New Digital Radiography Standards Simplified for Radiologists and Technologists

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1. Objective

The need for standardization of digital radiography has increased in recent years. Standardization among vendors, manufacturers, and technologists is important. When information is used repeatedly, the need for consistency is critical. Radiologists and medical physicists are important in the standardization process. This process, however, is complex and can result in difficulties and costs. Several factors are important. First, there is a need for a standard that is practical and cost-effective. Second, there is a need for a standard that is easy to use. Third, there is a need for a standard that is flexible and adaptable. Fourth, there is a need for a standard that is easy to implement. Fifth, there is a need for a standard that is easy to maintain. Sixth, there is a need for a standard that is easy to update. Seventh, there is a need for a standard that is easy to integrate. Eighth, there is a need for a standard that is easy to use on different manufacturers, and last, there is a need for a standard that is easy to use in different environments.

Table 1. Selected Manufacturer Exposure Index

<table>
<thead>
<tr>
<th>Vendor</th>
<th>3.0 KVP</th>
<th>7.0 KVP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agfa</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>GE</td>
<td>150</td>
<td>300</td>
</tr>
<tr>
<td>Siemens</td>
<td>200</td>
<td>400</td>
</tr>
</tbody>
</table>

2. Background

Traditionally, screen-film radiography has been the method of choice for chest radiography. (Image 1) Traditional screen-film radiography is limited by the dynamic range of the imaging system. The dynamic range of the imaging system is the ratio of the maximum and minimum amount of light that can be accurately represented. The dynamic range of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is the amount of light that is not represented accurately. The quantum noise of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is limited by the quantum noise of the imaging system. The quantum noise of the imaging system is limited by the quantum noise of the imaging system.

3. New Standards Developed

The Exposure Index (EI) is calibrated using specified beam conditions dependent on the beam spectrum (Figure 3). Thus, one must be careful when changing the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum.

4. IEC/AAPM Differences

The Exposure Index (EI) is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum.

5. Exposure Index and Patient Dose

The Exposure Index (EI) is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum. The EI is calibrated using specified beam conditions dependent on the beam spectrum.

6. Summary & Future Directions

The new standards are helpful in clarifying the terminology, and in defining the dose in digital radiography (DR) to eliminate proprietary and confusing terms. The new standards are helpful in clarifying the terminology, and in defining the dose in digital radiography (DR) to eliminate proprietary and confusing terms. The new standards are helpful in clarifying the terminology, and in defining the dose in digital radiography (DR) to eliminate proprietary and confusing terms. The new standards are helpful in clarifying the terminology, and in defining the dose in digital radiography (DR) to eliminate proprietary and confusing terms. The new standards are helpful in clarifying the terminology, and in defining the dose in digital radiography (DR) to eliminate proprietary and confusing terms.

7. References