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Clinical Perspective

A New and Inclusive Intake Form for Diagnostic Imaging Departments

Sidsel Pedersen, BRadiog, MRT (R)^{a*} and Virginia Sanders, MSc, RTR^b

^a SAIT, Calgary, AB, Canada

^b San Diego, California

ABSTRACT

Introduction: The gender landscape is changing. For professionals in health care, particularly diagnostic imaging (DI), we need better communication tools to obtain personal information from this gender diverse community. We need more specific information from patients because we are performing examinations in which radiation is involved. It is our professional duty to protect a patient's reproductive organs whenever possible, but we must know where those organs are located. In addition, we must determine if a patient could be pregnant or not. Compliance to the professional duty must also extend to transgender and nonbinary patients. Transgender patients do not express or identify the same as their sex assigned at birth; therefore, we may shield inappropriately and expose their reproductive organs unintentionally. Nonbinary patients do not identify as either male or female, and therefore, their expression does not indicate reproductive organ location.

Method: There are currently no specific forms in DI that ask the questions we need to know to protect the public from unnecessary radiation exposure to reproductive organs. In developing the new form, we began looking at current practices in DI departments to better understand where the communication gap was and what important information would be required in the new form.

Result: The authors have created a new intake form that accommodates all patients—regardless of age or gender. The result is the SIGE (Sex, Identity, Gender, Expression) form.

Discussion: The SIGE form is inclusive and asks the necessary questions medical radiation technologists need to know in a respectful and professional manner so that we can shield gonadal tissue from ionizing radiation. In addition, the intention of the form is to help the gender diverse community to feel safe and respected in our department.

RÉSUMÉ

Introduction/contexte : Le paysage de genre est en évolution. Les professionnels de la santé, notamment en imagerie diagnostique

(DI), ont besoin de meilleurs outils de communication pour obtenir des renseignements personnels auprès des membres de cette communauté diversifiée sur le plan du genre. Nous avons besoin de renseignements plus spécifiques des patients parce que nous effectuons des examens faisant appel à la radiation. Nous avons le devoir professionnel de protéger les organes reproducteurs des patients dans toute la mesure du possible, mais nous devons savoir où sont situés ces organes. Nous devons également déterminer si une patiente peut être enceinte. La conformité au devoir professionnel doit aussi s'étendre aux patients transgenres et non binaires. Les patients transgenres ne s'expriment ou ne s'identifient pas au sexe assigné à la naissance, ce qui fait que nous pouvons mal disposer les écrans et exposer de façon non intentionnelle leurs organes reproducteurs. Les patients non binaires ne s'identifient à aucun sexe et par conséquent leur expression de genre n'indique pas l'emplacement des organes reproducteurs.

Méthodologie : Il n'existe actuellement aucun formulaire en imagerie diagnostique permettant d'obtenir les réponses dont nous avons besoin pour protéger le public d'une exposition inutile des organes reproducteurs à la radiation. En développant les nouveaux formulaires, nous avons commencé à examiner les pratiques actuelles des services d'imagerie afin de mieux comprendre où se situait la lacune en matière de communication et quels étaient les renseignements importants que l'on devrait retrouver dans le nouveau formulaire.

Résultat : Les auteurs ont produit un nouveau formulaire d'entrée qui accomode tous les patients—sans égard à l'âge ou au genre. Le résultat est le formulaire SIGE (Sexe, Identité, Genre, Expression).

Discussion : Le formulaire SIGE est inclusif et pose les questions nécessaires pour permettre aux technologistes en radiation médicale d'obtenir les renseignements dont ils ont besoin d'une manière respectueuse et professionnelle, pour nous permettre de protéger les tissus gonadaux contre le rayonnement ionisant. De plus, le questionnaire vise à aider la communauté de la diversité de genre à se sentir en sécurité et respectée dans notre service.

* Corresponding author: Sidsel Pedersen, BRadiog, MRT (R), SAIT, 1301-16 Avenue NW, Calgary, AB T2M 0L4.
E-mail address: Sidsel.pedersen@sait.ca (S. Pedersen).

Introduction

The gender landscape is changing and many patients receiving diagnostic imaging (DI) examinations do not identify with the binary (male/female) model of gender. It is imperative that medical radiation technologists (MRTs) understand this shift in gender to better accommodate patients in the gender diverse community¹ [1], particularly transgender and nonbinary patients. MRTs have a professional responsibility to ensure patient safety during examinations, safety from ionizing radiation but also a safe environment in which all patients can feel comfortable [2]. Transgender patients may not present the same as their assigned sex at birth, and at times, this may lead to a breakdown in communication between the technologist and patient [3]. This breakdown can result in the technologist not inquiring about the patient's pregnancy status or not knowing the location of the patient's reproductive organs, which can lead to improper placement of gonadal shielding and thus unnecessary radiation exposure.

The disparity of proper treatment of transgender and nonbinary patients in health care is well documented [4–6]. Transgender and nonbinary patients have a unique situation in that the name on their identification documents may not be congruent with how they express and/or identify. Furthermore, electronic health records (EHR) and software intake systems often only allow for male and female gender options. However, the information collected by EHR systems regarding gender is changing due to mandates from governments and advocacy by transgender organizations. It is now recommended to ask SOGI (Sexual Orientation/Gender Identity) questions at hospitals, clinics, and primary care practitioners by the Centers for Medicare and Medicaid Services as well as the National Coordinator for Health Information Technology in the USA [7].

In the document entitled “Transgender-affirming Hospital policies” [8], it is suggested to collect patient name and pronoun during patient admission, as well as the two-step method for obtaining gender information. The two-step method consists of asking about gender identity and sex assigned at birth on all EHRs; this method was first introduced and recommended by the Williams Institute [9] and further studied by the Fenway Institute in 2014 [7]. In the later study, 301 respondents from a 5-minute survey were asked about sexual orientation, gender identity, and sex assigned at birth. Eighty two percent of the respondents believed that asking about gender identity was important and 88% said they would answer the “sex assigned at birth” question on EHRs. Seventy four percent of the respondents agreed

¹ Gender diverse community: A term that encompasses people throughout the gender identity and expression continuum regardless of sexual orientation. It is meant as an inclusive term to help define a group of the population that do not identify as cis-gendered.

that sexual orientation was also important to ask on EHRs. Other studies have also indicated that it is important that health care providers know about their patients' gender identity, sex assigned at birth, and/or sexual orientation when checking into a hospital or clinic [7,8,10,11].

In Canada, there are currently no requirements for EHR systems to accommodate sexual orientation, gender identity, or sex assigned at birth on entering a hospital or clinic. To protect the public from unnecessary radiation exposure, MRTs need to know the answer to two specific questions prior to performing a DI examination: 1) where are the patient's reproductive organs? (particularly when a pelvis or hip examination is ordered); and 2) is there any chance the patient could be pregnant?

After an extensive search of the literature, the authors were not able to find a form that addressed the aforementioned questions. Based on the information gathered from the literature reviews and our knowledge of what is required for a DI examination, we began to develop a new form specifically for use in DI departments.

Method

In developing the new form, we began looking at current practices in DI departments to better understand where the communication gap was and what important information would be required in the new form. We compiled feedback from MRTs regarding their own experiences and consulted with members of the LGBTQ2S+ community and medical professionals specializing in transgender practices. The goal was to create an intake form that would ensure the technologist has the necessary information to best protect the patient from unnecessary radiation exposure, and ensure the information is collected in a professional and respectful way.

To ensure inclusivity, the form would need to give patients the opportunity to provide their name in use and pronoun, as suggested by other studies [3,7,8,11]. Many patients use a different name than the legal name on their healthcare or identification documents. As an example some patients would prefer to be called by their middle name rather than their first name, also patients of varying cultures or ethnic backgrounds would be provided an opportunity to indicate a name they use. Patients could also use this space to write the phonetic spelling of their name should they choose to. By providing this space we can ensure that all patients will be referred to by the name they wish to be called during the exam. Using the correct patient name and pronoun is important to non-binary and transgender individuals as it is an integral part of their identity. By using these references appropriately, a patient may feel safer and more respected. From the research, we recognize that there are different approaches to collecting

gender-specific information from patients. Although it is important to use the two-step method for obtaining gender information, it still does not indicate where a patient's reproductive organs are located.

We used the common practice of inquiring about a patient's pregnancy status as our form's point of reference. It is the MRT's responsibility to confirm pregnancy status of all female patients of childbearing age [12] before the patient's radiographic examination. Commonly this is carried out by having the patient answer questions related to the date of their most recent menstrual cycle. This is documented in various ways, including patient waivers and in radiological information systems.

Another important issue that we needed to explore was the placement of gonadal shielding. We wanted to ensure that the form would provide information that would help the MRT accurately apply gonadal shielding for patients in gender diverse communities. In accordance with the ALARA principle (as low as reasonably achievable), it is the technologist's responsibility to use lead shielding on patients "whenever the value of the examination is not impaired by such use" [12]. For accurate placement of gonadal shielding specific to examinations such as pelvis, hip, and scoliosis we must know the location of the patient's reproductive organs. As it is not possible to determine the location of a patient's reproductive organs based solely on an individual's gender expression or identity, we realized the form would need to have questions specific to the patient's reproductive organs.

Currently, only females of childbearing age are asked questions related to their reproductive status, but the new form would be intended for all patients to fill out—regardless of age or gender. We identified several advantages to having every patient complete the same form: it would avoid the patient having to meet certain conditions or criteria before receiving the form; it is not dependent on age, gender, or type of examination; and it is less likely to be forgotten or missed at intake.

With input from a panel of specialists, community members, and MRTs, we developed a direct and easy to understand question to obtain the location of a patient's reproductive organs. The study by Cahill et al [10] states that patients are willing to answer sensitive questions and provide personal information when they are given a valid rationale. The new form should include a statement informing the patient why the question related to reproductive organ placement is necessary. The patient should also be given the opportunity to ask for clarification regarding the question if they are unsure of the answer. Some patients may not understand the question, and as a part of patient-centred care, it is vital to ensure that patients are always given an opportunity for clarification.

As mentioned before, pregnancy status must be obtained for patients aged 10–55 years. The new form should therefore provide the opportunity for anyone with internal reproductive organs to document when their last menstrual period was and if there is any chance they could be pregnant.

Result

From our research, we created the SIGE (Sex, Identity, Gender, Expression) form - this form accommodates all patients - regardless of age or gender. The new form allows the MRT ensure a safe environment by asking the appropriate questions in a respectful manner.

SIGE Form (Sex, Identity, Gender, Expression)

- 1 Name in use:
2. Pronoun: he/him she/her they/them other

Your doctor has ordered an x-ray.

We use ionizing radiation in order to obtain the images your doctor has requested. As x-ray technologists, it is our professional duty to protect patients as best as possible from any unnecessary exposure. This includes shielding reproductive tissue whenever possible.

Please complete this form to help us determine how to best protect you during your x-ray today.

If you have any questions or concerns please feel free to speak with the technologist prior to your exam.

3. Where are your reproductive organs currently?
 - Internal (ovaries, uterus)
 - External (testes)
 - I do not have any reproductive organs
 - I am unsure of the answer (please speak to the technologist prior to your exam)

*****COMPLETE BELOW IF YOU HAVE INDICATED INTERNAL REPRODUCTIVE ORGANS*****

Ionizing radiation may be harmful to a fetus. To ensure that there is no possibility of pregnancy please answer the following questions:

When was the start date of your last menstrual cycle (period)? _____

If the start date is more than 10 days ago please answer the following:

How can you be certain that you are not pregnant?

Discussion

The SIGE form will help create a safe and inclusive environment for patients. By asking all patients the same standard questions regardless of external appearances, gender markers², or age, the SIGE form will ensure all necessary information is provided to the MRT. As there is no way to verify the location

² Indicators of an individual's gender on official documents.

of reproductive organs without asking it is important that all patients complete this form. Children are more sensitive to the negative effects of radiation, and it is imperative to provide gonadal shielding during a DI examination. Because prepubescent children can easily pass as either gender, it is critical to collect this information from children regardless of appearances. In addition including the SIGE form as part of the clinical workflow could spark discussions on gender awareness, and help educate staff and patients about gender diverse communities.

The first two questions allow patients to indicate their name in use and pronoun. This information will give the technologist the ability to call the patient by the name they use—even if it is different than the patient’s legal name. Using a patient’s correct name and pronoun during examinations aligns with patient-centred care principles and will increase patient compliance during examinations. In addition, it will reduce the chance of someone being “outed” in public, which can put them in danger of physical abuse or verbal harassment. As much as the SOGI questions are important to the LGBTQ2S+ community, knowing a patient’s sexual orientation does not impact how MRTs perform DI examinations. We did not feel that SOGI questions are necessary as the CAMRT code of ethics states that MRTs must treat every patient with respect and dignity regardless of sexual orientation [13]. Neither sexual orientation nor gender identity should impact how we treat patients in our department or during examinations.

The importance of differentiating between female patients and patients with internal reproductive organs is crucial. Transgender male³ patients have not necessarily undergone any type of transitioning surgeries and may have internal reproductive organs. Question three ensures the MRT is able to place gonadal shielding accurately on every patient. An MRT performing a pelvis x-ray examination on a transgender male patient would place lead shielding with the assumption of male gonads and could unknowingly expose the patient’s ovaries to ionizing radiation. Alternatively, if we are performing a pelvis examination on a transgender female⁴ patient, we would shield for internal reproductive and would expose the testes unnecessarily. As stated earlier, this is one of the reasons that all patients are given the SIGE form to complete.

Because the gender landscape is changing, it is no longer sufficient to confirm pregnancy status based solely on the patient having female gender markers. In current practice, transgender and nonbinary patients may not be asked to confirm pregnancy. For example, if a transgender male patient arrives for a DI examination with male gender markers on their identity documents, why would an MRT ask this patient about pregnancy? It is appropriate to query transgender males for pregnancy as there are documented cases of transgender males giving birth [14]. The SIGE form

asks all patients with internal reproductive organs to confirm any chance of pregnancy.

Conclusion

The SIGE form serves to answer two important questions before a DI examination:

1. Determine the location of reproductive organs
2. Establish pregnancy status

Furthermore, the SIGE form helps create a safe and inclusive environment for all patients as they are given an opportunity to provide the technologist with the name they use and their pronoun.

By asking every patient to complete the SIGE form, we avoid having to make a judgement call and ensure accurate information is gathered for each patient, particularly young children.

The authors believe that the SIGE form will help patients in gender diverse communities feel more comfortable and help the MRT provide a safe environment for all patients.

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³ Female sex assigned at birth transitioned to male.

⁴ Male sex assigned at birth transitioned to female.

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