Medical imaging helps patients but raises health-care costs
CU doctor proposes national strategy to address situation

AURORA, Colo. (Sept. 21, 2010) – Modern medical breakthroughs in imaging are saving lives – but at the same time adding unnecessary costs to health care. That’s the conclusion of William R. Hendee, PhD, and colleagues in an article published recently in the scientific journal Radiology.

Hendee calls for a national strategy to address the issue.

An adjunct radiology professor in the University of Colorado School of Medicine, Hendee focuses the article on medical imaging. This includes such tools as CT scans (multi-section computed tomography), MR imaging (magnetic resonance) and PET scans (positron emission tomography).

In the article, Hendee notes that the cost of health care in the U.S. is increasing at more than twice the inflation rate and that imaging costs have outpaced increases in the costs of other health-care technologies.

“Advances in medical technology are one of the primary drivers of the increase in health care costs,” he writes. Yet, “without question these advances have greatly improved the ability of physicians to detect, diagnose and treat disease and injury.”

It comes down to what’s called overutilization – using imaging when it’s unlikely to help the patient. Some studies suggest that 20-50 percent of high-tech imaging procedures don’t improve patients’ welfare and so may be unnecessary.

What’s behind this problem? A number of factors, Hendee says, including the health system itself. In a fee-for-service system, more procedures equal more revenue. Another issue: self-referral, in which the doctor recommending the procedure also performs and is paid for it. “Defensive medicine,” designed to safeguard against malpractice lawsuits rather than for the patient’s benefit, also play a role. Hendee also says that referring physicians don’t always understand the procedures. Radiologists often don’t have the time or incentive to review requested procedures. And patients may ask for tests they’ve heard about that won’t really make a difference for them.
Beyond the increased costs, the unnecessary tests also add to patients’ exposure to radiation.

“A national strategy should be developed,” Hendee writes, “to address overutilization and increase accountability in radiology and the other health care professions for the appropriate utilization of medical imaging and radiation.”

Faculty at the University of Colorado’s School of Medicine work to advance science and improve care. These faculty members include physicians, educators and scientists at University of Colorado Hospital, The Children’s Hospital, Denver Health, National Jewish Health, and the Denver Veterans Affairs Medical Center. Degrees offered by the School of Medicine include doctor of medicine, doctor of physical therapy, and masters of physician assistant studies. The School is located on the Anschutz Medical Campus, one of four campuses in the University of Colorado system. For additional news and information, please visit the UC Denver newsroom online.

The University of Colorado Anschutz Medical Campus is a model for the type of interdisciplinary research in translational medicine that will take basic discovery “from the bench to the bedside.”

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