**Procedure Name:** Thyroid/Parathyroid

**Updated:** 1/9/13

**Indications:**
May include but not limited to thyroid gland size and location, abnormalities detected on other imaging examinations, suspected regional nodal metastases in patients with proven thyroid carcinoma, high-risk patients for occult thyroid malignancy, thyroid nodules on medical suppression therapy, localization of the parathyroid glands in patients with suspected primary or secondary hyperthyroidism, assessment of number and size of enlarged parathyroid glands in patients who have undergone previous parathyroid surgery or ablative therapy with recurrent symptoms of hyperparathyroidism, and localization of thyroid/parathyroid glands for biopsy, ablation, or other interventional procedures.

**Patient Preparation:**
None

**Equipment Selection and Settings:**
Select Thyroid from preset menu
A linear 15.0MHz probe will be used for most patients. The sonographer should use the preprogrammed setting for the appropriate body part and adjust gain, depth and transmit zone settings to optimize images. Fill out any applicable impression or worksheet upon completion of exam.

**Imaging Sequence:**
The following imaging sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in three planes, texture, size, shape, and relationship to adjacent anatomy. Utilize color doppler as needed to aid in the determination of any abnormality and to demonstrate blood flow.

- Imaged patient data (demographics page)

**TRANS**
1. Midline of entire gland (dual screen if necessary)
2. Midline of entire gland with color Doppler

**MEASUREMENTS**
1. RT lobe measured in three dimensions in the order LONG, AP, TRANS with AP measurement in TRANS only
2. LT lobe measured in three dimensions in the order LONG, AP, TRANS with AP measurement in TRANS only
3. Isthmus thickness
RT LOBE
1. TRANS superior, mid and inferior
2. LONG lateral, mid and medial with a color Doppler image in mid to show vascularity
3. Nodules, numbered superior to inferior (see below for numbering protocol)

LT LOBE
1. TRANS superior, mid and inferior
2. LONG lateral, mid and medial with a color Doppler image in mid to show vascularity
3. Nodules, numbered superior to inferior (see below for numbering protocol)

LONG/TRANS
1. Document lymph nodes and parathyroid glands
   • Evaluate all areas surrounding thyroid gland up to and including subclavicular notch

NODULE MEASUREMENTS:
For measurements of abnormal findings utilize the dual screen option in the following manner.
1. Dual screen – Long and trans with measurements
2. Dual screen – Long and trans without measurements
3. Color Doppler of nodules to show vascularity
4. All nodules must be numbered for right lobe and left lobe separately
5. Numbering is to begin superiorly and work inferiorly
6. For follow up exams, if nodules were not numbered in a manner that is compliant with current protocol, all nodules must be renumbered to the current protocol specifications. This needs to be documented on the worksheet. If a previous nodule is not seen on the current exam, skip that number and document “not visualized” for that particular number on the worksheet. If a new nodule is seen on the current exam, it is to be renumbered to fit with the other nodules in keeping with the numbering from superior to inferior.