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Qualitative Study

BEHAVIORAL BARRIERS AND FACILITATORS FOR SEXUAL ORIENTATION AND GENDER IDENTITY (SOGI) DATA COLLECTION IN A COMMUNITY HEALTH CLINIC IN SOUTHERN PUERTO RICO: A RAPID QUALITATIVE ANALYSIS

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ABTRACT

Collecting sexual orientation and gender identity (SOGI) is essential to provide affirming and evidence-based care and to address health inequities, especially among sexual and gender minorities (SGM). Despite the importance of collecting SOGI, there are multilevel barriers that hinder such implementation. However, in the context of Puerto Rico, few studies have examined these barriers and facilitators, and none have explored them through a behavioral lens. **Objective:** The purpose of this qualitative study is to explore the behavioral barriers and facilitators of SOGI data collection in a Community Health Clinic (CHC) in Southern Puerto Rico. **Method:** We conducted semi-structured interviews (N=10) among healthcare providers (n=5) and healthcare personnel (n=5). We analyzed the data using the Planning for and Assessing Rigor in Rapid Qualitative Analysis (PARRQA) approach and guided by the Theoretical Domains Framework (TDF). **Results:** Findings from the analysis indicate that key barriers to SOGI data collection include beliefs about consequences, emotion, social influence, and environmental context and resources. In contrast, behavioral facilitators include knowledge, skills, behavioral regulation, and reinforcement. **Conclusions:** We discuss pragmatic strategies for behavioral change to improve SOGI data collection in healthcare settings.

Keywords: SOGI, rapid qualitative analysis, implementation science, behavioral determinants

RESUMEN

La recolección de datos sobre orientación sexual e identidad de género (SOGI, por sus siglas en inglés) es una practica basada en la evidencia que es esencial para abordar las inequidades en salud, especialmente entre las minorías sexuales y de género. A pesar de su importancia, las barreras a múltiples niveles continúan obstaculizando su implementación. Sin embargo, en el contexto de Puerto Rico, pocos estudios han examinados estas barreras y facilitadores, y ninguno las ha explorado desde un lente conductual. **Objetivo:** El propósito de este estudio cualitativo es explorar las barreras y facilitadores conductuales en la recolección de datos SOGI en una Clínica de Salud Comunitaria en el sur de Puerto Rico. **Método:** Se realizaron (N=10) entrevistas semiestructuradas con proveedores de salud (n=5) y personal de salud (n=5), Analizamos los datos a través de la Planificación y Evaluación Rigurosa del Análisis Rápido Cualitativo (PARRQA, por sus siglas en inglés) y guiado por el Marco Teórico de Dominios (TDF, por sus siglas en inglés). **Resultados:** Los hallazgos indican que las principales barreras para la recolección de datos sobre SOGI incluyen creencias sobre las consecuencias, factores emocionales, influencia social y el contexto ambiental y los recursos disponibles. En contraste, los facilitadores conductuales incluyen conocimiento, destrezas, regulación del comportamiento y refuerzos. **Conclusiones:** Se discuten estrategias pragmáticas de cambio conductual para mejorar la recolección de datos sobre SOGI en entornos de salud.

Palabras clave: SOGI, análisis rápido cualitativo, ciencia de implementación, determinantes conductuales

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INTRODUCTION

SOGI Data Collection in Healthcare Settings

In healthcare settings, Sexual Orientation and Gender Identity (SOGI) data collection from patients is the systematic practice of collecting and documenting sex assigned at birth, sexual orientation, current gender identity, and pronouns. "Name other than legal" can also be included in SOGI data collection. From 2016 to 2024, the uptake of SOGI data collection increased across Community Health Centers (CHCs) in the continental United States and its territories following the Health Resources and Services Administration (HRSA) mandate requiring this information from adult patients (Health Resources and Services Administration, n.d.; Liu et al., 2023; McDowell et al., 2022). SOGI data can be collected verbally (e.g., through direct provider or personnel questions), in written form (e.g., intake forms), or electronically (e.g., Electronic Health Records, EHRs).

Routine and consistent SOGI documentation is essential for affirming care, informing clinical decision-making, and addressing real-world health inequities (Schmidt et al., 2025; Streed, 2022). For example, standardized SOGI data collection at a National Cancer Institute (NCI) identified significant health concerns and lower quality of life among sexual and gender minorities (SGM)—including individuals who identify as gay, lesbian, bisexual, transgender, non-binary, queer, two-spirit, and others—with cancer compared to their heterosexual and cisgender counterparts (Yang et al., 2023). Similarly, the inclusion of SOGI data collection in national health datasets (e.g., All of Us) has revealed adverse mental health outcomes among SGM populations (Lu et al., 2025). By implementing SOGI data collection, health systems can integrate evidence-based practices that might improve the quality of care for underserved populations.

Despite HRSA's initiative, multilevel barriers still hinder standardized SOGI data collection across the continental United States. At the institutional level, recent studies cite inadequate personnel training and unclear policies as key barriers to standardizing SOGI data collection (Akre et al., 2025). At the provider level, barriers include perceived irrelevance, concerns about patient discomfort, and a lack of competency training in SOGI data collection (Mullins et al., 2023). At the patient level, trends indicate lower response rates among Hispanic individuals, older adults, lower educational attainment, and those who complete patient intake questionnaires in Spanish (Boehmer et al., 2024). At the political level, restrictive or anti-SGM health policies pose additional barriers to standardized SOGI data collection (Sandhu et al., 2025). For example, as of January 20, 2025, Trump-Vance administration has prohibited federal efforts to collect SOGI-related demographics (Exec. Order No. 14168, 2025).

SOGI Data Collection as a Health Professional Behavior

While most research on SOGI data collection in healthcare settings has focused on interpersonal, structural, and policy-driven barriers, the behavioral components of this practice remain largely overlooked. SOGI data collection is not a passive procedure but an active behavior that requires healthcare providers and personnel to engage cognitively, emotionally, and socially. Even in settings where data collection involves minimal human interaction, such as intake forms or EHRs, implementation might still rely on the healthcare workforce's ability and willingness to facilitate the process. As such, SOGI data collection can be conceptualized as a health professional behavior. Health professional behaviors are actions exhibited by healthcare providers and personnel during patient care (Patey et al., 2023). These behaviors can be categorized into the following typologies: (a) promoting health and preventing illnesses (e.g., encouraging health-related changes); (b) assessing and diagnosing illnesses (e.g., inquiring about patients' biopsychosocial history); (c) providing treatment (e.g., curing diseases); (d) providing general management of health conditions (e.g., monitoring symptoms and adherence to treatment); (e) carrying out actions related to healthcare system management (e.g., documentation of patient concerns and treatments); and (f) building a therapeutic alliance with patients and carers (e.g., promoting collaboration and engagement in medical decision-making). SOGI data collection encompasses multiple dimensions of these typologies, like assessing psychosocial aspects of patients' identities, documenting sociodemographic information in health data sets, and fostering trust and collaboration with patients.

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Barriers to SOGI Data Collection in Puerto Rico

The current study was implemented in Puerto Rico, an archipelago in the Caribbean and an unincorporated territory of the United States with a distinct sociopolitical and cultural landscape. Due to Puerto Rico's political relationship with the United States, Health Center Programs authorized by section 330 of the Public Health Service (PHS) reported their health data to the USD until 2024. According to USD data (Health Resources and Services Administration, n.d.), in 2023, 18.98% of the patients from Puerto Rico had reported unknown data regarding their gender identity, compared to 5.99% in the United States. Similarly, 23.81% of patients had reported unknown data about their sexual orientations, compared to 7.12% in the United States.

Behavioral barriers, and facilitators for SOGI data collection in Puerto Rico's healthcare settings may differ from and be similar to those in the continental United States. However, to our knowledge, limited behavioral research has explored the barriers and facilitators of SOGI data collection in Puerto Rico.

Objective of the Study

The goal of this study was to document healthcare provider and personnel-level behavioral implementation determinants (i.e., barriers and facilitators) of SOGI data collection in a community health clinic in Southern Puerto Rico.

METHOD

Design

This analysis is based on data from the 'SOGI Pilot,' a pre-implementation pilot study hosted by the Health Equity Research (HER) Lab at the Ponce Research Institute in Puerto Rico. Using a qualitative approach, we conducted semi-structured interviews with engaged members of the CHC in Southern Puerto Rico.

Procedure

We obtained approval from the Ponce Health Sciences University's Institutional Review Board (IRB; Protocol Approval #230916785). In collaboration with the CHC, we identified potential participants. We employed a purposive sampling approach (Palinkas et al., 2015), targeting individuals with relevant experience collecting SOGI data in diverse roles (i.e., healthcare providers and personnel). To facilitate recruitment, we visited the clinic, shared study flyers, offered a brief overview of the study, and inquired about the interests of individuals to participate. Interviews were in person at the clinic or via Zoom, a secure videoconferencing platform. Two researchers conducted each semi-structured interview. The primary interviewer followed the semi-structured interview guide, while the co-interviewer scribed relevant information. All participants provided informed consent prior to the interview. To ensure confidentiality, each participant was assigned a unique code to de-identify them. We audio-recorded the interviews, which lasted between 18 and 43 minutes. All interviews were conducted in Spanish. Participants were compensated with a $35 Amazon gift card. Data collection took place from May 8 to June 11, 2024.

Participants

The study included (N=10) participants evenly divided between healthcare providers (n=5) and healthcare personnel (n=5). We determined the sample size a priori based on prior evidence-based consensus that states that saturation is typically achieved within a range of 9 to 17 interviews (Hennink & Kraiser, 2022). We also assessed data saturation using the stopping criterion approach to determine when sufficient information had been obtained (Guest et al., 2020; Rahimi & Khatooni, 2024). The inclusion criteria for healthcare providers were: (a) employment as a service provider at the Community Health Clinic for at least a year; (b) 21 years or older; and (c) proficiency in Spanish and/or English. The inclusion criteria for healthcare personnel were: (a) employment as part of the clinic's health personnel staff for at least a year; (b) 21 years or older; and (c) proficiency in Spanish and/or English.

Instrument

Semi-structured Interview Guide

We developed a semi-structured interview guide divided into two sections. Section 1 explored sociodemographic information, including age, gender identity, sexual orientation, ethnicity, and geographic location. For Section 2, we developed a guide with questions related to (a) Employment and SGM health knowledge; (b) Forms and methods for data collection at the CHC; (c) Barriers for SOGI data collection; (d) Facilitators for SOGI data collection; (e) Recommendations for SOGI data collection practices; and a (f) Clinical vignette. This

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Table 1

Example questions from the interview guide

Dimensions	Questions
Barriers for SOGI Data Collection	What provider-level factors hinder the standardized collection of information about patients' gender identity and sexual orientation at the clinic? What personnel-level factors hinder the standardized collection of information about patients' gender identity and sexual orientation at the clinic? What institutional-level factors hinder the standardized collection of information about patients' gender identity and sexual orientation at the clinic?
Facilitators for SOGI Data Collection	What provider-level factors facilitate the standardized collection of information about patients' gender identity and sexual orientation at the clinic? What personnel-level factors facilitate the standardized collection of information about patients' gender identity and sexual orientation at the clinic? What institutional-level factors facilitate the standardized collection of information about patients' gender identity and sexual orientation at the clinic?

article will focus on the questions regarding barriers and facilitators. In Table 1, we present an example of the questions from the interview guide.

Data Analysis

We conducted descriptive analysis (e.g., frequencies, means) for the sociodemographic data using IBM SPSS Statistics V.30. The qualitative data were analyzed using the Planning for Assessing Rigor in Rapid Qualitative Analysis (PARRQA) consensus-based framework (Kowalski et al., 2024). The rationale of incorporating Rapid Qualitative Analysis (RQA) was to provide recommendations to the CHC in a timely manner for facilitating SOGI data collection. RQA is recommended by researchers for its ability to address health equity issues, ensure rigor in data quality, respond to problem-solving criteria, and strengthen collaboration with engaged partners throughout the research project (St. George et al., 2023).

Qualitative data were distilled from notes taken during the interviews and recordings of the interviews. The first author trained the second and third authors in RQA approaches for data analysis. After each interview session, the research team debriefed and reflected on the notes.

After completing all interviews, we developed a summarizing data table template in MS Word. One column included domains derived from the study's research questions, while the other column provided space to document participants' quotes corresponding to each domain. The interview recordings were then divided among the three analysts, who independently completed the summarizing data table for each assigned participant. Each analyst listened to their assigned recordings in their entirety on two separate occasions and reviewed the notes to familiarize themselves with the data. Interviews were not transcribed for analysis.

To ensure consistency and accuracy in data capture, we held three team meetings to compare the extracted quotes, discuss similarities across team members' findings, and refine the summarizing board template as needed. Following this step, we developed a qualitative matrix table in MS Word, using the domain names from the summary template as column headers. Information from the summaries was then systematically integrated into the matrix table. The first author translated the data from Spanish to English, and the entire team reviewed the quotes to ensure accuracy, cultural relevance, and consistency in the meaning.

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Table 2
Overview of the Theoretical Domains Framework

Dimensions	Definition
Knowledge	Awareness of the existence of something
Skills	Ability or proficiency acquired through practice
Social/Professional Role and Identity	Coherent set of behaviors and displayed personal qualities of an individual in a social or work setting
Belief about Capabilities	Perception about an ability, talent, or facility that a person can put to constructive use
Optimism	Confidence that things will happen for the best or that desired goals will be attained
Beliefs about Consequences	Perceptions about outcomes of a behavior in a given situation
Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus
Intentions	Conscious decision to perform a behavior or a resolve to act in a certain way
Goals	Mental representations of outcomes or end states that an individual wants to achieve
Memory, attention, and decision processes	Ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives
Environmental contexts and resources	Circumstances of a person's situation or environment that discourages or encourages the development of skills, abilities, independence, social competence, and adaptive behavior
Social Influences	Interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviors.
Emotion	Complex reaction patterns, involving experiential, behavioral, and physiological elements, by which the individual attempts to deal with a personally significant matter or event
Behavioral Regulation	Anything aimed at managing or changing objectively observed or measured actions

Note: Table adapted from Atkins et al. (2017)

Theoretical Domain Framework

To guide the identification of behavioral determinants for SOGI data collection, we applied the Theoretical Domains Framework (TDF) (Atkins et al., 2017; Cane et al., 2012) during the Data Synthesis phase. The TDF is a behavioral framework that categorizes barriers and facilitators of implementation into 14 theoretical domains: 'Knowledge,' 'Skills,' 'Social/Professional Role and Identity,' 'Beliefs about Capabilities, 'Optimism,' 'Beliefs about Consequences,' 'Reinforcement,' 'Intentions,' 'Goals,' 'Memory, Attention, and Decision Processes,' 'Environmental Context and Resources,' 'Social Influence,' 'Emotion,' and 'Behavioral Regulation.' In Table 2, we include an overview of the TDF, which includes the 14 domains and their definitions. We transferred the data from the matrix table to a Data Synthesis Table in MS Word and deductively analyzed the data based on previously mentioned domains.

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Table 3
Sociodemographic Characteristics of Participants (N = 10)

Variable	n (%)	*M*	*SD*
Age	—	40.30	7.00
Gender			
Man	3 (30.0%)		
Woman	7 (70.0%)		
Sexual orientation			
Heterosexual	8 (80.0%)		
Gay / Lesbian	2 (20.0%)		
Ethnicity			
Latino/a/x	10 (100.0%)		
Regions of residency			
South	7 (70.0%)		
North	2 (20.0%)		
West	1 (10.0%)		
Marital status			
Married	4 (40.0%)		
Single	4 (40.0%)		
Living with partner	2 (20.0%)		
Household income (annually)			
< $20,000	2 (20.0%)		
$20,001–$40,000	6 (60.0%)		
$80,001–$100,000	1 (10.0%)		
$140,001–$160,000	1 (10.0%)		
Time working in community health clinic (annually)	—	8.40	6.13
SGM friend			
No	1 (10.0%)		
Yes	9 (90.0%)		
SGM family member			
No	3 (30.0%)		
Yes	7 (70.0%)		

RESULTS

Participant Demographics

The demographic characteristics of the participants (N = 10) are presented in Table 3. The average age was 40.3 years (SD =7.00). Most of the participants lived in the Southern region of Puerto Rico (70%), self-identified as women (70%) and heterosexual (80%). Likewise, most participants had a close SGM friend (90%) or SGM family member (70%).

Qualitative Results

Findings suggest that the CHC in Southern Puerto Rico collects SOGI data through the EHR; however, various behavioral factors influence whether this information is consistently inquired. Eight of the fourteen domains from the TDF were identified as either barriers or facilitators for the health professional behavior. Behavioral barriers to SOGI data collection include Belief about Consequences, Emotions, Social Influence, and Environmental Context and Resources. In contrast, behavioral facilitators include Knowledge, Skills, Behavioral Regulation, and Reinforcement.

Behavioral Barriers to SOGI Data Collection

Beliefs about Consequences. Beliefs about Consequences are "the perception of potential outcomes of a behavior in a given situation" (Atkins et al., 2017). Eight participants reported that healthcare providers and personnel avoided SOGI data because they thought the patients would be offended or react adversely to the questions.

> "The thought that you might make the patients uncomfortable can be a barrier" (healthcare provider, woman, lesbian, 32 years).

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> "I do not ask those questions because most of our patients have mental health issues, and that is a personal topic—not everyone will respond well" (healthcare personnel, woman, heterosexual, 50 years).

As seen in the quotes, participants' responses suggest that anticipated regret and expected adverse outcomes from the patients might contribute to not collecting SOGI data. If healthcare providers and personnel believe SOGI data collection will lead to dissatisfaction or conflict with patients, they might opt out of asking these questions. Likewise, stigmatizing views about patients might also guide their behaviors.

Emotion. Emotion, as defined by Atkins et al. (2017), is "a complex reaction pattern involving experiential, behavioral, and physiological elements, by which the individual attempts to deal with a personally significant matter or event". Four participants reported that unpleasant emotional responses in clinical interactions were a barrier to collecting SOGI data.

> "In the EHR, you are required to add it [SOGI data]. However, if you are scared or feel uncomfortable, you will respond [for the patients], 'Prefer not to Disclose.' But it won't be real data for later when they're looking for statistics. It won't be real data" (healthcare personnel, woman, heterosexual, 37 years).

> "There was a time when they [the clinic administration] told us to do it. Some people do, and others don't because they're afraid [to ask]" (healthcare personnel, man, homosexual, 49 years).

More specifically, healthcare providers and personnel shared that fear and shame could lead to hesitancy in collecting SOGI data, as they perceived the conversation as sensitive.

Social Influence. Cognitive and affective factors not only influence the health professional behavior, but contextual factors also play a significant role. Atkins et al. (2017) defined social influence as "the interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviors" (2017). Five participants verbalized that they did not see the relevance of collecting SOGI data, as they believed every human was equal.

> "I think we have to be neutral. In our profession, we're focusing that they're our patients. We're not looking at gender or race" (healthcare personnel, woman, heterosexual, 37 years).

Although probably well-intentioned, this belief reflects broader social norms that shape the ways health providers and personnel think, feel, and act. This verbalization likely reflects cultural views of cis-heteronormativity, where the assumption of heterosexual and cisgender identities as the norm may influence their behavior. As other participants mentioned, SOGI-related topics might still be considered culturally taboo among some Puerto Ricans—which in turn might shroud in discomfort the discussion of these demographics in healthcare settings.

> "In general, while things have improved, it's still taboo to [discuss SOGI-related topics]" (healthcare personnel, woman, heterosexual, 48 years).

Environmental Context and Resources. Environmental context and sources refer to "any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behavior" (Atkins et al., 2017). All the participants reported that workflow and time constraints could hinder them from collecting SOGI data. This barrier was particularly evident among reception personnel, who often mentioned facing higher time pressures. Understandably, these constraints could lead to environmental stress and may compromise the quality and completeness of the data.

> "It's about time... I mean, [providers] really work by the hour, so the patient has to come here to the front desk to check-in. After they check-in, they come to us, at reception, and we're rushing like crazy to get their signature, because the doctor is already waiting at the door. Everything is hectic. It's a race against the clock" (healthcare personnel, woman, heterosexual, 48 years).

> "If there's a large flow of patients, that could affect that we ask all the [SOGI-related] questions" (healthcare provider, woman, heterosexual, 34 years).

Facilitators for SOGI Data Collection

Knowledge. Knowledge refers to "an awareness of the existence of something" (Atkins et al., 2017). Eight of the participants reported that knowledge regarding the scientific rationale for inquiring about SOGI data in healthcare settings could promote this practice.

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> "I think it's relevant to [collect SOGI Data]. By gathering more demographic information about our patients, we can attend or canalize their unique [healthcare] needs" (healthcare provider, woman, heterosexual, 34 years).

In contrast, unfamiliarity with the SOGI data questions in the EHR could hinder collecting the information in a standardized manner. Several participants were unaware that this practice was implemented in the clinic. Meaning that increase of SOGI-related knowledge is a facilitator, while lack of knowledge is a barrier.

> "I don't have it in my EHR template (looks at the computer) ...well, it mentions race, ethnicity, sexual orientation...(hesitant), gender identity... you see, but it's not filled out" (healthcare provider, woman, heterosexual, 42 years).

Skills. Skills refers to the "ability or proficiency acquired through practice" (Atkins et al., 2017). Seven participants indicated that specific programs from the CHC had incorporated SOGI data questions. They mentioned that practicing SOGI-related questions facilitated implementing it throughout their interventions.

> "We ask about the name and pronouns our participants would like us to use; and we don't just ask during our first interaction, but also, 'Today, what pronoun do you prefer?'" (healthcare provider, woman, heterosexual, 43 years).

Similarly, participants reported that they would be more likely to collect SOGI if they were trained in collecting this type of demographic information.

> "I think if we received a workshop on how to support the people, ask the questions, and learn how to manage...that would help. I also think the workshop should include providers and personnel so we're on the same page" (health-care personnel, man, heterosexual, 35 years).

Behavioral Regulation. Behavioral regulation refers to "anything aimed at managing or changing objectively observed or measured actions" (Atkins et al., 2017). Six participants indicated that they engaged with the health professional behavior as a way to improve patient satisfaction. Because of this, SOGI data became a standardized practice in some units of the CHC.

> "From 2019 onward we saw an increase [of SGM patients] when we asked questions regarding pronouns, sexual orientation, and gender identity. We noticed more diversity, so we asked [the questions] to improve the quality of service for our participants" (healthcare provider, cisgender woman, heterosexual, 43 years).

Likewise, participants reported that they managed adverse reactions from patients by reassuring them that this information was confidential.

> "There are times when they [patients] react defensively. Like, 'why are they asking me this?'. And that's when I explain, 'look, all of this is confidential; it's part of a process and I need to know this.' And of course, I tell them, 'Look, I'm here to advocate for you" (healthcare provider, woman, heterosexual, 42 years).

We also found that some participants who collected SOGI data often did so informally, as part of their unit's work culture. This means that in occasions, participants asked SOGI-related questions but did not document it through their EHR. They were unaware that the clinic had formal infrastructure for recording this information, which might represent a key issue in data quality.

Reinforcement. Reinforcement refers to "when you increase the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus" (Atkins et al., 2017). Two of the participants indicated that they engaged with SOGI data collection because they were taught by their supervisors until it became an automatic behavior.

> "That's how we were taught [by our supervisors]. We've gotten used to asking the questions and restructuring the interviews" (healthcare provider, man, heterosexual, 33 years).

Similarly, participants indicated that the practice of administration monitoring the collection of SOGI data could possibly facilitate that providers and personnel systematically collect the information. Specifically, asking about their thoughts, emotions, and effectiveness while participating in the health professional behavior.

> They [administration] should do a check-up. 'How's it been going for you?' 'How have you been feeling?' Are you really doing it?'" (healthcare provider, woman, lesbian, 32 years).

Overall, the results indicate that behavioral barriers to SOGI data collection were shaped by domains related to cognition, affect, social norms, and contextual constraints, reflecting how beliefs about anticipated patient reactions, healthcare providers' fears and shame, culturally embedded assumptions about gender and sexuality in

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Puerto Rico, and workflow pressures inhibited the standardization of this practice. Behavioral facilitators centered on conceptual understanding, practice-based competence, regulation of emotional responses, and leadership reinforcement; all of which supported engagement in the behavior.

DISCUSSION

The goal of this analysis was to document behavioral determinants influencing the implementation of SOGI data collection in a CHC in Southern Puerto Rico. Like other studies, knowledge and environmental constraints influenced SOGI data collection (Mullins et al., 2023). Unique to this study, key barriers included beliefs about consequences, emotional responses, and social influences. Conversely, facilitators included skills, behavioral regulation, and reinforcement. In comparison to healthcare providers, healthcare personnel tended to offer more barriers to engage in SOGI data collection. This finding might be explained as healthcare personnel unanimously reported that they had not received prior training in SGM health issues. These results support the need to train the entire heath workforce in SOGI-related topics.

The main finding from this analysis is that merely having the infrastructure for SOGI data collection (e.g., EHRs) is insufficient to engage healthcare providers and personnel in the practice. If we conceptualize SOGI data collection as a health professional behavior, it becomes clear that cognition, affect, and culture play crucial roles in the practice uptake. Our study also supports the utility of the TDF in identifying behavioral determinants of SOGI data collection, a critical yet under-researched implementation behavior in healthcare settings. Given the challenges of changing behaviors among healthcare providers and personnel, applying a behavioral theoretical framework allows for a nuanced understanding of the barriers and facilitators of SOGI data collection. One of the strengths of the TDF is that it has been used with the Theory and Technique Tool to link the domains with Behavioral Change Techniques (BCTs) that are effective in facilitating the adoption of implementation in healthcare settings (Johnston et al., 2021; Michie et al., 2021). In the following paragraph, we offer pragmatic suggestions to address the determinants of behavior for SOGI data collection guided by the Theory and Technique Tool.

To enhance SOGI data collection behaviors, brief instructional trainings could strengthen healthcare providers' skills and knowledge regarding the clinical and public health relevance of the practice. Targeted strategies such as coping skills training may support healthcare providers in monitoring their emotion responses during these clinical interactions. Modeling, social reinforcement, and visible leadership endorsement might be effective to address culturally embedded social norms of SOGI data collection in the context of Puerto Rico. Given the constraints within Puerto Rican CHCs, low-burden workflow supports, like visual cues and scripted guidelines, may facilitate standardized practices without increasing the workload of the participants. To strengthen facilitators like skills, behavioral regulation, and reinforcement, behavioral change techniques like behavioral rehearsals, positive reinforcements, and problem-solving skills might be essential for SOGI data uptake.

Currently under the Trump-Vance administration, federal agencies like the National Institute of Health (NIH) and Center for Disease Control and Prevention (CDC), have scrubbed their websites of SGM health topics and eliminated initiatives related to SGM health research (Kozlov & Mallapaty, 2025). As health equity researchers working in Puerto Rico, we acknowledge that this moment presents both challenges and opportunities for SOGI-related initiatives. While restrictive policies in the United States may hinder SOGI data collection, this also represents an opportunity to highlight the need for global leadership in this area. Countries in the Caribbean and Latin America—where research censorship may be less severe—can take the lead in advancing the field and developing tools to address these health inequities (Bowleg, 2021). As such, we support ongoing global health debates that call for the decentralization of knowledge production from the United States, centering the voices of those most impacted by health disparities (Montenegro & Fonseca, 2025). While detailed recommendations on how to do so fall beyond the scope of this paper, we highlight authors from Latin America and the Caribbean who have offered possible suggestions that move from rhetoric to co-created action (Mascayano et al., 2025; Rivera-Segarra et al., 2022).

Likewise, we recommend that healthcare providers and personnel assess their current policies on protecting patients' data before implementing SOGI data collection (Oda & Stiehl, 2025). We hope this work inspires health researchers and professionals alike from diverse regions to collect SOGI data ethically and effectively. Health research on sexual orientation and gender identity is essential for achieving health equity (Graham et al., 2025).

Limitations

This study has several limitations. Most of the providers recruited were related to the mental health field as it was challenging to recruit primary care providers within the CHC. Primary care providers cited limited time as a barrier to participating in the interview. This sampling limitation may introduce bias, as past research has showcased that mental health providers generally have more affirming attitudes (Cruciani et al., 2024). In addition, the study was specifically implemented in a CHC in Southern Puerto Rico, so these results might not be transferable for other contexts.

Future Directions

This study is innovative as it offers an implementation science perspective on the challenges and solutions to SOGI data collection in the context of Puerto Rico. While our findings provide valuable information, future research should document Puerto Rican patients' barriers and facilitators to self-disclose SOGI status. Also, exploring barriers and facilitators among Puerto Rican primary care providers might offer further insights. In addition, future studies may consider incorporating quantitative or mixed methods designs, which can support larger and more diverse sample sizes and provide complementary perspectives on SOGI data collection behaviors. Future research should also assess the effectiveness of a behaviorally informed intervention to increase SOGI data collection competencies among healthcare providers and personnel at CHCs across Puerto Rico and other Caribbean countries.

Conclusions

In summary, this study underscores the importance of considering behavioral, affective, cognitive, and cultural factors influencing SOGI data collection in healthcare settings. By integrating a behavioral sciences and implementation research frameworks, targeted interventions can be developed to improve healthcare access among underserved communities, such as SGM populations. Importantly, this study highlights that the implementation of infrastructure alone is not enough to drive behavioral change in SOGI data collection. While developing implementation strategies for SOGI data collection, intervention developers would benefit from not only focusing on knowledge-based interventions but consider trainings that incorporate behavioral rehearsals, positive reinforcements, and coping skills practices to increase the use of this critical practice. In other words, interventions that increase the knowledge on SOGI-related concepts might not be enough to increase SOGI data collection uptake among the healthcare workforces.

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