

The logo for the British Medical Ultrasound Society (BMUS) is displayed in a white rectangular box. It consists of the letters 'BMUS' in a blue, serif font, followed by a stylized blue icon of two curved lines representing sound waves.

**BMUS** 

# **Transvaginal Ultrasound Examinations – Guidance for Practitioners**

**Produced by the British Medical Ultrasound Society**



October 2022

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## 1.0 Introduction

Transvaginal ultrasound (TVUS), also known as endovaginal ultrasound, was introduced in the 1960s but it wasn't until the 1980s, when real-time transvaginal scanning became available, that its full potential started to be realised.<sup>1</sup> Today, TVUS is the primary imaging modality for assessing the female pelvis due to its dynamic nature, acceptability, high resolution and absence of ionising radiation.

There is little current guidance for ultrasound practitioners on the appropriate use of TVUS, which has resulted in inconsistencies across services and users. With the increasing use of pelvic imaging and the superior resolution and image quality of TVUS, it is imperative that all patients, where appropriate, are offered TVUS in order to provide the best possible standard of care. Over the last four decades there have been significant societal, cultural and behavioural changes in the United Kingdom (UK) population, which has resulted in greater diversity of patient and client demographics requiring TVUS. As a result, what was previously considered a contraindication for internal examinations such as TVUS, is no longer applicable. For example, it is no longer appropriate to withhold offering TVUS because a person has not had penetrative sex or because they are a transgender man.

By having the opportunity to undergo TVUS, it is inevitable that more people will benefit from having the correct high-quality care at the right time. It should however be understood that it is entirely the right of any person being offered TVUS to decline and their decision is final.

Therefore, the aims of this guidance are to:

1. Set out clearly who is eligible to be offered a TVUS and to identify those ineligible
2. Eliminate discrimination and maximise equality in ultrasound service delivery
3. Optimise and modernise patient care in ultrasound services
4. Provide advice for the ultrasound practitioner regarding TVUS, governance and safety

It is anticipated that this document will provide a framework for educators, service providers and ultrasound practitioners to amend and apply at a local level. In addition, a patient information sheet regarding having a TVUS examination has been developed to accompany it and may be accessed and downloaded [here](#).

## 2.0 Communication and consent

Before any person accepts a TVUS, good communication between the ultrasound practitioner and patient is pivotal. Clear, unambiguous communication will improve the patient experience and reduce the risk of complaints. Useful guidance on communication and gaining informed consent is provided already in *Guidelines for Professional Ultrasound Practice* (2021) developed by the British Medical Ultrasound Society and Society and College of Radiographers.<sup>2</sup> For an examination as intimate as TVUS, ultrasound practitioners must gain explicit rather than implicit consent from the patient.<sup>3</sup> Further helpful information is available here:

Table 1. Consent guidance

<b>BMUS:</b> Statement on patient information and informed consent <sup>4</sup>	<a href="http://bmus.org">STATEMENT ON PATIENT INFORMATION AND INFORMED CONSENT (bmus.org)</a>
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<b>GMC:</b> The seven principles of decision making and consent <sup>5</sup>	<a href="#">The seven principles of decision making and consent - ethical guidance - GMC (gmc-uk.org)</a>
<b>HCPC:</b> Guidance on confidentiality <sup>6</sup>	<a href="#">Confidentiality   (hcpc-uk.org)</a>
<b>NHS:</b> Consent to treatment <sup>7</sup>	<a href="#">Consent to treatment - NHS (www.nhs.uk)</a>
<b>SoR:</b> Consent for radiographers and sonographers: Reviewing guidance on consent <sup>8</sup>	<a href="#">Consent for radiographers and sonographers   SoR</a>

### 3.0 Chaperones

The ultrasound practitioner must be respectful of the patient’s privacy and dignity at all times. A chaperone should be present during the examination and situated in the ultrasound room where they are able to observe the procedure, i.e. not behind a screen or curtain. The chaperone should be a member of the clinical team who understands what is normal practice when performing TVUS.

A friend or family member should not act as a chaperone for the patient although they may well be present during the examination at the patient’s request or if it is in the patient’s best interest. Useful guidance is included in the SoR/BMUS [Guidelines for Professional Ultrasound Practice](#) (2021),<sup>2</sup> which offers further referencing on chaperoning from the General Medical Council<sup>9</sup> and Royal College of Radiologists.<sup>10</sup>

Conversely, a patient should be given the opportunity to have a medical examination without a friend or family member present. This is to allow the patient the opportunity to speak to a health professional without risk of coercion or controlling behaviour from the person accompanying them. There are instances of modern slavery, domestic and sexual abuse which have come to the attention of NHS safeguarding teams when departments have a general policy of ‘trained chaperone only’. For example, in cases on modern slavery, the friend or relative could be the trafficker/perpetrator.

### 4.0 Who is eligible to be offered TVUS?

Every person assigned female at birth aged 16 years or older is eligible to be offered TVUS. Eligibility is also extended to transgender men, transgender women and people who identify as asexual, intersex or non-binary. In some very specific circumstances minors may be offered TVUS. There is no upper age limit for TVUS. The age, sexual status, sexuality, religious or personal beliefs of the person or the ultrasound practitioner should not be barriers to offering TVUS.

Ultrasound practitioners must not discriminate against patients by allowing personal views to affect the service they provide or arrange. The type of scan provided by the ultrasound practitioner must be based on clinical need, the practitioner’s clinical judgement and the needs and priorities of their patient. It is not appropriate to refuse to offer or delay a TVUS because the practitioner believes that the patient’s actions or lifestyle are not compatible with TVUS.

#### **4.1 People who have not had penetrative vaginal sex (virgo intacta)**

If a patient has not had penetrative sex, they are still entitled to be offered, and to accept, a TVUS in the same way that cervical screening is offered to all eligible patients. For example, the chance of developing cervical cancer is low in females who have not had penetrative sex. However, oral sex, the sharing of sex toys and bodily fluid on hands can all facilitate spread of the human papilloma virus associated with cervical cancer.<sup>11</sup> Both TVUS and cervical screening are health tests entirely removed from sexual activity.

Traditionally, the notion of virginity was constructed around whether the hymen was intact and whether a sexual or intimate experience had taken place. Since some people assigned female at birth and some intersex people are born without a hymen and others tear theirs during every day activities such as the use of tampons and taking part in strenuous hobbies and/or exercise, the hymen is an unreliable indicator for virginity. Furthermore, an intact hymen can stretch to accommodate penile intercourse so again its appearance is not a reliable indicator of intercourse.<sup>12</sup> Therefore, the concept of virginity plays no part in the clinical decision making for a TVUS, and the examination should be offered by the ultrasound practitioner, when clinically indicated. It is, however, acknowledged that health tests such as cervical screening and TVUS may be more uncomfortable for patients who have not had penetrative sex, and therefore the ultrasound practitioner must be extra vigilant if they are to proceed.

If the hymen is believed to be intact, and the patient accepts TVUS, they may experience higher levels of discomfort or pain and may be more at risk of infection. The patient must be counselled accordingly in advance and given the power to end the examination at any point.

In situations where patients have not had penetrative sex but have accepted TVUS, the ultrasound practitioner must:

- ensure that fully informed consent from the patient has been gained
- remain wholly aware of any patient discomfort or desire to cease the examination before or during the procedure

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### **4.2 Survivors of sexual abuse**

It must not be assumed by the ultrasound practitioner that, in circumstances where patients have experienced sexual and/or domestic abuse, they will automatically decline the offer of a TVUS. These patients must be treated with the utmost sensitivity and offered the same detailed counselling as other patients if a TVUS is recommended for management of their current condition. If these patients ask that a practitioner of a specific gender performs their examination, this request should be accommodated,<sup>13, 14</sup> and they should have the opportunity to discuss the procedure prior to attendance so that any concerns may be highlighted in advance and resolved where possible.

#### **4.3 Sexual orientation and gender identity**

A person's sexual orientation or gender identity does not preclude them from being offered, and accepting, a TVUS. This includes, but is not limited to, women, transgender men, transgender women, lesbians, bisexual, asexual, intersex and non-binary people. Misunderstanding among

health professionals and the general public about who should or should not have access to intimate examinations such as cervical screening<sup>15</sup> and TVUS has been documented. However, TVUS may likely offer superior imaging compared with transabdominal pelvic assessment and therefore help to optimise treatment and management for the current gynaecological condition under investigation. For example, transgender men receiving masculinising hormone therapy, may require TVUS at regular intervals for endometrial assessment.

Equally, ultrasound practitioners must be afforded similar non-discriminatory working conditions. The sexual orientation and gender identity of the ultrasound practitioner performing the scan is irrelevant to the employer and patient although it is acknowledged that there may be rare occasions when a patient may request a different practitioner (see *Sections 4.2 and 4.4*).

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### **4.4 Religion**

Evidence highlights that the use of TVUS assessment, when clinically indicated for medical reasons, is generally accepted across religious and cultural backgrounds. As such, there are no known reasons why a patient should not be offered TVUS owing to religious mandate.<sup>16-18</sup> However, cultural and religious factors may influence a patient's consent to TVUS.<sup>19</sup> Accessibility to gender congruent care, limiting the degree of nudity during the examination for the purposes of maintaining modesty, and the availability of same gender chaperones should be considered when offering TVUS.<sup>20-22</sup>

Certain religious observances such as the fasting during Ramadan, may induce reluctance to accept TVUS in some instances. However, a TVUS assessment does not hinder the observance of the month of Ramadan, and as such, patients should still be offered the choice of TVUS scan, when clinically indicated.<sup>23, 24</sup>

There is reported evidence to suggest that medical students training overseas may sometimes be hampered by cultural and religious beliefs held by their patients and supervisors and, as a consequence, gain fewer opportunities to perform intimate examinations on patients of different genders.<sup>25</sup> Similar beliefs and attitudes could be transferable to ultrasound practitioners in the UK in some circumstances. Therefore, it should be emphasised that TVUS must be offered to all eligible persons regardless of their own religious or cultural beliefs or those of the ultrasound practitioner too. It is the responsibility of the individual ultrasound practitioner and local department to make alternative arrangements if patient care may be compromised for these reasons.

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### **4.5 Capacity, understanding and 'best interests' guidance**

Despite being eligible for TVUS, there are situations where a person is incapable of making an informed decision on whether to consent to the procedure. Situations include, but are not limited to, severe cognitive impairment, profound learning difficulties, being unable to communicate through disability or illness or being unconscious such as when in a medically induced coma on an Intensive Care Unit.

In the absence of gaining informed consent from patients in these circumstances, a TVUS should not be undertaken and a discussion with the referring clinician is required before proceeding further. It is the referring clinician's responsibility to act in the patient's best interests<sup>14</sup> and to liaise appropriately with ultrasound staff. If the TVUS takes place, the patient must be treated as if they are awake and aware.<sup>14</sup>

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

Informed explicit consent must be obtained in a language that the patient understands.<sup>26, 27</sup> When English is not the patient's first language, it is helpful to have this information in advance so that an interpreter may be arranged at the time of booking. Otherwise, the ultrasound practitioner may attempt to locate a suitable member of staff if they share the language, utilise translator services locally or rearrange another appointment as soon as possible to occur with an interpreter present.

#### 4.6 Patient age

In the United Kingdom a person is deemed adult when they reach the age of 18 years but young people aged 16 and 17 are presumed, in law, to have the capacity to consent to medical treatment and should therefore be offered TVUS.

Patients under 16 years may also be counselled on the anticipated benefits and offered TVUS in certain circumstances, when clinically indicated, which may include, but is not limited to:

- Assessment of pelvis in the presence of a positive pregnancy test when seeking termination
- Assessment of pelvis in the presence of a positive pregnancy test when experiencing complications such as pain and bleeding
- Assessment of cervix and/or placenta during pregnancy

Ultrasound practitioners are recommended to gain explicit consent from both the child and parent or guardian before proceeding to TVUS in these rare circumstances.

Ultrasound practitioners should be aware of *Gillick Competency* and the *Fraser Guidelines*, both of which offer helpful advice regarding offering a test if it is in the child's best interest. The Care Quality Commission<sup>28</sup> public website offers a summary of key points: [GP mythbuster 8: Gillick competency and Fraser guidelines | CQC Public Website](#)

If the ultrasound practitioner is of the opinion that the young patient may be eligible for a TVUS but believes that counselling and/or the test should be offered and performed by a different member of staff, they should take all reasonable steps to arrange immediately or reschedule. In the event of TVUS being declined, it is the referrer's responsibility to manage further.

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### 4.7 Previous history of decision to decline TVUS

A patient may have refused TVUS in the past and on multiple occasions when attending the ultrasound department but it is best practice to continue to offer it, with a full explanation, on each new attendance. The circumstances or attitudes of the person may have changed in the interim

and therefore must always be respected, and the ultrasound practitioner should always strive to provide optimal care.

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report on every occasion.

## **5.0 When not to offer TVUS or proceed with TVUS or when to abandon TVUS**

### **5.1 Patient choice**

Transvaginal ultrasound examination should not be performed if, after counselling, the patient declines. The patient is not required to give an explanation or defend their decision. The declination must however, be recorded on the patient's ultrasound report and stored for future reference, along with all other decisions, actions and outcomes relating to the attendance.

### **5.2 Postmenopausal atrophy, vaginismus, vaginitis and recent surgery**

Although not absolute contraindicators, conditions including age-related atrophy, vaginismus, vaginitis and recent surgery may make TVUS particularly uncomfortable for the patient and may increase their risk of infection. Clear counselling and informed explicit consent to proceed is acceptable on the condition that the ultrasound practitioner is aware of the patient's level of discomfort at all times and empowers the patient with the choice to end the examination at any point.<sup>13</sup>

Although prolapse of the neovagina and rectovaginal fistulae are recognised complications of feminising genital surgery, dynamic magnetic resonance imaging (MRI) is deemed the best imaging modality for assessment.<sup>29</sup> TVUS, in these cases, should not be offered. Furthermore, every individual request for an ultrasound examination must be vetted and, if there is doubt that ultrasound may be useful, it should be discussed with the referrer and/or senior radiological colleagues.

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

### **5.3 Prolapse and pessaries**

A vaginal pessary is a soft, removable device that goes inside the vagina to support areas that are affected by pelvic organ prolapse. This can include the bladder, rectum or uterus which may bulge into the vagina. A pessary may also be used to help with stress incontinence. There are many types of pessary<sup>30</sup> made from materials including silicone and PVC (vinyl). Most transmit ultrasound well and usually the patient is aware of which type they have.

Discussion with the patient with regard to their pessary prior to commencing TVUS is essential. It is possible that the patient may 'self-manage' the device and choose to remove it prior to the procedure. However, TVUS is usually possible with the device in situ but a gentle approach is required as it may be slightly more uncomfortable for the patient.

Some pessaries fill the vagina such as a Gellhorn or Shelf pessary and self-management may not be possible i.e. they may be unable or unwilling to remove this type of pessary for the TVUS examination. In these instances, it is the referrer's responsibility to manage the patient further if



only a transabdominal ultrasound examination is performed. Contemporary practice guidelines on the use of vaginal pessaries can be found here [uk\\_pessary\\_guideline\\_final\\_april21.pdf \(thepogp.co.uk\)](#)

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### **5.4 Female genital mutilation (FGM)**

Female Genital Mutilation (FGM) is illegal in the UK. It has been estimated that over 20,000 children under the age of 15 are at risk of FGM in the UK each year, and that 66,000 people in the UK are living with the consequences of FGM. However, the true extent is unknown, due to the "hidden" nature of the crime.<sup>31</sup>

There are different types of FGM and some types mean that TVUS may not be acceptable or possible for some patients. Ultrasound practitioners who perform TVUS may identify FGM. NHS trusts are required to provide monthly figures to the Home Office relating to the identification of patients who have undergone FGM, either historical or recent cases. It is a likely requirement of most NHS trusts that the safeguarding team must be made aware of any cases of FGM.<sup>32</sup> Local policies should be consulted.

Since October 2015, there has also been a mandatory requirement for staff to report to the Police any case of FGM identified in a young person under the age of 18 years.<sup>33</sup> As a result, if a patient (under the age of 18 years) discloses that they have been subject to FGM, or shows signs which appear to suggest FGM has occurred, the Police should be contacted via their non-emergency advice line – 101.

Decisions, actions and outcomes must be recorded accurately on the patient's ultrasound report.

#### **5.5 Polycystic ovaries in adolescents**

It is inappropriate to offer a person under the age of 18 years ultrasound scanning, including TVUS, for suspected polycystic ovarian syndrome. Currently, the National Institute for Health and Care Excellence does not advocate ultrasound scanning of any type in adolescents with suspected polycystic ovaries.<sup>34</sup>

#### **5.6 Absolute contraindications for performing TVUS**

Absolute contraindications for performing TVUS are few but include:

- Paediatric age group
- Premature rupture of the membranes during pregnancy
- Bleeding associated with known placenta praevia
- Vaginal obstruction<sup>35, 36</sup>

## 5.7 Is transrectal ultrasound a suitable alternative for patients not having TVUS?

There is no evidence to indicate that transrectal ultrasound is a reasonable or acceptable alternative to TVUS. In 2017, after consultation, the National Institute for Health and Care Excellence did not recommend transrectal ultrasound in place of TVUS.<sup>37</sup> Instead, transabdominal ultrasound or MRI are suggested imaging alternatives for some conditions.<sup>38</sup>

## 6.0 Conclusion and Recommendations

A transvaginal ultrasound examination is safe, readily available and minimally invasive. It offers superior resolution when compared with transabdominal pelvic ultrasound assessment for most gynaecological conditions. Although any patient may decline to have a transvaginal ultrasound assessment, there are few situations where a patient is ineligible to be offered one.

Modern healthcare requires modern attitudes and understanding within our diverse communities and we anticipate this guidance will support local protocol updates. However, we also recognise that recommendations, especially in relation to transgender healthcare, are evolving and it is important that ultrasound practitioners remain aware of developments in order to continue to care for all their patients sensitively and appropriately.

Good communication between the ultrasound practitioner and patient, explaining both the advantages and limitations of TVUS in order to gain fully-informed explicit consent, is of paramount importance. Accurate record keeping, which documents the patient's decision, findings and any subsequent procedure, will help to keep both practitioner and patient safe and provide an auditable trail of practice and accountability.

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## **Acknowledgements**

We are very grateful for valuable advice and insight given by Claire Donaldson, FCR BSc(Hons), Society of Radiographers Immediate Past President, Chair of UK Council, and Superintendent Radiographer. We are also indebted to members of the Royal College of Obstetricians and Gynaecologists *Women's Network*.

## **Disclaimer**

The British Medical Ultrasound Society produces recommendations and guidelines as an educational aid to inform safe practice. They offer models and pathways associated with established clinical imaging techniques and best professional practice, based on published evidence.

BMUS recommendations and guidelines are designed to inform local protocols issued by employers, but are not intended to be inflexible or prescriptive. Therefore, the choice of imaging examination and subsequent management of all patients is ultimately a local decision based on agreed schemes of work, the clinical information provided, and the ultrasound practitioner's professional judgement.

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