Medical Imaging Services: Utilization, Spending, and Appropriateness

A Discussion Featuring:

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Location

Reserve Officers Association of the United States  
One Constitution Avenue, NE  
Congressional Hall of Honor  
Fifth Floor  
(Across from the Dirksen Senate Office Building)

Registration Required

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OVERVIEW

Technological advances in imaging have opened a range of diagnostic and treatment opportunities that are nothing less than transformative. At the same time, many believe that the rapid and relentless growth in spending on imaging services is not completely warranted and must be slowed. Recent history of medical imaging highlights the role of financial incentives in boosting utilization, the difficulty in determining appropriate utilization, the lack of coordination across health care providers, and patients’ and providers’ desire for definitive answers with respect to health care. This meeting will focus on efforts by Medicare to slow spending on imaging, private payer initiatives to ensure appropriate use of imaging services, and the views of a radiologist and a cardiologist on the impact of public and private efforts.

SESSION

The case of medical imaging services illustrates the constant tension between the promise of technological advances in medicine and the peril of continuing growth in health care spending. Innovations in medical imaging have been credited with virtually eliminating exploratory surgery, improving the early detection of cancer, and aiding in surgical and other treatments. New uses for imaging technology may provide more information with fewer side effects than other diagnostic services. Such information could foster better decisions about medical treatments as well and improve the quality of care for countless people.

These advances have come at a cost. More imaging services are provided to more people, often complementing (rather than substituting for) other services. The growth in spending on imaging is of particular concern because it has not coincided with declines in spending for other services or improvements in measured health outcomes. In the Medicare program, spending for imaging services billed by physicians increased at an average rate of 13 percent per year between 2000 and 2006 to reach $14 billion. Spending on physician imaging services is growing faster than overall Medicare spending, and consuming a larger piece of the Medicare pie. The share of Medicare beneficiaries receiving at least one imaging service increased from 63 percent to 66 percent between 2000 and 2006, and for those who received imaging services, the average number of services rose from 5.6 to 7. These numbers are particularly striking because much of the
growth is for more intensive, and thus more expensive, services. Although comparable figures are not available for other payers, there is no reason to believe that their trends are any different.

The delivery of imaging services has become diffuse across facilities and providers, making quality control and utilization management difficult. Imaging services used to be under the purview of hospitals and radiologists. More of these services are now provided in outpatient settings, including physician offices, and other physician specialties, such as cardiology and orthopedics, are increasingly providing imaging services themselves. This has prompted debates about the physician qualifications needed to accurately interpret imaging results: Which is more important, training in radiology, or specialization in the body part in question? In addition, diffusion of imaging services to a wider range of outpatient settings may make it more difficult to ensure appropriate training of staff and adequate maintenance of equipment.

Added to these concerns about quality is perceived overutilization. Imaging services tend to be profitable, and physicians who have the equipment in their offices may self-refer. A growing body of evidence indicates that physicians prescribe more imaging services when they own the means to provide those services. Creative ways to finance the equipment or otherwise allow a referring physician to financially benefit from the referral have proliferated, and manufacturers may even market the equipment as a “revenue center” for a physician practice. Radiologists generally are “nonreferring” physicians, meaning that their patients must be referred from another practice, although a radiologist may recommend follow-on or additional services.

Payers have used a variety of tools to try to ensure the appropriate use of imaging services. Prior authorization is intended to ensure that imaging services are provided only when clinically indicated by requiring that the justification for the service meets certain clinical standards before the payer will approve payment. Prior notification—a kinder, gentler approach—is similar in that the justification for the service is compared to standards, but the payer will not disallow payment for the service even if the clinical standards are not met. Both approaches seek to educate physicians as to the appropriate clinical situations for making referrals. Some payers require services to be provided only in credentialed facilities, to reduce the use of equipment that does not meet standards and staff who are not adequately trained. Another approach, provider privileging, limits the type of specialists who would be reimbursed for providing the service. All of these approaches are easier to implement and likely to be more successful if the payer is working with a closed network of providers or if the providers are connected through an electronic medical record.

Medicare has made changes to try to slow spending growth on imaging services. In January 2006, Medicare reduced physician fees under certain conditions for multiple images taken during the same session. Effective
January 2007, the Deficit Reduction Act of 2005 (DRA) required that the Medicare fee for certain imaging services not exceed what Medicare would have been paid for the services had they been provided in a hospital outpatient department. This effectively lowered Medicare’s payment for one in four imaging services that physicians provide. According to the Government Accountability Office, after these changes took effect, expenditures for physician-billed imaging services declined 12.7 percent per beneficiary, compared to average annual increases of 11.4 percent for the previous six years.3 Per-beneficiary utilization continued to rise, at 3.2 percent, a slower rate than earlier. Medicare will implement a provision of the Medicare Improvement for Patients and Providers Act of 2008 (MIPPA) that requires advanced diagnostic imaging services to be delivered by accredited providers.

It is not clear whether these tools can effectively curb the demand for noninvasive services or overcome the considerable financial rewards for providers in delivering these services. Payers, including Medicare, have achieved some success in slowing spending growth. Questions remain about whether the results can be sustained. It is also not known whether these approaches achieve desired alterations in prescribing behavior or changes in quality of care.

The case of medical imaging may foreshadow attention to other services, such as outpatient rehabilitation or arthroscopies. These services have shown high rates of growth and large geographic differences in utilization, which may signal inappropriate utilization and likely will draw payers’ attention as they look for ways to bring health care spending under control.

**KEY QUESTIONS**

- Does the experience of private payers mirror that of Medicare with respect to the utilization of and spending for imaging services?
- What are the most effective methods to ensure more appropriate use and better quality of imaging services?
- How important is specialization in the performance and interpretation of medical imaging? How can the health care system adapt to increasing subspecialization while maintaining appropriate access?
- How can Medicare be a prudent purchaser when medical technology, and imaging in particular, changes rapidly?

**SPEAKERS**

Bruce Steinwald, director, health care at the Government Accountability Office (GAO), will begin the program by reviewing the growth in spending for imaging services in the Medicare program and concerns about the appropriateness of this growth. He will review the GAO’s findings on the
impact of recent Medicare payment changes and GAO’s recommendations. He will be followed by **Lewis G. Sandy, MD**, senior vice president for clinical advancement, UnitedHealth Group, who will discuss his plan’s experience with imaging services, its programs to ensure appropriate utilization and spending on imaging, and the impact of these programs. **Geraldine McGinty, MD**, will give her views as a practicing radiologist on the need to control utilization and spending on imaging. She will also comment on the efforts of the American College of Radiology to ensure the appropriateness and quality of the imaging services provided to patients. **Janet Wright, MD**, vice president, science and quality, American College of Cardiology will discuss the College’s efforts to develop guidelines and protocols and its views on Medicare and private payer approaches to controlling imaging services.

**ENDNOTES**

