RSNA Statement on Appropriate Utilization of Medical Imaging
Reviewed: 4/15/2017

The Radiological Society of North America (RSNA) is committed to excellence in patient care through education and research.

- Medical imaging has improved the quality of health care and made it safer by providing less invasive methods for diagnosis and treatment. Appropriate use of medical imaging remains a cornerstone of high quality medical care.

- Radiologists are the physician specialists with imaging-focused education, training and experience to provide patients with the safest, most effective medical imaging and most accurate diagnostic interpretations. Radiologists have the expertise to determine the right imaging examination and to perform it the right way, using appropriateness criteria and accepted practice guidelines. Potential benefits should outweigh risks for each imaging procedure that is performed.

- Radiologists perform imaging examinations ordered by patients’ physicians or other providers based on the clinical needs of the patient. Recent studies have shown that the most significant growth in utilization of imaging procedures is due to imaging performed by non-radiologists.
  - Overall, imaging utilization by non-radiologists has grown twice as fast as imaging by radiologists, with growth in imaging by one specialty nearly four times as fast.
  - Total Medicare reimbursement for and utilization of magnetic resonance imaging (MRI) services increased at six times the rate for non-radiologist-provided services as compared to radiologist-provided services.

- A 2011 Neiman Health Policy Institute report examining the utilization of advanced medical imaging stated that from 2000 through 2005, computed tomography (CT) grew at an annual rate of 14.3 percent. That growth declined, however, in subsequent years—from 7.1 percent in 2006 to just 1.4 percent in 2009. This reflects overall trends for medical imaging. On a unit count basis, the total Medicare Part B utilization of medical imaging in 2010 was 4.5 percent less than it was in 2006.

- A 2012 analysis from the Medical Imaging & Technology Alliance reported that imaging utilization per Medicare beneficiary declined by 5.1 percent since 2009, with utilization of advanced imaging services experiencing a more pronounced 6.6 percent decline. Meanwhile, spending on imaging services for each Medicare beneficiary dropped 16.7 percent since 2006.

- To explore opportunities to improve patient safety through appropriate utilization, quality assurance and dose optimization, the RSNA has partnered with the American College of Radiology (ACR), the American Association of Physicists in Medicine (AAPM) and the American Society of Radiologic Technologists (ASRT) to conduct the Image Wisely campaign. Image Wisely is designed to raise awareness and promote education about radiation protection for patients undergoing medical imaging examinations.

- ImageWisely.org, directed at physicians and other medical professionals, was officially launched in November 2010 at the RSNA annual meeting. Thousands of imaging professionals and referring physicians have taken the pledge to Image Wisely. The website’s patient-directed content, which answers common patient questions about risks and benefits of medical imaging procedures, is available along with information on radiation exposure, contrast materials, anesthesia, radiation therapy procedures and other safety concerns on RadiologyInfo.org.

- In addition to following appropriate imaging utilization standards, radiologists and medical physicists have worked together to improve the safety of imaging examinations by minimizing dose without sacrificing diagnostic quality or therapeutic effectiveness. Working with radiology equipment
manufacturers, radiologic scientists are directly involved in the development of technologies and protocols to ensure patient safety in medical imaging scenarios.

- RSNA supports a requirement that all personnel involved in medical imaging and radiation therapy procedures performed on patients meet well defined educational and credentialing criteria.

- To improve patient health and safety, RSNA supports the establishment of accreditation requirements for medical imaging and radiation therapy facilities, a radiation dose index registry, consistent and mandatory reporting methods for medical radiation errors, and inclusion of appropriate utilization criteria into order entry systems.

Through its peer-reviewed journals, education programs and annual scientific assembly, RSNA continually informs radiologists, medical physicists, radiation oncologists and other radiology professionals of the latest technologies and research developments designed to improve radiologist performance and enhance patient safety.

RSNA is a strong advocate for quality, safety and adherence to appropriateness criteria in medical imaging and radiation oncology.

Through research and education, RSNA has been at the forefront of efforts to improve diagnostic accuracy and therapeutic effectiveness of medical imaging exams and procedures while minimizing radiation dose.