

A Novel Breast Imaging Intake Survey Inclusive of Transgender and Non-binary Populations To Foster Inclusion, Improve Breast Care and Better Understand Breast Cancer Risk and Outcomes



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Gender identity is a spectrum and is defined as *a person's sense of gender*

- **Cisgender:** Sex assigned at birth = gender identity
- **Transgender and non-binary (TGNB):** sex assigned at birth \neq gender identity
- **Transgender woman:** female gender identity, assigned male at birth (AMAB)
- **Transgender man:** male gender identity, assigned female at birth (AFAB)
- **Non-binary:** neither identifies as male nor female

- **TGNB patients are a heterogenous population with respect to breast cancer risk factors**
 - Hormone use
 - Gender-affirming chest/breast surgery
- **Incidence and prevalence of breast cancer not well-characterized due to limited data**
- **Absence of robust evidence-based breast cancer screening standards among TGNB patients**

- **Identification of group members – first step in improving data collection, research, and care of TGNB individuals**
 - Inform breast cancer risk and outcome
 - Yield data-driven appropriate breast imaging and follow-up recommendations
- **Recognize and mitigate challenges specific to TGNB patients**
 - Access to non-judgmental healthcare
 - Inclusive, non-discriminatory healthcare environment
 - Opportunity to safely self-disclose gender identity

- **Patients who present to one of our breast imaging sites complete an iPad-administered breast imaging history and breast cancer risk assessment survey**
 - Lifetime-risk of developing breast cancer estimated via modified Tyrer-Cuzick Risk model, version 8 (TC-8)
- **Patients identified classified “male” or “female” based on legal sex in electronic health record and complete corresponding gender-specific survey**
 - May not accurately reflect gender identity
 - Existing survey does not capture information specific to TGNB patients

- **With input from transgender health experts and a technical software engineer, UCLA Breast Imaging updated the structure and content of the existing survey to better capture the experiences of TGNB patients**
- **A single master survey with multiple branching points based on Boolean logic plus responses to gender identity and sex assigned at birth queries provided the most streamlined and elegant solution**
 - Requirements: 3 new questions and 3 question modifications
- **Updated survey provides four unique survey paths:**
 - (1) cisgender women,
 - (2) transgender men and non-binary AFAB patients,
 - (3) cisgender men,
 - (4) transgender women and non-binary AMAB patients

Updated survey: Two new questions at survey outset

KEY

- - changes and/or new additions from the existing survey
- X - corresponding question is asked on a specific survey

QUESTION	GENDER IDENTITY			
	Cisgender women	Transgender men; Non-binary AFAB	Cisgender men	Transgender women; Non-binary AMAB
NEW QUESTION: What was your sex assigned at birth?	X	X	X	X
NEW QUESTION: Some patients may identify with a gender that is different from their sex assigned at birth. What gender do you identify with?	X	X	X	X
Is this your first mammogram or breast imaging exam?	X	X	X	X
According to our records, your last mammogram was on [DATE]. Have you had a breast imaging exam since?	X	X	X	X
What is the main reason for your visit today?	X	X	X	X

Question modification concerning hormone use

- Deletion of the word “replacement”

QUESTION	GENDER IDENTITY			
	Cisgender women	Transgender men; Non-binary AFAB	Cisgender men	Transgender women; Non-binary AMAB
Are you pregnant?	X	X		
Are you currently breast feeding?	X	X		
Are you taking birth control pills?	X	X		
Are you currently taking any hormone <u>replacement</u> therapy? <div style="text-align: center;"> ↓ ↓ ↓ </div>	X	X	X	X
Are you currently taking any hormone therapy?				
Have you ever been pregnant?	X	X		
How many times have you been pregnant?	X	X		
How many children have you given birth to?	X	X		

- **To our knowledge, this survey is the first of its kind in radiology departments to ask patients their sex assigned at birth and gender identity and then tailor subsequent questions based on patient responses**
- **Downstream benefits of intervention**
 - Improve the patient experience and inclusivity
 - Facilitate collection of robust databank specific to TGNB patients to better understand
 - Incidence and risk factors for breast cancer
 - Augment screening recommendations with larger data sets
 - Optimize breast imaging management and follow-up recommendations among TGNB patients
 - Survey data is easily available for radiologist to review at the time of image interpretation.
 - Educational opportunity for physicians, staff and cisgender patients
- **Updated gender-inclusive survey can serve as a model for other breast imaging centers and radiology departments**
 - Many breast imaging practices already use TC-8 risk assessment tool which lowers barriers to adoption