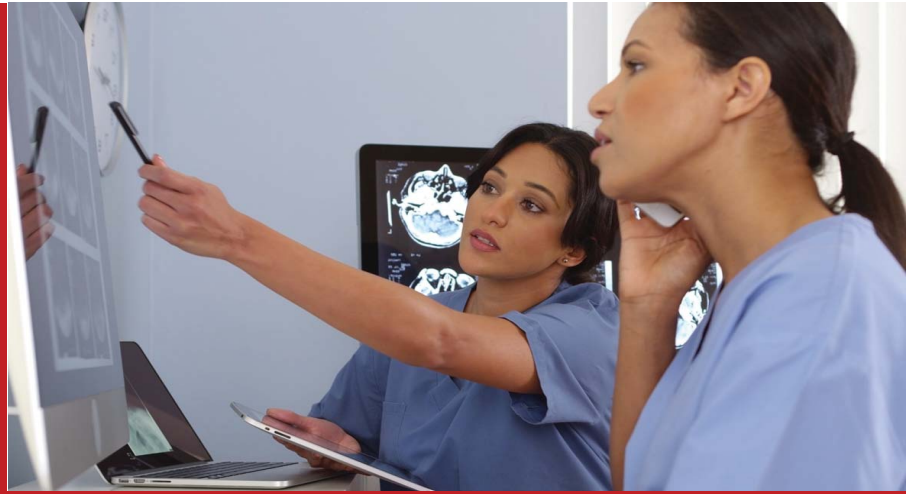


The UW CT Protocols



An implementation guide for health care administrators

OVERVIEW

There are many factors to consider when determining whether your organization is ready for the challenge of CT protocol conversion. Some factors are related to having the right equipment and software and others are related to your organization. Assess your organizational readiness by evaluating managerial buy-in, availability of resources, and staff and organizational capacity.

Why UW CT Protocols?

Reduce Unnecessary Radiation: Computerized Tomography (CT) dose reduction efforts stumble, because many centers do not have the expertise or time to adapt and customize protocols for their scanner platforms. The University of Wisconsin-Madison (UW) and GE Healthcare have formed a unique collaboration aimed at reducing unnecessary CT radiation, optimizing clinically useful images, and decreasing the frequency of repeat scans. The result of this work is a comprehensive set of dose-optimized, weight adjusted, and clinically validated CT protocols.

Adhere to New Regulations: Recent Joint Commission standards state that CT protocols must be maintained/updated annually as medical knowledge advances. The protocols were developed and rigorously tested at UW before being made available to GE customers using stringent ISO-9001 processes and procedures. The development and testing of this evaluation meets the American Association of Physicists in Medicine (AAPM) Medical Physics Practice Guidelines. Subsequently, the working relationship between UW, which will continuously update the protocols as new standards are set, and GE, an industry partner that will help organizations implement the updates, provides a mechanism for timely adoption of new CT radiology protocols and the fulfillment of the Joint Commission Standards.

Standardize Protocols Across Sites: Some patients are scanned as often as every 3-4 months. These patients are often scanned at different imaging centers or on different equipment using different CT protocols. The differences in images that result from various techniques can make it difficult for radiologists to assess whether they are seeing real change versus differences in scan technique. Using standardized protocols makes comparisons more consistent and elevates the level of confidence in interpretation.

Significant Cost Savings

UW scanner protocols are now installed at no cost (on new scanners) and available to users of GE CT systems. System installed protocols remove the need for individual protocol entry and decrease error rates. System installed protocols offer significant cost savings to end-users/organizations. One study demonstrated that the estimated annual cost of reviewing and optimizing 30 protocols can exceed \$150,000.*

EQUIPMENT

GE Scanner:

- Work with a GE Healthcare sales representative to identify the best scanner(s) for your site(s)
- UW CT protocols are developed to work specifically with GE scanners
- The CT protocols are delivered with the GE scanner, on a computer disc, to eliminate any extra programming time for your staff
- A hard copy UW CT Protocol manual is also provided



Dose Monitoring System:

- Monitor radiation dose for evaluating and reporting national standards
- Assess changes in radiation exposure due to implementation of new protocols

SETTING EXPECTATIONS

Staff engagement plays a key role in successfully implementing the new UW CT protocols. Informed staff are more likely to have a positive attitude during change. It is important to tell staff what will be expected of them during the implementation period and to share processes that are set in place to help them during the transition period. The following expectations will help ensure implementation success.

Expectations for Internal Staff

Technologist:

- Complete video training and attend/listen to appropriate informational meetings
- Train with either the onsite GE Clinical Application Specialist or GE trained onsite technologists
- Provide feedback about their support/learning needs
- Adhere to the protocols unless otherwise indicated

Physicist:

- Analyze dose monitoring data for protocol adherence and compare to baseline radiation dosages when possible
- Teach staff about the science behind the new GE protocols

Radiologist:

- Spend an appropriate amount of time training with the onsite GE Clinical Application Specialist during the first week of implementation
- Work with technologists to adhere to the protocols as much as possible
- Complete video training and attend/listen to appropriate informational meetings
- Complete assessments and provide feedback about CT study quality to support ongoing training

KEY CONSIDERATIONS

- Create a site implementation team of CT Protocol Implementation champions
- Let staff know what to expect ahead of time
- Engage staff in preparation for implementation
- Pick appropriate implementation roles based on staff member characteristics and ability/availability
- Ensure that your training schedule allows all technologists to get adequate training



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