

Consent and Chaperone Practices in Transvaginal Ultrasound: Exploring Sonographer Knowledge, Gender, and Ethical Challenges

E. Barnard, O. Somers, S. O'Rourke, J. Doyle, R. Hourihane, A. Fleming.

Radiography and Diagnostic Imaging, School of Medicine, University College Dublin, Belfield,
Dublin 4, Ireland.

Abstract

Aims

To examine consent and chaperone practices in transvaginal ultrasound (TVUS) within the Irish healthcare setting, and to identify knowledge gaps, training needs, and policy challenges influencing clinical practice.

Methods

This study synthesised findings from four undergraduate radiography research projects. Three cross-sectional surveys were distributed concurrently via purposive sampling to practising sonographers (n = 24), ultrasound departmental managers (n = 14), and male sonographers (n = 13) working across Irish ultrasound services. Survey data were analysed descriptively, with free-text responses analysed thematically. A scoping review of literature was undertaken to inform contextual interpretation it is not presented as a formal component of the results.

Results

A total of 51 respondents participated. Verbal consent was the predominant method for TVUS (35/51; 69%), with written consent used less frequently. Support for written consent was expressed by 17 of 24 practising sonographers (71%) and 12 of 13 male sonographers (92%). Knowledge gaps were identified, with 10 of 24 respondents (42%) incorrectly identifying the legal age of consent and 19 of 24 (79%) unfamiliar with substituted consent frameworks. In two cohorts (practising and male sonographers), the majority reported spending less than two minutes obtaining consent (27/37; 72%). Chaperone practices varied: all male sonographers required a chaperone, while 6 of 14 departments (43%) did not routinely offer one. Patient refusal to allow male sonographers to perform TVUS was reported by 12 of 13 respondents (92%).

Conclusion

Consent and chaperone practices for TVUS in Ireland are inconsistent, with identifiable knowledge gaps and gender-specific challenges. The findings support the need for clearer TVUS-specific guidance, alongside targeted education and standardised consent and chaperone practices to support safe and equitable care.

Introduction

Transvaginal ultrasound (TVUS) is the primary imaging modality crucial for evaluating the female pelvis.¹ TVUS has revolutionised gynaecological assessments due to its high-resolution imaging capabilities, detailed evaluations, dynamic nature, and absence of ionising radiation.^{1,2} To ensure the highest standard of care, it is imperative that TVUS is offered to all appropriate patients, particularly in early pregnancy assessment, where it plays a critical role in evaluating pregnancy viability, enabling early detection of ectopic pregnancy, and assessing complications such as miscarriage.

Over the past four decades, changes have led to a more diverse patient population requiring pelvic imaging. As a result, contraindications for TVUS must be reconsidered. It is no longer appropriate to withhold offering TVUS based on factors such as a person's sexual history or sexual status or being a transgender man.¹ The intimate nature of TVUS demands a highly sensitive approach to obtaining informed consent. Sonographers must prioritise patient privacy, dignity, and respect patient boundaries to ensure patient-centred care.³

Consent is a fundamental requirement for all interventions in healthcare. Acting without valid consent risks breaching an individual's legal and constitutional rights. For consent to be valid, it must be given voluntarily, without coercion, pressure, or undue influence.⁵ It must also be informed, meaning the person must receive clear information about the risks, benefits, and alternatives associated with the intervention. The individual must have the capacity to understand this information and make a considered decision.⁴

Sonographers play a critical role in the consent process. They are responsible for clearly explaining the purpose, nature, and potential risks of the ultrasound, ensuring patients understand they can refuse or withdraw consent at any time. Sonographers must adapt communication to individual needs, respect patient autonomy, document the consent process, and providing culturally sensitive non-discriminatory care.⁶ They are also expected to stay updated on legal and professional guidelines to ensure ethical, patient-centred practice.

As part of the consent process and to maintain safeguarding for both the patient and the sonographer, a clinical team member should act as a chaperone during TVUS

examinations.^{1,4,6} Friends or family may be present at the patient's request but should not act as chaperones.⁷ Guidance from the British Medical Ultrasound Society (BMUS), the General Medical Council (GMC), and the Royal College of Radiologists (RCR) supports these standards. While patients may decline a chaperone, practitioners can refuse to proceed if concerned for their safety, provided any delay does not harm the patient.⁷ If the ultrasound proceeds without a chaperone, documentation of the patient's decision is recommended. Studies show that individuals generally prefer a chaperone during TVUS when the sonographer is male, primarily due to medico-legal concerns.⁸ While there is a tendency for patients to favour female sonographers, many express no strong preference,^{9,10} and most are willing to accept a male sonographer if a chaperone is present, highlighting ongoing challenges faced by male practitioners in this setting.⁷

Internationally, several professional bodies have developed transvaginal ultrasound (TVUS)–specific protocols to support safe, ethical, and effective practice.^{1,6,8,9} In Ireland, nationally endorsed guidance relevant to TVUS does exist, but it is embedded within specific clinical contexts rather than provided as standalone, modality-specific guidance. In particular, guidance published by the Royal College of Physicians of Ireland (RCPI) acknowledges the use of TVUS and emphasises principles of patient dignity, respect, and informed care. However, these documents do not explicitly mandate written consent for TVUS, nor do they provide detailed or standardised recommendations regarding consent processes or chaperone use. Furthermore, this guidance is confined to early pregnancy assessment and does not address TVUS practice across the broader spectrum of gynaecological indications. Consequently, consent and chaperone practices for TVUS outside early pregnancy is limited, fragmented, and lacks specificity in Ireland.

This paper aims to investigate sonographers' experiences, knowledge, and challenges concerning consent and chaperone practices in TVUS within Irish ultrasound services, identify gaps in training and clinical practice, and inform future recommendations.

Methods

This study synthesised findings from four undergraduate radiography research projects conducted within the Irish healthcare system. Three cross-sectional surveys were undertaken, targeting male sonographers (n = 13), ultrasound departmental managers (n = 14), and practising sonographers working in Irish ultrasound departments (n = 24). A scoping review of international literature was conducted to inform contextual understanding and interpretation of findings but is not formally reported as a results component.

Ethical exemption was obtained from University College Dublin (UCD).

Survey development followed best-practice principles outlined in The International Association for Health Professions Education (AMEE) Guide for questionnaire design in medical education. Survey items were informed by existing professional guidance, relevant literature, and clinical experience. Draft surveys were reviewed by academic staff working in ultrasound in the department of radiography and piloted for clarity, content validity, and flow prior to dissemination.

Surveys included closed- and open-ended questions addressing demographics, consent practices, awareness of legal and professional guidance, confidence levels, documentation practices, chaperone use, and training needs.

All three surveys were distributed concurrently using an online platform (SurveyMonkey). Distribution occurred via gatekeepers within professional and educational networks, who circulated survey links to members of their respective communities. Participation was voluntary, and completion of the survey implied consent.

The target population comprised sonographers working in Irish ultrasound departments, irrespective of public, private or maternity sector employment.

Survey data were analysed descriptively using Microsoft Excel. Results are presented as frequencies and percentages with corresponding denominators (n/N). Free-text responses were analysed thematically to identify recurrent challenges and experiences.

Results

A total of 51 respondents participated across the three surveys, including male sonographers (n = 13), practising sonographers (n = 24), and departmental leads (n = 14). From the male sonographer cohort, 85% (11/13) reported working primarily in public hospitals, with 7.5% (1/13) working in private settings, and 7.5% (1/13) working across both. Among practising sonographers, half (12/24; 50%) were radiographers and 46% (11/24) were midwives/nurse sonographers; nurses alone represented 4% (1/24). Nearly one-third (8/24; 33.3%) reported working in public hospitals and one-quarter (6/24; 25%) in maternity hospitals. All departmental manager were female (14/14; 100%), with the majority previously qualified as midwives or nurses (12/14; 85.7%) and a smaller proportion as radiographers (2/14; 14.3%). Departmental workplace settings were reported as public hospitals (6/14; 42.9%), maternity hospitals (2/14; 14.3%), private hospitals (3/14; 21.4%), and mixed settings (3/14; 21.4%). These data demonstrate that the perspectives captured span both public and private healthcare environments, with strong representation from maternity and gynaecological services.

Consent Practices and Knowledge

Verbal consent was the predominant method used for TVUS, reported by 35 of 51 respondents (69%), with written consent used less frequently and implied consent rarely reported (Figure 1). Despite reliance on verbal consent, 17/24 (71%) of practising sonographers expressed support for the introduction of written consent. Among male sonographers, 12/13 (92%) preferred written consent for additional medico-legal protection.

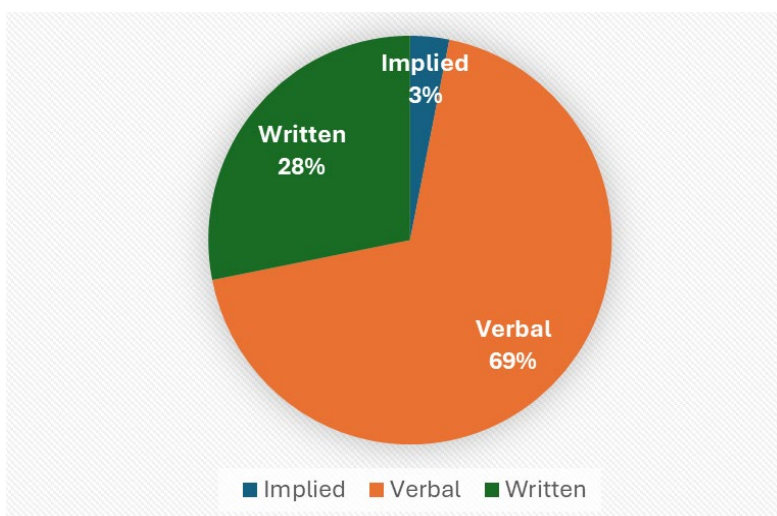


Figure 1. Types of consent used for transvaginal ultrasound examinations among respondents (n = 51).

Thirty-six respondents (36/51; 71%) reported that patients were not routinely provided with written information leaflets prior to or at the time of appointment.

Awareness of consent regulations varied. While 12/24 (54%) were aware of international professional guidance, 19/24 (79%) reported unfamiliarity with substituted consent frameworks. Ten respondents (10/24; 42%) incorrectly identified the legal age of consent in Ireland. Among male sonographers, 10/13 (77%) reported feeling adequately trained in consent processes. Awareness of unit-level, hospital, national, and international consent-related policies among practising sonographers (n = 24) is illustrated in Figure 2, demonstrating greater familiarity with local unit protocols compared with national and international guidance.

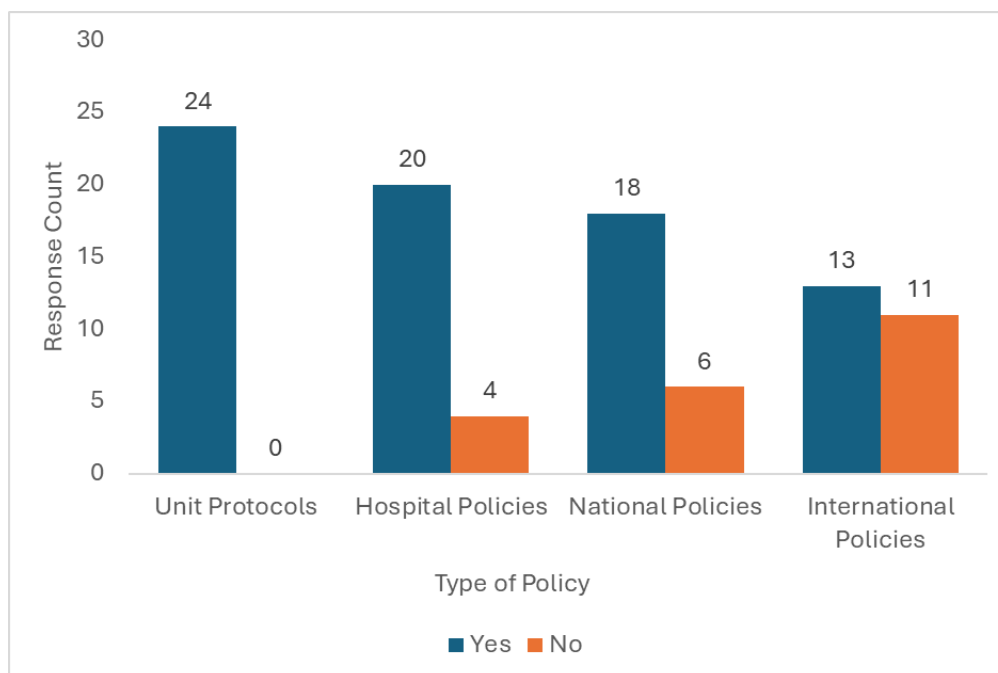


Figure 2. Awareness of consent-related policies among practising sonographers ($n = 24$), including unit protocols, hospital policies, national policies, and international professional guidance.

Time Allocation for Consent

Time spent on obtaining consent was commonly reported as brief. Most respondents reported spending less than two minutes obtaining consent prior to TVUS (27/37; 72%). While many believed this was sufficient, citing pre-appointment information or clinical familiarity. This may compromise patient understanding, especially where language barriers or sensitive topics are involved.

Chaperone Practices and Perceptions

The majority of male respondents (12/13; 92%) reported that their hospital protocol required the use of a chaperone during TVUS examinations. In contrast, departmental leads reported that chaperones were not routinely offered in 6 of 14 departments (43%). Informal chaperone practices were also reported, with 13 of 14 departmental manager (92%) indicating that examinations sometimes proceeded without a formally offered or documented chaperone.

Chaperone professional backgrounds varied and included healthcare assistants, nurses, doctors, and other sonographers, with no consistent departmental standard reported.

All male sonographers (13/13; 100%) reported refusing to perform TVUS without a chaperone present, and 8/13 (62%) believed male practitioners used chaperones more frequently than female colleagues.

Different chaperone guidance frameworks were reported across hospitals. Of the departmental manager surveyed, 6 of 14 (43%) indicated that their departments followed British Medical Ultrasound Society (BMUS) guidance, 6 of 14 (43%) reported that no specific chaperone guidelines were in place, and 2 of 14 (14%) followed guidance issued by the Irish Institute of Radiography and Radiation Therapy (IIRRT).

Training and Educational Gaps

Formal education on consent and chaperone use was inconsistently reported. Sixteen practicing sonographer respondents (16/24; 66%) indicated they had not received formal training on consent for intimate examinations. While participants noted some coverage of consent principles in postgraduate education, emphasis was placed largely on technical skills rather than legal and ethical aspects.

Participants expressed strong support for further training initiatives, such as workshops, written guidelines, and continuing professional development (CPD) activities.

Gender-Specific Challenges

Twelve of thirteen male sonographers (12/13; 92%) reported experiencing patient refusal to allow them to perform, assist with, or observe TVUS. These experiences often left male practitioners feeling uncomfortable, undermined, or professionally questioned. Despite these challenges, 11/13 (84%) expressed willingness to specialise in gynaecological ultrasound.

Recurring themes identified from free-text responses provided further insight into the nature of these challenges. Table 1 summarises the key themes reported by male sonographers regarding barriers to performing TVUS in Ireland, including concerns related to medico-legal risk, patient acceptance, and the availability of chaperones.

Table 1. Key challenges reported by male sonographers when performing transvaginal ultrasound in Ireland (n = 13).

The main challenges:
- Fear of litigation - Patients not compliant as you can tell they aren't comfortable with a male gender conducting the exam - Availability of chaperones/limited resources of chaperones - Being accepted by all female patients - Perception among male sonographers that female sonographers are more suitable to perform TVUS as majority of patients have no issue with a male sonographer performing the scan - Invasive scan and patients will be more comfortable with a female performing the scan however this isn't always possible. The sonographer should build a good rapport with the patient; they should explain the procedure in detail and give the patient sufficient time to consider the exam. - Acceptance of the procedure by female patients - Little experience with ultrasound consent process as it is a different exam to anything in radiography

Discussion

This study provides a comprehensive examination of current practices, perceptions, and challenges surrounding informed consent and chaperone use in TVUS within the Irish healthcare setting. Although verbal consent remains the most widely used method, its reliance raises important ethical and legal concerns given the intimate nature of the procedure.^{1,10} Participants across studies generally expressed confidence in obtaining consent, yet the findings revealed critical knowledge gaps.

Although verbal consent was the most commonly reported method for TVUS, its widespread use raises ethical and medico-legal concerns given the intimate nature of the procedure.^{1,10} While many sonographers reported confidence in obtaining consent, important knowledge gaps were identified. Ten respondents (10/24; 42%) incorrectly identified the legal age of consent, and the majority 19/24 (79%) were unfamiliar with substituted consent frameworks.

This disparity between perceived competence and legal understanding may place both patients and practitioners at risk.⁴

Notably, 10 of 14 respondents (71%) reported that patients were not routinely provided with written information leaflets prior to or at the time of appointment. Written information enables patients to fully understand the nature of the procedure, including its purpose, potential risks, and the sensations they may experience, allowing them to make a well-informed decision about their participation.¹¹⁻¹³ The Health Information and Quality Authority (HIQA) in Ireland advocates for clear, accessible communication to promote patient involvement in decision-making.¹⁴ Therefore, providing an information leaflet is not only best practice but a critical step in delivering ethical, respectful, and legally sound care.

The Health Service Executive (2024) emphasises that consent should not be a “last-minute” or “once-off” event immediately prior to an intervention, as this may coincide with heightened patient vulnerability.⁴ The majority of respondents (27/37; 72%) reported spending less than two minutes obtaining consent prior to transvaginal ultrasound, raising concerns regarding the quality and depth of patient understanding. While this may reflect clinical time pressures, such limited interaction may compromise patient understanding, particularly where anxiety, language barriers, or sensitive concerns are present. Consent is a continuous process, and sonographers need to be aware of verbal and non-verbal signs of withdrawal from patients throughout the process.¹¹ This further highlights the importance of providing information in advance of the procedure.

A recurring theme across studies was the need for enhanced training in consent and chaperone policy. Notably, 16/24 (66%) of participants reported receiving no formal training in consent practices. Participants consistently expressed a desire for CPD opportunities, written guidelines, and workshops tailored to clinical scenarios. These findings were corroborated by the scoping review, which identified a widespread lack of consistent, structured training on the ethical, legal, and cultural dimensions of consent and chaperone use.

Current postgraduate ultrasound programmes tend to prioritise technical and academic skills. Without comprehensive training in consent and communication, sonographers may unintentionally expose themselves and their patients to ethical risks, legal challenges, and diminished patient trust.

The importance of properly documenting consent for intimate examinations is increasingly emphasised internationally. Best practice guidelines from IMC (2024) and the HSE (2024) recommend that, while verbal consent may be acceptable, documentation or written consent should be standard for intimate procedures.^{4,10} Given the sensitivity of TVUS, the current reliance on informal verbal consent practices may no longer be sufficient to meet evolving ethical and legal expectations.

Chaperone practices were inconsistent across departments and individual practitioners. While the majority of male sonographers reported that their hospital protocols required the use of a chaperone for transvaginal ultrasound, departmental manager indicated that chaperones were not routinely offered in a substantial proportion 6/14 (43%) of departments. Informal chaperone practices were common, with examinations sometimes proceeding without a formally offered or documented chaperone. Where chaperones were used, roles included healthcare assistants, nurses, doctors, or other sonographers, with no consistent standard regarding training or responsibilities. This variability contrasts with recommendations from professional and medico-legal bodies, including the British Medical Ultrasound Society (BMUS) (BMUS, 2025) and MEDISEC (2024), which advocate for the routine offer of a trained clinical chaperone for all intimate examinations.¹⁷ The findings also highlight ongoing confusion regarding the role and qualification of a chaperone, with inconsistent policies potentially leaving both patients and practitioners legally exposed. Multiple studies emphasise that a chaperone, as a member of the clinical team, acts as a safeguard for both patients and sonographers.^{1,4,16,17}

Marked gender-specific differences were identified in consent-related perceptions, chaperone practices, and experiences of patient refusal during transvaginal ultrasound. All male sonographers reported refusing to perform TVUS without a chaperone, reflecting a heightened perception of legal and professional vulnerability. Additionally, 12 of 13 male respondents reported experiencing patient refusal to allow them to perform, assist with, or observe TVUS. While patient choice must be respected, repeated refusal may negatively affect professional confidence and training opportunities for male practitioners, as also reported in international literature.¹⁹

Despite these challenges, the majority of male participants expressed interest in specialising in gynaecological ultrasound. This resilience suggests that appropriate support—through consistent chaperone availability, clear guidance, and patient education—may help mitigate gender-based barriers and support inclusive professional practice.

While this study did not directly examine litigation related to ultrasound practice, concerns regarding medico-legal risk were frequently raised by participants, particularly male sonographers. Within the broader medico-legal climate in Ireland, clear documentation, standardised consent processes, and consistent chaperone practices may offer important protective benefits for both patients and practitioners.

The absence of nationally endorsed, TVUS-specific guidance in Ireland raises important questions regarding professional ownership and governance. In the absence of a single statutory regulatory body for sonography, responsibility for developing and implementing procedure-specific guidance is currently distributed across healthcare providers, educational institutions, and professional organisations. This challenge is further compounded by the fact

that the title “sonographer” is not a protected professional title in Ireland, which may contribute to variability in training pathways, scope of practice, and adherence to professional standards. Within this context, collaboration between national healthcare bodies, professional organisations, and educational providers is essential to support the development of consistent, TVUS-specific consent and chaperone guidance.

To the best of the authors’ knowledge, this is the first study to examine consent and chaperone practices for TVUS across multiple professional cohorts within the Irish healthcare setting. The inclusion of practising sonographers, departmental manager, and male sonographers enabled comparison of perspectives and enhanced triangulation of findings. However, several limitations are acknowledged. Convenience sampling and self-report measures may introduce response bias. Demographic detail was limited and did not include geographic, experience-level, or training variables. The study was descriptive and not powered to detect statistical differences between cohorts; demographic and gender comparisons should therefore be interpreted cautiously. Although a scoping review informed contextual interpretation, findings were not reported formally within the results. These limitations should be considered when interpreting the generalisability of findings.

Overall, the findings highlight a need for clearer, TVUS-specific guidance within Ireland beyond existing early pregnancy recommendations. Standardised consent documentation, patient information leaflets, and chaperone protocols—supported by targeted education and CPD—may enhance patient safety, support ethical practice, and improve practitioner confidence while promoting consistent and safe practice.

Declarations of Conflicts of Interest:

None declared.

Corresponding Author:

Emmelise Barnard,
Radiography and Diagnostic Imaging,
School of Medicine,
University College Dublin,
Belfield,
Dublin 4,
Ireland.

E-Mail: emmelise.barnard@ucd.ie

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