New CPR Guidelines—Chest Compressions, Hypothermia: The American Heart Association has changed its guidelines for CPR. They now are suggesting 30 chest compressions for every two rescue breaths, based on studies that have shown that the more times the chest is compressed, the better the results. This should simplify the CPR process, making it more easily understood and achieved. The goal is to have a greater emphasis on increasing the circulation during CPR. More than 300,000 Americans die of cardiac arrest each year, and about 80 percent occur outside the hospital, more than 90 percent of these not surviving to hospital admission. Effective CPR can double the chance of survival. The new guidelines also advise only one shock from a defibrillator before beginning CPR, and applying two minutes of CPR before attempting another defibrillation. Finally—and this may be where anesthesiologists may become involved—the new guidelines suggest that comatose patients following cardiac arrest receive hypothermia to 90 degrees Fahrenheit for 12 to 24 hours to improve brain survival and function.

Gainsharing—Does It Pass the Ethical Threshold? Gainsharing is a new player on the cost-containment street and has been given some legal standing by several recent case-by-case decisions by the Health and Human Services Office of the U.S. Inspector General. Gainsharing is a process wherein hospitals pay physicians to adopt certain cost-saving practices. One such example is at the Good Samaritan Hospital in San Jose (an HCA hospital permitted by the OIG to launch a three-year pilot project) where orthopedic surgeons were offered the opportunity to restrict their use of total joint replacement vendors. In exchange, these surgeons were to receive a 15 percent to 20 percent portion of the savings gained by the hospital in using those specified manufacturers. Such surgeons, if they perform 100 joint replacements in a year, could save the hospital approximately $200,000. Surgeons who already were using the selected brands would gainshare closer to 15 percent of the savings, while those who switch to these brands would receive closer to 20 percent. There are “safeguards” against surgeons who might decide to move their surgical practices from other hospitals to the Good Samaritan to take advantage of the gainsharing. While intending to align physician incentives with those of the hospital, there are the obvious ethical and moral questions of potentially placing physicians’ interests above those of their patients, and having hospitals dictate how physicians practice. The OIG is demanding transparency (disclosure and informed consent specifically about gainsharing) and
quality assurance and oversight. Beginning with only one approved gainsharing program in 2001, there were six approved in 2005, and potentially hundreds within a few years. Congress may even provide softer restrictions on gainsharing next year. Will surgeons be willing to limit their choice of sutures for a gainsharing bonus? Anesthesiologists their choice of muscle relaxants? Cardiologists their choice of stents or pacemakers? Infectious disease internists their choice of antibiotics? And, why are the pharmaceutical and technology companies not being more severely limited to the amount of profits they and their seemingly ubiquitous representatives make?

**Will Physicians and Nurses Report to Work During a Disaster?**

Faced with written scenarios of seven catastrophic disasters (such as a radioactive bomb explosion), 20 percent to 50 percent of the more than 6,000 surveyed healthcare workers in 47 institutions in the greater New York City area said that they would be unwilling to report to work. These numbers of absentees would have serious implications because the additional influx of patients created by the disaster would require even more staff than already present. Employers and public health officials previously had focused on an employee's ability to get to work during a disaster, but not on an employee's willingness to go to work under such disaster circumstances. As such, employers and public health officials need to evaluate barriers to willingness as well as barriers to ability to serve. Fear and concern for the safety of their families as well as for themselves was the most frequently cited reason for unwillingness to work. (From *Journal of Urban Health*, September 2005.)

**Physician Suicide Rates Greater than General Population:** Male physicians commit suicide at a 41 percent greater rate than the general population of white men in the U.S., but female physicians' suicide rate is even higher, more than twice the general public. The underlying causes have not been determined with certainty, but depression, drug abuse and alcoholism, possibly related to stress, often have been associated with physician suicide. Women may experience stress because of gender bias and an increased need to succeed in what currently remains a male-dominated profession. Being single and without children, more common among women, also has been linked to higher suicide rates. In addition, physicians often feel uncomfortable sharing their problems with colleagues and may be more likely to resort to isolation, drugs and alcohol. Early identification and treatment programs, even beginning in medical school, might decrease this frightening predisposition. (From *Harvard Medical Alumni Bulletin*, Winter 2005.)

**Motor Vehicle Crashes and Near Misses Increased Following Extended Work Shifts:** Medical interns who work extended shifts of at least 24 hours are at greater risk for motor vehicle accidents and near misses. These
results were based on a survey of almost 3,000 interns. For each extended duration shift per month, there was a 16 percent increase in the monthly risk of an MVA upon driving home from work. The risk of a MVA on the home-ward commute for interns with extended shifts was doubled—and they experienced a five-fold increase in near misses—when compared with commutes following a 12-hour work shift. In 2003 the Accreditation Council for Graduate Medical Education imposed guidelines restricting residents to an average working week of 80 hours over a four-week period, including a day off per week and at least 10 hours off between shifts, prohibiting more than a 30-hour shift, of which the last six hours cannot be devoted to clinical care. Many teaching hospitals are wrestling with ACGME guidelines and are not prepared to reduce hours even further. Furthermore, the change to shorter shifts—and the subsequent increased frequency of “handoffs”—has raised concern about harming patients by interrupting continuity of care. Stricter educational standards and increased financial pressures as Medicare tightens funding for residents further compounds the challenges of teaching hospitals. (From *New England Journal of Medicine*, January 13, 2005.)

**Tracking Adverse Drug Reactions:** The FDA has been criticized for its “system for tracking drug safety,” a voluntary one that relies largely on physicians and pharmacists to report adverse reactions. Because drug side effects are difficult to detect, fewer than 10 percent of adverse reactions are reported. In June 2005, the CMS proposed making information from the Medicare prescription drug program available to the FDA, and with Congressional support, would expand existing databases to link drug data with Medicare billing records (patients' identities would be protected). The Medicare program, with 43 million covered lives, would give researchers a massive array of data, allowing them to identify side effects that did not occur during clinical trials, and also to compare the effectiveness of competing drugs without data from pharmaceutical companies. (From *Proto*, Fall 2005.)

**DNR Orders Less Common at For-Profits and Academic Hospitals:** In a 2000 study of almost 400 hospitals encompassing almost one million patients older than 50 in California, do-not-resuscitate orders were found to be less frequent at for-profit and academic hospitals than at rural hospitals. These differences appeared to reflect institutional culture, physician practices and availability of technological advances. These findings may represent a failure to achieve consensus on how and when to implement DNR status. The differences may reflect patients' proclivity to seek the most high-tech advances in medicine at academic institutions, and the inexperience and general reluctance of house staff to initiate and/or discuss DNR with their patients and their families. This notwithstanding, financial incentives could prompt more aggressive
therapies in for-profit settings. (From Archives of Internal Medicine 165:1705-1712, 2005.)

**Curbing the Epidemic of Grade Inflation:** In response to the widespread, if not endemic, grade inflation in American colleges, Princeton University has taken controversial measures to address the abuses of this system, even if its undergraduates might be placed at a competitive disadvantage when applying for graduate schools. A new policy called “grading expectations” suggests that A-grades (including plus and minus grades) should account for less than 35 percent of the grades in undergraduate courses, and less than 55 percent of the grades for junior and senior independent work. After one year of this policy, A-grades account for 41 percent of undergraduate grades, down from 47 percent during the preceding two years. For junior independent work, the decrease was from 63 percent to 58 percent. For senior independent work, the figures went from 62 percent to 59 percent. The percent of A-grades dropped most precipitously in the humanities (from 56 percent to 46 percent), whereas the social sciences decreased from 43 percent to 39 percent, and engineering from 48 percent to 43 percent. The natural sciences remained unchanged at 36 percent. (From Princeton Alumni Weekly, October 19, 2005.)

**Overseas Insourcing:** Our country's leadership edge in science and technology is waning. There has been a striking shift in the distribution of scientific capital—including specialists, skilled workers and research facilities—from the U.S. to newer high-tech centers in Europe and Asia. This trend will soon be a threat to American technological competitiveness, especially as large developing countries like China and India harness their growing scientific and engineering expertise to their enormous, low-wage labor forces. Historically, in the 1970s, more than half of the world's science and engineering doctorates originated from within American universities. However, in 2001, the European Union graduated 40 percent more science and engineering Ph.D.s than the U.S., and by 2010 will have produced twice as many as the U.S. Even more dramatic are China's gains. In 2003, Chinese doctorates numbered 13,000, 70 percent of which were in science and engineering. By 2010, China is expected to surpass the U.S. At the college level there has been a decreasing interest among U.S. students in science-related careers as witnessed by only 17 percent of all bachelor degrees in the U.S. being in the natural sciences and engineering. This compares poorly to a world average of 27 percent and a Chinese average of 52 percent! (From Harvard Magazine, November-December 2005.)

**“Green” Automobiles:** There are “green” automobiles that, rather than using gasoline for fuel, may use canola oil, which can be purchased in bulk at
restaurant supply companies. A five-gallon jug of canola oil costs about $20. Although more expensive (at least currently) than gasoline, it can be used in fuel-efficient automobile engines that can accommodate canola oil. This requires a diesel-engine conversion kit (about $700, plus needing a storage tank and pump) installed by a specialist mechanic (another extra cost). An alternative to canola oil as a renewable fuel is biodiesel ($2.30 per gallon for a vegetable oil and diesel blend, $3.50 for pure biodiesel), which is the product of a process that removes glycerin from vegetable oils and may be employed in engines that do not require much, if any, modification. Popularized by country singer Willie Nelson, biodiesel is now becoming available nationwide. Of all alternative fuel options, the most popular combination remains that of gasoline and electricity, the basis for the enormously accelerating growth found in the hybrid industry. (From The Green Guide, July/August 2005.)

**Chiropractors Nabbed On Multiple Felony Counts:** Insurance Commissioner John Garamendi announced the arrest of four chiropractors on multiple felony counts and insurance fraud. Among the charges were filing false insurance claims, practicing medicine without certification, conspiracy to commit a crime, grand theft, workers' compensation fraud and unlawful rebates. Investigators alleged that two of the chiropractors were co-owners of an outpatient surgery center in Sacramento and suspected of performing “manipulation under anesthesia.” By virtue of their licensure, chiropractors are prohibited by law from performing and/or participating in medical-surgical procedures. Another medical center, this one in Modesto, allegedly also is involved in the ongoing investigations. (From Department of Insurance News Release, August 5, 2005 (#079).)

**Call for Submission of Resolutions to the House of Delegates**

Any CSA member may submit a resolution to the House of Delegates (your elected representatives) on any issue that you deem important. The deliberations pursuant to these resolutions influence the course of action of the CSA during the ensuing year. For assistance in formulating a resolution, you are welcome to contact Linda B. Hertzberg, M.D., Speaker of the House of Delegates.

The House of Delegates will meet on Saturday, May 20, 2006, as part of the Annual Meeting of the CSA/UCSD at the Rancho Las Palmas Marriott Resort & Spa in Rancho Mirage, California. A reference committee meets Friday evening to hear testimony on all matters to be considered by the House. For more information, contact the CSA office (650) 345-3020, (800) 345-3691, fax (650) 345-3269.

*The deadline for submissions is April 20, 2006.*