Updates to radiation safety standards

The goal: better treatment, greater safety

On Jan. 9, 2015, The Joint Commission issued “Revised Requirements for Diagnostic Imaging Services,” which took effect July 1, 2015. The new requirements call for more stringent tracking and recording of X-ray dose performance and making improvements that align with external benchmarks. Failure to meet the new standards could put a hospital’s accreditation at risk and adversely impact revenue.

Here’s a summary of the new safety standards.

1. Dose index
The joint commission calls for the radiation dose index of every study conducted on a patient during a diagnostic computed tomography (CT) exam.

   - Volume computed tomography dose index (CTDvol
   - Dose length product (DLP)
   - Size-specific dose estimate (SSDE)

   A more reliable dose reporting system — which may involve automated dose reporting — may assist physicians in giving the right radiation dose for each patient.

2. Dose data analysis and review
The requirement is to be consistent with the evaluation of reference level (DRL) for each radiologic procedure.

   - Exam type
   - Staff preferences
   - Patient characteristics

   After measuring and analyzing radiation doses for all radiation equipment, hospitals should establish diagnostic reference levels (DRLs) to assure they are in accordance with ALARA principles.

3. Review excessive dose ranges

   - External benchmarks

   The goal of The Joint Commission’s new standards is to create more individualized treatment for patients and reduce excessive exposure to radiation for both patients and staff. By establishing industry-wide benchmarks and recording vital dose data, hospitals can lay the foundation for an effective radiation program in their facility.

   - Diagnostic CT imaging protocols are to be reviewed and kept current. In addition, interpreting radiologists, medical physicists and lead imaging technologists should provide input to make sure protocols adhere to the most current practice standards and factor in changes in imaging equipment.

   - Maintaining imaging protocol reviews allows for exams to be customized to the patient’s needs, and the lowest possible dose necessary administered.