Table 1 QUIRKS	Table 1 QUIRKS-Provider Items				
Original Item	Original Answer Options	Comments	Final Scale Item	Revised Answer Options	
What sex were you assigned at birth?	Female Male Intersex	Define "intersex" (1) May be jarring as the first question (1) "If it's the first question, I can imagine feeling so uncomfortable. This should never be the first question someone is asked. If a question like this is asked, maybe explain why it is asked." - Participant 2 Good comprehension, retrieval, judgement, and response formulation (5)	1. What sex were you assigned at birth?	Female Male Intersex (people whose sex falls be tween male-typical and female-typical forms)	
2. What is your gender identity? (select all that apply)	Agender Cisgender man Cisgender woman Genderqueer Nonbinary Questioning Transgender man Transgender woman Two-spirit Another gender I prefer not to answer I do not understand the question	"I am who I am – I don't need to tell people who I am and validate who I am, so in the context of this in collecting data it's important but I feel weird requiring to be identified and requiring others to identify themselves." - Participant 4 Some respondents may have trouble with comprehension (3) "Some people would definitely say they don't understand the question, because I don't think everybody understands all of these different options. It could definitely be difficult, especially if you don't even know anything about different ways of identifying gender. I think some people would say, 'I don't know what you're talking about." - Participant 3 "If you're asking this survey to a bunch of older generation people, yeah the definitions would make a difference." - Participant 1 Add "man" and "woman" answer options (1) "Some people may not identify as cisgender man or transgender they just want man or women. Why is that not on there? Really boxing in when people might not want to feel boxed in I understand why you have it, because you don't want people think you're defaulting to cis when you say man or woman, but in reality, that doesn't happen. A lot of trans folk pick man or woman instead of trans man or woman." - Participant 2	2. What is your gender identity? (select all that apply) Note: It is okay if you are not familiar with all of these terms. Choose the term or terms that best fit with your identity.	 Agender (neither male nor female) Cisgender man (assigned male at birth, identifies as male) Cisgender woman (assigned female at birth, identifies as female) Genderqueer (neither male nor female exclusively) Nonbinary (neither male nor female exclusively) Questioning (questioning (questioning gender identity) Transgender man (assigned female at birth, identifies as male) Transgender woman (assigned male at birth, identifies as female) Two-spirit (having both feminine and masculine qualities) Another gender I prefer not to answer I do not understand the question 	

3. What is your sexual orientation? (select all that apply)	 Asexual Bisexual Gay Lesbian Pansexual Queer Questioning Same-gender loving Straight/ Heterosexual Two-spirit Another sexual orientation I prefer not to answer I do not understand the question 	Difficulty with comprehension of: • Same-gender loving (1) • Pansexual (1) Include definitions (1) Concern about length of options (2) "This is a lot to choose from. I don't know how fast you want the questionnaire answered, so that would be a concern for me. If this is a general form that'll be seen, 13 is a lot to choose from." - Participant 1	3. What is your sexual orientation? (select all that apply) Note: It is okay if you are not familiar with all of these terms. Choose the term or terms that best fit with your identity.	Asexual Bisexual Gay Lesbian Pansexual Queer Questioning Same-gender loving Straight/ Heterosexual Two-spirit Another sexual orientation I prefer not to answer I do not understand the question
4. There are signs in my clinic that welcome lesbian, gay, bisexual, and transgender patients.	• Yes • No • I don't know	Confusion about interpretation of "signs" "Signs on the wall." - Participant 1 "When you say signs, do you mean actual signs that say 'people are welcome' or clues in the environment? I work in a LGBT clinic, and I don't think they have a sign, but you feel welcome because of other things." - Participant 2 "Pretty literal in the interpretation – thinking about, is there anything that specifically says that, as an LGBT patient, you are welcome in this environment? Interpreting it very literally. If you want it to be not literal, you need to add more words." - Participant 3 "Cues in the room" - Participant 4 Uncertain if general "welcome" sign is included (1) "I think the answer is yes, but it welcomes everyone – it doesn't point out all the different things that are in the categories there. It's 'Welcome, if you wait more than 20 minutes, please come to the front desk and let the administrator know." - Participant 1 "Clinic" not inclusive of all providers (1) "I don't work in a clinic; I work in a nonprofit, so I just have to translate that word in my head If this were to be open to other disciplines other than a cancer center or a physical healthcare setting, then practice might be more inclusive." - Participant 5	12. There are cues in my healthcare practice that show I welcome lesbian, gay, bisexual, and transgender (LGBT) patients.	• Yes • No • I don't know

5. My patient intake form or process allows patients to indicate if they would like to be called by a name other than their legal name.	• Yes • No • I don't know	Variation in "intake form or process" interpretation "The intake process, clinically, does acknowledge this, but the formal intake does not acknowledge that Will answer from the formal perspective because it says form, which makes me go right to the hard copy formal stuff, so I answered no." - Participant 4	13. Patients have opportunities to easily document their name in use (if different from legal name) in my healthcare practice	Yes No I don't know
6. My patient intake form or process asks patients for their pronouns.	• Yes • No • I don't know	Paper forms only (3) "I'm assuming it could be whatever available – it could be electronic, it could be you write on pen and paper, what someone's asking you. Pretty inclusive Because it's intake form or process, it makes it very open so you could deliver the information in differ-	14. Patients have opportunities to easily document their pronouns in my healthcare practice.	Yes No I don't know
7. My patient intake form or process provides an opportunity for patients to disclose their sexual orientation.	• Yes • No • I don't know	ent ways" - Participant 2 Uncertain about the intake process (1) I don't know what the form looks like. It's all computerized now. We don't see the paper that they're filling out. That's part of the patient's chart, unless I go to a different screen, which I'm usually not going to I would imagine if we were asking that question, then it would be indicated in the chart that I see Ask, 'There's a place in my chart that indicates" - Participant 3 Include definition of pronouns (1) "You're gonna ask the older generation, and they're going to need an example." - Participant 1 Different types of providers may have different experiences (1) "I make it available for them to disclose their sexual orientation, because I deal with breast and cervical where that is extremely important. But those who do other cancers don't build the same rapport and intimacy level with patients to ask and disclose their sexual orientation. I don't dive into people's spirituality as much as my palliative care team due to a sense of need rather than a lack of finding the opportunity for a patient to disclose it." - Participant 4	15. Patients have opportunities to easily document their sexual orientation in my healthcare practice.	• Yes • No • I don't know

8. I ask my patients about their values and preferences when establishing goals of care.	 Always Usually Sometimes Never I don't know 	Providers may be unwilling to disagree (2) "You also may not get a lot of providers willing to say 'No, I don't.' I'm curious if there are other ways to ask the question where you may be more likely to get the real answer parsing it into other questions like, 'I have conversations with my patients about their values when setting up care,' 'I talk with my patients about their personal preferences when setting up care.'" - Participant 5 Consider changing "ask" to "discuss" (1) "Should you say not 'I ask,' but, 'I include my patients' values and preferences when establishing goals of care.' It could mean it came up because the patient brought it up, or it came up because the patient brought it up, or it came up because the patient asked about it. I don't go into the room and ask about it. But if it comes up, I'm definitely including that in my decisions about their care. And that could be wrong, I'm just saying that's to me the normal way it occurs. If you wanna know whether it's discussed then that's a different question." - Participant 3 Values and preferences are separate (1) "Those are two different things, and they shouldn't be in the same question you may discuss preferences with patients without maybe asking about values. Maybe 'values or preferences' would be a way to get around that, because then you don't have to think about both, and that's a very simple switch." - Participant 2 "It's a loaded question." - Participant 1	16. I initiate conversations about patient values and preferences when establishing goals of care.	 Always Usually Sometimes Never I don't know
9. I ask my patients about their sexual health concerns.	 Always Usually Sometimes Never I don't know 	Relevance depends on provider type (3) "Yes. Now is it the bias because I was a breast navigator? Those questions were vital to them" - Participant 1 "Some of this may not be applicable to every single specialty You could put in 'not relevant to my specialty.' If I'm an orthopedic surgeon, I might not ask about our sexual health." - Participant 3 "You'll get the answer based on the disease site they use." - Participant 4 Add "when appropriate" (1) "Could you put 'when appropriate'? Maybe someone doesn't always ask, but they ask when it's appropriate." - Participant 2	21. I am as comfortable discussing sexual health concerns with LGBTQI patients as I am with heterosexual, cisgender patients.	 Strongly agree Agree Disagree Strongly disagree I don't know

10. I consider my patients' hormonal balance when creating a cancer treatment plan	Always Usually Sometimes Never I don't know	Relevance depends on provider type (5) "I also question if we're talking about a physician versus a mental health practitioner versus different providers, and whether those providers would know this information." - Participant 5 "I think it just requires in the introduction to the questionnaire some careful instructions. For instance, you might say, 'Some of these questions may require you to think of yourself outside of your current specialty practice. Please give your best answer.' I'm not creating a cancer treatment plan for anybody. If you said, 'I consider hormonal balance when taking care of patients with cancer,' then I could answer that. But since you said creating a cancer treatment plan, I'm not ever creating a cancer treatment plan." - Participant 3 "It may not always be necessary. If you were talking of someone's basal cancer, are you going to consider the hormonal balance? What if you were treating someone with breast cancer? Yes. This question – what if you are a cancer specialist who only sees skin cancers? Your answers will be completely different to someone who's seeing someone with breast and ovarian cancers." - Participant 2	11. I consider endogenous and exogenous hormones when managing patients' medical conditions.	 Always Usually Sometimes Never I don't know
11. I respectfully confront colleagues who discriminate against LGBTQI patients. 12. I respectfully confront colleagues who make jokes about LGBTQI people.	Always Usually Sometimes Never I don't know Always Usually Sometimes Never I don't know	How to answer if it never happened (2) "I think that I would in a respectful way do that, but I've never had to face this I would answer in the future, that I would address." - Participant 1 "You might have someone who would feel comfortable doing it, but they've never had to. I was lumping it all together. I think there's value in separating it out. Have you confronted them before vs are you willing to or would you in the future, because in answering the question, I would say I'm not sure because I can't think of a specific instance where I've had to go out of my way to confront someone about this." - Participant 5 "Confront" has a negative connotation (1) "Confront is a little aggressive, and I don't think it's the correct adjective to use. Because people may have discussions with other providers around their discrimination, but I don't think they would characterize it as confront." - Participant 2 Uncertain if "respectfully confront Do you want to know if people confront, or if they want people to respectfully confront? If you have respectfully just in for kicks, you should take it out." - Participant 3 I think about, 'Well, what if I confront them, but I don't confront them respectfully?" - Participant 5	17. If I witness people discriminating against an LGBTQI patient, I actively challenge that behavior. 18. If I witness people making jokes about LGBTQI people, I actively challenge that behavior.	Always Usually Sometimes Never I don't know Always Usually Sometimes Never I don't know

13. I include same-sex partners in medical decision-making.	Strongly agree Agree Disagree Strongly disagree I don't know	Depends on patients' desires (4) "The only thing is, with permission. That's the only caveat for that one. Just like not same-sex partner, it's always with permission." - Participant 3 "It doesn't matter to me as a provider who the person is – it's who the patient wants the person to be. This assumes that the patient wants this, that the patient is bringing someone in the room to be in the decision." - Participant 5 "Same-sex" is limiting (1) "You don't want to exclude nonbinary partners, trans partners – I get what it's trying to say, but it's still you should include all partners." - Participant 2 Lack of consensus about answer options "I'm curious about why this answer scale was chosen versus 'always, usually, never, etc." - Participant 5 "I like 'Strongly agree' for this question. I hate 'always' and 'never' – I just feel like nobody does anything all the time, and never is always the wrong answer when you ask a behavioral question, to me, 'strongly agree' is more appropriate - Participant 3	19. In my practice, patients may designate any person of their choice, including an unmarried partner, as a medical decision-maker.	Always Usually Sometimes Never I don't know
		Participant 2 suggested asking about advance directives "Maybe questions around living wills and documents like that. That would be important to know. Are people discussing those types of things with patients who identify as LGBT, because I'm sure they're not." - Participant 2	20. I encourage my LGBTQI patients to document advance directives.	AlwaysUsuallySometimesNeverI don't know
14. It is my professional responsibility to champion positive system changes to support LGBTQI patients.	Strongly agree Agree Disagree Strongly disagree I don't know	Consider asking about frequency of engagement (1) "If you were to use the always, sometimes, never, it speaks to, 'Sometimes, I feel like I want to do this or sometimes I'm good at doing this, while other times I'm too busy and it's not my priority.' It's how often are you engaging in championing system changes, because I think system changes can sometimes feel very overwhelming You'd have some people look at this question and say yeah, I agree, whereas another aspect to the question is how often are you engaging in system changes." - Participant 5 Providers may be unwilling to disagree (1) "It's sort of a leading question. What provider do you think is gonna say, 'I disagree with that?' I think people will feel badly about saying anything other than, 'Strongly agree' or 'Agree.' You could ask, 'I have participated in developing changes in the medical system to support LGBTQI patients' if you're trying to figure out if people really are advocates, but this question is forcing you into, 'I'm a responsible professional or irresponsible professional.'" - Participant 3	28. It is my professional responsibility to champion positive system changes to support LGBTQI patients.	Strongly agree Agree Disagree Strongly disagree I don't know

15. I am clinically prepared to meet the healthcare needs of gay and/or lesbian patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Non-clinicians unable to answer the questions (1) Question meaning of clinically prepared (1) "Does that mean that I have affirming signage on the wall? Does that mean I have great intake forms that are affirming? Does it mean I need special equipment for something? Are we talking about physical healthcare tools and tactics and/or are we talking about environment/space/people?" - Participant 5	Split into two questions: 4. I feel clinically prepared to meet the healthcare needs of gay patients. 5. I feel clinically prepared to meet the healthcare needs of lesbian patients.	 Strongly agree Agree Disagree Strongly disagree I don't know
16. I am clinically prepared to meet the healthcare needs of transgender patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Unsure about definition of intersex (2)	7. I feel clinically prepared to meet the healthcare needs of transgender patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
17. I am clinically prepared to meet the healthcare needs of bisexual patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know		6. I feel clinically prepared to meet the healthcare needs of bisexual patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
18. I am clinically prepared to meet the healthcare needs of intersex patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know		8. I feel clinically prepared to meet the healthcare needs of intersex patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
19. I treat all my patients the same, so it is not important to know their sexual orientation or gender identity.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Two-part question (2) "I do treat all my patients the same, but I disagree with that second part. It's important to know who they are It's a divided question I don't know how to answer that." - Participant 1 "I think there's two things you're addressing with only one answer. Yes, I agree, it is important to know. So I don't know if this question makes sense, because I feel like I'm addressing two different things." - Participant 4 Separate sexual orientation and gender identity (1) "For someone who feels like one way towards sexual orientation and a different way towards gender identity, maybe they wouldn't know how to answer the question." - Participant 2	Split into two questions: 22. Because I treat all my patients the same, it is not important to know their sexual orientation. 23. Because I treat all my patients the same, it is not important to know their gender identity	 Strongly agree Agree Disagree Strongly disagree I don't know
20. I am comfortable caring for gay and lesbian patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	"Comfort" can be vague (1) "Comfort is a complicated word, but it's used in a lot of surveys, so I know it's been validated in some way Sometimes is it clinical comfort or is it emotional comfort?" - Participant 2	Removed	

21. Asking about both sex and gender identity will confuse my patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Change to "sex assigned at birth" (1) "Say sex assigned at birth. 'Sexual identity' people often use for sexual orientation identity." - Participant 2 Uncertainty about purpose of question (1) "Clearly, it will confuse some patients, and clearly, it will make some patients happy, and clearly, some providers are confused about it, so they ain't gonna ask about it. Ask the provider if they're confused about sex and gender identity. 'Are you confused about sex and gender identity?' I don't understand how asking this question is helpful to trying to get at the discomfort that a provider might have." - Participant 3 Consider changing to "Always/Never" scale (1)	24. My patients would not understand why they are being asked about both sex assigned at birth and gender identity.	 Strongly agree Agree Disagree Strongly disagree I don't know
22. Asking about both sex and gender identity will insult my patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Change to "sex assigned at birth" (1) "Say sex assigned at birth. Sexual identity people often use for sexual orientation identity" - Participant 2 Consider changing to "Always/Never" scale (1)	Removed	
23. It is my professional responsibility to learn about LGBTQI patient needs.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Good comprehension, retrieval, judgement, and response formulation (5)	27. It is my professional responsibility to learn about LGBTQI patient needs.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
24. I would like more training on how to better care for LGBTQI patients.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Separate LGBTQI (1) "I think sometimes we have it all like a big umbrella more training for whom? Maybe someone is very fine with LGB cisgender folks but has no training in how to care for intersex folks. Is an agree about the entire group of people, or is the agree about one subset? It would be helpful to ask it separately." - Participant 2	26. I would like more training on how to better care for LGBTQI patients.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
25. Everyone has implicit bias.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Add definition of "implicit bias" (2) Add answer options for those who don't know the meaning of "implicit bias" (1) "Does everyone know what implicit bias means? Possibly add 'I don't understand the question' or 'I don't know what this means' response option." - Participant 5	29. Everyone has implicit bias.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
26. Gender is biological.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Remove "Strongly agree" and "Strongly disagree" (1) Non-clinicians may not be able to answer the question (1) "I think being a non-clinician, I don't think I have to really know what the word biological truly means. I would say I don't know." - Participant 4	30. Gender is biological.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know

27. Transgender people are more likely to be rejected by their families.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Consider changing to "Always/Never" scale (1) "Always/sometimes/usually would be helpful because it's talking about families. If talking about society as a whole, I would answer this very completely." - Participant 1 Uncertain about comparison group (1) "More likely than who? Maybe not more likely than schizophrenics, but if you mean just more likely than 'normal' then I would have to say that many families, but not all, might reject a transgender member." - Participant 3 Uncertainty about whether to answer based on objective statistics or personal experience (1) "I would want to answer 'I don't know' because this is a statement. I don't have the percentages in front of me, so I would go I don't know. If this was a test, I don't know. But if I am going off of the experiences I know and what I've heard in media and such, I generally would say yes, I agree." - Participant 4	31. Transgender people are more likely to be rejected by their families.	 Strongly agree Agree Disagree Strongly disagree I don't know
28. Many LGBTQI people experience significant trauma.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Good comprehension, retrieval, judgement, and response formulation (5)	32. Many LGBTQI people experience significant trauma.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
29. I know LGBTQL specific psychosocial support resources I can refer patients to.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Separate LGBTQI (1) "I do think that it is different when you're talking about psychosocial support resources, because they're actually different depending on the population you're talking about. For instance, you may have stuff for LGB, but nothing for intersex folks If you want to know about gaps, people in general have LGB resources, fewer have T resources, and no one has I resources." - Participant 2	33. If a transgender patient wanted psychosocial support, I would know who to refer them to.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know
30. LGBT people have higher smoking rates than the general population.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Remove "Strongly agree" and "Strongly disagree" (1)	34. Sexual and gender minority people have higher smoking rates than the general population.	Strongly agreeAgreeDisagreeStrongly disagreeI don't know

31. It is impossible for transgender women who have had gender-affirming surgery to get prostate cancer.	Strongly agree Agree Disagree Strongly disagree I don't know	Negative phrasing can affect response formulation (1) "Agree. I can see that happening, yes, so I'm going to agree with that statement. It is possible, agree. It is impossible, no disagree. A little bit confusing." - Participant 1 Non-clinicians may not be able to answer the question (1) "I'm a non-clinician, so I set a very strict line where I can answer things If I was posed with this, and it was a mandatory question, I would go with 'I don't know.' If I go across that line, it's not a good reflection of my navigation role." - Participant 4	35. It is impossible for transgender women who have had genderaffirming surgery to get prostate cancer.	 Strongly agree Agree Disagree Strongly disagree I don't know
32. Transgender men are at a lower risk for cervical cancer after being on gender- affirming hormonal therapy for five years.	Strongly agree Agree Disagree Strongly disagree I don't know	Has more cognitive burden (1) "It's a bit more detailed than questions prior have to focus in and understand the meaning a little more." - Participant 5 Not all providers need to know the answer (2) "I don't know. It's a clinical question. I should not have to know these answers." - Participant 4 "If I was taking care of those people as part of my practice, I would know the answer. If any provider in the world needs to know the answers to these questions, I disagree wholeheartedly that's why we have specialists. And I don't feel bad about that. I'm a generalist, not a specialist. The whole world cannot be able to take care of the people who you feel most passionate about – that's just not reasonable." - Participant 3	36. Transgender men are at a lower risk for cervical cancer after being on gender-affirming hormonal therapy for 5 years.	Strongly agree Agree Disagree Strongly disagree I don't know
33. Sexual orientation is irrelevant when it comes to breast reconstruction preferences among breast cancer survivors.	 Strongly agree Agree Disagree Strongly disagree I don't know 	Negative phrasing can affect response formulation (1) "I disagree. I treat the person as a person and offer all reconstruction options Would be easier if it said is relevant That completely confused me." - Participant 4	37. Sexual orientation is relevant when it comes to breast reconstruction preferences among breast cancer survivors.	 Strongly agree Agree Disagree Strongly disagree I don't know
34. Please describe any experiences you have had working with LGBTQI patients:	Open text		54. Please describe any experiences you have had working with LGBTQI patients:	Open text
35. Please indicate any reserva- tions in caring for LGBTQI patients:	Open text		55. Please indicate any reservations in caring for LGBTQI patients:	Open text



36. Please provide suggestions for improving LGBQTI cancer care:	Open text		56. Please provide suggestions for improving LGBQTI cancer care:	Open text
37. Offer any additional comments:	Open text		57. Offer any additional comments:	Open text
Revisions are in boldface .				