 12 Months			Has a Usual Source of Care		
	N	%	X <sup>2</sup> , p	N	%	X <sup>2</sup> , p
Age						
Older gay men	79	84.0	3.1, .10	91	96.8	12.1, <.01
Middle-aged gay men	124	96.1	9.7, .01	119	92.3	6.4, .01
Younger gay men	162	86.6	2.0, .07	141	75.8	28.1, <.01
Participation in health care						
Has disclosed identity to PCP	341	90.9	17.9, <.01	325	86.9	4.6, .03
Education status						
College degree or above	313	89.7	1.0, .30	308	88.5	13.8, <.01
Employment status						
Employed full-time	231	91.3	3.5, .06	217	86.1	.04, .83
Employed part-time	51	83.6	2.2, .14	50	82.0	.87, .35
Retired	14	93.3	.30, .60	14	93.3	.72, .40
Unemployed	33	80.5	3.4, .07	32	78.I	2.3, .13
Other employed	28	90.3	.06, .81	31	100	5.5, .02
Income status (USD)						
Low-income (\$0–29,999)	113	86.3	1.7, .19	104	79.4	6.9, <.01
Middle-income (\$30,000–59,999)	89	84.8	2.9, .09	88	83.8	.54, .46
High-income (\$<60,000)	161	94.2	7.5, <.01	157	92.4	9.9, <.01
Insurance status						
Insured	329	89.7	1.4, .24	323	88.3	16.9, <.01
Race/ethnicity						
White	281	88.1	2.1, .14	278	87.4	.75, .39
Black or African American	39	92.9	.64, .42	36	85.71	.04, .85
Asian/other	12	100	1.5, .22	10	83.3	.12, .73
Latino/Hispanic	91	85.9	1.5, .22	87	82.1	1.6, .20
Identity discrimination						
History of identity discrimination	29	87.9	.04, .84	29	87.9	.11, .74
Depressive symptoms						
Present depressive symptoms	170	88.1	.86, .35	160	82.9	3.0, .08
HIV status						
HIV negative	266	86.4	12.2, <.01	251	81.8	17.8, <.01

minority of participants are without insurance (9.7%) which may be due to the extensive health coverage offered by Healthy San Francisco, a city program that offers universal health coverage (McLaughlin et al., 2011). The majority of the sample has disclosed their sexual identity to their medical provider (93.2%).

# Regression Analyses

Two multivariate logistic regression analyses were conducting to determine if age was significantly associated with health service utilization, as well as determining other

variables which significantly impact health service utilization among gay men in this sample. Bivariate associations are presented in Table 2. The seeking services model had a -2 log likelihood of 179.7 while the usual source of care model had a -2 log likelihood of 189.7. Overall model fit statistics and significant tests for specific independent and control variables are presented in Table 3.

The multivariate models presented in Table 3 revealed several significant findings related to health service utilization. In the seeking services model, middle-aged gay men were more likely to have visited a medical provider in the

Table 3. Regression Analysis Results.

	Seen PCP in Past 12 Months		Has a Usual Source of Care	
	OR	95% CI	OR	95% CI
Age (older gay men—reference)				
Middle-aged gay men	9.9**	[2.5, 40.4]	0.57	[0.10, 2.3]
Younger gay men	3.7*	[1.3, 10.4]	0.24*	[0.05, 0.83]
Participation in health care				
Has disclosed identity to PCP	2.7	[0.84, 8.7]	0.85	[0.28, 2.3]
Education status				
College degree or above	1.1	[0.35, 3.5]	2.2	[0.92, 4.9]
Employment status (full-time—reference)				
Employed part-time	0.44	[0.14, 1.4]	0.73	[0.29, 2.0]
Retired	3.3	[0.26, 41.3]	0.40	[0.04, 5.6]
Unemployed	0.53	[0.16, 1.7]	0.82	[0.29, 2.4]
Other employed	0.55	[0.10, 3.1]	2.1	[0.29, 3.6]
Income status (USD) (high-income—reference)				
Low-income (\$0–29,999)	0.58	[0.19, 1.8]	0.40*	[0.16, 1.0]
Middle-income (\$30,000–59,999)	0.38	[0.13, 1.1]	0.43	[0.17, 1.1]
Insurance status				
Insured	1.4	[.42, 4.9]	2.6*	[1.1, 6.2]
Race/ethnicity (White—reference)				
Black or African American	2.4	[0.49, 11.8]	1.8	[0.65, 5.7]
Asian/other	1.0	[0.25, 4.1]	0.46	[0.17, 1.3]
Latino/Hispanic	0.74	[0.28, 2.0]	1.6	[0.73, 3.8]
Identity discrimination				
History of identity discrimination	1.5	[0.25, 8.3]	1.01	[0.29, 4.4]
Depressive symptoms				
Present depressive symptoms	0.99	[0.45, 2.2]	0.61	[0.31, 1.2]
HIV status				
HIV negative	.06**	[.01, 0.51]	0.04**	[0.01, 0.31]
−2 log likelihood	179.7		189.7	

Note. OR = odds ratio; CI = confidence interval.

past 12 months compared to older gay men (odds ratio [OR] = 9.97; confidence interval [95% CI] [2.46, 40.41]; p < .01). Additionally, younger gay men were more likely to have visited a medical provider in the past 12 months compared to older men (OR = 3.65; 95% CI [1.28, 10.42]; p < .05). In the usual source of care model, younger gay men were less likely to have a usual source of medical care compared to older gay men (OR = .22; 95% CI [.05, .83]; p < .05).

Additional variables were found to be significantly associated with health service utilization. In the seeking services model, HIV negative gay men were less likely to

have seen a PCP compared to HIV positive gay men in the past 12 months (OR = .06; 95% CI [.01, .51]; p < .01). In the usual source of care model, lower-income earning gay men were less likely to have a usual source of medical care compared to high-income gay men (OR = .40; 95% CI [.16, .98]; p < .05). Those with health insurance were more likely to have a usual source of medical care than those who do not have health insurance (OR = 2.58; 95% CI [1.05, 6.19]; p < .05) and HIV negative gay men were less likely to have a usual source of medical care than HIV positive gay men (OR = .04; 95% CI [.001, .31]; p < .01).

<sup>\*</sup>p < .05. \*\*p < .01.

## **Discussion**

Age cohort was found to significantly impact the likelihood of gay men utilizing health services where older gay men were seen to access medical care less often when compared to both younger cohorts. When comparing to older gay men, middle-aged gay men were more likely to have sought medical care in the past 12 months. Additionally, younger men were more likely to have sought medical care in the past 12 months compared to older men. This finding is consistent with current research on this population which suggests older gay men may experience ambivalence toward seeking care to minimize incidents of stigma and discrimination based on sexual identity or other factors (Erdley et al., 2014; Fredriksen-Goldsen, Kim, Muraco, & Mincer, 2009). It appears the historical social stressors experienced by the older generation may be impacted by stressors associated with their sexual identity, although additional research is needed to confirm this association. Middle-aged men, due to their experience of coming-of-age during or shortly after the AIDS epidemic, may relate to their higher likelihood of seeking care more regularly. This cohort may also benefit from a more progressive society which emerged during their young-adulthood making ambivalence to seeking care as a way to minimize stigma or discrimination less important. Younger men may have sought medical care more often than older men for services such as HIV/STI testing or HIV pre-exposure prophylaxis (PrEP) consultations which are heavily advertised to this younger generation who did not personally live through the AIDS epidemic.

Age cohort was seen to impact the likelihood of gay men having a usual source of care. Results from this study suggest that younger gay men when compared to older gay men are less likely to have a usual source of medical care. Similar to studies on adolescents who identify as gay, this finding suggests that younger gay men do not limit their health services to one particular health agency which is further supported by this study, in that younger gay men did not significantly differ from older gay men in service utilization in general. Newman et al. (2014) found that younger gay men may be more inclined to use drop-in based health services that are readily available without appointments or establishment of care because of their more transient lifestyle (Newman et al., 2014) which supports the finding in this study.

Although previous studies have shown the unique health-seeking and use characteristics of specific age cohorts (David & Knight, 2008; Kessler et al., 2015), the current study is novel in its trichotomy analysis of differing age cohorts which provides in-depth information beyond the traditional dichotomization used in previous studies allowing for a richer examination into the behaviors of gay

men at various age groups. The findings suggest that differences in health service access and utilization are present throughout the life course of gay men. This indicates each age cohort will respond in varying forms during health service utilization and access which challenge previous findings suggesting generic differences between heterosexual and gay populations as well as between dichotomized age groupings.

In addition to the main findings, socioeconomic status including income and insurance status were found to be a significant predictor of health service utilization among gay men where men who reported lower income and no insurance received fewer health-care services. HIV status was seen to significantly impact the health service utilization of gay men. HIV positive participants were more likely to have visited a medical provider in the past 12 months as well as to have a usual source of care which may result from a greater need for service use.

# Limitations

The current study is not without multiple limitations. The participants in this study were recruited using a venue-based sampling technique. This technique is used when sampling hard-to-reach populations including gay men. Although this technique is considered the gold standard for sampling hard-to-reach populations, it hinders conclusive generalizations about gay men in general. For future studies, it will be beneficial to recruit a larger and more diverse sample which expands study participation to those who may not frequent venues where large number of gay individuals spend time.

Due to the use of cross-sectional data, the findings of this study cannot predict casual relationships between variables under investigation. To reduce the impact of this limitation, future research on age-related effects on health service utilization should incorporate longitudinal data. Operationalization of concepts and variables is also considered a limitation. For future studies, it is recommended that robust measures of health service utilization be incorporated in the sampling battery to more accurately assess this topic. Although the results of this study are consistent with previous research in this area, the need for measures assessing in-depth health service utilization and experiences with health services will help inform future research and practice implications.

The demographic makeup of the sample used is considered a limitation due to its emphasis on high earning White gay men. This limitation is considered an extension of the sampling technique. The results may not be generalizable to areas throughout the United States which do not offer comprehensive health coverage as San Francisco does through its Healthy San Francisco program (McLaughlin et al., 2011). Lack of health coverage

in other parts of the United States may be seen as a predictor of health service utilization due to limitations in access and affordability where in this sample it was not.

Last, a major limitation of this study is the lack of clarity around what type of health provider was sought and what services were provided when considering the second dependent variable: "In the past 12 months, have you seen a doctor, nurse, or other health-care provider?" Information on what type of provider (primary care, sexual health, specialist, etc.) could help detail what types of health services are being sought more often and why these services are used more or less than others. In particular, it would be useful to know whether participants considered receiving HIV/STI testing a source of health care compared to vising a primary-care provider for general wellness.

### Conclusion

Despite these limitations, this study is among the first studies examining the impact of age on health service utilization among gay men. To further explore this issue, it is recommended that future research be dedicated to examining age-related differences within the gay population that reach further than health service utilization. Additionally, it is recommended that mixed-method or qualitative research designs be used to explore health service-seeking and use in this population to gather more in-depth knowledge of these behaviors. Little research has been done on gay men in general but even fewer have been dedicated to understanding inter-group differences which may impact the well-being of these individuals. Gay men represent one of many marginalized populations but due to the lack of governmental census tracking of sexual minorities, the exact number of gay men currently living in the United States is still unknown. While various reports have estimated the number of sexual minorities in the United States (Gates, 2017; Ward & The National Center for Health Statistics Issuing Body, 2014), without specific census tracking these reports remain estimates. Given this gap in census collection, there is potentially less known about the issues impacting the lives of these individuals on a national level than estimated by reports.

The implications of this study include a consideration for inter-group differences that exist within the gay population beyond the traditional binary of adolescent and adult. Practice implications include revising traditional service delivery tactics which tend to see gay populations as static and homogeneous to ones that either take age into consideration or are age-specific in design. Tailoring services for specific gay subpopulations, like age cohorts, have the potential to reduce health disparities by highlighting the unique needs of subpopulations when compared to the

general gay population. LGBT community health centers, in particular, can use these findings to better meet the needs of clients, beyond providing a safe space, by customizing services specific to age cohorts or other subpopulations that find themselves hidden within the larger population.

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