

NCRP Responds to Two Requirements in the Recently Passed Medicare Improvements for Patients and Providers Act of 2008

A draft report from the National Council on Radiation Protection and Measurements (NCRP) played a role in two requirements in the Medicare Improvements for Patients and Providers Act.

NCRP's congressional charter includes the mandate to collect and analyze data related to public exposures to ionizing radiation. In the fall of 2006, NCRP formed a scientific committee (SC 6-2) to review all current publications and data, and prepare a new report on the magnitude of all sources of radiation exposure to the U.S. population. A medical subgroup was included as part of the committee to specifically examine the changes that had occurred over the last 25 years.

Preliminary* data indicate that in 2006 the per capita dose from medical exposure (not including radiotherapy) had increased almost 600 % since the last NCRP publication on this subject in 1982. The largest contributions and increases have come primarily from computed tomography (CT) and nuclear medicine. CT scans accounted for 16 % (67 million) of the total number of procedures and approximately half of the collective dose. Nuclear medicine accounted for about 4 % of all procedures and 26 % of the total collective dose. Medical exposure has now equaled natural background radiation in the United States. These findings have been presented in scientific and public health forums and briefed to congressional staff members and representatives of federal and state governments.

As a result of these findings and efforts by professional societies like the American College of Radiology the Act includes the following requirements which are intended to ensure the appropriate use of medical imaging procedures which expose patients to ionizing radiation:

- conduct a **demonstration project** to collect data regarding physician compliance with appropriateness criteria in order to determine the **appropriateness** of advanced diagnostic imaging services furnished to Medicare beneficiaries; and
- perform a **study**, by imaging modality, on the effect of the **accreditation** requirement under section 1834(e) of the Social Security Act.

Appropriateness can be equated with the fundamental radiation-protection tenet of justification (*i.e.*, the benefit to the patient outweighs any risk). A recent World Health Organization global initiative on radiation safety in health-care settings, in which NCRP participated, focused on this issue. Representatives from Belgium, Japan, Sweden and the United States reported that ~20 to 50 % of diagnostic imaging procedures performed in those countries are not medically justified (*i.e.*, they do not meet the relevant referral guidelines or appropriateness criteria). These unjustified exposures are contributing to the significant increase in medical exposures of the U.S. population. The demonstration project and accreditation study are important steps in addressing this significant public-health issue.

NCRP reports are available from the NCRP website, <http://NCRPpublications.org>, in both soft- and hardcopy formats. For additional information contact David A. Schauer, ScD, CHP at schauer@NCRPonline.org, 301.657.2652 (x20) or 301.907.8768 (fax).

*Data in NCRP publications are considered preliminary until reviewed and approved by NCRP. The draft report will be submitted for Council review during the third quarter of 2008.