

radiation. Between 1980 and 2006, the annual U.S. population radiation dose from medical procedures increased seven-fold, according to the National Council on Radiation Protection and Measurements.

"Imaging procedures conducted for the wrong reasons contribute to unnecessary costs and radiation exposure to patients," Dr. Hendee said. "Radiology is working to reduce unnecessary procedures, but some of the causes of overutilization are beyond radiology's influence."

Recent reports have drawn attention to the ionizing radiation associated with some imaging procedures, most notably CT. There is general agreement in the radiology community that certain imaging and radiation therapy procedures are associated with risks, which in each patient's case must be weighed against the benefit of the diagnostic information or treatment result one specific procedure may provide. Radiologists and medical physicists continue to work together to improve the safety of imaging exams by lowering radiation dose without sacrificing diagnostic quality. Efforts are also under way to better monitor patients' cumulative radiation exposure from multiple imaging exams over time.

To increase awareness of cumulative radiation dose and other radiation risks and to explore opportunities to improve patient safety through appropriate utilization, quality assurance and dose optimization, 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 launch the Image Wisely™ initiative. Much like the Image Gently initiative did for pediatric radiology, Image Wisely was developed to educate imaging professionals, referring physicians and the public on the relative benefits and risks of medical imaging.

"Rising concerns about the radiation dose associated with medical imaging have prompted vigorous responses at many levels, but perhaps the most important response has been expanded educational activities focused on radiation dose monitoring and control," Dr. Brink said. "Imaging professionals must pledge to reduce the radiation dose as much as reasonably achievable, to seek accreditation of imaging facilities with careful attention to radiation dose monitoring and control, and to participate in dose registries that will allow imaging practitioners to benchmark their dose levels with peer institutions."

ImageWisely.org, directed at physicians and other medical professionals, was officially launched at RSNA 2010. 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*.

"These websites strive to provide the most comprehensive and up-to-date information about radiation safety from expert sources to help patients and their physicians make informed decisions when considering the use of powerful imaging tests which can potentially save lives, help determine whether a therapy is working or avoid an unnecessary surgery," Dr. Wald said.

###

Note: Copies of RSNA 2010 news releases and electronic images will be available online at RSNA.org/press10 beginning Monday, Nov. 29.

RSNA is an association of more than 44,000 radiologists, radiation oncologists, medical physicists and related scientists committed to excellence in patient care through education and research. The Society is based in Oak Brook, Ill. (RSNA.org)

Editor's note: The data in these releases may differ from those in the printed abstract and those actually presented at the meeting, as researchers continue to update their data right up until the meeting. To ensure you are using the most up-to-date information, please call the RSNA Newsroom at 1-312-949-3233.

For patient-friendly information on radiation safety, visit RadiologyInfo.org.