

Supplementary table 4: Characteristics of included sources of evidence (N=167)

Author	Journal	Population	Age	Geography	Type	Method	Recruitment	Rural	Incentive	Funder	Content
Allen 2020 ¹	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM; SMW	Adults	State	Formt	QT	Venue/orig	Census	Indvl	Uni; NIH	Sexual health
Almazan 2023 ²	LGBT Health (LGBTQ Health and Studies)	TM; TW; GM	Adults	Region	Formt	QT	Social app; Venue/orig	Department of Agriculture	Raffle	Org/Foundation	Generic
Anderson 2024 ³	Nicotine and Tobacco Research (Alcohol, Tobacco, Drugs, and Other Substances)	SMM; SMW; TM; TW; GM	Adults	State	Intvtn	QT	Participant registry	Self-described by investigators	Not mentioned	Org/Foundation; State/County; Other Fed	Substance use
Anderson-Carpenter 2022 ⁴	Journal of Homosexuality (LGBTQ Health and Studies)	SMM	Adults	National	Formt	QT	Venue/orig; Snowball and respondent-driven	Census	Not mentioned	N/A	Generic
Austin 2013 ⁵	Women & Health (Public Health and Health Disparities)	SMW	Adults	Region	Formt	QT	Venue/orig	Self-reported by participants	Not mentioned	Other Fed	Healthcare discrimination and disclosure
Baker 2023 ⁶	LGBT Health (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Venue/orig	Self-described by investigators	Not mentioned	Uni	Substance use
Barefoot 2015 ⁷	LGBT Health (LGBTQ Health and Studies)	SMW	Adults	National	Formt	QT	Social app; Venue/orig	Self-reported by participants	Raffle	N/A	Metabolic health
Barefoot 2017 ⁸	Rural and Remote Health (Rural Health)	SMW	Adults	National	Formt	QT	Social app; Venue/orig	Self-reported by participants	Raffle	N/A	Cancer; Reproductive health; Sexual health; Healthcare discrimination and disclosure
Bednar 2024 ⁹	International Journal of	SMM; SMW	Adolescents - exclusive	Region	Intvtn	QT	Recruitment method not listed	Other	Not mentioned	N/A	Substance use and substance use

	Environmental Research and Public Health (Public Health and Health Disparities)						or provided				disorders; Violence
Bednarczyk 2017 ¹⁰	Papillomavirus Research (HIV/AIDS and Other STIs/STDs)	SMM; SMW; TM; TW; GM	Young adults - exclusive	National	Formt	QT	Social app	Self-described by investigators	Not offered	NIH	Cancer
Bennett 2014 ¹¹	Journal of Health Care for the Poor and Underserved (Public Health and Health Disparities)	SMM; SMW	Adults	State	Formt	QL	Social app; Venue/org; Snowball and respondent-driven	Other	Indvl	NIH	Substance use
Bennett 2015 ¹²	LGBT Health (LGBTQ Health and Studies)	SMM; SMW; TM; TW	Adults	State	Formt	QT	Venue/org	Rural-Urban Commuting Area	Not offered	Org/Foundation	Substance use
Bettergera rcia 2022 ¹³	Journal of Gay & Lesbian Mental Health (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adolescents and adults	State	Formt	QL	Social app; Venue/org; Participant registry	Self-described by investigators	Indvl	Org/Foundation; State/County	Mental health
Bineau 2021 ¹⁴	Rural and Remote Health (Rural Health)	SMM; TM; GM	Adults	Region	Formt	MM	Social app; Venue/org	Self-reported by participants	Indvl	Uni	Sexual health
Bocek 2024 ¹⁵	Transgender Health (LGBTQ Health and Studies)	TM; TW; GM	Adolescents - exclusive	State	Formt	QT	Venue/org	Federal Office of Rural Health Policy or Health Resources and Services Administration	Indvl	Org/Foundation	Mental health
Bockting 2007 ¹⁶	Archives of Sexual Behavior (Sexual Health and Sexuality)	SMM	Adults	National	Formt	QT	Sexual app	Population size or population density	Indvl	NIH	Sexual health
Bowen 2004 ¹⁷	AIDS and Behavior	SMM	Adults	Region	Formt	QT	Sexual app; Venue/or	Population size or	Not mentioned	NIH	Sexual health

	(HIV/AIDS and Other STIs/STDs)						g; Snowball and respondent-driven	population density				
Bowen 2007 ¹⁸	Health Education Research (Health Education, Behavior, and Promotion)	SMM	Adults	National	Intvn	QT	Sexual app; Venue/or g	Population size or population density	Indvl	NIH		Sexual health
Bowen 2008 ¹⁹	Journal of Behavioral Medicine (Mental Health, Behavioral Health, and Clinical Psychology)	SMM	Adults	National	Intvn	QT	Sexual app	Population size or population density	Indvl	NIH		Sexual health
Bradford 2016 ²⁰	LGBT Health (LGBTQ Health and Studies)	SMW	Older adults - exclusive	State	Formt	QL	Venue/or g	Self-described by investigators	Raffle	NIH		Neurodegenerative or aging
Cain 2017 ²¹	LGBT Health (LGBTQ Health and Studies)	SMM	Adults	National	Formt	QT	Online survey market	Census	Not mentioned	NIH		Mental health; Social health
Choudhury 2022 ²²	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMM; SMW; GM	Adults	National	Formt	QT	Online survey market	Population size or population density	Not mentioned	N/A		Suicide
Clausen 2023 ²³	Rural and Remote Health (Rural Health)	SMM; TM; TW; GM	Young adults - exclusive	Region	Formt	QT	Social app; Sexual app; Participant registry	Index of Relative Rurality	Raffle	NIH		Sexual health
Cogger 2012 ²⁴	Journal of LGBT Issues in Counseling (LGBTQ Health and Studies)	SMW	Adults	State	Formt	MM	Social app; Venue/or g; Snowball and respondent-driven	Census	Indvl	N/A		Substance use
Coleman 2014 ²⁵	Journal of Homosexuality (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/or g; Snowball and respondent-driven	Self-described by investigators	Raffle	N/A		Substance use and substance use disorders; Violence; Healthcare discrimination and

											disclosure; Generic
Curriu 2017 ²⁶	Sex Educatio n (Sexual Health and Sexuality)	SMM	Adults	State	Form t	QL	Social app; Sexual app; Venue/or g	Self- describe d by investiga tors	Indvl	State/Cou nty	Sexual health
Curriu 2017 ²⁷	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMM	Adults	State	Form t	QT	Social app	Self- describe d by investiga tors	Not menti oned	N/A	Healthcare discriminat ion and disclosure
Curriu 2019 ²⁸	Journal of Substanc e Use (Alcohol, Tobacco, Drugs, and Other Substanc es)	SMM	Adults	State	Form t	QL	Social app; Sexual app; Venue/or g	Self- describe d by investiga tors	Indvl	State/Cou nty	Substance use
Curriu 2020 ²⁹	Journal of Rural Health (Rural Health)	SMM	Adults	State	Form t	QT	Social app	Index of Relative Rurality	Indvl	State/Cou nty	Generic
DiCleme nte 2002 ³⁰	Southern Medical Journal (Medicin e)	SMM	Adults	State	Form t	QT	Recruitm ent method not listed or provided	Self- describe d by investiga tors	Not menti oned	Other Fed	Sexual health
Dubov 2019 ³¹	AIDS Care (HIV/AI DS and Other STIs/ST Ds)	SMM	Adults	Nation al	Form t	QT	Social app	Self- reported by participa nts	Not offere d	NIH	Sexual health
Escobar- Viera 2022 ³²	Frontiers in Digital Health (mHealth , eHealth, and Telehealt h)	SMM; SMW; TM; TW; GM	Adoles cents - exclusi ve	Nation al	Intv n	QL	Social app	Federal Office of Rural Health Policy or Health Resourc es and Services Adminis tration	Not menti oned	NIH; Uni	Social health
Escobar- Viera 2023 ³³	Internet Interventi ons (mHealth , eHealth, and Telehealt h)	SMM; SMW; TM; TW	Adoles cents - exclusi ve	Nation al	Intv n	MM	Social app	Federal Office of Rural Health Policy or Health Resourc es and Services Adminis tration	Indvl	NIH; Uni	Social health
Fisher 2014 ³⁴	Journal of Homosex uality (LGBTQ Health	SMM; SMW; TM; TW	Adults	State	Form t	QT	Venue/or g; Snowball and responde nt-driven	Census	Indvl	N/A	Substance use and substance use disorders; Generic

	and Studies)										
Gandy 2021 ³⁵	International Journal of Environmental Research and Public Health (Public Health and Health Disparities)	TM; TW; GM	Adolescents and adults	State	Form t	MM	Social app	Self-described by investigators	Indvl	Uni	Mental health; Healthcare discrimination and disclosure; Generic
Giano 2019 ³⁶	Psychology & Sexuality (Sexual Health and Sexuality)	SMM	Adults	State	Form t	QT	Social app; Sexual app; Venue/or g	Index of Relative Rurality	Indvl	State/Cou nty	Mental health; Social health
Giano 2019 ³⁷	Journal of Affective Disorders (Mental Health, Behavioral Health, and Clinical Psychology)	SMM	Adults	State	Form t	QT	Social app; Sexual app; Venue/or g	Index of Relative Rurality	Indvl	State/Cou nty	Mental health; Social health
Giano 2019 ³⁸	Drug and Alcohol Dependence (Alcohol, Tobacco, Drugs, and Other Substances)	SMM	Adults	State	Form t	QT	Social app	Index of Relative Rurality	Indvl	N/A	Substance use
Giano 2020 ³⁹	Journal of Health Care for the Poor and Underserved (Public Health and Health Disparities)	SMM	Adults	State	Form t	QL	Sexual app	Department of Agriculture	Indvl	State/Cou nty	Healthcare discrimination and disclosure
Giano 2020 ⁴⁰	Journal of Homosexuality (LGBTQ Health and Studies)	SMM	Adults	State	Form t	QL	Social app; Sexual app; Venue/or g	Index of Relative Rurality	Indvl	State/Cou nty	Sexual health
Giano 2022 ⁴¹	Psychology & Sexuality (Sexual Health and	SMM	Adults	State	Form t	QT	Social app; Sexual app; Venue/or g;	Index of Relative Rurality	Indvl	State/Cou nty	Social health

	Sexuality)						Snowball and respondent-driven				
Gilbert 2014 ⁴²	Journal of Homosexuality (LGBTQ Health and Studies)	SMM; TM	Adults	State	Formt	QT	Snowball and respondent-driven	Self-described by investigators	Indvl	NIH; Uni	Sexual health
Gilbert 2022 ⁴³	Journal of Homosexuality (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/org	Self-described by investigators	Not mentioned	NIH	Cancer; Substance use
Glon 2021 ⁴⁴	Journal of Gay & Lesbian Mental Health (LGBTQ Health and Studies)	SMM	Adults	State	Formt	QT	Social app; Sexual app; Venue/org	Index of Relative Rurality	Indvl	State/Cou nty	Mental health
Goldbach 2023 ⁴⁵	Journal of Rural Health (Rural Health)	SMM; SMW	Adolescents - exclusive	National	Formt	QT	Social app; Snowball and respondent-driven	Rural-Urban Commuting Area	Indvl	NIH	Mental health
Goldenberg 2014 ⁴⁶	JMIR mHealth and uHealth (mHealth, eHealth, and Telehealth)	SMM	Adults	National	Intv n	QL	Social app	Census	Not mentioned	NIH; Org/Foundation	Sexual health
Goldenberg 2015 ⁴⁷	JMIR Public Health and Surveillance (Public Health and Health Disparities)	SMM	Adults	National	Intv n	QL	Social app	Census	Not mentioned	NIH; Org/Foundation	Sexual health
Guest 2023 ⁴⁸	Innovations in Aging (Aging)	SMM; SMW	Older adults - exclusive	Region	Formt	QT	Social app; Venue/org; Snowball and respondent-driven	Rural-Urban Continuum Code	Indvl	NIH; Org/Foundation; Uni	Generic
Hall 2017 ⁴⁹	Journal of Acquired Immune Deficiency Syndromes (HIV/AIDS and Other	SMM	Adults	National	Formt	QT	Social app; Sexual app	Census	Not mentioned	NIH	Sexual health

	STIs/ST Ds)										
Hammack 2018 ⁵⁰	PLOS One (Other)	SMM	Adults	National	Formt	QT	Mail or phone public records	Rural-Urban Commuting Area	Not mentioned	NIH	Sexual health
Harb 2019 ⁵¹	Transgender Health (LGBTQ Health and Studies)	TM; GM	Adults	State	Formt	MM	Venue/org	Self-described by investigators	Indvl	N/A	Cancer; Sexual health
Harrison 2022 ⁵²	AIDS Care (HIV/AIDS and Other STIs/ST Ds)	SMM; TW	Adolescents and young adults - exclusive	Region	Formt	QL	Recruitment method not listed or provided	Self-described by investigators	Indvl	NIH	Sexual health
Holloway 2023 ⁵³	Qualitative Social Work (Psychology, Sociology, and Social Work)	TM; TW; GM	Adults	State	Formt	QL	Social app; Venue/org	Other	Indvl	N/A	Healthcare discrimination and disclosure; Generic
Horvath 2006 ⁵⁴	Health Psychology (Psychology, Sociology, and Social Work)	SMM	Adults	National	Formt	QT	Social app; Sexual app; Venue/org; Snowball and respondent-driven	Population size or population density	Indvl	NIH	Sexual health; Substance use
Horvath 2014 ⁵⁵	Journal of Homosexuality (LGBTQ Health and Studies)	TM; TW	Adults	National	Formt	QT	Social app; Venue/org	Self-reported by participants	Indvl	NIH	Mental health; Sexual health; Substance use
Hubach 2014 ⁵⁶	Health Education Monograph Series (Health Education, Behavior, and Promotion)	SMM	Adults	State	Formt	QT	Social app; Sexual app; Venue/org	Index of Relative Rurality	Not offered	N/A	Sexual health
Hubach 2015 ⁵⁷	Culture, Health & Sexuality (Sexual Health and Sexuality)	SMM	Adults	State	Formt	QL	Social app; Sexual app; Venue/org	Index of Relative Rurality	Indvl	Uni	Sexual health
Hubach 2015 ⁵⁸	AIDS Education and Prevention (HIV/AIDS and Other	SMM	Adults	State	Formt	QT	Social app; Sexual app; Venue/org	Index of Relative Rurality	Indvl	Uni	Sexual health

	STIs/STDs)										
Hubach 2017 ⁵⁹	AIDS Education and Prevention (HIV/AIDS and Other STIs/STDs)	SMM	Adults	State	Formt	QL	Social app; Sexual app; Venue/org	Index of Relative Rurality	Indvl	State/Cou nty	Sexual health
Hubach 2019 ⁶⁰	Health Equity (Public Health and Health Disparities)	SMM	Adults	State	Formt	QL	Social app; Sexual app; Venue/org	Department of Agriculture	Indvl	State/Cou nty	Healthcare discrimination and disclosure
Hubach 2020 ⁶¹	AIDS Patient Care and STDs (HIV/AIDS and Other STIs/STDs)	SMM	Adults	Region	Intvn	QL	Social app; Sexual app; Venue/org; Snowball and respondent-driven	Index of Relative Rurality	Indvl	N/A	Sexual health
Irwin 2014 ⁶²	Journal of Homosexuality (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Venue/org; Snowball and respondent-driven	Self-described by investigators	Indvl	N/A	Suicide
Israel 2016 ⁶³	Journal of Rural Mental Health (Rural Health)	SMM; SMW; TM; TW; GM	Adults	State	Intvn	MM	Social app; Venue/org	Self-described by investigators	Not mentioned	NIH	Mental health
Jabson Tree 2019 ⁶⁴	JMIR Mental Health (Mental Health, Behavioral Health, and Clinical Psychology)	SMM; SMW	Adults	Region	Intvn	MM	Snowball and respondent-driven	Self-described by investigators	Indvl	Org/Foundation; Uni	Mental health
Jenkins 2023 ⁶⁵	AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/org	Self-described by investigators	Indvl	Org/Foundation	Sexual health; Substance use
Jenkins 2023 ⁶⁶	JAMA Network Open (Medicine)	SMM; SMW; TM; TW; GM	Adolescents and adults	Region	Formt	QT	Snowball and respondent-driven	Self-described by investigators	Indvl	NIH; Other Fed	Sexual health; Substance use
Jenkins 2024 ⁶⁷	American Journal of Health Promotion (Health Education, Behavior,	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Recruitment method not listed or provided	Self-described by investigators	Not mentioned	Org/Foundation	Mental health; Healthcare discrimination and disclosure; Generic

	and Promotion)										
Jenkins 2024 ⁶⁸	Health Education & Behavior (Health Education, Behavior, and Promotion)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/organ	Population size or population density	Indvl	Org/Foundation	Mental health; Generic
Jones 2022 ⁶⁹	AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM	Young adults - exclusive	Region	Formt	QT	Social app; Sexual app	National Center for Health Statistics	Indvl	NIH	Sexual health
Jones 2022 ⁷⁰	JMIR Formative Research (mHealth, eHealth, and Telehealth)	SMM; TM; TW; GM	Young adults - exclusive	Region	Intvn	QL	Social app; Sexual app	Rural-Urban Commuting Area; National Center for Health Statistics; Index of Relative Rurality	Indvl	N/A	Sexual health
Jones 2022 ⁷¹	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents and adults	National	Formt	QT	Social app; Sexual app; Participant registry	Rural-Urban Commuting Area; National Center for Health Statistics; Index of Relative Rurality	Not offered	NIH	Sexual health
Jones 2023 ⁷²	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM; TM; TW; GM	Adolescents and young adults - exclusive	Region	Intvn	QT	Social app; Sexual app; Venue/organ; Participant registry	Index of Relative Rurality	Raffle	NIH	Sexual health
Joudeh 2021 ⁷³	Journal of the Association of Nurses in AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QL	Recruitment method not listed or provided	Self-described by investigators	Indvl	NIH	Healthcare discrimination and disclosure; Generic
Joudeh 2023 ⁷⁴	BMC Health Service Research (Other)	SMM; SMW; TM; TW; GM	Adults	State	Intvn	QL	Venue/organ	Self-described by investigators	Indvl	NIH	Generic

Jozsa 2024 ⁷⁵	Sexuality Research & Social Policy (Sexual Health and Sexuality)	SMM	Young adults - exclusive	National	Formt	QL	Recruitment method not listed or provided	Index of Relative Rurality	Indvl	Uni	Sexual health; Healthcare discrimination and disclosure
Kahn 2024 ⁷⁶	Telemedicine and e-Health (mHealth, eHealth, and Telehealth)	TM; TW; GM	Young adults - exclusive	National	Intvnt	QT	Venue/org	Federal Office of Rural Health Policy or Health Resources and Services Administration	Indvl	Org/Foundation; Other Fed	Generic
Kakietek 2011 ⁷⁷	AIDS Education and Prevention (HIV/AIDS and Other STIs/STDs)	SMM	Adults	National	Formt	QT	Venue/org	Population size or population density	Not mentioned	N/A	Sexual health
Kano 2016 ⁷⁸	Journal of the American Board of Family Medicine (Medicine)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QL	Venue/org	Self-described by investigators	Not mentioned	Org/Foundation	Generic
Kauth 2017 ⁷⁹	LGBT Health (LGBTQ Health and Studies)	SMM; SMW; TM; TW	Adults	National	Formt	QT	Venue/org	Self-reported by participants	Not offered	Other Fed	Mental health; Metabolic health; Substance use
King 2009 ⁸⁰	Journal of LGBT Health Research (LGBTQ Health and Studies)	SMM; SMW	Older adults - exclusive	National	Formt	QL	Venue/org	Population size or population density	Not mentioned	N/A	Neurodegenerative or aging; Generic
Kiperman 2022 ⁸¹	Psychology in the Schools (Psychology, Sociology, and Social Work)	SMM; SMW; TM; TW; GM	Adolescents - exclusive	National	Formt	QT	Venue/org; Snowball and respondent-driven	Self-reported by participants	Indvl	Uni	Mental health
Knutson 2018 ⁸²	Transgender Health (LGBTQ Health and Studies)	TM; TW; GM	Adults	National	Formt	QL	Social app; Venue/org	Self-reported by participants	Not mentioned	Uni	Generic
Knutson 2021 ⁸³	Journal of Rural Mental Health (Rural Health)	SMM; SMW; TM; TW; GM	Young adults - exclusive	State	Formt	QT	Social app; Venue/org	Index of Relative Rurality	Indvl	N/A	Suicide

Kosciw 2009 ⁸⁴	Journal of Youth and Adolescence (Adolescent and Youth Health)	SMM; SMW; TM; TW; GM	Adolescents - exclusive	National	Formt	QT	Social app; Venue/org	Other	Not mentioned	Org/Foundation	Violence
Kosciw 2015 ⁸⁵	American Journal of Community Psychology (Psychology, Sociology, and Social Work)	SMM; SMW; TM; TW	Adolescents - exclusive	National	Formt	QT	Social app; Venue/org	Other	Not mentioned	N/A	Mental health; Violence
Lauckner 2023 ⁸⁶	AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM; TM; GM	Adults	Region	Formt	QL	Social app; Venue/org	Other	Not mentioned	Uni	Healthcare discrimination and disclosure; Generic
Lee 2023 ⁸⁷	Journal of Acquired Immune Deficiency Syndromes (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents and adults	National	Formt	QT	Social app; Participant registry	National Center for Health Statistics	Not offered	NIH; Org/Foundation	Sexual health
Li 2015 ⁸⁸	Journal of Gay & Lesbian Mental Health (LGBTQ Health and Studies)	SMM	Adults	State	Formt	QT	Sexual app; Venue/org	Index of Relative Rurality	Not offered	Uni	Social health
Loo 2021 ⁸⁹	PLOS One (Other)	TM; TW; GM	Adults	Region	Formt	QL	Social app; Venue/org	Self-described by investigators	Not mentioned	Org/Foundation	Generic
MacCarthy 2024 ⁹⁰	Southern Medical Journal (Medicine)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Venue/org; Snowball and respondent-driven	Rural-Urban Commuting Area	Raffle	N/A	Sexual health; Substance use and substance use disorders; Violence; Healthcare discrimination and disclosure; Generic
Marsack 2017 ⁹¹	Journal of Gay & Lesbian Mental Health (LGBTQ	SMM; SMW	Adults	National	Formt	QT	Social app	Census	Not offered	N/A	Mental health

	Health and Studies)										
Marshall 2019 ⁹²	Journal of Adolescent Health (Adolescent and Youth Health)	SMM; SMW	Adolescents - exclusive	State	Formt	QT	Venue/org	Self-described by investigators	Indvl	NIH; Other Fed	Substance use
McKenney 2018 ⁹³	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adults	National	Formt	QT	Social app; Snowball and respondent-driven	Census	Not offered	Other Fed	Sexual health
Mendoza 2015 ⁹⁴	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMW	Adults	State	Formt	QT	Venue/org; Snowball and respondent-driven	Population size or population density	Not mentioned	N/A	Mental health; Metabolic health; Generic
Metheny 2016 ⁹⁵	Annals of Family Medicine (Medicine)	SMM	Adults	National	Formt	QT	Social app	Census	Not mentioned	N/A	Infectious disease; Sexual health
Meyerson 2014 ⁹⁶	LGBT Health (LGBTQ Health and Studies)	SMM	Adults	State	Intvtn	QT	Recruitment method not listed or provided	Self-reported by participants	Not mentioned	N/A	Sexual health
Moore 2002 ⁹⁷	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMM; SMW	Older adults - exclusive	State	Intvtn	QL	Participant registry	Self-described by investigators	Not mentioned	N/A	Neurodegenerative or aging; Social health
Mustanski 2014 ⁹⁸	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents - exclusive	National	Formt	MM	Social app; Venue/org	Other	Indvl	NIH	Sexual health
Mustanski 2023 ⁹⁹	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents - exclusive	National	Intvtn	QT	Social app; Participant registry	Rural-Urban Commuting Area	Indvl	NIH	Sexual health
Nelson 2018 ¹⁰⁰	AIDS Patient Care and STDs (HIV/AIDS and Other STIs/STDs)	SMM	Adults	National	Formt	QT	Social app; Sexual app	Rural-Urban Commuting Area	Raffle	NIH; Org/Foundation; Uni	Sexual health

Newcomb 2020 ¹⁰¹	LGBT Health (LGBTQ Health and Studies)	SMM	Adolescents - exclusive	National	Formt	QT	Social app; Participant registry	Rural-Urban Commuting Area	Indvl	NIH	Sexual health
Otis 2016 ¹⁰²	Journal of Social Work Practice in Addictions (Alcohol, Tobacco, Drugs, and Other Substances)	SMW	Adults	State	Formt	QT	Recruitment method not listed or provided	Self-described by investigators	Indvl	NIH	Substance use and substance use disorders; Violence
Owens 2020 ¹⁰³	AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM; TM	Adults	Region	Formt	QL	Social app; Venue/or g; Snowball and respondent-driven	Index of Relative Rurality	Indvl	Uni	Sexual health
Owens 2020 ¹⁰⁴	AIDS Education and Prevention (HIV/AIDS and Other STIs/STDs)	SMM; TM	Adults	Region	Formt	QL	Venue/or g; Snowball and respondent-driven	Index of Relative Rurality	Indvl	Uni	Sexual health
Owens 2020 ¹⁰⁵	Archives of Sexual Behavior (Sexual Health and Sexuality)	SMM; TM	Adults	Region	Formt	QL	Social app; Venue/or g; Snowball and respondent-driven	Index of Relative Rurality	Not mentioned	Uni	Sexual health
Owens 2021 ¹⁰⁶	Journal of HIV/AIDS & Social Services (HIV/AIDS and Other STIs/STDs)	SMM	Adults	State	Formt	QL	Venue/or g	Index of Relative Rurality	Indvl	Uni	Sexual health
Owens 2023 ¹⁰⁷	LGBT Health (LGBTQ Health and Studies)	SMM; TW; GM	Adults	National	Formt	MM	Sexual app	Index of Relative Rurality	Raffle	N/A	Sexual health
Owens 2023 ¹⁰⁸	Journal of Rural Health (Rural Health)	SMM	Adults	National	Formt	QT	Sexual app	Index of Relative Rurality	Raffle	N/A	Sexual health
Owens 2024 ¹⁰⁹	Archives of Sexual Behavior (Sexual Health and Sexuality)	SMM; TW; GM	Adolescents - exclusive	National	Formt	QT	Social app; Sexual app; Venue/or g; Snowball and	Rural-Urban Commuting Area	Indvl	NIH	Sexual health

							responde nt-driven				
Owens 2025 ¹¹⁰	Journal of Rural Health (Rural Health)	SMM	Adults	State	Intv n	QL	Sexual app; Venue/or g; Snowball and responde nt-driven	Index of Relative Rurality	Indvl	NIH	Sexual health
Paceley 2017 ¹¹¹	Journal of Commu nity Psyc hology (Psychol ogy, Sociolog y, and Social Work)	SMM; SMW; TM; TW; GM	Adoles cents - exclusi ve	State	Form t	QT	Social app; Venue/or g	National Center for Health Statistics	Raffle	Uni	Mental health
Paceley 2020 ¹¹²	Journal of Youth Studies (Adoles cent and Youth Health)	SMM; SMW; TM; TW; GM	Adoles cents - exclusi ve	State	Form t	QT	Social app; Venue/or g	National Center for Health Statistics	Raffle	Uni	Mental health; Violence; Generic
Pachank is 2020 ¹¹³	Journal of Consult ing and Clinical Psycholog y (Mental Health, Behavior al Health, and Clinical Psycholog y)	SMM; SMW; TM; TW; GM	Young adults - exclusi ve	State	Intv n	QT	Social app; Venue/or g; Snowball and responde nt-driven	Self- describ ed by investiga tors	Indvl	NIH	Mental health; Sexual health; Substance use and substance use disorders; Suicide
Parsons 2017 ¹¹⁴	Health Psycholog y (Psychol ogy, Sociolog y, and Social Work)	SMM	Adults	Nation al	Form t	QT	Online survey market	Rural- Urban Commun ing Area	Indvl	NIH	Mental health; Sexual health; Substance use and substance use disorders; Violence
Peteet 2018 ¹¹⁵	Health Educatio n & Behavior (Health Educatio n, Behavior, and Promotio n)	SMW	Adults	State	Form t	QT	Other	Self- describ ed by investiga tors	Indvl	NIH	Sexual health; Substance use
Petroll 2011 ¹¹⁶	Sexually Transmitt ed Diseases (HIV/AI DS and Other STIs/ST Ds)	SMM	Adults	State	Form t	QT	Venue/or g	Self- reported by participa nts	Indvl	NIH	Healthcare discriminat ion and disclosure

Pham 2022 ¹¹⁷	Vaccine (Other)	SMM; TM; TW; GM	Adults	National	Formt	QT	Sexual app	Federal Office of Rural Health Policy or Health Resources and Services Administration	Not mentioned	Org/Foundation	Cancer
Prasad 2002 ¹¹⁸	Journal of Gerontological Social Work (Aging)	SMM; SMW; TM; TW; GM	Older adults - exclusive	State	Formt	QL	Venue/org	Self-described by investigators	Indvl	Org/Foundation	Neurodegenerative or aging; Generic
Preston 2004 ¹¹⁹	AIDS Education and Prevention (HIV/AIDS and Other STIs/STDs)	SMM	Adults	State	Formt	QT	Venue/org; Snowball and respondent-driven	Census	Indvl	N/A	Sexual health
Preston 2007 ¹²⁰	AIDS Education and Prevention (HIV/AIDS and Other STIs/STDs)	SMM	Adults	State	Formt	QT	Venue/org; Snowball and respondent-driven	Census	Not mentioned	NIH	Sexual health
Price-Feeny 2019 ¹²¹	Journal of Pediatrics (Adolescent and Youth Health)	SMM; SMW	Adolescents - exclusive	National	Formt	QT	Online survey market	Self-reported by participants	Indvl	NIH	Mental health; Substance use and substance use disorders; Social health; Violence
Pryor 2023 ¹²²	Southern Medical Journal (Medicine)	SMM; SMW; TM; TW; GM	Adults	Region	Formt	QL	Participant registry	Self-described by investigators	Indvl	Other Fed	Mental health
Ralston 2024 ¹²³	Psychology of Sexual Orientation and Gender Diversity (LGBTQ Health and Studies)	TM; TW; GM	Adults	National	Formt	QT	Social app; Venue/org	Census	Indvl	NIH; Uni	Mental health; Suicide; Violence
Reisner 2022 ¹²⁴	Transgender Health (LGBTQ Health and Studies)	TM; TW; GM	Adults	Region	Formt	QT	Social app; Venue/org	Census	Raffle	Org/Foundation	Mental health
Rhodes 2010 ¹²⁵	Culture, Health & Sexuality (Sexual	SMM; TW	Adults	State	Formt	QL	Snowball and respondent-driven	Self-described by	Indvl	NIH	Sexual health

	Health and Sexuality)							investigators			
Rhodes 2012 ¹²⁶	Journal of Rural Health (Rural Health)	SMM; TW	Adults	State	Formt	QT	Snowball and respondent-driven	Population size or population density	Indvl	NIH	Sexual health; Substance use and substance use disorders; Violence
Rickard 2018 ¹²⁷	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMM; SMW	Adults	National	Formt	QT	Social app; Venue/org; Snowball and respondent-driven	Self-described by investigators	Raffle	Uni	Violence
Rosenberger 2014 ¹²⁸	Journal of Homosexuality (LGBTQ Health and Studies)	SMM	Adults	National	Formt	QT	Sexual app	Self-reported by participants	Not mentioned	N/A	Sexual health
Rossiter 2021 ¹²⁹	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents and adults	National	Formt	QT	Social app; Sexual app; Participant registry	National Center for Health Statistics	Not offered	N/A	Sexual health
Rostok y 2003 ¹³⁰	Journal of Adolescence (Adolescent and Youth Health)	SMM; SMW	Adolescents - exclusive	State	Formt	QT	Participant registry	Self-described by investigators	Indvl	NIH	Substance use
Sarno 2021 ¹³¹	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adults	National	Formt	QT	Social app; Sexual app	Index of Relative Rurality	Not mentioned	NIH	Sexual health
Schnarrs 2010 ¹³²	AIDS Patient Care and STDs (HIV/AIDS and Other STIs/STDs)	SMM	Adults	State	Formt	QT	Sexual app; Venue/org	Self-described by investigators	Raffle	N/A	Sexual health
Schneider 2021 ¹³³	AIDS Care (HIV/AIDS and Other STIs/STDs)	SMM; SMW	Adults	State	Formt	QT	Venue/org	Census	Indvl	Uni	Sexual health
Schwitters 2017 ¹³⁴	Culture, Health & Sexuality (Sexual Health and	SMM	Adults	State	Formt	QL	Sexual app; Venue/org	Self-described by investigators	Indvl	State/Cou nty	Sexual health

	Sexuality)										
Sharpe 2022 ¹³⁵	Journal of Rural Health (Rural Health)	SMM	Adolescents and adults	National	Formt	QT	Social app; Sexual app; Venue/org; Participant registry	National Center for Health Statistics	Not offered	NIH	Sexual health
Shramko 2018 ¹³⁶	American Journal of Orthopsychiatry (Mental Health, Behavioral Health, and Clinical Psychology)	SMM; SMW; TM; TW; GM	Adolescents and young adults - exclusive	National	Formt	QT	Social app	Self-described by investigators	Indvl	NIH	Mental health
Singh 2024 ¹³⁷	Frontiers in Public Health (Public Health and Health Disparities)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QL	Venue/org	Self-described by investigators	Indvl	Other Fed	Healthcare discrimination and disclosure; Generic
Smith 2018 ¹³⁸	Journal of Rural Mental Health (Rural Health)	TM; TW; GM	Adults	State	Formt	QL	Social app; Venue/org; Snowball and respondent-driven	Self-described by investigators	Not mentioned	NIH	Mental health; Suicide
Stahlman 2016 ¹³⁹	JMIR Public Health and Surveillance (Public Health and Health Disparities)	SMM	Adults	National	Formt	QT	Social app; Sexual app	Population size or population density	Not offered	NIH; Org/Foundation	Violence; Healthcare discrimination and disclosure
Starks 2019 ¹⁴⁰	Archives of Sexual Behavior (Sexual Health and Sexuality)	SMM	Adults	National	Formt	QT	Online survey market	Rural-Urban Commuting Area	Indvl	NIH	Mental health; Sexual health; Substance use
Stotzer 2014 ¹⁴¹	Hawai'i Journal of Health & Social Welfare (Public Health and Health Disparities)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/org; Snowball and respondent-driven	Census	Not mentioned	NIH	Substance use and substance use disorders; Healthcare discrimination and disclosure; Generic
Sucaldito 2023 ¹⁴²	AIDS Education and	SMM; TM;	Adults	Region	Formt	QL	Venue/org	Self-described by	Indvl	NIH	Sexual health; Substance

	Prevention (HIV/AIDS and Other STIs/STDs)	TW; GM						investigators			use and substance use disorders; Healthcare discrimination and disclosure; Generic
Sullivan 2020 ¹⁴³	Journal of the International AIDS Society (HIV/AIDS and Other STIs/STDs)	SMM	Adults	National	Formt	QT	Social app; Participant registry	National Center for Health Statistics	Not offered	NIH; Org/Foundation	Sexual health
Swank 2013 ¹⁴⁴	Sociological Inquiry (Psychology, Sociology, and Social Work)	SMM; SMW	Adults	National	Formt	QT	Venue/orig	Population size or population density	Not mentioned	N/A	Violence
Teti 2016 ¹⁴⁵	Arts & Health (Other)	SMM	Adults	State	Intvtn	QL	Venue/orig	Population size or population density	Not mentioned	N/A	Sexual health
Teti 2020 ¹⁴⁶	International Journal of Transgender Health (LGBTQ Health and Studies)	TM	Young adults - exclusive	State	Formt	QL	Venue/orig	Self-described by investigators	Indvl	N/A	Mental health; Metabolic health
Teti 2021 ¹⁴⁷	International Journal of Environmental Research and Public Health (Public Health and Health Disparities)	TM; TW; GM	Adults	State	Formt	QL	Venue/orig	Self-described by investigators	Not mentioned	Uni	Healthcare discrimination and disclosure; Generic
Tillewein 2024 ¹⁴⁸	Journal of Homosexuality (LGBTQ Health and Studies)	TM; TW	Adults	Region	Formt	QL	Venue/orig; Snowball and respondent-driven	Self-described by investigators	Not mentioned	Org/Foundation	Healthcare discrimination and disclosure; Generic
Tillewein 2024 ¹⁴⁹	Journal of Interpersonal Violence	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/orig	Federal Office of Rural Health Policy or Health	Indvl	Blue Cross and Blue Shield of Illinois	Violence

	(Violence)							Resources and Services Administration			
Tillewein 2024 ¹⁵⁰	American Journal of Drug and Alcohol Abuse (Alcohol, Tobacco, Drugs, and Other Substances)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QT	Social app; Venue/or g	Self-described by investigators	Indvl	Org/Foundation	Sexual health; Substance use
Tordoff 2022 ¹⁵¹	Journal of Acquired Immune Deficiency Syndromes (HIV/AIDS and Other STIs/STDs)	TM; TW; GM	Adults	National	Formt	QT	Social app; Venue/or g	Rural-Urban Continuum Code	Not mentioned	NIH	Sexual health
Traynor 2018 ¹⁵²	AIDS and Behavior (HIV/AIDS and Other STIs/STDs)	SMM	Adolescents and adults	National	Formt	QT	Social app	Other	Not mentioned	NIH; Org/Foundation	Sexual health
Turell 2012 ¹⁵³	Journal of Gay & Lesbian Social Services (LGBTQ Health and Studies)	SMM; SMW; TM; TW	Adults	State	Formt	QL	Snowball and respondent-driven	Population size or population density	Not mentioned	Org/Foundation; Uni	Violence
Ullrich 2002 ¹⁵⁴	Journal of Social and Clinical Psychology (Mental Health, Behavioral Health, and Clinical Psychology)	SMM; SMW	Adults	State	Formt	QT	Venue/or g	Census	Indvl	Uni	Mental health; Social health
VanKim 2017 ¹⁵⁵	Journal of the Academy of Nutrition and Dietetics (Other)	SMW	Adults	National	Formt	QT	Venue/or g	Population size or population density	Not mentioned	NIH	Metabolic health
Walinsky 2010 ¹⁵⁶	Journal of LGBT Issues in Counseling (LGBTQ)	TM; TW	Adults	Region	Formt	QL	Recruitment method not listed or provided	Census	Not mentioned	N/A	Mental health

	Health and Studies)										
Warren 2016 ¹⁵⁷	Health Behavior & Policy Review (Health Education, Behavior, and Promotion)	SMM; SMW; TM; TW; GM	Adults	National	Formt	QT	Social app; Venue/orig	Self-reported by participants	Raffle	N/A	Metabolic health; Sexual health; Substance use and substance use disorders; Suicide; Violence; Generic; Driving safety
Wedell 2024 ¹⁵⁸	Journal of Homosexuality (LGBTQ Health and Studies)	SMM; SMW; TM; TW; GM	Adolescents and adults	State	Formt	QT	Social app; Venue/orig; Snowball and respondent-driven	Self-described by investigators	Raffle	Org/Foundation; State/County	Mental health
Whitehead 2016 ¹⁵⁹	PLOS One (Other)	SMM; SMW; TM; TW; GM	Adults	National	Formt	QT	Social app	Census	Not offered	N/A	Cancer; Infectious disease; Metabolic health; Sexual health; Generic
Wike 2022 ¹⁶⁰	Journal of Interpersonal Violence (Violence)	SMM; SMW; TM; TW; GM	Adolescents - exclusive	State	Formt	QL	Venue/orig	Self-described by investigators	Indvl	Uni	Mental health; Violence
Wille 2025 ¹⁶¹	Telemedicine and e-Health (mHealth, eHealth, and Telehealth)	SMW	Adults	National	Intvntn	QT	Online survey market	Self-reported by participants	Indvl	Org/Foundation	Mental health
Willing 2006 ¹⁶²	Psychiatric Services (Mental Health, Behavioral Health, and Clinical Psychology)	SMM; SMW; TM; TW; GM	Adults	State	Formt	QL	Social app; Venue/orig; Snowball and respondent-driven	Population size or population density	Indvl	NIH	Mental health
Willing 2016 ¹⁶³	Journal of Gay & Lesbian Mental Health (LGBTQ Health and Studies)	SMM; SMW; TW	Adults	State	Intvntn	QL	Recruitment method not listed or provided	Self-described by investigators	Not mentioned	NIH	Mental health
Willing 2018 ¹⁶⁴	Community Mental Health Journal (Mental Health,	SMM; SMW; TM; TW; GM	Adults	State	Intvntn	MM	Social app; Venue/orig	Self-described by investigators	Indvl	NIH	Mental health; Social health

	Behavioral Health, and Clinical Psychology)										
Williams 2010 ¹⁶⁵	Health Promotion Practice (Health Education, Behavior, and Promotion)	SMM	Adults	National	Intvtn	QT	Sexual app	Population size or population density	Not mentioned	NIH	Sexual health
Williams 2022 ¹⁶⁶	Journal of Gerontological Social Work (Aging)	SMM; SMW; TM; TW	Older adults - exclusive	Region	Formt	QL	Venue/or g; Snowball and respondent-driven	Self-described by investigators	Not mentioned	N/A	Mental health; Neurodegenerative or aging; Healthcare discrimination and disclosure; Generic
Williams 2024 ¹⁶⁷	Psychology of Sexual Orientation and Gender Diversity (LGBTQ Health and Studies)	TM; TW; GM	Adults	Region	Formt	QT	Social app; Venue/or g	Self-described by investigators	Raffle	Uni	Mental health