Health Care Spending Growth Slows

A report released on January 8 by the Centers for Medicare & Medicaid Services (CMS) indicated that U.S. health care spending growth accelerated only slightly in 2006 but still outpaced growth in both the general economy and the inflation rate. In 2006, health care spending reached a total of \$2.1 trillion, or \$7,026 per person, up from \$6.649 per person in 2005. The health spending share of the nation's gross domestic product remained relatively stable in 2006 at 16.0%. "The cost of health care continues to be a real and pressing concern. Making sure we are paying for high-quality health care services, not just the number of services provided, is just one of the most critical issues facing the American public and the federal government now and in the future," said CMS Acting Administrator Kerry Weems.

Out-of-pocket spending grew 3.8% in 2006, a deceleration from 5.2% growth in 2005. This slowdown is attributable to the negative growth in out-of-pocket payments for prescription drugs, mainly as a result of the introduction of the Medicare Part D benefit. Out-of-pocket spending accounted for 12% of national health spending in 2006. This share has declined since 1998, when it accounted for 15% of health spending. Out-of-pocket spending relative to overall household spending, however, has remained fairly flat since 2003.

CMS researchers found that overall private spending growth slowed in 2006. Private health insurance premiums grew 5.5%, the slowest rate of growth since 1997. Benefit payment growth also slowed, from 6.9% growth in 2005 to 6.0% in 2006. The slower growth reflects, in part, a decline in private health insurance spending on prescription drugs. The ratio of net cost of private health insurance (difference between premiums and benefits) to total private health insurance premiums was 12.3% in 2006, slightly lower than 12.7% in 2005.

Businesses, households, other private sponsors, and governments paid for about the same shares of health services and supplies (25%, 31%, 3%, and 40%, respectively) in 2006 as in 2005. However, spending shifts occurred within these categories as a result of implementation of Medicare Part D benefits. Medicare's share of federal spending increased from 29% in 2005 to 34% in 2006, whereas Medicaid's share decreased from 45% to 40%. For households, the share of Medicare spending attributable to payroll taxes and premiums increased slightly in response to first-time Medicare Part D premiums. At the same time, the out-of-pocket spending share decreased slightly as a result, in part, of the newly available prescription drug coverage through Medicare Part D.

Total Medicaid spending declined for the first time since the program's inception, falling 0.9% in 2006. The introduction of Medicare Part D, which shifted drug coverage for dual eligibles from Medicaid into Medicare, contributed to the decline in Medicaid spending growth. Other reasons for the decline cited by CMS included continued cost containment efforts by states and slower enrollment growth because of more restrictive eligibility criteria and a stronger economy.

Spending growth for most personal health care services slowed in 2006. Hospital spending, which accounts for 31% of total health care spending, grew 7.0% in 2006, a decrease of 0.3% from 2005 and a continued deceleration from a peak of 8.2% in 2002. The 2006 growth rate was partially driven by lower utilization of hospital services, especially within Medicare, as fee-forservice inpatient hospital admissions declined.

Spending for physician and clinical services also slowed, increasing 5.9% in 2006, the slowest rate of growth

since 1999. The slowdown was driven by a deceleration in price growth, fueled by a near freeze on Medicare payments to physicians that influenced private payers as well.

Spending growth for nursing home and home health services also slowed. For freestanding nursing homes, spending grew 3.5% in 2006—the slowest rate since 1999. This deceleration is partially attributed to a reduction in nursing home price growth. Spending growth for freestanding home health care services decelerated from 12.3% in 2005 to 9.9% in 2006, also partially because of slowdowns in price growth. Despite the 2006 deceleration, home health care continues to be the fastest growing component of all personal health care spending.

The implementation of the Medicare Part D prescription drug benefit affected a variety of indicators, including rates of growth of prescription drug spending and the share of drug spending accounted for by Medicare. The Medicare Part D benefit contributed to an increase in total Medicare spending, which grew 18.7% in 2006 compared with 9.3% in 2005. In addition, Medicare Advantage spending as a share of total Medicare spending increased from 14% in 2005 to 18% in 2006, in part because of a 25% increase in Medicare Advantage enrollment over the same period. At the same time, traditional fee-for-service enrollment declined 3.8%, and its share of total Medicare spending fell from 86% to 82%.

Prescription drug spending growth accelerated for the first time in 6 years—from a low of 5.8% in 2005 to 8.5% in 2006. Roughly half of this growth was from increased use of prescription drugs, partly a result of coverage now available under Medicare Part D, as well as new indications for existing drugs, growth in therapeutic classes, and increased use of specialty drugs. However, a higher generic dispensing rate in 2006 helped to restrain prescription drug spending growth, which despite the acceleration remained well below the average annual growth of 13.4% per year that occurred between 1995 and 2004. The higher rate of use of generic drugs was driven, in part, by the continued use of tiered copayment structures, certain drugs going off patent, and the lack of new "blockbuster" drugs.

The complete report is available at: www.cms.hhs.gov/NationalHealth ExpendData/01_Overview.asp.

> Centers for Medicare & Medicaid Services

"Image Gently" Alliance Targets Pediatric Radiation Awareness

A multisociety alliance announced in January the launch of the Image Gently campaign, which will promote awareness of measures to minimize both single and cumulative radiation exposure to pediatric patients. Founding members of the Alliance for Radiation Safety in Pediatric Imaging include the Society for Pediatric Radiology (SPR), the American College of Radiology (ACR), the American Society of Radiologic Technologists, and the American Association of Physicists in Medicine (AAPM). Other member organizations include: the American Academy of Pediatrics, the American Osteopathic College of Radiology, the American Registry of Radiologic Technologists, the American Roentgen Ray Society, the Association of University Radiologists, the Conference of Radiation Control Program Directors, the National Council on Radiation Protection and Measurement, the Radiological Society of North America, and the Society of Computed Body Tomography and Magnetic Resonance.

"Children are not just 'smaller adults.' Their bodies are different and require a different approach to imaging," said Marilyn Goske, MD, chair of the alliance and board chair of the SPR. "Ultimately, we hope to change the way all children are imaged in the United States, using kid-size, not adult-sized radiation doses. It's an ambitious goal, but one that we feel must be achieved."

The campaign urges providers who perform pediatric imaging examinations to: significantly reduce, or "childsize," the amount of radiation used; be careful not to over-scan (including scanning only when necessary, scanning only the indicated region, and scanning once rather than using multiphase scanning); and be a team player, involving medical physicists to monitor pediatric CT techniques and technologists to optimize scanning.

The Image Gently campaign will initially focus on CT scans. Approximately 4 million pediatric CT scans were performed in 2006, representing a tripling in such studies over 5 years. The Image Gently campaign is an effort to help ensure that medical protocols for the imaging of children keep pace with advancing technology. "As the stewards of nearly 100 years of radiology safety knowledge, radiologists are committed to ensuring that patients receive safe, necessary imaging care," said Arl Van Moore, Jr., MD, chair of the ACR Board of Chancellors. "The Image Gently campaign is an opportunity for radiologists to help referring physicians and medical imaging professionals understand which exams may be most appropriate for children and how these exams may be carried out in a safe, effective manner."

The Image Gently Alliance Web site (www.imagegently.org) contains research and educational materials to aid imaging specialists, medical physicists, and other stakeholders in determining appropriate radiation techniques to be used in imaging of children and how the radiation received from these exams may affect pediatric patients over time. A key feature of the Web site is a library of helpful protocols.

"Although CT provides outstanding images that are critical to the management of patient care, it is one of the higher dose examinations performed today," said Mary Martel, PhD, president of the AAPM. "For this reason, it is most important that physicians have a firm understanding of the physics and technology of CT to enable them to judiciously select imaging parameters to eliminate unnecessary doses to these children."

Alliance for Radiation Safety in Pediatric Imaging

Industry Agreement to Increase U.S. ¹¹¹In Supply

On January 15, Advanced Medical Isotope Corporation (AMIC; Kennewick, WA) announced the execution of a 5-year agreement with Central Radiopharmaceutical Services, Inc. (CRS; Buffalo, NY), for the joint production and marketing of ¹¹¹In. The comprehensive agreement with CRS is designed to enable AMIC to complement production capacity of a variety of high-value medical isotopes with its Kennewick headquarters, where a proton linear accelerator, specifically designed for PET isotope production, will become operative later this month.

Hani A. Nabi, MD, PhD, president of CRS and chair of nuclear medicine at the State University of New York (SUNY) at Buffalo, said, "We look forward to the success of the commercial collaboration between CRS, Inc. and AMIC and expect to further develop a reliable, alternate source of radioisotopes for medical use to help satisfy the demands in the U.S." CRS is an advanced biomedical research and development facility established by SUNY-Buffalo, occupying approximately 12,000 sf of space and including a state-of-the-art 30-MeV cyclotron. The company serves more than 30 clinical sites, prepares 20 radiopharmaceuticals in-house, and distributes 10 others that are purchased from manufacturers in bulk and repackaged for clinical distribution. CRS also provides its clinical sites with calibration sources, accessories, and radiation protection services. The cyclotron facility is capable of irradiating solid targets as well as the traditional gas and liquid targets for PET imaging facilities in Buffalo, western and central New York, and southern Ontario, Canada.

The agreement with CRS allows for the initial production of ¹¹¹In, with commercial quantities of the radioisotope expected in the second quarter of 2008. Several other radiochemicals are under consideration for production in the near future at CRS.

CRS, Inc.

NIST Describes Radioactive "Understudy"

In a public press release issued on January 8 and picked up by print and Web media, the National Institute of Standards and Technology (NIST) described a partnership with the private sector to explore the use of ⁶⁸Ge as a calibration surrogate for ¹⁸F. The release reviewed the growing benefits and widespread use of ¹⁸F-labeled tracers in PET studies and also discussed its limitations, including short half-life. Although beneficial in patient studies, the quick decay means that "it is not possible for a single central lab to make precise measurements on ¹⁸F solutions and then distribute them to far-flung centers to calibrate PET machines." The lack of a standard reference for ¹⁸F stands in the way of studies that compare results from center to center, patient to patient, and even in the same patient over time.

NIST researchers are collaborating with RadQual (Concord, NH) on investigations of the use of ⁶⁸Ge for this calibration because of this radioisotope's much longer half-life and decay characteristics that are otherwise similar to those of ¹⁸F. Small differences between measurements of ⁶⁸Ge and ¹⁸F can be accounted for through the use of mathematical conversion factors. Although ⁶⁸Ge has been used on an ad hoc basis for performing corrections on PET scanners, the collaboration hopes to establish its use as a national standard reference material for instrument calibration.

NIST researchers have already calibrated ⁶⁸Ge solutions that could serve as standards. The next phase of the project involves working with RadQual to calibrate a new "mock" syringe standard that would use ⁶⁸Ge embedded in an epoxy to simulate ¹⁸F in a syringe to more accurately determine the amount of tracer to be injected in PET procedures. NIST is also working independently on a ⁶⁸Ge-based PET phantom that can be used to calibrate PET scanners "in a way that is traceable back to NIST." The first commercial products from this collaboration may reach PET centers later this year. The press release noted that, "By giving doctors more accurate results on how specific patients are responding to cancer treatments and providing more precise indications earlier in clinical trials as to how individual patients are metabolizing particular drugs, better standards for PET imaging may hasten the arrival of 'individualized' medicine."

National Institute of Standards and Technology

Multidisciplinary Lung Cancer Clinic

The Seattle (WA) Cancer Care Alliance (SCCA) announced on January 16 the opening of a multidisciplinary clinic designed for current and former smokers, including assessment of chronic and acute lung conditions and assistance with smoking cessation. "Based upon what we know about early versus late stage lung cancer, we believe that early detection of lung cancer should extend life. If you are looking for biomarkers that can detect early stage lung disease, who do you study? People who smoke," said Jason Chien, MD, MS, director of the new clinic, pulmonary and critical care specialist at the SCCA, and a clinical researcher at the Fred Hutchinson Cancer Research Center. "The only way to end the majority of lung cancer cases that we see today is for everyone to stop smoking. Realistically, that's unlikely to happen, and even if it does, lung cancer will still be a major health problem in the foreseeable future because former smokers remain at risk for lung cancer. So the alternative is to reach people at high risk much earlier to try to identify the cancer earlier or identify people at highest risk for the cancer."

The weekly clinic serves 2 patient populations: "worried well" current or former smokers who are concerned about their health and the risk of lung cancer, as well as patients whose primary care doctors have discovered a lung nodule during routine chest radiography. Every patient will meet with a physician for a thorough pulmonary assessment. Smokers who want to quit will be referred to the SCCA Smoke Free Life Program. The evaluation of otherwise healthy smokers will include a lung function test and, if determined clinically appropriate, a CT scan. Patients who are referred to the clinic for lung nodule assessment will be evaluated by a multidisciplinary team including a pulmonologist, thoracic surgeon, radiologist, and nuclear medicine physician. If a malignancy is diagnosed, the team will also facilitate the next course of action for the patient, such as meeting with an oncologist or a surgeon. "We envision this service as a comprehensive center for primary care physicians to refer their patients so that they can have their nodules thoroughly evaluated and diagnosed," Chien said.

Seattle Cancer Care Alliance

AHRQ Faults Error Reporting Systems

A study released on January 9 by the Agency for Healthcare Research and Quality (AHRQ) suggests that inadequate reporting systems are to blame for low rates of reported errors rather than a reluctance on the part of U.S. physicians to address current and future error. The study found that most doctors believe that current systems are unresponsive and inadequate, and most reported relying instead on informal discussions with colleagues. The study appeared in the January/February issue of Health Affairs (2008;27:246-255). The 68-question survey of 1,082 U.S. physicians found that most were willing to share knowledge about harmful errors and "near misses" with their institutions and were eager to learn about innovations to prevent common errors.

"These findings shed light on an important question—how to create error reporting programs that will encourage clinician participation," said AHRQ Director Carolyn M. Clancy, MD. "Physicians say they want to learn from errors that take place in their institution to improve patient safety. We need to build on that willingness with error reporting programs that encourage their participation."

Most physicians participating in the survey indicated that they had been involved in an error: 56% with a serious error; 74% with a minor error; and 66% with a near miss. More than half (54%)agreed with the statement that "medical errors are usually caused by failures of care delivery systems, not failures of individuals." The majority of physicians agreed that they should report errors to their hospital or health care organizations to improve patient safety. Almost all (95%) physicians agreed that they needed to know about errors in their organizations to improve patient safety, and 89% agreed that they should discuss errors with their colleagues.

Eighty-three percent reported that they had used at least 1 formal reporting mechanism, most often to report an error to risk management (68%) or to complete an incident report (60%). Few physicians believed that they had access to a reporting system that was designed to improve patient safety, and nearly half (45%) did not know whether such a system existed at their organizations. Most physicians (61%) had used at least 1 informal mechanism to report an error to their hospital or health care organizations, most commonly telling a supervisor or manager (40%) or physician chief or departmental chair (38%). Physicians were more likely to discuss serious errors, minor errors, and near misses with their colleagues than to report them to a risk management or patient safety official.

When asked what would increase their willingness to formally report error information, physicians said they wanted: (1) information to be kept confidential and nondiscoverable (88%); (2) evidence that such information would be used for system improvements (85%) and not for punitive action (84%); (3) the error reporting process to take <2 min (66%); and (4) review activities to be confined to their own departments (53%).

A press release from the AHRQ noted that this information is especially valuable as the U.S. Department of

Health and Human Services continues to develop proposed regulations to implement the Patient Safety and Quality Improvement Act of 2005. The Patient Safety Act authorizes the creation of new entities called patient safety organizations (PSOs) that will collect, aggregate, and analyze confidential information voluntarily reported by health care providers. PSOs will use this information to identify systemic and avoidable causes of risk in medical settings and to provide feedback to health care providers about successful approaches that reduce such risk and thereby improve patient safety and quality.

> Agency for Healthcare Research and Quality

Chiropractor Exception Eliminated by CMS

As of January 1, imaging specialists could no longer order studies for Medicare patients referred by chiropractors in a nonhospital setting. The 2008 Medicare Fee Schedule Final Rule eliminated the "chiropractor exception," which allowed nontreating physicians (such as radiologists) to order diagnostic tests to identify a subluxation of the spine at the request of a chiropractor. Before January 1, 2000, the law required an x-ray to confirm the subluxation diagnosis for Medicare reimbursement for chiropractic adjustments. Neither radiologists nor chiropractors qualify under Medicare rules as treating physicians who can order radiographs, so the loophole chiropractor exception was created. However, in 2000 the requirement for x-ray confirmation of spinal subluxations was removed, but the exception remained in effect. CMS has now aligned its reimbursement policies with the 2000 statutory change and will no longer pay for x-rays or other diagnostic tests ordered by a nontreating physician to be used by chiropractors to demonstrate subluxations.

The American Chiropractic Association (ACA) opposed the proposed rule to eliminate the exception. The ACA argued that x-rays are essential to the chiropractic treatment plan of Medicare patients and that allowing chiropractors to refer patients to radiologists does not impose any clinical harm to patients but, instead, helps to curb health care spending by enabling patients to avoid additional trips to primary care providers.

CMS disagreed, observing that other commenters noted that x-rays are not needed to identify spinal subluxations. Instead, the commenters stated that they used x-rays to rule out other conditions where manual manipulation of the spine is contraindicated or where more imaging studies are indicated. CMS decided that this use fell outside the chiropractic exception.

CMS is currently evaluating the chiropractic services demonstration project that began on April 1, 2005, and ended on March 31, 2007. This demonstration project allowed chiropractors to provide services that were approved by CMS, including ordering diagnostic tests and therapies, in Maine, New Mexico, Illinois, Iowa, and Virginia.

American College of Radiology

Clinical Trial Information for Seniors

The National Institutes of Health announced in January the release of a new clinical trials topic area at www. nihseniorhealth.gov, a Web site developed by the National Library of Medicine (NLM) and the National Institute on Aging (NIA). "Older adults who log on to NIHSeniorHealth.gov will find information to help them make informed decisions, including questions they should ask and the answers they should look for if they are thinking of joining a trial," said Donald A.B. Lindberg, MD, NLM director. "Participating in Clinical Trials," which joins the Web site's roster of 33 topics targeting the health interests of older adults, explains basic terms, types and phases of trials, the informed consent process, and the benefits, risks, and built-in safeguards for trial participants.

"Clinical trials are a critical part of medical research," said Richard J. Hodes, MD, NIA director. "The risk of many diseases and conditions increases with age, and it is important that clinical trials include older participants, who can help researchers find out if a drug, therapy, lifestyle change, device, or medical test is safe and effective in the older population."

NIHSeniorHealth is based on the latest research on cognition and aging and features short, easy-to-read segments of information that can be accessed in a variety of formats, including large-print type sizes, open-captioned videos, and audio versions. Additional topics coming soon to the site include Parkinson's disease, nutrition, and high cholesterol. The site links to Medline-Plus, NLM's more detailed site for consumer health information.

National Institutes of Health

Call for Fermi Award Nominations

The U.S. Department of Energy (DOE) announced on January 7 a call for nominations for the 2008 Enrico Fermi Award. This Presidential Award is the oldest science and technology honor given by the U.S. government. The Enrico Fermi Award is given by the DOE Office of Science to encourage excellence in energy science and technology and to show appreciation to scientists, engineers, and science policymakers. "The Department of Energy has a rich scientific tradition, and the Enrico Fermi Award is a significant part of this history," said Secretary of Energy Samuel W. Bodman. "This award honors those who dedicate their lives to innovation and discovery, and I look forward to nominations of the highest caliber."

The Enrico Fermi Award is bestowed by the president of the United States to an individual or individuals of international stature in recognition of a lifetime of exceptional scientific, technical, engineering, and/or management achievements related to the development, use, control, or production of energy. The deadline for nominations is April 1, 2008. "Enrico Fermi was one of the greatest minds of the 20th century," said Under Secretary for Science Raymond L. Orbach, PhD. "His legacy profoundly enriched our intellectual and material lives, and continues to this day. It is a great honor to call for nominations for the 2008 Fermi Award in his name."

A Fermi Award winner receives a citation signed by the president and the secretary of energy. The award winner also receives a \$375,000 honorarium and a gold medal. Early Fermi Award winners included Ernest O. Lawrence, PhD; Glenn Seaborg, PhD; and Edward Teller, PhD. For more information about the Enrico Fermi Award, to submit an electronic nomination, or to see a complete list of past winners, visit www.sc.doe.gov/fermi.

U.S. Department of Energy

NCRP Annual Meeting

The 44th annual meeting of the National Council on Radiation Protection and Measurements (NCRP), to be held April 14 and 15 in Bethesda, MD, will focus on low-dose and low-doserate effects and models. The theme was chosen because of considerable current interest in the potential human health effects of low doses of ionizing radiation, such as those experienced in occupational and medical exposures. Ongoing debates focus on the applicability of a linear-nonthreshold model for characterizing biological responses and health effects of exposure to low radiation doses as well as on the effect of the rate of delivery of radiation doses on biological and health outcomes of exposure. The primary goal of the 2008 NCRP annual meeting will be to bring these issues into the perspective of available data and models of biological responses and human health effects of exposure to low doses of radiation. The meeting will feature presentations by international experts on the topics of: (1) molecular, cellular, tissue, and

laboratory animal studies on the effects of exposure to low-dose and low-doserate radiation; (2) results of epidemiologic studies on human health effects of low radiation doses in occupational, medical, and other exposure scenarios; and (3) potential effects of these findings on future regulatory guidance and public health policy. The perspectives of research scientists, public health officials, and regulatory agencies will be represented. For information on attendance, contact David A. Schauer, ScD, CHP, at schauer@NCRPonline. org.

> National Council on Radiation Protection and Measurements

SNM Launches Daily E-News

SNM announced in January the initiation of a collaboration with SmartBrief, Inc. (Washington, DC), to bring the professional community daily e-mail briefs on nuclear medicine and molecular imaging. The service, which began on January 14, includes clinical, research, and industry news gathered from U.S. and international Web sources, newspapers, and professional journals. Summaries of the day's top stories on health care legislation and foreign and domestic health policies, information on grants and funding, and, news about SNM events, courses, and services are also provided.

"SNM SmartBrief will give our subscribers a comprehensive overview of the news of the day in an easy-toread format," said Virginia Pappas, SNM chief executive officer. The e-letter also provides wireless compatibility for mobile readers.

SNM SmartBrief is a complimentary e-publication. Interested subscribers can contact the SNM at www.snm. org for additional information or sign up at http://smartbriefs.com/news/SNM/ index.jsp?categoryid=7B651A9C-543B-43A9-909D-CC5F80F69335.

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