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SCREENING SAVES LIVES CAMPAIGN: KAP ASSESSMENT

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We acknowledge that this research has taken place on Country across Western Australia and pay our respects to Elders past and present. Our research team is based in Boorloo (Perth) on the lands of the Whadjuk Noongar people, who have been custodians of this boodjar since time immemorial. We acknowledge all Traditional Custodians and their continuing connection to culture, community, land, sea and rivers.

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About CERIPH

The Collaboration for Evidence, Research and Impact in Public Health (CERIPH) is located in the Curtin School of Population Health, in the Faculty of Health Sciences at Curtin University in Perth, Western Australia. We seek solutions that promote health, prevent disease and protect populations from harm.

CERIPH began as the Western Australian Centre for Health Promotion Research. It was established in 1986 and was the first health promotion research centre in the southern hemisphere. For more than 35 years the centre has sought to undertake applied and real world research and evaluation, and delivered a range of capacity building activities to support health promotion action. We have contributed to the establishment and development of key health promotion and public health programs and policies in Western Australia, nationally and globally.

Recognising the complexity of health and its determinants, our collaboration generates evidence to support action across educational, organisational, socio-economic, environmental and political domains to improve population health in our region. Our staff are highly skilled researchers, advocates, practitioners, leaders and educators who have

built strong partnerships locally and internationally. We are committed to creating meaningful outcomes for individuals, communities and populations. We create synergies by integrating our research, evaluation, consultancy and our capacity building with our award winning teaching programs.

CERIPH has built and demonstrated high level expertise and strengths in:

- Approaches using community and settings-based strategies, co-design, peer and social influence, social marketing, advocacy, community mobilisation and sector capacity building.
- Applied, participatory, intervention and social research.
- Building sustained partnerships and collaborations with vulnerable and priority communities and populations and relevant community, government and private sector organisations.
- Provision of research training, education and capacity building activities to students, professionals and community.
- Dissemination and translation of evidence informed practice and building practice informed evidence.

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Executive Summary

Background

Cancer is a significant health concern for LGBTIQASB+ Australians, with an estimated 7,500 new diagnoses and 23,000 survivors annually. The WA Cancer Plan 2020-25 aims to reduce cancer's burden and acknowledges the unique needs of those in the LGBTIQASB+ community. Ongoing disparities in cancer care for LGBTIQASB+ individuals lead to exclusion, lack of support, and increased distress. Discrimination in healthcare settings and a lack of LGBTIQASB+ competence among clinicians hinder cancer screening uptake, especially among trans people. There is a notable absence of LGBTIQASB+-specific information in Australian cancer support resources, with recent initiatives beginning to address this gap.

Launched in 2021, the Screening Saves Lives campaign targets members of the WA LGBTIQASB+ community, promoting awareness and engagement in bowel, breast, and cervical cancer screenings. Members of the WA LGBTIQASB+ community were featured in campaign resources, with widespread dissemination through various LGBTIQASB+ community channels and through healthcare providers.

Approach

The effectiveness of the Screening Saves Lives campaign was assessed through a cross-sectional online survey targeting the WA LGBTIQASB+ community. The survey aimed to measure campaign awareness and behaviour change prompted by the campaign as well as knowledge of cancer and screening. The target group for data collection was defined as self-identified members of the LGBTIQASB+ community in metropolitan WA who met the established criteria by program:

- Cervical screening: aged 25-74 years, has a cervix, has ever been sexually active.
- Breast screening: aged 40-74 years, has breasts or chest tissue, assigned female at birth.
- Bowel screening: aged 50-74 years, has a bowel.



The quantitative survey instrument was designed to take up to 15 minutes to complete. The overall sample size was 433. Participants were recruited via social media, LGBTIQASB+ organisational networks and via an online survey panel. Ethics approval for this evaluation was granted by the Curtin University's Human Research Ethics Committee (HRE2023-0649).

Key findings and implications

Participant demographics revealed an overrepresentation of women, particularly in the 30 to 39 age bracket, the majority of whom were Australian-born, English-speaking and tertiary educated. This outcome suggests a potential area for future evaluation efforts to ensure broader demographic segmentation, in particular older adults and people from culturally and linguistically diverse backgrounds. Interestingly, 6.9% of respondents identified as Aboriginal, Torres Strait Islander and/or both.

Notably, each campaign component achieved recall rates among approximately one-third of the target population (#1 Speak to your GP: 37.6%, #2 Screening eligibility criteria: 30.3%, and #3 Community Champions: 27.3%), indicating successful penetration of the campaign's core messages. Campaign materials were positively received, with over 80% of respondents affirming their appeal. This finding underscores the success of the campaign's content design and messaging strategy in resonating with the intended audience. The campaign's inclusive representation of the LGBTIQSB+ community was acknowledged by most participants. However, findings also suggested the need to explore inclusivity and representation in future campaign iterations.

Behavioural intentions following campaign exposure were promising, with 70% of respondents considering engaging in screening activities, a testament to the campaign's efficacy in translating awareness into actionable health behaviours. The use of outreach strategies appeared successful with social media, GP clinics, and community events identified as effective channels.

Barriers to screening such as fear, discomfort, and embarrassment were identified across cervical, breast, and bowel cancer screenings. Gaps in knowledge about screening protocols, particularly self-collection options for cervical screening were also evident. In addition, gaps in knowledge were identified in relation to modifiable risk factors. Opportunities exist for research and evaluation to interrogate these factors. Future efforts should demystify screening processes, address emotional and psychological barriers, and reinforce the critical role of regular screening in early detection and the facilitation of timely treatment interventions.



Abbreviations

AFAB/AMAB	Assigned Female/Male at Birth
AIHW	Australian Institute of Health and Welfare
BSWA	BreastScreen WA
CERIPH	Collaboration for Evidence, Research and Impact in Public Health
GP	General Practitioner
HPV	Human Papilloma Virus
KAP	Knowledge, Awareness and Practice
LGBTIQASB+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual, Sistergirl, Brotherboy. The plus symbol represents the inclusion of other sexual orientations, gender identities, and communities not specifically covered in the other letters. Other versions exist with some letters excluded.
M	Mean
N	Number
NBCSP	National Bowel Cancer Screening Program
NGO	Non-Government Organisation
NMHS	North Metropolitan Health Service
SD	Standard deviation
STI	Sexually Transmissible Infection
SPSS	Statistical Package for Social Science
WA	Western Australia
WACCPP	WA Cervical Cancer Prevention Program

Glossary and terminology

All definitions have been reproduced from Australian Institute of Family Studies¹ unless otherwise noted.

Bodies and variations in sex characteristics

AFAB/AMAB: an acronym for Assigned or presumed Female/Male at Birth.

Endosex: people whose innate sex characteristics meet medical and conventional understandings of male and female bodies.

Intersex: people who have innate sex characteristics that don't fit medical and social norms for female or male bodies, and that create risks or experiences of stigma, discrimination and harm.²

Sex: a classification that is often made at birth as either male or female based on a person's external anatomical characteristics. However, sex is not always straightforward, as some people may be born with an intersex variation, and anatomical and hormonal characteristics can change over a life span.

Sex characteristics: a term used to refer to physical parts of the body that are related to body development, regulation and reproductive systems. Primary sex characteristics are gonads, chromosomes, genitals and hormones. Secondary sex characteristics emerge at puberty and can include the development of breast tissue, voice pitch, facial and pubic hair, etc.



Gender

Cisgender/cis: a term used to describe people whose gender corresponds to what they were assigned at birth.

Dead name: an informal way to describe the former name a person no longer uses because it does not align with their current experience in the world or their gender. Some people may experience distress when this name is used.

Gender/gender identity: Broadly, gender is a set of socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate. Gender identity is a person's deeply held core sense of self in relation to gender and does not always correspond to a person's assigned sex. People become aware of their gender identity at many different stages of life, from as early as 18 months and into adulthood. Gender identity is a separate concept from sexuality and gender expression.³

1 <https://aifs.gov.au/resources/resource-sheets/lgbtiqa-glossary-common-terms>

2 <https://ihra.org.au/18106/what-is-intersex/>

3 <https://pflag.org/glossary/>

Gender affirmation: the personal process or processes a trans person determines is right for them in order to live as their defined gender and so society recognises this. This may involve social, medical and/or legal steps that affirm a person's gender. A trans person who hasn't medically or legally affirmed their gender is no less the man, woman or non-binary person they've always been. A person's circumstances may inhibit their access to steps they want to take to affirm their gender (TransHub, 2021).

Gender binary: something that is binary consists of two things or can refer to one of a pair of things. When talking about genders, binary genders are male and female, and non-binary genders are any genders that are not just male or female, or aren't male or female at all (TransHub, 2021).

Gender dysphoria: is the discomfort a person feels with how their body is perceived and allocated a gender by other people. The experience may occur when a person feels their biological or physical sex doesn't match their sense of their own gender (Health Direct, 2019). This feeling, that there is a mismatch, can trigger a range of responses. Some people experience serious distress, anxiety and emotional pain, which can affect their mental health. Others experience only low-level distress — or none at all. For this reason, gender dysphoria is no longer considered a mental illness. (Not to be confused with 'Body Dysmorphia'). (Victoria State Government, 2016).⁴

Gender euphoria: the experience of comfort, connection and celebration related to a trans person with their internal sense of self and gender. The pride of feeling and being affirmed as who they are.

Gender expression: refers to how a person chooses to publicly express or present their gender. This can include behaviour and outward appearance, including clothing, hair, make-up, body language and voice. Western expectations of gender expression are based on a binary of men as masculine and women as feminine but many people do not fit into binary gender expressions. Failing to adhere to the norms associated with one's gender can result in ridicule, intimidation and violence (Hill et al., 2020; Robinson, Bansel, Denson, Ovenden, & Davies, 2014).

⁴ <https://www.prideinhealth.com.au/wp-content/uploads/2020/07/Language-and-terminology.pdf>

Gender fluid: a term used to describe a person with shifting or changing gender.

Gender pronouns: refer to how a person publicly expresses their gender identity through the use of a pronoun. Pronouns can be gender-specific or gender-neutral (Rainbow Health Australia (formerly GLHV), 2016). This can include the traditional he or she, as well as gender-neutral pronouns such as they, their, ze and hir (see Transgender/Trans).

Genderqueer: a gender identity that does not conform to traditional gender norms and may be expressed as other than woman or man or both man and woman, including gender neutral and androgynous.

Gender questioning: not necessarily an identity but sometimes used in reference to a person who is unsure which gender, if any, they identify with.

Non-binary: is a term used to describe a person who does not identify exclusively as either a man or a woman. Genders that sit outside of the female /male binary are often called non-binary. A person might identify solely as non-binary, or relate to non-binary as an umbrella term and consider themselves genderfluid, genderqueer, trans masculine, trans feminine, agender, bigender, or something else (ACON Health, 2020).⁵

⁵ <https://www.prideinhealth.com.au/wp-content/uploads/2020/07/Language-and-terminology.pdf>





Sistergirl/Brotherboy: terms used for trans people within some Aboriginal or Torres Strait Islander communities. How the words Sistergirl and Brotherboy are used can differ between locations, countries and nations. Sistergirls and Brotherboys have distinct cultural identities and roles. Sistergirls are Indigenous people assigned male at birth but who live their lives as women, including taking on traditional cultural female practices (Rainbow Health Australia, 2016). Brotherboys are Indigenous people assigned female at birth but are a man or have a male spirit (Rainbow Health Australia, 2016).

Transgender/Trans: umbrella terms used to refer to people whose assigned sex at birth does not match their gender identity. Trans people may choose to live their lives with or without modifying their body, dress or legal status, and with or without medical treatment and surgery. Trans people may use a variety of terms to describe themselves including but not limited to: man, woman, trans woman, trans man, non-binary, agender, genderqueer, genderfluid, trans guy, trans masculine/masc, trans feminine/femme. Trans people have the same range of sexual orientations as the rest of the population. Trans people's sexual orientation is referred to in reference to their gender identity, rather than their sex. For example, a woman may identify as lesbian whether she was assigned female or male at birth. Trans people may also use a variety of different pronouns (see Gender pronouns). Using incorrect pronouns to refer to or describe trans people is disrespectful and can be harmful (see Misgendering under 'Societal attitudes/issues' below).

Sexual orientations

Aromantic/aro: refers to individuals who do not experience romantic attraction. Aromantic individuals may or may not identify as asexual.

Asexual/ace: a sexual orientation that reflects little to no sexual attraction, either within or outside relationships. People who identify as asexual can still experience romantic attraction across the sexuality continuum. While asexual people do not experience sexual attraction, this does not necessarily imply a lack of libido or sex drive.

Bisexual/bi: an individual who is sexually and/or romantically attracted to people of the same gender and people of another gender. Bisexuality does not necessarily assume there are only two genders (Flanders, LeBreton, Robinson, Bian, & Caravaca-Morera, 2017).

Gay: an individual who identifies as a man and is sexually and/or romantically attracted to other people who identify as men. The term gay can also be used in relation to women who are sexually and romantically attracted to other women.

Heterosexual: an individual who is sexually and/or romantically attracted to the opposite gender.

Lesbian: an individual who identifies as a woman and is sexually and/or romantically attracted to other people who identify as women.

Pansexual: an individual whose sexual and/or romantic attraction to others is not restricted by gender. Pansexuality can include being sexually and/or romantically attracted to any person, regardless of their gender identity.

Queer: a term used to describe a range of sexual orientations and gender identities. Although once used as a derogatory term and still considered derogatory by many older LGBTIQ+ people, the term queer now encapsulates political ideas of resistance to heteronormativity and homonormativity and is often used as an umbrella term to describe the full range of LGBTIQ+ identities.

QTPOC: an acronym for Queer and Trans People of Colour.

Sexual orientation: refers to an individual's sexual and romantic attraction to another person. This can include, but is not limited to, heterosexual, lesbian, gay, bisexual and

asexual. It is important to note, however, that these are just a handful of sexual orientations – the reality is that there are an infinite number of ways in which someone might define their sexuality. Further, people can identify with a sexuality or sexual orientation regardless of their sexual or romantic experiences. Some people may identify as sexually fluid; that is, their sexuality is not fixed to any one identity.

Societal attitudes/issues

Biphobia: refers to negative beliefs, prejudice and/or discrimination against bisexual people. This can include a dismissal of bisexuality, questioning whether bisexual identities are authentic or a focus on the sexual desires and practices of bisexual people (Ross et al., 2018).

Cisgenderism: where something is based on a discriminatory social or structural view that positions (either intentionally or otherwise) the trans experience as either not existing or as something to be pathologised. Cisgenderism believes that gender identity is determined at birth and is a fixed and innate identity that is based on sex characteristics (or ‘biology’) and that only binary (male or female) identities are valid and real (TransHub, 2021).

Cisnormativity: assumes that everyone is cisgender and that all people will continue to identify with the gender they were assigned at birth. Cisnormativity erases the existence of trans people.

Heteronormativity: the view that heterosexual relationships are the natural and normal expression of sexual orientation and relationships. This is an extension of cisgenderism, which is a discriminatory social structure that positions cis and binary genders as the only real or valid experiences of gender.

Heterosexism: describes a social system that privileges heteronormative beliefs, values and practice. Heterosexism provides the social backdrop for homophobic and transphobic prejudices, violence and discrimination against people with non-heteronormative sexualities, gender identities and intersex varieties (McKay, Lindquist, & Misra, 2019).

Homonormativity: a term that describes the privileging of certain people or relationships within the queer community (usually cisgender, white, gay men). This term also refers to the assumption that LGBTIQ+ people will conform to mainstream, heterosexual culture; for example, by adopting the idea that monogamy, marriage and having children is a natural and normal relationship progression.

Homophobia: refers to negative beliefs, prejudices, stereotypes and fears that exist towards same-sex attracted people. It can range from the use of offensive language to bullying, abuse and physical violence; and can include systemic barriers, such as being denied housing or being fired due to a person’s sexual orientation.

Misgendering: an occurrence where a person is described or addressed using language that does not match their gender identity (Rainbow Health Australia, 2016). This can include the incorrect use of pronouns (she/he/they), familial titles (dad, sister, uncle, niece) and, at times, other words that traditionally have gendered applications (pretty, handsome, etc.).

Transphobia: refers to negative beliefs, prejudices and stereotypes that exist about trans people.





BACKGROUND

01

Background

Although LGBTIQASB+ people are not currently listed as a key population by the AIHW [1], and there is therefore no national data on cancer statistics for the population, estimated rates of cancer amongst LGBTIQASB+ Australians indicate that it is a significant health issue. According to the Cancer Council of Australia, there may be over 7,500 LGBT people diagnosed with cancer each year, and approximately a further 23,000 cancer survivors [2]. Although LGBTI people are listed as a priority population in the WA Cancer Plan 2020-2025 [3], however the strategy does not provide any specific guidelines on supporting LGBTI people living with cancer. This is despite the fact that LGBTIQ+ people appear to experience significant risk factors for cancer, including heightened alcohol and drug consumption and exposure to viral infections such as HPV, HCV, and HIV [1, [4], [5], [6], [7]. These issues were included as part of ACON's submission to the Australian Cancer Plan 2023-2033 [8]. Sexual minority women's cancer risk factors, alongside those mentioned above, include higher rates of depression, experiences of physical abuse, and experiences of intimate partner violence [9]. Gay and bisexual men who have experienced prostate cancer also report higher rates of

cancer-related distress, including sexual dysfunction, low self-esteem, lower reported quality of life, and higher overall psychological distress [10].

Ongoing disparities between LGBTIQ+ and cisgendered heterosexual people's experiences of oncological healthcare can have significant negative effects on cancer pathway outcomes [11]. These include feelings of exclusion (from community, family, or broader society), lack of social support, as well as having to negotiate oncological support while also experiencing significantly higher rates of distress compared to their non-LGBTIQ+ counterparts [12], [13]. LGBTIQ+ people also report experiencing both explicit and implicit discrimination (i.e. microaggressions) in oncological settings, which further impact quality of care [14]. Such discrimination is reported as the result of heteronormative healthcare settings which do not adequately accommodate specific care needs [15]. Lack of competence in engaging with LGBTI people among oncological clinicians has been shown to affect rates of cancer screening uptake across the LGBTIQ+ population [16], [17]. It also appears that these issues are particularly impactful for trans people [18], [19], [20]. Knowledge of trans and intersex-specific cancer treatment approaches is particularly low amongst oncological clinicians [21]. This is despite the fact that there are many trans-specific issues in cancer care, such as addressing gynaecological cancer issues with trans men and other trans people who may not be comfortable discussing 'female anatomy' issues [22]. The delays which result from these barriers to timely screening and treatment mean that many LGBTIQ people experience poorer cancer care outcomes and later stage diagnosis [6], [9], [23].

LGBTIQ-specific information remains absent from the majority of cancer support resources in Australia [24], though a recent publication by the Cancer Council provides information on navigating oncological care specifically for LGBTIQ+ people [2]. Similarly, there is still little information about the psychosocial effects of different types of cancer for LGBTIQ+ people in Australia. In addition, most LGBT cancer research does not provide data on how cancer diagnosis and care is affected by the type of cancer. This is noteworthy as some cancers appear to be more common in LGBTIQ+ populations, namely breast, prostate, and gynaecological cancers [23], [25], and further research is needed to understand how LGBTIQASB+ people might be affected by other common cancers such as anal cancer, Kaposi's sarcoma, and lung cancer [26]. It is worth noting that some research indicates that the type of cancer may be



less distressing than issues surrounding cancer diagnosis and treatment [27], however more research is required.

A lack of coverage and awareness of appropriate screenings for LGBTQI+ Australians has also been outlined [28], [29]. There is poor LGBTQI+ representation in Australian cancer resources [29]. For example, less than one in five (O13%) of Australian cancer organisation websites directly referred to LGBTQI+ individuals. Of those that did, gaps remained relating too describing the differing needs of LGBTQI+ people with a tendency to homogenise populations. A study of transgender and gender diverse Australians found that if respondents believed they had a cancer symptom, they would still delay care [28]. This was attributed to a systemic lack of awareness campaigns for this community, as well as healthcare providers not inquiring about patient gender identity.

Considering the above challenges and realising the potential to enhance prompt health-seeking among members of WA LGBTQI+ communities, WA Health launched a collaborative campaign in 2021, implementing three population-based cancer screening programs for bowel, breast and cervical cancers. These efforts were tailored to address the specific needs of members of the Western Australian (WA) LGBTQI+ community.

The subsequent campaign, Screening Saves Lives (SSL), aims to increase awareness of their timely participation in cancer screening programs. Assessing campaign effectiveness, specifically reach, resonance, recognition, and behavioural change can inform future enhancement and focus areas for the campaign and related programs.



Aim of this evaluation

This evaluation aimed to determine the level of awareness and impact of the SSL campaign among members of WA's LGBTQI+ community. The research questions were:

1. What is the level of community awareness of the SSL campaign?
2. Where have the campaign materials been observed?
3. Have the campaign materials prompted action by the individual to screen for cancer?
4. Are individuals aware of which programs (cervical, breast and/or bowel) they are eligible for?

Ethical approval

Ethics approval for this evaluation was granted by the Curtin University's Human Research Ethics Committee (HRE2023-0649).



APPROACH

02

Approach

A note about LGBTIQASB+ terminology

Throughout this document the acronym LGBTIQASB+ is used to refer to lesbian, gay, bisexual, transgender, intersex, queer, asexual, sistergirl, brotherboy and other people with diverse sexualities and gender expression. We recognise that every LGBTIQASB+ person has terms and language they prefer when describing their own sex characteristics, gender, and sexuality. The use of this acronym is not intended to be limiting or exclusive of certain groups and we recognise that not all people will identify with this acronym or use these specific terms. When describing the findings of other studies or programs the terminology applied by those researchers and practitioners will be used instead.

Policy context

The WA Cancer Plan 2020-25 provides direction to reduce the burden of cancer in the WA community and includes every aspect of care, from prevention and early detection to curative treatment and palliative care. The plan outlines priority areas to strengthen existing partnerships and develop new ones to achieve cancer control suitable to all people affected by cancer. Notably, in an update since the previous plan, the LGBTI community is acknowledged as having unique needs as individuals who:

“often experience stigma, discrimination and/or racism, which causes significant barriers to accessing cancer services and negatively impact health and wellbeing. Providing programs and services that are responsive, competent, respectful and accessible to all is essential to improving cancer outcomes for Western Australians.”
[3]

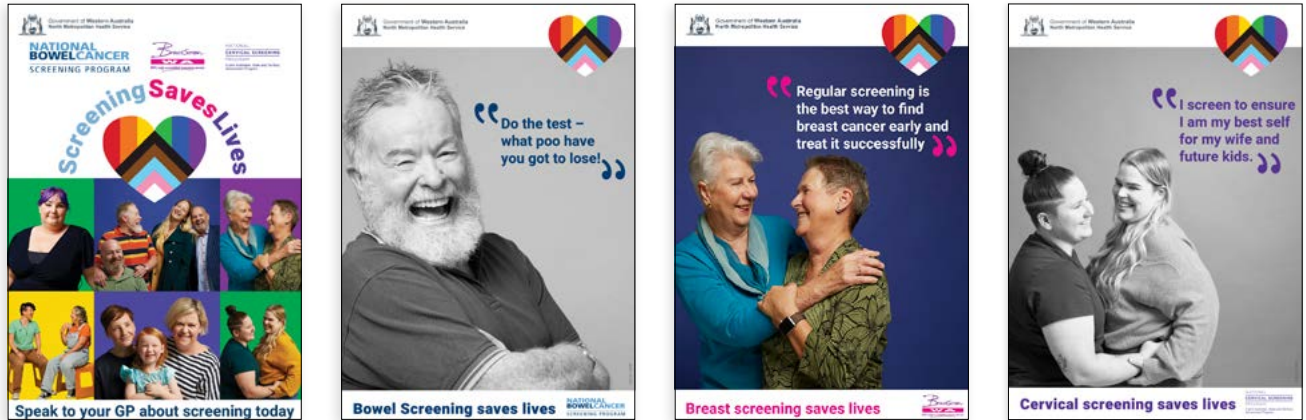
Screening Saves Lives

In 2021, a concerted effort to enhance participation in WA’s three key cancer screening programs—cervical, breast, and bowel—specifically for the WA LGBTIQ+ community led to the creation of the SSL campaign. This initiative, developed through a collaboration among the National Bowel Cancer Screening Program (NBCSP), BreastScreen WA (BSWA), and the WA Cervical Cancer Prevention Program (WACCCPP), focused on raising awareness of and increasing engagement in these critical health screening services. The campaign, informed by a literature review and initial discussions that began in March 2021, was tailored to meet the unique needs of the WA LGBTIQ+ community.

Collaboration with the WA Primary Health Alliance (WAPHA) LGBTIQ+ Reference Group helped to recruit members of the WA LGBTIQ+ community to be the ‘heroes’ of the campaign. The resources, featuring members of the WA LGBTIQ+ community as the faces of the campaign, were launched at Pride Fairday in November 2021. These resources, along with a comprehensive promotional toolkit, were widely disseminated through various channels, including social media, interviews, and updates on the BSWA website. The campaign extended its reach by including campaign material in healthcare premises in July 2022. Further efforts to diversify the representation in the campaign were made in 2023, although there were challenges in garnering responses. The suite of program advertisements is shown in Figure 1 below.



Figure 1. Examples of the campaign materials



The campaign’s effectiveness, in terms of its impact and behaviour change within the target community, can guide future enhancements and strategies. This evaluation offers the first Knowledge, Awareness and Practice (KAP) assessment of the campaign, enabling comparison across programs, age groups and sub-groups within the WA LGBTIQASB+ community, and will form a baseline for future campaign monitoring.

CERIPH research team

The project team was composed of Curtin University researchers with experience in community-facing evaluation and qualitative and mixed methods research. Senior researchers had previous experience conducting similar research and had experience within and with organisations that support LGBTIQ+ communities. Members of the research team were:

- Dr Jonathan Hallett (Lead): Health Promotion and Sexology, School of Population Health
- Associate Professor Justine Leavy: Health Promotion and Sexology, School of Population Health
- Dr Nang Phoo: Research Assistant, CERIPH, School of Population Health
- Associate Professor Gemma Crawford: Health Promotion and Sexology, School of Population Health
- Lekey Khandu: Research Assistant, CERIPH, School of Population Health

Process

A post-campaign only evaluation was used to examine the impact of the Screening Saves Lives campaign using a cross-sectional online survey with the primary target group(s). The evaluation was conducted in early December 2023.

Instrument Development

A draft questionnaire was developed following a scan of relevant literature, tested for content validity through two rounds of feedback with an expert panel from the Cancer Network WA screening programs. The questionnaire was then assessed for face validity with a subset of the target population which provided feedback on question sensitivity, language comprehension and survey usability. The resulting questionnaire was hosted on the Qualtrics online survey platform. More detail on the process of questionnaire development is provided in the next section of this report and the full instrument is available in Appendix A.

Recruitment

To be eligible to participate in this study participants needed to be:

- aged between 24 and 74 years,
- be a resident in WA at the time of completing the survey, and
- identify as LGBTIQASB+ (or use a synonymous term).

The survey was launched on 30 November and closed on 17 December 2023. It was promoted through adverts on Facebook, Twitter/X and LinkedIn, an online survey panel through a social research organisation (Qualtrics), and via online networks of community organisations working with and for LGBTIQASB+ people. Participants were offered the chance to enter a \$500 prize draw on completion of the survey as a token of appreciation for their time. The overall final included sample after data cleaning was 433.

Table 1. Data collection

Recruited by	CERIPH Social research organisation (Qualtrics)
Incentive	\$500 cash prize draw
Completion time (minutes)	15.7 +/- 44.4 Minimum: 3.6, Maximum: 867 Median: 9.1
When	30 November - 17 December 2023
Surveys collected	n=519
Data analysed	n=433

Analysis

The data was exported from Qualtrics into the Statistical Package for Social Sciences version 26 (SPSS v26) and cleaned before analysis. During data cleaning, the respondents who did not provide consent (n=69), whose age are not within eligible ranges (n=2), and who did not provide meaningful responses beyond the sociodemographic section (n=15) were excluded. Of 519 surveys collected, 433 were included in data analysis. A small number of questions allowed participants to skip them or select 'prefer not to answer' so the sample size for each analysis varies slightly and is displayed either within each table or figure or is provided in preceding text.

Descriptive statistics of sociodemographic characteristics of the survey respondents, awareness of cancer screening campaigns, campaign diagnostics, intention, knowledge, attitudes, and practice regarding the three cancer screening programs were obtained. While the research team aimed to ensure that response categories for gender and sex allowed for broad representation of preferred identities, it was necessary to recode the following variables for the purpose of statistical analysis.

- (1) The two variables, 'gender' and 'sex recorded at birth' were recoded into the following five gender categories following protocols used elsewhere [30]. The responses for another term were classified as appropriate.
 - Cisgender man (Gender: Man, Sex recorded at birth: Male)
 - Cisgender woman (Gender: Woman, Sex recorded at birth: Female)
 - Trans man (Gender: Man, Sex recorded at birth: Female)
 - Trans woman (Gender: Woman, Sex recorded at birth: Male)
 - Nonbinary (Gender: Non-binary, third gender)
- (2) Similarly, responses related to sexuality were merged into seven core sexuality categories: lesbian, gay, bisexual, pansexual, queer, asexual, and 'something different' [30]. The 'something different' category was made up of participants who identified as 'homosexual', 'prefer not to have a label', 'cannot choose only one sexuality', as well as the trans men, trans women and non-binary participants who identified as heterosexual.
- (3) Three response categories of the intersex question (No, I don't know, I prefer not to say) were combined and renamed as 'No'.

For the four sets of awareness questions, the questions assessing whether the respondents have seen the campaign materials were recoded from multiple-choice variables into dichotomous variables. The 'No' and 'Unsure' options were combined and renamed as 'No'.

Table 2. Recoded variables

	Recoded for data analysis
Sexuality	No changes
Lesbian	
Gay	
Bisexual	
Pansexual	
Queer	
Asexual	
Homosexual	Something else
Heterosexual	
Prefer not to have a label	
Another term (please specify)	
I prefer not to say	
Intersex	
Yes	No changes
No	No
I don't know	
I prefer not to say	
Unprompted recall: Having seen any advertising about cancer screening	
Yes	No changes
No	No
Unsure	
Unprompted recall: Having seen the GP poster about cancer screening	
Yes	No changes
No	No
Unsure	
Unprompted recall: Having seen the eligibility poster about cancer screening	
Yes	No changes
No	No
Unsure	
Unprompted recall: Having seen the five posters about cancer screening	
Yes	No changes
No	No
Unsure	



Descriptive statistics of sociodemographic characteristics of the survey respondents, awareness of cancer screening campaigns, campaign diagnostics, intention, knowledge, attitudes and practice regarding the three cancer screening programs were obtained. The relationship between gender/sexuality/variation of sex characteristics and campaign awareness was tested using the Pearson Chi-square test at 95% confidence level. P-values <0.05 were considered statistically significant. Content analysis was conducted for the answers to open-ended questions, and the themes of these answers were reported with illustrative quotes.



QUESTIONNAIRE DEVELOPMENT

03

Overview

The questionnaire for assessing knowledge, awareness, and practices (KAP) related to the Screening Saves Lives campaign was developed in three steps (Figure 2):

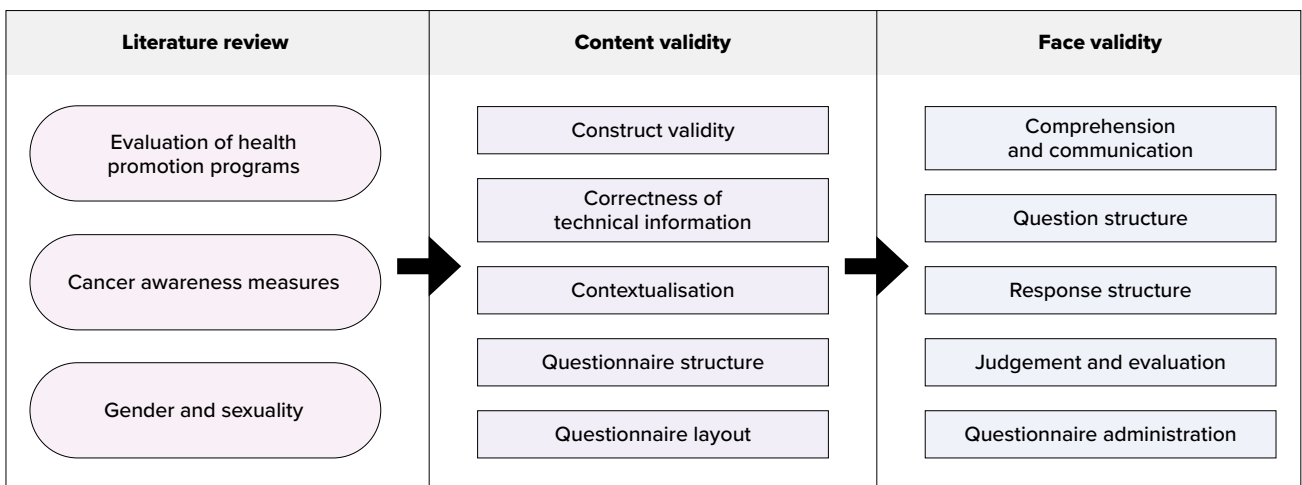
1. Initially, after a scan of literature on health promotion program evaluations, cancer awareness measures, and sociodemographic surveys (including questions on gender and sexuality), a draft questionnaire was formulated.
2. An expert panel then examined the content validity of the draft questionnaire. They provided feedback on the representativeness and adequacy of the question items for assessing outcome measures, technical details about cancer screening programs, materials from the publicly available SSL campaign, and the structure of the questionnaire. The draft was revised twice based on this feedback. Additionally, a LGBTQIA+ employee network within the WA Department of Health provided insights for refining the demographic questions and terminology for asking about sex, gender, sexuality and intersex status.

3. Finally, a subset of the target population for the current study evaluated the face validity of the questionnaire. They offered insights into the comprehensibility of the question items and instructions, the usability of the electronic survey format, and the potential emotional impact of the survey, especially given its assessment of sensitive information.

Literature scan and development of the survey instrument

The survey instrument for this study was adapted from a set of validated questions to assess cancer awareness, as well as questionnaires from previous studies by the research team, which were sourced from validated instruments. The question items regarding knowledge, attitudes, and behaviors around cancer screening were developed with reference to the Cancer Awareness Measures (CAM) [31], [32], [33]. The recall of cancer screening campaign materials was assessed using question items adapted from previous studies evaluating health promotion campaigns [34], [35]. Awareness of campaign materials was assessed through both prompted and unprompted recall questions. The sociodemographic questions were adapted from the 2021 Australian Census [36] and a national survey on the health and well-being of Australian LGBTQIA+ young people [30].

Figure 1. Overview of the process of questionnaire development



Content validity of the questionnaire

An expert panel, comprising representatives from three cancer screening programs involved in the development and implementation of the Screening Saves Lives campaign provided feedback on the first and second versions of the questionnaire. For the first version, feedback predominantly addressed the sociodemographic domain (20/70 comments) and the distal determinant domain (20/70 comments). In the second version, the latter received the most comments (7/29). Common feedback for the first version included adding more response categories (25/70 comments), more question items (8/70 comments), reassessing the relevance of certain items to the survey objectives (7/70 comments), and suggestions on wording (7/70 comments). For the second version, common feedback involved wording suggestions (10/29 comments), relevance to survey objectives (5/29 comments), and the addition of more question items (4/29 comments). This feedback is summarised in Table 3.

The major revision in the sociodemographic section concerned gender and sexuality questions. Beyond the initial variables of gender and sexuality, two more variables – sex recorded at birth and variation of sex characteristics – were updated in the second version. The suggestions for more response categories for sex, gender, and sexuality were implemented to align the survey with standards used by the Australian Bureau of Statistics and health records in Western Australia. This also ensured these terms accurately reflected Australian contexts, such as the absence of compulsory sex assignment at birth. Despite concerns about the relevance of sexuality information to the survey objectives, this question was retained to gain a more comprehensive understanding of the respondents. No additional questions were added for variables such as country of birth, length of stay in Australia, primary language at home, Aboriginal status, and highest educational level. Among these, the question on length of stay was modified from multiple-choice to an open-ended format.

For the section on awareness of the Screening Saves Lives campaign, minor changes were made between the first and second versions. More response categories were added for the question on where respondents encountered campaign materials. An agreement was reached on the specific campaign materials to be used for prompted recall questions in this section. For the campaign diagnostics section, two new question items were introduced: reasons

for the appeal of the campaign materials and suggestions for improvement. More response categories were added for questions about the organisations responsible for cancer screening advertisements.

The brief section querying respondents' contemplations after viewing the campaign materials remained unchanged across all versions of the questionnaire. In the distal determinant section of the first draft, eight additional response categories were added to the question on reasons for not participating in cancer screening programs. The construct validity of the KAP sections was enhanced after the content validity test by including questions about eligibility for screening programs, the number of screening tests completed, compliance with recommended screening schedules, and types of cancer screening tests. The accuracy of technical information was also improved, for example, regarding the recommended schedule for bowel cancer screening and the type of cervical screening test used in Australia.

After the second review by the expert panel, the major changes pertained to wording and construct validity. Terms related to campaign materials, LGBTIQASB+, bowel cancer screening, HIV, diet, and physical activity were rephrased for greater appropriateness and context. Following the second round of content validity tests, significant changes were made to the last four sections, which included the distal determinants and three KAP sections of the three cancer screening programs. The question items in the distal determinant section were made specific to each cancer screening program and integrated into the three KAP sections, eliminating the distal determinant section in the third version of the questionnaire. Furthermore, a potentially judgmental question item about being up-to-date with recommended cancer screening schedules was removed to minimise adverse emotional impact on respondents.

Table 3. Content validity feedback by expert panel

Expert panel review	Socio-demographic questions		Proximal determinants		Intermediate determinants		Distal determinants		KAP - Cervical cancer screening		KAP - Breast cancer screening		KAP - Bowel cancer screening	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Added more response categories	3		3				11	1	3		1		4	
Consistency	4										1			
Construct validity – added more question items	1		1	1			5	1		2		1		
Construct validity – Relevance of the question items to the survey objective	5	1		1			1	3			1			
Forced response/not	1													
Grammar			2											
Other	2													
Questionnaire layout							2							
Questionnaire structure	1							2						
Skip patterns	1													
Terminology	2		1						3					
Typo													1	
Unclear categories										1			1	
Visual aids			2	3										
Wording				1			1		3	3				
Sub-total	20	1	9	6	0	0	20	7	9	6	6	3	4	5
Total		21		15	0	0	27	27	15	15	10	11	11	99

Face validity of the questionnaire

To optimise the usability of the survey instrument, the face validity of the third version of the questionnaire was assessed. As the questionnaire would be administered electronically via an online platform, usability was evaluated in terms of both content and the computer-assisted self-administration mode. As part of this observational study, feedback from 10 to 15 participants in the face-validity test was sought. These participants were requested to complete a test survey and a feedback form, which included checkboxes and free-text response options. A total of 13 participants undertook the face validity test. Quantitative feedback is summarised in Table 4, while qualitative feedback content analysis, based on Forsyth et al.'s problem classification coding scheme [37], is categorised in Table 5.

Table 4. Quantitative feedback in the face validity test of the survey instrument

		n (%)
Clear Instructions	No	6 (46.1)
Further information required for any terms	Yes	4 (30.8)
Question mark icons required for unclear terms	Yes	3 (23.1)
Long questions	Yes	2 (15.4)
Complex or awkward questions	Yes	9 (69.2)
Sensitive questions	Yes	4 (30.8)
Adding more categories of response options	Yes	7 (53.8)
Unclear/ overlapping response categories	Yes	4 (30.8)
Distinguishable survey elements	No	4 (30.8)
Font size	Small	1 (7.7)
	Large	1 (7.7)
	Just right	10 (76.9)
	Missing	1 (7.7)
Cluttered pages	Yes	1 (7.7)
Survey Length	Short	0
	Long	4 (30.8)
	Just right	8 (61.5)
	Missing	1 (7.7)



Table 5. Qualitative feedback in the face validity test of the survey instrument

	Sociodemo-graphic questions	Proximal determinants	Intermediate determinants	KAP – Cervical cancer screening	KAP – Breast cancer screening	KAP – Bowel cancer screening	Prize draw	Overall	Total
Comprehension and communication									
Instructions							3		3
Unclear terms	3	1							4
Prompts for getting help for unclear terms		1							1
Question structure									
Question items: wording	2	1		3					6
Question items: length						1			1
Judgment and evaluation									
Potentially sensitive information	1							1	2
Response structure									
Missing categories	1	1		4					6
Computerised questionnaire administration									
Questionnaire administration		5		5	2	1			13
Questionnaire layout				3	2	1	1	1	8
Questionnaire structure		2							2
Visual aids		4							4
Typo	2								2
Other	1								1
Total	10	15	0	15	4	3	4	2	53

The most frequent qualitative feedback concerned questionnaire administration (13/53 comments), suggesting the inclusion of space for free-text answers and the ability to select multiple answers. Concerns regarding the questionnaire layout (8/53 comments) included suggestions for more ‘next’ buttons in the risk factor questions for the mobile version, adopting a grid style for these questions, and adding a ‘submit’ button on the final survey page.

Specific issues were noted, such as a double-barrelled question “Do you know if you are eligible for cervical cancer screening?” Also, one participant found the response option “It’s hard to get to” unclear. In terms of eligibility for cancer screening, it was recommended to include “I do not have a cervix” as an option for individuals who may not have a cervix at the time of the survey. Suggestions were made to provide a definition for “cancer screening” and clarify terms used in the gender question, as three participants found them unclear. Some participants recommended enlarging the size of campaign materials in the survey, particularly those about eligibility criteria. The instructions in the prize draw section were unclear to three participants, and one

respondent expressed concern about the survey’s potential sensitivity for individuals with negative experiences related to cancer.

After the face validity test, revisions were made to the questionnaire, clarifying terms and instructions, to ensure appropriate administration. In the gender question, “male” and “female” were replaced with “man” and “woman,” respectively, and “non-binary” and “third gender” were separated into distinct response categories. The wording for two sociodemographic items – language spoken at home and highest educational level – was modified. An explanation for “cancer screening” was incorporated. Questions and response options were reworded as advised, for instance, “It’s hard to get to,” was changed to “It’s hard to get to clinics/hospitals.” A new free-text question “Why do they not appeal?” was added to the campaign diagnostics section. The survey was adjusted to allow multiple responses for applicable questions and included text boxes for all free-text answer options.



Finalisation of the questionnaire

The fourth version of the questionnaire was briefly reviewed by the expert panel. Instead of four sets of questions on campaign materials, three sets were included in the final version to reduce participant burden. This was done by combining materials from the third and fourth sets into one question. The final version of the questionnaire is provided in Appendix A.

The questionnaire evolved significantly. The first version comprised eight sections with 43 question items. The second version maintained eight sections but expanded to 53 items. After two rounds of content validity tests, the questionnaire included 66 items across seven sections, with the distal determinant section items restructured into the

three cancer screening sections. Following the face validity test, questionnaire revisions, and expert panel review, the final version comprises 64 items organised into seven sections. In the final questionnaire (Appendix A), participants first provide sociodemographic information, including postcode, age and identification as LGBTIQASB+, which determines survey eligibility. The second section, Proximal Determinants, assesses awareness of campaign materials through both unprompted and prompted recall questions. This is followed by Section 3, Campaign Diagnostics, which queries the appeal of the campaign materials and reasons for their appeal or lack thereof. Section 4, Intermediate Determinants, explores respondents' behavioural intentions resulting from viewing the campaign materials. Sections 5 to 7 include questions on knowledge, awareness and practices related to cervical, breast, and bowel cancer screening.



DEMOGRAPHIC CHARACTERISTICS

04

Demographic characteristics

Age of participants

The age distribution of participants, is shown in Table 6. Most participants were between 25 to 39 years, representing 70% of the total respondents. Notably, only 12% of participants were aged 50 years or older.

Gender identity, sex recorded at birth, sexuality and variation of sex characteristics

As detailed in Table 6, 65.4% (n=283) of survey participants identified as women, 23.8% (n=103) as men, 6.4% (n=28) as non-binary or third gender, and 3.2% (n=14) as gender questioning. Regarding the sex recorded at birth, 72.1% (n=312) reported female, with 27.7% (n=120) reporting male, and only one person preferring not to say. The following gender categories were also generated to enable comparisons within subsequent data: cisgender man (22.9%; n=99), cisgender woman (64.9%; n=281), trans man (0.9%; n=4), trans woman (0.5%; n=2), and non-binary (6.93%; n=30). In terms of sexuality, 18.5% (n=80) identified as lesbian, 10.4% (n=45) as gay, 45.5% (n=197) as bisexual, 4.8% (n=21) as pansexual, 8.1% (n=35) as queer, 4.6% (n=20) as asexual, with 'something different' comprising 23.8% (n=87) of responses. A variation of sex characteristics (intersex status) was reported by 13.2% (n=57) of participants.

Country of birth and language spoken at home

Table 6 presents the data on the country of birth and the main language spoken at home. Most participants were born in Australia, constituting 81.3% (n=352) of the total participants, followed by 6.0% (n=26) born in the United Kingdom (UK) and 3.5% (n=15) born in New Zealand (NZ). English is the language predominantly spoken at home by almost all participants (98.2%; n=425).



Aboriginal and Torres Strait Islander origin

Regarding Aboriginal and Torres Strait Islander origin, 6.2% (n=27) of the participants identified as Aboriginal, 0.2% (n=1) as Torres Strait Islander, and 0.5% (n=2) identified as both Aboriginal and Torres Strait Islander.

Educational qualifications

The educational qualifications of the participants, as summarised in Table 6, indicate that the highest level of education completed varied. A significant proportion, 45.9% (n=199), had completed an undergraduate university degree or higher. In contrast, 28.6% (n=124) have completed a vocational training or diploma, and 14.1% (n=61) have finished high school as their highest educational attainment.

Table 6. Demographic characteristics of the sample

	n (%)
Postcode	
Metropolitan area	386 (89.1)
Regional area	45 (10.4)
Missing	2 (0.5)
Age	
25 to 29	130 (30.0)
30 to 39	173 (40.0)
40 to 49	78 (18.0)
50 to 59	42 (9.7)
60 to 69	9 (2.1)
70 to 74	1 (0.2)
Gender	
Man	103 (23.8)
Woman	283 (65.4)
Non-binary	24 (5.5)
Third gender	4 (0.9)
Gender questioning/unsure	14 (3.2)
Another term	3 (0.7)
I prefer not to say	2 (0.5)
Sex recorded at birth	
Male	120 (27.7)
Female	312 (72.1)
Another term	-
I prefer not to say	1 (0.2)
Variation of sex characteristics	
Yes	57 (13.2)
No	318 (73.4)
I don't know	48 (11.1)
I prefer not to say	10 (2.3)
Sexuality ^a	
Lesbian	80 (18.5)
Gay	45 (10.4)
Bisexual	197 (45.5)
Pansexual	21 (4.8)
Queer	35 (8.1)
Asexual	20 (4.6)
Homosexual	27 (6.2)
Heterosexual	17 (3.9)
Prefer not to have a label	41 (9.5)
Another term	2 (0.5)
I prefer not to say	16 (3.7)

Table 6. Demographic characteristics of the sample

	n (%)
Country of Birth	
Australia	352 (81.3)
United Kingdom	26 (6.0)
New Zealand	15 (3.5)
India	6 (1.4)
South Africa	1 (0.2)
Philippines	8 (1.8)
Somewhere else	25 (5.8)
Main language spoken at home in Australia	
English	425 (98.2)
Something else	8 (1.8)
Aboriginal and/or Torres Strait Islander	
No	403 (93.1)
Yes, Aboriginal	27 (6.2)
Yes, Torres Strait Islander	1 (0.2)
Yes, both Aboriginal and Torres Strait Islander	2 (0.5)
Highest level of educational qualification	
Primary school	1 (0.2)
Year 10 or equivalent	47 (10.9)
Year 12 or equivalent	61 (14.1)
Trade Certificate/Diploma	124 (28.6)
Undergraduate degree	133 (30.7)
Postgraduate degree	66 (15.2)
Something else	1 (0.2)
Notes: n = 433, unless otherwise specified	
^a multiple-answer options	



CAMPAIGN AWARENESS

05

Campaign awareness

Unprompted recall of any cancer screening campaigns

Cancer screening advertising in past 12 months

In relation to unprompted recall of cancer screening campaigns, over half (56.1%;n=243) of participants recalled seeing such advertising in the past 12 months. Table 7 details the locations where participants reported seeing or hearing cancer screening advertisements. The most common locations were television/TV streaming (52.7%; n=128), Facebook (28.8%; n=70), healthcare practice (26.7%; n=65), public bathrooms (21.0%;n=51), YouTube (18.1%; n=44), and Instagram (14.8%; n=36).

Table 7. Unprompted recall of any cancer screening campaigns

	n (%)
Having seen any advertising about cancer screening	
Yes	243 (56.1)
No	145 (33.5)
Unsure	45 (10.4)
Description of advertisement of cancer screening respondents have seen: Types of cancers (n=139) ^a	
Cervical	23 (16.5)
Breast	43 (30.9)
Bowel	69 (49.6)
Other	31 (22.3)
Sources/ media of advertisements (n=243) ^b	
Television/TV Streaming	128 (52.7)
Facebook	70 (28.8)
YouTube	44 (18.1)
Instagram	36 (14.8)
Twitter/X	10 (4.1)
Radio	43 (17.7)
Internet publication	25 (10.3)
Public bathroom	51 (21.0)
Community event (Pride Fair Day)	21 (8.6)
Healthcare practice	65 (26.7)
Somewhere else (please specify)	14 (5.8)
Don't know/ Unsure	4 (1.6)

Notes: n = 433, unless otherwise specified.

^a One respondent mentioned one or more types of cancers.

^b multiple-answer options.

The association between unprompted recall of any cancer screening advertisements and their location by sexuality is detailed in Table 8 and by gender and variation of sex characteristics in Table 9. A higher proportion of respondents with sex variation (70.2%; n=40) has seen any cancer screening advertisements than those without sex variation (54.0%; n=203), and the difference is statistically significant ($p < 0.05$). Due to sexuality having a multiple-answer option no inferential statistics are reported.



Table 8. Unprompted recall of any cancer screening advertisements and their location by sexuality

Sexuality (n=433) ^a	Having seen any advertisements about cancer screening n (%)	Where the cancer screening advertisements were seen (n=243) n (%) ^b									
		Television	Facebook	YouTube	Instagram	Twitter/X	Radio	Internet publication	Public bathroom	Community event	Healthcare practice
Lesbian (n=80)	47 (58.8)	26 (55.3)	17 (36.2)	10 (21.3)	3 (6.4)	1 (2.1)	9 (19.1)	5 (10.6)	9 (19.1)	3 (6.4)	14 (29.8)
Gay (n=45)	32 (71.1)	16 (50.0)	10 (31.3)	6 (18.8)	6 (18.8)	1 (3.1)	1 (3.1)	3v (9.4)	3 (9.4)	3 (9.4)	4 (12.5)
Bisexual (n=197)	107 (54.3)	55 (51.4)	24 (22.4)	12 (11.2)	10 (9.3)	2 (1.9)	19 (17.8)	11 (10.3)	24 (22.4)	6 (5.6)	33 (30.8)
Pansexual (n=21)	12 (57.1)	9 (75.0)	6 (50.0)	2 (16.7)	3 (25.0)	1 (8.3)	1 (8.3)	1 (8.3)	7 (58.3)	1 (8.3)	3 (25.0)
Queer (n=35)	21 (60.0)	10 (47.6)	7 (33.3)	4 (19.0)	3 (14.3)	-	1 (4.8)	1 (4.8)	7 (33.3)	3 (14.3)	8 (38.1)
Asexual (n=20)	12 (60.0)	8 (66.7)	1 (8.3)	2 (16.7)	-	-	1 (8.3)	1 (8.3)	1 (8.3)	-	3 (25.0)
Something different (n=100)	53 (53.0)	28 (52.8)	18 (34.0)	15 (28.3)	20 (37.7)	5 (9.4)	11 (20.8)	6 (11.3)	10 (18.9)	7 (13.2)	12 (22.6)

Notes: Multiple-answer option, so no inferential statistics is reported.

^a Multiple-answer option so sum is greater than n.

^b Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

Table 9. Unprompted recall of any cancer screening advertisements and their location by gender and variation of sex characteristics

Having seen any advertisements about cancer screening n (%)	Where the cancer screening advertisements were seen (n=243) n (%) ^a										
	Television	Facebook	YouTube	Instagram	Twitter/X	Radio	Internet publication	Public bathroom	Community event	Healthcare practice	
Gender identity (n=416)											
Cisgender man (n=99)	61 (61.6)	36 (59.0)	13 (21.3)	12 (19.7)	7 (11.5)	3 (4.9)	11 (18.0)	3 (4.9)	7 (11.5)*	2 (3.3)**	9 (14.8)
Cisgender woman (n=281)	149 (53.0)	79 (53.0)	49 (32.9)	24 (16.1)	26 (17.4)	6 (4.0)	27 (18.1)	18 (12.1)	33 (22.1)*	16 (10.7)**	48 (32.2)
Transman (n=4)	2 (50.0)	1 (50.0)	1 (50.0)	1 (50.0)	-	-	-	1 (50.0)*	1 (50.0)**	-	1 (50.0)
Transwoman (n=2)	1 (50.0)	1 (100.0)	1 (100.0)	-	1 (100.0)	1 (100.0)	-	1 (100.0)*	1 (100.0)**	-	-
Non-binary (n=30)	18 (60.0)	6 (33.3)	3 (16.7)	3 (16.7)	1 (5.6)	-	2 (11.1)	2 (11.1)	6 (33.3)*	1 (5.6)**	3 (16.7)
Intersex status (n=433)											
Yes (n=57)	40 (70.2)*	21 (52.5)	18 (45.0)	17 (42.5)***	11 (27.5)*	6 (15.0)***	13 (32.5)*	7 (17.5)	12 (30.0)	7 (17.5)*	6 (15.0)
No (n=376)	203 (54.0)*	107 (52.7)	52 (25.6)	27 (13.3)***	25 (12.3)*	4 (2.0)***	30 (14.8)*	18 (8.9)	39 (19.2)	14 (6.9)*	59 (29.1)

Notes: Pearson chi-square test at p value < .05; *p < .05, **p < .005, ***p < 0.001.

^a Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

Of those who recalled such advertising, over half (57.2%;n=139) noted a specific cancer relevant to Screening Saves Lives in their description: bowel (49.6%; n=69), breast (30.9%; n=43) and cervical (16.5%; n=23). Respondents frequently mentioned advertisements for “bowel cancer screening,” for example, “an ad on TV with about 4 people talking about changes in your toilet habits”. Respondents also often noting the distribution of “bowel cancer screening kits” for “over 50s” and “over 60s.” Many recalled advertisements related to “breast cancer,” citing “TV advertisements” and “posters” as well as campaigns on “Facebook and Instagram.” For cervical cancer, participants mentioned receiving reminders for “Pap smear” tests.

Around one in five participants mentioned other cancers (22.3%;n=31). Of those,16.5% (n=23) referred to skin cancer, with mentions of advertisements for “sun safety practices” and “mole checks”, such as “I can’t remember the specific campaign, but it was to do with skin checks to check for potential melanomas.” Some responses also referred to risk behaviours such as smoking, for example “I saw an ad campaign for anti-smoking that included info about getting a cancer screening” and “I’ve seen TV adverts of people with skin cancer and also stop smoking.”

Television emerged as a key medium, with participants recalling advertisements on specific channels like “Channel 7” and during certain programs like the “Channel 9 news.” Social media platforms, including “Instagram by an influencer,” were noted for spreading messages about cancer screening. Other media such as “radio,” “billboards,” and “pamphlets in doctors’ surgeries” were highlighted, for example “It was for bowel cancer testing, a printed sign in my doctor’s office”.

Respondents described a variety of ad strategies, from “emotional and personal stories” to “factual and informative campaigns.” Use of social media influencers was mentioned, “It was on Instagram by an influencer to get your bowel checked.”

Advertisements were memorable for emphasising the importance of “early detection” and encouraging regular screenings with messages like “It doesn’t take much to get tested, it’s an easy process.” The impact of advertising was evident, with statements like “Made me aware” of screening needs and “Reminding people to get checked.” However, some respondents noted a lack of engagement, with comments like “I can’t remember the specific campaign.”

Gender-focused campaigns were identified, with prostate cancer and breast cancer screenings perceived as targeted toward “men” and “women” respectively. Age-specific targeting was apparent, with mentions of “Bowel tests for 50 years and above” and:

“I think it was for men reminding them if they are over 40 to get a prostate check done. Luckily I am 38 lol.”

There were also mentions of efforts to be inclusive, such as “LGBTQ+ friendly advertising,” indicating awareness of a move towards more inclusive health campaigns. The accessibility of screening options was often highlighted, with emphasis on “free or mail-in options” for tests.

Prompted recall of Screening Saves Lives Campaign material

Screening Saves Lives Campaign #1 (Speak to your GP)



When prompted about the Screening Saves Lives Campaign material ‘Speak to your GP’ (campaign material #1), over one-third (37.6 %;n=163) of participants recognised this campaign material. Table 10, shows reported locations where materials were seen. More than half of participants had seen materials at the GP clinic (59.5%; n=97). Other reported locations were social media (42.3%; n=69), online (27%; n=44) and LGBTQIASB+ event (19.0%; n=31).

Table 10. Prompted recall of SSL Campaign material #1 (Speak to your GP)

	n (%)
Having seen campaign material	
Yes	163 (37.6)
No	229 (52.9)
Unsure	41 (9.5)
Locations of the campaign material (n=163) ^a	
GP Clinic	97 (59.5)
Social Media	69 (42.3)
Online	44 (27.0)
LGBTIQASB+ Event	31 (19.0)
Somewhere else	2 (1.2)
Don't know/Unsure	7 (4.3)
Main message of the campaign material (themes) ^b	
Campaign slogan	28 (6.5)
Benefits of cancer screening	175 (40.4)
Encouragement to get screened	193 (44.5)
LGBTIQASB+ targeted/ inclusive	70 (16.2)
Everyone	53 (12.2)
Family	18 (4.1)
GP	51 (11.8)
Cancer	11 (2.5)
Cancer screening	27 (6.2)
Bowel cancer	33 (7.6)
Breast cancer	14 (3.2)
Cervical cancer	10 (2.3)
Women	2 (0.5)
Caucasians or Aboriginal	2 (0.5)
Other	4 (0.9)
Irrelevant answers	31 (7.1)

Notes: n = 433, unless otherwise specified.

^a multiple-answer options.

^b More than one theme is included in the response of each respondent.

The association between prompted recall of campaign material #1 and location by sexuality is detailed in Table 11 and by gender and variation of sex characteristics in Table 12. More intersex respondents (70.2%; n=40) have seen this material than non-intersex respondents (32.7%; n=123) ($p < 0.001$). The materials were seen at LGBTIQASB+ events by 30.0% (n=12) of intersex people and 15.4% (n=19) of non-intersex people ($p < 0.05$). Due to sexuality having a multiple-answer option no inferential statistics are reported.



Table 11. Prompted recall of SSL Campaign material #1 (Speak to your GP) by sexuality

Sexuality (n=433) ^a	Having seen campaign material #1 n (%)	Where the campaign material #1 was seen (n=163) n (%) ^a			
		GP clinic	Social media	Online	LGBTIQASB+ event
Lesbian (n=80)	35 (43.8)	23 (65.7)	14 (40.0)	10 (28.6)	6 (17.1)
Gay (n=45)	23 (51.1)	12 (52.2)	12 (52.2)	3 (13.0)	7 (30.4)
Bisexual (n=197)	66 (33.5)	42 (63.6)	24 (36.4)	20 (30.3)	12 (18.2)
Pansexual (n=21)	8 (38.1)	4 (50.0)	4 (50.0)	2 (25.0)	5 (62.5)
Queer (n=35)	16 (45.7)	8 (50.0)	10 (62.5)	2 (12.5)	6 (37.5)
Asexual (n=20)	7 (35.0)	5 (71.4)	2 (28.6)	-	-
Something different (n=100)	36 (36.0)	18 (50.0)	16 (44.4)	14 (38.9)	4 (11.1)

Notes: Multiple-answer option, so no inferential statistics is reported.

^a Multiple-answer option so sum is greater than n.

^b Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

Table 12. Prompted recall of SSL Campaign material #1 (Speak to your GP) by gender and variation of sex characteristics

Sexuality (n=433) ^a	Having seen campaign material #1 n (%)	Where the campaign material #1 was seen (n=163) n (%) ^a			
		GP clinic	Social media	Online	LGBTIQASB+ event
Gender identity (n=416)					
Cisgender man (n=99)	40 (40.4)	23 (57.5)	15 (37.5)	10 (25.0)	8 (20.0)
Cisgender woman (n=281)	100 (35.6)	62 (62.0)	43 (43.0)	30 (30.0)	15 (15.0)
Transman (n=4)	3 (75.0)	3 (100.0)	2 (66.7)	-	1 (33.3)
Transwoman (n=2)	1 (50.0)	-	1 (100.0)	1 (100.0)	1 (100.0)
Non-binary (n=30)	12 (40.0)	5 (41.7)	6 (50.0)	2 (16.7)	3 (25.0)
Intersex status (n=433)					
Yes (n=57)	40 (70.2)***	19 (47.5)	24 (60.0)*	16 (40.0)*	12 (30.0)*
No (n=376)	123 (32.7)***	78 (63.4)	45 (36.6)*	28 (22.8)*	19 (15.4)*

Notes: Pearson chi-square test at p value < .05; *p < .05, **p < .005, ***p < 0.001.

^a Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

Each of the main messages described by the participants (n=433) for campaign material #1 included one to six themes. The most commonly reported themes were ‘encouragement to get screened’ (44.5%; n=193) and ‘benefits of cancer screening’ (40.4%; n=175). Among the respondents who identified a message about the benefits of cancer screening, 16% (n=28) cited the slogan of the campaign (‘Screening Saves Lives’). Comments related to these themes included:

“Applicable to queer community; you’re safe to ask about screening.”

“It’s good, it’s not all doom and gloom, it’s reminding you that prevention is the best cure, and to be safe and check, at worst you will be relieved.”

“That screening for cancer could be life saving, and that you can access information on doing so through your GP.”

“Proactive screening even without symptoms can help detect cancer, allowing treatment to commence prior to symptoms - at this time it can sometimes be too late.”

“No matter what your background, cancer can affect anyone so it’s safest to get checked.”

The images of people included in the campaign material were interpreted as ‘LGBTIQASB+ community’ by 16.1% (n=70), as ‘everyone’ (12.2%; n=53), and as ‘family or loved ones’ (4.1%; n=18) of participants. Comments included:

“That there are some cancers that are especially prevalent, undiagnosed or under-aware of among LGBTIQ+ people, and this ad is drawing attention to that and reminding LGBTIQ+ people to have themselves checked out.”

“That anyone, regardless of gender identity or sexuality can be impacted by cancer, so screening is important for early detection and possible prevention.”

“I can imagine bowel cancer is more prevalent in queer couples due to anal sex. This could cause large cases of bowel cancer in LGBTIQ populations and therefore bowel screen advertisement tailored to us.”

“Cancer screening is important for everyone, sexual orientation and gender diverse lives are important and worth saving, and cancer affects everyone/ our loved ones and the people who care about us. So looking after ourselves is important in looking after them.”

Reference to a ‘GP’ was mentioned in 11.8% (n=51) of responses, for example “screening can be a life saver and people are encouraged to with their GP about screening for cancer” and “Talk to your GP about screening.”

The respondents who specified a type of cancer in the message most frequently reported bowel cancer (7.6%; n=33), breast cancer (3.2%; n=14), and cervical cancer (2.3%; n=10).⁶

Although the number was small, two respondents reported the main message was for women, commenting “Women of all ages can benefit from screening” and “It’s important for all females to get a cervical screening”.

Two respondents highlighted the lack of Aboriginal people or non-Caucasian people in the campaign material:

“A positive message about the importance of screening for cancer. Diversity seems to be a focus, but the cast seems relatively white across the board. Indigenous inclusion seems important and is seemingly absent here.”

“Queer people are white? Why does this LGBTQIA+ representation also feel so heteronormative? I think the pictures of people detracts from the message and others the information it is presenting.”

⁶ This may be due to the position and font size of the three logos in the campaign material.

**Screening Saves Lives Campaign #2:
Screening eligibility criteria**



In relation to the Screening Saves Lives Campaign material ‘Screening eligibility criteria’ (campaign material #2), 30.3% (n=131) of participants indicated that they had seen it before. Table 13 illustrates the various locations where this material was observed. Around two-thirds of participants reported seeing materials at a GP clinic (65.6%; n=86). Other locations reported were social media (41.2%; n=54), online (29.9%; n=38) and LGBTIQASB+ event (19.8%; n=26).

Table 13. Prompted recall of SSL Campaign material #2 (Screening eligibility criteria)

	n (%)
Having seen campaign material	
Yes	131 (30.3)
No	263 (60.7)
Unsure	39 (9.0)
Locations of the campaign material (n=163) ^a	
GP Clinic	86 (65.6)
Social Media	54 (41.2)
Online	38 (29.9)
LGBTIQASB+ Event	26 (19.8)
Somewhere else	1 (0.8)
Don't know/Unsure	2 (1.5)
Main message of the campaign material (themes) ^b	
Eligibility	209 (48.3)
Campaign slogan	6 (1.4)
Benefits of cancer screening	66 (15.2)
Encouragement to get screened	110 (25.4)
LGBTIQASB+ targeted/ inclusive	27 (6.2)
Everyone	42 (9.7)
Family	3 (0.7)
GP	36 (8.3)
Cancer	3 (0.7)
Cancer screening	31 (7.1)
Bowel cancer	28 (6.5)
Breast cancer	32 (7.4)
Cervical cancer	26 (6.0)
Women	4 (0.9)
Caucasians or Aboriginal	1 (0.2)
Old/ Young	6 (1.4)
Other	1 (0.2)
Irrelevant answers	39 (9.0)

Notes: n = 433, unless otherwise specified.

^a multiple-answer options.

^b More than one theme is included in the response of each respondent.

The association between prompted recall of campaign material #2 and their location by sexuality is detailed in Table 14 and by gender and variation of sex characteristics in Table 15. Similarly to campaign material #1, campaign material #2 were more commonly noticed by respondents with self-reported variation of sex characteristics (63.2%; n=36) than those without (25.3%; n=95) (p < 0.001). Due to sexuality having a multiple-answer option no inferential statistics are reported.

Table 14. Prompted recall of SSL Campaign material #2 (Screening eligibility criteria) by sexuality

Sexuality (n=433) ^a	Having seen campaign material #1 n (%)	Where the campaign material #1 was seen (n=131) n (%) ^a			
		GP clinic	Social media	Online	LGBTIQASB+ event
Lesbian (n=80)	27 (33.8)	19 (70.4)	12 (44.4)	8 (29.6)	6 (22.2)
Gay (n=45)	12 (26.7)	5 (41.7)	7 (58.3)	3 (25.0)	6 (50.0)
Bisexual (n=197)	57 (28.9)	41 (71.9)	16 (28.1)	18 (31.6)	8 (14.0)
Pansexual (n=21)	5 (23.8)	3 (60.0)	1 (20.0)	1 (20.0)	2 (40.0)
Queer (n=35)	10 (28.6)	6 (60.0)	6 (60.0)	1 (10.0)	6 (60.0)
Asexual (n=20)	3 (15.0)	3 (100.0)	-	-	-
Something different (n=100)	30 (30.0)	17 (56.7)	15 (50.0)	12 (40.0)	3 (10.0)

Notes: Multiple-answer option, so no inferential statistics is reported.

^a Multiple-answer option so sum is greater than n.

^b Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

Campaign material #2 was more commonly seen at LGBTIQASB+ events by trans men (100%; n=1) and trans women (100%; n=1) than cisgender men (26.7%; n=8) and cisgender women (13.3%; n=11).⁷

Table 15. Prompted recall of SSL Campaign material #2 (Screening eligibility criteria) by gender and variation of sex characteristics

Sexuality (n=433) ^a	Having seen campaign material #1 n (%)	Where the campaign material #1 was seen (n=131) n (%) ^a			
		GP clinic	Social media	Online	LGBTIQASB+ event
Gender identity (n=416)					
Cisgender man (n=99)	30 (30.3)	16 (53.3)	11 (36.7)	6 (20.0)	8 (26.7)*
Cisgender woman (n=281)	83 (29.5)	58 (69.9)	34 (41.0)	27 (32.5)	11 (13.3)*
Transman (n=4)	1 (25.0)	1 (100.0)	1 (100.0)	1 (100.0)	1 (100.0)*
Transwoman (n=2)	1 (50.0)	-	1 (100.0)	1 (100.0)	1 (100.0)*
Non-binary (n=30)	11 (36.7)	6 (54.5)	4 (36.4)	2 (18.2)	3 (27.3)*
Intersex status (n=433)					
Yes (n=57)	36 (63.2)***	17 (47.2)*	20 (55.6)*	14 (38.9)	11 (30.6)
No (n=376)	95 (25.3)***	69 (72.6)*	34 (35.8)*	24 (25.3)	15 (15.8)

Notes: Pearson chi-square test at p value < .05; *p < .05, **p < .005, ***p < 0.001.

^a Note the denominator in these columns is the subset of participants who have seen the advertisements (Column 2).

⁷ Although these differences are statistically significant (p < 0.05), this result should be interpreted with caution due to the small number of the total number of trans men (n=4) and trans women (n=2) in this study.

Table 13 presents participant perceptions of the main campaign messages. Nearly half of the respondents (48.3%; n=209) correctly reported eligibility as the main message of this campaign material, for example, “It tells you who is eligible for different screening of cancer treatments.” Other comments included:

“It’s inclusive in language to the trans community - for example by stating that if you were assigned female at birth/have a cervix but now identify as male it is still crucial to get screened – and it implies that GPs in WA will be inclusive and helpful in response.”

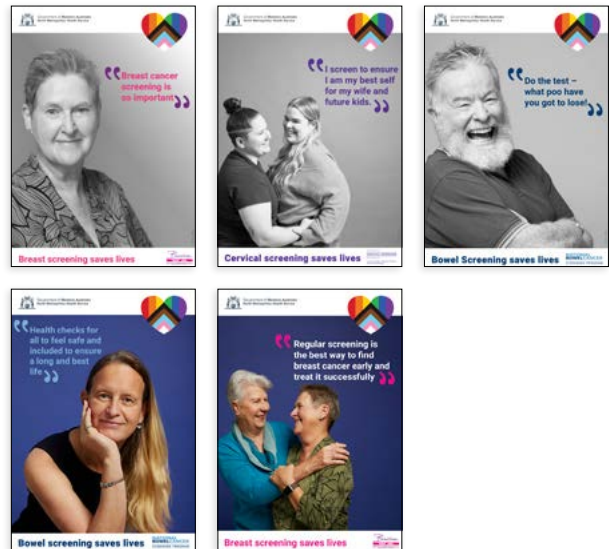
“Who can access proactive screening, reinforcing that screening even without symptoms can lead to early diagnosis & access to treatment.”

A quarter of the respondents (25.4%; n=110) interpreted the materials as an encouragement to get screened, for example:

“The main messages of this campaign material are about cancer screenings for different types of cancer, including bowel, breast, and cervical cancer. It emphasises the importance of early detection and highlights the benefits of screening, as early detection can save lives.”

Respondents who specifically mentioned the type of cancer in their response reported breast cancer (7.3%), bowel cancer (6.5%), and cervical cancer (6.0%).

Screening Saves Lives Campaign #3 (Community champions)



When prompted, over one-quarter of participants (27.3%; n=118) reported recognising campaign material #3 featuring ‘Community champions’ from Screening Saves Lives. The locations where campaign material #3 was observed, as shown in Table 16, were GP clinic (34.7%; n=41), social media (28.8%; n=34), online (18.6%; n=22) and LGBTIQASB+ event (14.4%; n=17).



Table 16. Prompted recall of SSL Campaign material #3 (Community champions)

	n (%)
Having seen campaign material	
Yes	118 (27.3)
No	271 (62.6)
Unsure	44 (10.2)
Locations of the campaign material (n=118) ^a	
GP Clinic	41 (34.7)
Social Media	34 (28.8)
Online	22 (18.6)
LGBTIQASB+ Event	17 (14.4)
Somewhere else	2 (1.7)
Don't know/Unsure	2 (1.7)
Main message of the campaign material (themes) ^b	
Campaign slogan	29 (6.7)
Benefits of cancer screening	252 (58.2)
Encouragement to get screened	125 (28.9)
LGBTIQASB+ targeted/ inclusive	31 (7.1)
Everyone	45 (10.4)
Family	19 (4.4)
GP	3 (0.7)
Cancer	3 (0.7)
Cancer screening	19 (4.4)
Bowel cancer	11 (2.5)
Breast cancer	38 (8.8)
Cervical cancer	8 (1.8)
Women	3 (0.7)
Caucasians or Aboriginal	-
Old/ Young	3 (0.7)
Other	5 (1.1)
Irrelevant answers	40 (9.2)

Notes: n = 433, unless otherwise specified.

^a multiple-answer options.

^b More than one theme is included in the response of each respondent.

The association between prompted recall of campaign material #3 and their location by sexuality is detailed in Table 17 and by gender and variation of sex characteristics in Table 18. Campaign material #3 was reported to have been seen by half of survey respondents who reported intersex variation (52.6%; n=30) and a nearly a quarter of those who did not report sex variation (23.4%; n=88). This proportion difference is statistically significant ($p < 0.001$). Due to sexuality having a multiple-answer option no inferential statistics are reported.



Table 17. Prompted recall of SSL Campaign material #3 (Community champions) by sexuality

Sexuality (n=433)	Having seen campaign material #3 n (%)	Where the campaign material #1 was seen (n=118) n (%)					N (denominators _ where)
		GP clinic	Social media	Online	LGBTIQASB+ event		
Lesbian (n=80)	23 (28.7)	8 (34.8)	6 (26.1)	2 (8.7)	5 (21.7)	23	
Gay (n=45)	8 (38.1)	2 (15.4)	4 (30.8)	2 (15.4)	4 (30.8)	13	
Bisexual (n=197)	53 (26.9)	25 (47.2)	10 (18.9)	11 (20.8)	5 (9.4)	53	
Pansexual (n=21)	5 (23.8)	2 (25.0)	3 (37.5)	2 (25.0)	1 (12.5)	8	
Queer (n=35)	7 (20.0)	2 (28.6)	1 (14.3)	-	4 (57.1)	7	
Asexual (n=20)	3 (15.0)	2 (66.7)	1 (33.3)	-	-	3	
Something different (n=100)	27 (27.0)	7 (25.9)	10 (37.0)	6 (22.2)	2 (7.4)	27	

Notes: Multiple-answer option, so no inferential statistics is reported.

Table 18. Prompted recall of SSL Campaign material #3 (Community champions) by gender and variation of sex characteristics

Sexuality (n=433)	Having seen campaign material #3 n (%)	Where the campaign material #1 was seen (n=118) n (%) ^a					N (denominators _ where)
		GP clinic	Social media	Online	LGBTIQASB+ event		
Gender identity (n=416)							
Cisgender man (n=99)	30 (30.3)	4 (13.3)	13 (43.3)	7 (23.3)	5 (16.7)	30	
Cisgender woman (n=281)	72 (25.6)	30 (41.7)	18 (25.0)	12 (16.7)	9 (12.5)	72	
Transman (n=4)	1 (25.0)	1 (100.0)	-	-	-	1	
Transwoman (n=2)	1 (50.0)	-	1 (100.0)	-	-	1	
Non-binary (n=30)	9 (30.0)	4 (44.4)	2 (22.2)	2 (22.2)	1 (11.1)	9	
Intersex status (n=433)							
Yes (n=57)	30 (52.6)***	9 (30.0)	9 (30.0)	6 (20.0)	6 (20.0)	30	
No (n=376)	88 (23.4)***	32 (36.4)	25 (28.4)	16 (18.2)	11 (12.5)	88	

Notes: Pearson chi-square test at p value < .05; *p < .05, **p < .005, ***p <0.001.

The main messages conveyed by campaign material #3, as reported by respondents, are presented in Table 16. More than half of the respondents (58.2%; n=252) reported the message as relating to the importance and benefits of cancer screening. More than a quarter (28.9%; n=125) interpreted the message of the materials as encouraging people to undergo cancer screening. Breast cancer was mentioned specifically in 8.8% (n=38) of responses, while bowel and cervical cancers were mentioned by 2.5%

(n=11) and 1.8% (n=8) respectively.⁸ The images of multiple people were seen as representing family by 4.3% (n=19) respondents.

⁸ This finding may also suggest that some respondents only looked at the first image.

The overarching theme in the commentary from participants was the lifesaving potential of early cancer detection, emphasised by numerous respondents. Phrases like “screening saves lives,” “early detection is completely essential,” and “regular screening can save your life” recur throughout, underscoring the perceived criticality of cancer screening.

A significant number of responses highlight inclusivity and representation. Statements such as “It doesn’t matter who you are everyone old young gay lesbian should get checked” and “That people similar to myself have gotten screening already” indicate a recognition of the universal need for cancer screening. This inclusivity is further emphasised by responses like “everyone should be making sure they are doing what they can to help see the signs of diseases” and “Everyone needs to check.” One respondent stated:

“Without the queer relationships, the individual photos look a bit out of place with the pride flag! But as a queer person these ads make me consider screening for myself because it makes it feel more applicable and inclusive.”

The responses also reflect a personal connection and sense of responsibility towards loved ones. Phrases like “Not only you can save your life but also save other people as well and to be there for your loved ones” and “If you catch cancer early it can save your life” illustrate this sentiment. Additionally, the importance of regular health checks for peace of mind and proactive health management is echoed in responses such as “Health checks for all to feel safe and included to ensure a long and best life” and “timely health check-ups may help catching the cancer before it goes worse.”

Interestingly, a few responses indicated uncertainty or a lack of specific knowledge, as seen in comments like “Not sure” and “Don’t know,” and one response compared this material to the previous saying “I feel like these are less clear I’m not sure.”

Screening Saves Lives Campaign diagnostics

Appeal of campaign material

Most participants reported that the Screening Saves Lives Campaign material was appealing, responding either of respondents stating ‘very much’ (44.8%; n=194) or ‘somewhat’ (36.7%;n=159). The reasons given for the appeal are shown in Table 19. Almost three-quarters of respondents (72.2%; n=255) found it easy to understand, and a majority noted its colourful design (67.6%; n=239) and engaging content (64.9%; 229). Over half of the respondents (53.3%; n=188) appreciated the representativeness of the material and 42.5% (n=150) reported its happy/upbeat tone.

Table 19. Screening Saves Lives campaign appeal and responsibility

	n (%)
Appealing campaign materials	
Very much	194 (44.8)
Somewhat	159 (36.7)
Neutral	55 (12.7)
Not much	16 (3.7)
Not at all	9 (2.1)
Reasons why the campaign materials are appealing (n=353) ^a	
Colourful	239 (67.7)
Engaging	229 (64.9)
Happy/ Upbeat	150 (42.5)
Representative	188 (53.3)
Easy to understand	255 (72.2)
Provide links to more information	90 (25.5)
Other	6 (1.7)

Notes: n = 433, unless otherwise specified.
^a multiple-answer options.

Table 20. Perspectives of campaign material

	Agree n (%)	Disagree n (%)	Don't know/ Unsure n (%)
They are relevant to me.	358 (82.7)	40 (9.2)	35 (8.1)
They told me something new.	286 (66.1)	103 (23.8)	44 (10.2)
They are believable.	401 (92.6)	10 (2.3)	22 (5.1)
They were easy to understand.	404 (93.3)	20 (4.6)	9 (2.1)
They make me want to undertake cancer screening.	320 (73.9)	47 (10.9)	66 (15.2)
They make me want to find out more information.	330 (76.2)	54 (12.5)	49 (11.3)
They stick in my mind.	314 (72.5)	72 (16.6)	47 (10.9)
They prompt me to take action.	302 (63.7)	64 (14.8)	67 (15.5)
They represent LGBTIQASB+ people in my community.	366 (84.5)	24 (5.5)	43 (9.9)
They would appeal to LGBTIQASB+ people in my community.	340 (78.5)	32 (7.4)	61 (14.1)
I would talk about them with LGBTIQASB+ friends.	289 (66.7)	72 (16.6)	72 (16.6)

Only 5.9% (n=25) combined said 'not much' or 'not at all' when asked if the materials were appealing. Limited commentary was provided (n=7), but responses were categorised into two key themes. Some respondents did not like the design aesthetic (n=3) and others preferred non-LGBTIQASB+ specific targeting (n=3), for example:

“A bit too corporate / stiff. Sometimes I find LGBTQIA+ advertisements that are too “rainbow” isolating. It makes me feel like they were created by straight people with assumptions about the LGBTQIA+ community. It can also make me question my queerness and feels isolating and doesn’t always resonate. Advertisements with subtle visibility and inclusive language always speak to me more. Don’t get me wrong, I am proud of our rainbow community but there is more to our identity than our sexuality.”

“I don’t tend to like things specifically targeted at LGBTQIA+ it feels isolating to constantly be made to feel other and different to me. I prefer to just be included in a normal campaign with representation which isn’t a statement.”

Perspectives of campaign material

Participants provided their perspectives on campaign material in relation to agreement with specific statements. These results are detailed in Table 20. The highest level of agreement was seen in relation to materials being easy to understand (93.3%; n=404) and believable (92.6%; n=401). There was also strong agreement that the materials represented LGBTIQASB+ people (84.5%; n=366), were relevant (82.7%; n=358) and would appeal to LGBTIQASB+ people in their community (78.5%; n=340). Approximately three-quarters (76.2%; n=330) of respondents agreed that the materials make them want to find out more information, with two-thirds (66.1%; n=286) reporting that the campaign told them something new and 63.7% (n=302) that it would prompt them to act.

Responsibility for developing Screening Saves Lives

Participants' perceptions of who is responsible for developing the campaign material varied, depicted in Table 21. Over half attributed responsibility to the WA Department of Health (56.6%; n=245), Cancer Screening Programs (55.2%; n=239) and Cancer Council WA (55.0%; n=238). This was closely followed by the LGBTIQASB+ community itself (43%; n=186), then Australian Government Department of Health and Aged Care (28.2%; n=122) and Pride WA (26.3%; n=114).

Table 21. Responsibility for developing Screening Saves Lives

	n (%)
Responsible organisations/ communities of the cancer screening messages ^a	
WA Department of Health	245 (56.6)
Australian Government Department of Health and Aged Care	122 (28.2)
Cancer Screening Programs	239 (55.2)
Cancer Council WA	238 (55.0)
LGBTIQASB+ community	186 (43.0)
Pride WA	114 (26.3)
Living Proud	51 (11.8)
WAAC	34 (7.9)
Don't know/ Unsure	35 (8.1)
Missing	1 (0.2)

Notes: n = 433, unless otherwise specified.
^a multiple-answer options.

Prompted to take action

A majority of respondents (70.0%; n=303) reported a behavioural intention, e.g. thinking about doing something because they saw the campaign materials. Most who reported a behavioural intention suggested that they were thinking about getting screened (70.0%; n=211). Respondents also reported thinking about seeking more information (9.2%; n=28), spreading the message (5.6%; n=17), and telling someone else to get screened (4.6%; n=14). In most of the answers the type of cancer was not specified. When it was, cervical cancer was most frequently/commonly mentioned (10.4%; n=29) followed by breast cancer (9.3%; n=26). The term ‘pap smear’ was used eight times (2.6%) despite the survey not using this term. Bowel cancer was the least commonly mentioned (4.6%; n=13). These respondents referred to wanting to remind their older family members of bowel screening.⁹

9 This may be due to the younger demographic of most study participants.

Best ways to reach the LGBTIQASB+ community

When asked about the best ways to reach the WA LGBTIQASB+ community with these messages, participants suggested a variety of channels and strategies. One quarter of participants (24.0%; n=104) referred to social media platforms as the most effective way to reach the target audience. This is highlighted by the frequent mention of platforms such as Facebook, Instagram, TikTok, and online community groups. The appeal of social media was described as its ability to quickly disseminate information and reach a wide audience, including younger demographics:

“Engage with LGBTIQASB+ communities on platforms like Reddit, TikTok, Discord, and niche forums related to specific identities within the community.”

“I think social media is better for younger people for breast cancer and cervical cancer. Bowel cancer is 55+ so I think it would be better coming from community groups.”



Many responses also suggest placing campaign materials in healthcare settings such as GP clinics, pharmacies, and at events like Pride festivals. There was also a call for broader visibility in everyday places, like supermarkets, public toilets, and through various forms of media, including TV advertisements, radio broadcasts and community venues. For example:

“A letter in the mail like I receive for yearly pap smear reminder. Everyone should be treated equally regardless of their sex, and sexual orientation. Send letters to remind us to screen for bowel cancer, breast cancer, etc.”

“Cleaner designs that are more obvious with the information they are trying to share. A focus more on education for GPs and making GPs more obvious safe spaces. I do not feel safe coming out to my GP and receive poorer quality care because of it.”

“Meet us where we are, such as in our community groups, with the messages delivered by members of our community.”

“These messages can be best represented by being spread through community organisations, but also through regular health channels. Many LGBTQIA+ people are not actively involved in the community and so may not see promotional materials through community alone.”

Engaging with the community through events, discussions, and personal outreach was mentioned to foster a deeper connection and trust. Participants suggested that this could be achieved by including local people in campaigns, distributing flyers at clubs, and engaging in personal conversations. Several respondents indicated the need for educational and advocacy activities to raise awareness, suggesting that this could happen through schooling, community organisations, and targeted events.

The responses reflect a strong desire for respect towards individual identities and experiences within the LGBTQIA+ community. This includes using correct pronouns, not assuming gender or sexuality, and understanding the nuances of representing diverse identities, relationships and family structures. Respondents also reported the importance of inclusivity in campaign messaging. This includes using



inclusive language, featuring diverse individuals from the LGBTQ+ community in the campaign materials, and ensuring visibility at events and community spaces. For example:

“Ensure our medical system understands and recognises the nuances of sexuality and gender, and how this may influence cancer screening practices e.g. broaden their definition of “sex”, for individuals who have not engaged in sexual activity and identify as ACE asking to do cervical cancer screenings is unnecessary and potentially harmful/triggering, etc.”

“The inclusive language, because some people prefer to not be defined by the gender labels so it’s important to talk about the anatomical terms and the risk to those who have undergone transition but maybe don’t consider that they still need to be aware of these cancer screens.”

“Signaling mutual respect and affirming their identity. Intentionally misgendering a person can cause harm and is tantamount to harassment. Often, when someone’s identity is unknown, it is best to use third-person pronouns.”

“Show real families and queer people. Especially people of colour. This campaign seemed overwhelmingly white and able-bodied.”



Although not all sought tailored campaigns:

“The same way you would communicate to not LGBTQI people, I don’t understand why they are being advised to separately when cancer can affect people regardless of their sexual orientation.”

Other feedback on the campaign material

Regarding further improvements to the campaign materials, 300 (94.9%) provided relevant responses. More than three quarters of those respondents did not recommend any advice for further improvement as the campaign materials were already well designed, commenting “Good,” (24.0%; n=72) and “No,” (58.0%; n=174), including:

“Looks great. I like the one that covers all the different cancer screenings available, breast/cervical/bowel. You usually only see one at a time and if it’s not relevant to you, you would ignore it and forget about it.”

Among the 7.6% (n=23) respondents who provided advice for further improvement, two questioned why the materials were in black and white colour. Three preferred more colourful designs. However, this advice is conflicted by comments from two respondents who wanted to see less colourful campaign materials. One suggested that the

colours should be friendly for viewers with learning needs. Regarding the text tagline in the materials, two wanted to see them less crowded and two recommended to make them more direct and clearer. There were two suggestions on using updated or fresh photos. Three respondents advised to use modern design and one advised to include QR codes in the campaign materials. The use of pride flags was supported by one respondent *“Incorporate the Pride flag better instead of it just being slapped on like a sticker”*, while it was rejected by another *“I wonder if you don’t include the flag and just include diverse pictures?”*

Representativeness and inclusiveness were more frequently commented on (4.3%; n=13). These respondents reported that the campaign materials should depict young people, Aboriginal people, people of colour, people with all kinds of relationships, more gender-fluid people, and people with disability. Suggestions included *“I think maybe the colour scheme could be a bit more dyslexic friendly,”* and:

“Diversity! Make it represent our community instead of clearly refashioning existing materials but swapping out the photos.”

Four respondents reported that it was inappropriate to isolate LGBTIQASB+ people from other people in promoting screening for these three cancers, for example, *“Make it appeal to everybody not just the LGBTQIA’s community,”* and:

“I think it’s nice you’re thinking about LGBTQ people but for me personally, I would like to see pictures of everyone so to speak. Because cancer effects everyone and not targeted to one group. We all know someone who has been affected by it so it will resonate. Bowel and prostate cancer is higher risk for gay men but not specifically for gay men.”

“People may think that it’s a specific queer cancer screening, and not a screening that is for all people, no matter what sexuality. They may think they need to be out to their doc in order to do the screening. The queer flag really emphasises the queer aspect, so I wonder if this is removed and we just see diversity of people, it communicates all different kinds of people should get tested, not just the queers.”



CERVICAL CANCER SCREENING KNOWLEDGE, ATTITUDES AND PRACTICE

06

Cervical cancer screening eligibility and participation

This section of the survey was only presented to those participants who had their sex recorded at birth as female (n=312). Most respondents identified that they were eligible for cancer screening (76.6%; 239) however 15.1% (n=47) were unsure and 6.4% (n=20) did not have a cervix.

Of the remaining respondents who had a cervix (n=292), 55.5% (n=162) had participated in cervical cancer screening. For those who had participated, the primary motivations were advice or recommendation from a healthcare provider (40.1%; n=65), awareness of risk (38.9%; n=63) and the benefits of screening (32.1%; n=52). Other motivations are detailed in Table 22.

For those having participated in cervical screening (n=162), 32.1% (n=52) had participated once while 51.9% (n=84) participated as recommended, and 16.0% (n=26) did every year. Most respondents had followed up their results (71.0%; n=115) however 23.5% (n=38) had not and 5.6% (n=9) were unsure.

Barriers to participation in cervical cancer screening

For those respondents who had not taken part in a cervical cancer screening program (n=114), the most frequently cited reasons were experiencing fear/discomfort/embarrassment (32.5%; n=37), not knowing if they were eligible (28.9%;

Table 22. Cervical cancer screening eligibility, participation, and motivations

	n (%)
Eligibility (n=312)	
Yes	239 (76.6)
No, I do not have a cervix	20 (6.4)
No, another reason	6 (1.9)
Not sure	47 (15.1)
Having participated in a cervical cancer screening program (n=292)	
Yes	162 (55.5)
No	114 (39.0)
Not sure	16 (5.5)
Motivating reasons for taking part in a cervical cancer screening program (n=162) ^a	
I saw an advert/ poster	22 (13.6)
I'm aware of my risk	63 (38.9)
I have a family of cancer	20 (12.3)
I have an abnormal result	39 (24.1)
I received advice/ recommendation from a healthcare provider	65 (40.1)
I received a letter advising me I was eligible to participate	39 (24.1)
I received a screening kit in the mail	12 (7.4)
I'm aware of the benefits of screening	52 (32.1)
It was easy to access a screening service	30 (18.5)
Something else	10 (6.2)
No. of participation in a cervical screening (n=162)	
Just once	52 (32.1)
Every year	26 (16.0)
As recommended by the program/ my doctor/ reminder	84 (51.9)
Follow-up of the cervical screening results (n=162)	
Yes	115 (71.0)
No	38 (23.5)
Not sure	9 (5.6)

Notes: ^a multiple-answer options.

n=33) and not knowing where to find a safe healthcare provider (20.2%; n=23). Other reasons are detailed in Table 23.

Table 23. Cervical cancer screening barriers

	n (%)
Reasons for not taking part in a cervical cancer screening program (n=114) ^a	
I don't know if I'm eligible	33 (28.9)
I experience fear/ discomfort/ embarrassment	37 (32.5)
I don't know where to find a safe healthcare provider	23 (20.2)
I worry about stigma or discrimination related to my gender and/or sexuality	7 (6.1)
I don't feel comfortable/ safe talking about my cancer screening needs	7 (6.1)
I have had a previous negative experience with a healthcare provider	2 (1.8)
My risk is low	10 (8.8)
I'm scared of what they may find	17 (14.9)
I don't want to know if I have cancer	16 (14.0)
I'm healthy	7 (6.1)
It's hard to get to clinics/ hospitals	8 (7.0)
I don't have time	13 (11.4)
Cost	16 (14.0)
Something else (please specify)	10 (8.8)

Notes: ^a multiple-answer options.

Knowledge of cervical cancer, risk factors and screening

Of those who have participated in cervical cancer screening (n=162), only 1.8% (n=3) correctly identified 25 as the age of eligibility for cervical screening programs. However, a further 53.4% (n=87) identified '25 years and older' as being eligible.

Regarding the recommended frequency of the Cervical Screening Test, 45.9% (n=134) of participants correctly identified every 5 years as the recommendation, while one in five (20.9%; n=61) thought it should be done every 2 years, one in ten (10.6%; n=31) every year, and 8.9% (n=26) every 3 year. A significant proportion (13.7%; n=40) were unsure about the recommended frequency.

When asked whether participants have the choice to self-collect their own Cervical Screening Test Sample, 49.3% (n=144) responded 'True', 7.5% (n=22) 'False', and 43.2% (n=126) were unsure. These data are displayed in Table 24.

Table 24. Cervical cancer and screening knowledge

	n (%)
Eligible age for cervical screening programs (n=292)	
Write age in years	163 (55.8)
Don't know/ Unsure	129 (44.2)
Eligible age for cervical screening programs _ Write age in years (n=162)	
Correct (25 years)	3 (1.8)
Correct (25 years and older)	87 (53.4)
Incorrect	71 (43.6)
Irrelevant answers	1 (0.6)
Missing	1 (0.6)
Cervical screening test schedule (n=292)	
Every 5 years	134 (45.9)
Every 3 years	26 (8.9)
Every 2 years	61 (20.9)
Every 1 year	31 (10.6)
Don't know	40 (13.7)
All cervical screening participants now have the choice to self-collect their own Cervical Screening Test sample (n=292)	
True	144 (49.3)
False	22 (7.5)
Don't know/ Unsure	126 (43.2)

Notes: ^a multiple-answer options.

Participants' understanding of risk factors for cervical cancer varied. Table 25 details levels of agreement with identified risk factors. The risk factors which received a majority agreement were infection with HPV (78.1%; n=228),

having a weakened immune system (74.0%; n=216), smoking cigarettes (68.8%; n=201), infection with chlamydia (60.3%; n=176) and not going for regular cervical screening tests (70.9%; n=207).

Table 25. Perception of risks for cervical cancer (n=292)

	Agree n (%)	Disagree n (%)	Don't know/ Unsure n (%)
Infection with HPV (human papillomavirus)	228 (78.1)	11 (3.8)	53 (18.2)
Smoking any cigarettes at all	201 (68.8)	33 (11.3)	58 (19.9)
Having a weakened immune system (e.g., because of HIV, immunosuppressant drugs or having a transplant)	216 (74.0)	11 (3.8)	65 (22.3)
Long-term use of the contraceptive pill	138 (47.3)	52 (17.8)	102 (34.9)
Infection with Chlamydia (a sexually transmitted infection)	176 (60.3)	27 (9.2)	89 (30.5)
Having a sexual partner who is not circumcised	72 (24.7)	142 (48.6)	78 (26.7)
Starting to have sex at a young age (before age 17)	95 (32.5)	114 (39.0)	83 (28.4)
Having many sexual partners	137 (46.9)	89 (30.5)	66 (22.6)
Having many children	64 (21.9)	125 (42.8)	103 (35.3)
Having a sexual partner with many previous partners	121 (41.4)	96 (32.9)	75 (25.7)
Not going for regular cervical screening tests	207 (70.9)	40 (13.7)	45 (15.4)



BREAST CANCER SCREENING KNOWLEDGE, ATTITUDES AND PRACTICE

07

Breast cancer screening eligibility and participation

This section of the survey was only presented to those participants whose sex recorded at birth was female (n=312). Regarding eligibility for breast cancer screening, 40.4% (n=126) of respondents reported being eligible, while 24.4% (n=76) were unsure. In relation to breast cancer screening programs, 40.7% (n=35) of respondents indicated they had participated, with a small number (8.1%; n=7) unsure.

For those who had participated, the primary reported motivations were awareness of risk (38.9%; n=14), family history (38.9%; n=14), and receiving a letter advising they were eligible (30.5%; n=11). Other motivators are detailed in Table 26.

For those having participated in breast screening (n=86), 44.4% (n=16) had participated once, 41.7% (n=15) yearly, and 13.9% (n=5) participated as recommended. Most respondents had followed up their results (83.3%; n=30).

Table 26. Breast cancer screening eligibility, participation, and motivations

	n (%)
Eligibility (n=312)	
Yes	126 (40.4)
No	110 (35.3)
Not sure	76 (24.4)
Having participated in any breast cancer screening programs (n=86)	
Yes	35 (40.7)
No	44 (51.2)
Not sure	7 (8.1)
Motivating reasons for taking part in the breast cancer screening program (n=36) ^a	
I saw an advert/ poster	5 (13.8)
I'm aware of my risk	14 (38.9)
I have a family history of cancer	14 (38.9)
I have an abnormal result	3 (8.3)
I received advice/ recommendation from a healthcare provider	6 (16.7)
I received a letter advising me I was eligible to participate	11 (30.5)
I received a screening kit in the mail	7 (19.4)
I'm aware of the benefits of screening	7 (19.4)
It was easy to access a screening service	4 (11.1)
Something else	2 (5.5)
No. of participation in a breast screening (n=36)	
Just once	16 (44.4)
Every year	15 (41.7)
As recommended by the program/ my doctor/ reminder	5 (13.9)
Follow-up of the breast screening results (n=36)	
Yes	30 (83.3)
No	5 (13.8)
Not sure	1 (2.8)

Notes: ^a multiple-answer options.

Barriers to participation in breast cancer screening

For those respondents who had not taken part in a breast cancer screening program (n=44), the most frequently cited reason was not knowing if they were eligible (47.7%; n=21). Other reasons included experiencing fear/discomfort/embarrassment (18.2%; n=8), being scared of what they may find (13.6%; n=6), and not wanting to know if they have cancer (13.6%; n=6). Other reasons are detailed in Table 27.

Table 27. Breast cancer screening barriers

	n (%)
Reasons for not taking part in a breast cancer screening program (n=44) ^a	
I don't know if I'm eligible	21 (47.7)
I experience fear/ discomfort/ embarrassment	8 (18.2)
I don't know where to find a safe healthcare provider	4 (9.1)
I worry about stigma or discrimination related to my gender and/or sexuality	3 (6.8)
I don't feel comfortable/ safe talking about my cancer screening needs	1 (2.3)
I have had a previous negative experience with a healthcare provider	2 (4.5)
My risk is low	2 (4.5)
I'm scared of what they may find	6 (13.6)
I don't want to know if I have cancer	6 (13.6)
I'm healthy	3 (6.8)
It's hard to get to clinics/ hospitals	4 (9.1)
I don't have time	3 (6.8)
Cost	2 (4.5)
Something else (please specify)	5 (11.3)

Notes: ^a multiple-answer options.

Knowledge of breast cancer and screening

When asked what the eligibility age was for free breast screening in WA s, over half (51.6%; n=161) were unsure. Of the 48.4% (n=151) respondents who did suggest an age, around one third (33.1%; n=50) identified the age as 40 and above. Higher levels of uncertainty existed for respondents when asked about the age at which people received their last reminder for free breast screening; 74.4% (n=232) were unsure. Of those that suggested a response (25.6%; n=80), around one in ten (11.2%; n=9) correctly identified 74 years of age.

When asked about the recommended frequency for breast cancer screening, more than one-third (38.5%; n=120) of respondents correctly identified every two years, while one in five (19.6%; n=61) thought it should be done every year. Just under one-third were unsure (29.8%; n=93). These data are displayed in Table 28.

Table 28. Breast cancer and screening knowledge

	n (%)
Eligible age for breast screening programs (n=312)	
Write age in years	151 (48.4)
Don't know/ Unsure	161 (51.6)
Eligible age for breast screening programs _ Write age in years (n=151)	
Correct (40 years and older)	50 (33.1)
Incorrect	101 (66.8)
The age for the last reminder for breast screening in WA (n=312)	
Write age in years	80 (25.6)
Don't know/ Unsure	232 (74.4)
The age for the last reminder for breast screening in WA _ Write age in years (n=80)	
Correct (74 years)	9 (11.2)
Incorrect	71 (87.5)
Irrelevant answer	1 (.25)
Breast screening test schedule (n=312)	
Every year	61 (19.6)
Every two years	120 (38.5)
Every three years	38 (12.2)
Don't know/ Unsure	93 (29.8)

Notes: ^a multiple-answer options.

Participants' understanding of breast cancer risk factors indicated varying levels of knowledge. Table 29 details levels of agreement to statements about identified risk factors. Only non-modifiable risks such as a history of breast

cancer (93.9%; n=293), having a close relative with breast cancer (87.8%; n=274), getting older (82.4%; n=257), or being recorded as female at birth (73.4%; n=229) received majority agreement.

Table 29. Perception of risk of developing breast cancer (n=312)

	Agree n (%)	Disagree n (%)	Don't know/ Unsure n (%)
Getting older	257 (82.4)	26 (8.3)	29 (9.3)
Being recorded as female at birth	229 (73.4)	49 (15.7)	34 (10.9)
Having a history of breast cancer	293 (93.9)	9 (2.9)	10 (2.3)
Using HRT (Hormone Replacement Therapy)	145 (46.5)	31 (9.9)	136 (43.6)
Drinking more than 1 standard drink of alcohol a day	147 (47.1)	64 (20.5)	101 (32.4)
Being overweight (BMI over 25)	153 (49.0)	54 (17.3)	105 (33.7)
Having a close relative with breast cancer	274 (87.8)	13 (4.2)	25 (8.0)
Having children later in life or not at all	80 (25.6)	94 (30.1)	138 (44.2)
Starting your periods at an early age	72 (23.1)	99 (31.7)	141 (45.2)
Having a late menopause	76 (24.4)	87 (27.9)	149 (47.8)
Doing less than 30 minutes of moderate-intensity physical activity most days a week	116 (37.2)	85 (27.2)	111 (35.6)



BOWEL CANCER SCREENING KNOWLEDGE, ATTITUDES AND PRACTICE

08

Bowel Cancer Screening Program eligibility and participation

The first question in this section of the survey was presented to all participants (n=433). Concerning eligibility for the National Bowel Cancer Screening Program, around one-quarter (26.2%; n=113) reported being eligible although only 12.0% (n=52) met the age criteria of being over 50.

Approximately a third of the eligible participants (34.6%; n=18) indicated they had participated, more than half (57.7%; n=30) had not. Among those who had participated, the

primary motivation was receiving a screening kit in the mail (61.1%; n=11). A range of other motivators are detailed in Table 30.

Regarding the frequency of participation, over half (55.6%; n=10) had participated just once, while around one in five (22.2%; n=4) participants every year or as recommended by the program or their doctor (22.2%; n=4) as. Post-screening follow-up actions revealed that around three-quarters of participants (77.8%; n=14) followed up to get their result or referral for more tests.

Table 30. Bowel cancer screening eligibility, participation, and motivations

	n (%)
Eligibility (n=433)	
Yes	113 (26.2)
No	194 (44.9)
Not sure	125 (28.9)
Missing	1 (0.2)
Having participated in the National Bowel Cancer Screening Program (n=52)	
Yes	35 (40.7)
No	44 (51.2)
Not sure	7 (8.1)
Motivating reasons for taking part in the National Bowel Cancer Screening Program (n=18)^a	
I saw an advert/ poster	3 (16.7)
I'm aware of my risk	4 (22.2)
I have a family of cancer	4 (22.2)
I have an abnormal result	1 (5.6)
I received advice/ recommendation from a healthcare provider	3 (16.7)
I received a letter advising me I was eligible to participate	4 (22.2)
I received a screening kit in the mail	11 (61.1)
I'm aware of the benefits of screening	2 (11.1)
It was easy to access a screening service	-
Something else (please specify)	-
No. of participation in the National Bowel Cancer Screening Program (n=18)	
Just once	10 (55.6)
Every year	4 (22.2)
As recommended by the program/ my doctor/ reminder	4 (22.2)
Follow-up of the screening results (n=18)	
Yes	14 (77.8)
No	3 (16.7)
Not sure	1 (5.6)

Notes: ^a multiple-answer options.

Barriers to participation in the National Bowel Cancer Screening Program

The main reasons for non-participation or being overdue for the next test, included fear, discomfort, or embarrassment (26.7%; n=8) and being scared of what they may find (23.3%; n=7). Other reasons are outlined in Table 31.

Table 31. Bowel cancer screening barriers

	n (%)
Reasons for not taking part in the National Bowel Cancer Screening Program (n=30) ^a	
I don't know if I'm eligible	3 (10.0)
I experience fear/ discomfort/ embarrassment	8 (26.7)
I don't know where to find a safe healthcare provider	1 (3.3)
I worry about stigma or discrimination related to my gender and/or sexuality	1 (3.3)
I don't feel comfortable/ safe talking about my cancer screening needs	2 (6.7)
I have had a previous negative experience with a healthcare provider	1 (3.3)
My risk is low	4 (13.3)
I'm scared of what they may find	7 (23.3)
I don't want to know if I have cancer	5 (16.7)
I'm healthy	2 (6.7)
It's hard to get to clinics/ hospitals	2 (6.7)
I don't have time	-
Cost	2 (6.7)
Something else (please specify)	7 (23.3)

Notes: ^a multiple-answer options.

Knowledge of the National Bowel Cancer Screening Program

These questions were also presented to all participants (n=433) and are presented in Table 32. When asked what the eligibility age for participating in the National Bowel Cancer Screening Program, over half (51.9%; n=224) were unsure. Of the 48.0% (n=208) respondents who did suggest an age, more than half (59.1%; n=123) correctly identified 50 and above. Higher levels of uncertainty existed for respondents when asked about the age at which people received their last reminder for free breast screening; 75.8% (n=328) were unsure. Of those that suggested a response (24.0%; n=104), around one-quarter (23.1%; n=24) correctly identified 74 years of age.

Table 32. Bowel cancer and screening knowledge

	n (%)	Remarks
Eligible age for the National Bowel Cancer Screening Program (n=433)		
Write age in years	208 (48.0)	
Don't know/ Unsure	224 (51.9)	
Missing	1 (0.2)	
Eligible age for the National Bowel Cancer Screening Program _ Write age in years (n=208)		
Correct (50 and above)	123 (59.1)	Range: 18 to 70
Incorrect	83 (39.9)	
Irrelevant answers	1 (0.5)	
Missing	1 (0.5)	
The age for last reminder for the National Bowel Cancer Screening Program (n=433)		
Write age in years	104 (24.0)	
Don't know/ Unsure	328 (75.8)	
Missing	1 (0.2)	
The age for the last reminder for the National Bowel Cancer Screening Program _ Write age in years (n=104)		
Correct (74 years)	24 (23.1)	Range: 18 to 100
Incorrect	79 (75.9)	
Missing	1 (0.9)	
Bowel screening test schedule (n=433)		
Every year	94 (21.7)	
Every 2 years	133 (30.7)	
Every 5 years	67 (15.5)	
Every 8 years	6 (1.4)	
Every 10 years	3 (0.7)	
Don't know/ Unsure	129 (29.8)	
Missing	1 (0.2)	
Type of test used in the National Bowel Cancer Screening Program (n=433)		
Faecal Occult Blood Test (poo kit)	271 (62.6)	
Colonoscopy	72 (16.6)	
Blood test	19 (4.4)	
Don't know/ Unsure	70 (16.2)	
Missing	1 (0.2)	

Participants' agreement that different items were risk factors for bowel cancer varied and is detailed in Table 33. Most risk factors received a majority agreement except for having diabetes (48.8%; n=211). Behavioural factors also showed lower levels of awareness among the participants, for example, eating red/processed meat (50.2%; n=217),

low physical activity levels (50.7%; n=219), drinking more than one standard drink per day (55.8%; n=241). The risk factors with highest agreement were getting older (85.9%; n=371), having a close relative with bowel cancer (83.3%; n=360) and having a bowel disease (81.5%; n=352).

Table 33. Perception of risk of developing bowel cancer (n=433; missing=1)

	Agree n (%)	Disagree n (%)	Don't know/ Unsure n (%)
Getting older	371 (85.9)	21 (4.9)	40 (9.3)
Having a close relative with bowel cancer	360 (83.3)	27 (6.3)	45 (10.4)
Having a low fibre diet	251 (58.1)	47 (10.9)	134 (31.0)
Being overweight (BMI over 25)	276 (63.9)	47 (10.9)	109 (25.2)
Having a bowel disease (e.g., Ulcerative colitis, Crohn's disease)	352 (81.5)	16 (3.7)	64 (14.8)
Eating red/ processed meat once a day or more	217 (50.2)	82 (19.0)	133 (30.8)
Doing less than 30 minutes of moderate-intensity physical activity most days a week	219 (50.7)	79 (18.3)	134 (31.0)
Smoking	288 (66.7)	52 (12.0)	92 (21.3)
Drinking more than 1 standard drink of alcohol a day	241 (55.8)	62 (14.4)	129 (29.9)
Having diabetes	211 (48.8)	46 (10.6)	175 (40.5)



KEY FINDINGS AND IMPLICATIONS

09

Key findings and implications

General overview

Overall, the awareness and campaign diagnostic findings are positive for the Screening Saves Lives (SSL) Campaign. All three executions #1 Speak to your GP, #2 Screening eligibility criteria, and #3 Community Champions were recalled by around one third of the target audience. Of interest, campaign #1 Speak to your GP encouraged people to get screened and identify the benefits of screening however there were calls for increased diversity in future iterations of the campaign. Campaign #2 Screening eligibility criteria was the most commonly reported image seen in a GP clinic and was seen as a proactive message for early diagnosis and access to treatment. This is a positive outcome. The advertisement featuring Community Champions resonated with the target audience in terms of importance and screening benefits. However, the multiple photos in one poster may have been a distraction, with some focussed only on the first message related to breast cancer screening. The evaluation highlights areas for further examination, especially community awareness of modifiable risk factors associated with each of the cancers. Key findings are summarised below with implications for the SSL Campaign future practice and evaluation endeavours.

Demographics

It was pleasing to see the sample size quota achieved using the Qualtrics online panel, as it provides findings that can confidently inform Cancer Network WA decision-making and the direction of the SSL Campaign. Noteworthy is that women were over-represented (65.4%), most respondents were aged 30 to 39 years (40.0%), Australian born (81.3%), spoke English at home (98.2%), and almost half had a tertiary education (45.9%). These demographic insights should inform future formative work to reach under-served populations.



It is worth noting that responses may not be consistent with or representative of the older adult population (40 to 69 years). In future evaluations, broadening the socio-demographic composition of the sample and examining recruitment processes to include those from culturally diverse backgrounds, regional locations and older people is recommended.

Of interest, 6.9% of respondents identified as Aboriginal, Torres Strait Islander and/or both. This is a positive outcome for the evaluation. In health research in general, Aboriginal and Torres Strait Islander people are under-represented. In this evaluation there are insightful qualitative quotes that may inform future iterations of the SSL. It is recommended that future formative work include people from Aboriginal and Torres Strait Islander backgrounds.

Campaign awareness

Over half of the participants recalled advertising focused on cancer screening, and most recalled bowel screening. In addition, one third of participants recalled when prompted each of the three SSL campaigns (#1 Speak to your GP: 37.6%, #2 Screening eligibility criteria: 30.3%, and #3 Community Champions: 27.3%). This is a pleasing finding for a small-scale print and social media campaign, delivered in the GP setting, and using community channels for distribution.



community, exploring comments around ‘subtle visibility and inclusive language’ may be instructive. This may require refreshing intended messages, and/or using cues to action and/or a new creative execution in the medium term.

Prompted to act

Seventy percent of participants reported a behavioural intention, in that they considering doing something because of the campaign. It is recommended that the next iteration of the SSL Campaign build on this positive finding and include clear steps to access screening regularly, follow up screening results and continue to reinforce the message of the importance of screening as a prevention tool to community, family and friends.

Of interest, awareness for continuing mass media campaigns is usually around 60% [38], [39], which is consistent with our finding. Most Western Australians will have seen campaigns delivered by NGOs such as the Cancer Council for bowel and skin cancer so this is not a surprising result. The SSL campaign used local community champions in the campaign #3 execution as a novel and engaging creative. This may be a point of difference from traditional cancer screening campaigns, which include statistics, images of cancer and specific cues to action. Accordingly, it would be reasonable to suggest that with one-third of participants recalling the SSL Campaign, findings point to a solid base from which to continue to build the brand and grow awareness over time.

Campaign diagnostics

Over 80% of participants reported that the SSL Campaign materials were appealing. This finding is noteworthy considering the investment in the design and testing of the creative concepts, suggesting it was the right message for the right audience at the right time. Nine out of ten participants agreed the campaign materials were believable, easy to understand, and 8 out of 10 thought they represented LGBTIQSB+ people in their community. Two thirds thought the material told them something new or prompted them to act. Given just under 8 out of 10 of participants thought the material would appeal to LGBTIQASB+ people in their

Best ways to ways to reach the LGBTIQSB+ community

Social media, materials in GP clinics and community events were suggested as strategies to reach the target audience. This finding reinforces the current dissemination channels as appropriate choices. A call for everyday locations e.g. supermarkets and public toilets was evident. Noteworthy is the need for inclusive language, and diverse individuals in campaign material images, a finding consistent with the comments above. Accordingly, consideration of the role and acceptability of diverse images (i.e. age, ethnicity and ability) in the next campaign is worthwhile. Interestingly the need for increased advocacy and educational activities to increase awareness of screening and cancer in the LGBTIQSB+ community is also a worthwhile consideration as part of a multi-strategic approach to promote screening in the LGBTIQSB+ community.



Cervical cancer and screening

Three quarters of respondents knew they were eligible for cervical screening. Key barriers to screening included fear, discomfort, embarrassment and not knowing where to find a health provider. Only half of respondents were aware that self-collection was available for cervical screening tests. Whilst there was agreement that infection with HPV and chlamydia were risk factors for cervical cancer there were lower levels of agreement with a range of other factors related to reproductive and sexual behaviour. This suggests that there is a need for more comprehensive education on these aspects of the screening program.

Breast cancer and screening

Almost 40% of respondents knew breast cancer screening was required every two years. The primary motivator reported by participants to access breast screening was risk. However, most respondents provided their highest agreement with identified non-modifiable risk factors (e.g. getting older, having a history of breast cancer). This finding suggests the need to amplify the role of primary prevention in reducing breast cancer risk, in the next phase of the SSL campaign.

Bowel cancer and screening



One third of eligible respondents had screened for bowel cancer, and two thirds of those were prompted by receiving a kit in the mail. Of interest more than three-quarters of respondents followed up their results. Like cervical screening, fear, discomfort and embarrassment were cited as key barriers to bowel cancer screening. These barriers are not unique to the LGBTIQSB+ community. Emotions and fear play a critical role in health behaviours and are often neglected in formal models to understand or predict health behaviours and behavioural change. To better understand these barriers, an examination of social-cognitive models of health behaviour decision-making including social norms, attitudes and beliefs is recommended when planning future campaign materials [40].





Appendix A

Survey instrument

No.	Question	Response categories
<p>About this survey We are seeking LGBTIQASB+* folk aged 25 and older in Western Australia to help us evaluate a cancer screening health campaign. This anonymous online survey will take 15 minutes to complete and will help inform future health strategies to prevent and detect cancer in our communities.</p> <p>*Lesbian, Gay, Bisexual, Trans, Intersex, Queer, Asexual, Sistergirl, Brotherboy and other diverse sexualities and gender identities.</p> <p>Project Title: Screening Saves Lives campaign: knowledge, awareness and practice (KAP) assessment of LGBTIQ+ focused resources in Western Australia Principal Investigator: Dr Jonathan Hallett, Curtin School of Population Health HREC Project Number: HRE2023-0649</p> <p>After completing this survey, you will be invited to go into a prize draw for the chance to win \$500 in appreciation of your time.</p> <p>Consent to participate The Information Statement for this study can be found here.</p> <ul style="list-style-type: none"> • I have read the Information Statement version listed above and I understand its contents. • I believe I understand the purpose, extent and possible risks of my involvement in this project. • I agree to maintain confidentiality of all information discussed during this project. • I voluntarily consent to take part in this research project. • I have had an opportunity to ask questions and I am satisfied with the answers I have received. • I understand that this project has been approved by Curtin University Human Research Ethics Committee and will be carried out in line with the National Statement on Ethical Conduct in Human Research 2007 (updated 2018). • I understand that I will receive a copy of this Information Statement and Consent Form. 		
<p>Please confirm: <input type="radio"/> I understand and agree with the above statements. <input type="radio"/> I do not understand and agree with the above statements.</p>		
<p>Before we start we just want to make sure you are a real person!</p> <div data-bbox="164 1480 635 1592" style="border: 1px solid #ccc; padding: 5px; display: flex; align-items: center;"> <input style="margin-right: 10px;" type="checkbox"/> I'm not a robot </div>		
<p>1. Sociodemographic Characteristics We'd like to start by asking a few questions about you – it will help us to build a picture of who is taking our survey.</p>		
1	What is the postcode where you currently live?	[Free text]
2	How old are you?	<input type="checkbox"/> 24 or younger → End of survey <input type="checkbox"/> 25 to 29 <input type="checkbox"/> 30 to 39 <input type="checkbox"/> 40 to 49 <input type="checkbox"/> 50 to 59 <input type="checkbox"/> 60 to 29 <input type="checkbox"/> 70 to 74 <input type="checkbox"/> 75 or older → End of survey

No.	Question	Response categories
3	Which options best describe your gender?	<input type="checkbox"/> Man <input type="checkbox"/> Woman <input type="checkbox"/> Non-binary <input type="checkbox"/> Third gender <input type="checkbox"/> Gender questioning/ unsure <input type="checkbox"/> Another term (please specify) _____ <input type="checkbox"/> I'd prefer not to say
4	What was your sex recorded at birth?	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Another term (please specify) _____ <input type="checkbox"/> I'd prefer not to say
5	Do you have a variation of sex characteristics (sometimes called 'intersex' or 'DSD')?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know <input type="checkbox"/> I'd prefer not to say
6	How do you describe your sexuality? (select all that apply)	<input type="checkbox"/> Lesbian <input type="checkbox"/> Gay <input type="checkbox"/> Bisexual <input type="checkbox"/> Pansexual <input type="checkbox"/> Queer <input type="checkbox"/> Asexual <input type="checkbox"/> Homosexual <input type="checkbox"/> Heterosexual <input type="checkbox"/> Prefer not to have a label <input type="checkbox"/> Another term (please specify) _____ <input type="checkbox"/> I'd prefer not to say
7	In which country were you born?	<input type="checkbox"/> Australia → Q 09 <input type="checkbox"/> United Kingdom → Q 08 <input type="checkbox"/> New Zealand → Q 08 <input type="checkbox"/> India → Q 08 <input type="checkbox"/> South Africa → Q 08 <input type="checkbox"/> Philippines → Q 08 <input type="checkbox"/> Somewhere else (please specify) → Q 08 _____
8	In what year did you first arrive in Australia to live for one year or more?	[Free text]
9	What is your main language spoken at home in Australia?	<input type="checkbox"/> English <input type="checkbox"/> Something else (please specify) _____
10	Are you of Aboriginal or Torres Strait Islander origin?	<input type="checkbox"/> No <input type="checkbox"/> Yes, Aboriginal <input type="checkbox"/> Yes, Torres Strait Islander <input type="checkbox"/> Yes, both Aboriginal and Torres Strait Islander
11	What is the highest level of educational qualification you have completed?	<input type="checkbox"/> Primary school <input type="checkbox"/> Year 10 or equivalent <input type="checkbox"/> Year 12 or equivalent <input type="checkbox"/> Trade Certificate/Diploma <input type="checkbox"/> Undergraduate degree <input type="checkbox"/> Postgraduate degree <input type="checkbox"/> Something else (please specify) _____

No.	Question	Response categories
<p>2. Proximal Determinants (Awareness Level) We'd now like to ask you some questions about recent health campaigns that you might have seen.</p>		
12	In the past 12 months, do you remember seeing any advertising about cancer screening*? <i>(*Cancer screening means undertaking tests for cancer when a person doesn't have any symptoms of cancer.)</i>	<input type="checkbox"/> Yes → Q 13 <input type="checkbox"/> No → the preamble before Q 15 <input type="checkbox"/> Unsure → the preamble before Q 15
13	If "Yes", can you please describe any advertising you saw about cancer screening?	[Free text]
14	If "Yes", where did you see or hear it? (select all that apply)	<input type="checkbox"/> Television/ TV Streaming <input type="checkbox"/> Facebook <input type="checkbox"/> YouTube <input type="checkbox"/> Instagram <input type="checkbox"/> Twitter/ X <input type="checkbox"/> Radio <input type="checkbox"/> Internet publication <input type="checkbox"/> Public bathroom <input type="checkbox"/> Community event (Pride Fair Day) <input type="checkbox"/> Healthcare practice <input type="checkbox"/> Somewhere else (please specify) _____ <input type="checkbox"/> Don't know/ Unsure
<p>The "Screening Saves Lives" campaign has been running in Western Australia for a while. We'd like to ask you some questions about the following adverts that are part of this campaign.</p>		
15	Have you come across this campaign material before today? 	<input type="checkbox"/> Yes → Q 16 <input type="checkbox"/> No → Q 17 <input type="checkbox"/> Unsure → Q 17
16	If "Yes", please tell us where you've seen it. (select all that apply)	<input type="checkbox"/> GP Clinic <input type="checkbox"/> Social Media <input type="checkbox"/> Online <input type="checkbox"/> LGBTIQASB+ Event <input type="checkbox"/> Somewhere else (please specify) _____ <input type="checkbox"/> Don't know/ Unsure
17	What are the main messages this campaign material is trying to tell you? 	[Free text]

No.	Question	Response categories
18	Have you come across this campaign material before today? 	<input type="checkbox"/> Yes → Q 19 <input type="checkbox"/> No → Q 20 <input type="checkbox"/> Unsure → Q 20
19	If "Yes", please tell us where you've seen it. (select all that apply)	<input type="checkbox"/> GP Clinic <input type="checkbox"/> Social Media <input type="checkbox"/> Online <input type="checkbox"/> LGBTIQASB+ Event <input type="checkbox"/> Somewhere else (please specify) _____ <input type="checkbox"/> Don't know/ Unsure
20	What are the main messages this campaign material is trying to tell you? 	[Free text]
21	Have you come across any of these campaign materials before today? 	<input type="checkbox"/> Yes → Q 22 <input type="checkbox"/> No → Q 23 <input type="checkbox"/> Unsure → Q 23
22	If "Yes", please tell us where you've seen it. (select all that apply)	<input type="checkbox"/> GP Clinic <input type="checkbox"/> Social Media <input type="checkbox"/> Online <input type="checkbox"/> LGBTIQASB+ Event <input type="checkbox"/> Somewhere else (please specify) _____ <input type="checkbox"/> Don't know/ Unsure
23	What are the main messages this campaign material is trying to tell you? 	[Free text]

No.	Question	Response categories
2.1. Campaign diagnostics		
24	Does the Screening Saves Lives campaign material appeal to you?	<input type="checkbox"/> Very much → Q 25 <input type="checkbox"/> Somewhat → Q 25 <input type="checkbox"/> Neutral → Q 27 <input type="checkbox"/> Not much → Q 26 <input type="checkbox"/> Not at all → Q 26
25	Why do they appeal? (select all that apply)	<input type="checkbox"/> Colourful <input type="checkbox"/> Engaging <input type="checkbox"/> Happy/ Upbeat <input type="checkbox"/> Representative <input type="checkbox"/> Easy to understand <input type="checkbox"/> Provide links to more information <input type="checkbox"/> Other (please specify) _____
26	Why do they not appeal?	[Free text]
27	Please tell us whether you agree or disagree with the following statements about these adverts. Agree Disagree Don't know/ Unsure	<input type="checkbox"/> They are relevant to me. <input type="checkbox"/> They told me something new. <input type="checkbox"/> They are believable. <input type="checkbox"/> They were easy to understand. <input type="checkbox"/> They make me want to undertake cancer screening. <input type="checkbox"/> They make me want to find out more information. <input type="checkbox"/> They stick in my mind. <input type="checkbox"/> They prompt me to take action. <input type="checkbox"/> They represent LGBTIQASB+ people in my community. <input type="checkbox"/> They would appeal to LGBTIQASB+ people in my community. <input type="checkbox"/> I would talk about them with LGBTIQASB+ friends.
28	Do you have any other thoughts about this campaign material?	[Free text]
29	Who do you think is responsible for developing this campaign material?	<input type="checkbox"/> WA Department of Health <input type="checkbox"/> Australian Government Department of Health and Aged Care <input type="checkbox"/> Cancer Screening Programs <input type="checkbox"/> Cancer Council WA <input type="checkbox"/> LGBTIQASB+ community <input type="checkbox"/> Pride WA <input type="checkbox"/> Living Proud <input type="checkbox"/> WAAC <input type="checkbox"/> Don't know/ Unsure
30	What do you think are the best ways to reach the LGBTIQASB+ community with these messages?	[Free text]
31	Do you have any feedback or suggestions to improve the design / layout / messaging for the above mentioned campaign material?	[Free text]
3. Intermediate Determinants		
32	As a result of seeing the "Screening Saves Lives" cancer screening campaign advertisements, did you think about doing anything related to the message?	<input type="checkbox"/> Yes → Q 33 <input type="checkbox"/> No → the preamble before Q 34
33	If "Yes", what did you think about doing?	[Free text]

No.	Question	Response categories
<p>Cervical Cancer Screening We'd now like to ask you some questions about cervical cancer screening.</p>		
34	Are you currently eligible for cervical cancer screening?	<input type="checkbox"/> Yes <input type="checkbox"/> No, I do not have a cervix <input type="checkbox"/> No, another reason ----- <input type="checkbox"/> Not sure
35	Have you ever participated in a cervical cancer screening program?	<input type="checkbox"/> Yes → Q 36 <input type="checkbox"/> No → Q 39 <input type="checkbox"/> Unsure → Q 40
36	If "Yes", what motivated you to take part in the cervical cancer screening program? (select all that apply)	<input type="checkbox"/> I saw an advert/ poster <input type="checkbox"/> I'm aware of my risk <input type="checkbox"/> I have a family history of cancer <input type="checkbox"/> I had an abnormal result <input type="checkbox"/> I received advice/ recommendation from a healthcare provider <input type="checkbox"/> I received a letter advising me I was eligible to participate <input type="checkbox"/> I received a screening kit in the mail <input type="checkbox"/> I'm aware of the benefits of screening <input type="checkbox"/> It was easy to access a screening service <input type="checkbox"/> Something else (please specify) _____
37	If you have participated, how many times have you participated?	<input type="checkbox"/> Just once <input type="checkbox"/> Every year <input type="checkbox"/> As recommended by the program/ my doctor/ reminder
38	When you screened, did you follow up to get your result / referral for more tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
39	If you haven't taken part in a cervical cancer screening program or are overdue for your next test, what are the reasons? (select all that apply)	<input type="checkbox"/> I don't know if I'm eligible <input type="checkbox"/> I experience fear / discomfort / embarrassment <input type="checkbox"/> I don't know where to find a safe care provider <input type="checkbox"/> I worry about stigma or discrimination related to my gender and/or sexuality <input type="checkbox"/> I don't feel comfortable/ safe talking about my cancer screening needs <input type="checkbox"/> I have had a previous negative experience with a healthcare provider <input type="checkbox"/> My risk is low <input type="checkbox"/> I'm scared of what they may find <input type="checkbox"/> I don't want to know if I have cancer <input type="checkbox"/> I'm healthy <input type="checkbox"/> It's hard to get to clinics/ hospitals <input type="checkbox"/> I don't have time <input type="checkbox"/> Cost <input type="checkbox"/> Something else (please specify) _____
40	At what age are people eligible for cervical screening programs?	<input type="checkbox"/> [Write age in years] _____ <input type="checkbox"/> Don't know / Unsure
41	How often should eligible people have a Cervical Screening Test?	<input type="checkbox"/> Every 5 years <input type="checkbox"/> Every 3 years <input type="checkbox"/> Every 2 years <input type="checkbox"/> Every 1 year <input type="checkbox"/> Don't know

No.	Question	Response categories
42	<p>The following may or may not increase a person’s risk of developing cervical cancer. How much do you agree that each of these can increase a person’s risk of developing cervical cancer?</p> <p>Agree Disagree Don’t know/ Unsure</p>	<input type="checkbox"/> Infection with HPV (human papillomavirus) <input type="checkbox"/> Smoking any cigarettes at all <input type="checkbox"/> Having a weakened immune system (e.g., because of HIV, immunosuppressant drugs or having a transplant) <input type="checkbox"/> Long-term use of the contraceptive pill <input type="checkbox"/> Infection with Chlamydia (a sexually transmitted infection) <input type="checkbox"/> Having a sexual partner who is not circumcised. <input type="checkbox"/> Starting to have sex at a young age (before age 17) <input type="checkbox"/> Having many sexual partners <input type="checkbox"/> Having many children <input type="checkbox"/> Having a sexual partner with many previous partners <input type="checkbox"/> Not going for regular cervical screening tests
43	<p>Please answer True or False in relation to the following statement: “All cervical screening participants now have the choice to self-collect their own Cervical Screening Test Sample.”</p>	<input type="checkbox"/> True <input type="checkbox"/> False <input type="checkbox"/> Don’t know/ Unsure
<p>Breast Cancer Screening We’d now like to ask you some questions about breast cancer screening.</p>		
44	<p>Are you currently eligible for breast cancer screening?</p>	<input type="checkbox"/> Yes → Q 45 <input type="checkbox"/> No → Q 49 <input type="checkbox"/> Not sure → Q 50
45	<p>Have you ever participated in any breast cancer screening programs?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
46	<p>If “Yes”, what motivated you to take part in the breast cancer screening program? (select all that apply)</p>	<input type="checkbox"/> I saw an advert/ poster <input type="checkbox"/> I’m aware of my risk <input type="checkbox"/> I have a family history of cancer <input type="checkbox"/> I had an abnormal result <input type="checkbox"/> I received advice/ recommendation from a healthcare provider <input type="checkbox"/> I received a letter advising me I was eligible to participate <input type="checkbox"/> I received a screening kit in the mail <input type="checkbox"/> I’m aware of the benefits of screening <input type="checkbox"/> It was easy to access a screening service <input type="checkbox"/> Something else (please specify) _____
47	<p>If you have participated, how many times have you participated?</p>	<input type="checkbox"/> Just once <input type="checkbox"/> Every year <input type="checkbox"/> As recommended by the program/ my doctor/ reminder
48	<p>When you screened, did you follow up to get your result / referral for more tests?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

No.	Question	Response categories
49	If you haven't taken part in a breast cancer screening program or are overdue for your next test, what are the reasons? (select all that apply)	<input type="checkbox"/> I don't know if I'm eligible <input type="checkbox"/> I experience fear / discomfort / embarrassment <input type="checkbox"/> I don't know where to find a safe care provider <input type="checkbox"/> I worry about stigma or discrimination related to my gender and/or sexuality <input type="checkbox"/> I don't feel comfortable/ safe talking about my cancer screening needs <input type="checkbox"/> I have had a previous negative experience with a healthcare provider <input type="checkbox"/> My risk is low <input type="checkbox"/> I'm scared of what they may find <input type="checkbox"/> I don't want to know if I have cancer <input type="checkbox"/> I'm healthy <input type="checkbox"/> It's hard to get to clinics/ hospitals <input type="checkbox"/> I don't have time <input type="checkbox"/> Cost <input type="checkbox"/> Something else (please specify) _____
50	At what age are people eligible for free breast screening in WA?	<input type="checkbox"/> [Write age in years] _____ <input type="checkbox"/> Don't know / Unsure
51	At what age do people receive their last reminder for free breast screening in WA?	<input type="checkbox"/> [Write age in years] _____ <input type="checkbox"/> Don't know / Unsure
52	How frequently should people be screened for breast cancer?	<input type="checkbox"/> Every year <input type="checkbox"/> Every two years <input type="checkbox"/> Every three years <input type="checkbox"/> Don't know/ Unsure
53	The next set of questions is about what might increase the risk of getting breast cancer. How much do you agree that each of these can increase the risk of getting breast cancer ? Agree Disagree Don't know/ Unsure	<input type="checkbox"/> Getting older <input type="checkbox"/> Being recorded as female at birth <input type="checkbox"/> Having a history of breast cancer <input type="checkbox"/> Using HRT (Hormone Replacement Therapy) <input type="checkbox"/> Drinking more than 1 standard drink of alcohol a day <input type="checkbox"/> Being overweight (BMI over 25) <input type="checkbox"/> Having a close relative with breast cancer <input type="checkbox"/> Having children later in life or not at all <input type="checkbox"/> Starting your periods at an early age <input type="checkbox"/> Having a late menopause <input type="checkbox"/> Doing less than 30 minutes of moderate-intensity physical activity most days per week
Bowel Cancer Screening We'd now like to ask you some questions about bowel cancer screening.		
54	Are you currently eligible for the National Bowel Cancer Screening Program?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
55	Have you ever participated in the National Bowel Cancer Screening Program?	<input type="checkbox"/> Yes → Q 56 <input type="checkbox"/> No → Q 59 <input type="checkbox"/> Not sure → Q 60

No.	Question	Response categories
56	If "Yes", what motivated you to take part in the National Bowel Cancer Screening Program? (select all that apply)	<input type="checkbox"/> I saw an advert/ poster <input type="checkbox"/> I'm aware of my risk <input type="checkbox"/> I have a family history of cancer <input type="checkbox"/> I had an abnormal result <input type="checkbox"/> I received advice/ recommendation from a healthcare provider <input type="checkbox"/> I received a letter advising me I was eligible to participate <input type="checkbox"/> I received a screening kit in the mail <input type="checkbox"/> I'm aware of the benefits of screening <input type="checkbox"/> It was easy to access a screening service <input type="checkbox"/> Something else (please specify) _____
57	If you have participated, how many times have you participated?	<input type="checkbox"/> Just once <input type="checkbox"/> Every year <input type="checkbox"/> As recommended by the program/ my doctor/ reminder
58	When you screened, did you follow up to get your result / referral for more tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
59	If you haven't taken part in the National Bowel Cancer Screening Program or are overdue for your next test, what are the reasons? (select all that apply)	<input type="checkbox"/> I don't know if I'm eligible <input type="checkbox"/> I experience fear / discomfort / embarrassment <input type="checkbox"/> I don't know where to find a safe care provider <input type="checkbox"/> I worry about stigma or discrimination related to my gender and/or sexuality <input type="checkbox"/> I don't feel comfortable/ safe talking about my cancer screening needs <input type="checkbox"/> I have had a previous negative experience with a healthcare provider <input type="checkbox"/> My risk is low <input type="checkbox"/> I'm scared of what they may find <input type="checkbox"/> I don't want to know if I have cancer <input type="checkbox"/> I'm healthy <input type="checkbox"/> It's hard to get to clinics/ hospitals <input type="checkbox"/> I don't have time <input type="checkbox"/> Cost <input type="checkbox"/> Something else (please specify) _____
60	At what age are people eligible for the National Bowel Cancer Screening Program?	<input type="checkbox"/> [Write age in years] _____ <input type="checkbox"/> Don't know / Unsure
61	At what age do people stop being eligible for the National Bowel Cancer Screening Program?	<input type="checkbox"/> [Write age in years] _____ <input type="checkbox"/> Don't know / Unsure
62	How frequently should people screen in the National Bowel Cancer Screening Program?	<input type="checkbox"/> Every year <input type="checkbox"/> Every 2 years <input type="checkbox"/> Every 5 years <input type="checkbox"/> Every 8 years <input type="checkbox"/> Every 10 years <input type="checkbox"/> Don't know/ Unsure
63	What is the test used to screen for bowel cancer by the National Bowel Cancer Screening Program?	<input type="checkbox"/> Faecal Occult Blood Test (poo kit) <input type="checkbox"/> Colonoscopy <input type="checkbox"/> Blood test <input type="checkbox"/> Don't know/ Unsure

No.	Question	Response categories
64	<p>Do you agree or disagree that the following factors can increase a person's risk of developing bowel cancer?</p> <p>Agree Disagree Don't know/ Unsure</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Getting older <input type="checkbox"/> Having a close relative with bowel cancer. <input type="checkbox"/> Having a low fibre diet <input type="checkbox"/> Being overweight (BMI over 25) <input type="checkbox"/> Having a bowel disease (e.g., Ulcerative colitis, Crohn's disease) <input type="checkbox"/> Eating red/ processed meat once a day or more. <input type="checkbox"/> Doing less than 30 minutes of moderate-intensity physical activity most days a week <input type="checkbox"/> Smoking <input type="checkbox"/> Drinking more than one standard drink per day. <input type="checkbox"/> Having diabetes
<p>Prize Draw</p> <p>Thanks so much for making it through the survey! Your responses will help North Metropolitan Health Service keep their cancer screening programs relevant and effective for our community.</p> <p>As thanks, please fill in your details to go in the draw to win \$500 cash. The first 100 participants will get 4 entries in the draw. Remember your contact details will be kept separate from your responses, so enter the draw to win.</p> <p>See the Terms & Conditions.</p>		
65	<p>Do you accept the Terms & Conditions?</p> <p>If you don't want to enter the prize draw, please close the browser window. Your responses have been saved.</p> <p><input type="checkbox"/> I have read the competition Terms and Conditions and provide my consent to be bound by them.</p>	
66	<p>Your details:</p> <p>Full Name _____</p> <p>*Contact Phone Number _____</p>	

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