Imaging Wisely/
Imaging Gently:
Imaging Decisions for Our Patients

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How we care for our patients is constantly evolving as are the tools to help us manage and direct their care. In 2012 the American Board of Internal Medicine Foundation initiated the Choosing Wisely Campaign. The goal of this campaign is to initiate awareness by clinicians and help them generate conversations with patients to ensure their care is supported by evidence, not duplicative of other tests or procedures, is free from harm, and is truly necessary. This approach is supported by over 70 specialty societies, that have developed patient-friendly materials which can be found at http://www.choosingwisely.org/.

For example, the American Academy of Pediatrics advocates that cough and cold medicines should not be prescribed or recommended for respiratory illnesses in children under four years of age. Another example is their recommendation that simple febrile seizures are not an indication for neuroimaging with CT or MR.

Similar initiatives have been developed for imaging with two campaigns: Imaging Gently (http://imagegently.org) and Imaging Wisely (http://imagewisely.org).

The Alliance for Radiation Safety in Pediatric Imaging
We pledge to image gently

IMAGE WISELY™
Radiation Safety in Adult Medical Imaging

Imaging Gently was initiated in late 2006 by the Society of Pediatric Radiology with the support of the American College of Radiology, the American Society of Radiology Technologists and the American Association of Physicists in Medicine. The goal was to increase awareness about pediatric imaging. The website provides information on radiation from medical imaging. There is specific information about a variety of exams, to help educate parents. The site directs parents to inquire whether the imaging facility performing exams on their child has specific protocols for pediatric patients.

Imaging Wisely was created a couple years later to address adult imaging, with the inclusion of the major radiology societies, as well as major vendors of imaging equipment (GE, Hitachi, Phillips, Siemens, and Toshiba). This website has information about general radiation safety and specific information about various modalities. It provides reference information for clinicians including radiation dose reference cards, radiation safety facts, links to the ACR appropriateness criteria, and templates for patient medical imaging records.

There has been intensive media coverage about the rampant increase in radiation exposure from medical imaging. Since the 1980s there has been a 7-fold increase in radiation exposure to the population of the United States through medical imaging. Although the U.S. has 4.6% of the world’s population, we have 12% of all radiology procedures and about half of all nuclear medicine procedures. To protect patients, the Medicare Improvements for Patients and Provider Act (MIPPA) was passed in 2008. This required providers of advanced imaging (MR, CT, NM and PET) to have their equipment accredited if they were to be paid by CMS (Centers for Medicaid and Medicare Services). This act excluded x-ray, ultrasound and fluoroscopy. Mammography was already covered under Mammography Quality Standards Act.

CMS has authorized several organizations to perform accreditation: the American College of Radiology (ACR), the Intersocietal Accreditation Commission (IAC) and The Joint Commission (TJC). Of the three, ACR accreditation is considered the gold standard. The ACR has stringent review and verification of education and training standards for physicians and non-physician personnel. It requires evaluation of the quality of images from multiple types of exams on actual patients as well as evaluation of the equipment with standard phantoms, and evaluation by a radiology physicist, to make sure the equipment is functioning properly and producing optimal images.

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Imaging Decisions...
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Of the other two bodies, the IAC does some patient image review. Of note, TJC has no review of images either of patients or phantoms in their accreditation process. Neither of these other two bodies perform evaluation of the quality of equipment or physicist review. At UWVMC our outpatient sites are all accredited by the ACR and The Breast Center is an ACR Breast Imaging Center of Excellence.

To further maintain quality we participate in the ACR Dose Index Registry. This captures the radiation dose for each CT exam and compares it on a local and national level, to assess how we are doing in maintaining appropriate radiation exposure. Our sites are doing quite well.

Finally, I would like to discuss Clinical Decision Support (CDS). As part of the meaningful use legislation, CMS will require use of CDS by clinicians ordering advanced diagnostic imaging exams (CT, MR, NM and PET). The system must use government-approved, evidence-based appropriate use criteria. The decision system will have to be developed or endorsed by national medical specialty societies, be scientifically valid, evidence-based, using published studies.

Under CDS, physicians who furnish advanced imaging services will only be paid for claims that confirm that appropriate use criteria was consulted. They must document which CDS mechanism was used and whether the exam ordered adhered or did not adhere to an acceptable CDS rating. Of interest, at this time the clinicians ordering advanced diagnostic imaging services do not have to adhere to the appropriate use criteria; however, they must confirm that the guidelines have been consulted. CDS requirement will affect all providers whether office or hospital based.

How we care for our patients has become more complex, but there are tools that can help educate us and our patients about good medical decision-making. Given the media attention to radiation exposure from medical imaging, patients may have questions, and there are resources available to address these questions. Patients can ask: “How will having this exam improve my health? Are there alternatives that do not use radiation which are equally efficacious? Will my child receive a “kid-sized” radiation dose? Are the individuals performing the exam appropriately trained and credentialed? Is the site ACR-accredited?” In the near future, we will have additional tools within our EMR to support appropriate use of imaging resources.