

# Health Plans Plot How To Rein In Radiology Costs

By Jane DuBose

Radiology is all about images and pictures, but its numbers are keeping health plan executives up at night. Over the past five years, while prescription drug costs and hospital-payor contracts grabbed headlines, radiology costs have been growing at a huge clip.

Although radiology comprises only 10 percent of the medical dollar spent by health plans, the segment is growing by 18-20 percent a year. By contrast, interventions in prescription drug management by health plans have resulted in a slowdown in the rate of growth to below 10 percent in some cases.

"We continue to see significant increases in outpatient radiology," said Dr. Allen Schaffer, chief clinical officer for CIGNA HealthCare. "And the biggest single problem is duplicate studies. A physician orders one study and it turns out not to be the optimal one. It's crucial because MRIs cost almost as much as a day in the hospital."

To battle the issues of duplication and over-use of expensive imaging, health plans are using pre-certification, radiology copays and dictating guidelines for physicians. While these elements of managed care have all but disappeared from many areas of healthcare delivery, they are becoming more commonplace for imaging.

Anthem Blue Cross and Blue Shield's West division, which includes Colorado and Nevada, was faced with double-digit increases in radiology costs two years ago but, with the help of a vendor, has reduced its costs to the point they are flat, said Karen Linden, manager of provider contracting for Anthem-West. Anthem plans in Connecticut, New Hampshire and Maine implemented a radiology management program in the fall of 2004, using the same program and vendor (NIA) as the West region plans. Anthem plans in Ohio, Kentucky and Indiana will implement a different program using a different vendor (AIM) on March 1, 2005. Anthem BC/BS in Virginia will also implement a program sometime this year.

Anthem, CIGNA HealthCare, Health Net of the Northeast and many other insurers require pre-certification for each non-emergent order for Magnetic Resonance Imaging (MRI), computed tomography (CT) and nuclear exams. Anthem uses

National Imaging Associates, a leading radiology vendor, which employs radiologists to give an imaging request a thumbs-up or down. The process is critical, Linden said, because half of all imaging doesn't provide information that improves a patient's diagnosis and treatment.

Over a two-week period, NIA had 1,041 incoming cases, with 56 of them denied or withdrawn from the ordering physician, Linden said. NIA reviews orders for both Anthem HMO and PPO members. "We took this very seriously when we added prior authorization in 2002," said Dr. Lisa Latts, medical director for Anthem-West. "We've not gotten a lot of complaints because the docs see a lot of value in being able to talk to radiologists at NIA."

Radiology vendors say their focus is to authorize the right study the first time. "We work hard to get the right study, but that may sometimes be a more expensive study than was asked for the first time," said Dr. Shelley Weiner, a medical director at CareCore National, which was recently hired by Health Net to manage radiology costs for its New York and New Jersey members. Without pre-certification, imaging orders jump dramatically, said Dr. Michael Komarow, also a medical director at CareCore.

Other insurers take a different approach. Cleveland-based Medical Mutual of Ohio in 2004 became more selective in the kinds of tests that it reviewed. "We came up with those that were higher volume and that had high denial rates," said Kathleen Weeks, director of prospective review for Medical Mutual.

Medical Mutual this year required pre-authorization only for MRIs and Magnetic Resonance Angiography of the lower extremity joints and the spine, lumbar and cervical areas, as well as all PET scans, Weeks said. The company does all of its review in-house, citing the additional expense and loss of control as reasons why it does not use a vendor.

**Standards and Guidelines.** In addition to, or perhaps in place of, pre-certification, health plans may require imaging studies be performed according to guidelines from the American College of Radiology (ACR) or another organization.

UnitedHealth Group, which does only limited pre-certification, has collaborated with the ACR to advance evidence-based criteria from the organization. The criteria are for the diagnosis and treatment of more than 190 specified medical conditions intended to serve as a guide for radiologists, radiation oncologists and referring physicians.

Aetna also requires ACR accreditation for MRI, mammography and obstetric ultrasounds.

The ACR's guidelines, criteria and standards address the issue of self-referral, which Dr. James Borgstede, chairman of the ACR Board of Chancellors, believes is the single most important issue in over-utilization. "If you have your own equipment, you are two-to-seven times more likely to order an imaging test," said Borgstede, also clinical professor of radiol-

## ESTIMATED NUMBER OF IMAGING PROCEDURES IN THE U.S., 2003

CT	57 million
MRI	18.5 million
Ultrasound*	122.5 million
Nuclear Medicine	35.5 million
Xray	281 million

\*Excludes OB.

Source: American College of Radiology

**CERTIFICATE OF NEED LAWS FOR MRI**

State	Units	State	Units
Alabama	87	Missouri	148
Alaska	15	New Hampshire	6
Connecticut	81	New York	178
D.C.	10	N.C.	164
Hawaii	14	Rhode Island	25
Kentucky	78	S.C.	14
Maine	19	Tennessee	210
Massachusetts	103	Virginia	127
Michigan	104	W. Va.	39
Mississippi	64		

Source: National Directory of Health Planning, Policy and Regulatory Agencies, 2003

ogy at the University of Colorado Health Science Center. “You have to pay off your equipment.”

Like many physicians, Borgstede doesn’t believe pre-certifications ultimately control costs. “The answer is the appropriateness of the examination and the quality of the examination performed. What the college is promoting is the idea of a ‘designated physician imager.’ What we’re looking for there is basically four different parameters—is the site accredited, does it use registered technologists, does it pass physics inspections and proof that the interpreters can interpret with skill and safety.”

Pennsylvania-based Highmark Inc., which also requires ACR accreditation for some procedures, now requires its providers undergo a privileging process in order to be reimbursed for imaging expenses. The process means providers know how to use the equipment and understand the procedures. Highmark spends around \$500 million annually on advanced imaging, said Highmark spokesman Michael Weinstein.

Central to radiology management is data gathering, which shows what providers’ ordering and denial rates are outside the norm. “We are not afraid of confronting providers who are consistently performing studies outside of appropriate practice patterns,” said David Bender, vice president of innovation with MedSolutions, a Tennessee-based radiology vendor. Its clients include Aetna, CIGNA HealthCare and the postal workers’ union.

“Right now, pre-certification is an effective process, and I think MedSolutions and our competitors are doing well with that intervention. What we are also trying to do is take an intelligent look at what can we do with all this data, and determine what kind of additional data is needed to make even more meaningful interventions to benefit our clients and their members.”

**Proliferation Of Equipment.** Sales of ultrasound, MRI, CT and Positron Emission Tomography (PET) equipment were expected to be \$3.9 billion in 2005, according to consulting firm Booz Allen Hamilton, which said the equipment sales totaled \$2.9 billion in 2000. Part of the demand is driven by the continued evolution of the technologies. For example, the

newest MRI technology uses stronger magnets to provide faster and more precise scans, according to a study from the Blue Cross and Blue Shield Association.

Radiology is estimated to be a \$75 billion industry but it touches both inpatient and outpatient segments of the categories health plans use to measure medical spending. A total of \$162.4 billion was spent on prescription drugs in 2002 and \$486.5 billion on hospital care. (Some of the latter total may include radiology).

The ACR estimates that 18.5 million MR scans were performed in 2003, and that the volume has grown by 20 percent a year since 2000. Some states limit the availability of MRI and PET equipment through certificate-of-need laws. A total of 36 states, plus the District of Columbia, have CON laws for some modality of imaging, while 19 of those have CON laws for MRI, according to the ACR.

Neither Indiana nor Ohio have CON laws for MRIs, but the presence of the law doesn’t necessarily limit the machines. Ohio has 187 free-standing MRIs (outside of a hospital), according to the Ohio Department of Health, but it’s unknown how many are in hospitals. Even a partial count in Ohio is larger than all of Canada’s MRI locations, which number 150, according to the Canadian Institute for Health Information. In Kentucky, where CON laws regulate MRIs, there are 78.

“There really seems to be one (high-tech imaging machine) on every corner,” said Anthem’s Linden. “It really is a proliferation and it’s viewed by many as a money-maker.”

While the number of imaging outlets grows, so does consumer demand. “People look at football games and they see them (players) get an MRI. When they have an injury, they demand it,” Borgstede said. “And then there are the physicians who have a stubborn quest for diagnostic certainty. They insist on one more exam.”

Anthem is hoping that its benefit structure will address some of those issues. Many of its regions have introduced \$100 copays for CT and MRI scans, depending on a members’ benefit package. It is having some effect, Linden said, but the copay is still about one-tenth the cost of the procedure.

**NATIONAL UTILIZATION OF PROCEDURES**

**For CT Scan**

- » 2003 = 57 million
- » 2002 = 45.4 million
- » 2001 = 39.6 million

**Number of Imaging Procedures**

- » Estimated number of 2003 diagnostic CT, MRI, Ultrasound, interventional, nuclear and x-ray procedures: 543 million.
- » Monetary value of diagnostic radiology procedures in 2005: \$100 billion
- » Total value of estimated diagnostic radiology procedures that are unnecessary: \$2 billion to more than \$16 billion

Source: MedSolutions

**What's Next?** Expect more sophisticated use of data as vendors and health plans consider ways to reward quality and try to uncover secrets to why costs may vary so much by region. “There are significantly lower medical costs in the West and they are higher in the Northeast and Florida, with the Midwest somewhere in the middle,” said CIGNA’s Schaffer.

Dr. Gregg Allen, chief medical officer for MedSolutions, echoes the assessment of the Northeast and said Delaware is one of the largest users of radiology services in its system. “Who would guess that? We’re not even sure of all the factors.”

Demographic trends and continued advances in the equipment will also mean higher utilization in the future.

Cardiac imaging is expected to be one of the next big things in radiology and in all of medicine, according to the Radiological Society of North America. Cardiac CT allows the entire

heart to be scanned in approximately 10 to 15 seconds with an injection of contrast material. Radiologists can examine cardiac function and coronary artery plaque while assessing cardiac structure for other diseases. The cost should be approximately what a chest CT scan costs now.

“It will be performed in astronomical numbers,” Borgstede said. “It has not caught on yet, but I guarantee you in the next year, it will have caught on.”

**ANALYSIS:** *Health plans are beginning to get a handle on radiology costs, but they are fighting an uphill battle given the proliferation of equipment, consumer demand and medical advances that propel utilization. The tools may be more limited than with prescription drugs, but look for plans to be every bit as aggressive as they have been on the drug front.* ■