

# Sonography Technical Standards

After a sufficient period of instruction the students would be expected to perform the following technical standards:

## Acquire Information

Acquires information from didactic, clinical, and technological learning experiences.

- Lecture, demonstration, observation, interview and online learning.

Acquires information from written, video, audio, and electronic sources

- Literature search, data retrieval, and electronic medical records

### Examples:

- Identify and document normal and abnormal sonographic patterns of disease processes, pathology, and pathophysiology of organs and areas of interest. Modify scanning protocol based on sonographic findings and differential diagnosis relevant to the sonography speciality.
- Identify pertinent clinical questions and the goal of the examination.
- Recognize significant clinical information and historical facts from the patient and medical records, which may impact the diagnostic examination.
- Utilize examination recording devices to obtain pertinent documentation of examination findings.

## Critical Reasoning (Interpret and Integrate)

Measure, calculate, reason analyze and synthesize data related to patient care.

Examples:

- Review data from current and previous examinations to produce a summary of technical findings, including relevant interval changes, for the reporting physician's reference.
- Perform related measurements from sonographic images or data.
- Demonstrate knowledge and understanding of anatomy, physiology, pathology, and pathophysiology relevant to and in the sonography speciality.
- Apply theory content in the skills lab/clinical setting.

## Psychomotor/Technical Skills

Perform or assist with procedures and treatments.

Examples:

- Perform sonographic examinations of organs and regions of interest according to professional and institutional protocols relevant to and in the sonography speciality.
- Adjust instrument controls including examination presets, scale size, focal zone(s), overall gain, time gain compensation, and frame rate to optimize image quality.
- Select the correct transducer type and frequency for examination(s) being performed.
- Perform related measurements from sonographic images or data.
- Utilize examination recording devices to obtain pertinent documentation of examination findings.
- Identify and document normal and abnormal sonographic patterns of disease processes, pathology, and pathophysiology of organs and areas of interest. Modify scanning protocol based on sonographic findings and differential diagnosis relevant to the sonography speciality.
- Distinguish textures, degrees of firmness, temperature differences, pulse rate, vibrations and strength.

## Communication Skills

Communicate information effectively and efficiently in English with faculty, clients, families and healthcare constituents.

Examples:

- Report client status, facilitate client teaching, and document care.
- Collaborate with faculty, clients, family and healthcare constituents.
- Participate in the exchange of information among healthcare constituents.

## Character

Demonstrate integrity, accountability and concern for self, and others.

Examples:

- Accountable for actions, exercises proper judgement, and completed responsibilities according to clinical guidelines and course outcomes.
- Exhibit professional, sensitive and effective interactions with clients, families and healthcare constituents.
- Respond professionally during stressful and/or rapidly changing situations and/or alterations in the status of a client.
- Uphold ethical principles and practices of education and the profession of sonography.
  - American Institute of Ultrasound in Medicine
  - Society of Diagnostic Medical Sonography
  - Bryan College of Health Sciences Student Code of Conduct
  - College Values

## References

ARDMS. (2017). Clinical verification (CV) form. ARDMS.org. Retrieved from <http://www.ardms.org> .

These Technical Standards are required for completion of a Bachelor of Science in Health Professions. Technical Standards must be met with or without reasonable accommodations.

Bryan College of Health Sciences is committed to providing an environment conducive to learning for all students, including students with disabilities. Accommodations are provided in accordance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you are a student with a disability who may need reasonable accommodations, please contact the Academic Support Services Director at [dss@bryanhealthcollege.edu](mailto:dss@bryanhealthcollege.edu).