

by measuring from the fundal region along the endometrial lining and endocervical canal using the outer-to-outer technique.⁸ The depth of the uterus (anteroposterior dimension) is measured in the same sagittal view from its anterior to posterior walls, perpendicular to the length. The maximum width is measured in the transverse or coronal view. If volume measurements of the uterine corpus are performed, the cervical component should be excluded from the uterine length measurement.

Abnormalities of the uterus should be documented.^{9–11} The myometrium and cervix should be evaluated for contour changes, echogenicity, masses, and cysts as well as symmetry between the anterior and posterior segments of the myometrium. Fixed retroflexion of the uterus, particularly in the presence of posterior adenomyosis, should be recognized as a possible indicator of deeply infiltrating endometriosis in the posterior cul-de-sac.¹² The size and location of clinically relevant lesions should be documented. Masses that may require follow-up or intervention should be measured in at least 2 dimensions, acknowledging that it is not usually necessary to measure all uterine fibroids.

The endometrium should be analyzed for its thickness, focal abnormalities, echogenicity, and the presence and characteristics of fluid or masses in the cavity. The thickest part of the endometrium should be measured perpendicular to its longitudinal plane in the

anteroposterior diameter from echogenic to echogenic borders, using the outer-to-outer technique (see Figure 1).⁸ The adjacent hypoechoic myometrium and fluid in the cavity should be excluded (see Figure 2). In reproductive-aged postmenarchal patients, assessment of the endometrium should allow for variations expected with phases of the menstrual cycle and with hormonal supplementation.^{11,13,14} It should be reported if the endometrium is not adequately seen in its entirety or is poorly defined; in this circumstance, the measurement should not be included in the report. Sonohysterography may be a useful adjunct to evaluate the patient with abnormal uterine bleeding or to further clarify an abnormally thickened endometrium and to further evaluate an incompletely visualized endometrium. (See the *AIUM Practice Parameter for the Performance of Sonohysterography*.) If the patient has an IUD, its location should be documented.

The addition of 3-dimensional to 2-dimensional ultrasound (transabdominal, transvaginal, transperineal, and/or transrectal) can be helpful in many circumstances, including but not limited to evaluating the relationship of masses with the endometrial cavity, identifying uterine congenital anomalies and a thickened and/or heterogeneous endometrium, and evaluating the location and orientation of an IUD and the integrity of the pelvic floor.^{12,15–22}

Figure 1. Measurement of endometrial thickness. The endometrial thickness is measured in its thickest portion from echogenic to echogenic borders (calipers) perpendicular to the midline longitudinal plane of the uterus.



Figure 2. Measurement of endometrium with fluid in cavity. In the presence of endometrial fluid, the measurements of the 2 separate layers of the endometrium (calipers), excluding the fluid, are added to determine the endometrial thickness.

