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Integration of the Healthcare Utilization Model to Understand Barriers to HIV Prevention and Treatment Services Among MSM in Rural Georgia: A Qualitative Study

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Abstract

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By Jordan D. Helms

BACKGROUND Men who have sex with men (MSM) living in the Southeast region of the United States are at highest risk of contracting HIV. Furthermore, MSM that live in rural communities experience unique challenges in access to HIV treatment and prevention services. The purpose of this study was to examine barriers to HIV prevention and treatment services among MSM that live in rural Georgia.

METHODS: An exploratory qualitative study was conducted to examine barriers of HIV-negative and HIV-positive MSM living in rural Georgia, as well as healthcare workers in that area. The Andersen Healthcare Utilization Model (HUM) was used to guide the investigation of barriers to HIV prevention and treatment services. This study was conducted in two phases. For Phase I, seven healthcare workers were enrolled and participated in semi-structured in-depth interviews. For Phase II, 17 MSM participants were enrolled and participated in semi-structured, in-depth interviews. Thematic analysis was utilized to explore themes within the data.

RESULTS: The Andersen Healthcare Utilization Model was an appropriate framework to describe the barriers to HIV prevention and treatment services. Population characteristics, including *Predisposing* factors, *Enabling* factors, *Need* factors, as well as *Health Behavior* and *Health Outcome*s served as facilitators and barriers to HIV prevention and treatment services among MSM. Stigma, lack of knowledge, lack of prevention services, lack of personal and community resources, perceived health and health status, and social structure of rural life acted as barriers to HIV prevention and treatment services among MSM in rural Georgia.

CONCLUSIONS: MSM living in rural Georgia experience a variety of barriers to HIV prevention and treatment services. Overcoming barriers associated with HIV prevention and treatment services is necessary to achieve fewer cases of HIV infection and increase the care of people living with HIV. Future research is needed explore the impact of barriers related to healthcare utilization among MSM living in rural communities.

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Chapter I: Introduction

National HIV Data

Human immunodeficiency virus (HIV) is the infectious agent that, if left untreated, can cause acquired immunodeficiency syndrome (AIDS). HIV/AIDS is a worldwide health concern that kills millions of individuals each year. In the United States, 1.2 million people 13 and older currently live with HIV including 13% who are unaware of their status. New infections remain steady at about 50,000 new infections each year.(1) Of all transmission categories, men who have sex with men (MSM) of all races and ethnicities are the most affected by HIV.(1) Even though MSM represent only 4% of the United States population, they account for 78% of new HIV infections among men and 63% of new infections in general. From 2005 to 2014 there was a 19% decrease in new HIV infections for MSM overall.(1) Among white MSM, diagnosis dropped by 18% between 2005 to 2014. But among Hispanic and Latino MSM, new HIV infections increased by 24% between 2005 and 2014.(1) For Black and African-American MSM, the rate of diagnosis increased 22% between 2005 and 2014. However, the rate of new infections has leveled off, increasing less than 1% each year since 2010.(1)

According to the CDC, the Southern region[*] of the United States is most affected by HIV/AIDS. In 2015, the South accounted for 55% of new HIV cases.(2) In addition, the South accounts for 44% of all people living with HIV even though this region makes up 37% of the national population.(2) Furthermore, 52% of people living with AIDS

[*] The CDC classifies the following states as being included in the South: Alabama, Arkansas, Delaware, Washington, D.C., Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.[2]

reside in the South and 53% of persons who have died from AIDS have lived in the South.[2] Finally, the CDC noted that the South, in general, was behind all other regions in the United States in terms of HIV prevention, as well as HIV treatment interventions.[2]

National HIV/AIDS Strategy for the United States

In 2015, the White House announced its National HIV/AIDS Strategy for the United States.[3] This strategy included four main goals and several strategies to achieve these goals.[3] The goals for 2020 are to: 1) reduce new HIV infections; 2) increase access to care and improving health outcomes for people living with HIV; 3) reduce HIV-related disparities and health inequities; and 4) achieve a more coordinated national response to the HIV epidemic.[3] Two factors are instrumental in achieving these national HIV goals: prevention and treatment.

HIV Prevention

The CDC includes a variety of mechanisms for preventing HIV transmission. These mechanisms include: routine HIV testing, linkage to care, prevention of mother-to-child transmission; treatment as prevention; use of pre- and post-exposure prophylaxis; correct and consistent condom use; substance use treatment; partner testing and counseling; and STI testing and treatment.[4] HIV testing refers to at least annual HIV testing and counseling.[4] Linkage to medical care refers to engaging in medical care for HIV within 30 days of receiving an HIV-positive test.[4] HIV prevention via mother-to-child transmission includes the mother taking antiretroviral medication (ART) to prevent transmission to her child.[4] Treatment as prevention (TASP) is a method which includes HIV positive individuals adhering to ART.[4] Pre-exposure prophylaxis (PrEP) is a prevention method which includes a HIV negative person taking a once daily HIV

medication to prevent contracting HIV.[4] Post-exposure prophylaxis (PEP), on the other hand, is taking ART after contracting HIV and/or recent exposure, such as an accidental needle stick in by a clinician, for example.[4] Increased correct and consistent condom use has also been proven to prevent HIV. Prevention programs for people with HIV and their partners includes HIV testing, counseling, and other prevention methods as mentioned above.[4] Prevention programs for people at high risk for HIV infection includes PrEP, condom distribution, HIV testing, linkage to care, and counseling.[4] Substance abuse treatment and access to sterile syringes has also been known to reduce HIV infections.[4] Finally, sexually transmitted infection (STI) screening and treatment reduces HIV infections because STIs increase the likelihood of contracting HIV.[4] The CDC funds the above prevention methods at various levels within each state, city, and community.

The State of Georgia follows suit for these types of HIV prevention. Additionally, the State funds the following types of prevention: clinical testing, non-clinical testing, condom distribution, prevention with positives, prevention with high-risk negatives, and outreach/community mobilization.[5] Clinical testing includes implementing routine HIV testing in all health county departments.[1, 5] Non-clinical testing is implementing HIV testing in areas with higher HIV prevalence and among certain populations.[5] Condom distribution in health clinics and in areas with higher HIV prevalence and among certain populations.[5] Prevention with positives concerns itself with implementing programs among people living with HIV/AIDS.[5] Prevention for high-risk negatives includes targeted interventions among populations and individuals at elevated levels of risk for HIV infection.[5] Outreach and community mobilization includes the promotion of HIV testing during national HIV observances and at community events.[5] In addition to the

CDC funding prevention services, the State of Georgia funds the above services in certain communities, including rural spaces.

HIV Treatment

A second factor for reaching the 2020 goal for the National HIV/AIDS Strategy for the United States includes HIV treatment.[3] HIV treatment is often defined and measured by a continuum of care, a central tenet of the HIV Care Continuum Initiation launched by President Obama in 2013.[6] The ultimate goal of HIV treatment is to achieve viral suppression, or when the level of virus is very low and undetectable.[6] The CDC follows the proportion of people along the continuum of care. This continuum includes four stages: 1) diagnosis of HIV infection; 2) linkage to care within 30 days of infection; 3) engaged or retained in care; and 4) virally suppressed, or reaching a level of undetectable status.[6]

Nationally, according to the latest CDC surveillance report in 2014, 1.2 million people are living with HIV in the United States. Of those, 86% were diagnosed with HIV. Of the 86% people diagnosed with HIV, 40% were engaged in HIV medical care, 37% were prescribed anti-retroactive treatment and 30% achieved total viral suppression.[1, 6] However, these rates vary among states and within specific communities.

Georgia HIV Data

In 2013, Georgia was ranked fifth highest for persons living with HIV in the United States as well as the fifth highest state for new HIV infections.[7] As of December 2013, about 51,000 persons living with HIV reside in Georgia.[7] 80% of new infections in Georgia were transmitted via males and 72% of these infections were attributed to sexual contact among MSM.[7] As of 2013, 64% of persons living with HIV in Georgia

resided in the Metropolitan Statistical Area of Atlanta.[7] Interestingly, all but four health care districts are funded directly by the state. Rome, Gwinnett, Fulton, and DeKalb do not receive state funding for HIV prevention and treatment services. These districts receive funding directly from the CDC because of elevated rates of HIV infection (i.e. DeKalb and Fulton). However, the rate of new HIV infection among MSM remained stable between 2011 and 2014 in these districts.[8]

Care continuum statistics for Georgia were identified in 2014. As of 2014, linkage to care within 30 days of an HIV diagnosis was 75%, with 72% for Blacks, 83% for Whites.[9] Younger people (ages 18-24) had the lowest rate of linkage to care of any other age range with 68% linked to care.[9] Of the 75% of adults linked to care within 30 days of HIV diagnosis, 61% were retained in care and 45% achieved viral suppression.[9] The HIV care continuum for MSM in Georgia was very similar to adults overall, with 73% of MSM linked to care within 30 days, 48% retained in care, and 45% achieving viral suppression.[9]

There were noticeable differences in the care continuum between individuals living in the Atlanta MSA versus those not living in the Atlanta MSA. The proportions of those linked to care and virally suppressed are higher overall (77% and 47%, respectively) in the Atlanta MSA compared to the non-Atlanta MSA (72% and 42%).[9] However, the proportion with those retained in care are slightly higher for those who do not live in the Atlanta MSA counties, (49%) versus those who live within the Atlanta MSA counties (47%).[9]

Rural Health

In comparison with healthcare settings in more urban locations, there are significant differences and needs for the rural locations. Briefly, those living in rural

communities are met with special obstacles that are either not experienced by those living in the urban setting or that are heightened by living in rural communities. Rural populations tend to be older, poorer, and sicker than other groups, and tend to have need for high-quality and timely care.[10] It is estimated that 1 out of 5 people in the united states live in rural settings, but only one tenth of physicians do.[10] According to the U.S. Department of Health and Human Services, two-thirds of the health professional shortage are in rural areas and these shortages result in long travel distances, long wait for appointments, limited access to specialists, and a large patient population which can overwhelm the rural healthcare system.[10]

Rural Georgia and MSM

The state of Georgia is comprised of 16 Healthcare Districts, each district comprising one or more counties. Between 2011 and 2014 sexual contact among MSM accounted for the majority of new HIV infections in Georgia.[8] However, there were two districts where the highest rates of new HIV infections were not attributed to MSM. These districts were Valdosta and Dublin, which are geographically adjacent.[8] Because these two districts are geographically adjacent, certain factors, such as demographics, politics, culture, could be similar and therefore affect the method of HIV infection. Additionally, not every healthcare district accepts funding from the state, which affects HIV infection rates and prevention methods. Gwinnett, Rome, Fulton, and DeKalb healthcare districts do not accept state funding.

Study Purpose

Drawing from specific levels of the Andersen Healthcare Utilization Model (HUM), this study aimed to examine *Predisposing* (i.e. demographics, health beliefs, social structure), *Enabling* (i.e. personal resources and community resources) and *Need* characteristics (i.e. perceived health and evaluated health) and how it affects use of HIV prevention health services and HIV treatment services among rural MSM in Georgia. Specifically, barriers to access of HIV prevention and treatment services among men who have sex with men (MSM) living in four rural Georgia health districts (Valdosta, Rome, Gainesville, Waycross) were examined and compared to the general population residing in these communities.

Study Objectives

The primary objective of this study was to describe the healthcare needs, concerning HIV prevention and treatment, of self-identified MSM who live in rural Georgia. Secondary objectives included understanding perceived barriers to HIV prevention and treatment services among rural MSM and examining the differences between the perceptions of healthcare workers and rural MSM concerning barriers to HIV treatment and prevention services. Finally, the behavior and life or MSM living in rural Georgia was accessed.

Significance of the Study

Based on the literature reviewed, there are several gaps that this study aimed to address. First, while there have been a limited number of studies examining rural MSM, only a few have examined the communities in the South. Second, most studies have examined the overall life of LGBT persons in rural communities and did not specifically

ask about HIV prevention or treatment services. Third, there have been no studies specifically targeted to rural Georgia. Fourth, the majority of studies looking at rural life and MSM do not use the label of MSM. Instead, they require their participants to self-identity as gay, straight, bisexual, etc. and not as MSM, which as literature suggests, is a more inclusive label. Lastly, very few studies have used a theoretical framework to guide their research. To date, no study has used the Andersen Model for Healthcare Utilization to examine rural MSM, healthcare workers, and access to HIV treatment and prevention services.

Theoretical Framework

Very few studies have been conducted concerning rural MSM and access of healthcare, more specifically, HIV prevention and treatment services. Many studies that have been clinical studies not grounded in health behavior and a few theory-based interventions, again from a clinical position. On study conducted by Bowen, Horvath and Williams used Social Cognitive Theory as the basis for a virtual intervention for HIV prevention among rural MSM.[11]

There have, however, been numerous studies conducted grounded in behavioral theory concerning HIV prevention and treatment services in general. A brief overview of the literature found that Social Cognitive Theory and Health Belief Model have been used most frequently when discussing HIV prevention and treatment among MSM.

The Behavioral Model and Access to Medical Care, also known as the Utilization of Healthcare Services Model and the Andersen Behavioral Model hereto referred to as "HUM," is a theoretical framework which describes differences in access to healthcare services between the general population and a vulnerable population. Andersen and

Aday[12] first developed this theoretical framework in the 1970s and Andersen has since revisited, revised, and evaluated the framework.[13] The model used in this study is loosely derived from the model that Gelberg, Andersen, and Leake used in their study with the homeless population.[14] The model has also been adapted to work for other vulnerable population. Furthermore, people living with HIV and at high risk for HIV can be considered as a vulnerable population. Finally, because the HUM has a history assessing access and satisfaction to healthcare among vulnerable populations, this is the best theory for this current study.

The HUM examines characteristics of the populations, the general population and the vulnerable population and how these characteristics influence the health behaviors and health outcomes of the populations. *Population Characteristics* include three branches: *Predisposing*, *Enabling*, and *Need* factors. Within each branch are certain constructs that affect access to healthcare. *Predisposing Characteristics* are those which exist before illness (e.g. age, race, gender, sexual orientation, etc.). *Enabling Characteristics* are means by which individuals are able to utilize healthcare services. These include income, social support, transportation, etc. Finally, *Need* is the actual illness. This is the difference between the health conditions of the general population and the vulnerable population.

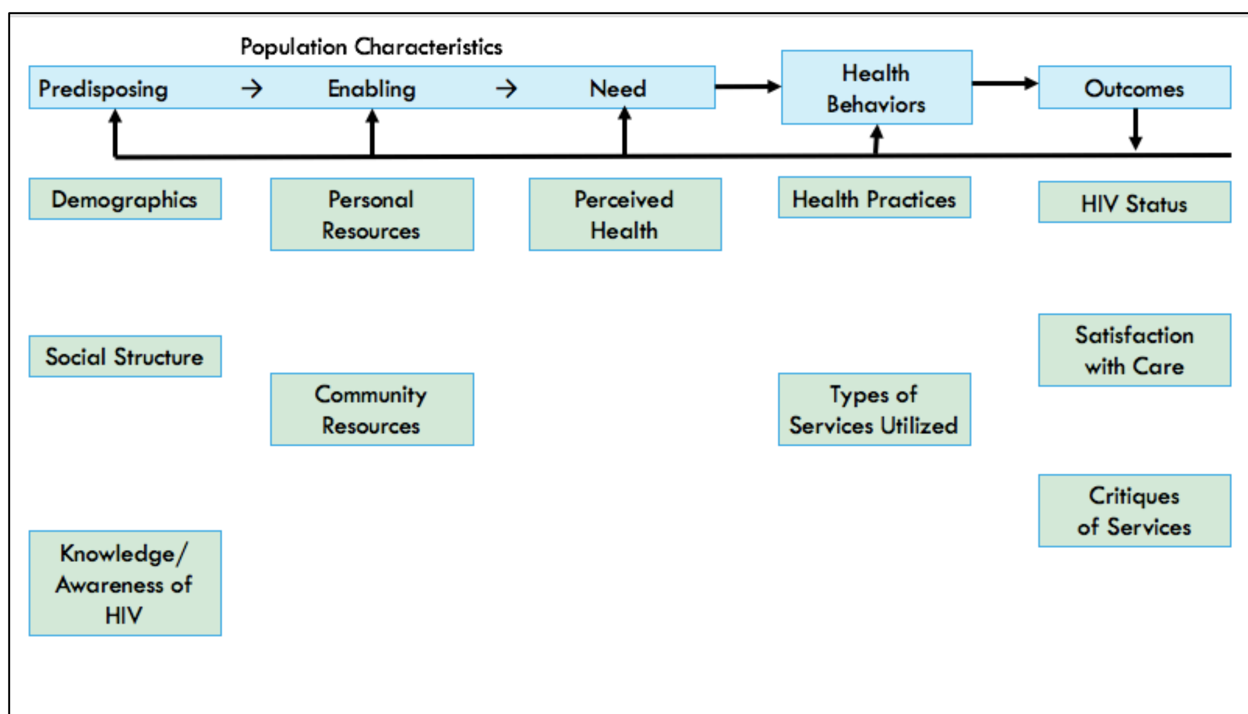

Figure 1: Revised Framework of the Healthcare Utilization Model

These factors affect the *Health Behavior* and utilization of healthcare services. This construct includes what kind of service, length of the services, purpose of the service and the physical location of where the service is performed. Lastly, these overarching branches result in the *Health Outcome* (i.e. HIV, AIDS, et). In addition to healthcare status, this model measures satisfaction with healthcare services, such as time spent with provider, and cost, ability, coordination of, and communication of services.

This study examined different factors within each construct and each level within the constructs. For example, demographics were measured as were behavioral characteristics. These behavioral characteristics included social support, perceived barriers to care, stigma from the community and from healthcare providers, available treatment services, etc. Finally, demographics and behavioral characteristics were examined to determine the effect on *Health Outcome* (i.e. HIV status).

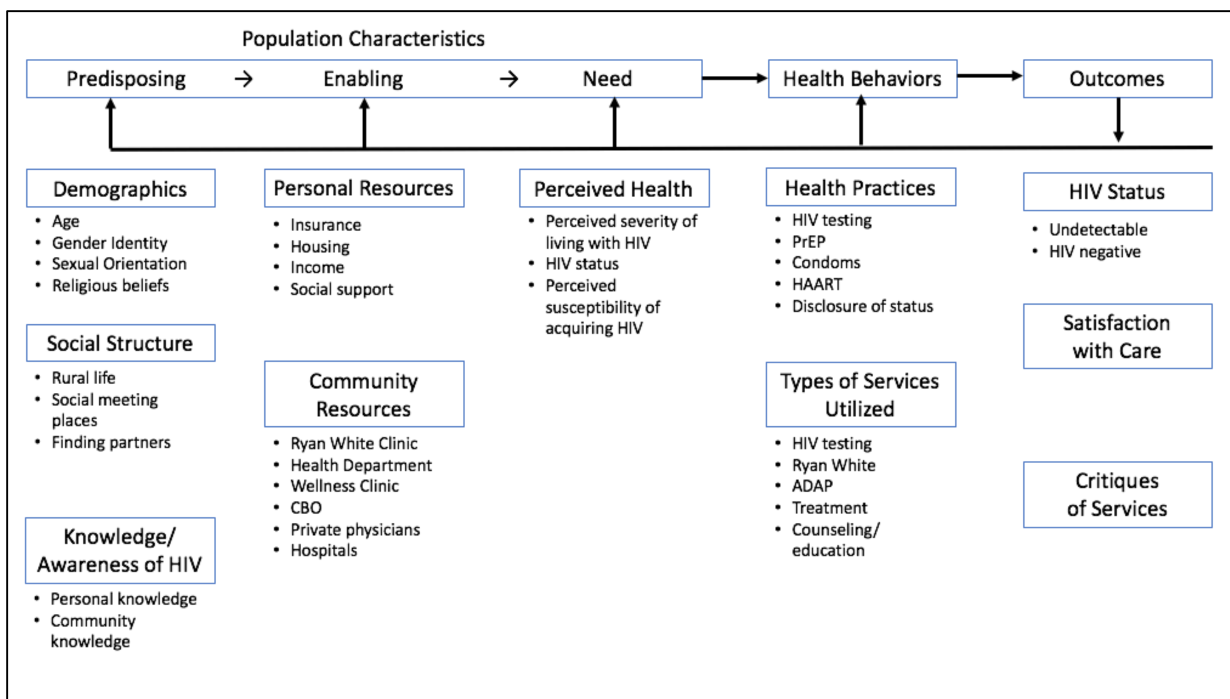

Figure 2: Theoretical Framework Map*: Constructs and sample measures involved in this study*

Chapter II: Literature

Introduction

As previously stated, the objectives of this study were 1) to describe the healthcare needs, concerning HIV prevention and treatment, of self-identified MSM who live in rural Georgia and 2) to understand perceived barriers to HIV prevention and treatment services among rural MSM and examining the differences between the perceptions of healthcare workers and rural MSM concerning barriers to HIV treatment and prevention services.

Previous literature has shown that 1) MSM who live in in the Rural Southeastern Region of the United States are at higher risk for HIV acquisition and more negative care outcomes related to HIV and 2) MSM who live in rural areas experience unique barriers to HIV prevention and treatment. However, no other study has examined barriers to HIV prevention and treatment services among MSM living in rural Georgia. This chapter explores literature relevant to this issue and is organized in the following sections: rural MSM and the HIV epidemic; unique factors associated with rural life; MSM and other sexual minorities living in rural areas; and barriers to HIV prevention and treatment among MSM living in rural areas.

Rural MSM and HIV in Georgia

In the United States, 1.2 million people 13 and older currently live with HIV including 13% who are unaware of their status.[(1)] New infections remain steady at about 50,000 new infections each year.[(1)] Of all transmission categories, MSM of all races and ethnicities are the most affected by HIV.[(1)] Even though MSM represent only 4% of the

United States population, they account for 78% of new HIV infections among men and 63% of new infections in general.[1]

In 2015, the South accounted for 55% of new HIV cases.[2] Additionally, 52% of people living with AIDS reside in the South and about 53% of persons who have died from AIDS have lived in the South[2] Finally, the CDC noted that the South, in general, was behind all other regions in the United States in terms of HIV prevention, as well as HIV treatment interventions.[2]

In 2013, Georgia was ranked fifth highest for persons living with HIV in the United States as well as the fifth highest state for new HIV infections.[7] As of December 2013, about 51,000 persons living with HIV reside in Georgia.[7] About 80% of new infections in Georgia were male and 72% of these infections were attributed to sexual contact among MSM.[7] As of 2013, 64% of persons living with HIV resided in the Metropolitan Statistical Area of Atlanta.[7]

The HIV care continuum for MSM in Georgia was very similar to adults overall with 73% linked within 30 days, 48% retained in care, and 45% virally suppressed.[9] There were noticeable differences, however, in the care continuum between individuals living in the Atlanta MSA versus those not living in the Atlanta MSA. The proportions of those linked to care and virally suppressed are higher overall (77% and 47%, respectively) in the Atlanta MSA compared to the non-Atlanta MSA (72% and 42%).[9] However, the proportion with those retained in care are slightly higher for those who do not live in the Atlanta MSA counties, (49%) versus those who live within the Atlanta MSA counties (47%).[9]

Unique Factors Associated with Rural Life

For the purposes of this study, all counties and health districts outside of the Metro Statistical Area of Atlanta are considered rural. Persons who live in rural environments face unique disparities that are not experienced by their metropolitan counterparts. For instance, those who live in rural areas often experience longer travel times to hospitals, clinics, and other places to receive medical care and treatment. Additionally, there might be fewer medical resources available in rural communities because there are not as many people needing these services.

MSM and Other Sexual Minorities Living in Rural Areas

A 2013 study performed by the South Carolina Rural Health Research Center examined 28 states and found that 95% of the rural counties lacked Ryan White medical providers.(15) The Ryan White Program is a federal program which provides financial resources to manage HIV/AIDS for those who lack a medical provider and it is the largest program that focuses exclusively on HIV/AIDS.(16) In terms of resources, politics of rural areas often determine whether it receives any government funding, including money from Ryan White Programs. Finally, rural communities are often characterized by close, tight-knit communities where more traditional, conservative ways of life are valued. Each of these aspects of rural life may contribute to higher rates of HIV infection as well as reduced healthcare quality and access.(17)

Fewer clinics, primacy care providers, and lack of insurance may also contribute to higher infections of HIV. For instance, an individual may not be aware of his status, not have a primary care provider or clinic for where to get tested, and he might not have insurance to utilize prevention and treatment services.(18-21) Additionally, if someone were

to become infected with HIV and they live in a rural area with few to little healthcare provides, they might not have access to prevention and treatment resources.

Conservative, "traditional" values in smaller, rural towns also lead to stigma. Stigma from healthcare providers, family, friends, and the greater community all contribute to HIV infections. For instance, if someone is concerned about their HIV status, they might fear stigma from their community, healthcare provider, and/or family if they seek testing or prevention services. In addition, if someone does become HIV positive, they will most likely not go to the clinics in the area or their primary care provider because of stigma. (18-21)

Barriers to HIV Prevention/Treatment

A limited number of studies have examined the relationship between rural life and HIV in general, and even fewer studies examine how rural life negatively affects MSM. Common barriers to health care for rural MSM include stigma, affordability/lack of health insurance, inadequate prevention services, hostility, and transportation. (18-30)

Stigma

Stigma was the most common theme in literature examining rural life, MSM, and HIV. Stigma can be further differentiated into stigma for being perceived as a homosexual as well as stigma for being perceived to be living with HIV. Stigma can be measured at each level of the Healthcare Utilization Model. For instance, previous studies have classified stigma from the community(22, 24) which can be measure under the *Enabling* construct and which affects the *Health Behavior* as well as the *Health Outcome*. In several studies, it was found that stigma from the family and healthcare provider

discrimination and stigma were felt by rural MSM.[24, 31] This also can be measured under the *Enabling* construct which again affects the *Health Behavior* and the *Health Outcome.*

Affordability/Lack of Insurance

Affordability and lack of health insurance was also a barrier to healthcare services as identified by the literature.[31, 32] Adimora et al. examined political policies that affected health insurance and found that many Southern states, where rates of new HIV infection are the highest, and where states chose not to extend their Medicaid program under the Affordable Care Act.[32] This means that more people live without insurance and are unable to afford prevention and/or treatment services. Insurance status as well as cost of services can be measured under *Predisposing*, *Enabling*, and *Need*, which affect the *Health Behavior* and the *Health Outcome*.

HIV Testing

Inadequate testing rates and testing services also attributed to higher rates of HIV infection among rural MSM. Ohl and Perencevich found that rural persons were less likely than their urban counterparts to have ever been tested for HIV and were often diagnosed at later stages of infection.[18] In addition, Rosser and Horvath noted that the more religious a state, the less successful their HIV prevention services were.[22] Testing is measured within the *Predisposing* and *Need* construct and *Health Behavior* and *Health Outcome.*

Community Hostility

Community hostility and lack of LGBTQ+ networks also lead to increased HIV infections.[22-24] Rosser and Horvath found that the lack of a gay community attributed to higher HIV rates and higher cases of sensation seeking.[22] Williams et al. also found that

hostility, increased violence and social and sexual isolation towards rural MSM lead to increased participation in high risk, high sensation seeking behavior.[23] Finally, Preston et al. found that living in an unsupportive community attributed to higher sexual risk taking and higher rates of engagement in riskier sexual behaviors, which all contribute to higher rates of new HIV infections.[24] Because the Healthcare Utilization Model examines the "vulnerable" population in comparison with the "traditional" population, a sense of community can be measured at each construct and at each level.

Transportation/Structural Factors/Lack of Resources

Structural factors include the sprawl of the rural community, transportation to and from healthcare provides, the location of healthcare providers' office, availability of resources to travel, the built environment, as well as HIV prevention and treatment resources (medication, condoms, etc.). There have been several studies that have shown transportation and structural factors to be barriers to access to healthcare surrounding HIV prevention and treatment. Insurance, shortage of providers, medical mistrust, location, and transportation are all barriers to HIV prevention and treatment in rural communities.[19, 25, 26, 32] These factors are part of the *Population Characteristics*, specifically *Predisposing, Enabling,* and *Need*, which affect the *Health Behavior* and the *Health Outcome.*

The Role of Providers

Perhaps one of the most important parts of HIV prevention and treatment is the role the provider(s) plays. However, because of the nature of HIV, the more traditional, conservative and religious rural community, the less likely that MSM are to be "out" to their providers.[20, 21, 25, 27, 30] More specifically, Petrol et al. examined the relationships

between MSM being out to their providers and their healthcare outcome. The authors found that that disclosure of sexual orientation was associated with appropriate health services related to MSM.[21] Additionally, shortage of medical providers is also linked to poor healthcare outcomes in all rural communities, especially surrounding HIV prevention and treatment.[15, 21, 30, 32, 33]

Factors which Contribute to Health Outcome (HIV Acquisition or Management)

There are several factors that contribute to HIV acquisition and transition. Popular factors that act as barriers to prevention and treatment services have been mentioned in previous sections. However, there have been several studies which have examined MSM living in rural communities and their sexual experiences. High-sensation seeking sexual experiences have been attributed to HIV stigma, loneliness, and internalized homophobia.[18, 34-36] There is also a link of what type of venue rural MSM are finding their partners and increased risk. With the advent of internet chat rooms and hook-up apps, MSM who live in more conservative, rural societies are able to meet each other for sex. Several studies have found that internet use in finding a sexual partner, in conjunction with stigma, increased risky sexual behavior and decreased condom usage with anal sex.[23, 34-37]

Theoretical framework

There have been a few studies which use HUM in regards of HIV. More specifically, after an exhaustive review of the literature, there were two studies and one systematic review that specifically used HUM. In regards to HIV treatment and care, a systematic review by Brenann et al. reviewed ten articles worldwide that used HUM. The

authors found that *Predisposing* factors included gender, age, ethnicity, immigrant status, and route of infection.[26]

Christopoulos et al. also used the HUM in terms of HIV and found that individual level factors attribute to HIV care and treatment such as coming out and self-acceptance in terms of sexuality as well as HIV status.[28] Additional individual level factors include stigma, discrimination, racism, homophobia, religiosity, and substance use.[28] Enabling factors were found to include personal/family resources and community resources which matches the constructs found within the HUM.[28] Finally, *Need* factors were defined as the individual's self-perceived health and need for care.[28]

Finally, using the HUM, Holtzman et al. described 18 types of barriers and facilitators to retention in care as well as adherence to antiretroviral medication.[25] There were 11 factors that were common to both retention and adherence. These barriers and facilitators included: stigma, mental illness, substance abuse, social support, reminder strategies, housing, insurance, symptoms, competing life activities, colocation of services, and provider factors.[25] Three distinct factors were specifically attributed to retention (transportation, clinic experiences and appointment scheduling), and four factors affected adherence (medication characteristics, pharmacy services, health literacy, health beliefs).[25]

Summary

MSM in the rural South, including Georgia, are disproportionately affected by HIV.[2] There needs to be a closer examination to the unique factors that are barriers and facilitators to HIV prevention and treatment. Examining these barriers in this demographic has potential for better outcomes for this population. Research is needed to

examine how stigma, health insurance, rural placement, relationship with providers, knowledge/awareness of HIV, structural factors and HIV testing affects the *Health Behavior* and the *Health Outcome* of MSM in rural Georgia. These factors have been previously examined in limited studies, but there has been no research on this specific population. Because of the lack of research surrounding healthcare utilization and HIV among MSM, especially in rural Georgia, this research study will explore the experiences of MSM in rural Georgia surrounding HIV prevention and treatment services as well as other factors associated with living in a rural community.

Chapter III: Methodology

Introduction

This study was an exploratory qualitative study conducted in two phases. The study population consisted of helathcare workers and self-identified MSM 18 years and older who live in rural Georgia. More specifically, MSM participants resided in the following health districts: Rome, Gainsville, Valdosta, and Waycross, and health workers worked in the afformentioned healthcare districts. The first phase of the study consisted of interviewing two healthcare workers in each district. The healthcare workers gave their perceptions of current services being offered and perceived barriers within their disctrict. In addition, the healthcare workers were crucial for identifying rural MSM to be interviewed in each district as part of phsae two. For phase two, three to five MSM participants per healthcare district were interviewed

After determining eligibility using the screening guide (*Appendix A*) and written consent was obtained (*Appendix B*), a total of seven healthcare workers were enrolled in the study. Following screening (*Appendix C*) and oral consent obtained (*Appendix D),* seventeen HIV-negative and HIV-positive MSM were recruited. Twenty-four semi-structured interviews were scheduled, conducted via phone, and audio-recorded. Upon competition of each interview, the interviews were transcribed and then data analysis was further conducted.

Study Population

Participants for both phases of the study worked and resided in the following four healthcare districts: Rome, Gainesville, Valdosta and Waycross (*Figure 1*). This figure shows the location and makeup of the healthcare districts included and this study.

Additionally, the geographic location of the healthcare districts provided unique characteristics and responses from participants. The Rome Healthcare District is in the northwest part of Georgia, and contains the following 10 counties: Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk, and Walker. The population total for the Rome Healthcare District, as of 2015, is 653,743 which represents 6.4% of Georgia's state population.[38] The Gainesville Healthcare District in the northeast part of Georgia and contains the following 13 counties: Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union and White. The population total for the Gainesville Healthcare District, as of 2015, is 674, 664, which is 6.6% of Georgia's state population.[38] The Valdosta Healthcare District is in the southern part of the state and contains the following 10 counties: Ben Hill, Berren, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift, and Turner. The population total for the Valdosta Healthcare District, as of 2015, is 254, 588, which is 2.5% of Georgia's state population.[38] The Waycross Healthcare District is located in the southeast part of the state and contains the following 16 counties: Appling, Atkinson, Bacon, Brantley, Bulloch, Candler, Charlton, Clinch, Coffee, Evans, Jeff Davis, Pierce, Tattnall, Toombs, Ware, and Wayne. The population total for the Waycross Healthcare District, as of 2015, is 365,293 which is 3.6% of Georgia's state population.[38]

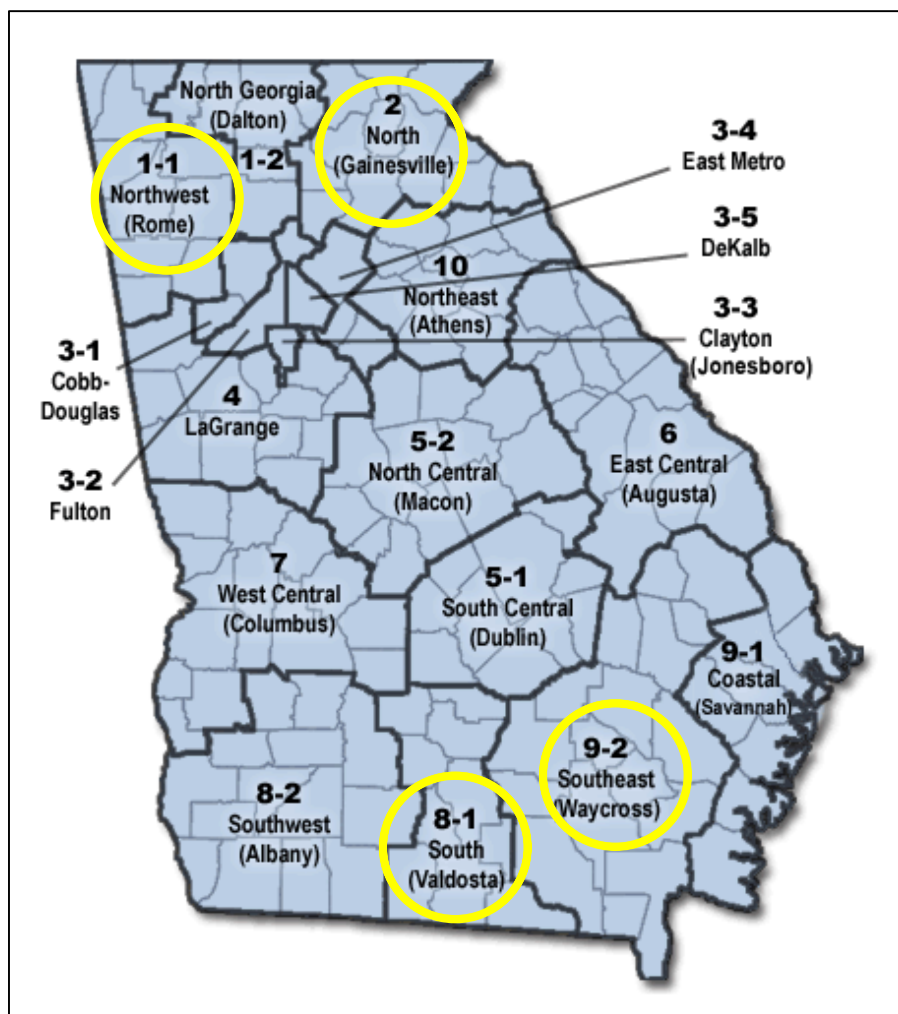

Figure 3: Map of Georgia's Sixteen Healthcare Districts[39]

Participants

Inclusion Criteria

For the Phase I of the study, the following inclusion criteria were used to access eligibility: works with MSM in regards to HIV prevention/treatment services in one of the four healthcare districts; familiar with services availbile for MSM individuals; ability and willingness of partcipant to provide written informed consent; able and willing to undergo an in-depth interview; and fluent in English.

For Phase II, the following inclusion criteria were used to assess eligiblity: male sex (sex defined as sex at birth); age 18 years or older; sex (oral, anal, or both) with any man in the past; ability and willingness of partcipant to provide verbal consent; able and willing to undergo an in-depth interview; resides in the health district studied; and fluent in English.

For Phase I, the following exclusion criteria were used to assess eligibility: does not work with MSM regarding HIV prevention services; does not work in district studied; unfamiliar with services available for MSM individuals; unable or unwilling to provide verbal or written informed consent; unable or unwilling to undergo in-depth interview; and not fluent in English

For the Phase II, the following exclusion criteria were used to assess eligibility: female sex; age less than 18; no sex with a man in the past; unable or unwilling of participant to provide verbal or written informed consent; unable or unwilling to undergo in-depth interview; does not reside in the health district studied; and not fluent in English

Participant Recruitment

All participants were screened for eligibility based on the aforementioned inclusion and exclusion criteria. Before interviews were performed, potential participants were asked questions to determine eligibility for the study.

For Phase I of the study, snowball recruitment strategy was used in the form of referral system based on those who work professionally with the target populations. Employers at the Georgia Department of Public Health made the initial contact to the healthcare workers in the districts to be studied. A copy of the initial email sent to healthcare workers can be found in *Appendix E*. The names and contact information of

the healthcare workers were generated from a statewide HIV prevention meeting at the Georgia Department of Public Health. Healthcare workers in each district were asked to come up with the names and contact information of other healthcare workers in that district, in the event that we were only able to contact one healthcare worker or the second was unable to be interviewed.

In return, MSM participants were recruited via recommendations during interviews with healthcare workers. Because this study included a hidden, small, private population, referrals by the healthcare workers were useful. Healthcare workers identified known community leaders who fit the inclusion criteria and generated quality, useful, and reliable participants. Once community leaders had been identified and referred by district leaders, they were contacted, informed about the study, and screened for potential enrollment. Additionally, recruitment posters were displayed in Ryan White Clinics, department of public health offices, and other healthcare related clinics in the four districts where the targeted population frequented. The recruitment flyer is available in *Appendix F.*

Participants were also encouraged to refer their friends who might be eligible to contact the Principal Investigator in order to be screened. Additionally, recruitment flyers were also distributed amongst listservs and on social media, such as Facebook and Twitter. Finally, recruitment was conducted using a geospatial "hook-up" app. This proved to be the most fruitful form of recruitment. This app had the capability to search men by zip code, and because it was an online tool, it allowed for anonymity for the participants. Potential participants did not have to show their face and because of the sensitive nature of the subject, and the format, the uneasiness and discomfort was able to

be diminished. A sample conversation with a participant on the “hook-up” app can be found in *Appendix G.*

Data Collection Methods

Semi-structured interviews were conducted in both phases of the study. Semi-structured, in-depth interviews comprise a particular field research data-gathering process designed to generate narratives that focus on fairly specific research questions.[(40)] Semi-structured interviews utilized a interview guide, comprised of questions as well as probes for each question. However, because of the semi-structured nature of the interview, the interviewer had the option to ask questions out of order, as they arose, as well as ask questions that were not on the interview guide. Even though the interview was semi-structured, there were about five domains that were constant for each interview in their respective phases.

Domains that were discussed in Phase I interviews included: experiences with MSM; information about health district; information about HIV prevention/treatment services offered; perceived barriers to HIV prevention/treatment services; critiques to the services; and recommendations

Topics that were discussed in Phase II interviews included: experiences living in the health district; experiences, if any, with healthcare providers; HIV knowledge; perceived barriers; perceived severity; perceived susceptibility; experience with HIV prevention and/or treatment services; critiques to services; and recommendations.

For each phase there was a different interview guide written. The interview guides contained major domains as well as a list of optional probes to facilitate more thoughtful discussion responses to the questions. The interview began with a broad question to get

the respondent comfortable with talking and proceed with a list of probing questions. The opening question was "Tell me about yourself." Full interview schedules and questions can be found in *Appendix H* and *Appendix I*. At the beginning of each interview, in both phases, a series of demographic questions were asked. These demographic questionnaires can be found in *Appendix J* and *Appendix K*.

After the first few interviews were conducted, they were reviewed to determine if the interview guides needed to be adjusted based upon respondent input. All interviews for this study were digitally recorded on two separate devices, a handheld digital recorder and a phone with recording and playback capabilities. In doing so, this offered a way to store and organize files in a manner that offers better sound quality than traditional audio-cassettes. In addition to the better sound quality, digital recording results in greater ease of duplication (e.g., sound quality is not lost when copies of an original file are made), the facilitation of data security (e.g., computer files can be encrypted so that only certain individuals can access the audio data), and more compact storage (digital files can be transferred onto a flash drive instead of multiple audio-cassettes). Additional features include: greater ease with transferring files from one computer to another; the ability to play back at the same speed with which the data were recorded, which preserves the pitch and feel of the voice; the ability to manipulate playback speed without changing pitch; the ability to share sections of interviews via email or on the web within data security constraints.

Data Analysis

Each interviewee and interview was given a code name and a number. Interviews were transcribed verbatim by the Principal Investigator as well as with the assistance of a

contracted transcriptionist. The transcriptionist was chosen to assist with handling the amount of data and because of their reputable work with higher education and research. The transcriptionist signed a certificate of confidentiality and destroyed all copies of transcripts once they were complete (*Appendix L*).

Interviews were stored on a password protected server as well as the digital recorders. Additionally, they were uploaded to a secure shared file box that was password protected and managed by the Principal Investigator. Transcripts and original audio files were saved in a password protected folder on the Principal Investigator's laptop, which itself was password protected.

After all interviews were transcribed, they were reviewed as the interviews were played back to ensure complete accuracy. All transcripts were imported into *MaxQDA,* which is a software package used to manage large amounts of textual data and has the capability to analyze textual data in various ways. *MaxQDA* also allowed for data sharing and is one of the leading software packages in the field of qualitative research.

After transcripts were transferred into *MaxQDA*, the Principal Investigator went through and read all transcripts writing memos on each one. The purpose of applying memos is to remind the reader what they were thinking when they were reviewing the transcripts. Additionally, applying memos assists in the creation of codes. Preliminary codes were developed by reviewing interview filed notes as well as a number of transcripts. Codes were defined as well as instructed on when and when not to be used. The codebook was uploaded into *MaxQDA.* The codebook can be found in *Appendix M.*

One transcript was given to both coders, the Principal Investigator and a graduate research assistant. The two coders separately coded the same transcript and then came

back together to compare coded transcripts. This was done to ensure intercoder reliability, which is a way to measure that each coder codes the transcripts the same way. The final codebook was solidified after coding the first few transcripts. The coders met intermittently to make sure they were still agreeing on the same codes and the way in which to apply the codes. After the first few rounds of codes, the coders divided the remaining transcripts and coded separately.

Thematic analysis was used to analyze the coded transcripts. Thematic analysis is a classic, qualitative methodology characterized by developing themes based on what is in the data.(41) Themes can be inductively and deductively derived. Inductive coding relies on letting the text speak for itself and developing themes out of the text.(41) In contrast, deductive thematic analysis has a prescribed theory in which to fit the data.(41) It is important to understand the degree and depth by which a theme is defined. Themes are generally identified as common phenomenon that are across multiple sources of data, much like in grounded theory and other qualitative analysis techniques.(41) Thematic analysis gives the most freedom in analyzing qualitative data because it does not come with a determined formula or construct that require items to be fit in a box.

There are six steps in using thematic analysis: familiarizing oneself with the data, generation of codes, searching for themes, viewing themes, fining and naming themes, and producing a report or final document.(41) Though this process appears to be linear, it is often a circuitous path. Developing, defining, and applying codes as well as themes requires returning to the individual data to see what is happening within it, as well as lifting above the data to see what is occurring across all sources data. Additionally, different types of analysis plans can be combined with thematic analysis. Within thematic

analysis, one can analyze codes themselves or cases. Case based coding treats each phenomenon as its own special case and then compares cases to each other. Given that this data is from two different phases, and four different districts, case based analysis is another alternative.

Data Quality

<u>Confidentiality</u>

All protocol and related documents have been approved by the Emory University Institutional Review Board as well as the Georgia Department of Public Health Institutional Review Board. Proof of approval from both review boards are available in *Appendix N* and *Appendix O*.

<u>Informed Consent Process</u>

Written consent was obtained by all participants in Phase I and verbal consent was obtained by all participants in Phase II. *Appendix B* and *Appendix D* contains the informed consent form. Participants were guided step by step trhough the consent form to determine if they comprehend the potential risks and harms from the study. In addition, there was adequete time to ask for questions from the consent form. Questions about the basics of the consent form were asked to ensure comprehension.

The informed consent process took place in the same setting as the interview. The interviewer reviewed the conesent form with the study participant after determining eligbility to participate in the study.

<u>Records to Be Kept</u>

Demographic questionnaires (*Appendix H* and *Appendix I*) were provided for each participant at the time of the interview. These data were collected from the participant

directly. Participants were not identified by name on any of the questionnaires, instead by the participant identification number (PID) provided by the study investigator upon entry into the study. All data (recorded interviews, transcripts, demographic and profile questionnaires) were secured at all times in a locked computer and/or a locked file cabinet (in the case of hard copy materials). Data was kept on an encrypted and password protected server at the Rollins School of Public Health.

Role of Data Management

Instruction concerning the recording of study data on the questionnaires was provided by the Principal Investigator. It is the responsibility of the Principal Investigator to assure the quality of computerized data. This role extends from protocol development to generation of the final study databases. Demographic data was entered into *Microsoft Excel 2010* and further analyzed using *IBM Statistics SPSS 24*. The Principal Investigator conducted all data entry and data edits was performed at the time of data entry. Qualitative interviews were digitally recorded and then transcribed by the Principal Investigator and the transcriptionist. The text was returned in the form of a Microsoft Word document and then entered into *MaxQDA* to be coded for further analysis.

Training of Study Team

All members of the study team were CITI certified in Behavioral and Social Sciences and approved by Emory University's Internal Review Board. Proof of CITI certification from all members of the study team has been obtained and kept on record.

Subject Confidentiality

All records that leave the site were identified by coded number only to maintain subject confidentiality. All records were kept locked in a filing cabinet. All computer

entry and networking programs were done with coded numbers only. All personal identifiers have been removed from transcripts and demographic questionnaires. All names referred to hereafter are fictitious pseudonyms to protect the identity of the participants.

Chapter IV: Results

Introduction

The following section provides a summary and analysis of participant responses about the social structure of rural life, available community resources, personal resources, services utilized and health practices, barriers to services, critiques of services and satisfaction with care, and recommendations. There were similarities and differences between healthcare workers and MSM participants, as well as differences between the four healthcare districts. This section first provides demographics of healthcare workers and then MSM participants. Then, each theme is described by each healthcare district, Rome, Gainesville, Valdosta, and Waycross, and differences between the healthcare workers and MSM participants are explored.

Participant Demographics

Healthcare Workers

Of the eight healthcare workers approached to participate in this study, seven were enrolled into the study. Two healthcare workers per healthcare district were enrolled, with the exception of the Valdosta district, which only had one healthcare worker to enroll. The one participant was not able to participate in the study and no other healthcare workers were available in that healthcare district. Table 1 provides basic demographics of the healthcare worker participants. Healthcare workers had an average age of 46.29, with a range of 35 to 62 years of age. Most participants were white (4, 57.1%), female (5, 71.4&), heterosexual or “straight” (6, 85.7%). Most participants had received at least some type of college education, with two possessing a Bachelor’s degree

(28.6%), two possessing a Master's degree (28.6%), and three having at least "some college" (42.9%).

In addition to general demographics, each healthcare worker has a unique experience working with MSM in their healthcare district. The current titles and types of work experience among healthcare workers included: HIV testing, counseling, and education as part of a community based organization, a district Ryan White coordinator, a district HIV coordinator, a district epidemiology program supervisor, a program associate with a Ryan White clinic, and a linkage and retention specialist/HIV testing and counseling educator at a Wellness Clinic.

Table 1. Healthcare Worker Demographics (N=7)

Characteristic	n	%	M	SD	Range
Age			46.29	10.63	35-62
Race/Ethnicity					
White	4	57.1			
Black/African-American	2	28.6			
Hispanic/Latino	1	14.3			
Sex					
Female	5	71.4			
Male	2	28.6			
Sexual Orientation					
Heterosexual/Straight	6	85.7			
Homosexual/Gay	1	14.3			
Education					
Some college	3	42.9			
Bachelor's	2	28.6			
Master's	2	28.6			
Healthcare District					
Rome	2	28.6			
Gainesville	2	28.6			
Valdosta	1	14.3			
Waycross	2	28.6			

MSM Participants

Of 37 participants screened for this study, 30 were eligible and 17 were enrolled in the study. We enrolled 13 HIV-negative and 4 HIV-positive MSM living in four rural healthcare districts in Georgia. Table 2 provides basic demographics about MSM participants in the study. Participants had an average age of 40, with a range of 23 to 68 years of age. The majority of participants were non-Hispanic (15, 88.2%), White (13, 76.5%), homosexual/gay (15, 88.2%), and had received at least "some college" (15, 88.2%). Most participants were in some relationship (10, 58.82%), which was monogamous (6, 35.3%). The majority of participants reported not having a religious affiliation (10, 58.8%). Employment-based insurance was the most common source of insurance (12, 70.6%), but three participants reported receiving some sort of government-based insurance (17.6%), and two participants reported having no health insurance (11.8%). There was no significant difference in number of participants by district.

Table 2. MSM Demographics (N=17)

Characteristic	n	%	M	SD	Range
Age			40	14.86	23-68
Healthcare District					
Rome	5	29.4			
Gainesville	4	23.5			
Valdosta	5	29.4			
Waycross	3	17.6			
Race					
White	13	76.5			
Black/African-American	1	5.9			
Latino	3	17.6			
Ethnicity					
non-Hispanic	15	88.2			
Hispanic	2	11.8			
Sexual Orientation					
Homosexual/Gay	15	88.2			
Bisexual	2	11.8			
HIV Status					
HIV-negative	13	76.5			
HIV-positive	4	23.5			
Education					
High School	1	5.9			
Some college	2	11.8			
Technical	2	11.8			
Associate's	3	17.6			
Bachelor's	6	35.3			
Master's	3	17.6			
Relationship status					
Single	7	41.2			
Dating	3	17.6			
Partnered	6	35.3			
Married	1	5.9			
Relationship Type					
Monogamous	6	35.3			
Open	4	23.5			

Table 2 (continued). MSM Demographics (=17)

Characteristic	n	%	M	SD	Range
Religion					
None/Agnostic	10	58.8			
Protestant	2	11.8			
Catholic	4	23.5			
Health Insurance					
Uninsured	2	11.8			
Insured-Affordable Care Act	2	11.8			
Insured-Employer-based	12	70.6			
Insured-Medicare	1	5.9			

Overview of Themes

Several discussion pieces related to healthcare in rural Georgia emerged as a result of semi-structured interviews with healthcare workers and MSM participants. These topics were combined to form seven themes. The remainder of this chapter examines each theme, stratified by each healthcare district, and discusses the similarities and differences between healthcare workers and MSM participants.

Social Structure

Social structure was defined anything related to the way of life or demographics of the healthcare district in which the healthcare workers work and the MSM participants live. This also included social environment, social norms, beliefs, attitudes, and behaviors of the community in which the participant may work or live in.

Rome

Healthcare Workers

There were differing opinions concerning the social structure of the Rome Healthcare district between the two healthcare workers. Norman, who works at a community based organization in Rome, is a native of Rome and tends to have a more

positive view of the healthcare district. He perceived the community as being well-educated with a tight-knit LGBT community. He noted that even though a lot of people are still in the closet and there is no gay bar in the community, there are still important community activities. For instance, there is "Family Feast" each year where LGBT members of the community come together during the holidays and have a meal together.

Holly, a district epidemiology supervisor, described the district as being more rural and spread out where there are a lot of people who are uninsured or underinsured. The health department was seen as a last resort and there is still stigma and negative associations with government agencies. Holly described the socioeconomic status of residents in the Rome Healthcare District as so poor that all children in Floyd County receive lunch for free because poverty is so high.

MSM Participants

The MSM participants had more to say about the culture and climate of the Rome Healthcare District. The participants echoed Holly's statements about how rural and spread out the district is. Almost every participant discussed the many facets that contribute to rural life in Rome. A few participants noted the very small town life that is spread out. One participant compared Rome to Mayberry from *the Andy Griffith Show*, while another participant mentioned how religious the community is. Many participants noted the surprising number of LGBT people in the community, but there was no sense of an LGBT community. The participants further noted that many are still in the closet about their sexuality, which agrees with what Holly stated. However, Brandon, a graduate of one of the colleges in Rome, noted that there is an LGBT club at the university, but that is the only gay organization in Rome. One participant in particular discussed his

distaste for Rome, especially his hometown of Bartow County and went as so far to call it his “fifth circle of hell”:

> Interviewer: I want to you to clarify why you say that “Bartow is the fifth circle of hell.”
>
> Phillip: It’s not very educated…what are my sense of enjoyment to what people other’s sense of enjoyment that are form there is completely split…I don’t hunt I don’t fish I don’t own a pick-up truck, I don’t go to church on a regular basis…I come from a very religious family, and that’s a lot of people that live out there and that’s just not my scene. And, it’s a very small knit community that’s growing and people there don’t want it to grow so people are… kicking and screaming because there’s so much growth in the area….
>
> Phillip, 32, Rome

Phillip described a lot of the values within his community. Religion, hunting, and fishing. He also expressed how he does not share those same values and that it’s not his “scene.” Another interesting item that Phillip mentioned was the struggle that growth has incited within community. People were not happy with how much the community is growing and progressing.

Gainesville

Healthcare Workers

One thing that both healthcare workers made an effort to mention is the large Hispanic community in the Gainesville district. The healthcare workers also talked about the low level of literacy within the community and the increased level of community stigma. Because of this stigma, many people are still in the closet, in terms of sexual orientation, though the younger generation is a little bit more open. Both healthcare workers also discussed that the MSM community often goes to Atlanta or other bigger cities to find partners or to socialize.

MSM Participants

Much like the healthcare workers, the MSM participants commented on the lack of an LGBT community. Participants talked about how MSM meet partners, which included: online, hookup apps, and in other cities like Atlanta. All the participants commented on how conservative, religious, and traditional the community is and how everyone in the community knows everyone else and, "their business." Participants also described how the larger community does not think there are gay people. One participant in particular, Marco, discussed why he would never publically come out as gay or as living with HIV:

> The people that I grew up with, their mentalities and stuff like that. Again it brings me back to the point that they're not that knowledgeable so me coming out and saying, "Hey, let's talk about HIV because by the way 'I'm positive" That would just completely flip people, out and me. With their reactions [laughs].
>
> Marco, 25, Gainesville

When asked about potentially being a mentor or a part of a peer support system for people living with HIV in his community, Marco mentioned how difficult it would be to come out and the probable reaction.

Valdosta

Healthcare Workers

George, an HIV Coordinator for Valdosta, talked about how difficult it is for LGBT people to live in Valdosta. He mentioned that because the community is so small and close, and everyone know everyone else, there is a lot of stigma and discrimination from the community. He also stated that family members don't acknowledge if they have a gay person in their family and that people "get stuck" in rural areas. George further

discussed that many MSM drive to Atlanta or Jacksonville, if they have the means to do so, to meet other MSM and might even drive 150 miles to go on a date.

MSM Participants

Much like George, the MSM participants discuss how there is more of an LGBT community in larger cities like Atlanta. The participants also talked about how Valdosta is the center of the district and how spread out the district is. Participants remarked on the religiosity of the community and how everybody knows everyone else within the community. The participants also commented on the lack of gay venues to congregate. However, some participants stated that Valdosta State University has a gay/straight alliance and that Valdosta is where South Georgia Pride is held every year. Many participants talked about, what one person called being "the only gay in the village," or the feeling of having no community at all. One person, however, described how much he loves the rural area because there is not as much traffic, there is a "simpler lifestyle," his church is friendly and accepting, and there is a "pretty good population of gay guys on [hookup] apps, (James, 68). Because James is older than the rest of the population from his district, and he moved out on farm when he retired, his views may be influenced by those factors.

Waycross

Healthcare Workers

Both healthcare workers discussed the rural, closeted community. According to Ashley, an HIV testing and counseling educator at a community based organization, one of the biggest challenges connecting to the MSM community is that people do not identify as being gay, bisexual, or MSM. The MSM community is very discrete and uses

hookup apps to meet each other. There are no gay clubs or organizations, but there is a gay, clothing optional campground. One interesting facet of the community, was described by Rebecca, who works in HIV testing, counseling and education with the Wellness Center:

> But church is the biggest, the easiest way, and one of the biggest things that they [MSM] use to meet people, and so I was like, "Oh, okay." I never would've thought that, but that's easier. Because no one is thinking – if two guys are sitting on the back row of the church – to look back and think – you know, because we're all there for the same purpose. It's like the easiest and most open place to meet someone.
>
> Rebecca, 32, Waycross, Wellness Clinic Linkage and Retention Specialist

It's interesting that while many rural MSM discussed church and religion as something negative in their lives, in this particular community, church is a venue in which MSM meet each other.

MSM Participants

The MSM participants did not widely differ from the views expressed by the healthcare workers. Most of the MSM participants stated how small and rural the town is. However, two participants discussed that there is a sense of an LGBT community and that it feels like they have each other's backs. One person, Henry, said that there is a big community in Waycross for how small the town is. However, he complained that there were the same ten guys on the hookup apps and that it's people who are visiting from other towns. Andre agreed with Henry in the opinion that many people found on apps were driving through or visiting.

Available Community Resources

Available community resources was defined as any resources in the community related to HIV prevention and treatment. This included, but was not limited to, health service resources such as hospitals, private physicians, governmental agencies, such as health clinics, and community based organizations.

Rome

Healthcare Workers

Holly mainly discussed the services that the Ryan White Clinic provides: HIV treatment, linkage to care, partner services, educational materials, and condom distribution. Holly also commented on how spread out the community is and that the main clinic is in Floyd County, which is difficult to get to for individuals in the community. She also talked about the fact that there is only one infectious disease specialist for two healthcare districts and that most people have to go to Atlanta for services. Finally, there is no HIV prevention funds and the one community based organization in town is solely responsible for prevention and education in the community. Norman, who is a long-standing member of the HIV community based organization in Rome, talked about the services that the organization provides. These services include: free HIV testing, education, emergency financial assistance, and transportation.

MSM Participants

There was a wide variety among the participants about available community resources in Rome. Participants discussed private physicians in the community, none gay-friendly though, as well as the one community based origination. One participant, Bill, mentioned that he sometimes leaves the district to go to another HIV community

based organization in a different healthcare district. Another participant, Brandon, who does not have health insurance, talked about going to the local hospital for services and his overall satisfaction with it. Finally, Alex said that many people favor the health department, whereas Edward stated that many people associate the health department with poverty because of where it is located and the clientele it serves.

Gainesville

Healthcare Workers

Because both healthcare workers work in the Ryan White Clinic, they focused much of their attention discussing that service and what it provides. However, they did mention that aside from the main Ryan White Clinic in Gainesville, there is a satellite clinic in Stephen's county. The healthcare works also mentioned setting up telehealth services for those patients that cannot travel to the only infectious disease doctor in the district, a district which is comprised of thirteen counties. Roberta, a nurse at the Ryan White Clinic who mentioned that there used to be a community based organization, but it recently closed. Sharon, who oversees the Ryan White Clinics in the Gainesville district, discussed that there is a social service clinic that does some social supportive services at the main Ryan White Clinic.

MSM Participants

The majority of participants discussed the different sources of treatment and health related services. The popular community resources included the health department, the Ryan White Clinic, private physicians, and a retail pharmacist.

Valdosta

Healthcare Workers

George, an HIV coordinator in Valdosta, mainly discussed the lack of community resources. He talked about a former program in which he tested people in jails and also discussed open health education positions that he cannot fill because of lack of funding. Additional community resources offered included: homeless shelters, clinics, health centers, churches, the Southern Georgia Pride committee, and a local PFLAG chapter. George also discussed the health department, which people do not view favorably, and also "old school" doctors that aren't familiar with MSM and HIV. He did mention one private infectious disease doctor in the district that only accepts patients with health insurance.

MSM Participants

Several resources in the community were mentioned by the MSM participants. Among these include testing events by the health department (such as annual HIV testing at the university, testing at the South Georgia Pride, and other community health fairs), hospitals and private physicians, retail pharmacies, and specifically the South Georgia Medical Center. A few participants expressed the need to research of places to go for HIV testing and treatment if they were ever to become HIV positive. Finally, a few participants discussed going to Atlanta to access the community resources there.

Waycross

Healthcare Workers

Because Ashley works for a community based organization, and Rebecca works with the Wellness Clinic at the health department, they had unique and somewhat similar

perspectives of available community resources. For the 16 counties in the Waycross Healthcare district, there is one community based organization devoted to HIV. There are two full Ryan White Clinics as well as two satellite clinics. The two full clinics are open regular business hours, Monday through Friday. The satellite clinic in Tombs County only sees patients two days a week. Because the Waycross district is so spread out, many people have to drive 45 minutes to an hour to go to a clinic. Rebecca further discussed the scarcity of services and that many people have to travel outside of the district, and sometimes state, to receive services. Also, there is only one or two infectious disease specialists in the district and those providers are located in Waycross at the hospital.

MSM Participants

The MSM participants discussed the following community resources: private physicians, the health department, and Ryan White. The participants also stated that they would have to do research on their own to find HIV specific services and that there is no prevention or advertising of HIV related services in the community.

Personal Resources

Personal resources was defined as all resources that attribute to live and function, which included: health insurance, income, employment, transportation, housing, family and social support.

<u>Rome</u>

Healthcare Workers

As previously mentioned in the "Social Structures" section, Holly mentioned the level of poverty in the Rome Healthcare District. Additionally, she talked about the great number of people that are underinsured and uninsured. Holly expressed how great the

Ryan White Clinic is, but they are unable to treat everybody for everything related to HIV, and they have to refer out to the community for other services, but even then, some people may not receive care.

MSM Participants

The majority of the patients feel that they have enough resources to address their healthcare concerns. One participant who is living with HIV has been undetectable for seven years and still sees his doctor in Atlanta about three or four times a year. Brandon, who does not have health insurance, discussed how he goes to the immediate care if he needs anything and how satisfied he is with care there. In his words, it is “fast and effortless; the nurses take time and work with you.”

Gainesville

Healthcare Workers

The main type of personal resource that the healthcare works discussed was the lack of health insurance among people living in Gainesville and rely on the Ryan White Clinic as their primary source of care.

MSM Participants

Marco, who is the only participant in Gainesville living with HIV, goes to the Ryan White Clinic and views it as his primary care provider. Eric has two doctors that he sees, has “decent” health insurance, and goes to a retail pharmacy to buy his at home HIV testing kits. William has health insurance and a private physician that he sees twice a year.

Valdosta

Healthcare Workers

George discussed at length a variety of resources that many people living in the Valdosta Healthcare District do not have. These resources include: health insurance, transportation, housing, mental health and substance use services.

MSM Participants

DeShawn is the only MSM participant who does not have insurance interviewed in this district. He utilizes services at the emergency room when needed. The other participants have physicians that they see regularly. The one participant from Valdosta living with HIV, Raymond, has an HIV physician but receives his medication through the local Ryan White Clinic.

Waycross

Healthcare Workers

Much like the healthcare workers in other districts, the two healthcare workers from the Waycross Healthcare District mentioned the personal resources that the people, living in their district do not have. These sources included: health insurance, income, and transportation. However, Ashley discussed that the majority of people living in her community, who have health insurance, receive it from Medicaid, Medicare, and as a result of the Affordable Care Act.

MSM Participants

Samuel recalled his unfilled search for an LGBT specific/friendly doctor in Waycross and how he just received insurance, through the Affordable Care Act, and can

now see a physician. Andre, on the other hand, is living with HIV and does not have health insurance, but seeks treatment services through the local Wellness Clinic.

Services Utilized and Health Practices

Health practices referred to the type of healthcare services MSM use and the different healthcare practices they employ. This included HIV prevention and treatment practices, such as PrEP utilization, HIV testing and counseling, condom usage, ART medication adherence, maintaining an undetectable viral load, sero-sorting, and participating in less risky sexual acts. Examples of *healthcare services utilized* include HIV/STI testing and treatment, visiting a healthcare provider, visiting a community based organization, and/or a government organization.

Rome

Healthcare Workers

In discussing health practices, Holly mentioned difference things that she was seeing with MSM in her healthcare district. She is seeing a growing number of MSM with syphilis and other STIs. Many MSM in her community do not discuss risk reduction, believe untruths about HIV, do not know of ways to contract/transmit STIs and do not disclose their HIV and/or STI status with partners they meet online/via apps. Among types of services utilized, Holly mentioned that the health department with where people go to receive immunizations and other affective health services.

MSM Participants

There was an extensive discussion about different health practices and services among the MSM participants from the Rome Healthcare District. Many participants talked about interest in starting PrEP and/or using PrEP. In addition to PrEP, MSM

discussed using condoms with main sexual partners, as well as partners outside of the relationship, getting HIV tested, at least annually, staying in treatment and keeping an undetectable status, if living with HIV, and discussing their status with sexual partners. Many participants have heard of PrEP but do not know of how to get access to it and do not know of where to get it in their community. Some people discussed not using condoms with their main partners and using condoms with others. Other participants talked about using condoms with everyone they have sex with, including their main partners. While another participant, who is living with HIV, said that if he is dating someone who is HIV negative and not on PrEP he will use condoms, but if he is dating someone exclusively and that person is on PrEP, he will not use condoms. Even though this person has a favorable view of PrEP, he mentioned other concerns with it, and with safer sex:

> The only ones [MSM] that would use condoms would be either on PrEP or with guys who are HIV positive and not on meds or don't know if they are or not. But again if they are on some type of medication, hell no. They're not using condoms. That's the point. That's the reason why people take the shit. Because condoms suck. They do. Nobody, no, absolutely not, that's the point--people don't want to wear condoms, they don't. Barebacking feels good. Condoms suck.
>
> Phillip, 32, Rome

It is very interesting, Phillip's point of view on PrEP and condoms when he in fact uses both. There is also a sense of judgment of other MSM in Phillip's quote. Phillip goes on to discuss that the majority of his friends are on PrEP, but that the further out from Atlanta, where he and his friends spend a lot of their time, the lower the number of MSM who are use PrEP. This is in agreement with the use of PrEP and the HIV-negative MSM interviewed in this study.

Gainesville

Healthcare Workers

In keeping with their previous statements, the healthcare workers from Gainesville discuss the types of services utilized by MSM in their community and their different healthcare practices. A lot of MSM travel to Atlanta to have sex and are not concerned about contracting HIV, according to Sharon. Additionally, many of the people who get tested are very sick and the only reason they get tested is because they are worried.

MSM Participants

Among the MSM, much like the previous districts, condoms, regular testing, communication with partners, HIV treatment, and PrEP are health practices utilized by MSM in Gainesville. Each HIV negative participant gets tested regularly and has a physician. Marco, who is living with HIV, continues to see his provider at the Ryan White Clinic and his HIV negative partner gets tested every three months and the two of them use condoms. Marco is a huge advocate for PrEP and his partner is trying to initiate PrEP. While most participants discussed using condoms, communication with partners and seeing their physician regularly, one participant in particular specifically mentioned being very selective with sexual partners based on their HIV/STI status and types of protection that partner may use.

Valdosta

Healthcare Workers

One common theme that George talked about in his interview was when people get HIV testing in the Valdosta community. Much like what Sharon and Roberta said,

George discussed that people only get tested of HIV when they are worried about something. Additionally, he mentioned that the health department was the only place to receive HIV testing.

MSM Participants

There was a wider variety of health practices and services utilized among MSM participants living in Valdosta. While many participants mentioned HIV testing, condoms, and communicating with partners, the frequency and levels of these services varied by participant. For instance, DeShawn, who does not have health insurance, feels comfortable discussing protection with partners but has not been tested for a while and does now know where to access PrEP. Another participant, Jesse, also uses open dialogue in relationships, but he mainly employs abstinence and condoms, and continues to see his healthcare provider. Raymond, who is living with HIV, takes medication, sees his provider, and communicates with partners. As for services utilized, he sees his provider every four to six months and receives medication through the Ryan White Clinic. Matthew and James both utilize the health department for HIV testing and prevention. However, because Matthew works in the healthcare industry, he goes to a different county to be tested for HIV for fear of someone he knows seeing his HIV test. Matthew, as well as James, is not out to his physician about his sexuality, which is consistent with participants in other healthcare districts.

Waycross

Healthcare Workers

People in the Waycross healthcare district go to the health department to receive testing because that is the only place to receive testing. At the Ryan white clinic, they

provide linkage to care as well as enrollment into the AIDS Drug Assistance Program (ADAP). Also, many people in the community want PrEP, but there is no way to get it.

MSM Participants

Much like the previous healthcare districts, participants describe discussing status and risk with partners. Some participants mention using at-home self-testing kits as well as personal physicians. Not many people viewed the health department in high regards. There was also some mention of PrEP, but very little interest in it. In fact, one participant said he does not believe PrEP works, nor does he believe that there is such a thing as safe sex.

> Because there's no such thing as safe sex. Yeah, a person might put a condom on doing anal, right? But unless you have a condom on while you're doing oral, you're still exposed, right? So there's no such thing as safe sex.
>
> Henry, 53, Waycross

Henry also he is not out to his physician about his sexual orientation and he does not get tested or treated at his local county health department because he does not want his name or information reported in the state epidemiology database, which is required for all notifiable diseases in the state of Georgia.

Barriers to Services

Barriers to services was defined as items that impede MSM participants from utilizing HIV prevention and treatment services. There are several barriers to these types of services which included, but were not limited to, lack of knowledge, housing, transportation, available community resources, health insurance, socioeconomic factors,

distance from services, stigma, discrimination, perception of risk, religiosity and conservative, “traditional” values.

Rome

Healthcare Workers

Several factors were mentioned by healthcare workers when disusing barriers to HIV prevention and treatment services. Holly, a district epidemiologist from Rome, discussed lack of knowledge surrounding HIV and other STs as well as other barriers. These barriers include, transportation, lack of funding for prevention and treatment, spread out rural community, general stigma towards the government, no PrEP services, and difficulty retaining staff at the health district clinics. One of the greatest barriers to services utilized is stigma and fear of discrimination associated with MSM participants receiving HIV related services in the Rome Healthcare District.

MSM Participants

Concerning knowledge and awareness of HIV, every participant in Rome talked about how the general population living in the Rome Healthcare district did not know a lot of accurate information about HIV/AIDS and many people do not see themselves at risk and do not think that HIV/AIDS is a thing that people living in Rome acknowledge. The MSM participants themselves knew correct information about HIV/AIDS and were very knowledgeable on the subject. Interestingly, all MSM participants in Rome talk about how people choose not to get tested for HIV because they choose to ignore HIV/AIDS. As described by one participant:

> Interviewer: And so what do you think that prevents people from getting tested from using services in the community that you live in.
>
> Participant: I think it's because they have their heads in the sand, that they think it's only an urban or a bigger city issue. It's just not common place. That's what I think. Sad but true. That's what I think their mentality is.
>
> Bill, 61, Rome

Other MSM participants discussed additional barriers such as travel and having to go to the health department to receive services. The MSM participants did not have a favorable view of the health department and expressed the shared belief by other members of their community.

Gainesville

Healthcare Workers

Both healthcare workers in Gainesville, much like the healthcare worker in Rome, discussed the lack of knowledge of HIV/AIDS among their community. The healthcare workers also talked about how the younger people living in their district do not know about HIV and have no perceived risk of becoming infected with HIV. In addition, the Gainesville healthcare workers mentioned that people in their district are afraid of getting tested for HIV because they do not have accurate information about the disease and they believe myths and untruths. In addition to the barrier of knowledge and awareness of HIV, other barriers were mentioned. These barriers include: low literacy, low funding, stigma, substance use, housing, lack of insurance, medical mistrust and mental health issues. Mental health is such a serious issue in the Gainesville health district that one healthcare workers, Sharon (who oversees all district Ryan White Clinics), said:

> I think the majority thing that's the biggest thing in our community is our amount of mentally ill patents…. different social workers and the other people that have come in here…they'll look at us and say they have never seen as many patients who have such severe mental illness as our clientele do.
>
> Sharon, 62, Gainesville, Ryan White Clinic Director

MSM Participants

Much like the MSM participants in the Rome Healthcare District, the MSM participants discussed the lack of knowledge, awareness, and perceived risk among the general community surrounding HIV. Much like the healthcare workers, the MSM participants discussed the lack of knowledge and perceived risk and severity of HIV among the younger generation. The one participant (Marco) who is HIV positive was diagnosed when he was 22 years old and he said that he was not knowledgeable about HIV prior to seroconverting. Another participant is significantly older than the Marco discussed that because the younger generation was not alive during the AIDS epidemic of the 1990s and 1990s, they do not believe they are at risk of contracting HIV and do not see it as a serious issue. In addition to the lack of knowledge, MSM participants discussed lack of advertisement of HIV prevention and treatment resources and lack of physicians with experience in HIV.

<u>Valdosta</u>

Healthcare Workers

In continuing with previous healthcare districts, George, the healthcare worker from the Gainesville Healthcare District, mentioned lack of knowledge and awareness of HIV in the community. He also discussed the schism between people younger than 35 who have "no idea of HIV," and who "have been taught that if you have unprotected sex you will get AIDS and die," and people who are older because they experienced and lived

through the AIDS epidemic of the 1980s and 1990s. George was very verbose in his list of barriers to utilization of services related to HIV among MSM in his district. He talked about a large decrease in government funding that his district receives and the negative outcomes related to that. He lost staff, certain programs, and prevention and education community outreach. In addition, George mentioned lack of resources, community based organizations, poverty, lack of transportation, wage gap between people in poverty and people in wealth, lack of job growth and opportunity, homelessness, lack of sensitivity and diversity, religiosity and conservative, and "rural" values. For people living with HIV, HIV is oftentimes not their biggest concern, according to George:

> We still have the same issue that everybody does. I mean, we're lucky if we can keep about 35% of them retained in care and virally suppressed…probably 50% to 60% in care, maybe 35%, 40% are virally suppressed, and it's still the same old routine. HIV unfortunately is not their biggest issue when they get up every morning. They've got to find housing. They've got to find a job. They've got to do this other stuff, and they don't have a way here. We've got one clinic for ten counties, and we can do gas vouchers and things like that, but there's no transportation. You can't even take a cab and get from one city to another. If you don't know somebody, you can't get here. And then we treat people who tend to be living in extreme poverty.
>
> George, 53, Valdosta, HIV Coordinator

MSM Participants

There was a variety in participant's knowledge of HIV. Some participants believed that HIV can be transmitted via saliva, while other participants do not get tested for HIV because they do not think that are at risk for contracting HIV. As far as the community, there was a common theme that there is stigma surrounding people living with HIV and that the younger generation does not know about HIV and does not think they are susceptible for contracting HIV.

> I think that it's just the thought in your head is, "Oh, well it's not going to happen to me," because of the circle being so small, whether people realize it or not, we're fucking the same people over and over, it's really sad that that [contracting HIV] happens, but the pond is so small and there are so many fish. I think that it's just, either people don't care or it's just in the back of their mind that, "It won't happen to me," kind of thing.
>
> Raymond, 28, Valdosta

Raymond, the one participant who is living with HIV, first blamed himself for becoming positive and felt a lot of shame and stigma. He now believes that more people in the community need to be discussing HIV and getting routinely tested for HIV. Another participant does not get tested for HIV at his local community health department because he works in the local hospital and all the samples go to the same lab. While he acknowledges that there are HIPAA laws, because it is a small community, people would know he was getting tested for HIV, which would imply he was participating in activities that make him at risk for contracting HIV. Finally, participants mentioned interest in PrEP, but there was no way of receiving PrEP in their community and no advertisement about it.

Waycross

Healthcare Workers

Much like the other healthcare district workers, the two healthcare workers in the Waycross Healthcare District discussed knowledge/awareness of HIV/AIDS as well as other barriers. As previously stated, many MSM in the Waycross community do not associate their behaviors with a particular label and do not self-identify as being MSM, gay, or bisexual. Additionally, there is very little education surrounding HIV, safer se practices, and prevention and treatment. Many people do not believe they are at risk for contracting HIV and people believe that HIV/AIDS is a “gay” thing. Lack of knowledge

and education surrounding HIV is also found among healthcare professionals. One of the healthcare workers described a time when she received a call from a frantic nurse who did not know what to do with her patient, a man living with HIV. Other barriers included stigma and discriminations. Participants chose to seek care outside of their county/healthcare district for fear of others seeing them utilize certain services. Other barriers included lack of health insurance, lack of support system, no perceived risk of contracting HIV and no perceived severity of living with HIV, transportation, lack of advertisement and communication of services and lack of certain services such as PrEP. Because of lack of available resources in the community, the Wellness Clinic where Rebecca works accepts people who are insured at the Wellness Clinic, a clinic that is mainly for people who are uninsured:

> If they were in Waycross and they needed to see the nearest next ID provider and they had insurance, they would have to go across the state lines, but if they're in this district, we see insured, as well as uninsured, but if they chose not to come to us, they would have to add at least another 2 hours to the travel time that they already have coming to see us, because we see people that come 2 hours. They have to drive 2 hours just to come and see us who are insured.
>
> Rebecca, 32, Waycross, Wellness Clinic Linkage and Retention Specialist

MSM Participants

The knowledge of HIV/AIDS among MSM participants in Waycross was varied. One participant was very knowledgeable about HIV in general and in relation to the community in which he lives. However, he had to research on his own. Other participants' understanding of HIV is less accurate, with one participant believing there is only a cocktail of medication to take and that HIV is a completely different virus than what it used to be. As far as other barriers to utilization of healthcare services,

participants mentioned lack of community resources surrounding HIV testing and treatment, no communication about services available, and difficulties with the health department. One participant had a particular difficult time with the local health department:

> When I went [to the health department], and this is a few years prior, they had very limited time frame for any HIV/STI/STD testing. Never was really given an excuse for it, but it boils down to the communication aspect of it. People just don't know. They just don't understand that there are things available but it also goes to the fact that I don't feel there's enough available for them. Because we don't have a specific organization or even a group within an organization dedicated to LGBT health issues.
>
> Samuel, 27, Waycross

Another participant talked about how many people do not want to go the health department because people who go to the health department are labeled and diseases are reportable to the state epidemiology services. Finally, a participant who both works at the health department and receives treatment there discussed how busy the clinic is and that many times they are forced to reschedule appointments because there is not enough resources to see all the patients. He also mentioned that the protocol the health department is required to follow makes things more mechanic and leaves little room to meet the patients where they are and fulfill all their needs.

Critiques of Services and Satisfaction with Care

Critiques of services and *satisfaction with care* was defined as MSM participants' satisfaction with the services they have received from different sources and/or available services. These reactions to the services available and utilized were negative, neutral, and positive. These critiques and satisfactions were related to coordination, communication,

time spent, access/availability to services, comprehensiveness and general satisfaction of services utilized.

Rome

Healthcare Workers

Both healthcare workers described the general satisfaction they have heard from recipients of their programs. Both the health department and the community based organization have a good response from the community. The only critique is regarding the health department. Holly, a district epidemiologist, discussed that they cannot transport people, there is no STDs funds or staff, and they have no HIV prevention funds or staff.

MSM Participants

Among the MSM participants, the majority are happy with the care they receive. All but one participant has received services via private clinicians. One participant who went to a non-profit in Athens did not like that they charged him for condoms and lube. He also did not like that, according to him, his local health department only sees women and children and no one else. One participant, Alex, discussed, his provider had a lack of knowledge surrounding PrEP, but Alex believes that he is still able to get a prescription from his physician.

Gainesville

Healthcare Workers

The healthcare workers in Gainesville described that they are "doing the best they can to try and match their patients' needs." They have received positive feedback, in general, from their participants. However, the critiques and complaints they have

received have surrounded the distance traveled to seek care. Nonetheless, as Roberta added, “people may complain, but they won’t stop coming.”

MSM Participants

Much like MSM participants in other healthcare districts, the participants that have private physicians are generally satisfied with the care they receive. Both participants who have a private physician discussed having to switch physicians because their old physician was very judgmental and not sensitive to the needs/requests of his gay and bisexual male patients. Of the two participants who have received healthcare through the health department and Ryan White Clinic, they have very differences of experiences. Marco, who is HIV positive, has only had good experiences with the Ryan White Clinic in Gainesville:

> I love every single one of them. If I had my insurance again, and if I could choose them, I would choose all of them again, but I can’t….with Ryan White here I can say you get everything the whole package… with the Ryan White Clinic here in Gainesville you get friendly staff, knowledge, you know, above and beyond and they take care of you and make you feel like you matter.
>
> Marco, 25, Gainesville

Marco recently returned to Gainesville after living in Florida for a year and he is trying to get insurance through his employer. However, he hoped to keep his team at the Ryan White Clinic. Michael, on the other hand, did not have a good experience when he and his partner went to their local health department:

> …on the front side of it, they try to be very pro HIPAA, and, "Nobody else can come back with you. Even if they're your emergency contact and you give us consent, we can't talk to anybody. Blah, blah, blah," but then again when you go in the room, they leave the door open, and they have everybody and their mother walking down the hall while this loudmouth nurse practitioner is discussing viral loads and medications and all kinds of stuff like that. It's very unprofessional, and honestly, I can see why guys our age and younger would not go to that, because it's completely demeaning and embarrassing…I think that they are so overworked, understaffed, underfunded, and underpaid, that they do the bare minimums, as required by state and federal law. As far as going above and beyond or trying to provide that one-on-one doctor/patient stuff you would get from going to your general practitioner and paying for it, no, not at all.

Michael, 31, Gainesville

The problem with privacy and the fact that the health department only did the "bare minimum" contributed to Michael seeking care elsewhere in the community. When he finally received health insurance, he and his partner found a private physician in the community and were happy with the care they received there.

Valdosta

Healthcare Workers

While the healthcare worker did not mention any satisfaction with services utilized, he did mention many critiques. The critiques mainly consisted of lack of resources and funding. George mentioned Valdosta having an underfunded Ryan White program, no state money invested in HIV prevention just a small portion awarded by the federal grants. Additionally, George discussed that in 2012 the CDC redistributed its HIV prevention funds towards two counties in Atlanta and that left the rural communities, included Valdosta, vastly underfunded and understaffed.

MSM Participants

Many MSM participants from Valdosta were satisfied with the services they received Most participants reported having a private physician, with one who is without health insurance and goes to the local emergency room when sick. Few participants discussed testing events sponsored by the health department or going to the health department specifically for testing. The participants that utilized services related to the local health department reported being very satisfied with their treatment. The only critiques of services mentioned by the MSM participants were of former physicians that they did not get along with, but they now have new physicians that they like.

Waycross

Healthcare Workers

The healthcare workers from the Waycross Healthcare District reported that the people who utilize their services, at the community based organization and Wellness Clinic, seem to be satisfied with the services utilized. However, Ashley, who works with the community based organization in Waycross, mentioned that people she has worked with mentioned that they were not satisfied with the limited clinic schedule in the district. Additionally, Rebecca, who works at the Wellness Clinic, discussed receiving phone calls from panic nurses in the community who don’t know what to do with their MSM patients:

> For one example, we had a nurse call from the hospital, and she was like, "Yeah, I've got this patient here, and we told him that he was positive," and I'm thinking, "What kind of test could you have done in 30 minutes that would be a definitive positive?" I said, "Did you do that test?" And she was like, "No. He came in, and he's constipated, so he told us his sexual preference, so we're just assuming that he's positive." I was like, "How does that work?...
>
> For an example, we had a young man that came into the health department, and he came in, and he didn't say, "Well, you know, I'm sleeping with men." He told me that he was MSM. Well, the nurse called in a panic. She was like, "I don't even know what disease this is. What does this young man have?" And I'm like, "What does he have?" And she was like, "He said he was an MSM," and I'm like, "It's a man that sleeps with a man," and she's like, "Oh! Why didn't he say that? But what do I do?" I'm thinking, like, "What do you do? Educate him!" And so it was like, at that moment, the whole ball was dropped. They didn't have anything to offer. They didn't know what to tell him. And he was new. He was just asking questions like, what would he need to look for if something happened or you know, and it was just crazy, and I was like – so I emailed one of my colleagues like, "What website do we go on to pull this information, so I can send this nurse at this health department about this young man?" And so I don't know if she got that information to the person, but it was just like, at that moment, he said those three letters, and she didn't know what to do with it.
>
> Rebecca, 42, Waycross, Wellness Clinic Linkage and Counseling Specialist

Echoing Rebecca's concerns, it is interesting that in the first example, one nurse assumed their patient was HIV positive just because of his sexual orientation. Additionally, the fact that the nurse in the second example was not aware of the terminology or resources for their patient is an additional critique of services.

MSM Participants

The MSM participants of Waycross have a variety of experience with types of providers. Some participants have never received services from government agencies, such as a Wellness Clinic or health department, and private physicians. One participant, Samuel, did not have a good experience with the health department because he was told he needed to make an appointment to receive HIV/STD testing. However, this participant

could find a non-profit in the community for testing services. Another participant discussed not wanting to go to the health department in his community because he works in the local hospital and they use the same lab and he wants more discretion. Finally, all participants discussed positive experiences with the private doctors that they visited.

Recommendations

Recommendations referred to recommendations for current and future services to be utilized by the MSM participants. These included healthcare services, general resources, changes to the community climate, opportunities for growth, and other recommendations that participants mentioned.

Rome

Healthcare Workers

Several recommendations were made by the healthcare workers in the Rome Healthcare District. These recommendations included: more acceptability of the community, outlet for grassroots and community based outreach, increased education surrounding sexual health and education, more staff to focus specifically on HIV prevention and increased funding so someone can “do the services that need to get done.”

MSM Participants

There was not much difference between the recommendations of the healthcare workers and MSM participants in Rome. Participants mentioned wanting a more accepting community, a pride parade or festival, a physician that is open to all sexualities, more testing events and more advertisement, and finally to use social media to market and educate people. One participant offered the following:

> Well I think honestly that the Wellness Clinic or the centers if the health department would step up and do their job I think that would give an avenue or opening for people to go in discretely because you go into the health department for many reasons not just for any STDs or HIV or anything. There's all sorts of reasons to go to the health department. Where it could be masked over. But you know a separate facility in this town or this area that has one county high school. I mean, that's what it is. It's just a very small rural community and that would not fly. But the health department doesn't do that and I suspect that it doesn't one have the funds, two doesn't have the man power, three doesn't have the education and the resources.

Bill, 61, Rome

Gainesville

Healthcare Workers

The two healthcare workers interviewed from Gainesville shared similar recommendations. One of the biggest need was substance use treatment services and mental health treatment services in the community. The healthcare workers also expressed need of more funding, social workers, infectious disease specialists, a community based organization, and staff (preferably bilingual). Other community factors needed include decreasing stigma, increasing education, dentists, gas vouchers, and a mobile testing unit.

MSM Participants

One participant expressed the need for culturally appropriated outreach services, specifically tailored for the Hispanic community. Additionally, participants recommended increasing education, events, advertising, and services. One participant took a unique direction towards possible recommendations:

> I would like a complete overhaul. I would love education and people being open to that education. Because there is a huge sense of ignorance when it comes to that here, and ignorance does a lot more harm than good. Ignorance, in my book, helps the spread instead of helping develop a possible cure and eradication of the disease…I would love to see people call it for what it is and know that it might be a blow to the gut, but it's something, if you're careful with it, it's manageable. It's not a death sentence anymore. It's really nothing to be ashamed about. Most people can't help it.
>
> Michael, 31, Gainesville

It is a very interesting approach towards needs to the existing structure of the health department and serves surrounding HIV education, prevention, and treatment. The fact that Michael wants a complete overhaul and specifically mentions the negative consequences of ignorance is unique. Lastly, Michael offered hope for people that either have a negative view of HIV or are afraid to acknowledge their status.

Valdosta

Healthcare Workers

George offered a variety of recommendations to improve his community. The majority of his recommendations were related to resources including funding, programs, and staff. On a broader scale, George mentioned that he would like to see Medicaid expanded in Georgia and that he wants to see HIV made an important state issue. Other recommendations included: free HIV testing on demand, more education programs for the community (including trainings for healthcare professionals), more community partnerships, transportation, housing, drug and mental health treatment, and a testing van.

MSM Participants

Among the MSM participants, there was a need for more counseling and testing, and a better, supportive LGBT community. There was also a need and interest in more sexual education, outreach programs, and information for people at high risk for STIs,

especially HIV. A few participants expressed interest in a specifically gay and bi men's health center or at least sensitivity training for healthcare professionals. One participant who is living with HIV offered the following:

> I think that there need to be more people in this community that talk about it more and show people that it can happen to them and that they need to just say, "Look, this is what's going on in our community, and we need to stop it." Because I know the HIV rate here in Valdosta is very high.
>
> Raymond, 28, Valdosta

Raymond also further recommended peer support and/or counseling for people who are living with HIV/AIDS, especially for people that are newly diagnosed. While Raymond discussed having a strong support system from his friends and family, he mentioned interest in a specific group of people who have lived with HIV for a longer time or who are newly diagnosed.

Waycross

Healthcare Workers

Like other healthcare districts, the healthcare workers of Waycross had similar and specific recommendations and needs for their community. Both healthcare workers mentioned the need for support groups, a peer navigation system, advertisement of sources, health fairs and community buy-in and partnerships, and the need for an Infectious disease specialist specifically in surrounding HIV. Additionally, the workers talked about the need for a PrEP provider and general information about HIV, prevention, and treatment. One healthcare worker offered a unique way to work with the community

> Everything doesn't have to be in the clinical setting. Some people are just turned off at the idea that I'm walking into the doctor's office and it's a clinical setting. I would like to see some form of outreach or some form of nonclinical setting that it can walk into, you know, may it be something like a CBO that has a room that offers support. Because we don't even have support groups in this area. Offers support groups for different things. Or just come in, and we can talk about anything or provide those services, and it's not in a clinical setting. Because I think we could reach more people if it wasn't the clinical setting, if it was more like a real life atmosphere that anybody can walk in and we can talk about anything or they can come in and see information freely posted…it's free, that you can come in and get what you need without having to be scrutinized, wondering what are you here for.

Rebecca, 42, Waycross, Wellness Clinic, Linkage and Retention Specialist

Based on other factors of the community previously mentioned, this strategy of removing the services from a clinical setting and meeting people where they are, as well as providing a safe, non-threatening, and inviting place, can serve the community better.

MSM Participants

The needs and recommendations expressed by the MSM participants were not different from that of the healthcare workers and MSM participants in other districts. The following recommendations were offered: an LGBTQ center, testing, mental health resources, counseling, education, funding, peer support, and awareness of services. This last recommendation is further examined by Samuel:

> It all boils back to my theme here, communication. If I could change anything it would be to make sure that the LGBT and the community in general are more educated about the issues that we face with it. Both specifically the LGBT individuals but also as with also the fact the drug use is also prevalent in this area we look at oh it's not just the LGBT community but that it can transmit from here to there. There needs to be this open line of communication that people can really get the information they need in a nonjudgmental way that will empower them to make better decisions.

Samuel, 27, Waycross

This need for communication, about risk, services, education, is a common thread not only in this district, but in all healthcare districts and communities in this study.

Summary

In summary, there was a variety of themes that emerged from the data. Some themes were more salient in certain healthcare districts, while others were not applicable. Even so, certain themes varied between healthcare workers and MSM participants. However, the main themes included discussion about social demographics of the healthcare district, types of healthcare services utilized, barriers to these services, satisfaction with received services and care, and finally recommendations to improve upon the type, delivery, and availability of healthcare services in each district. The healthcare workers were sometimes more explicit in discussion of each themes, while the MSM participants needed further encouragement to expand upon on their comments.

Chapter V: Discussion

Introduction

The purpose of this study was to describe the healthcare needs concerning HIV prevention and treatment, of self-identified MSM who live in rural Georgia and to understand perceived barriers to HIV prevention and treatment services among rural MSM as well as examine the differences between the perceptions of healthcare workers and rural MSM concerning barriers to HIV treatment and prevention services. Utilizing the Healthcare Utilization Model (HUM), *Predisposing*, *Enabling*, and *Need* characteristics were found to influence the Health Behavior, which in turn influenced the Health Outcome (Health Status, Satisfaction with Care). In terms of HIV prevention and treatment, the social structure of rural life, personal and community resources, perceived risk and personal factors associated with acquiring/prevention HIV, affected utilization of healthcare services related to HIV prevention and treatment and satisfaction of those services.

The Healthcare Utilization Model: An Appropriate Model

The results of this study demonstrate the appropriateness of the Healthcare Utilization Model in examining factors related to barriers of HIV prevention and treatment services among sampled MSM from four healthcare districts in rural Georgia. The Healthcare Utilization Model (HUM) categorized the experiences of the participants into *Predisposing* factors (social structure, knowledge/awareness of HIV), *Enabling* factors (personal and community resources), and *Need* factors (perceived health). Additionally, personal health practices, types of services utilized, health status and satisfaction with care were explored in relation to barriers of HIV prevention and

treatment services. Experiences differed among participants individually, but themes were not explicitly different among participants in each district and between healthcare workers and MSM participants within each district. *Figure 3* shows the HUM model in context of the participants' views.

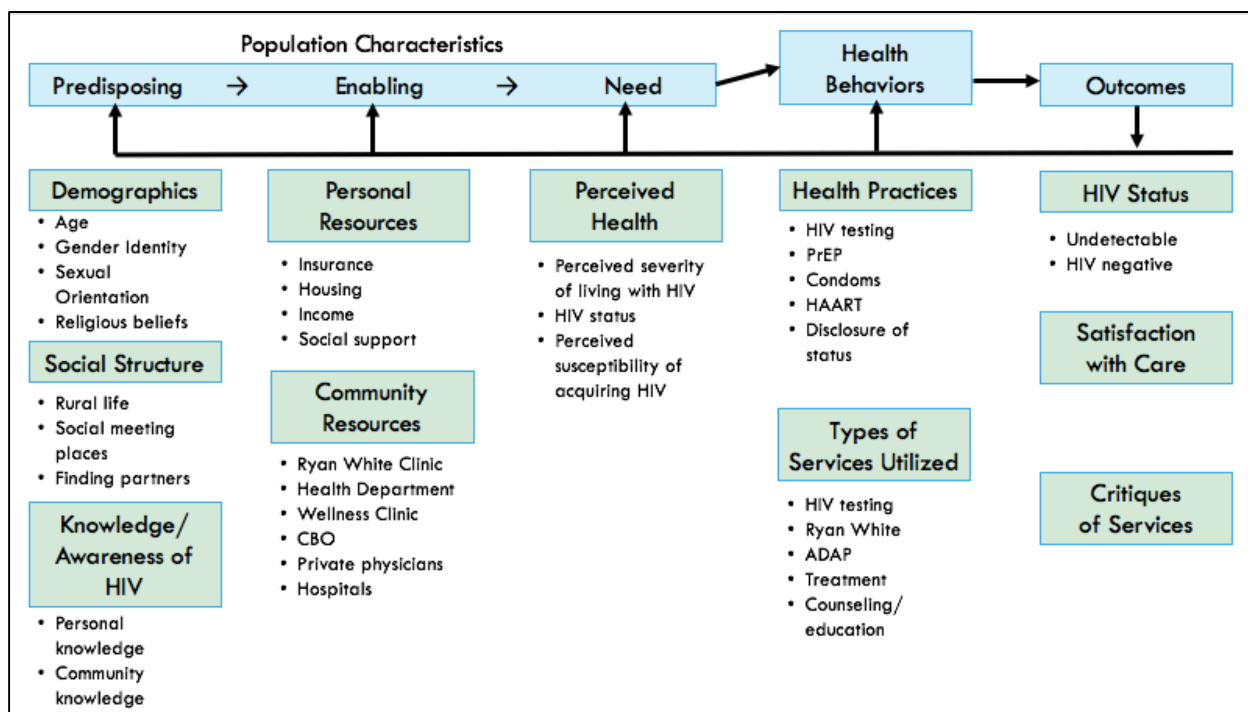

Figure 4: The Integrated Healthcare Utilization Model

In sum, participants (healthcare workers and MSM participants) provided several barriers to accessing HIV prevention and treatment services in the context of four healthcare districts in rural Georgia. Barriers can fall under any of the constructs of the HUM (see *Figure 4*).

Many participants discussed living in a rural community as a barrier to accessing healthcare, while others truly embraced the rural identity. Participants also discussed the availability of both personal and resources available in the area they lived. Some participants in certain healthcare districts had a community based organization, a Ryan

White Clinic, private clinicians, and a health department at their disposal in their district. Other participants, however, only had the health department and it was so far away or contained a stigma with it they would never use that as a resource. In addition, certain health departments had little or no resources concerning prevention of HIV, only treatment. Finally, participants' personal resources varied from not being insured to receiving insurance and other benefits from employers. These available resources impacted the access to HIV prevention and treatment services. Perceived health also varied across participants. Participants interviewed discussed their own perceived susceptibility and severity of living with HIV as well as discussing how people in the community perceived their health status and contracting/living with HIV. Health practices and types of services also varied depending on participant and district. However, many participants discussed using condoms, PrEP, HIV testing and counseling, communication of status, and adherence to antiretroviral medication. Popular health services included HIV testing, private physicians, attending the Ryan White Clinic, Wellness Clinic, and/or local health department. Finally, satisfaction with care and HIV status affected the *Health Behavior* and *Predisposing* characteristics.

In conclusion, the HUM is still an appropriate model when discussing access to HIV prevention and treatment, in comparison with similar models such as Social Cognitive Theory and the Health Belief Model. The following section will further explore the study's results in relation to theoretical context of literature. More specifically, this section will address population characteristics, health practices, health outcomes, and barriers.

Social Structure

Most healthcare workers discussed rural life as being slower, spread out, with people still closeted about their sexuality. The healthcare workers in Rome mentioned the majority of the people in their community were uninsured or underinsured, while the healthcare workers in Gainesville pointed out the large Hispanic population. Healthcare workers in Valdosta mentioned that people get stuck in the rural community and that people must travel far distances to socialize and find partners. Lastly, the healthcare workers in Waycross discussed the fact that many MSM do not identify with that label and are closeted.

The MSM participants agreed with many of the healthcare workers said, but there were some differences. MSM mentioned the fact that there was little or no LGBT community in Rome, Gainesville, and Waycross and that the culture is more religious and has traditional values. In contrast to both MSM and healthcare workers, the MSM participants in Valdosta mentioned the very small, but very close, LGBT community.

This sense of rurality mixed with religiosity and more traditional values is not uncommon in our study population. Several other studies have found similar results in the context of the rural communities studied.[10] Additionally, this rural identity is also a barrier to access to healthcare resources, as found in other studies.[18-21, 29] Finally, lack of an LGBT community and discrimination and stigma has been linked to increased sexual risk and higher rates of HIV acquisition.[22-24]

Personal/Community Resources

Healthcare workers mentioned similar community and individual resources, but it varied depending on healthcare district. All districts had some sort of government agency,

such as a Wellness Clinic, Ryan White clinic, and health department. Some healthcare districts only had one clinic, while others had multiple, including satellite clinics. Two healthcare districts, Rome and Waycross, had one community based organization in which to perform HIV prevention services. Most healthcare districts have no funds in which to do HIV prevention, only treatment and management of disease. Additionally, these services are often government-based organizations, which most people have negative associations with these agencies. Personal resources also included insurance/lack of insurance, transportation, housing, mental health and substance use services. Many healthcare workers discussed the lack of these resources in the community. Of people who are insured, most in the rural communities received insurance through the Affordable Care Act, Medicaid, and Medicare. Lastly, many healthcare districts have few, one to four, infectious disease specialists and they are often located farther away from people that need their services. There was no mention of physicians especially trained in HIV/AIDS, but instead infectious disease specialists in general.

MSM participants mentioned similar resources, and included private providers. Most participants sought prevention and treatment outside of their healthcare district in a city with gay friendly physicians and resources for HIV prevention. Participants mentioned traveling to Atlanta or other larger cities to received HIV prevention and treatment services because the providers there were more knowledgeable in HIV and also had services for prevention. Unfortunately, lack of providers, especially gay-friendly and specialists, is not unique to the rural community in Georgia. Other studies have found lack of providers,[10] as well as lack of prevention services.[18, 32] Studies have also found

that MSM will likely seek healthcare services not in their own community for fear of stigma and discrimination as well as lack of resources.[18-21, 25, 26]

Health Practices/Services Utilized

Healthcare workers were more uniform in relation to healthcare practices and services utilized among the MSM in their community. The common theme was that people do not receive routine HIV testing, often due to lack of services, and when people do get tested for HIV, it is because they are concerned about an exposure and it is often too late. Most people in the rural communities had very little to no education about HIV. Most rural communities do not have access to free HIV testing and counseling, free condoms, PrEP, and education.

MSM participants discussed using condoms, taking antiretroviral medications, staying in medical care, communicating with partners, and getting routinely tested for HIV. Testing for HIV was oftentimes done at the general physician's office or in larger cities. Sometimes health departments, like Valdosta, will do HIV testing at the college and during events, like South Georgia Pride. Most participants, however, discussed leaving their community for a larger city to receive testing. Many participants, if they had a physician in the rural community, were not out to their physician because of fear of stigma and discrimination. Participants who were out about their sexuality to their physicians often had physicians in larger cities, away from the rural community in which they lived. There was mention of PrEP by both healthcare workers and MSM participants, but no one had access to it in their rural community and no provider was prescribing it. If the participant was on PrEP, they had a provider in a larger city away from their rural community.

Perceived stigma and discrimination from providers has been found in other studies which examined rural health.[20, 21, 24, 25, 27, 30, 31] Other studies have examined the lack of HIV testing in rural communities and increase of HIV acquisition.[18, 22, 24] Finally, other literature has linked the shortage of HIV specific providers to higher acquisition of HIV within rural communities.

Additional Barriers

In addition to lack of HIV knowledge, lack of prevention services, and lack of healthcare providers, healthcare workers and MSM discussed other barriers to prevention and treatment of HIV. These barriers include lack of severity and susceptibility surrounding an HIV infection, lack of transportation, substance use, mental health, lack of housing and employment, religiosity, rural and "traditional" values, and a lack of support system. Several studies have examined these factors, especially in the rural setting, in relation to HIV treatment and prevention.

Community and provider stigma have been associated with higher levels of HIV transmission and lower levels of treatment.[22, 24] Affordability and lack of insurance has also been found to be a barrier to HIV treatment and prevention services, especially in southern, rural, religious communities where Medicaid expansion has not occurred.[31, 32] This is consistent with our findings because communities examined in our research are rural, religious, and southern, in a state that has chosen not to expand Medicaid. Additional factors which increase barriers to HIV treatment and prevention (transpiration, housing, economic instability and inequality, etc.) which were found in this study is similar to other studies in rural settings.[19, 25, 26, 32]

Critiques to Services and Satisfaction with Care

Even though there is a large lack of resources and increasingly larger barriers to HIV treatment and prevention in the rural communities examined in our study, most people were content with the services they received. These services include Ryan White care, health department care, community based organizations, and private physicians. One unique factor about the satisfaction with care is that the more satisfied people were those living with HIV, had little to no resources, and received care from government based organizations. People with insurance did not have good experiences with the health department. This is because of lack of services for people who are HIV negative, and the stigma surrounding government agencies, for people who are living with HIV. Participants who sought private healthcare within the rural community were not happy with their provider, due to lack of sensitivity and knowledge of gay men's health and HIV, and instead sought care in more populated settings. These findings further emphasize the need for more qualified providers who are knowledgeable in HIV and gay men's health. As previously stated, the relationship between provider and patient is important in HIV treatment and prevention, as shown in this study and similar studies.[10, 15, 20, 25, 27, 30, 32, 33]

Limitations

There are several limitations with this study. First, the study population was broadly defined, due to the secretive nature of the population. Second, the MSM participants, in general, are white, older, insured, HIV-negative, and in some sort of care. These demographics could skew the findings of the study. However, because these participants are more privileged, they should have better health outcomes, but they are

still experiencing barriers to care and treatment. In terms of study sampling, there was not the same number of healthcare workers interviewed per district, and there was not the same number of MSM participants interviewed per district. Thus, there could be an over representation of certain healthcare districts. Third, recruitment flyers were administered in healthcare settings and healthcare workers assisted in recruitment of MSM participants. Because the purpose of this study was to examine barriers to HIV prevention and treatment, recruiting from healthcare services skews the study sample to only those already receiving care. Fourth, in terms of analysis, there was one coder for this study and having multiple coders increases validation of codes. Fifth, interviews were conducted via the phone and in qualitative research face-to-face, in person interviews are preferred and generally provide the most representative results. Finally, this study is an exploratory qualitative study and therefore cannot describe causation and is not generalizable to the larger rural health population in Georgia and other rural communities in the United States.

Further Directions and Conclusions

There are several barriers to HIV prevention and treatment in rural communities. Lack of personal and community resources contribute to higher rates of HIV transmission and acquisition. Traditional, religious, and conservative domains within rural communities increases stigma and discrimination towards the LGBT community, especially with MSM, which provides additional barriers. Institutional and political barriers, such as lack of funding and no expansion of Medicaid, contribute to the growing HIV epidemic in rural communities, especially in Georgia. Compared with rural

counterparts, MSM living in rural communities often have worse health outcomes and are affected by more barriers in access to HIV prevention and treatment services.

Further studies are needed to examine other factors unique to rural MSM, especially in the context of Georgia and the South in general. There is little data and literature surrounding the needs of this specific community. In addition, very few studies have examined barriers to HIV prevention and treatment within this population. Future studies should also examine the relationship between providers and patients within the rural community, as well as a survey of available community and personal resources of this population. More detailed, focus studies at the county and district levels is needed to examine these unique experiences and the needs of the population. Future qualitative studies should explore the integration of a sense of community among MSM participants and how that affects healthcare outcomes, especially surrounding HIV. Many MSM who live in more urban metropolitan locales experience the same lack of community, however this lack of community is operationalized differently within the rural population. Finally, to measure causation and improve upon generalizability, quantitative research, such as surveys and possible medical record abstraction, is needed in this population.

The healthcare workers and MSM participants discussed several recommendations or changes they would like to see in their community in terms of HIV prevention and treatment. The majority of recommendations included having a more acceptable larger community and increasing the LGBT community as well as having social events and bars and clubs in which to congregate. Healthcare workers and MSM participants mentioned the need for actual HIV prevention services which would require funding, staffing, and additional resources need for HIV prevention. Communication

about available resources and education about HIV and prevention methods is also needed in the rural communities studied. There also needs to be more specially trained providers closer to where the MSM live in their rural communities. There is an expressed need for PrEP and PrEP providers within the rural communities interviewed. On a larger scale, many healthcare workers called for the expansion of Medicaid in Georgia as well as making HIV a statewide concern with a statewide strategic plan. Because of reallocation of funds away from the rural communities into Atlanta, many resources and programs were taken. There is a call for return of funds to the rural communities in Georgia, as well as other rural locations in the United States, in order to effectively prevention HIV acquisition as well as increase the health outcome for people living with HIV.

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Appendices

Appendix A: Healthcare Worker Eligibility Form

Title of Study: An Exploratory Qualitative Study Examining Healthcare Needs Among MSM in Rural Georgia

ELIGIBILITY CONFIRMATION

STAFF NAME: ____

TODAY'S DATE: ____________/____________/______________

INCLUSION CRITERIA: Participants **MUST MEET ALL FIVE** of the following criteria to take part in the study.

1. Is age 18 or older: **Yes___** **No ___**

2. Is able to give verbal and written consent in English: **Yes ___** **No ___**

3. Employed by the Department of Public Health **Yes ___** **No ___**

4. Works with MSM or oversees HIV prevention services **Yes ___** **No ___**

5. Works in one of the following health districts: Rome, Valdosta, Waycross, Gainesville: **Yes ___** **No___**

EXCLUSION CRITERIA Participants with any one of the following characteristics **MUST** be excluded from the study:

1. Is unable to give informed consent (due to obvious inebriation/ intoxication, inability to comprehend the informed consent process, etc.): **Yes ___** **No ___**

Appendix B: Healthcare Worker Consent Form

Emory University
Consent to be a Research Subject

Title: Healthcare Needs among MSM in Rural Georgia

Principal Investigator: Jordan D. Helms, MPH candidate, Rollins School of Public Health, Emory University

Project Director/Advisor: Eric J Nehl, Ph.D. Neal Carnes, MA

Introduction:

You are invited to consider participating in this research study. The study is called "*Healthcare Needs among MSM in Rural Georgia.*" Please take your time to make your decision. It is important that you read and understand several general principles that apply to all who take part in our studies:

a) Taking part in the study is entirely voluntary;
b) Personal benefit to you may or may not result from taking part in the study, but knowledge may be gained from your participation that will benefit others;
c) You may withdraw from the study at any time without any of the benefits you would have received normally being limited or taken away.

The purpose and nature of the study, possible benefits, risks, and discomforts, other options, your rights as a participant, and other information about the study are discussed below. Any new information discovered, at any time during the research, which might affect your decision to participate or remain in the study will be provided to you. You are urged to ask any questions you have about this study with the staff members who explain it to you. You are urged to take whatever time you need to discuss the study with your physician and your family and friends. The decision to participate or not is yours. If you decide to participate, please sign and date where indicated at the end of this form. (Please note that you do not have to sign using your real name. You may use an alias if you wish).

The study is being sponsored by the Georgia Department of Public Health (GDPH) and the Emory University's (EU) Rollins School of Public Health (RSPH). The GDPH and RSPH are called the sponsors. The researchers in charge of this study are Jordan D. Helms, Eric J. Nehl, Ph.D., and Neal Carnes, MA.

Why is the Study Being Conducted?

You are being asked to participate in this study because you work or oversee work that is targeted to the community of men who have sex with other men (MSM). You may not participate in this study if any of the following applies to you:

- You are *younger* than 18 years old
- You are *not* able to give verbal and/or written consent in English
- You do *not* work in the health district being studied
- You do *not* work for the Department of Public Health
- You do *not* work with MSM or oversee services for MSM

The purpose of this study is to learn more about issues related to healthcare access, HIV, testing and treatment, and health behaviors among MSM living in Rural Georgia.

This research is being done because researchers know little about the relationship of healthcare use to risks for HIV, as well as testing and treatment practices, and health behaviors among MSM living in Rural Georgia. Our hope is that information from this study will help in creating effective prevention and treatment programs.

How Many People Will Take Part in the Study?

Participants in the study are referred to as subjects. About 50 subjects will take part in this study, 40 rural MSM participants and 10 healthcare workers. They will be recruited in the following health districts in Georgia: Gainesville, Rome, Valdosta, and Waycross.

What is Involved in the Study?

Now that you have been recruited as a prospective subject for the study, this step will help to confirm your eligibility and allow you to decide whether to give your informed consent to participate. If you do give your informed consent, you will be asked if you would like to participate in a focus group. If you are willing to proceed, the following will happen:

In-depth Interview. The interview asks questions about the socio-cultural context for MSM in Rural Georgia your attitudes, beliefs, and behaviors related to sexual behavior, sexual identity, and other health behaviors. The Principal Investigator (Jordan D. Helms) will conduct these activities based on an established protocol per the conceptual model. If there are questions that you do not want to answer, you may skip them.

What is the Length of the Interview?

The interview may take up to one and a half hours to complete. You can stop participating at any time.

What are the Risks to Being in the Study?

Risks and side effects related involved in participating in the study include: Being asked questions of a very personal nature can cause some people to become very anxious or uncomfortable. The research staff will keep your information private. They are sworn to not tell others about your visit and anything you have shared.

There may also be side effects, other than listed below that we cannot predict.

For more information about risks and side effects, ask the researcher or contact Dr. Eric J. Nehl (404) 727-9445 or Neal Carnes (404) 651-9833

Are There Any Benefits to Taking Part in the Study?

You may not directly benefit from participating in this study. Please note that this study is not intended to provide any medical benefits to you. The information you provide may benefit the population of MSM living in Rural Georgia concerning healthcare services provided for this population.

What are the Costs?

You will not have to pay for participation in the study.

What Other Options Are There?

You may choose not to participate in this study.

What About Confidentiality?

Efforts will be made to protect your research questionnaire and other personal information to the extent allowed by law. However, we cannot guarantee absolute confidentiality. Research records of study participants are stored and kept according to legal requirements. You will *not* be identified in any reports or publications resulting from this study. Organizations that may request to inspect and/or copy your research questionnaire for quality assurance and data analysis include groups such as:

- Emory University ‘s Rollins School of Public Health
- Emory University Institutional Review Board (IRB)
- Georgia Department of Public Health (GDPH) IRB
- Other research oversight government agencies

Data Security

Data collected will be identified with an ID number only and will be kept in locked files and password-entry computer files, separate from any personal contact information. These files will be stored in the offices of the Emory University School of Public Health as well as secured on an encrypted, password protected server at the Emory University

Rollins School of Public Health.

Payment for Participation

You will not be offered payment for being in this study.

What Are My Rights as a Participant?

Taking part in this study is voluntary. You may choose to not take part in or leave the study at any time. If you choose to not take part in or to leave the study, your regular care will not be affected nor will your relations with your physicians, other personnel and the hospital or university. In addition, you will not lose any of the benefits to which you are entitled.
We will tell you about new information that may affect your health, welfare, or participation in this study.
By signing this form you do *not* lose any of your legal rights.

New Findings

It is possible that the researchers will learn something new during the study about the risks of being in it. If this happens, you will be told about it so you can decide if you want to continue to be in this study or not. You may be asked to sign a new consent form that includes the new information if you decide to stay in the study.

Contact Information

Jordan Helms (502) 345-9601, Eric J. Nehl (404) 727-9445, or Neal Carnes (404) 651-9833

- if you have any questions about this study or your part in it,
- if you feel you have had a research-related injury, or
- if you have questions, concerns or complaints about the research

Contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu:

- if you have questions about your rights as a research participant.
- if you have questions, concerns or complaints about the research.
- You may also let the IRB know about your experience as a research participant through our Research Participant Survey at http://www.surveymonkey.com/s/6ZDMW75.

Consent & Authorization

Please, print your name and sign below if you agree to be in this study. By signing this consent form, you will not give up any of your legal rights. We will give you a copy of the signed consent, to keep.

____

Name of Subject

____

Signature of Subject　　　　Date　　　　Time

____

Signature of Person Conducting Informed Consent Discussion　　　　Date　　　　Time

Appendix C: MSM Eligibility Form

Title of Study: An Exploratory Qualitative Study Examining Healthcare Needs Among MSM in Rural Georgia

ELIGIBILITY CONFIRMATION

STAFF NAME: ____

TODAY'S DATE: ____________/____________/______________

INCLUSION CRITERIA: Participants **MUST MEET ALL FIVE** of the following criteria to take part in the study.

1. Self-identifies as a male: **Yes ___**
   No ___
2. Is age 18 or older: **Yes___**
   No ___
3. Is able to give verbal and written consent in English: **Yes ___**
   No ___
4. Had any sex with a man in the past (oral, anal, or both): **Yes ___**

   No___
5. Resides in one of the following health districts:
   Rome, Valdosta, Waycross, Gainesville: **Yes ___**

No___

EXCLUSION CRITERIA Participants with any one of the following characteristics **MUST** be excluded from the study:

1. Is unable to give informed consent (due to obvious inebriation/ intoxication, inability to comprehend the informed consent process, etc.):

   Yes ___ No ___

Appendix D: MSM Consent Form

Emory University
Oral Consent and Script/Information Sheet
For a Research Study

Study Title: Healthcare Needs among MSM in Rural Georgia

Principal Investigator: Jordan D. Helms, Rollins School of Public Health

Introduction and Study Overview

Thank you for your interest in our men who have sex with men (MSM) research study. We would like to tell you everything you need to think about before you decide whether or not to join the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study.

1) The purpose of this study is to learn more about issues related to healthcare access, HIV, testing and treatment, and health behaviors among MSM living in Rural Georgia.
2) This study will take about an hour to complete. The interview will be recorded and destroyed within six months thereafter.
3) If you join, you will be asked questions about your attitudes, beliefs, and behaviors related to sexual behavior, sexual identity, and HIV prevention services. The Principal Investigator (Jordan D. Helms) will conduct these activities based on an established protocol per the conceptual model. If there are questions that you do not want to answer, you may skip them
4) About 50 subjects will take part in this study, 40 rural MSM participants and 10 healthcare workers. They will be recruited in the following health districts in Georgia: Gainesville, Rome, Valdosta, and Waycross.
5) Risks and side effects related involved in participating in the study include: Being asked questions of a very personal nature can cause some people to become very anxious or uncomfortable. The research staff will keep your information private. They are sworn to not tell others about your visit and anything you have shared.
6) This study is not intended to benefit you directly, but we hope this research will benefit people in the future.
7) Your privacy is very important to us.
8) Your health information that identifies you is your "protected health information" (PHI).
9) The PHI we will use includes survey responses and voice recordings.
10) To protect your PHI, we will follow federal and state privacy laws, including the Health Insurance Portability and Accountability Act (HIPAA).
11) The following persons or groups may use and /or disclose your PHI for this study:
    - The Principal Investigator and the research staff.
    - Emory offices who are part of the Human Research Participant Protection Program, and those who are involved in research-related administration and billing
    - The Georgia Department of Public Health

12) We will disclose your PHI when required to do so by law in the case of reporting child abuse or elder abuse, in addition to subpoenas or court orders.
13) You may revoke your authorization at any time by calling the Principal Investigator, Jordan Helms (502) 345-9601
14) If identifiers (like your name, address, and telephone number) are removed from your PHI, then the remaining information will not be subject to the Privacy Rules. This means that the information may be used or disclosed with other people or organizations, and/or for other purposes.
15) We do not intend to share your PHI with other groups who do not have to follow the Privacy Rule, but if we did, then they could use or disclose your PHI to others without your authorization. Let me know if you have questions about this.
16) Your authorization will not expire because your PHI will need to be kept indefinitely for research purposes.

Contact Information

If you have questions about this study, your part in it, your rights as a research participant, or if you have questions, concerns or complaints about the research you may contact the following:

Jordan Helms, Principal Investigator at (502) 345-9601 or email at Jordan.Helms@emory.edu

Emory Institutional Review Board: 404-712-0720 or toll-free at 877-503-9797 or by email at irb@emory.edu

Consent

Do you have any questions about anything I just said? Were there any parts that seemed unclear?

Do you agree to take part in the study?

Participant agrees to participate: Yes No

If Yes:

____
Signature of Person Conducting Informed Consent Discussion Date Time

____
Name of Person Conducting Informed Consent Discussion Date Time

Appendix E: Recruitment Script for Healthcare Workers

Hello [insert name here],

My name is Neal Carnes. I Work for the Georgia Department of Public Health in their Office of HIV/AIDS. I am calling you today to discuss an opportunity to take part in a research study. This study is being conducted in collaboration with Jordan Helms, a graduate student at the Rollins School of Public Health at Emory University.

The primary reason to interview you is to hear about your experience working with rural men who have sex with men (MSM) regarding HIV prevention and barriers to these services. Findings from this study intend to help us better understand the needs of MSM who live in rural Georgia and how to develop better health programs.

By participating in this study, you will take part in an hour long interview and be asked questions about your experience working with rural MSM.

If you are interested in participating in this study, please call Jordan Helms at 502-345-9601, or email him at jordan.helms@emory.edu to set up a time to conduct this interview.

Are there any questions you have for me?

Listen for and answer questions.

Thank you for your time and have a wonderful day.

Appendix F: Recruitment Flyer

GAY/BI MEN'S STUDY

60 MIN INTERVIEW: $10 Gift Card

- Are you a **man**?
- In the past **12 months**, have you had sex with another man?
- Help us understand **your** HIV service needs.
- What are **your** experiences?

If interested, please Call/Text **Jordan Helms** at

or email at

Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

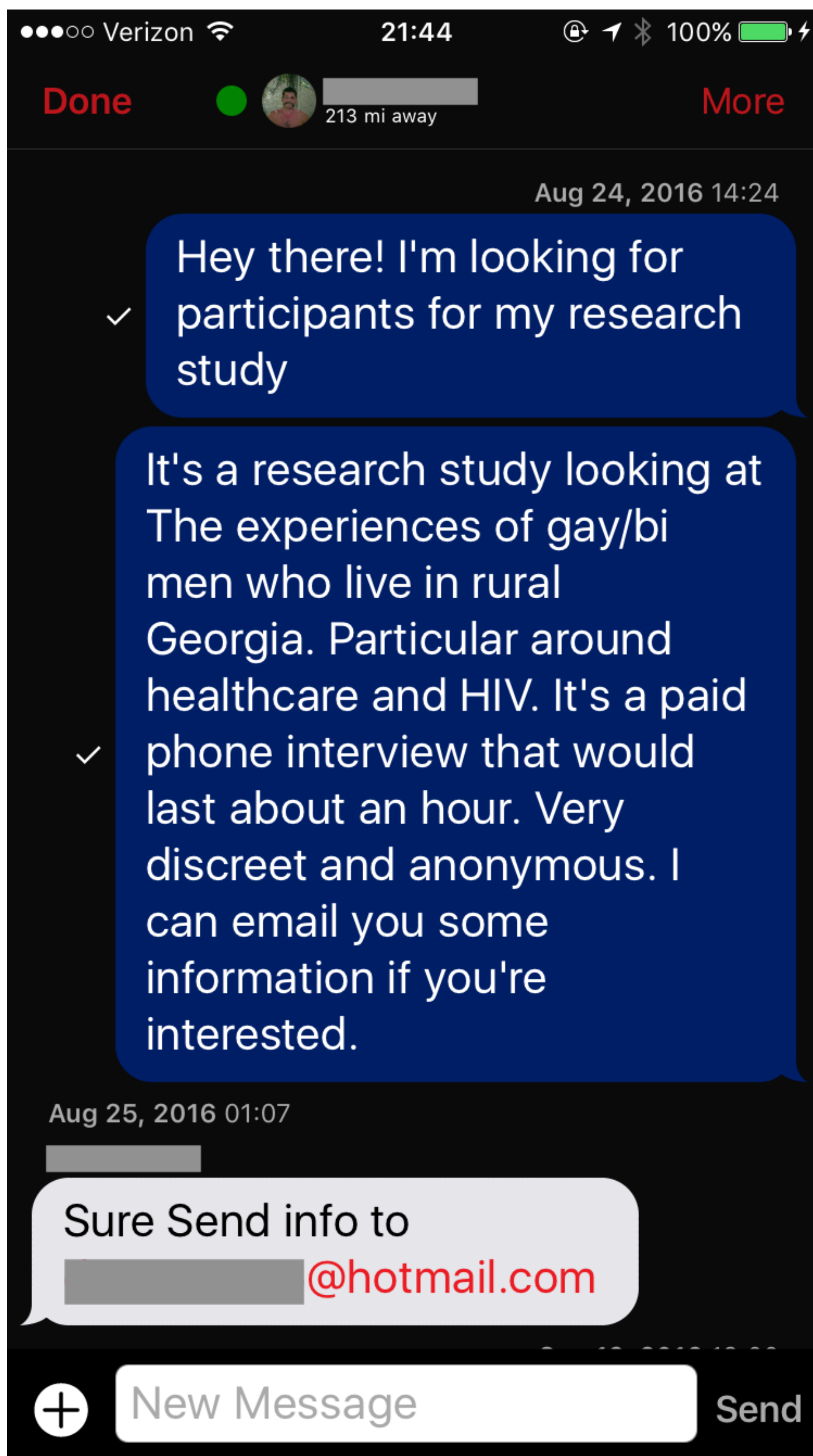
Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

Gay/Bi Men's Study

Appendix G: Sample Conversation on "Hook-up" App



Appendix H: Healthcare Worker Interview Guide

Interview Schedule and Questions (for healthcare workers)

1. Introduction: Thank you for taking time to talk with me. I appreciate your willingness to discuss your experiences. The primary reason to interview you is to hear about your experience working with rural men who have sex with men (MSM) regarding HIV prevention and barriers to these services. Findings from this study intend to help us better understand the needs of MSM who live in rural Georgia and how to develop better health programs.

Before we proceed, what is your current age? (If less than 18, thank them for their time and explain the study is limited to those 18 years of age or older.)
Please state your position with the department of public health and which district you work in (If occupation is not one that directly works with services targeted to MSM and/or they do not work in the district being studied, thank them for their time and explain this study is specifically considering the experiences of people who work with MSM)

2. Interviewer Role: I want you to feel this is an opportunity for you to tell your story. I am interested in your experiences and what they may mean to you. Please feel free to share anything you think is important. My job is to listen to you in order to understand your story.

3. Audio Recording Procedures: I will record our conversation so that your answers are told in your words. I want to ensure I am listening to you more than writing. Your voice will be distorted by the audio-recorder through an adjustment to the pitch and tone settings. At times, I may take notes to capture something you say that leads to a follow-up question, but primarily I hope to approach this interview more like a conversation. No one, besides me and possibly my advisor (Dr. Eric Nehl,), will ever listen to the tape and I will erase it, to better protect your confidentiality, within a week of this interview. Is this okay with you?

4. Confidentiality: Please feel free to speak openly with me. Maintaining your privacy is the most important thing to me and anything you say will be kept private and confidential. I will not include your name for as you know I have not asked for your name, just a nickname. Any other unique information that could identify you will also be excluded from any reports or publications, and will be destroyed no later than at the time of the audio-recording destruction. Please note: you are free to skip any question you do not wish to answer, and you are free to stop the interview at any point and for any reason.

5. In order to protect your identity, I am asking you to select a nickname or pseudonym that I can identify you during this interview as well as in my write up. Please note, I do intend to publish my dissertation and will identify you based on this selected nickname or pseudonym, so I encourage you to select one that does not allow others to identify you. Do you have a nickname/pseudonym in mind? (If yes, let them disclose their selected nickname. If they do not have one in mind, offer the following as possibilities: Addison, Ari, Blake, Bobbie, Charlie, Dana, Dorian, Eddie, Francis, Jamie, Jesse, Kelly, Logan, Max, Morgan, Pat, River, Sam, Shawn, Tanner, Taylor, Tracie – these nicknames were selected based on their gender neutrality. Once a nickname has been selected, check the participants level of comfort, emotionally and physically.)

6. Interview Length: The interview will last about an hour to an hour and a half. Please feel free to ask questions and let me know if you need to take a break.

7. Study Information/Agreeing to Participate: It is important we go over the study's Consent Form, which describes the nature of the study, your role in the study, the steps taken to maintain your confidentiality, and the voluntary nature of the study. You can take a written copy with you. We can go over it together or you are free to read it on your own. Which would you prefer? (Read the Consent Form if requested or wait for the participant to finish reading). Any questions? (Address any questions). Do you give permission to participate in the study by being interviewed? (If they do not, thank them and end the interview. If they give permission, begin the interview). Do you give consent to being audio recorded? (If they do not, thank them and end the interview. If they give permission, begin the interview)

[Select record] Thank you again for agreeing to participate in this study. We are now recording. Today is... My name is Jordan Helms. I am a Master's student at Emory University's Rollins School of Public Health. Today I have the honor of talking with (nickname). I would like to ask your permission to record the interview which I will transcribe myself and use the transcription for study purposes. If you are ok with recording please indicate by saying your nick name. [Demonstrate the voice distortion function to the participant by replaying the recording of this introductory statement.]

My first question is a general question to introduce you to the types of questions I'll be asking and provides an opportunity to get used to talking about yourself, your experiences, and what importance they hold for you.

Introduction

I would like to hear a little bit about you.

a. What is your current age?
b. In what city and county do you currently live?
c. How do you identify your sex?
d. How do you identify your gender?
e. How do you identify you race and ethnicity?
f. What is your current socio-economic (or income) status?
g. What is your current level of education?
h. How do you define your sexuality?

Transition statement: *Now that I know a little bit about you, I want to hear more about your work with MSM.*

Experience with MSM

1. Please describe what you do at the department of public health.
    i. What tasks do you do as a part of your job?
    j. How long have you been in your current position?

2. Tell me about your experiences working with MSM.
    a. How long have you worked with the MSM population'
    b. Have you worked only with Rural MSM?
    c. Have you worked with Urban MSM?
    d. What differences do you see?

Information about the health district in which you work

1. Please tell me about the culture of this district/county.
    e. What is it like to live there?
    f. Conservative or liberal?
    g. How do you see the community feels about homosexuality? MSM?
    h. What is the acceptability of sexual minorities?
    i. How does the community view HIV?

2. Now, please tell me about the MSM community here.
    a. Are there social networks you see?
    b. How do MSM find each other? Are there gathering places, homes, etc.?
    c. What is the attitude toward visibility?

3. Tell me about the knowledge of HIV/AIDS in this community?
    a. The same or different in the general, non-MSM community as compared to the MSM community? The comparison groups may not be clear given the question statement
    b. Is it the same or different from a more urban population?

Transition statement: *Now I want to ask you about the HIV prevention/treatment services in this district.*

<u>Description of services offered</u>

1. Tell me about the HIV prevention services available.
    a. What kinds of services do you offer?
    b. Are STI tests and treatment available?
    c. Testing?
    d. How often?
    e. Who is the target population for prevention?

2. What do you see is the community's attitudes about the services you provide?
    a. Is this an office in which anyone from the district can present themselves?
    b. Are they aware of these services?
    c. Are they satisfied with these services?

3. Describe to me what happens when someone tests positive.
    a. What are the next steps?
    b. Referral list available, (calls made/) and sites nearby?
    c. How are they linked to care?
    d. Is the health care provided free of charge for those without insurance?
    e. Are these physicians in the district/county?
    f. Do they have to drive to a larger city? How far? How often?
    g. Do people stay in care?

<u>Barriers to prevention/treatment services</u>

1. Describe any barriers to prevention services you see in this community.
    a. What keeps people from getting tested?

2. What do MSM say prevents them from prevention services?
    a. What do they say is the reason for not getting tested?

3. Describe any barriers to treatment/care that you see in this community.
    a. How does this compare to barriers identified by MSM?

4. What do MSM say prevents them from seeking treatment?
    a. How does this compare to barriers identified by MSM?

Transition statement: N*ow that I know more about the services offered, I would like to hear about your thoughts on hese services.*

Critiques to the services

1. What would you like to change, if anything, in regards to prevention services in this community?
    a. Do you feel this represents what you hear from the community?
    b. What services do you feel the MSM community wants?
    c. Men and women?
    d. How satisfied do you see the MSM community is with the current prevention services?

2. What would you like to change, if anything, in regards to treatment in this community?
    a. Do you feel this represents what you hear from the community
    b. What services do you feel the MSM community wants?
    c. How satisfied do you see the MSM community is with the current treatment services?

Closing

Any final thoughts about what we have discussed during this interview. Additional details you would like to add; questions you wish I had asked yet didn't; or, thoughts about the interview itself?

(Address final questions or concerns.)

8. Thank you: Thank you again for taking time to talk about your experiences. The information you have shared has been very helpful. If you have any questions you think of later, please feel free to call me.

(End of Interview Schedule)

Appendix I: MSM Interview Guide

Interview Schedule and Questions (for MSM)

Introduction: Thank you for taking time to talk with me. I appreciate your willingness to discuss your experiences. The primary reason to interview you is to hear about your experience as a man who has sex with men (MSM) regarding HIV prevention and barriers to these services. Findings from this study intend to help us better understand the needs of MSM who live in rural Georgia and how to develop better health programs.

Before we proceed, what is your current age? (If less than 18, thank them for their time and explain the study is limited to those 18 years of age or older.)
How do you identify your sex/gender? Male, female, transgender, or other (If "no" thank them for their time and explain this study is specifically considering the experiences of MSM).
Have you had sex with a man in the last 12 months? (If "no" thank them for their time and explain this study is specifically considering the experiences of MSM).

Interviewer Role: This is an opportunity for you to tell your story. I am interested in your experiences and what they may mean to you. Please feel free to share anything you think is important. My job is to listen to you in order to understand your story.

Audio Recording Procedures: I will record our conversation so that your answers are told in your words. I want to ensure I am listening to you more than writing. Your voice will be distorted by the audio-recorder through an adjustment to the pitch and tone settings. At times, I may take notes to capture something you say that leads to a follow-up question, but primarily I hope to approach this interview more like a conversation. No one, besides me and possibly my advisor (Dr. Nehl), will ever listen to the tape and I will erase it, to better protect your confidentiality, within a a few months of the interview. Is this okay with you?

Confidentiality: Please feel free to speak openly with me. Maintaining your privacy is the most important thing to me and anything you say will be kept private and confidential. I will not include your name, just a nickname. Any other unique information that could identify you will also be excluded from any reports or publications, and will be destroyed no later than at the time of the audio-recording destruction. Please note: you are free to skip any question you do not wish to answer, and you are free to stop the interview at any point and for any reason.

In order to protect your identity, I am asking you to select a nickname or pseudonym that I can identify you during this interview as well as in my write up. Please note, I do intend to publish the findings and will only identify you based on the selected nickname or pseudonym, so I encourage you to select one that does not allow others to identify you. Do you have a nickname/pseudonym in mind? (If yes, let them disclose their selected nickname. If they do not have one in mind, offer the following as possibilities: Addison, Ari, Blake, Bobbie, Charlie, Dana, Dorian, Eddie, Francis, Jamie, Jesse, Kelly, Logan, Max, Morgan, Pat, River, Sam, Shawn, Tanner, Taylor, Tracie – these nicknames were selected based on their gender neutrality. Once a nickname has been selected, check the participants level of comfort, emotionally and physically.)

Interview Length: The interview will last about an hour to an hour and a half. Please feel free to ask questions and let me know if you need to take a break.

Study Information/Agreeing to Participate: It is important we go over the study's Consent Form, which describes the nature of the study, your role in the study, the steps taken to maintain your confidentiality, and the voluntary nature of the study. You can take a written copy with you. We can go over it together or you are free to read it on your own. Which would you prefer? (Read the Consent Form if requested or wait for the participant to finish reading). Any questions? (Address any questions). Do you give permission to participate in the study by being interviewed? (If they do not, thank them and end the interview. If they give permission, begin the interview). Do you give consent to being audio recorded? (If they do not, thank them and end the interview. If they give permission, begin the interview)

[Select record] Thank you again for agreeing to participate in this study. We are now recording. Today is... My name is Jordan Helms. I am a Master's student at Emory University's Rollins School of Public Health. Today I have the honor of talking with (nickname). I would like to ask your permission to record the interview which I will transcribe myself and use the transcription for study purposes. If you are ok with recording please indicate by saying your nick name. [Demonstrate the voice distortion function to the participant by replaying the recording of this introductory statement.]

My first question is a general question to introduce you to the types of questions I'll be asking and provides an opportunity to get used to talking about yourself, your experiences, and what importance they hold for you.

Introduction

I would like to hear a little bit about you.

a. What is your current age?
b. In what city and county do you currently live?
c. How do you identify your sex?
d. How do you identify your gender?
e. How do you define your sexuality?
f. Do you know your HIV status? (if yes, what is it?)
g. How do you identify you race and ethnicity?
h. What is your current socio-economic (or income) status?
i. What is your current level of education?

Transition statement: *Now that I know a little bit about you, I want to hear more about the community in which you live.*

History living in the community

2. How long have you lived here?
   j. Did you grow up here? Did you move here?
   k. How was the transition to living here?

3. Please tell me about the culture of this district/county.
   j. What is it like to live here?
   k. Conservative or liberal?
   l. How do you see the community feels about homosexuality? MSM?
   m. What is the acceptability of sexual minorities?
   n. How does the community view HIV?

Sexuality and the community

1. Please tell me about the experiences with your sexuality and living in the community.
   a. Are you out to anyone? To whom?
   b. Do you feel comfortable discussing your sexuality with people in your life?
   o. Do you feel safe here?
   a. Where do you go to find friends? Partners?

2. How do you think life would be different if you lived in a bigger, more liberal community?
   a. Would you be able to be out?
   b. Do you think you would have more support there?
   c. Would you be more accepted?
   d. Would there be more services for LGBT persons?

Experiences with healthcare providers

1. Please describe to me past experiences with healthcare providers.
    a. Do you have a primary physician?
    b. Where are they located?
    c. Are you out to them?
    d. Do you discuss your sexuality with them?
    e. Do you discuss HIV prevention with them?

HIV

1. Please tell me about your knowledge of HIV/AIDS
    a. What do you know about HIV?
    b. What do you think your friends know about HIV/AIDS?
    c. What about your community?

2. How do you think your community is affected by HIV/AIDS?
3. How serious do you think it is to live with HIV/AIDS?
4. Do you feel comfortable talking about HIV and ways to prevent it with your friends? Partners?
5. Do you believe you will get HIV in your lifetime?
    a. If you felt like you had HIV, would you go to your doctor, why or why not?
6. Please describe to me the kinds of support you would receive if you were to become HIV positive? (Family? Friends? Doctor? Partner(s))

Prevention Services

1. Tell me about HIV prevention services you know of.
    a. What kinds of HIV prevention methods are available in your area?
    b. Do you know where you can get tested for HIV?
    c. Have you ever been tested for HIV?
    d. How often do you get tested? Where?

2. Please tell me about the times you have gone to places where you can get HIV prevention services
    a. How long ago was that
    b. Do you go regularly?
    c. Where did you go?
    d. How did you feel about the experience?
    e. Were you tested for HIV?
3. If you were to test positive for HIV, tell me how would get into treatment.
    a. Where would you go.
    b. Who would you tell
    c. How would you pay for treatment?
    d. Would you stay on treatment?

Barriers to care

1. Please describe to me what prevents you from using HIV prevention services?
    a. What prevents you from going to get tested? Starting PrEP? Getting on treatment? Using condoms?
2. What do you think prevents your friends, other members of your community from using HIV prevention services?
    a. What kinds of prevention services would you like to see offered
    b. What would make you use these services?

Gay/Bi Men's Wellness Center

1. Would you go to a wellness center specifically focused on gay and bi men's health? Why or why not?
2. What services would need to be offered to meet your needs?
4. Would you go to one in your county?
    a. How far would they travel to get to one?
5. Do you think the gay men in your area and/or friends and partners would use such a Center?

Future changes

Please describe me what changes you would like to see in your community regarding HIV/AIDS.
What changes, if any, would you like to see with your doctor about HIV/AIDS?
What changes, if any, would you like to see in your community about MSM (LGBT people?
What changes, if any, would you like to see with your doctor about LGBT people?

Closing

Any final thoughts about what we have discussed during this interview. Additional details you would like to add; questions you wish I had asked yet didn't; or, thoughts about the interview itself?

(Address final questions or concerns.)

Thank you: Thank you again for taking time to talk about your experiences. The information you have shared has been very helpful. If you have any questions you think of later, please feel free to call me. If you think of anyone who may meet the study's inclusion criteria that would be interested in discussing being interviewed please feel free to share the study's number.

Compensation: Here is the gift card I mentioned as a way to thank you for your time and participation.

(End of Interview Schedule)

Appendix J: Healthcare Worker Demographic Form

1. What is your age?__________

2. Ethinicity origin (or Race) (Check all that apply):
   a. White
   b. Hispanic or Latino
   c. Black or African American
   d. Native American or American Indian
   e. Asian / Pacific Islander
   f. Other (please specify): ______________________

3. What is the highest degree or level of school you have completed? *If currently enrolled, highest degree recieved*.
   a. No schooling completed
   b. Nursery school to 8th grade
   c. Some high school, no diploma
   d. High school graduate, diploma or the equivalent (for example: GED)
   e. Some college credit, no degree
   f. Trade/technical/vocational training
   g. Associate degree
   h. Bachelor's degree
   i. Master's degree
   j. Professional degree
   k. Doctorate degree

4. What county do you live in?___________________________

5. What county do you work in?_______________________

6. Do you consider yourself to be:
   a. Heterosexual (straight)
   b. Gay or lesbian
   c. Bisexual
   d. Other (please state)_______________________

7. What is your gender identity? (check all that apply)
   a. Male
   b. Female
   c. Trans male/Trans man
   d. Trans female/Trans woman
   e. Genderqueer/Gender non-conforming

Different Identity (please state):_________________

Appendix K: MSM Demographic Form

1. What is your age?

2. Ethinicity origin (or Race) (Check all that apply):
    a. White
    b. Hispanic or Latino
    c. Black or African American
    d. Native American or American Indian
    e. Asian / Pacific Islander
    f. Other (please specify): ______________________

3. What is the highest degree or level of school you have completed? *If currently enrolled, highest degree recieved*.
    a. No schooling completed
    b. Nursery school to 8th grade
    c. Some high school, no diploma
    d. High school graduate, diploma or the equivalent (for example: GED)
    e. Some college credit, no degree
    f. Trade/technical/vocational training
    g. Associate degree
    h. Bachelor’s degree
    i. Master’s degree
    j. Professional degree
    k. Doctorate degree

4. What is your current relationship status?
    a. Single
    b. Dating
    c. Partnered
    d. Married
    e. Widowed
    f. Seperated
    g. Divorced

5. If you are in a relatinshp, which best describes your relationship?
    a. Exclusive/Closed (mutually monogamous)
    b. Open (dating multiple persons)
    c. Polyamrous (more than one person in a relationship)

6. Employment status
    a. Employed for wages
    b. Self-employed
    c. Out of work and looking for work
    d. Out of work but not currently looking for work
    e. A homemaker
    f. A student
    g. Military
    h. Retired
    i. Unable to work

7. What county do you live in?___________________________

8. Which best descibes your current health insurance?
    a. Private plan (employment bsed)
    b. Private plan (direct purchase)
    c. Government plan (medicare)
    d. Government plan (medicaid)
    e. Government plan (military health care)
    f. Uninsured

9. Did you receive health insurance as a result of the Affordable Care Act ("Obamacare")?
    a. Yes
    b. No

10. Do you consider yourself to be:
    a. Heterosexual (straight)
    b. Gay or lesbian
    c. Bisexual
    d. Other (please specify)_______________________

11. What is your gender identity?
    a. Male
    b. Female
    c. Trans male/Trans man
    d. Trans female/Trans woman
    e. Genderqueer/Gender non-conforming
    f. Different Identity (please state):_________________

12. What is your HIV status?
    a. HIV positive
    b. HIV negative
    c. Don't know

13. What best desrcibes your religious preference?
    a. Christian
    b. Evangelical
    c. Baptist
    d. Methodist
    e. Presbyterian
    f. Episcopalian
    g. AME
    h. Luthern
    i. Pentacostal
    j. Adventist
    k. Mormon
    l. Jehovah's Wittness
    m. Catholic
    n. Orthodox Christianity
    o. Jewish
    p. Muslim
    q. Atheist
    r. Agnostic
    s. Other (please specify):____________________

Appendix L: Transcriptionist Confidentiality Agreement

Confidentiality Agreement

Transcriptionist

I, __Angela Michell Otwell___ transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentations received from Jordan Helms related to his/her research study on the researcher study titled "An Exploratory Qualitative Study Examining HIV Related Healthcare Needs Among MSM in Rural Georgia."

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents.
2. To not make copies of any audiotapes or computerized titles of the transcribed interviews texts, unless specifically requested to do so by the researcher, (name of researcher).
3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession.
4. To return all audiotapes and study-related materials to (researcher's name) in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices.
6. I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed)

____

Transcriber's signature

____

Date ____

Appendix M: Codebook

Demographics

Definition: Text regarding personal information to the individual (MSM participant)

Use for:

- Age
- Race
- SES
- HIV status
- Work history

Example:

I grew up in a small town 45 minutes from Valdosta. It's called Moultrie. I was the third child with two older brothers into a very Christian family. They're very religious, so they do not approve of any homosexual activity or anything like that…

Social Structure

Definition: Social environment of the community in which a participant works/lives

Use for:

- Stigma
- Homophobia
- Discrimination
- Religion
- Other environmental factors

Example:

Well, pretty much where we grew up, you have to go to Valdosta or "town," as we like to call it, in order to grocery shop. We just got an IGA maybe 3 years ago in Statenville, and that's it. There's convenience stores, one red light, two gas station kind of town. So you had to go Valdosta in order to go to college, grocery shop, things like that, so pretty much, I came to Valdosta.

Retention in Care

Definition: References made when discussing HIV+ and their relationship to care

Use for: References made to keeping HIV+ MSM in care

Example:

I would say I think we have a pretty high rate that will stay sometimes. Unless they're doing drugs or unless they're doing something else or they're just in denial. But I would say at least 80% or maybe higher. That would stay in care, and we have the other ones that either they're using drugs or they're in denial… Everything else is important except the appointments or coming to care, so yeah, I would say, like, I feel comfortable, like 87%, let's say, retention, like 87%.

Linkage to Care
Definition: Connecting MSM who are positive into HIV care and treatment

Use for:

- Process of how to link people to care
- Difficulties linking people to care

Example:
I went in for just a checkup and then they came, well they ran tests and everything and blood work and then I went back for the results and they told me that I was, you know, that I had, or that I was positive for HIV and I mean they just walked me over to the Ryan White department because it's on the other side of the building, and sort of pretty much handed me over.

Available Community Resources
Definition: Resources avail bile in the community related to HIV prevention/treatment

Use for:

- Health service resources
- Services in community related to HIV treatment/prevention

Example:
They have the South Georgia Pride here, and I think they do the testing. I'm pretty sure they do. But it was just something that I did up there, but I never went to the health department every 3 months like you're supposed to, so it was just something I did once a year there.

Personal Resources
Definition: Resources that MSM individual has to live/function/aid with HIV prevention/treatment/healthcare

Use for:

- Insurance
- Income
- Social support
- Personal sexual risk reduction

Example:
I have to go to the ER or to the urgent care. I applied for the whole healthcare thing but at my job it's I'm on that threshold where I don't make enough, it's like I don't make enough to qualify for it.

Health Practices
Definition: Practices that participant employees to keep them healthy

Use for:
- HIV prevention/treatment practices
- Diet
- Exercise
- Risk reduction practices
    - Condoms
    - ART
    - PrEP
    - Abstinence
    - Sero-sorting
    - Less risky types of sexual acts

Example:
I don't use condoms with my husband, but we have had sexual relations outside of our marriage before, and we've always used condoms.

Types of Services Utilized
Definition: The source of HIV prevention/treatment services that the participant use.

Use for:
- Private Physician
- Community Based Organization
- ER care
- Health Department services
- Ryan White Clinics

Example:
I honestly have hung onto my general practitioner in Atlanta, mainly because he knows me. There are two doctors and a couple of nurse practitioners in the practice, and once somebody has all your health records, if you like them, stick with them. It is not worth filling out all the forms kind of thing.

Knowledge/Awareness of HIV
Definition: Assessing general information regarding HIV in the community/MSM participant

Use for: knowledge/awareness

Example:
I know the basic stuff that everybody knows that…it's contracted through unprotected sex and also the mother has it the child could have it at birth just the basic stuff.

Perceived Health
Definition: Perception of health status/risk for change in health status (i.e. acquisition of HIV, other diseases)

Use for: Any reference to health status or perceived health

Example:
I'm pretty sure everyone here knows about it [HIV], but again, I think that it's just the thought in your head is, "Oh, well it's not going to happen to me," because of the circle being so small, whether people realize it or not, we're fucking the same people over and over, and you know, it's really sad that that happens, but the pond is so small and there are so many fish. I think that it's just, either people don't care or it's just in the back of their mind that, "It won't happen to me," kind of thing.

Health Status
Definition: Perception of health status/risk for change in health status (i.e. acquisition of HIV, other diseases). As well as received health diagnoses

Use for:
- Perceived health status
- Evaluated health status
- Perceived susceptibility

Example:
We do have a few places up here [to socialize] but the majority of the patients go down there [Atlanta]. So that's where they always bring back their STDs from.

Barriers to Services
Definition: Anything that prevents MSM individual from accessing HIV prevention/treatment services

Use for:
- Cost
- Availability
- Knowledge of services
- Discrimination/stigma
- Transportation
- Other barriers mentioned by participant

Example:
I don't actually use the health department where I live just because all of their blood goes to the hospital and it goes through the main laboratory, which is where I used to work, and I don't like the fact that, you know, everybody would see.

Satisfaction with Care
Definition: Participants' satisfaction with HIV related care (prevention and treatment services)

Use for:
- Coordination of services
- Communication of services
- Time spent with provider
- Access/availability/convenience of services
- Comprehensiveness of services
- General satisfaction with services

Example:
I've felt welcomed, as I've said I've gone with some clients of theirs. I've never felt out of place and yes they were more than happy to test me and what have you so I mean for the most art it's a great organization it really is.

Critique of Service
Definition: Critiques of prevention and treatment services provided and/or available services in the community

Use for: Critiques of treatment/prevention services

Example:
I think that they [department of public health] are so overworked, understaffed, underfunded, and underpaid, that they do the bare minimums, as required by state and federal law. As far as going above and beyond or trying to provide that one-on-one doctor/patient stuff you would get from going to your general practitioner and paying for it, no, not at all.

Recommendations
Definition: recommendations to services, community climate, resources, etc.

Use for: recommendations to:

- Healthcare services
- Personal/community resources
- Community climate
- Healthcare opportunities

Example:
First and foremost, funding. Again, I know the state budget, and it's horribly underfunded for what they need to do. They need to budget to do it, and they need internal education about it and maybe even, dare I say, some sensitivity training? Because even with my ex's case, there were several health care providers in that general facility that would look at him as a second-class individual and one of these – "You did this to yourself. You could have prevented it. Now you're taking my time because of your ill decisions," and stuff like that. So I would like to see stuff like that changed.

Experience Working with MSM
Definition: References to what healthcare worker does for a living and working with the MSM community

Use for: Working experience with MSM.

Example:
My role is…I do HIV testing and counseling. I also facilitate prevention programs for high risk, for those that are at high risk for contracting HIV and I also facilitate programs for prevention with positives people who are already HIV positive. Working with them as far as their medication adherence, teaching them about safer sex, condoms, things like that.

Relationships
Definition: How participants meet friends/partners and types of relationships

Use for:

- Sexual partners
- Romantic partners
- Casual partners
- Friends

Example:
It's primarily online from what I can tell. Just – at least in my experience. And then you end up with the FOFs, which are the friends of a friend who you may run into or something like that. But with my demographic being different, I don't have that many opportunities when it comes to that, just because, like, if I look on Grindr right now, everything is 26 and under or faceless.

Substance Use

Definition: References made to illicit/illegal substances used

Use for:

- Alcohol
- Marijuana
- Cigarette
- Tobacco
- Illicit drug use

Example:

Well our biggest problem area? Is drug abuse and mental health. That's our biggest thing of what we see because of non-compliancy. We have a lot of meth users, we have crack users, we have alcoholics, 90% of our patients smoke cigarettes, probably 90% of our patients use marijuana, which that's fine with me. I think that should be legalized. And I think low literacy. Those are our biggest problems

Appendix N: Emory IRB Approval Letter

EMORY
UNIVERSITY

Institutional Review Board

TO: Jordan Helms
Principal Investigator
*SPH: Behavrl Sciences & Health

DATE: April 01, 2016

RE: **Expedited Approval**
IRB00087938
An Exploratory Qualitative Study Examining HIV Related Healthcare Needs Among MSM in Rural Georgia

Thank you for submitting a new application for this protocol. This research is eligible for expedited review under 45 CFR.46.110 and/or 21 CFR 56.110 because it poses minimal risk and fits the regulatory category F[7] as set forth in the Federal Register. The Emory IRB reviewed it by expedited process on **03/31/2016** and granted approval effective from **03/31/2016** through **03/30/2017**. Thereafter, continuation of human subjects research activities requires the submission of a renewal application, which must be reviewed and approved by the IRB prior to the expiration date noted above. Please note carefully the following items with respect to this approval:

- Revised_Rural_HIV_MSM_IRB_Protocol_2016.docx
- Revised_Rural_HIV_MSM_2016_Interview guide_HC.docx
- Rural_HIV_MSM_2016_Demographic_HC.docx
- Rural_HIV_MSM_2016_Demographic_MSM.docx
- Rural_HIV_MSM_2016_Eligibility_HC.docx
- Rural_HIV_MSM_2016_Eligibility_MSM.docx
- Rural_MSM_2016_Interview guide_MSM.docx
- Rural_MSM_Recruitment_Poster_Draft.pdf
- RuralMSM_Recruitment Script for HC.docx
- Rural_HIV_MSM_2016_Consent_HC.doc
- Rural_MSM_Verbal_consent.doc
- waiver of signed documentation of consent - approved. No More Than Minimal Risk Study, signed consent not required outside the research context, info sheet provided.

Any reportable events (e.g., unanticipated problems involving risk to subjects or others, noncompliance, breaches of confidentiality, HIPAA violations, protocol deviations) must be reported to the IRB according to our Policies & Procedures at www.irb.emory.edu, immediately, promptly, or periodically. Be sure to check the reporting guidance and contact us if you have questions. Terms and conditions of sponsors, if any, also apply to reporting.

Before implementing any change to this protocol (including but not limited to sample size, informed consent, study design, you must submit an amendment request and secure IRB approval.

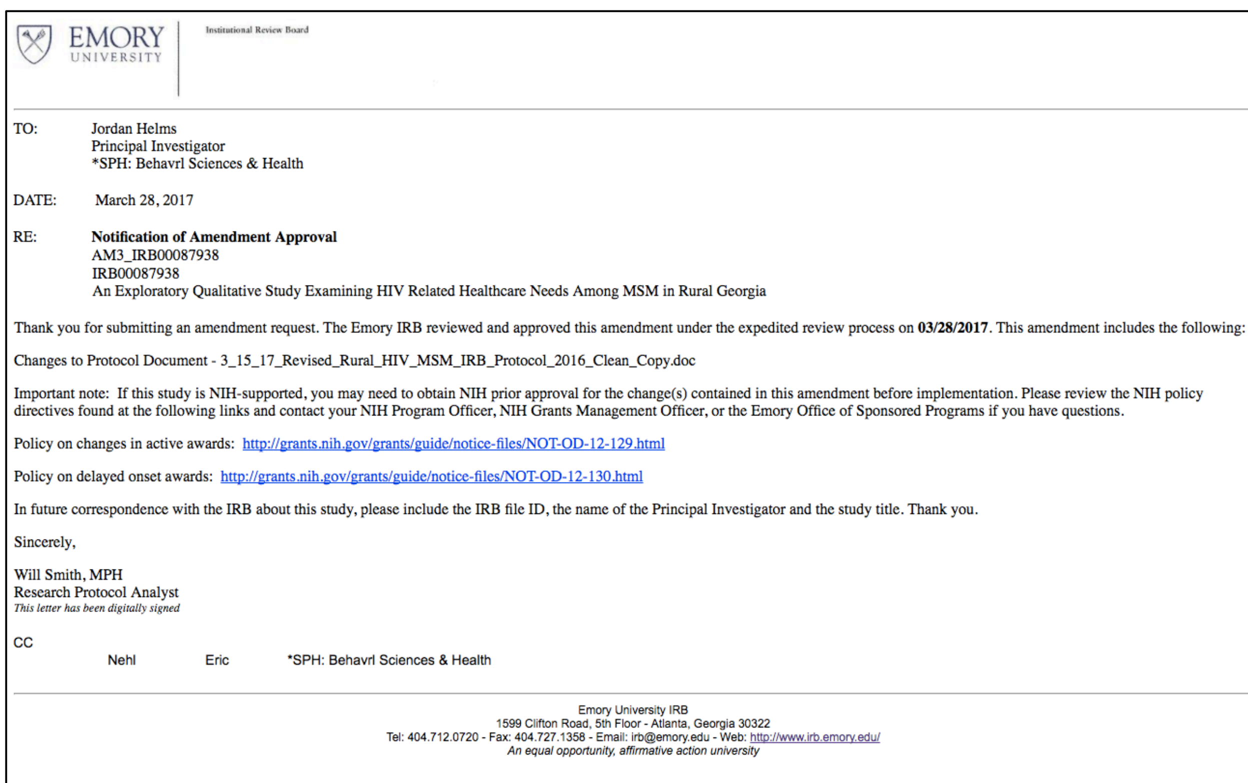
In future correspondence about this matter, please refer to the IRB file ID, name of the Principal Investigator, and study title. Thank you

William Smith
IRB Research Protocol Analyst
This letter has been digitally signed

CC:

Nehl Eric *SPH: Behavrl Sciences & Health

Emory University
1599 Clifton Road, 5th Floor - Atlanta, Georgia 30322
Tel: 404.712.0720 - Fax: 404.727.1358 - Email: irb@emory.edu - Web: http://www.irb.emory.edu/
An equal opportunity, affirmative action university



EMORY UNIVERSITY

Institutional Review Board

TO: Jordan Helms
Principal Investigator
*SPH: Behavrl Sciences & Health

DATE: March 28, 2017

RE: **Notification of Amendment Approval**
AM3_IRB00087938
IRB00087938
An Exploratory Qualitative Study Examining HIV Related Healthcare Needs Among MSM in Rural Georgia

Thank you for submitting an amendment request. The Emory IRB reviewed and approved this amendment under the expedited review process on **03/28/2017**. This amendment includes the following:

Changes to Protocol Document - 3_15_17_Revised_Rural_HIV_MSM_IRB_Protocol_2016_Clean_Copy.doc

Important note: If this study is NIH-supported, you may need to obtain NIH prior approval for the change(s) contained in this amendment before implementation. Please review the NIH policy directives found at the following links and contact your NIH Program Officer, NIH Grants Management Officer, or the Emory Office of Sponsored Programs if you have questions.

Policy on changes in active awards: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-129.html

Policy on delayed onset awards: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-130.html

In future correspondence with the IRB about this study, please include the IRB file ID, the name of the Principal Investigator and the study title. Thank you.

Sincerely,

Will Smith, MPH
Research Protocol Analyst
This letter has been digitally signed

CC
Nehl Eric *SPH: Behavrl Sciences & Health

Emory University IRB
1599 Clifton Road, 5th Floor - Atlanta, Georgia 30322
Tel: 404.712.0720 - Fax: 404.727.1358 - Email: irb@emory.edu - Web: http://www.irb.emory.edu/
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Appendix O: GDPH IRB Approval Letter

Brenda Fitzgerald, MD, Commissioner | Nathan Deal, Governor

2 Peachtree Street NW, 15th Floor
Atlanta, Georgia 30303-3142
www.health.state.ga.us

May 5, 2016

Jordan Helms
Masters Candidate

Project: **160502 - An Exploratory Qualitative Study Examining HIV Related Healthcare Needs Among MSM in Rural Georgia**

Project Status: Approved Until 05/05/2017

Dear Researcher,

The above-refereneced project was reviewed by the DPH Institutional Review Board in accordance with expedited review procedures outlined in 45 CFR 46.110(b)(1), category(ies) 7
The Board has **approved** this study until **05/05/2017**

If you wish to continue this project beyond the current approval period, please submit a "Continuing Review Application" before the above expiration date. If you do not submit a renewal application before the expiration date, the approval of your project will automatically terminate. Any involvement with human subjects must cease on the above date unless you have received approval from the Board to continue the project. It is the investigators responsibility to track the deadline.

This approval applies only to the protocol described in your application. IRB review and approval is required before implementing any changes in this project except where necessary to eliminate apparent immediate hazards to human subjects.

If you have any questions regarding this letter or general procedures, please contact the DPH IRB at irb@dhr.state.ga.us. Please reference the project # in your communication.

Best wishes in your research endeavors,

Brian Kirtland, Ph.D.