“Just Going Without”: A Health Needs Assessment for Queer Women, Non-binary, and Transgender People in Seattle, WA

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Abstract

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Queer people (LGBTQIA+ people) face discrimination that negatively impacts their health. Research on queer health has tended to condense people of diverse queer identities into one group, meaning little is understood about the differences in health needs at different intersections of queerness. This trend has obscured the health needs of queer women, people of color, gender minorities (non-binary, genderqueer), and transgender people. The present study uses mixed methods to evaluate the health needs of queer women and non-binary people. Our findings indicate that queer women and non-binary people face considerable barriers when seeking health care services, across a broad spectrum of service types. Insurance and financial barriers were most ubiquitous, but transportation, hours, and queer competence also presented

barriers that reduced access to care. This study improves our understanding of queer health needs and suggests areas for intervention to support queer health, but further research is needed.

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Specific Aims:

AIM 1: To evaluate the relative importance of health needs and the degree to which they are met among queer (LBTQ) women and non-binary people in King County, WA, by analyzing data from (n=238) quantitative survey respondents.

The Lesbian, Bisexual, Trans, and Queer (LBTQ) Women's Health Needs Assessment and Feasibility study conducted a needs assessment survey to explore the health needs that LBTQ women and non-binary people identify as being most important to them. The survey also sought to evaluate the relative importance of health needs, participants' experiences with healthcare, and the degree to which their health needs were being met. The survey was primarily quantitative with multiple choice and Likert-type response options, and a few short free response questions. The goal of this aim is to quantitatively describe participants' health priorities and the degree to which they are met. To explore heterogeneity and disparities within the study population, we conducted stratified analyses of health needs among participant sub-groups, including identifying as women vs other genders, and cisgender vs. non-cisgender participants.

AIM 2: To conduct an exploratory, inductive, qualitative analysis from four focus groups to explore participants' experiences with unmet health needs and elucidate participant recommendations and ideas for care improvements for LBTQ people in King County, WA.

The Lesbian, Bisexual, Trans, and Queer (LBTQ) Women's Health Needs Assessment and Feasibility study conducted four focus groups (n=27) with queer women and non-binary people to better understand their health needs. Specifically, the focus groups explored questions such as:

what health needs are being met adequately, vs. not met? Who is meeting these health needs, and who would queer women and non-binary people like to see meeting those needs? The topics addressed in the focus groups spanned the spectrum of care, including medical healthcare, mental health services, and dental care. This aim involved developing a mixed deductive/inductive codebook and conducting a thematic analysis.

Background:

Globally, lesbian, gay, bisexual, transgender, and queer (LGBTQ+) communities experience health disparities due to discrimination on multiple levels based on their sexual orientations and gender identities. Throughout, we use the terms "LGBTQ+" and "queer people" as umbrella terms to refer to all people who self-identify within the full spectral span of sexual and gender identities, excluding people who identify as cisgender and heterosexual. The "+" in "LGBTQ+" recognizes the breadth of the unlisted identities that are still very much part of the broader queer community, such as intersex, pansexual, and asexual people. This usage is consistent with the current usage of the term "queer" in the queer studies and social science literature (1). We use the terms "queer women" and "LBTQ" to refer to female-identifying lesbians, bisexuals and pansexuals, as well as transwomen of any sexuality. These terms are derivates of "queer people" and "LGBTQ+", respectively, and are helpful here given our study sample. We use the term "non-binary people" to include those who are gender fluid, two-spirit, and/or gender non-conforming. Our study primarily involves LBTQ and non-binary people as participants but discusses LGBTQ+ health issues more broadly. The use of terms and acronyms to refer to groups of queer people is diverse within the queer community and is highly inconsistent, both across academia and within individual disciplines, including public health. We diverge from the above terms only to ensure that data from our references are portrayed accurately.

Examples of systemic discrimination against LGBTQ+ people include the global prohibition of LGBTQ+ identities – 71 countries criminalize private, consensual, same-sex activity between men, 43 countries between women, and there are 11 countries where the death penalty may be imposed in the event of consensual same-sex activity. There are 15 countries that

expressly criminalize transgender identities, but transgender people are negatively impacted by a range of laws criminalizing aspects of their identity expression (2). Thus, LGBTQ+ identifying people face broad discrimination, which negatively impacts queer health in many ways, at various levels.

Anti-LGBTQ+ discrimination remains prevalent in the U.S. Until June 26, 2015, gay marriage was legal in only a minority of U.S. states (3). Despite its legalization, LGBTQ+ individuals continue to be denied service by bakers, catering halls, and photographers when attempting to exercise their right to marry (4). Transgender people are often denied the right to use the restroom that aligns with their gender identity (4) causing emotional trauma, and furthering trans stigma. As of 2016, 31 states had "a low or negative overall rating in terms of legal equality for transgender people," vs. 22 states for LGB people (5). Additionally, federally funded adoption agencies can still deny LGBTQ+ families access to adoption (4). Additionally, at the state level there are ongoing attempts to impede access to gender affirming care, particularly for transgender children. Texas, Alabama, and Florida have all made legislative moves to prohibit clinicians from administering gender-affirming care to trans children, and have gone as far as to label such care as child abuse (6–8). The ongoing navigation of these and innumerable other structural barriers has a deleterious impact on the health of queer people. Additionally, the persistence of systemic and structural discrimination against queerness enables the persistence of damaging interpersonal discrimination and harassment, and restricted access to health services that exacerbates health strife for queer people.

Among LGBTQ adults in the U.S., incidents of interpersonal discrimination are common: 57% of LGBTQ+ adults in the US have been the target of slurs, 51% report experiencing sexual harassment, 51% violence, and 34% bathroom use related harassment (9). The same national

study (n=489) found that 91% of respondents believed that “LGBTQ” and “transgender” identities are discriminated against in the U.S. Importantly, 18% of LGBTQ people reported avoiding healthcare encounters due to concern about being discriminated against, and that number rose to 22% among transgender people (9). Among LGBTQ people 16% report having faced discrimination during clinical encounters. Of individuals with LGBTQ+ identities, 22% faced discrimination when seeking housing, 22% when seeking equal pay or promotions, and 20% when applying for jobs, or 20% when applying to or attending college (9).

Due to the complex impacts of lifelong interpersonal, institutional, and structural discrimination, LGBTQ+ people when evaluated across their lifespan face disparities in terms of their health and its social determinants. Young, middle aged, and aging queer people all face similar types of discrimination manifest anew with shifting life stages. The nationwide 2019 Youth Risk Behavior Survey (YRBS) found that 32% of “LGB” youth reported being the target of bullying at school (10), and bullying increases the risk of depression, suicidal ideation, and alcohol/drug use (11). LGB youth are more than four times as likely to have attempted suicide compared to heterosexual youth (12–14). Queer youth are also more likely than heterosexual cis-gender youth to have experienced homelessness in the last 12 months (15). LGBTQ youth have greater than double the risk of homelessness as compared to their non-LGBTQ peers, and among youth living homeless LGBTQ youth have greater than double the risk of premature death (15). As adults, LGBTQ+ people have higher rates of psychiatric disorders (16,17), substance abuse (16,18,19), and suicide (16,20). They also face frequent violence and issues with personal and familial acceptance that can have long lasting negative mental health impacts (16,21,22).

Institutional and structural discrimination against LGBTQ+ people create barriers to health. People in the LGBTQ+ community experience gaps in healthcare services. Lesbian

women are less likely than heterosexual women to receive preventive cancer screening (16,23,24), and lesbian and bisexual women are more likely to be overweight or obese (16,25). Transgender individuals have higher rates of HIV and STDs (16,26), mental health issues (16,27) and suicide (16,28), in addition to being less likely to be insured than heterosexual or LGB people (16,29). Elders and aging members of the LGBTQ+ community face isolation and difficulty accessing culturally competent care providers (16,30). Again, taking a lifetime perspective (31), LGBTQ people of all ages face ever changing forms of discrimination that contribute to considerable health disparities, which negatively impact the ability of queer people to lead long and healthy lives.

The queer community exists, definitionally, as a result of their marginalization by dominant heteronormative society (1), but queer identity is experienced as a component of an individual's multiple intersecting identities, including race/ethnicity, gender, age, socioeconomic class, and disability status. People of different queer identities face intersecting discrimination, such as racism and/or sexism, in addition to homophobia and/or transphobia (32). For example, one study found that LGBTQ people of color were twice as likely as LGBTQ whites to say that they had faced "institutional discrimination" when applying for jobs and interacting with the police (9). Gay white men occupy some positions of privilege relative to queer women, or queer people of color. These positions of privilege have enabled gay white men to commandeer collective queer movements and take credit for the work of transgender and BIPOC queer organizers. Sexism plays a clear role in shaping the power dynamics within the queer community that have enabled such exclusionary behavior to persist (33). The history of queer movements is a story of the peripheralization of queer women, transgender people, and non-binary people at the hands of gay cis-gender men (33). People of diverse LGBTQ identities face documented

discrimination upon attempting to enter and while attempting to exist within the broader queer community, due to biphobia, acephobia, transphobia, gatekeeping, and racism (34). A national survey of LGBTQ care providers found that gay men were most (89%) likely to be served by the clinics of those surveyed, followed by 80% of clinics serving lesbian women, 74% serving bisexual men and women, 74% serving transgender women, 70% serving queer men and women, and 66% serving transgender men, indicating that access to health services may be poorer for people of some marginalized queer identities (35). The asymmetrically massive HIV/AIDS research funding apparatus may further marginalize under-researched queer communities, as HIV research has historically tended to focus on gay men, while often excluding other queer identities. Increasingly, HIV research is expanding is focus beyond MSM communities, including black MSM and transwomen who carry a disproportionately high burden of HIV in the US and globally. But these improvements have not overcome the historical research trends that have reduced the broader consideration of queer health to disease specific research contexts, allowing MSM to eclipse other queer identities, while further obscuring the broader picture of queer health needs. As a result, LBTQ people are statistically buried and silenced by HIV and public health researchers in much the same way that they have historically been peripheralized by gay men (36).

While our understanding of queer health is improving, regionally specific information about queer health needs is still sparse. In the Seattle, King County, WA area specific information about queer health needs and the degree to which they are met is limited. We conducted an informal literature review of queer health needs assessments in Seattle, WA since 2010. We used Google Scholar with the search terms [“Seattle” “LGBTQ” “Health”] and [“Seattle” “LGBTQ” “Needs”] and reviewed the first 100 results for each search, which returned

the 6 following relevant articles. A small (n=11) qualitative paper with a sample from The Pacific Northwest, U.S. in 2013 found that LGTBQ people report receiving substandard care due to discrimination (37). A national survey of aging LGBTQ people (aged 50 and over), based in Seattle, WA, and published in 2015 with a sample of (n=355) from King County, WA found that 16% were denied service or were provided inferior service due to sexual orientation and/or gender-based discrimination and reported that "most aging and health and human services providers do not have adequate training to effectively serve LGBTQ older adults" (38). Another 2015 survey (n=52) of LGBTQ immigrants and undocumented residents of King County, WA found that 77% of participants reported it was either 'important' or 'very important' that they feel part of their local immigrant or refugee communities, while 85% responded that it was either 'important' or 'very important' to feel part of the local LGBTQ community (39). In 2016, a Seattle, WA based study on youth transgender health (n=50 caregivers, 15 youth) found 6 primary barriers to care "1-few accessible pediatric providers are trained in gender-affirming health care; 2-lack of consistently applied protocols; 3-inconsistent use of chosen name/pronoun; 4-uncoordinated care and gatekeeping; 5-limited/delayed access to pubertal blockers and cross-sex hormones; and 6- insurance exclusions" (40). A recent article highlighted the importance of continuing accessible HIV services in Seattle, WA during the COVID-19 pandemic (41). A 2016 Seattle-based, qualitative study (n=52) of youth transgender-specific health barriers mentioned above made 6 recommendations: Themed barriers to care led to the following recommendations: "1-mandatory training on gender-affirming health care and cultural humility for providers/staff; 2-development of protocols for the care of young transgender patients, as well as roadmaps for families; 3-asking and recording of chosen name/pronoun; 4-increased number of multidisciplinary gender clinics; 5-providing cross-sex hormones at an age that permits peer-

congruent development; and 6-designating a navigator for transgender patients in clinics" (40). Other recent Seattle based LGBTQ+ research has focused on school safety for youth (42), aging research (43,44), and more theoretical work related to queer health (45). While limited, the exigent Seattle-specific LGBTQ+ health needs research suggests that gender and sexual orientation-based discrimination reduce access to care and quality of care, and that access to and quality of care may be different for people of differing queer identities. However, more research is needed to better elucidate the specific differences in unmet health need across queer identities.

The discrimination faced by LGBTQ+ people negatively impacts their health. Queer people face multidimensional discrimination, that acts on multiple levels to restrict healthy behaviors (encourage unhealthy behaviors) and limit access to healthcare services. Additionally, the preponderance of discrimination within the queer community is distributed asymmetrically, with gay, male, cis-gendered identities facing different discrimination than lesbian, bisexual, transgender, and non-binary identities. These asymmetrical distributions of discrimination drive and parallel the disparities in health outcomes between these queer identities. By definition, queer identities are diverse but the preponderant trend in scientific inquiry about the health of queer people is to lump all queer identities together as a single community. This trend servs to amplify the voices of cis-gender, male queer voices, while burying those of transgender people and female identifying people. Thus, what little research attention has been paid to queer health outside of the HIV/AIDS context, has largely furthered a troubling and damaging narrative and causal pathway, that prevents the most marginalized queer identities from becoming the communities of focus in research. Thus, researchers need to intentionally focus their research inquiries on the most marginalized queer identities, in order to reduce health disparities within the queer community and beyond. Additionally, while some national level surveys have worked

to evaluate queer health status and needs, there is an apparent lack of regional and urban-center-specific information available about the status of queer health. The present study is designed to address these evident research gaps by focusing its inquiry on marginalized queer voices (LBTQ and non-binary) and by developing a regionally specific understanding of queer health needs.

The goal of this study is to evaluate the unmet health needs of marginalized queer people in the Seattle, Washington Metro Area. We identify lesbian and bisexual women as marginalized as result of the combined impacts of homophobia and sexism. We also include non-binary and transgender queer identities as marginalized given the negative health impacts of homophobia, transphobia, and xenophobia. We intentionally exclude cis-gender, male, queer identities (gay men, bisexual men) as these identities, while they face their own types of discrimination and associated health issues, have been the focus of substantial research inquiry by comparison to other queer identities, and as stated, their inclusion often obscures the health experiences of less prominent queer groups.

This study, led by a Seattle community organization, Gay City, was a mixed-methods evaluation of unmet queer health needs, including a quantitative survey, and qualitative focus groups. The study is exploratory in nature, with a QUAN-QUAL emphasis and sequential temporality, where quantitative data collection preceded qualitative (46,47). We integrate quantitative and qualitative results through a combined complementarity (48) and triangulation approach (49), identifying and discussing similarities and differences between findings from both methodological approaches. A mixed-methods approach was appropriate given the exploratory nature of the primary research question, and focus groups were selected for qualitative data collection, reflecting a desire to understand consensus and disagreement within queer communities of particular identity groups (50). These research findings should inform the

development and expansion of queer health initiatives in Seattle, WA, in addition to improving our understanding of the health experiences and needs of people of diverse queer identities.

Methods:

Study Population and Recruitment:

The Lesbian, Bisexual, Trans, and Queer (LBTQ) Women's Health Needs Assessment and Feasibility study was conducted by a Seattle-based queer community organization, with the purpose of understanding the specific health needs of people of diverse queer identities and informing the organization's future programming. Technical assistance was provided by academic partners from University of Washington. We used a multipronged recruitment strategy to recruit participants to respond to a quantitative survey about their healthcare needs. This multi-pronged strategy included emails to listservs, an online flier on the organization's website, dissemination of print fliers at community venues, and in-person outreach at community events such as Seattle Trans* Pride.

Eligible participants identified as LBTQ and/or non-binary, identified in some way with the experience of seeking or receiving services constructed as "women's health", were at least 14 years of age, were residents of King County, WA, and were willing to share information about their health needs and experiences seeking healthcare services.

At the end of their survey, all survey participants were asked to indicate whether they were willing to participate in a focus group discussion. Focus group eligibility criteria matched the eligibility criteria from the quantitative survey, except focus group participants needed to be at least 18 years old. Willing participants were contacted by the study team and scheduled to attend an in person focus group meeting, in Seattle, WA, of 6-8 participants.

Quantitative Study Design and Survey Instrument:

Study participants completed a cross-sectional online eligibility screener and survey between 6/22/2018 and 9/28/2018. Participants accessed the survey either using a study mobile device if recruited through in-person outreach, or by accessing the survey link on their own device. The survey was exploratory, quantitative, and descriptive. Participants were asked about their basic demographic information, sex and gender identity, sexuality, annual household income, and health insurance status. In addition, participants were asked to identify their ten most important health needs, and their level of healthcare satisfaction across 16 care types. Participants were also asked to identify specific barriers to care, again across 16 areas of care. The preference of participants to have specific health services met in an LGBTQ+ devoted healthcare setting was evaluated.

Items were developed through collaboration between the academic and community-based members of the study team. Healthcare satisfaction was evaluated using a five anchor Likert-type scale (completely unsatisfied, unsatisfied, neither satisfied nor unsatisfied, somewhat satisfied, complete satisfied). Items to evaluate barriers to healthcare provided as response options included: none, insurance/financial, transport, hours, gender/sexuality inclusivity, other (asked to specify). To evaluate the relative number of total barriers to care for each care category, we calculated mean and SD, using the equation {total number of barriers to care in each category / n number of respondents for that category}. We used the mean values to rank each care category from that with the highest average number of barriers to care to that with the lowest average number of barriers to care. The care types with the higher number of barriers have higher mean values, and lower number ranks. Thus care type of rank number 1 had the highest average number of barriers, while rank 16 had the lowest number of barriers. The weighting factor was

produced with the equation [1 / (number of responses per category / total number of responses)], where the total number of responses is the sum of the number of responses in each category. Weighted means were calculated by multiplying raw means by their weighting factor. We report the proportion of participants that affirmed any barrier for each area of care. Additionally, we will report the mean and SD of the number of distinct barriers reported by participants for each category, using this metric to rank care types from highest to lowest overall barriers. Finally, by care category, we report the proportion of total participants that affirmed each barrier type. Healthcare setting preference between an open-to-all setting versus an LGBTQ+ specific health setting was evaluated with a five anchor Likert-type scale with response options including (strongly prefer open setting, somewhat prefer open setting, no preference, somewhat prefer LGBTQ+ setting, strongly prefer LGBTQ+ setting). The survey was administered using the HIPAA-compliant REDCap platform.

Quantitative Analysis:

We exported our complete data set from REDCap and used R-studio statistical software to clean and analyze the data. We included only complete survey responses (n=238). We report basic demographic information about our sample, in addition to information on the distribution of gender identities and sexualities across the sample. For the level of importance of each health need, we report mean and standard deviation, and mean rank. To evaluate levels of healthcare satisfaction, we assigned sequential numerical values to the five Likert anchors and report mean satisfaction and standard deviation. For healthcare barriers, by care area, we report the percent of participants affirming any care barrier and the percent that report each specific barrier. We also report the mean and standard deviation of the number of barriers reported by participants for

each category of healthcare service. For care setting preference we assigned ascending numerical values and take means of the Likert-type responses.

In addition to the above descriptive statistics, when sample size permitted, we evaluated differences in responses according to binarized or categorical demographic groups. These comparisons included those who identified as women vs. other genders, and cisgender vs non-cisgender. We used t-tests to calculate p-values and evaluate differences between these binarized demographic groups in terms of their responses to the relative importance of health needs.

Qualitative Study Design and Focus Group Description:

Participants for the focus groups had completed the quantitative survey and indicated that they were willing to also participate in a focus group. Up to 8 participants were invited to each of four focus groups, based on their provided scheduling preferences.

The focus groups took a semi-structured approach and were exploratory by design and intended to validate survey findings, better understand the community-level experiences of people from diverse queer identities as they interacted with the healthcare system in King County, WA, and gain guidance about design of programs to meet community needs. Focus groups were chosen as opposed to individual interviews to assess the level of agreement and congruity across the diversity of queer identities. Discussion questions explored care experiences in terms of access, and quality, in addition to asking about unmet healthcare need and health aspirations.

Many of the topics discussed in focus group discussions can be highly sensitive for some participants, and some such questions can negatively influence a participants' willingness to engage in the focus group discussion and share openly; some participants may choose to self-

censor when they are uncomfortable sharing their personal responses in a group setting. To abate this issue, focus group questions were asked in an order that started with less invasive questions, to help the group build rapport and get comfortable with one another, before more sensitive topics were broached. Additionally, the identity alignment of each focus groups' members (queer, and self-identification with female health issues) may have helped to create a sense of community and comfortability within each group.

Mixed-methods approach:

The combination and integration of quantitative and qualitative results will be undertaken with a combined complementarity and triangulation approach. In this case, given the sequential QUAN-QUAL design, qualitative findings were used to confirm quantitative findings (triangulation), and also in order to enhance and further specify quantitative findings (complementarity) (51).

Qualitative Theoretical Framing:

This study frames its analysis of queer identities in terms of intersectional theory (32). We recognize that queer people, and those in our study sample, often occupy more than one queer identity (gender, sexuality) and that these overlapping identities can be viewed as particular intersections either from a societal or community level perspective. Additionally, we recognize that people who align with multiple queer identities may face types of discrimination that are unique to the intersections that they occupy, as people from differing queer identities tend to be impacted by different social driving forces (sexism, homophobia, racism, agism, etc.).

Finally, queer identities intersect with race, class, age, and disability status, which each augment the types of discrimination faced by people of varying queer identities.

We consider the health impacts of queerness and of queer marginalization across the lifespan, in accordance with the lifespan approach described by (31). Exposures and health risks change over the life of individuals, as their presentations, experiences, and public perception change. Sometimes these effects are cumulative over the course of the lifespan, while other times these exposures are acute or temporally bound. We consider the impact of ongoing and changing queer marginalization across the lifespan, on the health and wellbeing of our participants, given their various identities.

Partner Organization Positionality:

The primary mission of our partner organization is to support the community, cultural, and health needs of all queer identifying people in the King County, WA area. The Seattle-based organization was started in response to the US HIV/AIDS epidemic. Thus, while the organization has always offered a queer-health informed approach, health needs differ between specific queer identities. Historically this partner organization has expressly provided services and helped to hold space for gay and bisexual men, while also being supportive of the health needs of queer women, trans, and non-binary people. In the early 2000s the partner organization absorbed a queer women's health organization, which expanded our partner organization's mission to be more inclusive of the full spectrum of queer identities.

Research Team Positionality:

The research team was comprised of investigators and researchers from the University of Washington Department of Global Health (UW DGH). These included an Acting Assistant Professor who was involved during project design, data collection, and analysis, and a Master of Public Health Student involved in data analysis and publication preparation. While the UW DGH team does occupy some queer identities that overlap with those of study participants, our research team occupies economic, racial, and education intersections that may be quite divergent from those of our study sample. Additionally, our primary contact at GayCity was a queer woman working in a public health context. Therefore, our primary contact had identities overlapping with those of both the research team and of the study participants.

Epistemology Statement:

The authors of this study ascribe to the belief that the outputs of qualitative inquiries are significantly influenced by the theoretical stance of the authors. Positivist researchers and interpretivist researchers, due to methodological preferences and preferred ways of knowing, approach the analysis of qualitative data differently and with divergent results. Our study team has a combination of interpretivist and positivist identified researchers. Given that the study is exploratory in nature, the research team intentionally erred on the side of inclusion during the code generation process. Interpretivist code developers preferentially chose in-vivo codes when feasible. Deductive (positivist) codes were developed based on survey questions and based on the research team's discussions with the partner organization. To fully honor research participants' expertise in their lived experiences, theme generation involved collapsing

overlapping codes, with the preference that inductively generated codes absorb deductively generated codes.

Qualitative Analysis:

This study approached code development with a mixed approach. First, the study team collaborated with the partner organization, and conducted a review of the quantitative survey items to generate a deductive codebook. Deductive codes were reviewed by the study team member that designed the quantitative survey, and codes evaluated in comparison to the research objectives set forth in our grant application.

Separately, and without reference to the deductive codebook, researchers executed an inductive, open coding process (52). This involved two code writers reading through a complete focus group transcript and suggesting relevant codes as they present themselves, with an effort to use in-vivo coding and keep the language of the participants intact wherever possible (53). The coders were provided no explicit recommendations in terms of the number of or type of codes to generate, beyond ensuring coverage of facilitators and barriers to successfully accessing care. After both coders independently generated a list of codes, the two coders met to discuss all codes. Inductive codes based on overlapping constructs were collapsed into single codes based on discussion and consensus between the two coders. We erred towards inclusivity and codes initially identified by only one of the two code writers were included. Codes were grouped into parent/and child code groups based on the identified codes' relationships to one another.

After the code generation process was complete, the two coders (same as code writers) conducted a double-coding process on all focus group transcripts. Coders were encouraged to use the codebook liberally, and to apply more than one code whenever prudent. The deductive and

inductive codes were merged into a single codebook to prevent one set of codes being referred to in preference to the other set. The coders consulted with one another throughout the coding process to achieve intercoder agreement and ensure that individual code definitions were interpreted with consistency. Coders read each other's coded transcripts and compared to their own coding and each identified text fragments for coding discussion and resolution.

Once the double coding process was complete, both coders met to discuss emergent themes. We intentionally do not report an inter-rater reliability and chose instead to include, for thematic considerations, codes that were only identified by one of two coders, again erring on the side of inclusion given our exploratory intention. Theme generation consisted of a collaborative process by which the association between codes and the relative importance placed on them was evaluated by the coding team. Overlapping codes were collapsed with updated code descriptions. Coders noted the relationships that participants identified between codes. Ultimately, themes were generated from the final collapsed codebook and based on an evaluation of the common threads that emerged in the coder's notes.

Results:

Quantitative Sample Characteristics:

The study sample was young, with a median age of 28 (IQR: 23, 35). Overall, participants were predominantly White (86.0%). Participants of color were primarily Asian (9.3%), with lower numbers of survey respondents identifying as Latinx (3.8%), Black (2.5%), American Indian/Alaska Native (2.5%), and Native Hawaiian/Pacific Islander (1.3%). Only 3.8% of the sample had less than a high school level education, while 64.0% of participants had completed a 4-year college degree or a post-graduate degree. More than ¼ of participants (26.3%) had completed a post-graduate educational program (i.e. MD, PhD, MPH). Half of the sample (51.9%) reported an annual household income of less than $40,000 USD, a quarter of the sample (25.1%) reported an annual household income of $40,000-80,000 USD, and 22.9% reported that their annual household income exceeded $80,000 USD. Household incomes supported a median of 1 adult (IQR: 1,2) and 0 children (IQR: 0,0). The entire sample (100%) reported "Native/Fluent" level English language proficiency. A majority of the study sample had private health insurance (67.5%), while slightly over a quarter (27.4%) were publicly insured and 5.1% were uninsured.

In terms of sex and gender identity classified with a single-choice item, a majority of the sample (52.9%) identified as cisgender women, while the sample contained no cisgender men, consistent with our eligibility criteria. Around ¼ of the sample (25.6%) identified as genderqueer or gender non-binary, and 15.2% identified as transgender (6.7% Trans woman, 8.4% Trans man). One participant identified as intersex (0.4%), and the remaining participants identified as a gender other than those listed as options (6.3%).

In terms of sexuality, measured with a select-multiple item that allowed participants to select all sexualities they identified with, the largest portion, (40.8%) of participants identified as "queer". Substantial portions of the participant sample identified as lesbian (29.0%), bisexual (23.5%), or pansexual (17.7%). Just over 10% of the total sample identified as gay (3.8%), straight (0.2%), asexual (5.0%), or as a sexuality that was not listed as an option (0.8%). Table 1 includes detailed participant demographic information including sex and gender identity and sexuality.

TABLE 1: Participant Demographics Including Sex, Gender, and Sexuality			
Variables	**N**	**n or Median**	**% or IQR**
Age	238	28	(23, 35)
Race / Ethnicity	236		
American Indian / Alaska Native		6	2.5%
Asian		22	9.3%
Black		6	2.5%
Latinx		9	3.8%
Native Hawaiian / Pacific Islander		3	1.3%
White		203	86.0%
Other		10	4.2%
Highest Education Level	236		
Less than high school		9	3.8%
High School /GED completed		51	21.6%
Community College completed		25	10.6%
4-year college completed		89	37.7%
Post graduate education		62	26.3%
Annual Household Income	231		
<$40,000		120	51.9%
$40,000-80,000		58	25.1%
$80,000-120,000		22	9.5%
>$120,000		31	13.4%
Health insurance status	234		
Public		64	27.4%
Private		158	67.5%
Uninsured		12	5.1%
Sex and Gender Identity	238		
Cis woman		126	52.9%
Trans woman		16	6.7%
Trans man		20	8.4%
Genderqueer/non-binary		61	25.6%
Intersex		1	0.4%
Other		15	6.3%
Sexuality	238		
Gay		9	3.8%
Lesbian		69	29.0%
Bisexual		56	23.5%
Pansexual		42	17.6%
Queer		97	40.8%
Straight		1	0.4%
Asexual		12	5.0%
Other		2	0.8%

Relative Importance of Health Needs:

The relative importance of health needs was evaluated using a ranking item, where participants were asked to reflect on a list of 16 care types, then select and rank ten of those care types in order of relative importance; lower ranks indicate higher importance. Based on mean ranks, we ranked care types from highest to lowest in terms of relative importance. Since each participant provided a rank for only their top 10 care needs, we conducted this analysis twice: 1) first using raw means to rank each care type, thereby disregarding the different number of participant responses per care category while emphasizing the amplitude of responses for each care type, 2) and second by using weighted means that took into consideration the different number of participant responses per category. We also report the relative frequency at which participants identified any of the care types among the top ten most important out of the 16 options.

"Dental" was most frequently identified as one of the top ten most important care needs, with 191 (80.3%) participant selections (Table 2). Dental was followed by "gynecological care" and "psychotherapy," which received 174 (73.1%) and 173 (72.7%) participant selections respectively. Also ranked with high frequency were "prescription medication" with 160 (67.2%) and "vision" with 153 (64.3%) participant responses. Care types with an upper-middle range number of responses included "massage" with 144 (60.5%), "non-gynecological screening" with 141 (59.2%), and "urgent care" with 139 (58.4%) participant responses. "lab tests" (131, 55.0%), "STI testing" (103, 43.3%), "physical therapy" (95, 39.9%), and "nutrition" (90, 37.8%) all had a lower middle-range number of participant responses. "Hormones" (70, 29.4%), "naturopathy" (65, 27.3%), "acupuncture" (55, 23.1%), and "specialist chronic care" (37, 15.5%) were the care categories least frequently ranked among the top ten most important care categories.

When care types were ranked using the raw mean score approach, acupuncture, specialist chronic care, naturopathy, massage, and STI testing were ranked as the top five most important care needs respectively. Of note, the top three care needs identified by raw mean scores were the three least common categories to be included in the top 10 needs. Care needs including gynecological care (including preventative pap & breast exam), non-gynecological preventative screening (eg. diabetes, blood pressure), lab tests, psychotherapy, and physical therapy were ranked as being middle-level in terms of importance, ranked in order from 6-10 respectively. Ranked lowest on the list of care type importance (from 11-16, in order) were hormones, prescription medication, nutrition, dental, urgent care, and vision. Interestingly, care categories dental, prescription meds, and vision all were commonly included in the top 10, but were ranked as relatively low importance, based on raw mean score.

When looking at the weighted mean rank, the weighting factor and weighted mean are not interpretable as absolute values, but were used as an indication of the relative importance of different categories. When care types were ranked using the weighted mean approach, dental care, gynecological care, and psychotherapy rose to ranks 1-3 respectively, indicating that they were most important relative to other care needs. Massage was ranked 4th and prescription medications were ranked 5th, followed sequentially by vision, non-gynecological screening, urgent care, lab tests, and STI testing with ranks 6-10 respectively. The care needs ranked as being of lowest relative importance were physical therapy, nutrition, acupuncture, naturopathy, hormones, and specialist chronic care in rank order 11-16 (Table 2). The unweighted vs weighted mean ranking approach produced markedly different results, the significance of which is addressed in the discussion section.

TABLE 2: Relative Importance of LBTQ Health Needs. Participants were asked to examine a list of 16 health care types and indicate which 10 were most important to them from 1 (most important) to 10 (least important).

Types of Care	N	Mean	SD	Un-weighted mean # rank	Weighting factor	Weighted Mean	Weighted mean # rank
Dental	191	5.67	2.52	13	10.06	57.03	1
Gynecological care	174	5.31	2.72	6	11.04	58.62	2
Psychotherapy	173	5.35	3.08	9	11.10	59.41	3
Massage	144	5.14	2.60	4	13.34	68.57	4
Prescription meds	160	5.725	3.14	15	12.01	68.74	5
Vision	153	5.65	2.65	11	12.56	70.94	6
Non-gyn screening	141	5.33	2.79	7	13.62	72.62	7
Urgent care	139	5.65	2.76	12	13.82	78.08	8
Lab tests	131	5.35	2.39	8	14.66	78.45	9
STI testing	103	5.22	2.54	5	18.65	97.36	10
Physical therapy	95	5.53	2.69	10	20.22	111.82	11
Nutrition	90	5.67	2.49	14	21.34	121.02	12
Acupuncture	55	4.04	3.02	1	34.93	141.11	13
Naturopath	65	5.03	2.81	3	29.55	148.66	14
Hormones	70	5.8	3.45	16	27.44	159.17	15
Specialist chronic care	37	4.67	3.10	2	51.92	242.46	16

Care Satisfaction:

For each of the prior-identified categories of care, care satisfaction was evaluated using a 5-anchor Likert-type item for each care category, with higher numbers indicating greater satisfaction. A mean was calculated for each item, and the resultant means were ranked from highest to lowest. Each participant only reported satisfaction with the health needs they had indicated among the top 10 most important (Table 2), thus the difference in N by care type (Table 3).

Participants had the highest relative level of care satisfaction with prescription medication, non-gynecological screening, lab testing, STI testing, and specialist chronic care,

ranked 1-5 respectively. Overall care satisfaction was lackluster: even the care types with the highest level of satisfaction had means that corresponded to a level of satisfaction between "neither satisfied nor unsatisfied" and "somewhat satisfied." Care types with mid-level satisfaction from ranks 6-10 included gynecological care, hormones, vision, urgent care, and dental. The lowest ranked care areas, in terms of level of satisfaction with care, were psychotherapy, acupuncture, physical therapy, naturopathy, nutrition, and massage ranked 11-16. Across care areas, means ranged from 1.52-2.76. Means at the top of that range corresponded with Likert-type response option "somewhat satisfied", while the means at the bottom of that range leaned towards "somewhat unsatisfied."

TABLE 3: Level of Healthcare Satisfaction by Type of Care. For each care type, participants were asked to report their relative level of satisfaction with the care they have received in that area. For each category, participants responded to a 5-anchor Likert-type item with responses from 0-completely unsatisfied to 4-completely satisfied. The rank is based on stratifying care types from highest satisfaction (highest mean value) to lowest satisfaction (lowest mean value).

Types of Care	N	Mean	SD	Rank (most to least satisfied)
Prescription medication	157	2.76	1.32	1
Non-gyn preventative screening	137	2.75	1.16	2
Lab tests	128	2.70	1.23	3
STI testing	100	2.70	1.26	4
Specialist chronic care	35	2.63	1.26	5
Gynecological care	166	2.47	1.22	6
Hormones	64	2.47	1.37	7
Vision	148	2.40	1.41	8
Urgent care	126	2.37	1.29	9
Dental	187	2.24	1.53	10
Psychotherapy	169	2.22	1.45	11
Acupuncture	42	2.12	1.60	12
Physical therapy	88	1.94	1.25	13
Naturopath	57	1.88	1.57	14
Nutrition	84	1.79	1.23	15
Massage	139	1.52	1.44	16

Barriers to care:

Barriers to care were evaluated by category, using the same sixteen care types. For each type of care, participants were asked to review a list of possible barriers to care and select any barrier that applied. The barrier to care options included: None (no barriers), insurance / financial, transport, hours, gender / sexuality inclusivity, other. Again, participants only responded to 10 out of the 16 possible items, dependent on which care types they had indicated among the top ten most important (see Table 2).

Across the board, the proportion of participants that affirmed at least one barrier to care in each area was remarkably high. There was no care type for which fewer than 80% of participants reported facing at least one barrier to care. While the proportion of participants that reported at least one barrier per category was high, the overall mean number of barriers reported by each participant was low (exceeding 1 for only psychotherapy). Interestingly, the top three health needs categories (by weighted mean ranking) were the same top three categories in terms of the percent of participants that reported experiencing at least on barrier to care, though ordered differently. Dental (97.8%), psychotherapy (97.3%), gynecological care (94.4%), and massage (94.2%), had then 2nd-4th highest rates of inclusion as barriers. Physical therapy (93.9%), prescription medication (93.2%), vision (92.8%), urgent care (92.7%), STI testing (90.6%), lab tests (88.0%) had mid-level rates of barrier. Naturopathy (87.8%), non-gyn preventative screening (87.7%), specialist chronic care (87.5%), hormones (86.5%), nutrition (83.1%), and acupuncture (82.5%) saw the least frequent reporting of barriers.

Psychotherapy was ranked 1, having the highest average number of barriers. Dental, gynecological care, massage, and urgent care ranked 2-5 respectively. Care categories with middle-rankings included vision, prescription meds, non-gynecological preventative screening,

physical therapy, lab tests, and STI testing with rankings 6-11 respectively, indicating a medium relative average of total barriers to care. Ranked 12-16 respectively were nutrition, hormones, naturopathy, acupuncture, and specialist chronic care, indicating the lowest relative number of barriers. A complete analysis of barriers to care is presented in Table 4.

Beginning with psychotherapy, rated 1 for highest number of barriers to care, examining which barriers were most impactful in each care category, the highest proportion of participants (54.31%) identified insurance and financial issues as a barrier to psychotherapy. The second highest proportion of participants (34.01%) identified gender and sexuality inclusivity as a barrier to psychotherapy. Additionally, just over ¼ of participants reported that hours (the time at which psychotherapy appointments are held) were a barrier, and 16.75% cited transportation as a barrier. Only 14.72% of respondents reported experiencing no barriers when seeking psychotherapy.

For dental care, ranked 2 with the second highest average number of barriers to care, insurance and financial was again the most frequently reported barrier, with 60.56% of respondents indicating that this issue stifled care access. Hours was the dental care barrier with the second highest (22.22%) proportion of participant responses. Encouragingly, 31.67% of participants reported no barriers to dental care. Only 11.11% of participants reported transportation as a barrier to dental care, and less than 10% reported that gender/sexuality inclusivity was a barrier.

Gynecological care had the third highest average number of barriers to care, but barriers to this care type were more evenly distributed across the barrier categories. Gender and sexuality inclusivity was cited by the highest proportion of participants (34.69%) as a barrier to gynecological care. Just more than ¼ of participants (27.04%) reported no barriers when seeking

gynecological care. Slightly fewer than ¼ of participants (23.47%) reported that transportation was a barrier, while 17.86% of participants identified hours.

As a crude summary of the overall impact of each barrier categories (insurance and financial, transport, hours, gender and sexuality inclusivity, other) across all 16 care types, we calculated the average proportion of participants that reported each barrier across all care types. Indeed, insurance and financial was the most frequently selected barrier overall (23.87%), followed in sequence by hours, gender and sexuality inclusivity, transportation, and other, but on average fewer than ten percent of participants reported these barriers when average across all care categories. Some 15.35% (SD: 10.73%) of participants on average across all categories reported no barriers to care whatsoever, making none the second most frequently reported barrier to care category. Complete statistical results regarding barriers to care are presented in Table 4.

TABLE 4: Healthcare Barriers by Type of Care

							Percent of total sample (N) reporting each barrier type by care category											
Care Categories	**N**	**n**	**Percent Affirming any barrier (%)**	**Mean # barriers reported by care category**	**SD**	**Rank # (Most Barriers to Least Barriers)**	**n**	**None (%)**	**n**	**Insurance/ Financial (%)**	**n**	**Transport (%)**	**n**	**Hours (%)**	**n**	**Gender/ Sexuality Inclusivity (%)**	**n**	**other**
Psychotherapy	147	143	97.28%	1.14	1.23	1	29	19.73%	107	72.79%	33	22.45%	50	34.01%	67	45.58%	24	16.33%
Dental	136	133	97.79%	0.82	0.91	2	57	41.91%	109	80.15%	20	14.71%	40	29.41%	17	12.50%	16	11.76%
Gynecological care (including preventative pap & breast exam)	124	117	94.35%	0.78	0.96	3	53	42.74%	46	37.10%	20	16.13%	35	28.23%	68	54.84%	22	17.74%
Massage	121	114	94.21%	0.67	0.83	4	27	22.31%	99	81.82%	13	10.74%	18	14.88%	22	18.18%	9	7.44%
Urgent care	96	89	92.71%	0.54	0.81	5	45	46.88%	60	62.50%	25	26.04%	29	30.21%	17	17.71%	7	7.29%
Vision	97	90	92.78%	0.50	0.73	6	59	60.82%	82	84.54%	12	12.37%	21	21.65%	8	8.25%	2	2.06%
Prescription medication	88	82	93.18%	0.46	0.73	7	78	88.64%	75	85.23%	9	10.23%	16	18.18%	9	10.23%	10	11.36%
Non-gyn preventative screening	81	71	87.65%	0.44	0.78	8	62	76.54%	42	51.85%	14	17.28%	28	34.57%	20	24.69%	8	9.88%
Physical therapy	66	62	93.94%	0.43	0.84	9	31	46.97%	50	75.76%	12	18.18%	27	40.91%	10	15.15%	7	10.61%
Lab tests	75	66	88.00%	0.39	0.72	10	56	74.67%	47	62.67%	15	20.00%	22	29.33%	8	10.67%	9	12.00%
STI testing	53	48	90.57%	0.32	0.73	11	53	100.00%	27	50.94%	12	22.64%	12	22.64%	21	39.62%	9	16.98%
Nutrition	65	54	83.08%	0.32	0.66	12	27	41.54%	48	73.85%	8	12.31%	12	18.46%	6	9.23%	9	13.85%
Hormones	52	45	86.54%	0.29	0.71	13	25	48.08%	26	50.00%	6	11.54%	10	19.23%	21	40.38%	11	21.15%
Naturopath	49	43	87.76%	0.23	0.53	14	18	36.73%	35	71.43%	5	10.20%	4	8.16%	6	12.24%	4	8.16%
Acupuncture	40	33	82.50%	0.19	0.52	15	16	40.00%	32	80.00%	5	12.50%	9	22.50%	3	7.50%	1	2.50%
Specialist chronic care	24	21	87.50%	0.18	0.66	16	18	75.00%	14	58.33%	12	50.00%	12	50.00%	6	25.00%	7	29.17%
mean of percentage of barriers by barrier type								58.32%		67.43%		17.96%		26.40%		21.99%		12.39%
SD								22.38%		14.51%		9.86%		10.41%		15.04%		6.88%

Table 4: Healthcare barriers by care type. For each care type, participants were given a select multiple item and asked to indicate all of the types of barriers in each care area that prevented them from accessing care. Rank is based on stratification of mean.

Healthcare Setting Preferences:

Healthcare setting preferences were evaluated in a manner similar to level of healthcare satisfaction, with 5-anchor liker type items for care setting preference for each of the 16 types of care. The five anchors were: 1-Strongly prefer open setting, 2-Somewhat prefer open setting, 3-No preference, 4-Somewhat prefer LBGTQ setting, 5-Strongly prefer LBGTQ setting. Again, only participants that include a care type among their top 10 most important health needs received items that corresponded to that care type for setting preferences. We took a mean of the responses for each type of care and ranked types of care from highest mean to lowest mean. A higher mean (lower rank) indicates that a queer specific health setting preference was more preferred, whereas a lower mean (higher rank) indicated that a queer specific setting was less preferred.

Psychotherapy was the type of care that participants most preferred to seek in a queer specific care context, followed by hormones, STI testing, gynecological care, and massage in ranks 2-5 respectively. Care areas with a middle ranking for queer specific health context preference were non-gynecological screening, naturopathy, nutrition, specialist chronic care, prescription medication, and urgent care with ranks 6-11. Care types where a queer healthcare setting was less preferred included lab tests, physical therapy, acupuncture, dental, and vision. Only dental and vision had means of less than three indicating a slight preference for an open (non-queer specific) care setting, while a queer specific care setting was at least slightly (or more) preferred for every other care type.

TABLE 5: Healthcare Setting Preference by Type of Care. Healthcare setting preference was evaluated using a 5-anchor Likert-type item for each care type, with response options from 1-strongly prefer open setting to 5-strongly prefer queer setting.				
Types of Care	N	Mean	SD	# Rank (Queer space most to least preferred)
Psychotherapy	173	4.35	1.14	1
Hormones	68	4.32	1.20	2
STI testing	102	4.31	1.13	3
Gynecological care	172	4.14	1.26	4
Massage	140	3.86	1.17	5
Non-gyn preventative screening	138	3.54	1.11	6
Naturopath	63	3.44	1.09	7
Nutrition	88	3.35	1.04	8
Specialist chronic care	37	3.35	1.16	9
Prescription medication	158	3.28	1.00	10
Urgent care	138	3.28	1.09	11
Lab tests	129	3.27	1.08	12
Physical therapy	92	3.27	1.14	13
Acupuncture	51	3.25	0.91	14
Dental	191	2.93	0.94	15
Vision	151	2.87	0.90	16

Comparison of Differences in Importance of Health Needs:

In addition to the descriptive statistics already presented, we conducted an analysis to better understand the difference in health need prioritization. Our sample size only allowed for two such meaningful comparisons:

1) Between women (cisgender women, transgender women) and participants of all other gender identities (non-binary, transgender men, intersex and other identifying) participants. Given that part of the sampling frame of our study was people who identify in some way with women's health issues, it seemed prudent to understand if

there were difference between those who identified as women and those who identified otherwise.

2) Between cis-gender (cisgender women) and non-cis-gender (transgender women, transgender men, non-binary, intersex, and other identifying) participants. This distinction made sense to analyze given our study purpose to better understand how different types of discrimination influences health for people of different queer identities. Gender non-conformity is one such identity that may influence health.

Table 6 presents results for the comparison of health need importance differences between women and other identifying participants by care type. We divided participants into two categories women, and other. We found no significant differences between female and non-female participants in terms of their ranking of health needs.

TABLE 6: Difference in LBTQ Health Needs by Gender

		Women (cis-woman, trans-woman), (N = 142)			**Other (non-binary, trans-man, intersex, other), (N = 76)**			
Types of Care	N	n	Mean	SD	n	Mean	SD	p-value
Acupuncture	55	33	3.7	2.9	18	4.7	3.1	0.26
Dental	191	113	5.8	2.5	65	5.3	2.4	0.19
Gynecological care	174	101	5.5	2.8	61	5.2	2.6	0.46
Hormones	70	25	5.2	3.4	36	5.7	3.7	0.63
Lab tests	131	77	5.4	2.4	42	5.3	2.5	0.89
Massage	144	85	5.3	2.6	51	4.9	2.7	0.50
Naturopath	65	38	4.9	2.8	20	5.1	2.9	0.87
Non-gyn screening	141	86	5.3	2.9	43	5.3	2.7	0.89
Nutrition	90	50	5.7	2.5	27	5.7	2.6	0.90
Physical therapy	95	58	5.5	2.7	31	5.4	2.6	0.83
Prescription meds	160	92	5.7	3.0	51	5.9	3.5	0.73
Psychotherapy	173	99	5.1	3.3	65	5.8	2.8	0.14
Specialist chronic care	37	18	4.8	3.3	16	4.4	3.0	0.67
STI testing	103	63	5.1	2.4	40	5.3	2.6	0.58
Urgent care	139	82	5.8	2.7	51	5.6	2.7	0.61
Vision	153	95	5.8	2.6	46	5.5	2.7	0.43

Differences in LBTQ health needs between cis and non-cis status are presented in Table 7 below. The cis category included participants that identified as cisgender women (the sample had no participants that identified as cisgender men). The non-cis category included anyone whose gender did not align with their sex assigned at birth, including transgender men, transgender women, genderqueer, non-binary, and other identifying participants. Again, there were no significant differences in the rating of relative importance of health needs by care type between the cis and non-cis groups.

TABLE 7: Difference in LBTQ Health Needs Cis Vs Non-Cis Status

		Cis (N = 126)			**Non-Cis (N = 88)**			
Types of Care	N	n	Mean	SD	n	Mean	SD	p-value
Acupuncture	55	30	3.9	3.0	20	4.4	3.1	0.55
Dental	191	102	5.8	2.5	73	5.4	2.4	0.30
Gynecological care	174	101	5.5	2.8	63	5.2	2.6	0.44
Hormones	70	12	4.8	2.8	46	5.7	3.7	0.36
Lab tests	131	66	5.5	2.4	50	5.2	2.5	0.48
Massage	144	75	5.3	2.7	58	4.9	2.6	0.49
Naturopath	65	35	5.1	2.8	22	4.9	2.8	0.82
Non-gyn screening	141	86	5.2	2.9	49	5.5	2.7	0.57
Nutrition	90	44	5.7	2.6	32	5.8	2.5	0.94
Physical therapy	95	53	5.7	2.7	33	5.3	2.6	0.55
Prescription meds	160	84	5.7	3.0	58	5.9	3.4	0.63
Psychotherapy	173	87	5.3	3.4	73	5.5	2.9	0.71
Specialist chronic care	37	14	4.7	3.3	18	4.7	3.1	0.99
STI testing	103	56	5.1	2.4	45	5.4	2.6	0.51
Urgent care	139	72	5.8	2.8	59	5.7	2.7	0.85
Vision	153	85	5.9	2.6	54	5.3	2.6	0.19

Qualitative Sample Characteristics:

In total 4 focus groups were constructed, ranging in number of participants from 4-10 members. The first focus group had 7 participants. Among those, three identified as women, one as non-binary, one as genderqueer, and one as agender. Three participants reported that they were transgender, three that they were cisgender, and one reported that they were neither cis nor transgender. All but one participant identified as white, with that participant identifying as Latinx. Participant ages ranged from 24-33 years. The participants were split in half in terms of their insurance status, where half were publicly insured, and the others were privately insured (one participant was uninsured).

The second focus group discussion had 10 participants, among which 4 identified as women, one as male, one as agender, two as non-binary, and two as gender queer. Half of the participants identified as transgender, 3 participants as cisgender, and two participants as neither. Seven participants identified as white, two as AIAN, and one as mixed race. Participant ages ranged from 23-61. Four participants were on Apple Health public insurance, while four were on private employer-based insurance, and two participants declined to respond.

The third focus group discussion was the smallest, with just 4 participants. Half of these participants identified as non-binary, and the other half as transgender women. All of the participants in this focus group identified as white. Half were privately insured while half were publicly insured. Participants ranged in age from 22-34 years.

The fourth and final focus group had 6 participants. Four of the six identified as women, while two identified as non-binary. Half of participants identified as neither cisgender nor transgender, while two participants identified as cisgender and one identified as transgender. Participants were all white and ranged in age from 21-49 years old. Finally, 2/3 of these

participants were publicly insured, while the remainder were privately insured through their employer.

Qualitative Codebook Process Results:

The deductive and inductive codebooks were developed through independent processes as described in the methods section. The deductive codebook resulted in the generation of 60 codes, there were six parent codes under which most of the codes were organized. The parent codes were cost, insurance, time and competing demands, social acceptance, and access. The independent codes (single codes with no parent) were categorized into three groups for the sake of organization, and those two groups were healthcare needs, recommendations, and care stories/experiences.

The inductive codebook contained 36 codes. This codebook included 5 main parent codes with associated child codes: insurance, queer competence, participant perceptions, care access issues, care specifics and context. The independent codes were left uncategorized in the inductive codebook. Additionally, the inductive codebook introduced a plus/minus system for indicating a positive or negative connotation for the use of a particular code. Thus, the 36 code codebook, when used with the plus/minus system, yields 72 possible options.

Finally, the inductive and deductive codebooks were collapsed to create the final version of the codebook used for analysis, with preference given to the inductive codebook when constructs overlapped. The final version of the codebook had 61 codes, in addition to using the plus/minus system which yielded 122 possible code options. The final codebook had seven main parent codes 19 independent codes. The seven parent codes were: insurance, queer competence, health needs, participant perceptions, care access issues, care specifics and context, and Gay City

new care offerings. Insurance included two types of child codes, care types where insurance was discussed (e.g. dental), and specific types of insurance barriers (e.g. coverage confusion, insufficient coverage). Queer competence included codes about specific queer health skills such as chosen name use, and using correct pronouns. Health needs included categories of care (dental, psychotherapy, gender affirming care). It also included the care contingencies code which was used to indicate a situation in which one care need had to be met for another care need to be sought (discussed in thematic analysis section below). Participant perceptions included codes for interpretations of systematic phenomena and societal themes, in addition to including commentary about positive or negative sentiments towards heterosexuals. Care access issues included codes for types of barriers commonly faces when participants attempted to seek care (i.e. cost, medical gatekeeping). Care specifics and context included information about available care options, settings, and participant rationales for seeking care.

Thematic Analysis Results:

Our thematic analysis of the four focus group sessions (n=27) resulted in ten themes emerging from text. Among those ten themes, nine of the emergent themes had to do with health barriers. The final theme concerned level of care satisfaction. The barrier to care themes are discussed first, followed by the level of care satisfaction theme.

Theme 1: Overburdened care systems impeded continuity of care, presenting a consistent barrier to quality of care and care-seeking.

Participants reported that care systems were overburdened, which resulted in several barriers for participants when they were seeking care. Two of the most impactful results of the

overburdening of care systems, according to participants, was 1) the difficulty of identifying clinics or clinicians that are accepting new clients, and 2) a lack of continuity of care caused by high clinician turnover driven by burnout from working in an overburdened system. Changes in insurance coverage also contributed to a lack of care continuity.

The difficulty of identifying clinics or clinicians that were accepting new patients overlapped with insurance coverage issues. Participant 10 from FG 2 stated "Nobody takes state insurance. I personally have been looking for a therapist for two years and have not had luck finding one who is trans competent and either sliding scale or takes state insurance." Thus, while participants often had insurance coverage that would theoretically cover the services they needed, it often proved too difficult to find a provider or clinic that would accept their coverage. As put by participant 3 from FG1, "with therapy there's not enough providers that are covered under my insurance so I'd either have to pay out of pocket or deal with the few that they have and if they are - you can search the different criteria, transgender, lesbian, etcetera - so if they show up in those hits you call them [and] they're not taking any new patients, they're completely full." The lack of available care providers accepting new patients (particularly for psychotherapy) is a significant barrier that prevents people from accessing the care they need to thrive. Additionally, even when clients were able to access services, they were not able to access them as regularly as they would have preferred. "The only downside," participant 6 FG 3 reported, "is that they have such high demand because it's such a niche market that sometimes you have to wait 2-3 weeks between appointments."

Participants also reported that frequent changes in coverage results in a lack of continuity of care. Participants reported seeing a particular clinician, and developing a relationship and mutual understanding with them, until the provider was recategorized as out of network

providers leaving clients with the options of paying out of pocket to keep accessing care with that provider or changing to a new provider and restarting the care process. Participant 5 from FG 3 stated “my barrier has always been with health coverage outside of network, because sometimes I start therapy with [a clinician] and then maybe your health [insurance] provider, or your therapist, maybe they don’t offer that network anymore and then you have to pay out of pocket.” Changes in coverage are one of the key factors that resulted in a lack of continuity of care. Participants added that repetition of the intake process can be retraumatizing.

The overburdening of care systems seemed to be taxing on providers in addition to clients, which contributes to high clinician turnover. Clinician turnover resulted in clients being reassigned to other providers, requiring them to restart care processes and repeat their sensitive stories. Additionally, clinician turnover contributed to a lack of continuous access to critical medications. As reported by participant 10 FG 2 “One thing that a close friend of mine expresses a frustration with at [community mental health organization] is therapist turnover. [group noises of sympathy] She got established with a therapist she really liked there, 6 months later that therapist moved on to a paying position. [She] got a new therapist so she had to reestablish herself with this therapist, [and] didn’t like this one as much so that has been frustrating for her.” The process of restarting care with a new provider due to turnover is burdensome to clients and leading some to be less likely to seek necessary services.

Theme 2: Participants attempt to circumnavigate barriers to care through tradeoffs, seeking only what care they can afford and going without other needed care, but care contingencies can prevent the success of care tradeoffs.

This theme contains two independent constructs, "care contingencies" and "tradeoffs" both of which were codes from the qualitative codebook. Care contingencies refer to a type of care, the access to which is dependent on one's ability to access another independent type of care. Tradeoffs are a result of barriers to care, where participants described prioritization processes for choosing which sorts of necessary care to access, and which sorts of care to just go without, given that their means do not allow them to access all the types of care that they need.

First considering tradeoffs, participants reported that due to numerous barriers to care (insurance, cost, etc.) that they were unable to access all types of care that they needed and had to choose which types of care to prioritize. As participant 3 FG1 explained, "I needed teeth cleanings… but I had to put my top surgery on a credit card and I'm just worried about paying off a credit card because all these other things that aren't covered by insurance, we put off dental stuff because you're like, ah, a cleaning, I can't keep missing these payments." Due to the combined effects of multiple barriers to care, in this tradeoff participants were forced to prioritize their financial wellbeing over their own wellbeing and to self-select out of seeking necessary health services. As another example of tradeoff, participant 3 FG 2 stated "my coverage covers most of it but not all of it… and there's always a portion of that I'm going to have to pay for myself which is frustrating but I'm not willing to see somebody else." In this case, the tradeoff is to pay out of pocket or be forced to seek care with a new provided and restart the care relationship.

Next considering care contingencies, a poignant example was provided by participant 7 FG1 who stated:

"A lot of insurance companies don't cover dental and I know that a lot of people... well I've had at least two friends that couldn't get gender affirming surgery because they had very severe problems with their teeth that had to be taken care of before they go under and they couldn't get that taken care of because dental's not covered."

Participant 7 FG1 implies here that their friend would have been able to access gender affirming surgery had they not been dealing with the barrier of an inability to access dental care that needed to occur prior to gender affirming treatment. Where care contingencies were present, participants were unable to take advantage of tradeoffs to circumnavigate barriers to care.

Theme 3: Across all types of care insurance, and specifically underinsurance, presented a barrier to care, that negatively influenced care seeking behavior and access to care.

Insurance was a highly problematic barrier to care. While most focus group participants reported having health insurance, underinsurance was a consistent concern across all four focus groups. Participants reported that even with their insurance coverage, out of pocket expenses presented a challenge. For example, participant 6 FG2 shared "I'm on Medicaid and the coverage of dental care, if you're lucky enough to have it, [costs] about $25 per quarter or appointment. It's like if you're getting your teeth cleaned. And that adds up quickly if you're on an extremely low income." This is an example of underinsurance in that the participants concern about their ability to pay despite being covered indicates that their insurance is not adequately serving its

function. Speaking of underinsurance in the context of dental coverage, participant 2 FG1 simply stated that “a lot of them are just going without.”

In another manifestation of underinsurance or insufficient coverage, participant 4 FG3 reported “I’m on Apple Health and that does cover routine cleaning, it doesn’t cover anything else. Like they’ll pay dentists to find a problem if there’s one there but then they won’t pay for a dentist to fix it.” Many participants reported similar situations where they had coverage up to a certain threshold, but that threshold fell short of covering all necessary care, leaving the remainder at the expense of the participant.

Theme 4: Cost and financial barriers were associated with but also independent from insurance barriers. Where cost was a secondary barrier experienced in addition to underinsurance the combination prevented care access.

In dialogue, participants spoke about insurance coverage and cost as two independent barrier domains. However, insurance coverage and cost barriers were closely related. Often, having insufficient insurance coverage was a precedent to experiencing a cost barrier. Insufficient insurance coverage meant paying for care out of pocket. This occurrence is captured in a care example from participant 7 FG2 who explained “I’m on Apple Health. I just went to the dentist today. It’s the 3rd time for one tooth. I go to UW and so I do Apple Health and so I end up paying for root canals about $680. I live on SSI that’s $740 a month so they take a [twelfth] of my yearly income.” If Apple Health covered root canals, this cost barrier would be mute, and in this way cost and insurance barriers are associated but independent; one may occur without the other, but they are likely to occur together.

Other participants spoke of the difficulty that the cost of care presented when deciding whether or not to seek care at all. Participant 3 FG 1 described the internal dialogue they experience in this situation:

"The financial barrier is really hard because then you're sitting there like do I really need to be in urgent care right now? It's just like I think I might maybe have a Vicodin somewhere maybe I'll just pop that and go to sleep and I'll be fine, if it hurts too bad in a couple days maybe I'll go. Because the financial barrier."

Participants were so concerned about the threat that presenting for care represented to their financial security that they were willing to consider unhealthy alternatives to seeking the care they needed.

Theme 5: Participant confusion about what care is covered vs uncovered and the processes to navigate care seeking were barriers that prevented participants from seeking care, or which resulted in poor care experiences.

Many participants reported experiencing a considerable amount of difficulty attempting to understand the bounds of their insurance coverage. Participants also astutely connected confusion about the bounds of tier coverage with the general fragmentation of health systems in Seattle, WA and the US generally. Participant 5 FG 1 explained this issue well:

"I think that in general - maybe I'm just not looking hard enough - but it's difficult for me to navigate like how to do everything with Apple Health so I think there's an information gap

maybe. But also like in general I feel like health... all of these heath needs are so fragmented... it's just weird to me that there are like all these different avenues we have to go through to get all these different things even though they're all related and for me massage is related to mental health care and so… it's just like everything is so separated and there's [a] different processes for each of them and different people and locations and like logistics and it'd be cool if it was more like integrated."

There is "an information gap" wherein participants are unaware of the bounds of their coverage, and this confusion about coverage results in increased barriers and reduced access to care.

Unexpected healthcare expenses are an unwelcome side effect of this theme, because a lack of clarity around the bounds of coverage can lead clients to unknowingly request and receive a service that they assume to be covered when it is in fact not covered. As described by participant 6 FG 1, "I think there's another issue related to communication you know where sometimes you start out being covered and then you use it up, but they don't tell you and then you start getting billed for this thing in the mail and you're like what I owe you hundreds of dollars?" Indeed, as indicated by participant 6 FG 1, clinicians contribute to this issue by breezing over care details with clients, and by failing to provide adequate pricing transparency. Participant 3 FG 1 reported a similar experience "I think some of what was said with the surprise billing because they're not communicating - because after you've seen them for 10 visits it's the eleventh visit and you don't know there's a surprise with the bill, that's definitely one."

Confusion about the bounds of coverage and processes for seeking care constitute a barrier to care that can delay care access. Similarly, confusion about care can result in

unexpected healthcare expenses that can lead to a poor care experience and future care avoidance.

Theme 6: Fear about the prospect of discrimination and unsafe conditions in care settings made participants uncomfortable seeking care, thus presenting a barrier and access issue.

Participants frequently reported that concern about the prospect of discrimination and unsafe conditions in care settings negatively influenced their willingness and their likelihood of seeking care. When discussing massage, participant 2 FG 1 reported that an acquaintance had "been very reluctant to seek massage even if he could afford because he's afraid it's going to be like trans-insensitive and it's going to go badly for." In this example, the concern that the subject has about the potential for discrimination during massage is preventing the subject from seeking massage services.

When participants did choose to seek care, the prospect of discrimination still influenced participant behavior in interactions with providers. Participant 6 from FG1 reported that "People want to have therapists that reflect their identity - I have seen very very progressive, accepting, welcoming, straight therapists and there are certain things I would never say to them just because they're straight and because of no other reason." Thus, even when the prospect of discrimination does not prevent participants from seeking care, it still negatively impacts disclosure during care, thereby presenting a barrier to care.

Finally, safety concerns at some clinic sites made participants feel uncomfortable, and presented a barrier to future care seeking, for fear that a similar situation might recur. Participant 9 FG 2 explained that "there are a lot of highly symptomatic people that also go to Harborview. In one of my classes one of the participants pulled out a hammer and started tapping their head

with it and claimed that they were scratching their head. I've been catcalled in the facility." Such negative experiences in care settings can negatively influence participant willingness to seek care in the future.

Theme 7: Many practitioners, across most care types, lack familiarity with queer issues and fail to provide queer competent care, which can be traumatizing to patients, leading them to avoid seeking care in the future.

Across all areas of care, a lack of clinician familiarity with queer issues resulted in a failure to provide queer competent services. In some cases, the clinicians lack of familiarity was traumatic for patients, which led them to be reluctant to continue seeking care. As an example of the sort of discrimination and naivete faced by queer patients, participant 3 FG 1 shared: "If I go to a cisgender 60-year-old woman and she goes 'wait a minute do you have this [body] part or this [body] part,' and that's one of the very first things she asks during the first session it's just like that has nothing to do with the fact that I need assistance with navigating abusive relationships from parents and other things that I have to deal with, with my work." This participant went on to add "they don't know the experience, they can't empathize and sympathize - I think that's why gender is a barrier for people."

When clinicians lack knowledge about queer issues, the burden falls on the patient to educate the clinician about those issues, meaning that the clinical value of that time is reduced for the client. Participant 7 FG2 explained that "educating them so much about trans issues but about being part of the leather community, the sex-positive culture community the BDSM community and feeling like I need to come in and go OK my submissive is doing this and it's not feeding my dominance and them going Ok... And me seeing... so I just talk over it and proceed to

continue on because I know what I'm talking about." This quote captured the oft-felt sentiment among participants that their own queer knowledge exceeded that of their providers, which devalued the care clinicians were able to provide. Often, the burden of educating the clinician can outweigh any benefit meeting with the clinician may provide, particularly in the psychotherapeutic context. As stated eloquently by participant 7 FG1 "Rather than muscles, the mind is what they're trying to fix in therapy, and misgendering and homophobia hurts that part, the mind." This quote clearly captures that clinicians can cause considerable harm through their inability to provide queer competent care.

A similar lack of queer competence was present in other care settings too, not just for psychotherapy. For example, participant 7 FG2 when discussing a failure to provide queer competent care in the dental setting, explained:

"They've got their hands in my mouth! You couldn't be more vulnerable… ... a couple years ago after 4 hours of being misgendered in the chair I said can I talk to you and your dental assistant and they said yeah and I said first off I'm not going to kill myself but if you ever do that to another person again! And they said what did we do? And I said you misgendered me for four hours while I was sitting in the chair. All my medical says male. And I said if you ever brush your hand up against one of my transgender sisters and find a 5 o'clock shadow and you treat her less than the woman that she is there's a possibility she may not live to see the next day and they both went wow and I went yeah. I hope you guys learned a lesson. So it has gradually gotten better but the psychological effects of being in a dentist's chair can be devastating. And you can't speak! You can't correct them! It's very difficult"

This quote captures the unique phenomenon that for some types of care, the care provision itself presents a physical barrier to self-advocacy. Thus, in some care contexts, even patients that are willing and able to speak up for their needs may be unable to do so, and may have to endure prolonged discrimination as a result.

Theme 8: Clinicians often engage in practices such as not listening to patient concerns and desires or passing judgment, constitute medical gatekeeping and act as a barrier to care and access to services.

Medical "gatekeeping" was among the most interesting in-vivo codes to emerge from text during the inductive coding process. Medical gatekeeping took a number of different forms, but generally referred to a care experience in which a patient had to undergo numerous, often repetitive, steps in order to achieve a single health-related objective. This process repetition was burdensome and harmful to participants in the present study. Gatekeeping was the result of forces at multiple levels. Regional and hospital policies likely influenced which questions doctors were required to ask, and increased repetition, while the approaches of individual clinicians may also have had an effect.

An example of gatekeeping came from participant 1 FG4 who described gatekeeping in the context of seeking psychiatric medication:

"One of the experiences I had with psych issues that I'd definitely heard of but didn't expect is that now that I'm getting older and I'm pre-menopause and I'm taking hormones as a cis woman and I did not expect to hit against the same kind of gatekeeping that I'd heard from trans femmes! And I mean I'm on multiple medications for multiple issues and somehow only the

hormones have been the issue, only the hormones is the one where like my lady-brain can't make decisions for itself and my doctor made decisions for me on my hormones and I had to get a social worker involved, I had to get my psych doctor involved, and almost everyone in the story was queer too which was an extra dagger in me."

This gatekeeping construct includes multiple discrete ideas. Included is a suggestion that hormones are particularly difficult to access due to individual provider discomfort with gender transition. Thus, the gatekeeping is an act (conscious or unconscious) on the part of the provider that unnecessarily increases the level of burden faced by the client when trying to seek a particular type of care.

Gatekeeping was also used in a way that overlapped with continuity of care issues that arose as part of Theme 1. High burden on healthcare systems drives high clinician turnover, which in turn puts patients in a position where they are exposed to more potential for gatekeeping through their interaction with a higher number of clinicians who each practice in a manner informed by their unconscious and conscious biases. As explained by participant 3 FG 4 who was describing the process of attempting to access gender-affirming surgery, "last year I went through their whole get-the-letters gatekeeping rigamarole for [gender-affirming] surgery and the surgeon I was doing that with stopped accepting Washington Medicaid so I had to start over again and go through the whole process this year with a different doctor."

Another manifestation of medical gatekeeping came as a result of clinicians' failure or refusal to actively listen to their patients. During FG2, participant 9 remarked "I'm on Apple Health and I had a similar experience where they refused to pull a broken tooth and I ended up pulling it out myself. Because it was that bad." In this case medical gatekeeping led to a patient

making a less-safe medical decision due to clinicians' unwillingness to provide the care requested by the patient. In response to participant 9, participant 7 (FG2) quipped "They said try finding a dentist who'll take Apple Health! No private dentist will. So you're stuck with UW as far as I know. So let me talk with you later about how to pull a tooth." The fact that multiple participants were willing to consider taking their health care into their own hands, indicates a failure of their providers to meet their needs.

Another form of medical gatekeeping, that might be thought of as indirect (as opposed to the prior examples which were all direct), is the fear and shame that clinicians sometimes cast on their patients, which can make patients reluctant to seek care in the future. Participant 4 FG2 noted "I personally am pretty lucky I have dental care and can go whenever I want. But personally my dental hygiene isn't very good when I'm super depressed. And I know I have cavities and I've kind of been avoiding my checkup because I'm embarrassed about it." Participant 6 from the same group added that "sometimes it's hard to find a dentist or whatever that isn't condescending. My mom thought that the dentist we had as a kid was a wonderful dentist but he was so condescending and I did not want to go to the dentist." Thus, some participants were so uncomfortable with the judgment and "condescension" of their providers that it led to them "avoiding" care.

Theme 9: Both participants and clinicians tended to deflect about care needs leading to patients feeling less worthy of care, therefore presenting a barrier that prevents clients from seeking care and reduces access to care.

Both participants and clinicians alike shared or were reported to have shared deflective sentiments, particularly about the relative acuity of individuals care needs. For instance, some

participants shared an ‘others-have-it-worse’ sentiment. This sentiment was summarized well by participant 6 from FG4 who stated, “I feel like lucky in some ways and I don’t want to be like whining but there’s more than I need that I don’t have access to.” Participants expressed feelings of guilt about their own needs being an impediment to others with more acute needs seeking the services that they need. This seemed almost like a form of imposter syndrome felt by patients that needed to seek care but felt unworthy of seeking it.

Participant 2 FG2 reported that their dentist expressed a similar sentiment to them during a clinic visit. “The dentist himself was very kind of awkward about it and went on this weird speech about how things can’t be that bad and a lot of people have things a lot worse in the world and you’ve just got to get out of bed and wake up and decide that you’re going to have a good day.” Thus, clinicians likely contribute to patients’ sense that their claiming of clinical space is unwarranted.

Theme 10: Participants were unsatisfied with their care experiences in invasive care types (i.e. massage) given a lacking utilization of best practices from trauma informed care.

The final theme, and the only theme not directly related to health barriers notes a trend that participants tended to be unsatisfied with their care experiences in care areas that were highly invasive (i.e. massage, psychotherapy). Massage is invasive due to the significant amount of physical contact between provider and client. Participant 2 group 1, in a summative statement after some examples from the group shared “I also feel like it’s sort of important to bring up as some people were saying I know some people are just plain old uncomfortable with touch for neurological reasons, I also know that there are people who are uncomfortable with touch for trauma reasons so having trauma-sensitive care here would be a good thing.” This quote

highlights the importance of trauma informed care for psychotherapy which we have categorized as invasive.

In addition to the general commentary about the importance of trauma informed care, participant 1 FG1 went so far as to say:

"so more generally thinking about the intersex community, not that I'm a spokesperson but a lot of us carry specific traumas around medical spaces, so seeing a therapist can be really challenging for a lot of people, and we have to do the work of educating people about what it means to be an intersex person who's experienced trauma is a constant reevoking of the experience that we've had to go through in a context that isn't necessarily therapeutic."

This quote reinforces that people some queer identities carry specific traumas around care spaces, that the act of seeking care can reawaken. So simply the act of seeking care may be retraumatizing. Therefore, trauma informed care is critical in order to be able to overcome this barrier.

Discussion:

Summary of Discussion:

We conducted a quantitative analysis of survey results to better understand health needs across the sample, in addition to using a combination and triangulation approach, where our qualitative results were used to confirm and specify our quantitative findings. We found that care types needed by a higher majority of participants (i.e. dental) tended also to be rated as more important overall. Care satisfaction hovered around the Likert scale midpoint, corresponding to response option "neither satisfied nor unsatisfied." Barriers to care were ubiquitous across care types, with most participants (>80%) reporting at least one barrier to care in all care areas, and with insurance and financial barriers proving the most common. Care setting preferences, collectively, did not skey strongly towards either an open setting, or a queer specific setting, but a queer specific care setting seems to be preferred for the most invasive and sensitive care types. Our qualitative results from focus group discussions confirmed that barriers served a primary barrier to care, both by preventing people from accessing care, and by making people unwilling to seek care.

Interpretation of Quantitative results:

Relative Importance of Healthcare Needs:

Depending which method was used to rank types of care in order of need from most important to least important (raw mean rank, or weighted mean rank), the results were markedly different. The item asked participants to rank from 1-10 (1-most important, 10-least important) the ten health needs that they see as most important. Thus, every care category had a different number of responses, that ranged from 191 responses to just 37.

The raw mean score approach did not take into account the number of responses per category, calculating the mean as an average of all affirmative responses 1-10 divided by the number of responses in that category. With this approach, care categories acupuncture, specialist chronic care, and naturopathy took ranks 1, 2, and 3 respectively. These care areas also had the lowest number of total respondents include them among their top ten: 55 included acupuncture, 37 included specialist chronic care, and 65 included naturopathy. However, when we consider the weighted mean number ranking approach that accounts for the number of responses per care category, the low number of responses for acupuncture, specialist chronic care, and naturopathy sees them drop to ranks 13, 14, and 16 respectively – they drop from the top of the ranking list to the bottom due to the low number of respondents. This indicates that while only a small proportion of respondents included these care categories among their top ten, those that did include them placed them nearer to the top of their 1-10 ranking.

This finding makes a lot of sense for these three categories. Acupuncture is quickly gaining popularity in the US, but that uptick in interest is still emergent (54). The origin of acupuncture is traditional Chinese medicine. Historically, the use of acupuncture was unusual in the Western biomedical context (55). The evidence on the medical effectiveness of acupuncture is mixed (55), but there is some evidence to suggest that acupuncture can be effective for pain management (56). In other words, acupuncture is a type of specialty care, and may often be used when other treatments are providing inadequate results. Those who have had a positive acupuncture care experience might be likely to include it high among their top ten most important care types, while most participants that have not sought this type of care are likely to exclude it from their top ten. Additionally, acupuncture can be expensive and is less frequently covered by insurance, so not all participants may be able to access this type of care.

The same is true of naturopathy – it is a type of specialty care that is sought by only a minority of patients. Again, naturopathy draws on a combination of Western and traditional medicine. Also, the scope of services that are typically provided by naturopathic doctors is narrower than the scope of service provided by most primary care doctors (57).

Similarly, for specialty chronic care, only a minority of participants would be in need of this sort of care, and as result many participants that do not need to seek this type of care are likely to leave it out of their top 10 care needs. However, specialty chronic care for those who need it is often critical.

Once the weighted mean approach was applied, the three care types with the highest frequency of responses dental (191), gynecological (174), and psychotherapy (173) jumped from middle or lower rankings to ranks 1-3 respectively. Dental moved from rank 13 to rank 1, gynecological care from rank 6 to 2, and psychotherapy jumped from rank 9 to rank 3. Dental care was not often rated highly in the top half of respondents top ten rankings, but it was included in the top ten by a large majority of participants. Given that the sampling frame for this study included people who identify with women's health needs, it's not surprising that a high proportion of the sample reported that gynecological care was of high importance, but participants infrequently ranked it among the top 1-3 most important needs. Psychotherapy seems to have been consistently ranked low within top ten rankings but was included in that low-rank position by a strong majority of participants.

It was surprising to see massage ranked so highly (rank 4) via both the raw mean ranking and weighted mean ranking approaches. It was both included in the top ten by a high number of participants and seems to often have been ranked in a middle or high position. Hormones were consistently ranked near the bottom of the list (in position 15 for weighted mean rank, and 16 for

raw mean rank), which was a surprising finding given the strong transgender representation in the study sample.

Healthcare satisfaction:

Participants were most satisfied with care types of prescription medication, non-gynecological preventive screening, and lab tests, ranked 1-3 respectively. On the other hand, participants were least satisfied with naturopathy, nutrition, and massage (ranks 14-16). That said, level of satisfaction by care type was low across all care types. No care type had a mean that met or exceeded "somewhat satisfied" and no care type received a mean that corresponded to a rating that met or was worse than "somewhat unsatisfied." A mean of 2 for this item would be the Likert scale midpoint – indicating a rating of "neither satisfied nor unsatisfied." Twelve among the 16 care types leaned towards satisfied, while the other four leaned towards unsatisfied.

Participants tended to be less satisfied with the specialty care types that were ranked as being the most important healthcare needs using the raw mean ranking approach. Acupuncture for example was rated as most important on the raw mean rank, but ranked 12, putting it in the bottom 5 care areas in terms of satisfaction. Naturopathy which ranked as third most important with raw mean rank, had a rank or 14 for level of care satisfaction, placing it in the bottom 3 care areas for satisfaction. Finally, specialist chronic care which ranked as second most important in with mean ranking, dropped to rank five for satisfaction level.

The care areas that ranked highest level importance with the weighted mean rank approach included dental, gynecological care, and psychotherapy (1-3 respectively). These care areas all had middle levels of care satisfaction: dental ranked 10th, gynecological 6th,

psychotherapy 11th. Finally, massage which was consistently rated as high importance, with rank 12 regardless of method, was the care area participants were least satisfied with.

Care type satisfaction rankings looked drastically different than level of health need importance rankings (by either method). There is room to improve level of care satisfaction in all areas. Generally, care types that were less invasive seemed to be ranked with higher levels of satisfaction (prescription medication, lab tests), while care types that were more invasive seemed to be ranked with lower levels of satisfaction (massage, psychotherapy). But there were exceptions like gynecological care.

Healthcare Barriers by Type of Care:

One consideration for the calculation of barriers to care during our analysis planning was that, given the design of our survey, care categories might have a high mean of barriers reported based on one of two phenomena: 1) A smaller number of participants each indicating many different barriers, or 2) a larger number of participants each indicating fewer barriers. To evaluate which of the two was occurring in our sample, in addition to calculating the mean number of barriers per category, we also calculated the percentage of participants that affirmed any barrier in that category.

Across all care categories the proportion of participants that reported at least one barrier to care was remarkably high, with no fewer than 83.08% of participants indicating at least one barrier per care category. The care category with the highest proportion of participants reporting any barrier was psychotherapy, where 97.28% of respondents reported at least one barrier.

When we compare the percent of respondents who affirmed any barrier to care with the mean (and rank number), we see that the largest means also tended to have larger numbers of

participants that affirmed any barrier to care. We also see that on average participants reported that on average no category had a higher number of barriers than 1.14 for psychotherapy. Thus, phenomenon 2 is occurring in our sample, and means seem to have been driven by high numbers of respondents each indicating one or fewer barriers per category, with few participants indicating many barriers per category.

A particularly interesting finding is that the top three care categories in terms of weighted mean ranking for level of importance, were the same three categories with the highest proportion of participants that indicated any one barrier to care, and the categories indicated with the highest mean numbers of barriers (highest ranked for barriers to care). Thus, while a strong majority of participants included dental (importance rank 1), gynecological care (importance rank 2), and psychotherapy (importance rank 3), almost all of the participants that included these categories among their top ten most important, also reported that these were the most difficult types of care to access, in terms of barriers.

A similar finding is that when we instead consider the raw mean rank scores for level of importance, acupuncture, specialist chronic care, and naturopathy were ranked 1-3 as the most important. In terms of barriers to care the same three categories rated as having the lowest proportion of barriers to care by mean barriers reported for that category. Acupuncture ranked 15 for barriers, specialist chronic care 16, and naturopathy 14, where a higher rank meant a lower average number of barriers. Therefore, while only a minority of participants needed care of these three types, they were important for the people that needed them, and the people who needed these sorts of care also reported having relatively good access to care in these categories, in terms of there being fewer barriers to care. It is important, however, to keep in mind that a high

proportion of participants reported at least one barrier in all areas of care, so there remains significant room for improvement.

The above findings when taken together can be interpreted as meaning that for care areas needed by a high proportion of participants (i.e. dental, gynecological) barriers more regularly prevent access to care. Alternatively, the minority of participants that ranked specialty care needs as important, also tended to report fewer barriers and better access to those services.

The practical implication of this finding, when considering where to invest funding to address disparities in access to services through the reduction of barriers, the types of care for which those barriers need to be addressed are the same types of care that most people are seeking. In other words, investment (of both funding and human resources) to address barriers to healthcare access for LBTQ people, will be an investment that simultaneously works to the benefit of other care-seeking groups.

Considering which barriers had the most significant impact on care type barrier rankings, the insurance and financial barrier was most frequently cited. Only 5.04% of the sample reported that they were uninsured, and only about 1% of participants opted not to respond. Encouragingly, 93.28% of participants reported being insured. Thus, while most participants were insured, most also reported that the insurance that they had presented a considerable barrier to care, and therefore most insured people in the sample could be considered underinsured.

The grouping of insurance and financial into one category may have contributed to this finding. The two constructs were merged into a single category as the constructs have a high level of overlap – those who have higher paying jobs are also more likely to have employer-funded health insurance. All the other barrier categories had a single construct scope, so future questionnaires with similar design might consider keeping these constructs separate. Had they

been separate, however, this may have artificially inflated the mean number of barriers reported by category, given that the same people who report an insurance barrier may be more likely to report a financial barrier.

Care setting preferences:

Findings for care setting preferences tended to follow a somewhat different ranking pattern from the health needs importance rankings, care satisfaction rankings, and care barriers rankings. Care types where a queer space was most preferred make intuitive sense, including psychotherapy, hormones, STI testing, gynecological care, and massage ranked 1-5 for queer space preference. All of these care types might be considered invasive. Psychotherapy is invasive in that the information shared by clients is often deeply personal and sensitive, particularly as it related to gender and sexuality. Hormones are invasive for the same reason as psychotherapy, in that in order to seek this sort of care, patients need to disclose personal and sensitive information about their sexual identity to their provider. STI testing and is both emotionally and physically invasive in that it requires disclosing information about sexual partnerships – which is highly taboo in the US – and in that it may require uncomfortable physical examination. Gynecological care is physically invasive, as is massage. It makes intuitive sense that a queer setting would be most preferred for care types that are most invasive because queer spaces often offer queer people an increased sense of comfort by comparison to open spaces, where they may feel less able to fully express themselves. This willingness to express oneself is of critical importance to health because when people feel uncomfortable, in a particular care setting, they may be less likely to accurately disclose health-relevant information for fear of judgement from the clinical staff. This withholding of information can impact the quality of care and care outcomes.

Differences Relative Importance of Health Needs Across Groups:

Our sample allowed us to evaluate differences in the relative importance of health needs rankings based on identification as a woman or identification as another gender and based on cisgender vs other identifying. We found that there were no significant differences between these two groups, in terms of how they rated the relative importance of health needs, which could have been due in part to the smaller-sample size of subgroups. Additionally, because only participants that indicated a health need among their top ten care type received subsequent questions about that care type, further analysis of differences between groups for care satisfaction, barriers to care, and care setting preferences was not warranted.

Implications of Qualitative Results:

When the ten emergent themes from the qualitative analysis are considered together, it is particularly striking that 9/10 themes pertain to barriers to care. This is an indication of just how ubiquitous and diverse barriers to care are, while also being suggestive of the magnitude that the combined effects of these barriers must have on access to care. Some of the themes barrier themes identified suggest deep systemic problems with care systems (overburdened care systems, medical gatekeeping) that may only be addressed through complex policy level interventions.

The qualitative results also made clear that barriers to care overlap with one another, often with additive or multiplicative effect. For example, insurance barriers like underinsurance predisposed some participants to have other barriers like cost. This overlap in barriers presents a problem for measurement, given that the boundaries of one barrier construct and the start of another may well occupy overlapping spaces.

Queer competence, while indicated as a less prominent barrier than insurance and financial in quantitative results, was frequently discussed as a barrier in the qualitative results. A lack of queer competent providers led participants to avoid seeking care and reduced the quality-of-care encounters, often leading to trauma. This suggests the need for improved provider training on queer competence, particularly for providers that provide a sensitive or invasive type of care. Training on unconscious biases is insufficient and needs to be replaced with more tailored training to address the specific health needs of minority groups.

Triangulation of Quantitative and Qualitative Results:

The design of the qualitative questions for this study, makes them most valuable (for triangulation purposes) to the quantitative results for care satisfaction and barriers to care results, while they are less valuable for confirming health needs, and care setting preferences results. Focus group questions took into consideration crude health needs results, which means that the qualitative results are of no value in triangulating findings for the health needs item.

Implications of Quantitative Findings:

The quantitative findings suggest the need for interventions that remove barriers to care. Specifically, despite the function of insurance being to guarantee access to services, insurance presented the most common barrier to care, meaning that systemic changes are needed to ensure that insurance is meeting the needs of clients. Additionally, care systems are understaffed and under supported to meet patient needs in a timely manner. The key takeaway is that insurance companies are not utilizing their funding effectively to meet client needs. Insurers need to include coverage for higher number of clinicians and systems. While unconventional, one means

of ensuring this might be an insurer based fine system. With the passage of state or federal policy, insurers that failed to provide adequate access to providers accepting new clients, or that failed to provide sufficient coverage for necessary care (preventative, acute, chronic) would be fined, and the funding used to fund state-level health programming. This would also encourage insurance companies to invest in an support health systems to ensure that the systems themselves had adequate capacity.

Care Satisfaction:

One of the key quantitative findings regarding care satisfaction was that, in general, care areas that were less invasive tended to be rated as having higher level of participant satisfaction. The qualitative theme that pertained to care satisfaction resulted in an aligned finding that participants tended to be less satisfied with care types that were most invasive. Thus, the qualitative findings confirm the quantitative findings, which increases our confidence in this interpretation of the results.

Barriers to Care:

The qualitative findings fully reinforced quantitative findings with respect to barriers to care. Results from the quantitative analysis showed that most participants faced barriers in all care areas. Similarly, the finding that 9/10 emergent themes had to do with barriers to care is consistent with quantitative findings. Clearly barriers to care are a tremendous impediment to care access.

The specific barriers to care that were identified as options for the quantitative respondents to select from were all discussed as barriers during focus group discussions. Another

consistent finding was that across both quantitative and qualitative results was that insurance barriers were particularly impactful in terms of impeding access to care. The quantitative results demonstrated that the insurance and financial barrier, was across all categories, the most frequently reported barrier to care. The qualitative results confirmed that insurance and financial barriers were both highly impactful in terms of preventing access to care. Additionally, the qualitative findings indicated considerable overlap between insurance and cost barriers, which support their use as a single barrier type in our quantitative survey. The qualitative analysis also confirmed that transportation, hours, and gender/sexuality inclusivity issues were barriers of concern.

Complementarity of Quantitative and Qualitative Results:

Care Satisfaction:

In terms of complementarity between the quantitative and qualitative results for care satisfaction, the qualitative results expanded our understanding of the mechanisms and forces at play that may be leading to lower care satisfaction for care areas that are highly invasive. In multiple invasive care categories (massage, psychotherapy) focus group participants reported that a lack of trauma informed care was a key issue that contributed to low satisfaction.

Barriers to Care:

Considering complementarity for barriers to care between quantitative and qualitative results, the qualitative findings about insurance barriers confirm the quantitative finding that insurance was a barrier due to underinsurance. Most participants in both the qualitative and quantitative samples were insured, yet still the majority say insurance was a barrier to seeking care. Participants described diverse manifestations of underinsurance or insufficient coverage.

Some participants reported that they had worked with the same provided for a long time, but their coverage changed, and their preferred provider was suddenly out of network. While participants' insurance covered some types of care (dental cleaning) it did not cover all types of necessary care (root canal). Other participants reported that insurance presented a barrier to care because of the difficulty of interpreting what procedures and providers were covered vs not covered, or because it was too difficult to find a clinic or clinician that would accept their coverage.

Insurance and cost barriers were closely related but were independent constructs. The quantitative survey design for types of barriers grouped insurance and cost together but the qualitative findings indicate that they are distinct and related constructs, in terms of their impact on barriers to care. Underinsurance often predisposed a participant to experiencing a cost barrier in two ways 1) had the insurance coverage simply included a broader scope of services that included the needed services, no out of pocket payment would be necessary, 2) often the types of insurance that lack a broader scope of coverage also have higher out of pocket expenses. Underinsurance and cost barriers were regularly occurred together in the qualitative data, and this makes sense given that underinsurance can lead increased out of pocket costs.

In the qualitative results, the impact of queer competence (gender/sexuality inclusivity) on access to care was more marked than in the quantitative results. This may have been a result of how the issues were framed differently in the quantitative questionnaire, vs in focus group discussion. In other words, the constructs "queer competence" and "gender/sexuality inclusivity" from the qualitative and quantitative codebooks respectively may not be entirely congruous. Participants reported that failures on the part of clinicians to provide queer competent care were traumatizing and harmful.

Study Strengths:

The strengths of this study include good queer diversity and transgender representation, and the exploratory mixed-methods approach which was methodological sound given the research question at hand. Additionally, the use of a double coding process, and inclusion of triangulation and complementarity add to the value of the study. Overall, the multipronged recruitment approach was successful in recruiting a regionally representative sample with good queer diversity.

Study Limitations:

One of the primary limitations of this study was the sample's limited racial diversity. The sample was somewhat less racially diverse than the City of Seattle, which was the location of the majority of recruitment activities (58). A more tailored recruitment approach may have resulted in better representation of BIPOC in the sample (59).

While overall study enrollment was sufficient, when broken down by groups for comparison, the sample sizes did not provide adequate power to allow for all of the evaluations intended. Future studies that attempt to understand differences between groups will need to enroll even larger numbers of participants in order to have the statistical power necessary to fully evaluate this.

Survey items were all designed specifically for this study, which means that findings from this study may be difficult to compare to the findings of other similar studies in they used different survey items. It would be of benefit for these survey items to be compared to those used in other similar studies to evaluate the degree to which these results are comparable. Additionally, a validation study to determine the quality of these items may be of benefit.

Generally, the survey took a fairly deficits-based interpretation of access to care, which may be less appropriate for BIPOC participants (60); emerging evidence preferentially supports the use of strengths-based framing to reach BIPOC and LGBTQ individuals (61, 62). Additionally, there should have been an opportunity during the survey development phase for participants from the same sampling frame as the survey to provide input on the types of items included. Typically, a small number of formative interviews is sufficient for this purpose and improves the validity of survey instruments.

It may have been of benefit to split out the barrier insurance and financial into two categories based on a face validity issue that all other barrier categories included a single construct and not multiple. Thus, to be best comparable to the other constructs in this section, it may have helped to separate them. This said, doing so may have artificially increased the mean number of barriers per category.

Conclusion:

This study addresses the need for research that examines the differences in health needs and barriers for people of different intersections of queerness. LBTQ participants reported a remarkably high number of barriers to care, meaning that access to care is persistent issue despite low uninsured rates. Further research is needed to understand how these findings may differ by region, race, age, and other categories, that this study did not have the statistical power to evaluate. The barriers to care presented herein are suggestive of multiple pathways for intervention to reduce barriers to care and improve access to health services.

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