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## RSNA Press Release

### Diagnostic Imaging In Line With Other Hospital Costs

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Media Contacts:

**RSNA Media Relations: (630) 590-7762**

Maureen Morley  
(630) 590-7754  
[mmorley@rsna.org](mailto:mmorley@rsna.org)

Heather Babiar  
(630) 590-7738  
[hbabiar@rsna.org](mailto:hbabiar@rsna.org)

OAK BROOK, Ill. - Dramatic increases in the utilization of high-technology imaging studies have raised the argument that diagnostic imaging has replaced prescription drugs as the driver of healthcare costs. However, a study in the June issue of the journal *Radiology* shows that imaging cost increases have remained in line with other hospital costs and that diagnostic imaging may be associated with shorter hospital stays.

The study was based on a review of hospital costs for 17,139 patients admitted to Massachusetts General Hospital (MGH) in Boston between 1996 and 2002. Although the number of diagnostic imaging procedures for this group more than doubled—particularly in computed tomography (CT) and magnetic resonance (MR)—imaging cost as a percentage of total costs remained approximately the same.

"It's hard to say that diagnostic imaging is driving hospital costs when imaging costs have increased at approximately the same rate as other expenses in healthcare," said study author G. Scott Gazelle, M.D., M.P.H., Ph.D., director of the MGH Institute for Technology Assessment and associate professor of radiology at Harvard Medical School.

The data also associated an additional \$100 spent on imaging with a decreased length of stay by 0.26 of a day, meaning an additional \$385 spent on imaging by this sample group was associated with one less day in the hospital.

"Those patients who had more imaging had less of a hospital stay," Dr. Gazelle said. "As doctors, we like to think that imaging leads to quicker diagnosis and treatment. Our results were encouraging and suggested that more spending on imaging does appear to be associated with a shorter hospital stay."

For the study, six groups related by diagnoses—stroke, appendectomy, lung cancer, colon cancer, back problems and upper gastrointestinal—were selected from MGH's accounting

#### At A Glance

- Diagnostic imaging procedures for a sampling of patients at Massachusetts General Hospital (MGH) more than doubled from 1996 to 2002.
- Imaging costs for this sample increased 51% during that time, compared with a 55% increase in other hospital costs.
- Every \$385 spent on imaging was associated with a one-day reduction of hospital stay.

records and analyzed. The total cost of inpatient imaging for this sample was 51 percent higher in 2002 than in 1996, but was still in line with other hospital expenses, which jumped 55 percent during the same period. The hospital's numbers reflected national trends, where health expenditures were 50 percent higher in 2002 than in 1996, according to the Centers for Medicare and Medicaid Services.

Based on these findings, Dr. Gazelle cautioned against across-the-board cuts in diagnostic imaging use in hospitals. "The danger in healthcare is that we look at something that is growing quickly but we look at it in isolation-not how it relates to the rest of the profession-and then we look at attempts to limit that growth," Dr. Gazelle said.

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(Note: Studies presented at the RSNA annual meeting in December 2004 showed dramatic increases in diagnostic imaging being performed at private practice and imaging centers, particularly in the specialties of cardiology and orthopedic surgery. More information and links to study abstracts are available at: [http://www.rsna.org/rsna/media/pr2004/pr\\_diagnostic\\_imaging\\_surge.html](http://www.rsna.org/rsna/media/pr2004/pr_diagnostic_imaging_surge.html))

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"Diagnostic Imaging Costs: Are They Driving Up the Costs of Hospital Care?" Molly T. Beinfeld, M.P.H., collaborated with Dr. Gazelle on this paper.