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1 ***Barriers and facilitators to accessing sexual health services for older LGBTQIA+ adults:***
2 ***A global scoping review and qualitative evidence synthesis***

3

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20

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22

23

24 **ABSTRACT**

25 **Background**

26 The number of older adults identifying as lesbian, gay, bisexual, transgender and other sexual
27 and gender diverse identities (LGBTQIA+) continues to grow as populations age and social
28 environments become more accepting. This study uses a global evidence synthesis to
29 understand perceived barriers and facilitators to sexual healthcare service access globally for
30 older LGBTQIA+ adults.

31

32 **Methods**

33 We used a scoping review and qualitative evidence synthesis. Embase, PubMed and PsycInfo
34 were searched with terms related to LGBTQIA+ populations, adults aged 45 years old, and
35 sexual healthcare. We used the Cochrane Handbook and the review protocol was registered.
36 Primary and secondary textual data were coded and grouped into themes using PRISMA-
37 SCR and the Minority Stress Model. The certainty of review findings was assessed using the
38 GRADE-CERQual approach.

39

40 **Results**

41 The scoping review identified 19 studies and 15 were included in the qualitative evidence
42 synthesis. All studies were from high-income countries. Heterocentricity and male-centricity of
43 sexual health care services contributed to feelings of exclusion for older LGBTQIA+ adults (13
44 studies, moderate certainty of evidence). Both anticipated and enacted stigma from healthcare
45 providers resulted in older LGBTQIA+ adults, especially those with chronic conditions,
46 avoiding health services (seven studies each, low certainty). Older LGBTQIA+ adults have
47 unique sexual health needs and may feel their age empowers them to access appropriate
48 care (four studies, low certainty).

49

50 **Conclusion**

51 This review highlights the need for additional research and interventions to improve sexual
52 health services for older LGBTQIA+ adults. Practical strategies to make sexual health less
53 heterocentric (e.g., gender neutral signage) may increase uptake of essential sexual health
54 services.

55

56

57 **INTRODUCTION**

58

59 The percentage of individuals identifying as lesbian, gay, bisexual, transgender, intersex,
60 asexual, and other sexual and gender diverse identities (LGBTQIA+) has increased over the
61 past 50 years across the globe [1, 2]. LGBTQIA+ people have unique sexual health needs and
62 experiences, which are often influenced by lifetime discrimination, informal support networks,
63 and sexual behaviors which fall outside of hegemonic heteronormativity. This highlights the
64 importance of visibility and accommodation for older LGBTQIA+ adults in all health services,
65 especially sexual health services.

66

67 Older adults, or adults aged 45 years old or older, are often neglected in sexual health
68 services [3]. There is also a paucity in disaggregated data for LGBTQIA+ adults in this age
69 range and many are excluded from studies. Menopause and related biological changes at
70 mid-life provide a rationale for this age cutoff. Older adults are likely to face barriers in
71 accessing sexual healthcare given that many sexual health services do not focus on this
72 subpopulation [4-7]. Older adults are more likely than younger adults to be affected by chronic
73 illness, disability, or co-morbidities which have consequences for sexuality and sexual function
74 [4, 8-11]. The overall prevalence of HIV among people aged 50 and above doubled in the last
75 decade [6, 12]. Older LGBTQIA+ adults are more likely to live with multiple diseases than
76 older cis-gendered and heterosexual adults [13-15]. Additionally, sexual dysfunction is more
77 likely among older adults [8, 16]. Sexual healthcare for older LGBTQIA+ adults may be
78 accessed through general practitioners (GPs) and specialist healthcare providers in lieu of
79 sexual health physicians. Therefore, it is pertinent that these such healthcare providers are
80 aware of the sexual healthcare needs and priorities of older LGBTQIA+ adults in order to
81 provide well-rounded care.

82

83 The historic pathologizing of advanced age in sexual health has led to increased hesitation
84 seeking professional help compared to younger cis-gendered and/or heterosexual people [17,
85 18]. Additional factors such as inclusion in minoritized ethnic and religious communities may
86 lead to further barriers to access to care [19]. Sexual health research has historically focused
87 on youth and fewer sexual health programs target older adults, yet older adults have diverse
88 sexual identities and many continue vibrant sexual lives [20]. Given that older LGBTQIA+
89 adults are likely to have familiar, longitudinal relationships with healthcare providers and to
90 have experienced compounding microaggressions and heteronormativity in during interactions
91 with these providers, they provide an especially important perspective when considering the
92 inclusivity of sexual healthcare [21, 22].

93

94 Few research studies focus on older LGBTQIA populations [23-26]. There are limited
95 quantitative data that have rich, nuanced details about their sexual lives [27]. A limited number
96 of studies consider barriers and facilitators to sexual health care and even fewer discuss how
97 morbidities and disabilities affect the sexual health of sexual and gender diverse older people.
98 Qualitative analyses allow for direct and personal narratives about older LGBTQIA+ adults'
99 experienced barriers and facilitators. A qualitative evidence synthesis can capture social
100 determinants which may affect service uptake. Qualitative evidence syntheses have been
101 used by the WHO and other organizations to inform guideline development [28].

102

103 The purpose of this scoping review was to determine barriers and facilitators in accessing
104 sexual healthcare services for older LGBTQIA+ adults using a global scoping review and
105 qualitative evidence synthesis.

106

107 **METHODS**

108

109 ***Search strategy and selection criteria***

110 We used a scoping review method for the following reasons: few research studies focused on
111 this specific topic; there was substantial heterogeneity in key operational definitions;
112 identifying research gaps in the literature may be well addressed through a scoping review
113 [29]. We used a qualitative evidence synthesis method to lend a richer, more nuanced
114 interpretation of qualitative results to understand the current situation and to better inform our
115 recommendations [28].

116

117 This scoping review used a framework as developed by Arksey and O'Malley to guide the
118 methodological approach and structure [30, 31]. This study used an adapted Minority Stress
119 Model and the Patient-Centered Access to Care framework to map the results from the
120 qualitative evidence synthesis [32, 33]. The Minority Stress Model has been previously used in
121 studies related to LGBTQIA+ adults' sexual health [34]. The Patient-Centered Access to Care
122 framework has previously been used in sexual health research focused on individuals with
123 disabilities [35]. As such, these frameworks were selected because they provide an
124 established and inclusive lens through which we can identify individual, provider and system-
125 level barriers to sexual healthcare access for older LGBTQIA+ adults.

126

127 On June 10, 2021, PsycINFO, Medline and Embase databases were searched using the
128 search terms with assistance from a public health librarian (Appendix 1). Synonyms,
129 truncations, acronyms, subject headings, and Boolean operators (AND/OR) were used to
130 combine the search terms. Relevant terms varied between databases given their individual
131 search mechanisms. Additionally, relevant articles were searched manually from references.

132

133 All potential studies were exported into EndNote citation software, removing duplicates and
134 were screened for inclusion by one author following PRISMA-SCR guidance. Studies were
135 included if they discussed older adults' views on the sexual health care, the study population
136 was older LGBTQIA+ adults as defined by individuals aged 45 and above or sub-analyses
137 were completed for this age group, and they used qualitative methods or ~~was~~ a review of
138 qualitative literature. Studies were excluded if they did not include a main or sub-analysis for
139 older LGBTQIA+ adults, did not address sexual healthcare access or perceptions of
140 experiences, or the primary analysis used quantitative data. There were no time or geographic
141 restrictions. References from studies identified by the search strategy as well as the manual
142 search were assessed and those meeting the inclusion criteria were included as a part of this
143 review. Grey literature was also included.

144

145 ***Data analysis***

146 For the thematic analysis, one researcher thoroughly read each of the included articles. An
147 initial list of themes was discussed with two co-authors and finalized. Using the Minority Stress
148 Model, deductive themes of heterocentricity, stigma, and disclosure were identified. Text was
149 pulled from the included articles if it addressed one of these deductively set themes. Given the
150 Minority Stress Model did not adequately explain all themes addressed in the selected
151 studies, inductive coding methods were used. During multiple reads of the full included texts,
152 one researcher pulled quotes and concepts related to barriers and facilitators of sexual
153 healthcare access and, if similar, subsequently grouped together. Our inductive analysis
154 captured themes of male-centricity, provider characteristics, increased security in older age
155 and the unique needs of older LGBTQIA+ adults. Text fitting these inductively determined

156 themes was initially pulled from the included articles when similar ideas were found in various
157 articles and later codified into coherent themes.

158

159 Confidence in the Evidence from Reviews of Qualitative Research approach (GRADE-
160 CERQual) was used to assign grades of “Very low confidence,” “Low confidence,” “Moderate
161 confidence,” and “High confidence” to thematic findings (Table 5) [36]. CERQual is
162 recommended by Cochrane and has been used by the World Health Organization and other
163 organizations to synthesize qualitative data for guideline development.

164

165 **RESULTS**

166

167 A total of 946 citations were identified. 54 duplicates and 863 unrelated citations were
168 excluded. A total of 19 studies were selected, including four literature reviews, thirteen
169 qualitative studies and two mixed method studies of which only the qualitative evidence was
170 analyzed (Figure 1). A total of 15 studies were included in the qualitative evidence synthesis.
171 Details (lead author, study design, methods, location, population, and age range) are in Table
172 1. All included studies were conducted in high-income settings including the United States
173 (eight studies), the United Kingdom (five studies), Canada (three studies), Australia (two
174 studies), New Zealand (two studies), Ireland (one study), and Sweden (one study). Seventeen
175 studies focused on cis-gendered individuals, two included transgender people and none
176 looked specifically at trans people. Ten studies analyzed gay and/or bisexual men or men who
177 have sex with men (MSM) and four studies looked solely at lesbian and/or bisexual.
178 Publication year of the articles included ranged from 2006 to 2020. Included studies captured
179 the experiences of older adults seeking prostate cancer treatment (six studies), breast cancer
180 treatment (one study), HIV-related care (three studies), primary care (three studies), sexual

181 health clinics (two studies) as well as general healthcare experiences (six studies). None of
182 the included studies captured the perspectives of sexual health specialists, with older
183 LGBTQIA+ adults seeking sexual healthcare from GPs and other internal medicine specialists.
184 Only two studies [37, 38] were guided by theoretical frameworks, using the Socio-Ecological
185 Theory and the Health Behavior Model of Health Service Use, respectively. Additionally, we
186 were interested in capturing the intersection between disability and sexual healthcare access
187 for older LGBTQIA+ adults but no studies reported on disability. Access to sexual healthcare
188 services for older people with disabilities is a complex issue and should be explored further.

189

190 **Themes**

191

192 Only the fifteen unique qualitative studies were compared to organize codes and derive
193 relevant themes and the results were assessed for quality (Table 2). Our analysis identified
194 five overarching barriers for sexual health care access for older LGBTQIA+ individuals. From
195 the perspective of older LGBTQIA+ adults, anticipated stigma following disclosure of sexual
196 orientations and/or gender identity, and diverse needs as a result of aging as part of the
197 LGBTQIA+ community function as barriers. At the level of health systems and providers,
198 heterocentricity and male-centricity of sexual health service environments and resources,
199 enacted stigma in response to disclosure and insensitive healthcare providers decreased
200 sexual healthcare access for older LGBTQIA+ adults.

201

202 Our analysis also identified three overarching facilitators for sexual health care access for
203 older LGBTQIA+ individuals. Increased security in identity in older age as well as
204 intersectional needs as a result of aging as part of the LGBTQIA+ community facilitate sexual

205 healthcare access for older LGBTQIA+ adults. Empathetic healthcare providers also
206 contribute to increased access for this population.

207

208 The inductive and deductive themes identified in the selected articles reflect the perspectives
209 and experiences of the older LGBTQIA+ adults accessing sexual healthcare, which then map
210 to sociocultural stressors, health behaviours within the Minority Stress Model and represent
211 opportunities for intervention as dictated by the Access to Care framework.

212

213 ***Heterocentricity of sexual health services and research (Moderate certainty of the***
214 ***evidence)***

215

216 Results from thirteen studies [37, 39-50] suggested that heterocentricity of healthcare service
217 environments, intake forms and resources were a barrier for older LGBTQIA+ adults to access
218 sexual health services. Heterocentricity was defined as the assumption of, or default to,
219 sexual relationships between a cis-gender heterosexual man and a cis-gender heterosexual
220 woman by providers. Heterocentricity affected the way that LGBTQIA+ individuals accessed
221 services and interacted with health care providers [51]. Providers with heterocentric attitudes
222 made older LGBTQIA+ adults feel unwelcome and unsupported [49, 50].

223

224 ***Male-centricity sexual health services for non-male identifying individuals***

225

226 Results from the selected studies indicated that older LGBTQIA+ adults who were male-
227 identifying were researched to a greater extent to those who identified with other genders,
228 evidenced by the lack of studies focused on this population. The male-centric bias translated

229 into the exclusion of lesbian women from “sexual health scripts” [47]. The risk of sexually
230 transmitted infections for older LGBTQIA+ women was reportedly fully dismissed by sexual
231 healthcare providers due to a lack of adequate understanding of sexual behavior and risks
232 [39].

233

234 ***Anticipated stigma following disclosure of gender identity and/or sexual orientation to***
235 ***healthcare providers (Moderate certainty of the evidence)***

236

237 Ten studies [39, 40, 42, 44, 46, 47, 49, 52-54] pointed to older LGBTQIA+ adults’ anticipation
238 of stigma following disclosure of their gender identity and/or sexual orientation to their
239 healthcare providers as a barrier to accessing sexual healthcare. Anticipated stigma may have
240 resulted from previous experiences with providers as well as the legal and political setting in
241 which older LGBTQIA+ adults exist which may alienate, or exclude these individuals from
242 protection [39, 44]. These experiences were characterized by overt homophobia, judgement of
243 sexual behaviors, and provider embarrassment when discussing LGBTQIA+ sexual identities
244 [35, 38, 50]. When older LGBTQIA+ adults were disincentivized to disclose their identity or
245 sexual behaviors, to healthcare providers, the less likely it became that they would receive
246 appropriate care or access care at all [39].

247

248 ***Enacted stigma from sexual healthcare providers (Moderate certainty of evidence)***

249

250 According to eleven studies [37, 39, 40, 42, 45-50, 52], enacted stigma towards older
251 LGBTQIA+ adults by healthcare providers was a barrier to sexual healthcare access. Enacted
252 stigma was reported in the form of homophobic comments by providers, providers not

253 knowing about sexual healthcare needs of LGBTQIA+ adults, and denial of care following
254 disclosure of gender or sexual orientation, for example [37, 39, 40, 42, 46-49]. Older
255 LGBTQIA+ adults were more likely to experience discrimination in healthcare settings than
256 LGBTQIA+ youth or non-LGBTQIA+ individuals [39]. Experiences of enacted stigma may also
257 contribute to later anticipated and internalized stigma when accessing healthcare. Findings
258 from two studies noted that older LGBTQIA+ adults were likely to delay or discontinue care as
259 a result of such behavior by providers [37, 52]. Two other studies reported that older
260 LGBTQIA+ adults felt they needed to find other means of care and information outside of
261 formal healthcare settings such as personal research or non-medical social support [45, 49].

262

263 ***Characteristics of sexual health providers for older LGBTQIA+ adults (Moderate***
264 ***certainty of evidence)***

265

266 Results from ten studies [38, 40, 42, 44, 46, 48, 49, 53-55] noted the effects of healthcare
267 providers' characteristics on sexual healthcare access for older LGBTQIA+ adults. Depending
268 on whether older LGBTQIA+ adults perceived the characteristics of a provider as positive or
269 negative affects the way that they view their care experience. Participants in four studies
270 noted that they were more comfortable discussing their needs and concerns with a sexual
271 healthcare provider that was also LGBTQIA+ [38, 40, 49, 53]. Providers who were seen as
272 empathic, compassionate, and open were associated with increased service access and
273 comfort discussing sexual health needs by older LGBTQIA+ adults, particularly older
274 LGBTQIA+ women [38, 46, 48].

275

276 ***Increased security in identity in older age for LGBTQIA+ adults (Moderate certainty of***
277 ***evidence)***

278

279 According to five studies [38, 47, 50, 55, 56], older age facilitated sexual healthcare access
280 among older LGBTQIA+ adults. Older age was linked to resilience in the face of minoritized
281 gender identity and/or sexual orientation [38]. Older age was also associated with a strong
282 sense of self leading some older LGBTQIA+ adults to note that they felt more comfortable
283 discussing their sexual health needs at their current age than they did as young people due to
284 anticipated and enacted stigma [47].

285

286 ***Unique sexual health needs of older LGBTQIA+ adults (Moderate CERQual evidence)***

287

288 Six studies [39, 42, 45-47, 49] suggested that older LGBTQIA+ adults had unique sexual
289 health needs that affected access to sexual health services. Unique sexual health needs
290 referred to how various social categorizations, such as race, sexuality and gender, intersect to
291 influence discrimination or disadvantage [57]. In particular, older gay and bisexual men in one
292 study felt that their sexual health needs were divergent from that of older heterosexual men in
293 relation to treatment options, consequences from side effects, and sexual relationship
294 dynamics [46]. Conversely, older women who have sex with women noted increased
295 hesitance initiating sexual health screening and providers were less likely to emphasize
296 service access due to deprioritization [39, 47]. Older LGBTQIA+ adults of all genders noted
297 that sexual activity was intertwined with intimacy and maintenance of support networks, which
298 felt more pertinent to them at their current age than when they were younger [45, 47].

299

300 **DISCUSSION**

301

302 This scoping review and qualitative evidence synthesis identified multiple barriers and
303 facilitators to sexual health care services for older LGBTQIA+ adults. Our data suggests that
304 heterocentric health services may inadvertently exclude older LGBTQIA+ adults. Internalized
305 homophobia among older LGBTQIA+ adults could exacerbate this process of exclusion,
306 particularly when providers and systems reinforce their “otherness” through unequal access to
307 appropriate information and resources. We found that health system level stressors, such as
308 one-size-fits-all treatment plans and inadequate acknowledgement of diverse sexual
309 relationships, are likely to cause sexual health risks to be misinterpreted, deprioritized, or
310 simply ignored for older LGBTQIA+ individuals. The combined effects of system level
311 stressors and older individuals’ health behaviors are likely to result in negative health
312 outcomes for this already underserved population.

313

314 Our results suggest that heterocentricity was a barrier for older LGBTQIA+ adults to access
315 sexual health services This is consistent with existing research demonstrating heterocentric
316 biases in sexual health research and practice [18, 58]. Heterocentric sexual health services
317 discourage older adults from disclosing their gender identity and/or sexual orientation.
318 Meanwhile, male-centricity prioritizes the experiences of ~~male-identifying~~ cisgender male
319 individuals, worsening gender disparities in health outcomes. Ensuring that healthcare
320 providers have sufficient training to serve older LGBTQIA+ adults sexual healthcare needs is
321 critical to facilitating high-quality services for all [38, 44]. However, we speculate that training
322 alone may be insufficient to counter heterocentricity and male-centric services. Structural
323 interventions to support diverse genders and sexualities are important [59, 60]. When older
324 LGBTQIA+ adults feel confident that their needs will be met by a provider, they will be more
325 likely to continue accessing their services [55].

326

327 The findings in this review provide practical strategies to enhance sexual health services for
328 this subgroup as outlined by the Minority Stress Model and Access to Care framework [32,
329 33]. The barriers suggested in this study serve as opportunities for interventions and
330 improvements to current sexual healthcare practices while the facilitators represent aspects of
331 successful care access (Figure 3). Our review findings suggested that older LGBTQIA+ adults
332 have different sexual health priorities than younger, non-LGBTQIA+ adults. Providers were not
333 found to adequately acknowledge and address older LGBTQIA+ adults' specific concerns, a
334 complaint observed in other studies [61]. Ensuring that healthcare providers have adequate
335 training and resources that meet LGBTQIA+ needs, particularly when embedded in routine
336 non-sexual clinical services, may improve the acceptability of services. Providers can improve
337 outcomes by clearly signposting support in physical spaces and through provision of
338 LGBTQIA+-specific resources, improving approachability. Gender neutral language could
339 decrease anxiety and distress for older LGBTQIA+ adults during initial encounters [56]. Using
340 gender neutral language in informal health settings (e.g. support groups) may also make
341 these spaces feel more appropriate for older LGBTQIA+ adults [45]. The included texts did not
342 fully address the concept of affordability as laid out by the Access to Care framework.
343 However, there is evidence that older LGBTQIA+ adults are less likely to have health
344 insurance and more likely to experience financial challenges than older non-LGBTQIA+ adults
345 [62, 63].

346

347 This review extends the literature by focusing on older LGBTQIA+ individuals, assessing the
348 quality of the evidence and using a qualitative evidence synthesis. Despite the importance of
349 disability among older people, none of the studies focused on disabilities or comorbidities as
350 they relate to accessing sexual health services. Older non-LGBTQIA+ adults with disabilities
351 are similarly underrepresented in sexual health research, particularly related to their

352 experiences and perspectives related to accessing care. There is evidence, however, that
353 similarly to older LGBTQIA+ adults, their sexual health needs are also not adequately
354 addressed by providers [64]. This is an important topic because conditions associated with
355 older age have implications for sexual function and pleasure. Given that older LGBTQIA+
356 adults regularly access other specialist healthcare services as part of managing chronic
357 conditions and comorbidities, integrating sexual healthcare into these services could further
358 support this population and address their currently underserved needs. This deserves further
359 research.

360

361 While this study has identified important implications for practice, it also has several
362 limitations. First, this study was not able to capture the full policy and sociocultural contexts of
363 older LGBTQIA+ adults and only captured data from high-income countries. This gap is a
364 reflection of the dearth of research focused on older LGBTQIA+ adults outside of high-income
365 contexts. However, high-income countries are less likely to criminalize divergent gender
366 identities and/or sexual orientations and are more likely to have well-established healthcare
367 infrastructure. High income countries may also provide a more supportive and feasible context
368 for intervention given the increasing visibility of older LGBTQIA+ adults and health system
369 infrastructure. Second, most of the participants from the selected studies were white and
370 middle class. This underlines the importance of further research in other racial and ethnic
371 groups. Third, much research on older LGBTQIA+ individuals is focused on gay men and
372 lesbian women, further marginalizing less visible members of the community such as intersex,
373 bisexual, transgender and gender non-conforming older adults. However, the value of this
374 research is not diminished in that the contexts and individuals considered have intrinsic value.

375

376 This review is a rare comprehensive qualitative evidence synthesis of barriers and facilitators
377 to sexual healthcare access among diverse older LGBTQIA+ population. Our findings highlight
378 how heterocentricity, stigma and providers who are not inclusive inhibit sexual healthcare
379 uptake and continuation for older LGBTQIA+ adults while age- and identity-related factors
380 support sexual healthcare service use. Our data on older LGBTQIA+ adults lay the foundation
381 for iterative service improvements. The results of this review demonstrate the need for more
382 expansive provider training and inclusive sexual healthcare delivery, particularly in specialist
383 healthcare, as well as inclusion of older LGBTQIA+ adults in clinical trials to make clinics more
384 inclusive.

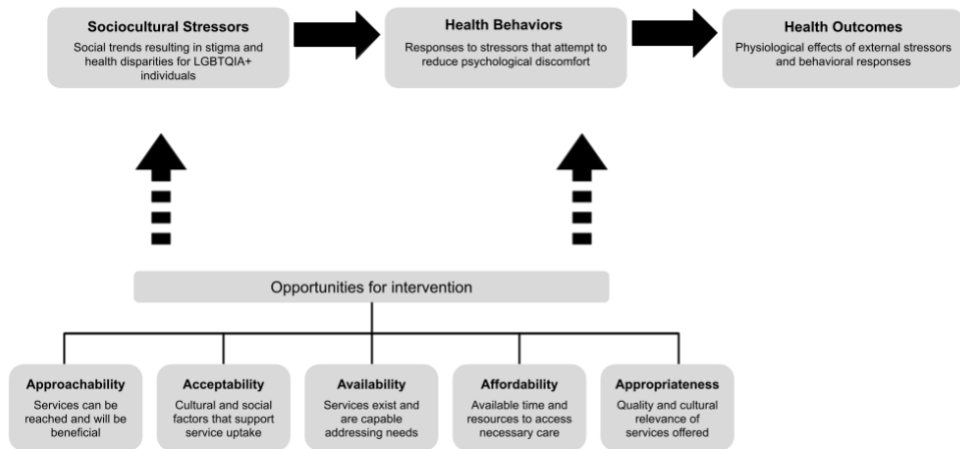
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386 From a research perspective, our findings suggest the need to explore sexual healthcare
387 experiences of older LGBTQIA+ women, intersex, bisexual, transgender, and gender non-
388 conforming older adults. Additionally, research which explores the experiences of older
389 LGBTQIA+ adults who are non-white, from low- and middle-income countries and diverse
390 social classes will further add to our understanding and support service provision adaptations
391 to best serve everyone. It is important that these investigations are led by people in these
392 communities so as to not further privilege a heterocentric and male-centric perspective.

393

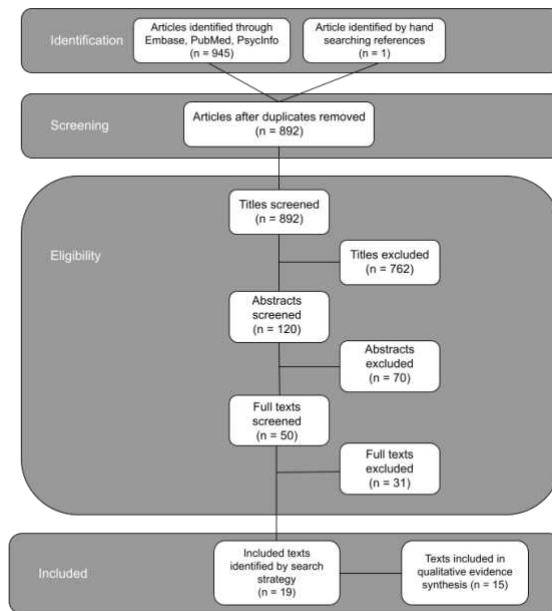
394 This scoping review and qualitative analysis highlights gaps in the literature, and points to
395 individual and system level changes that could improve older LGBTQIA+ adults' sexual health
396 services. For this population, barriers to sexual healthcare access are the result of
397 sociocultural stressors and maladaptive health behaviors older LGBTQIA+ adults develop in
398 response. Heterocentricity and stigma contribute to discriminatory information access and
399 provider behavior as well as anxiety for this population. To address these barriers, our results
400 suggest that providers and health systems need to improve the approachability, acceptability,

401 availability, affordability, and appropriateness of sexual health services. Older LGBTQIA+
402 adults represent an underserved population by sexual healthcare services from the provider
403 level to the health system level and as such represent a flaw in the system to be rectified to
404 achieve equity in healthcare.



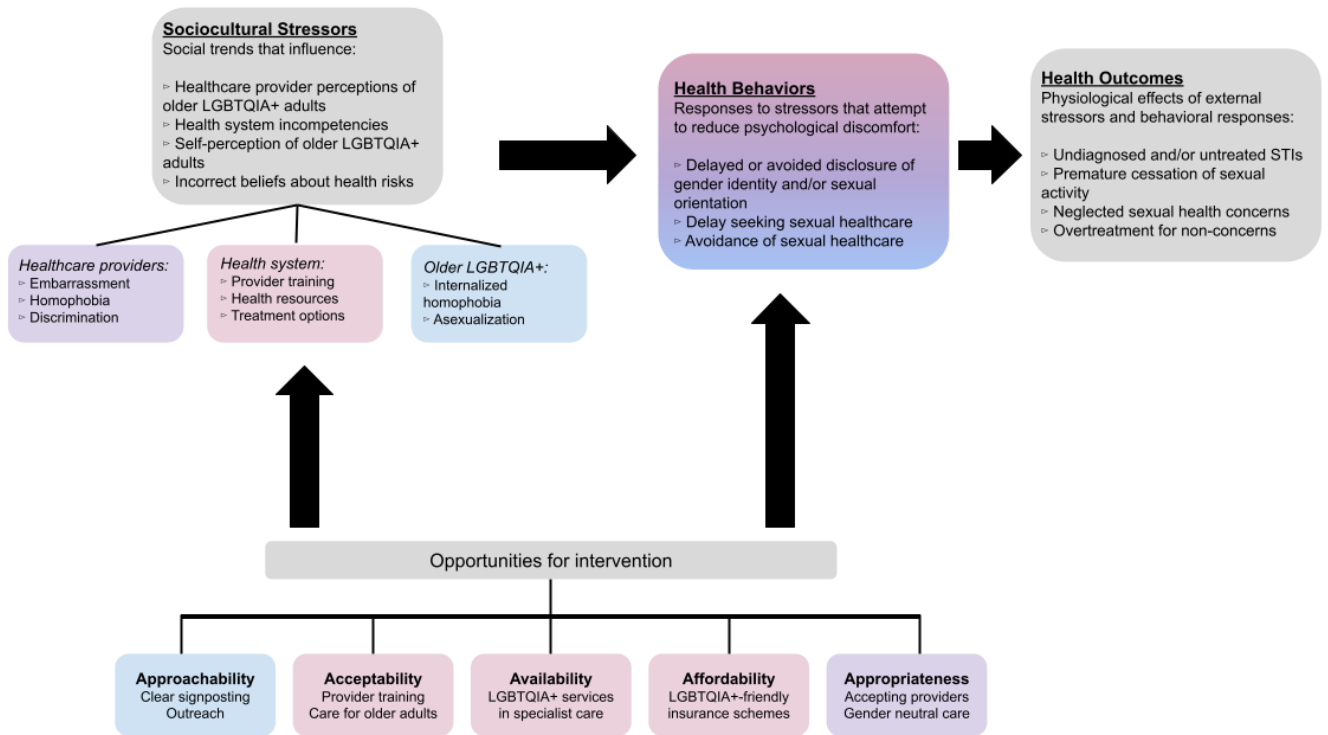
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Figure 1. An adapted Minority Stress Model using the Patient-Centered Access to Care framework identifying opportunities for intervention to increase uptake of sexual health services among Older LGBTQIA+ adults



410
 411

412 **Figure 2.** PRISMA flow chart



413

414 **Figure 3.** Using the Patient-Centered Access to Care framework to interrupt the pathway to
 415 poor health for older LGBTQIA+ individuals as described by the Minority Stress Model

416

417

418 **Table 1.** Studies included in the scoping review and qualitative evidence synthesis of data
 419 from older LGBTQIA+ adults on sexual health (n=19)

Lead author and year	Study design	Methods	Location	Population*	Age range* (in years)
[39] Addis 2009	Literature review	Meta-narrative	<i>Not specified</i>	Lesbian, gay, bisexual and transgender individuals	<i>“older” not defined</i>
[40] Alexis 2018	Literature review	Meta-synthesis	<i>Not specified</i>	Cis-gender gay, bisexual men who previously had prostate cancer	45+
[52] Clover 2006	Qualitative	Semi-structured interviews	London, UK	Cis-gender, white gay men	60 - 75
[41] Danemalm 2019	Qualitative	Semi-structured interviews	Sweden	Cis-gender gay men who had previously been treated for prostate cancer	58 - 81
[42] Doran 2018	Qualitative	Semi-structured interviews	England, UK	Cis-gender gay men with prostate cancer	49 - 82
[37] Dune 2020	Literature review	Thematic systematic review	<i>Not specified</i>	Cis-gender lesbian, bisexual women	55+
[43] Gessner 2019	Qualitative	Semi-structured interviews	USA	Cis-gender lesbian, gay, queer individuals	52 - 59
[38] Green 2019	Qualitative	Semi-structured interviews	Philadelphia, USA	Cis-gender gay men living with HIV	50+
[56] Kushner 2013	Qualitative	Semi-structured interviews	New Zealand	Cis-gender gay men	65 - 81
[44] LaVaccare 2018	Qualitative	Focus groups	Los Angeles, USA	Cis-gender lesbian, bisexual women	65+
[45] Lee 2015	Qualitative	Semi-structured interviews	British Columbia, Canada	Cis-gender MSM	58 – 71
[46] Lisy 2018	Literature review	Systematic review and meta-synthesis	USA, Australia, UK, Canada	Cis-gender lesbian, gay, bisexual individuals who have/had cancer	<i>Majority of studies included were 45+</i>
[53] Maloney 2017	Qualitative	Focus groups	USA	Cis-gender gay, bisexual men	40 – 52
[54] Martos	Qualitative	Semi-structured	USA	Cis-gender	52-59

2018			interviews		lesbian, gay, bisexual individuals	
[47]	McIntyre	Qualitative	Semi-structured interviews	Calgary, Canada	Cis-gender lesbian women who had previously had a Pap test	43 – 54
[48]	Politi	Qualitative	Structured interviews	Rhode Island, USA	Cis-gender lesbian women who were currently unmarried	40 - 75
[55]	Pollard	Qualitative	Focus groups	Southeast England	Cis-gender MSM	50+
[49]	Rose	Mixed method	Semi-structured interview and quantitative survey	Australia, New Zealand, USA, UK	Cis-gender gay, bisexual men and their partners	45 - 89
[50]	Sharek	Mixed method	Semi-structured interview and quantitative survey	The Republic of Ireland	Lesbian, gay, bisexual and transgender individuals	55+

** Included in the analysis of this study*

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Review finding	Contributing studies	Confidence in the evidence	Explanation of confidence assessment
Heterocentricity* and male-centricity of sexual health clinical services (intake forms, environments, resources, surveys) privilege the perspectives of heterosexual people and men specifically. Older LGBTQIA+ individuals, especially women, report feelings of exclusion and erasure.	[41, 42, 43-45, 47-50]	Moderate	All studies have minor to moderate methodological limitations. Moderate concerns about coherence and adequacy for all 13 studies. Major concerns about relevance due high-income settings of all studies.
Anticipated stigma following disclosure often based on past experiences leads older LGBTQIA+ adults to refrain from addressing identity-related needs. Older LGBTQIA+ often have difficulty identifying providers that they feel will not stigmatize them following identity disclosure.	[42, 44, 47, 49, 52-54]	Low	All studies have minor to moderate methodological limitations. Moderate concerns about coherence and adequacy. Major concerns about relevance due high-income settings of all studies.
Older LGBTQIA+ people reported enacted stigma from healthcare providers in the form of discrimination, rejection, or poorer treatment. This experience of stigma sometimes leads older LGBTQIA+ individuals to avoid primary healthcare.	[42, 45, 47-50, 52]	Low	All studies have minor to moderate methodological limitations. No or very minor concerns about coherence. Moderate concerns about adequacy. Major concerns about relevance due high-income settings of all studies.
Provider characteristics related to gender identity and sexual orientation, amount of experience with LGBTQIA+ patients, and openness may act as a barrier or facilitator	[38, 42, 44, 48, 49, 53-55]	Low	All studies have minor to moderate methodological limitations. No or very minor concerns about coherence for all 10 studies. Moderate concerns about adequacy. Major concerns about

depending on the specific context.

relevance due high-income settings of all studies.

Increased security in identity in older age, especially for older LGBTQIA+ women, leads individuals to advocate for their diverse healthcare needs more confidently, facilitating access to services.

[38, 47, 50, 55, 56]

Low

All studies have minor to moderate methodological limitations. No or very minor concerns about coherence for all 5 studies. Major concerns with adequacy given 2 studies with thin data, 3 studies with thick data. Major concerns about relevance due high-income settings of all studies.

Intersectional needs of older LGBTQIA+ adults related to age, gender identity and sexual orientation interact to drive sexual healthcare priority setting for individuals. As a result, older LGBTQIA+ individuals may make additional efforts to seek sexual healthcare or may be inclined to deprioritize particular services.

[42, 45, 47, 49]

Low

All studies have minor to moderate methodological limitations. No or very minor concerns about coherence. Major concerns about adequacy. Major concerns about relevance due high-income settings of all studies.

436 * Heterocentricity is defined as the assumption of or default to acknowledging relationships, sexual or otherwise,
437 between a cis-gender heterosexual man and a cis-gender heterosexual woman for this study
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609 **SUPPLEMENTAL**

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611 **Appendix 1.** Full search strategies

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Embase	1. Queer or lesbian or gay or MSM or WSW or transgender or transexual or intersex or bisexual or LG* or "sexual minority" or "men who have sex with men" or "women who have sex with women"
	2. "Older adult*" or older or elder* or ag?ing or "mature adult*" or "middle age**"
	3. "sexual health" or "sexual healthcare" or "sexual health care"
	4. 1 and 2 and 3
	5. limit 4 to (360 middle age <age 40 to 64 yrs> or "380 aged <age 65 yrs and older>" or "390 very old <age 85 yrs and older>")
	6. limit 4 to aged <65+ years>
PsycInfo	1. Queer or lesbian or gay or MSM or WSW or transgender or transexual or intersex or bisexual or LG* or "sexual minority" or "men who have sex with men" or "women who have sex with women"
	2. "Older adult*" or older or elder* or ag?ing or "mature adult*" or "middle age**"
	3. "sexual health" or "sexual healthcare" or "sexual health care"
	4. 1 and 2 and 3
	5. limit 4 to (360 middle age <age 40 to 64 yrs> or "380 aged <age 65 yrs and older>" or "390 very old <age 85 yrs and older>")
Medline	1. sex/ or sex.mp
	2. sexual health/ or sexual health.mp
	3. sexual dysfunction.mp
	4. 1 or 2 or 3
	5. Healthcare or health care or delivery health care

	6. Middle age* or middle age.mp or aged or ag?ing or elderly or elderly.mp
	7. Chronic disease.mp or chronic disease/
	8. Comorbidity/ or comorbidity.mp
	9. Hypertension/ or hypertension.mp or diabetes.mp or diabetes/
	10. 7 or 8 or 9
	11. Qualitative.mp or focus group/ or focus group.mp
	12. 2 or 5
	13. 4 and 5
	14. 6 and 13
	15. 10 and 14
	16. 11 and 15

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Appendix 2. Summary of CASP scores from the systematic review checklist of literature review studies

Lead author	Year published	Focus ed?	Best sort of studies?	Relevant studies included?	Ri go r?	Results appropriately combined ?	Overall results clear?	Generalizabil ity?	Imp nt out s con ed?
Addis	2009	Yes	Yes	Yes	Yes	No	Yes	No	Y
Alexis	2018	Yes	Yes	Yes	Yes	Yes	Yes	No	Y
Dune	2020	Yes	Yes	Yes	No	Yes	Yes	No	Y
Lisy	2018	Yes	Yes	No	Yes	Yes	Yes	No	Y

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Appendix 3. Summary of CASP scores from the systematic review checklist of qualitative studies

Lead author	Year published	Focus ed?	Qualitative approach	Appropriate research design?	Appropriate recruitment	Appropriate data collection	Reflexiv ity?	Eth cs cle rly
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			justified ?		strategy?	strategy?		sta ed'
Clover	2006	Yes	Yes	Yes	Yes	Yes	No	No
Danemalm	2019	Yes	Yes	Yes	Yes	Yes	No	No
Doran	2018	No	Yes	Yes	Yes	Yes	No	No
Gessner	2019	No	Yes	No	Yes	Yes	Yes	No
Green	2019	Yes	Yes	Yes	Yes	Yes	No	No
Kushner	2013	Yes	No	Yes	No	Yes	No	No
LaVaccare	2018	Yes	Yes	Yes	Yes	Yes	No	No
Lee	2015	Yes	Yes	Yes	No	Yes	No	No
Maloney	2017	Yes	Yes	Yes	Yes	No	No	No
Martos	2018	Yes	No	Yes	Yes	Yes	No	No
McIntyre	2010	Yes	Yes	Yes	No	Yes	No	No
Politi	2009	Yes	No	Yes	No	Yes	No	No
Pollard	2017	Yes	Yes	Yes	No	No	No	No
Rose*	2016	Yes	Yes	Yes	No	Yes	No	No
Sharek*	2015	Yes	Yes	Yes	Yes	Yes	No	No

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