

Table S1. *Systematic review summary of included studies with TGD or combined LGBTQIA+ and mixed samples.*

| Intervention name | Outcomes | Author(s) | Year | Location | Study design, Data collection | Description of sample, <i>n</i> | Digital platform | Findings |
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| Telehealth or telemedicine interventions | | | | | | | | |
| AFFIRM Online | Depression, Coping, Stress Appraisal, Hope | Craig et al. ^a | 2021 | Canada | <ul style="list-style-type: none"> MM: non-randomized CBT online groups | <ul style="list-style-type: none"> 96 participants (46 intervention group, 50 control group: waitlist control condition) Age: intervention: M = 21.17 (SD = 4.52), control: M = 23.42 (SD = 3.41) 67.71% of total sample TGD | Zoom (videoconferencing) | Post-test intervention group: <ul style="list-style-type: none"> ↓ depression more likely to appraise stress as challenge, appraise resources to deal with stress as enough ↑ active coping, ↑ emotional/instrumental support, ↑ positive framing, ↑ planning, ↓ self-blame no statistically significant change in hope 95.2% of completers agreed that they learned a lot from AFFIRM Online |
| Project Moxie | HIV and STI testing | Sharma et al. | 2019 | USA | <ul style="list-style-type: none"> QNT: pilot RCT HIV testing with telehealth-based counseling | <ul style="list-style-type: none"> 186 participants (75 trans men, 40.3%; 33 trans women, 17.7%; 78 non-binary individuals, 41.9%) 2 age groups: 15-18 (n = 86, 46.2%), 19-24 (n = 100, 53.8%), average age: 19 years 100% of total sample TGD | VSee (videoconferencing) | Cross-sectional analysis of baseline characteristics: <ul style="list-style-type: none"> 6.1%-20.8% reported testing for HIV in the past year, 11.1%-33.3% reported testing for other STIs in the past year 55.4% had heard about PrEP, and 0.5% was currently on PrEP trans women less likely to report testing for HIV and other STIs |

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| | | | | | | | | (compared with trans men) <ul style="list-style-type: none">participants treated by trans-informed HCPs three times more likely to report getting tested for HIV and other STIs than those who disagreed |
| HIV and STI testing | Stephenson et al. | 2020 | USA | <ul style="list-style-type: none">QNT: pilot RCTHIV testing with telehealth-based counseling | <ul style="list-style-type: none">202 participants (126 intervention HIV self-testing under supervision, 76 control HIV self-testing alone; 82 transmasculine, 36 transfeminine, 56 non-binary AFAB, 27 non-binary AMAB)3 age groups: 15-17 (n = 66, 32.7%), 18-20 (n = 64, 32.1%), 21-24 (n = 71, 35.2%)100% of total sample TGD | VSee (videoconferencing) | <ul style="list-style-type: none">counselors described as friendly (98-100%), knowledgeable (100%), experienced (87-100%) and professional (97-100%)participants willing to repeat intervention session (86-100%), recommend the intervention to others (68-100%), and recommend home-based HIV self-testing to others (95-100%)↑ overall satisfaction levels with the intervention↑ willingness to use PrEP in both groups↑ testing for STIs in the past 3 months in the intervention (72.5%) than the control (42.9%) arm (p=0.001), but declined again by 6 months (intervention arm 19.2%, control arm 15.3%) | |
| Telemedicine consultations in Italy | Impact of Event, Depression, Health-related Quality of Life | Gava et al. | 2021 | Italy | <ul style="list-style-type: none">QNT: NISsurvey | <ul style="list-style-type: none">108 participants (79 trans men, 73.1%, 29 trans women, 26.9%) | Videoconferencing (n.n.ref.) | <ul style="list-style-type: none">respondents confirmed the availability of telemedicine for endocrinological care |

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| | | | | | | <ul style="list-style-type: none"> • mean age: 34.3 (SD = 11.7, range = 18-61) • 100% of total sample TGD | | <ul style="list-style-type: none"> • (76.8%) and mental health support (64%) • 10 satisfaction scale: ↑ satisfaction 8.2 +/- 2.6 for the endocrinological visit and 8.0 +/- 2.4 for the psychological visit • availability of telemedicine consults associated with lower impact of the COVID-19 pandemic on mental health (better IES total scores) • 1/4 subjects presented a moderate to severe impact of the COVID-19 pandemic (IES score ≥ 26) • 12% presented moderate to severe depressive symptoms, 18.5% mild to moderate depression (trans women ↓ than trans men) • ↓ mental health-related quality of life than the general population of similar age |
| Unnamed online HIV counselling and testing | feasibility, key factors for choosing service options, satisfaction among MSM and trans women | Phanuphak et al. | 2018 | Thailand | <ul style="list-style-type: none"> • QNT: non-randomized • online, supervised, HIV self-testing • three distinct service delivery models (online, mixed, offline) | <ul style="list-style-type: none"> • 564 participants (465 MSM, 99 trans women) • mean age: 27.9 (SD = 7.2); MSM (mean age: 28.1, SD = 7.2), trans women (mean age: 26.8, SD = 7.2) • 17.55% of total sample TGD | Video chatting platform of choice of participants | <p>Specific findings for trans people</p> <ul style="list-style-type: none"> • Factors associated with selecting "online pre-test counselling": positive attitude towards HIV testing (however, prioritizing nucleic acid testing-based HIV testing decreased such chances) |

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| | | | | | | | | <ul style="list-style-type: none">• Factors associated with selecting “online HIV testing and online post-test counseling”: being a trans woman, spending 4 to 8+ hours on social media per day, preference towards online services and home-based HIV testing• Factors associated with selecting “Offline” and “Mixed” groups: being a trans woman negatively influenced mixed group selection• Primary apps for conducting video calls included LINE (87.5%), Facebook messenger (20.8%), ClickDesk (8.3%), Zoom (8.3%) and Facetime (8.3%) |
| linkages to HIV confirmatory testing and ART initiation | Phanuphak et al. | 2020 | Thailand | <ul style="list-style-type: none">• QNT: non-randomized• online, supervised, HIV self-testing• three distinct service delivery models (online, mixed, offline) | <ul style="list-style-type: none">• 564 participants (200 offline group, 156 mixed group, 208 online group; 465 MSM, 99 trans women; 45 trans women in offline, 2 in mixed, and 52 in online group)• see also above | Video chatting platform of choice of participants | <ul style="list-style-type: none">• 75.0% of who tested reactive (=36 people) through online, supervised, HIV self-testing subsequently accessed HIV confirmatory testing• 100% of them were confirmed to have HIV infection• 52.8% of these who first tested reactive by HIV self-testing successfully started ART | |
| Unnamed telehealth intervention | Magnus et al. ^b | 2018 | USA | <ul style="list-style-type: none">• MM: non-randomized pilot study | <ul style="list-style-type: none">• 25 participants (trans women of color) | Video chat (Digigone), e-mail, text, or phone | <ul style="list-style-type: none">• only texting, e-mailing, and phone contacts, no video chat contacts | |

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| | of care in past month | | | | <ul style="list-style-type: none">3-month telehealth intervention | <ul style="list-style-type: none">Age: 18-25 (n = 5, 20.0%), >25 (n = 11, 44.0%), declined to state (n = 9, 36.0%)100% of total sample TGD | | <ul style="list-style-type: none">intervention associated with ↑ odds of intention to seek transgender-specific care, having sought transgender-specific care in the last month, ↑ odds of seeking HIV-specific care <p>exit interviews after intervention:</p> <ul style="list-style-type: none">better access to and more openness to receiving health care services↑ knowledge where to seek servicesparticipants were scared or nervous to ask about services or help, but telehealth intervention and access to the peer health consultant aided them to overcome thisparticipant choice of mode of communication depended on preference and familiarityaccessibility, knowledge base, and affability of the peer health consultants important for ability to improve access to care and overcome challenges | |
| Mobile health apps | | | | | | | | | |
| MOTIVES | HIV knowledge and frequency of HIV testing | MacCarthy et al. ^b | 2020 | USA | <ul style="list-style-type: none">QNT: quasi-experimental | <ul style="list-style-type: none">218 participants (HIV-negative MSM and trans | Mobile phone | <ul style="list-style-type: none">Both treatment arms ↑ levels of HIV prevention knowledge | |

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| | | | | <ul style="list-style-type: none"> randomized pilot study • Mobile Technology and Incentives (MOTIVES) to increase HIV knowledge and testing frequency • weekly text messages (additionally for information plus group: win incentives by answering weekly quiz questions) | <p>women, 2 intervention groups: 99 information only, of this 36.7% trans women, 119 information plus, of this 30.2% trans women),</p> <p>Comparisons (547 MSM and trans women)</p> <ul style="list-style-type: none"> • Age: Information Only: M = 34.8, Information Plus: M = 35.2, Comparisons: M = 33.7 • 12.4-36.7% of sample trans | | <p>at baseline, over time ↑ HIV prevention knowledge in information plus group</p> <ul style="list-style-type: none"> • Both MOTIVES intervention groups ↑ likely to test for HIV in any given 3-month interval (compared with comparison group) |
| acceptability and feasibility | MacCarthy et al. | 2021 | USA | <ul style="list-style-type: none"> • QUAL: quasi-experimental randomized pilot study • Mobile Technology and Incentives (MOTIVES) to increase HIV knowledge and testing frequency | <ul style="list-style-type: none"> • 41 study participants (n = 26 latinx sexual minority men and 15 latinx trans women) and study staff (n = 6) • mean age: 37.36 (n = 41) • 36.59% of total sample TGD | Mobile phone | <p>Exit phone interviews:</p> <ul style="list-style-type: none"> • Acceptability: high intervention coherence • participants appreciated the intervention and that it required minimal time • intervention feasibility: use of technology was mentioned as both a strength and sometimes a weakness • balance between programmatic and research goals: participant and study staff raised concerns about the time taken to complete research activities including |

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| | | | | | | | | consenting, surveys etc. |
| RUMAH SELA | HIV/AIDS Knowledge, Sexual Behavior, Recency of HIV Testing, Self-Esteem, Mobile App Acceptability | Garg et al. | 2020 | Indonesia | <ul style="list-style-type: none"> • QNT: non-randomized prospective intervention cohort study, • Android-based mobile app | <ul style="list-style-type: none"> • 168 participants: MSM (n=49), trans women (n=49), people who use drugs (n=70) • Age (years), mean (SD): MSM = 22.6 (3.3), trans women = 25.6 (3.0), people who use drugs = 23.7 (4.0) • 29.17% of total sample TGD | Mobile phone | <ul style="list-style-type: none"> • ↑ in comprehensive HIV-related knowledge from 22% (11/49) to 57% (28/49) among trans women (p<.001) • reduction in sexual activities without condom use from 18% (9/49) to 12% (6/49) among trans women (p=.25) • uptake of HIV testing by 49% (24/49) for trans women • measures of self-esteem increased among trans women (mean 26.5 vs mean 27.8; p=.02) • 25% (4/15) of trans women made an appointment for an HIV test through the app • acceptability of the app: majority of the participants (36/39, 74% MSM; 41/49, 84% trans women; and 47/70, 67% people who use drugs) stated that they liked the game and health facility map features of the app |
| Trans Women Connected | Usability testing, service utilization, goal setting, social support, PrEP knowledge | Sun et al. | 2020 | USA | <ul style="list-style-type: none"> • MM: developmental, usability non-randomized study • prototype mobile app | <ul style="list-style-type: none"> • 16 participants (14 trans women, 2 non-binary) • mean age: 34.5 (SD = 9.28, range = 19-52) | Mobile phone | <p>Usability testing (phase 3)</p> <ul style="list-style-type: none"> • ↑ likeability and usability (mean rating across all usability/likability questions was 5.9 out of 7) |

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| | | | | | | <ul style="list-style-type: none">100% of total sample TGD | | <ul style="list-style-type: none">↑ multiple social support measures↑ self-efficacy in finding LGBTQ-friendly services↑ intention to seek online social support↑ PrEP knowledgePositive qualitative feedback: participants felt the app was useful and attractive |
| Unnamed eNavigation | efficacy, HIV care continuum outcomes | Arayasirikul et al. | 2020 | USA | <ul style="list-style-type: none">QNT: non-randomized non-comparativetext message-based, digital HIV care navigation intervention | <ul style="list-style-type: none">120 participants (103 men, 17 trans women)mean age: 27.75 years (SD 4.07), range: 18-34 years14.17% of total sample TGD | Mobile phone | <ul style="list-style-type: none">Baseline: 99/120 (82.5%) of the participants recently received primary HIV care; 92/120 reported taking ART (76.7%) and 65/120 having an undetectable viral load (54.2%)↑ odds of viral suppression at 6 months compared with baselineno statistically significant additive or multiplicative interactions on comparing outcome effects over time according to intervention completionon testing for stratum-specific effects: viral suppression increased over time among those who completed the intervention |
| weCare | process evaluation of mobile health intervention | Tanner et al. | 2020 | USA | <ul style="list-style-type: none">QUAL: non-randomized non-comparative | <ul style="list-style-type: none">32 participants: 18 intervention participants (13 cis men, 5 trans | Mobile phone | Interviews: <ul style="list-style-type: none">Approach uses existing social media platforms |

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| | | | | | <ul style="list-style-type: none"> HIV care related mobile health intervention, bilingual (English + Spanish) | <p>women), and 14 HIV clinic providers and staff</p> <ul style="list-style-type: none"> Mean age (intervention participants): 25.2 (SD = 3.79; range = 20–36) 27.78% of the intervention participants trans | | <ul style="list-style-type: none"> HCPs therefore able to engage with participants in a more community-oriented way Bidirectional messaging allows client-centered, individualized treatment Type and frequency of intervention can be adaptively adjusted to the client's current situation Positive evaluation of approach, improvements should focus on implementation logistics, intervention content, intervention expansion |
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| Game-based interventions | | | | | | | | |
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| Singularities | implementation success, game demand, game acceptability | Egan et al. ^a | 2021 | USA | <ul style="list-style-type: none"> QNT: 2-arm nonblinded pilot RCT role-playing game intervention | <ul style="list-style-type: none"> 240 participants (120 intervention with access to the game and a resource list, 120 control with access to the resource list only) sexual and gender minority youth, thereof 113 gender minority Age: intervention: M = 15.79, control: M = 15.74, All: 15.77 | Web-accessible computer | <ul style="list-style-type: none"> Game demand: 55.8% of intervention participants self-reported downloading and 55.8% self-reported playing the game (lower than hypothesized thresholds). Of those that played, 68.2% reported playing an hour or greater, which exceeded hypothesis. Game-playing participants exceeded hypothesized benchmarks and reported high positive |

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| | | | | | | <ul style="list-style-type: none">47.08% of total sample TGD | | <ul style="list-style-type: none">affect, low negative affect, low tension/annoyance, and high competence while playing the game.Of those who played the game, 46.2% reported a desire to play it again, and 50.8% would recommend it to friends.intervention group reported: ↓ cyberbullying victimization, ↓ binge alcohol use frequency, ↑ knowledge and greater use of online resources |
| Rainbow SPARX/ SPARX | acceptability | Lucassen et al. | 2018 | United Kingdom | <ul style="list-style-type: none">QUAL: non-randomized non-comparative computerized CBT self-help program: Rainbow SPARX | <ul style="list-style-type: none">21 LGBT+ youth participants, 6 HCPLGBT+ young people: aged 15-22 years, mean age 17.9 years19.05% of the LGBT+ participants trans | Web-accessible computer | <ul style="list-style-type: none">How and why LGBT+ young people use the internet to support their mental health: personal pathways (e.g., mindful videos on YouTube)HCPs concerned about safety and security (e.g., cyberbullying)Considering e-therapy like Rainbow SPARX as a useful tool: most HCPs would recommend the program when feeling down (only 8/21 LGBT+ young people recommend it for that reason)Pressure for a game-like e-therapy format to |

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| depressive symptoms | Lucassen et al. | 2020 | New Zealand | <ul style="list-style-type: none"> • QNT: non-randomized • computerized CBT self-help program: SPARX | <ul style="list-style-type: none"> • Finishers (n=891): baseline to last module (4 or 7): transgender (n=14), male (n=247), female (n=630) • Age groups: 12-15 and 16-19; at registration: transgender (n=294), thereof 12-15 (n=131, 63.3%), 16-19 (n=76, 36.7%) • 1.57% of the finishers trans | Web-accessible computer | <p>be as up-to-date as possible relative to commercial games</p> <ul style="list-style-type: none"> • initial respectable recruitment of trans people, but much lost-to-follow-up • trans users (n = 185) at baseline depression assessment ↑ mental health needs (69.0%) • overall low completion rates at Modules 4 and 7 for all users (less than 10%) • trans users reported no improvements in depressive symptoms (but for cis male and female improvements) • 'look and feel' of SPARX for gender minority adolescents may in part explain the low completion rates (forced gender binary) • SPARX (not Rainbow SPARX) = not trans-specific, not LGBT-specific |
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Online programs or courses

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| Queer Sex Ed | feasibility, acceptability, efficacy, sexual health: sexual orientation identity and self-acceptance, sexual health knowledge, relationship variables, safer sex | Mustanski et al. | 2015 | USA | <ul style="list-style-type: none"> • MM: non-randomized non-comparative pilot study • online sexual health intervention | <ul style="list-style-type: none"> • 202 participants: 103 male, 84 female, 14 transgender (4 AMAB, 10 AFAB), 1 N/A • mean age: 17.91 years, age range: 16-20 years • 6.93% of total sample TGD | Web-based software (web-accessible computer) | <ul style="list-style-type: none"> • majority of health outcomes (15/17) significant ($p < .05$) • small effect sizes for sexual orientation (e.g., internalized homophobia) and relationship variables (e.g., communication skills) • moderate effect sizes for safer sex (e.g., |
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| | | | | | | | | contraceptive knowledge) outcomes <ul style="list-style-type: none"> • positive attitudes toward Queer Sex Ed and high ratings for each intervention section (on average 4.2 out of 5 stars) • participants reported learning more in this program than in school-based sex education and appreciated the LGBT-specific approach • Low dislike for program, but disapproval of the limited amount of trans-specific information provided |
| QueerViBE | psychological and physical well-being | Martin ^b | 2019 | United Kingdom | <ul style="list-style-type: none"> • MM: pilot RCT • online, interactive video tutorials | <ul style="list-style-type: none"> • 120 randomized (90 intervention, 30 waiting), 45 completed participants: intervention: 23 (13 transgender male, 10 non-binary), control: 22 (12 transgender male, 10 non-binary) • mean age: intervention 18.09 years (SD=1.70), control 17.73 years (SD=1.64) (range for all: 16-21) | Video tutorials via YouTube (web-accessible computer) | <ul style="list-style-type: none"> • significant interactions for psychological distress with medium to large effect sizes, well-being, self-esteem, positive trans identity, appraisal of stressful events, and collective self-esteem (compared to control group) • effective intervention for increasing self-reported empowerment and improving scores on measures of psychological, social and physical well-being compared to a waiting list control group • perception of general online resources for |

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| | | | | | | <ul style="list-style-type: none"> 100% of total sample TGD | | <p>participants: limited resources, importance of community building, education to cope with stressful situations (e.g., health care encounters, educational settings)</p> |
| Unnamed MOOC | completion rate, study participants characteristics | Canavese et al. | 2020 | Brazil | <ul style="list-style-type: none"> QNT: non-randomized non-comparative pilot study Massive Open Online Course via Moodle | <ul style="list-style-type: none"> 3000 participants, 582 completers (4 trans men, 7 trans women, 14 non-binary, 119 cis men, 334 cis women, 41 other, 37 not reported) completers mean age: 29.4 (SD = 9.9), range: 15-68 years 11.34% of the completers TGD | Massive Open Online Course via Moodle (web-accessible computer) | <ul style="list-style-type: none"> mixed sample of HCPs and LGBTI+ people completion rate for this MOOC (about 20%) exceeds the typical average for MOOC, which stands at about 2–10%) 63.6% (n = 370) of completers stated they had never participated in training related to health of the LGBTI+ population 48.1% (n = 280) had never interacted with LGBTI+ social movements or NGOs in their region 60.1% (n=350) were not aware of regional LGBTI+ health service actions |
| Forums and online groups | | | | | | | | |
| Internet: Forums and social networks | Reasons for online interactions, types of support | Cipolletta et al. | 2017 | Italy | <ul style="list-style-type: none"> QUAL: NIS Forums and social networks | <ul style="list-style-type: none"> analysis of 122 online community conversations (Italian forums and Facebook groups involving trans people), among them 39 forum users (14 MtF; 8 FtM; 5 non-transgender | Forums, Facebook (web-accessible computer) | <ul style="list-style-type: none"> 3 forums found: one for trans people only; one for LGBT; one contained a thread on transgenderism, which was moderated by a female psychologist 5 Facebook groups found: 4 for trans people and 1 for LGBT |

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| <p>male; 2 non-transgender female; 10 non-identified gender, among them 4 admins, 3 moderators, 1 psychologist)</p> <ul style="list-style-type: none"> • online interviews with 16 users of these communities (9 MtF, 4 FtM, 1 non-identified gender, 1 male, 1 female) • age of interviewees: mean = 44 years, range = 25-64 years • 63.64% of total sample TGD | <ul style="list-style-type: none"> • total number of selected conversations: 122 (about 2440 answers and 107,935 words), comprising 46 conversations on forums and 76 conversations on Facebook groups • six final categories were identified after analysis of online communities and of interviews: motivations, online help, differences between online and offline interactions, status, conflicts and professional help • Findings on professional help: in case of specific medical requests tips for searching for help offline provided (e.g., list of professional names or LGBT organizations) • study participants find it positive when doctors, psychologists, lawyers offer help in online communities to manage user flow and shared information |
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Abbreviations: AFAB = assigned female sex at birth, AMAB = assigned male sex at birth, CBT = cognitive behavioral therapy, FtM = female to male, HCPs = health care professionals, LGBTQIA+ = lesbian, gay, bisexual, transgender, queer, intersex, asexual, + stands for the inclusive representation of all identities and expressions, MM = mixed methods study, MOOC = massive open online course, MSM = men who have sex with men, MtF = male to female, NIS = non-interventional study, QNT = quantitative study, QUAL = qualitative study, TGD = transgender and gender diverse

^a additional sources identified via associated published studies to the study protocols (see Supplementary File S1, Figure S1, Supplementary Material)

^b additional articles sourced from reference lists (see Supplementary File S1, Figure S1, Supplementary Material)

Table S2. Systematic review summary of included studies with health care professionals-only samples.

| Intervention name | Outcomes | Author(s) | Year | Location | Study design, Data collection | Description of sample, <i>n</i> | Digital platform | Findings |
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| Teleconsultations or e-consultations | | | | | | | | |
| VHA Transgender SCAN-ECHO / VHA e-consultation | confidence in providing care to trans veterans | Kauth et al. | 2015 | USA | <ul style="list-style-type: none"> QNT: non-comparative pilot study (3-year feasibility program) teleconsultation and training to clinicians | <ul style="list-style-type: none"> 33 participants (5 learning teams; 13 participants completed evaluation) age: n/a | VHA teleconsultation technology (videoconferencing) | <ul style="list-style-type: none"> degree of confidence (0–100%) in providing care to trans veterans before and after participating in SCAN-ECHO: 39.7% increase 92.3% described didactics as “somewhat helpful” or “very helpful” 76.9% reported that receiving consultation was “somewhat helpful” or “very helpful” 92.3% felt they benefited from listening to other cases being discussed 76.9% found resources on the internal Web site “somewhat helpful” or “very helpful” 92.3% reported that knowing experts they could contact in the future was “somewhat helpful” or “very helpful” |
| | feasibility, typical questions from providers in e-consultation | Shipherd et al. | 2016 | USA | <ul style="list-style-type: none"> QNT: non-comparative pilot study (3-year feasibility program) e-consultation | <ul style="list-style-type: none"> 303 e-consults from 130 facilities (submitted by providers at VA) | VHA teleconsultation technology (videoconferencing) | <ul style="list-style-type: none"> primary questions about medications, e.g., hormone therapy (n=125), primary care medical comorbidity and screening |

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| | | | | | <ul style="list-style-type: none">hospitals, n = 177, 58%, and the rest, n = 126, 41%, were from community-based outpatient clinics)age: n/a | | <ul style="list-style-type: none">questions (n=97), mental health evaluations for hormone therapy and/or gender confirming surgeries (n=63), and questions about psychotherapy (n=18)secondary questions about mental health issues (n=31), medications (n=22), primary care (n=14), and psychotherapy (n=12)average amount of time spent on reviewing the chart and responding to the consult question: 78 min (63–94 min) total per consulteach profession took an average of about 34 min (range = 18–58) to respond to the e-consult |
| providers' program experiences (qualitative), methods for improving program use (quantitative) | Blosnich et al. | 2019 | USA | <ul style="list-style-type: none">MM: non-randomized study (3-year feasibility program)e-consultation | <ul style="list-style-type: none">15 interview participants (11 rural, 4 urban; 12 primary care, 3 mental health)53 survey participants (18 rural, 35 urban; several disciplines)age: n/a | VHA teleconsultation technology (videoconferencing) | <ul style="list-style-type: none">common reasons for nonuse of program: no knowledge of program (54%), no need of program (32%), receipt of help from a colleague outside of e-consult (24%)common suggestions to improve the program use: more information about where to find e-consult in the chart, |

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| | | | | | | | | | <div>guidance on talking with patients about program, e-mail announcements to improve provider awareness of the program</div> <div><ul style="list-style-type: none">• program used to establish care plans, hormone therapy recommendations, sexual and reproductive health education, surgical treatment education, patient-provider communication guidance, and second opinions• suggestions for improvement: addition of concise or sectioned responses, expansion of program awareness, designation of a follow-up contact person, and increase in provider education about trans-related care</div> |
| Online trainings or courses | | | | | | | | | |
| Addressing the Needs for LGBTQ-Affirming Cancer Care: A Focus on Sexual and Gender Minority Prostate Cancer Survivors | knowledge increase, satisfaction with training | Pratt-Chapman et al. | 2020 | USA | <div><ul style="list-style-type: none">• QNT: non-randomized non-comparative• Online training</div> | <div><ul style="list-style-type: none">• 204 participants (archived training, of which 77 participated in the webinar)• Archived training: age group 21-29,</div> | Webinar (web-accessible computer) | <div><ul style="list-style-type: none">• Knowledge increase about interpersonal determinants that lead to LGBTQI health inequities (live webinar): strongly agree (71, 91.2%)• Knowledge increase about unique needs of GBT prostate cancer</div> | |

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| | | | | | | <p>n=45 (22.1%); 30-39, n=68 (33.3%); 40-49, n=40 (19.6%); 50-59 n=34 (16.7%); 60 or older, n=13 (6.4%); prefer not to answer, n=4 (2.0%); webinar: no data collected on age</p> | | <p>patients: strongly agree (72, 94.8%)</p> <ul style="list-style-type: none"> Knowledge increase about affirming and culturally sensitive strategies: strongly agree (73, 94.8%) Examples perceived as practical: strongly agree (73, 96.1%) Gained new strategies and resources for work: strongly agree (69, 90.8%) Plans for implement of new strategies and resources for work: strongly agree (63, 84.0%) Recommendation of training: strongly agree (75, 97.4%) |
| COLORS training | LGBT-related knowledge, attitudes, clinical practices | Seay et al. | 2020 | USA | <ul style="list-style-type: none"> QNT: non-randomized non-comparative pilot study web-based LGBT cultural competency training | <ul style="list-style-type: none"> 44 participants (oncologists), 33 (75%) completed the COLORS training mean age: 47.4 years (SD = 9.3) | Training website (web-accessible computer) | <ul style="list-style-type: none"> after completing the training: ↑ LGBT-related knowledge, ↑ attitudes, ↑ clinical practices ↑ training acceptability: 82% of participants rating the training as high quality, and 97% being willing to recommend the training to a colleague |
| Unnamed interactive online didactic session | clinical skills, clinical preparedness, knowledge on LGBTQ health | Barrett et al. | 2021 | USA | <ul style="list-style-type: none"> QNT: non-randomized non-comparative interactive online didactic session | <ul style="list-style-type: none"> 29 participants (residents, medical students): 12 male (41%), 15 female | Videoconferencing (n.n.ref.) | <ul style="list-style-type: none"> 29 attendees completed the baseline survey (15 residents and 14 medical students) 18 completed the follow-up survey (8 |

| | | | | | | | | |
|--------------------------------|---|--------------|------|--------|---|---|--|---|
| | | | | | | (52%), 2 other/missing (7%), among them 6 LGBT-identified (21%) | | residents and 10 medical students) |
| | | | | | | <ul style="list-style-type: none"> mean age: 29 (SD = 5) | | <ul style="list-style-type: none"> baseline and follow-up scores from the clinical skills scale increased overall, in self-reported clinical preparedness, and in basic knowledge |
| Unnamed web-based intervention | effectiveness of intervention program, prejudices, prevalence of discrimination | Costa et al. | 2016 | Brazil | <ul style="list-style-type: none"> QNT: non-randomized non-comparative web-based intervention | <ul style="list-style-type: none"> 307 health practitioners (259 women, 84.36%; 48 men, 15.63%) average age: 34.52 years (SD = 9.40), range 18-62 years | University e-learning platform (web-accessible computer) | <ul style="list-style-type: none"> ↑ pre-intervention prejudice level of HCPS (higher among those with less education, inhabiting smaller cities, with no previous education in the subject and religiosity) 68.74% were not aware of episodes of discrimination in their health services intervention was effective: percentage of participants in the lowest category of prejudice rose by 55.73 percent after the intervention (11.07%– 19.87%) |

Abbreviations: HCPs = health care professionals, LGBTQIA+ = lesbian, gay, bisexual, transgender, queer, intersex, asexual, + stands for the inclusive representation of all identities and expressions, MM = mixed methods study, QNT = quantitative study, QUAL = qualitative study, VHA = Veterans Health Administration