



A Comparison of Health Care Reform Options

Provision	Senate Finance Committee "America's Healthy Future Act of 2009"	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. Prohibits lifetime limits and annual caps on benefits.</p> <p>Expands Medicaid and SCHIP and offers temporary Medicare buy-in for adults aged 55-64 years.</p> <p>Extends Medicaid eligibility to households with incomes of up to 133% of FPL, starting in 2014.</p> <p>Expands SCHIP eligibility 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. Prohibits lifetime or annual limits.</p> <p>Expands Medicaid to individuals with household incomes of 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>Does not create a public plan option. Instead, establishes not-for-profit member-owned cooperatives to compete with private insurers.</p>	<p>Calls for establishment of a new public plan to compete with private insurers. Plan would be government run and would negotiate payment rates with providers.</p>	<p>Creates new public health insurance option that must meet the same requirements as private plans.</p> <p>Amended to ensure that public option negotiates rates with provider; clarifies that provider is not obligated to participate in the public plan and that no penalties will be assessed on nonparticipating providers.</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>Does not reset the SGR baseline.</p> <p>Would replace the scheduled 21.5% Medicare payment cut with a 0.5% increase in 2010.</p>	<p>No provision</p>	<p>Updates the physician fee schedule conversion factor in 2010 by the percentage increase in the MEI. Annual updates beginning in 2011 are determined according to a new SGR structure comprising 2 physician services categories—E/M and all other services—each with a separate allowed expenditure target. Recalculates the SGR using actual expenditures for 2009 in those categories.</p> <p>Maintains current formula for determining allowed expenditures under the SGR and the update adjustment factors but with modification of GDP growth factor. Allows GDP plus 2% for E/M services and GDP plus 1% for all other services.</p>	<p>To reform Medicare's payment system and find innovative models for physician payment, Congress must eliminate the SGR.</p> <p>Opposes short-term "patch" that only temporarily prevents 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>Starting in 2011, provides 10% bonuses to primary care physicians and general surgeons in health professional shortage areas. Half of these bonuses would be offset through cuts to other physicians and surgeons.</p>	<p>No provision.</p>	<p>Effective Jan. 1, 2011, mandates 5% payment bonus for E/M services and such other physicians' services that the HHS Secretary determines ensure accessible, continuous, coordinated, and comprehensive care when provided by generalist physicians and practitioners. Has allowed charges for primary care that account for at least 50% of total Medicare payments.</p> <p>Applies 10% bonus for practitioners in areas 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>
Medicare Commission	<p>Establishes a President-appointed 15-member commission tasked with making proposals to Congress to extend the solvency of Medicare, slow Medicare cost-growth, and improve the quality of care to beneficiaries.</p>	<p>No provision.</p>	<p>No provision.</p>	<p>Opposes efforts to divest Congress of its authority over Medicare and to replace the transparency of congressional hearings and debates with a minimally open process overseen by unelected officials.</p>



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Misvalued Codes	Requires HHS Secretary to periodically identify potentially misvalued physician services and make adjustments to the relative values of such services under the Medicare physician fee schedule.	No provision.	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. Requires the HHS secretary to establish a validation process for RVUs, including a sampling of potentially misvalued codes.	The AMA/Specialty Society RVU Committee should continue to serve as the entity responsible for determining the value of medical services.
PQRI	Makes PQRI participation mandatory starting in 2011. Requires that participants receive timely feedback and have access to an appeals process. Extends incentive payments beyond 2010 and to physicians who participate in a qualified MOC program and complete a qualified assessment. Professionals who successfully report in 2010 would receive a 1% bonus in 2011; participants for 2011 will get a 0.5% bonus; 2012 nonparticipants would face 1.5% Medicare pay cut; penalties for 2014 and beyond would be set at 2%.	No provision.	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. 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.	Generally supports proposal to allow physicians who participate in MOC programs to qualify for PQRI bonuses. Participation in PQRI should be voluntary; there should be no penalties for physicians who do not participate. Supports program improvements, including establishment of an appeals process and more timely feedback reports.
Trauma and Emergency Services	No provision.	Provides funding to states or local governments to help improve regional coordination of emergency services. Reauthorizes and improves the Trauma Care Systems and Development Act, providing grants to the states and trauma centers. Grants are targeted to assist centers in underserved areas.	New language authorizes the ECCO and a Council on Emergency Care; establishes emergency care regionalization pilot projects; supports and expands emergency medicine research; and provides financial support to economically challenged trauma centers.	Supports regional coordination of emergency services and reauthorization of the Trauma Care Systems and Development Act.
Payment for Imaging Services	Raises the presumed rate of utilization for calculating payment for advanced imaging equipment from 50% to 65% for 2010 to 2013. The rate would be further increased to 75% beginning in 2014. HHS Secretary would be required to study the estimated impact of the utilization rate change.	No provision.	Changes the presumed rate of use of imaging equipment employed to compute the number of practice expense RVUs from 50% to 75%. Increases the payment deduction applicable to the technical component of certain imaging services when multiple imaging procedures of contiguous body parts are performed in a single session.	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	Calls for determining which risk-adjusted payment systems, including bundling, lead to increased coordination of care for acute, emergency, and chronic conditions. Bundled payments would include costs of readmissions. If the pilot program results in significant improvements in quality and cost reductions, the HHS Secretary will be required to submit a permanent implementation plan to Congress in 2016. Directs CMS to track national and hospital-specific data on readmissions at Medicare participating hospitals for certain high-cost conditions with high rates of potentially avoidable readmissions. Starting in 2012, hospitals with readmissions above a certain threshold would have payments for the original hospitalization reduced 20% if a patient with a selected condition is rehospitalized with a preventable condition within 7 days or 10% if it is within 15 days.	Hospitals are required to report preventable readmission rates. Will require hospitals with high readmission rates to work with local patient safety organizations to improve their transition practices.	Starting in FY 2011, reduces payments to PPS and critical access hospitals, based on each institution's ratio of actual to expected risk-adjusted readmissions. Applies only to base DRG payments. In FY 2011, 2012, 2013, reductions cannot exceed 1%, 2%, and 3%, respectively. For FY 2014 and subsequent years, reduction is limited to 5%. Within 1 year of enactment, the HHS Secretary must report on how the readmissions policy could be applied to physicians. Directs the HHS Secretary to develop a detailed plan to reform payment for post-acute care services. Amendment clarifies that physicians can be included in bundled payments for acute care episodes. Calls upon the HHS Secretary to study and develop plan for testing bundled and episodic payment for broader range of services, including outpatient and office-based procedures.	To prevent unintended consequences, such as avoidance of patients with complex medical conditions, readmission and bundling policies must use risk-adjusted benchmarks. 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. Congress should exclude readmissions for a diagnosis different than the original admission.



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Physician Referrals to Hospitals	Eliminates "whole hospital" and rural exceptions to the ban on self-referrals. Creates new exemption for physician-owned hospitals and a Medicare provider agreement on Nov. 1, 2009. Provides rules on how exempt hospitals should address conflicts of interest.	No provision.	Requires hospitals to report in detail on physician ownership and investment and to publicly disclose physician ownership and investment interests. Requires referring physician owners/investors to disclose to referred patients any ownership or investment interests. Sets fines for each failure to disclose at \$10,000/day.	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	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. Requires any manufacturers to report transactions with physicians annually.	No provision.	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 CME and professional organizations. Directs the HHS Secretary to establish procedures for correcting misinformation.	Strongly supports disclosure and transparency of physician and industry relationships through a single, federal reporting system that preempts state law. Physicians should have the opportunity to review and correct information about their financial relationships before disclosures are made public. Most surgical societies have specific provisions in their codes of ethics regarding industry funding of CME.
Graduate Medical Education	Redistributes unused residency slots as a means of increasing training, particularly in the areas of primary care and general surgery.	Emphasizes financial assistance for individuals entering the health care professions.	Reduces authorized residency levels if, for any of the last 3 reporting periods, an institution's actual residency level is less than authorized 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.
Professional Liability Reform	Expresses sense of the Senate that health care reform presents an opportunity to address issues related to medical malpractice and medical liability insurance, and states should be encouraged to develop and test ADR.	No provision.	New provision would provide incentive payments to states that enact or implement ADR mechanisms. HHS Secretary will determine effectiveness of ADR programs in preventing and/or prompting fair resolution of disputes and access to affordable liability insurance.	Supports comprehensive medical liability reform provisions, including a cap on noneconomic damage awards, ADR, protections for physicians who follow established evidence-based practice guidelines and/or volunteer their services in emergency situations.
ESTIMATED COST (all costs approximate)	\$856 billion over 10 years	\$615 billion over 10 years	\$1.5 trillion over 10 years	

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 updated version of a comparison chart published in the August SURGERY NEWS Exclusive Online Edition. A shorter version was published in the August print edition (p. 4), along with an article describing the current health care reform initiatives.



AMERICAN COLLEGE OF SURGEONS

SURGERY NEWS

Value-Based Purchasing Boosted Hospital Quality

BY BROOKE MCMANUS

Hospitals participating in the Hospital Quality Incentive Demonstration value-based purchasing project funded by the Centers for Medicare and Medicaid Services raised their overall quality by 17% over 4 years, the agency reported.

The program, launched in 2003 by the CMS and Premier Inc., an alliance of not-for-profit hospitals and health care systems, is designed to test Medicare payment incentives. The goal is to improve the safety, quality, and efficiency of inpatient treatment in five clinical areas: acute myocardial infarction, coronary artery bypass graft (CABG), heart failure, pneumonia, and hip and knee replacement.

The CMS awarded \$12 million in year 4 to 225 hospitals. The program determines aver-

age composite quality scores for the five areas using more than 30 evidence-based clinical quality measures developed by the Joint Commission and other groups. Although the CMS and Premier are tracking widely accepted measures to calculate the quality composite scores, the program also uses other indicators not included in the composite calculation, such as 30-day mortality and 30-day readmission rates.

In year 4, the average score improved most for heart failure patients and pneumonia patients. The score for the heart failure group rose from 64.5% to 92.2%, based on measures that included evaluation of left ventricular systolic function and smoking cessation counseling. The score for pneumonia improved from 69.3% to 92.6%, with measures including appropriate initial antibiotic selection and influenza vaccination.

Hip and knee replacement scores rose from 84.6% to 97.2%, based on such measures as the use of prophylactic antibiotics and the 30-day readmission rate.

For MI patients, the average composite quality scores improved from 87.5% to 96.3%, with measures for reporting including administration of aspirin and beta-blockers on arrival, and primary percutaneous coronary intervention within 90 minutes of arrival. According to Premier, the performance improvement saved the lives of an estimated 4,700 MI patients over 4 years.

The average score for CABG patients increased from 84.8% to 98.5%, based on measures that included the use of aspirin at discharge and inpatient mortality.

The shift to paying for health care based on performance rather than volume is

often cited as a primary goal of health reform. The reform bills that have surfaced so far this year do not provide much detail on how programs like HQID could be expanded beyond the demonstration phase, although there has been

attention to the processes for selecting and validating new quality measures. ■

BROOKE MCMANUS is a reporter for *The Gray Sheet*. This newspaper and *The Gray Sheet* are published by Elsevier.

VITAL SIGNS

10 Most Expensive Conditions Treated in Hospitals

(total national bill in billions of dollars)

Coronary artery disease	\$52.6
Pregnancy and delivery	\$47.8
Newborn infants	\$38.2
Acute myocardial infarction	\$35.1
Heart failure	\$32.8
Sepsis	\$30.3
Osteoarthritis	\$28.0
Pneumonia	\$27.5
Device/implant/graft complication	\$27.4
Respiratory failure (adult)	\$23.7

Note: Based on data from the 2006 Nationwide Patient Sample.
Source: Agency for Healthcare Research and Quality

ELSEVIER GLOBAL MEDICAL NEWS

Glucose Abnormalities Common After Gastric Bypass

BY BRUCE JANCIN

Elsevier Global Medical News

GRAPEVINE, TEX. — Gastric bypass surgery's status as the gold standard weight-loss procedure has come under question by new evidence that many recipients develop late, often-unrecognized glucose abnormalities contributing to significant weight regain.

"The gastric bypass has been the procedure of choice, especially for sweets eaters. I think it's time to reconsider. I actually believe that vertical sleeve gastrectomy and duodenal switches that are not severely malabsorptive will be the best operations in the future," Dr. Mitchell S. Roslin asserted at the annual meeting of the American Society for Metabolic and Bariatric Surgery.

After weight loss induced by gastric bypass, patients have an enhanced insulin response. Many of these patients develop rapid emptying of their surgically created pouch, with resultant reactive hypoglycemia that contributes to grazing and other maladaptive eating behaviors, noted Dr. Roslin, an ACS Fellow at Lenox Hill Hospital, New York.

This hypothesis arose from conversations with a large number of post-gastric bypass patients contemplating revision-

al bariatric surgery because of troubling weight regain.

"They were essentially saying that 1 or 2 hours after eating they were ravenously hungry. Many complained of being light headed. The symptoms sounded to me a lot like hypoglycemia," he recalled.

To test his hypothesis, he gave a 100-g oral glucose tolerance test to 63 patients coming to the obesity surgery clinic for routine follow-up a mean of 4 years after Roux-en-Y gastric bypass. Their mean age was 48.5 years, 81% were women, and one-third of the patients had diabetes preoperatively. Their mean preoperative weight was 138 kg. They had a maximum 55% excess weight loss, but had regained an average of 12 kg.

Fully 49 of the 63 patients (78%) had an abnormal glucose tolerance test. Six had hyperglycemia as defined by any post-challenge blood glucose value greater than 200 mg/dL with none below 80 mg/dL. Significantly, all but one of these six patients had normal fasting blood glucose.



Another 35 patients had reactive hypoglycemia, defined as a blood glucose value below 60 mg/dL or a decrease of at least 100 mg/dL between hours 1 and 2, with no value greater than 200 mg/dL. Another eight patients had both reactive hypoglycemia and hyperglycemia. Thus, more than two-thirds of the study group had evidence of hypoglycemia. These patients displayed a rapid postchallenge upsurge in blood glucose correlating with a rising insulin level, then a rapid decline in glucose in the second hour.

For sweets eaters, procedures that are not severely malabsorptive will be the best operations in the future.

DR. ROSLIN

"We see higher peaks and more profound drops in the patients who have both hyper- and hypoglycemia," Dr. Roslin said.

"I think your hypothesis may be very valid. I see a lot of rapid emptying," said Dr. Harvey J. Sugerman, an audience member whose studies in the late 1990s

are widely credited as enthrone gastric bypass as the gold standard bariatric surgery procedure. A nonsurgical solution to these problems, he added, is simply to have affected patients drink half a glass of orange juice 30 minutes after they eat.

"It levels off their insulin and glucose levels. It takes away the unpleasant symptoms of dumping and also that ravenous hunger," said Dr. Sugerman of Sanibel, Fla., an ACS Fellow who is editor in chief of *Surgery for Obesity and Related Diseases*, the official journal of the American Society for Metabolic and Bariatric Surgery.

"This is a very interesting study, the results of which deserve significantly more study," said Dr. Myriam J. Curet, who was asked to comment. "With the new trend toward looking at metabolic surgery as a treatment for diabetes, perhaps all studies should include glucose tolerance tests to patients," suggested Dr. Curet, an ACS Fellow who is professor of surgery at Stanford (Calif.) University.

Dr. Roslin disclosed that he has potential conflicts of interest resulting from commercial relationships with Covidien AG, C.R. Bard Inc., ValenTx Inc., Scientific Intake Ltd., and VentralFix Inc. ■



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SURGERY NEWS

Surgeons Launch Group to Promote Use of Robotics

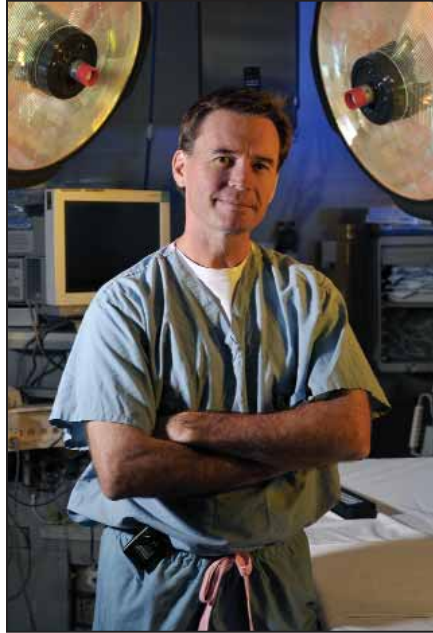
BY MARY ELLEN SCHNEIDER
Elsevier Global Medical News

In Memphis, a small group of surgeons from across several specialties has teamed up to advance the use of robotic surgical techniques.

The Memphis Robotic Surgery Society, which grew out of informal chats in the doctors' lounges of Memphis hospitals, was officially incorporated as a medical professional society over the summer. The founding members of the organization believe it is the first robotics surgery society in the country.

So far the organization has about 60 members from Tennessee, Mississippi, and Arkansas. The surgeons who make up the membership of the group have several goals: offering professional medical education, establishing a database of outcomes data, and spreading the word about the benefits of robotic surgery. But one of the main aims of the group is simply to learn from one another, said Dr. Edward Stanford, the society's treasurer and chief of urogynecology and female pelvic medicine at the University of Tennessee in Memphis.

The multispecialty society includes members from across the surgical community—gynecology, urogynecology, urology, cardiovascular surgery, ENT surgery, colorectal surgery, and anesthesiology. This type of collaboration is especially important in a new field with constantly changing technology, he said. The society creates an environment in



COURTESY DR. EDWARD STANFORD

A main goal is “simply to learn from one another,” said Dr. Stanford.

which a urologist can easily share tips and tricks for a new device with a cardiovascular surgeon.

“It’s a new area of medicine, and we’re in a learning and growth phase,” Dr. Stanford said. “We want to use our collective good minds from different specialties and move the science forward.”

The multispecialty makeup of the organization is a real plus, agreed Dr. Charles E. Miller, a past president of the AAGL (formerly the American Association of Gynecologic Laparoscopists), who is not a member of the group.

Most of the time, the sharing of best practices across surgical specialties is something that only happens in the hallway when there’s time to find out what a colleague has been doing. That’s one of the major reasons that certain techniques will become prevalent in one specialty and lag behind in another, said Dr. Miller, who is also the director of minimally invasive gynecologic surgery at Lutheran General Hospital in Park Ridge, Ill.

Dr. Miller, who advocates increased training as well as recognition for minimally invasive gynecologic surgeons, said he has high hopes for the Memphis Robotic Surgery Society. While the adoption of laparoscopic surgery has been slow in gynecology, Dr. Miller said he is seeing real enthusiasm for the use of robotic techniques, even among physicians who shied away from adopting other minimally invasive techniques. Many surgeons feel comfortable with the new robotic technology, he said, which offers sharp images, well-articulated instrumentation, and a console that they can become facile with quickly.

The goal of the members of the new Memphis Robotic Surgery Society is to create an environment in which patients can get the minimally invasive approach that is appropriate for them, said Dr. Stanford, who runs a fellowship program in minimally invasive gynecologic surgery at the University of Tennessee. But since robotic surgery is still a young and evolving field, there isn’t clear agreement about who the appropriate pa-

tients are. In gynecology, robotic devices are being used for minimally invasive procedures for fibroids, endometriosis, and difficult hysterectomies, he said.

Another aim of the society is to dispel myths and show the benefits of robotic procedures, said Dr. Todd Tillmanns, president of the group and a gynecologic oncologist at the West Clinic in Memphis. As someone who focuses on robotic surgery, Dr. Tillmanns said he hears a lot of myths—for example, that robotic procedures can’t be performed on obese patients or patients with prior surgeries. Studies have shown that those statements aren’t true, he said, and that the techniques have many advantages for patients.

In gynecology, patients who have robotic surgery experience significantly less blood loss, less pain, and return to normal activities in about a fifth of the time it would take them if they had undergone a traditional open procedure, Dr. Tillmanns said. He added that he wants to get that message out to patients and physicians and that the new society can help do that through prospective data collection.

The society is beginning to collect data on surgeries to help the physicians look across specialties at patient outcomes, positioning, port placement, anesthesia issues, and other data points that could help make the surgeries more effective over time. They hope to be able to pool and share their data with other groups. “The spirit of it is to be collaborative,” Dr. Stanford said. ■

Islet Autotransplants Cut Need for Insulin in Children

BY MIRIAM E. TUCKER
Elsevier Global Medical News

NEW YORK — Islet autotransplantation prevented or minimized the need for insulin therapy at 1 year in 8 of 12 children who underwent total pancreatectomy for chronic pancreatitis.

Diabetes with complete insulin dependence would have resulted if these patients had undergone pancreatectomy alone, Dr. Melena D. Bellin said at a joint meeting of the Lawson Wilkins Pediatric Endocrine Society/European Society for Pediatric Endocrinology.

Previously, Dr. Bellin and her colleagues at the University of Minnesota, Minneapolis, reported retrospective findings for 18 children who underwent pancreatectomy with islet autotransplantation (injected into the portal vein) during 1989-2006. At 1 year, 10 children were fully insulin independent while 4 had just partial dependence (once-daily insulin use only). Only 7 still were taking narcotics after surgery, whereas all 18 had required narcotics before surgery (*J. Pediatr. Gastroenterol. Nutr.* 2008;47:37-44).

Now, the procedure has been found similarly successful in a prospective analysis of 12 children who underwent the combined procedures more recently and were followed for 1 year or longer. The seven girls and five boys had a mean age of 14.7 years at the time of surgery (range 5-18 years), and a mean duration of 1.6 years post surgery. In eight children, the cause of the chronic pancreatitis was hereditary/genetic, in three it was idiopathic, and in one the cause was a pancreatic divisum.

All 12 patients had required narcotics for pain relief prior to surgery. At 6 months to 2 years post surgery, nine were off narcotics completely, one discontinued them for several months and then restarted them but at a lower dose, and two remained on narcotics, but also at a lower dose.

Six of the patients achieved insulin independence at a mean of 4 months post pancreatectomy (range 1-10 months), and remained off insulin at 1 year. Another two patients were able to maintain euglycemia with just one daily insulin shot of 0.25 U/kg per day or less.

Compared with the four patients who became insulin dependent (requiring more than 0.25 U/kg per day), those

who were partially or completely insulin independent were significantly younger: All four patients who became insulin dependent after surgery were aged 13 years or older, while three of the six who remained completely insulin independent were preadolescents. Those using minimal or no insulin also had received a significantly greater number of transplanted islets (4,113 vs. 2,251 islet equivalents per kilogram of body weight).

The patients using minimal or no insulin at follow-up had greater C-peptide responses to a 2-hour mixed-meal tolerance test (2.8 vs. 0.3 ng/mL), and none had severe hypoglycemic episodes (requiring assistance to treat or experiencing seizure/loss of consciousness). There was one such episode in one of the four patients who became insulin dependent following surgery, resulting from an accidental insulin pump overdose, Dr. Bellin reported.

It’s not clear why preadolescent children were more likely to achieve insulin independence. It could be due to lower levels of insulin resistance, a more favorable metabolic milieu, or “healthier” beta cells, she suggested.

Dr. Bellin stated that she had no financial relationships to disclose. ■