



AMERICAN COLLEGE OF SURGEONS

SURGERY NEWS

High Iron Levels May Raise CV, Cancer Risks

BY BRUCE JANCIN
Elsevier Global Medical News

DENVER — The mechanism by which increased stored bodily iron raises the risks of both cardiovascular events and cancer in patients with peripheral artery disease appears to involve iron-catalyzed oxidative stress as reflected in elevated inflammatory cytokines and biomarkers, Dr. Ralph G. DePalma said at the Vascular Annual Meeting.

He presented a new prespecified sub-study of the Iron (Fe) and Atherosclerosis Study (FeAST), a multicenter single-blind trial in which 1,277 cancer-free patients with advanced stable peripheral artery disease (PAD) were randomized to calibrated reduction of iron stores by phlebotomy or to a control group.

The FeAST hypothesis was that accumulated bodily iron exceeding physiologic requirements increases risks of cancer and cardiovascular disease and that reducing iron stores by phlebotomy without causing anemia would favorably influence clinical outcomes. This proved to be the case, noted Dr. DePalma, national director of surgery in the Department

of Veterans Affairs, Washington.

During a mean 4.5 years of prospective follow-up at 24 VA hospitals, patients in the phlebotomy group were 35% less likely than controls to develop a new visceral cancer. Moreover, in patients diagnosed with visceral cancer, those in the phlebotomy group were 61% less likely to die of cancer than were controls with cancer. Mean serum ferritin levels in PAD patients who developed cancer were significantly higher than in those who remained cancer free, by a margin of 127-76 ng/mL (J. Natl. Cancer Inst. 2008;100:996-1002).

The effect of reducing iron on cardiovascular outcomes was more convoluted. In the full FeAST cohort, (mean age 67 years at entry), no significant differences were found between treatment arms for the primary study end point of all-cause mortality or the secondary end point of death plus nonfatal MI and stroke.



In a preplanned analysis based on age as a continuous variable, a nonlinear interaction between iron reduction and the primary and secondary study end points was seen. Patients aged 43-61 years who were assigned to iron reduction had significant 53% and 59% reductions in all-cause mortality and death plus nonfatal MI and stroke, respectively (JAMA 2007;297:603-10).

The trial suggests that perhaps ferritin and IL-6 levels should be monitored as disease risk factors.

DR. DePALMA

whom blood levels of several substances were measured every 6 months during follow-up: interleukin-6, -2, and -10; tumor necrosis factor- α receptors 1 and 2; and high-sensitivity C-reactive protein. Mean serum ferritin was 83.6 ng/mL in the 77 survivors and 132.5 ng/mL in the 23 nonsurvivors. The nonsurvivors' higher ferritin levels were significantly correlated with increased levels of IL-6, TNF- α receptor 2, and CRP. "I believe that the ferritin level stimu-

lates IL-6, which is a ubiquitous inflammatory cytokine made by almost every tissue in the body. The elevated ferritin provokes an inflammatory response, which in turn determines what happens at the level of the plaque," he explained.

Excess bodily iron could help explain the imperfect correlation between serum lipids and cardiovascular events. In all, 53 patients were on statin therapy at baseline, and 31 started on it during follow-up. In a multivariate analysis, statin therapy resulted in a mean 29-ng/mL reduction in serum ferritin independent of phlebotomy. "This has important implications in terms of statins' pleiotropic actions," he said.

He said studies are needed to better define the role of bodily iron reduction in the risks of cardiovascular disease and cancer, but FeAST suggests that perhaps ferritin and IL-6 levels should be monitored as cancer and cardiovascular disease risk factors. And reduced dietary iron intake by less consumption of red meat and iron-fortified foods may be appropriate.

FeAST was funded by the VA. Dr. DePalma reported no financial conflicts of interest. ■

White House Releases Final Stem Cell Guidelines

BY JOYCE FRIEDEN
Elsevier Global Medical News

Federally funded human embryonic stem cell research may use stem cells only from embryos created by in vitro fertilization for reproductive purposes and are no longer needed, according to final guidelines issued in July by the White House.

The human embryonic stem cells (hESCs) must be donated by people giving "voluntary written consent for the human embryos to be used for research purposes," according to the guidelines. Researchers must obtain written documentation that hESCs meet requirements, including:

- ▶ Options for disposing of embryos not needed for treatment were explained to the donors.
- ▶ No payments of any kind were offered for the embryos.
- ▶ Policies were in place ensuring that neither consenting nor refusing to donate embryos would affect the treatment given.
- ▶ Decisions about whether to donate embryos were made free

of influence from researchers.

▶ Donors were told they retained the right to withdraw the embryos until they were used.

"The guidelines will ensure that [National Institutes of Health]-funded research in this area is ethically responsible, scientifically worthy, and conducted in accordance with applicable law," according to an statement from the NIH, which will oversee all federally funded hESC research. "Internal NIH policies and procedures, consistent with [Obama's March 9 executive order] and these guidelines, will govern the conduct of intramural NIH stem cell research."

Under the Bush administration, federal funding for human embryonic stem cell research was limited to studies using only the few stem cell lines in existence when the policy was created in August 2001. President Obama's executive order lifted those restrictions and allowed funded research to include embryonic stem cell lines created after that date. It also called for the

NIH to develop new stem cell research guidelines. However, the order did not lift a current ban on using federal funds to create stem cell lines if doing so involved destroying human embryos. Federal policy does not affect privately funded stem cell research.

One question raised by the executive order was how the guidelines would treat stem cell lines already in existence when the guidelines were issued.

In a document accompanying the guidelines, NIH officials note that "many lines were derived consistent with ethical standard and/or guidelines developed by various states, countries, and other entities such as ... the National Academy of Sciences. These various policies have many common features, rely on a consistent ethical base, and require an informed consent process, but they differ in details of implementation."

The guidelines authorize use of such stem cell lines if they are compliant with the new guide-

lines or if they undergo a review by an NIH working group. "Working group review will enable preexisting hESCs derived in a responsible manner to be eligible for use in NIH-funded research," the document states.

The draft hESC guidelines, which were released in April, generated 49,000 comments.

When the guidelines were announced, Dr. David Stevens, CEO of the Christian Medical Association, Bristol, Tenn., cited problems with embryonic stem cell research. First, there is a moral issue: "We understand that embryos are human beings," he said. "When you destroy an embryo, you destroy a distinct human being." Also, embryonic stem cell research has been overblown, he continued. "We know that embryonic stem cells are difficult to culture and to control. ... Even people in this field say that if treatment is going to come out of this, it's probably 20 years away."

Several groups reacted positively to the final guidelines.

The Association of American Medical Colleges said it was "pleased that the NIH has issued clear guidelines on stem cell research, and established a pathway for existing lines to be considered for federal funding. We hope to work with the NIH to ensure that this process is transparent and moves forward in an expeditious manner for the benefit of all patients."

The Juvenile Diabetes Research Foundation also praised the guidelines. "We particularly want to commend the NIH for including ... a provision under which existing stem cell lines derived in an ethically responsible manner would be eligible for federally funded research," said JDRF president and CEO Alan Lewis, Ph.D. "This provision will ensure that a process is in place so researchers can build on the stem cell advancements made to date and accelerate research on cell lines with the greatest potential to facilitate treatment" of diseases such as type 1 diabetes. ■



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Quality Rankings Not Biased by Voluntary Reporting

BY KERRI WACHTER
Elsevier Global Medical News

FT. MYERS, FLA. — Voluntary reporting does not appear to bias hospital quality rankings, based on a study of more than 1,000 hospitals reporting on six high-risk procedures.

Dr. Amir Ghaferi, a surgical resident at the University of Michigan, Ann Arbor, and his colleagues looked at data from 1,169 hospitals participating in the 2007 Leapfrog Survey for six high-risk procedures: percutaneous coronary intervention (PCI), abdominal aortic aneurysm repair, coronary artery bypass graft (CABG), aortic valve

replacement, pancreatectomy, and esophagectomy. The Leapfrog Group is a large consortium of private payers that collects self-reported quality information from hospitals for several procedures.

The researchers ranked the Leapfrog data using a composite quality measure consisting of operative mortality and hospital volume. For this measure, the mortality rate is weighted according to its reliability or precision, and the remaining weight is placed on volume. "Because this [new] method includes observed data for mortality to the extent that it is useful and only relies on the proxy measure of volume

to the extent necessary, it ensures an optimal combination of these two quality measures," Dr. Ghaferi reported at the annual

WE DO NOT SEE AN OVER-REPRESENTATION OF HIGH-QUALITY HOSPITALS IN THE LEAPFROG SURVEY.

Academic Surgical Congress.

His group validated this predictor using Medicare data and found that it was an excellent predictor of future performance

(*Med. Care* 2009;47:226-33).

They next created a set of rankings for a national sample of hospitals from the 2006 Nationwide Inpatient Sample (NIS), with four groups (quartiles) for each of the six procedures, based on the new composite measure. Finally, they calculated the proportion of Leapfrog hospitals in each quartile. They predicted that the Leapfrog hospitals would cluster in the top quartiles, if voluntary reporting resulted in bias.

The distribution of the Leapfrog hospitals within the NIS performance quartiles varied across procedures, however. For PCI and aortic valve replacements,

57% and 52% of Leapfrog hospitals were in the top two quartiles, respectively. For pancreatectomy and esophagectomy, 56% and 61% of Leapfrog hospitals, respectively, were in the top two quartiles. But for CABG and abdominal aortic aneurysm repair, the percentages were just 35% and 36%, respectively.

"Ultimately, though, we do not see a systematic over-representation of high-quality hospitals in the Leapfrog survey," Dr. Ghaferi said.

Dr. Ghaferi reported that he has no relevant financial relationships. He noted that his two coauthors were unpaid consultants for the Leapfrog Group. ■

Real-Time Performance Data Improved VTE Prophylaxis

BY PATRICE WENDLING
Elsevier Global Medical News

CHICAGO — Automated real-time relay of the venous thromboembolism prophylaxis order status of all patients at a 550-bed tertiary care teaching hospital significantly increased prophylaxis usage in the ICU and in medical and surgical units.

For at least 5 months after the intervention, 15 nursing units averaged greater than 90% prevalence of venous thromboembolism (VTE) prophylaxis, a level reached by just 5 units prior to the intervention. Dr. Jason Stein and his colleagues at Emory University, Atlanta, reported in a poster at the annual meeting of the Society of Hospital Medicine.

Pulmonary embolism resulting from VTE is the most common preventable cause of hospital death. Yet a large U.S. registry study showed that most hospitalized patients with risk factors for deep-vein thrombosis did not receive prophylaxis (*Am. J. Cardiol.* 2004;93:259-62).

In the current study, pharmacologic VTE prophylaxis in the surgical ICU unit significantly increased from 78% at baseline to 94% after the intervention. That occurred without a significant rise in lone mechanical prophylaxis, which increased from 17.3% to 19.6%.

In a medical nursing unit, the intervention resulted in a significant increase in overall VTE prophylaxis (from 85% to 91%) that was almost entirely attributable to a significant increase in lone mechanical prophylaxis (from 14.6% to 20.2%).

Frontline processes, such as rounding format or timing of capture of new orders, may modulate the effect of the program, and thus explain the different outcomes between the two units, according to Dr. Stein and his colleagues.

In the surgical ICU unit, simultaneous physical rounding on every patient is conducted every morning by all members of the front-line clinical team, including the responsible physician. A clinical pharmacist views the real-time relay-and-display program prior to rounds to call attention to appropriateness of VTE prophylaxis during rounds. New VTE prophylaxis orders are discussed and captured via new physician orders during rounds.

In contrast, the rounding format in the medical unit is asynchronous physical rounding on patients by clinical team members. A multidisciplinary team meets on weekday mornings to discuss individual patients. The charge nurse views the relay-and-display program to call attention to patients, with no order for VTE prophylaxis during the team meeting. New orders are discussed but not captured during the meeting, and the nurse follows up ad hoc.

"More research is needed to examine sustainability and to clarify features of the most effective implementations of relay-and-display strategies in hospitals," according to Dr. Stein and his colleagues.

The researchers acknowledged that they are employees of Emory University and Emory Healthcare. Dr. Stein also disclosed stock holdings with Ingenious Med Inc. and honoraria from Sanofi. ■

FDA Flags Fatality Risk After Liver Transplant

BY ELIZABETH
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Elsevier Global Medical News

Patients who have had a liver transplant and are in stable condition may be at a greater risk of dying if they're switched from a calcineurin inhibitor-based immunosuppressive regimen to the immunosuppressive drug sirolimus, according to an alert issued by the Food and Drug Administration.

A statement posted June 11 on the FDA's MedWatch Web site refers to data from a clinical trial of stable liver transplant patients conducted by Wyeth, which markets sirolimus as Rapamune. In the trial, patients who switched from a calcineurin inhibitor (CNI)-based therapy to sirolimus were compared with those who continued treatment with a CNI.

The data suggested that mortality may be increased in patients who were switched to sirolimus, according to the FDA. The study also showed a significantly higher overall treatment failure rate at (defined as acute rejection or premature discontinuation of the drug for any reason) among those switched to sirolimus. In addition, drug discontinuations due to adverse events were higher among those who switched to sirolimus; the most common such events

were peripheral edema, stomatitis, and mouth ulcerations.

Sirolimus is approved for preventing organ rejection in patients aged 13 and older receiving kidney transplants. The drug's safety and efficacy in both liver and lung transplant recipients "have not been established by the FDA," the agency said in the statement.

The alert states that the agency has not concluded there is a causal relationship between sirolimus and this safety issue, "nor does it mean that FDA is advising health care professionals to discontinue prescribing this product." The FDA is continuing to review the data in the Wyeth study and will determine whether a change in the sirolimus label is needed. In the meantime, clinicians "should continue to use the drug's professional labeling as a guide to therapy," the alert said. ■

The alert and information for health care professionals are available at www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm165731.htm. Adverse events associated with sirolimus or other drugs should be reported to the FDA's MedWatch program at www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm or 800-332-0178 (fax).



A Comparison of Health Care Reform Options

Provision	Senate Finance Committee Policy Options	Senate HELP Committee Affordable Health Choices Act	House Bill H.R. 3200, "America's Affordable Health Choices Act"	Surgical Community's Views
Expanded Access to Insurance Coverage	<p>Requires all individuals to have health insurance.</p> <p>Creates an HIE where individuals and small businesses can buy coverage.</p> <p>Creates 4 benefit categories. Requires all plans to provide a comprehensive set of services and prohibits inclusion of lifetime limits on coverage or annual caps on benefits.</p> <p>Expands Medicaid and SCHIP and offers temporary Medicare buy-in for adults aged 55-64 years.</p>	<p>Requires all individuals to have health insurance.</p> <p>Creates state-based American Health Benefit Gateways where individuals and small businesses can buy coverage.</p> <p>Creates 3 benefit tiers. Requires provision of essential benefits and prohibits inclusion of lifetime or annual limits.</p> <p>Expands Medicaid to all individuals with incomes up to 150% of the FPL.</p>	<p>Requires all individuals to have health insurance.</p> <p>Creates an HIE that will let individuals and employers buy coverage.</p> <p>Requires employers to provide coverage to employees or to pay into an HIE Trust Fund.</p> <p>Creates an essential benefits package that provides comprehensive services as proposed by a Health Benefits Advisory Council. Prohibits lifetime or annual limits.</p> <p>Expands Medicaid to individuals earning up to 133% of the FPL.</p>	<p>All Americans should have consistent access to timely, patient-centered, affordable, unencumbered, and appropriate health care coverage.</p> <p>Coverage reforms must accompany system reforms to improve delivery of care.</p> <p>Basic benefit packages should ensure access to acute and surgical care for all individuals.</p>
Public Health Plan Option	<p>Option A: Creates new public plan subject to the same rules as private plans. May be administered by the federal government, states, or multiple third-party payors.</p> <p>Option B: Does not create a public plan option.</p>	No provision.	<p>Creates new public health insurance option that must meet the same requirements as private plans.</p> <p>Sets provider payments at Medicare rates with a 5% bonus to providers who participate in both Medicare and the public plan; includes pediatricians and physicians who do not typically participate in Medicare.</p>	<p>Public plans should not tie provider payments to Medicare rates.</p> <p>Public plans should not mandate physician participation.</p> <p>Public plans must be self-sustaining and competitive with private insurance plans.</p>
Use of SGR to Determine Medicare Payment	<p>Option A: Updates the fee schedule by 1% in 2010 and 2011 and by 0% in 2012. The calculations under the SGR system to determine updates would then revert to the current law for 2013.</p> <p>Option B: Same schedule of updates for 2010-2012 as option A; once the updated calculations revert to current-law SGR for 2012, a floor of -3% would be in effect. In 2014, the fee schedule updates for localities with 2-year average fee-for-SGRs at or >110% of the national average would have a -6% floor.</p>	No provision	<p>Updates the physician fee schedule conversion factor in 2010 by the MEI percentage increase. Bases the SGR on actual expenditures in 2 new physician services categories—E/M and all other services—in 2009. Annual updates from 2011 onward are determined using the 2 physician services categories structure, each with a separate allowed expenditure target.</p> <p>Maintains current formula for determining allowed expenditures under the SGR and the update adjustment factors but with modification of the GDP growth factor. Allows GDP + 2% for E/M services and GDP + 1% for all other services.</p>	<p>To reform Medicare's payment system, Congress must eliminate the SGR and find innovative models for physician payment.</p> <p>Opposes short-term "patch" that prevents only temporary Medicare payment cuts and does not address the underlying SGR problems.</p> <p>Congress must incorporate a realistic budget baseline that provides positive updates to physicians.</p> <p>During the transition to a new payment system, Congress should replace the SGR with a separate service category growth rates system to recognize the unique nature of the service types.</p>
Bonus Payments for Generalist Services	<p>Provides bonuses of at least 5% above the fee schedule to practitioners who furnish at least 60% of certain E/M services in specified ambulatory settings, from Jan. 1, 2010, to Dec. 31, 2014.</p> <p>Establishes bonus payments for general surgeons in newly defined rural general surgeon scarcity areas. From Jan. 1, 2010, to Dec. 31, 2015, these physicians would receive a 5% bonus or other amount greater than the fee schedule.</p> <p>Cost of the bonuses offset by a reduction in payments for all other services or through other funding sources.</p>	No provision.	<p>Mandates—effective Jan. 1, 2011—a 5% payment bonus for E/M services and other physicians' services that the HHS secretary determines ensure accessible, continuous, comprehensive, and coordinated care when provided by a physician or specialist in family medicine, internal medicine, pediatrics, or geriatrics and has allowed charges for primary care that account for at least 50% of total Medicare payments.</p> <p>Applies a 10% bonus to practitioners who primarily furnish services in an area with health professional shortages.</p>	<p>Supports increased payments for primary care physicians and general surgeons.</p> <p>Opposes any measure that would finance increased payments for primary care and/or general surgery with an across-the-board reduction in payments for all other services.</p>
Misvalued Codes	No provision.	No provision.	<p>Requires the HHS secretary to periodically identify and review potentially misvalued codes and adjust the RVUs appropriately, including consolidation of individual services into bundled payments.</p> <p>Requires the HHS secretary to establish a validation process for RVUs, including a sampling of potentially misvalued codes.</p>	The AMA/Specialty Society RVU Committee should continue to serve as the entity responsible for determining the value of medical services.
PQRI	<p>Expands PQRI incentive payments to include eligible professionals who biennially participate in a MOC or equivalent program and complete a qualified MOC practice assessment. Eligible professionals would qualify for bonuses for 2 successive years.</p> <p>Committee is considering options for extending incentive payments beyond 2010.</p>	No provision.	<p>Extends PQRI incentive payments through 2012. By Jan. 1, 2011, requires a mechanism to provide timely feedback to eligible professionals about proper reporting of their data and whether they will receive a bonus. Allows review of disputed payment amounts and errors.</p> <p>Requires the HHS secretary to develop a plan to integrate clinical reporting on quality measures with reporting requirements centered on use of electronic health records.</p>	<p>Generally supports proposal to allow physicians who participate in MOC programs to qualify for PQRI bonuses.</p> <p>Participation in PQRI should be voluntary; there should be no penalties for physicians who do not participate.</p> <p>Supports program improvements, including establishment of an appeals process and more timely feedback reports.</p>



Provision	Senate Finance Committee Policy Options	Senate HELP Committee Affordable Health Choices Act	House Bill H.R. 3200, "America's Affordable Health Choices Act"	Surgical Community's Views
Payment for Imaging Services	No provision.	No provision.	<p>Raises the presumed rate of imaging equipment use to compute the number of practice expense RVUs from 50% to 75%. Changes apply to such services as x-rays; PET, CT, and MRI imaging; ultrasound; and fluoroscopy.</p> <p>Increases the payment deduction applicable to the technical component of some imaging services when multiple imaging procedures of contiguous body parts are done in a single session.</p>	Opposes subjecting ultrasound and less expensive imaging modalities to the 75% equipment use rate. Ultrasound should be excluded from any other reimbursement reductions directed at imaging services.
Preventable Hospital Readmissions and Postacute Care Services	<p>Provides that, as of 2010, CMS begins calculating national and hospital-specific data on readmission rates of hospitals participating in the Medicare IPPS, related to the 8 conditions with the highest readmission rates.</p> <p>Mandates that, as of 2013, hospitals with readmissions above the 75th percentile for selected conditions are subject to a payment withhold on a DRG-by-DRG basis.</p> <p>Requires that, as of 2015, acute inpatient PPS services and postacute care services initiated within 30 days of discharge be paid through bundled compensation.</p>	No provision.	<p>Reduces payments to the inpatient PPS and critical access hospitals as of fiscal year 2011, based on each institution's ratio of actual to expected risk-adjusted readmissions as defined using a National Quality Forum-endorsed methodology. Applies only to base DRG payments. In FY 2011, 2012, and 2013, reductions cannot exceed 1%, 2%, and 3%, respectively. For FY 2014 and subsequent years, the reduction is limited to 5%.</p> <p>Within 1 year of enactment, the HHS secretary must report on how the readmissions policy could be applied to physicians.</p> <p>Directs the HHS secretary to develop a detailed plan to reform payment for postacute care services.</p>	<p>To prevent unintended consequences, such as avoidance of patients with complex medical conditions, readmission and bundling policies must use risk-adjusted benchmarks.</p> <p>Congress must develop a coherent risk-adjustment policy as the primary method for preventing the deselection of patients, addressing the readmission issue, and providing the highest quality of care.</p> <p>Congress should exclude readmissions for a diagnosis different than the original admission.</p>
Physician Referrals to Hospitals	Eliminates "whole hospital" and rural exceptions to the ban on self-referrals. Created new exemption for physician-owned hospitals and a Medicare provider agreement on July 1, 2009. These facilities would be "grandfathered" and able to continue to self-refer, subject to issues of potential conflicts of interest, investments, and patient safety.	No provision.	<p>Limits expansion of rural hospital capacity to circumvent the prohibition on certain physician self-referrals due to ownership or investment.</p> <p>Requires hospitals to report in detail on physician ownership and investment and to publicly disclose physician ownership and investment interests.</p> <p>Requires referring physician owners/investors to disclose to referred patients any ownership or investment interests.</p> <p>Sets fines for each failure to disclose at \$10,000/day.</p>	Physician-owned hospitals are an important component of the health care delivery system. Congress should not prohibit the development or expansion of physician-owned hospitals.
Physician Disclosure of Financial Relationships	<p>Provides for transparency between physicians and applicable manufacturers on payments and transfers of value and physician ownership or investment interests in manufacturers. Calls for submission of payment and ownership information and procedures to make this information public.</p> <p>Requires manufacturers of covered drugs, devices, biologicals, or medical supplies to annually report transactions of payments or transfers of value to physicians to the HHS secretary.</p>	No provision.	<p>Requires disclosure and reporting of payments or other transfers of value between covered drug, device, medical supply, or biological manufacturers and distributors under Medicare, Medicaid, or SCHIP and physicians and other health care entities/providers. Includes reporting of industry funding for CMEs and professional organizations.</p> <p>Preempts state laws that require reporting of the same types of payments of value or physician relationship.</p> <p>Directs the HHS secretary to establish procedures for physicians and "covered persons" to submit corrections to incorrect data reported about them.</p>	<p>Strongly supports disclosure and transparency of physician and industry relationships through a single, federal reporting system that preempts state law.</p> <p>Physicians should have the opportunity to review and correct information about their financial relationships before disclosures are made public.</p> <p>Most surgical societies have specific provisions in their codes of ethics regarding industry funding of CME and the ACGME.</p>
Graduate Medical Education	Redistributes unused residency slots as a means of increasing training, particularly in the areas of primary care and general surgery.	No provision.	Reduces authorized residency level if an institution's actual residency level for any of the 3 most recent reporting periods is below the authorized level. Drops level by 90% of the difference between actual and authorized levels. Unused slots would be redistributed to primary care.	Reallocation of unused residency training slots could exacerbate apparent and emerging workforce shortages in some surgical specialties unless it includes an option to lift residency caps.

Key: ACGME: Accreditation Council on Graduate Medical Education; AMA: American Medical Association; CME: continuing medical education; CMS: Centers for Medicare & Medicaid Services; DRG: diagnosis-related group; E/M: evaluation and management services; FPL: federal poverty level; FY: fiscal year; GDP: gross domestic product; HELP: Health, Education, Labor, and Pensions; HHS: U.S. Dept. of Health & Human Services; HIE: Health Insurance Exchange; PPS: prospective payment system; MEI: Medicare Economic Index; MOC: maintenance of certification; PQRI: Physician Quality Reporting Initiative; RVUs: relative value units; SCHIP: State Children's Health Insurance Program; SGR: sustainable growth rate.

Editor's Note: The chart above is an expanded version of a comparison chart published in the August Surgery News print edition (p. 4), along with an article describing the current health care reform initiatives.