Negotiating the EHR vendor contract
FEATURES

Negotiating the EHR vendor contract 12
Jenny Jackson, MPH; Steven J. Fox, Esq.; and Vadim Schick, Esq.

Breaking down barriers for minorities and cancer patients:
A profile of LaSalle D. Leffall, Jr. 18
Diane S. Schneidman

Invigorating a state ACS chapter:
The Georgia experience 25
James K. Elsey, MD, FACS; Harold L. Kent, MD, FACS;
Kathy D. Browning; and Don K. Nakayama, MD, FACS

Using simulation to train oncology surgeons: Gynecologic
oncologists practice OR’s touch, feel—and pressures 31
Jeannie Glickson

DEPARTMENTS

Looking forward 4
Editorial by David B. Hoyt, MD, FACS, ACS Executive Director

What surgeons should know about... 6
PQRS reporting of measure #22
Caitlin Burley

State STATs 39
Understanding physician taxes
Alexis Macias

HPRI data tracks 40
Independent practice becoming increasingly rare among surgeons
Stephanie Foley; Vann Newkirk; Kristie Thompson;
and Thomas Ricketts, PhD, MPH

On the cover: Health information technology legislation and incentives, along
with changing practice environments, necessitate complex decisions regarding
contracts with electronic health records providers (see article, page 12.)
NEWS

Report on the AMA HOD interim meeting
Jon H. Sutton

Did you know...

A look at The Joint Commission:
JCR announces board appointments

Members in the news

Remembering Jameson L. Chassin, MD, FACS

ACOSOG news:
Reconciling axillary staging controversy in neoadjuvant therapy
Judy C. Boughey, MD, FACS; David M. Ota, MD, FACS; and Heidi Nelson, MD, FACS

Trauma meetings calendar

Disciplinary actions taken

AWS to turn 30

NTDB® data points: Tighten your belt
Richard J. Fantus, MD, FACS; and Michele M. Mellett, MD, FACS

The American College of Surgeons is dedicated to improving the care of the surgical patient and to safeguarding standards of care in an optimal and ethical practice environment.
Looking forward

Patients, physicians, other health care providers, policymakers, and payors have long agreed that the current U.S. health care system is inadequate and unsustainable. However, a parting of the ways becomes apparent when these stakeholders are asked to define the objectives of health care reform and how to achieve them. Indeed, expanded access to care, improved quality of care, controlled spending, heightened safety, patient-centered services, and so on, are fairly abstract concepts and open to a range of interpretations. Because these goals are so mutable, it is difficult to determine whether they are being met. How can these goals possibly be measured in a way that everyone understands?

One objective that has been discussed in the health care debate actually can be defined and measured, and that is adding value to the system, Michael E. Porter, PhD, posits in the December 23, 2010, edition of the New England Journal of Medicine. In health care, value is defined as outcomes relative to costs, both of which can be measured using scientific means.*

Measuring value

 Increasingly, patients and payors are going to select health care professionals who can prove they have successfully cared for patients with similar conditions and are qualified to perform specific procedures. Health care providers also are going to need to demonstrate that the services they offer are efficient and effective. Hence, surgical practices and institutions need to capture data on outcomes that are meaningful to patients, as well as on the costs of treating those patients throughout episodes of care.†

Because the value of medical services can only be revealed over a period of time—through such factors as sustainable recovery or occurrences of treatment-induced illnesses—outcomes and costs will need to be tracked longitudinally. For patients with more than one medical problem, value should be measured for each condition, and outcomes should be risk-adjusted to account for the existence of multiple conditions.*

In the simplest terms, according to Dr. Porter, long-term outcomes for any medical condition can be tracked using a three-tier hierarchy. Tier 1 involves looking at health status achieved or retained, survival, and degree of health or recovery. Tier 2 centers on examining the process of recovery and the time it takes for the patient to recuperate and return to normal activities. It also entails analyzing problems in the delivery of care, such as diagnostic errors, complications, and so on. Tier 3 looks at the sustainability of health, the nature of recurrences, and long-term consequences. This methodology will allow us to capture the full picture of how well a patient does after undergoing a procedure or treatment regimen.*

Like outcomes, costs will be measured through analysis of the entire care process and based on the effects of resource use on patient outcome. It is anticipated that adding up the total amount spent during a patient’s entire care cycle and weighing that amount against outcomes will enable true cost reduction. It should yield these

financial benefits through reallocation of spending among types of services, elimination of unnecessary services, provision of care in appropriate settings, and so on.*

Effects on surgeons

Movement toward a value-centered system will have a significant effect on how health care professionals and institutions present themselves to the public, work with each other, and get paid.

Unquestionably, physicians and other health care providers who want to attract and keep patients are going to need to make their outcomes and costs more transparent.

Because value will be determined based on the entire care process, teamwork among all health care professionals and institutions that are providing care will be very important. Health care providers will need to share accountability for outcomes—good and bad. All health care professionals and institutions that were involved in treating a patient’s primary and associated medical conditions will have to take responsibility for the patient’s experience. Shared accountability will be achievable through the development of integrated practice units. These integrated, comprehensive care systems would replace our existing “silos,” in which specific departments and specialties work independently and concentrate on providing a limited range of interventions.†

Under a valued-centered paradigm, physicians and other providers will receive financial rewards based on their ability to offer patients value-based care. Value likely will be measured to reflect all services or activities that jointly determine whether the patient’s medical needs were met. Aligning reimbursement with value in this manner rewards providers for efficiency in achieving positive outcomes while creating accountability for subpar care.*

College is ready

The College has anticipated these transformations for many years, and has been taking steps to help surgeons and hospitals adapt to the demands of the changing environment.

With regard to outcome measures, we have taken the responsibility for the following activities:

- Bringing the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) into the private sector. Hundreds of hospitals throughout the nation now use ACS NSQIP to compare and assess patient observed versus expected outcome.
- Working with the Centers for Disease Control and Prevention to develop surgical site infection measures.
- Developing, refining, and expanding the ACS Case Log System, and transforming it into the ACS Surgeon-Specific Registry, which will allow surgeons to evaluate and learn from their own experiences.
- Creating the Rapid Quality Reporting System for voluntary participation and releasing a participant-use file of data from the National Cancer Data Base.
- Implementing a Trauma Quality Improvement Program at trauma centers throughout the nation.

Furthermore, we offer educational programs to help surgeons evaluate their performance and to learn how to lead multidisciplinary teams.

The leadership of this organization recognizes that no matter what happens in Washington, DC, the current health care system must be improved, and enhancements to the system are likely to follow a value-based paradigm. We have developed the programs described here to help surgeons face the challenges ahead as we move toward implementing the value model. I encourage you and your institutions to participate in these opportunities. The reality is that surgeons who want to maintain and add to their practices in the coming years will need to participate in outcomes measurement programs, to practice in a transparent manner, and to cooperate with other health care professionals.

David B. Hoyt, MD, FACS

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
PQRS reporting of measure #22
by Caitlin Burley

Editor’s note: This is the third in an ongoing series of articles on the 2011 Physician Quality Reporting System (PQRS), formerly known as the Physician Quality Reporting Initiative (PQRI). These articles are intended to help surgeons understand and adapt to changes in the PQRS so that they can receive optimal Medicare Part B reimbursement.

The Centers for Medicare & Medicaid Services (CMS) has continued the PQRS into 2011 as required under the Medicare Improvements for Patients and Providers Act (MIPAA) of 2008. PQRS links the reporting of quality data to physician payment by offering an incentive payment of 1 percent of the total allowed charges for Medicare Part B professional services covered under the physician fee schedule and furnished during the 2011 reporting period.

For those eligible surgeons who have previously reported in the PQRI program, it is important to note that 2011 PQRS now includes 200 quality measures (including both individual measures and measures that are part of a 2011 measures group). Whereas 2010 PQRI quality measures may be continued in the 2011 PQRS, measures specifications may have been updated for the new program year. Surgeons who are currently reporting in 2010 PQRI should review the 2011 Physician Quality Reporting System Measure Specifications Manual for Claims and Registry Reporting of Individual Measures (also known as the 2011 PQRS Measure Specifications Manual) for updates and changes.

This article focuses on a specific PQRS measure that surgeons are likely to use frequently—Perioperative Measure #22: Perioperative Care: Discontinuation of Prophylactic Antibiotics (Non-Cardiac Procedures). The previous article in this series gave an overview of the changes in the PQRS for 2011 and was published in the February 2011 issue of the Bulletin of the American College of Surgeons.

Abbreviations and acronyms used in this article

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC X12N 837</td>
<td>electronic claim form</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>CMS 1500</td>
<td>standard claim form used by a non-institutional provider or supplier to bill Medicare carriers and durable medical equipment regional carriers</td>
</tr>
<tr>
<td>CPT</td>
<td>Current Procedural Terminology</td>
</tr>
<tr>
<td>MIPPA</td>
<td>Medicare Improvements for Patients and Providers Act</td>
</tr>
<tr>
<td>N365</td>
<td>remittance advice denial remark code N365 is listed for each QDC submitted</td>
</tr>
<tr>
<td>PQRS</td>
<td>Physician Quality Reporting System</td>
</tr>
<tr>
<td>PQRI</td>
<td>Physician Quality Reporting Initiative</td>
</tr>
<tr>
<td>QDCs</td>
<td>quality data codes</td>
</tr>
</tbody>
</table>

How do I use the measure specifications manual?

The first step for implementing PQRS in your office is to use the 2011 PQRS Measure Specifications Manual to identify measures applicable for professional services that your practice routinely provides. Next, select those measures that make sense based upon prevalence and volume in your practice, as well as your individual or practice performance analysis and improvement priorities. The 2011 PQRS Measure Specifications Manual can be found at http://www.cms.gov/PQRI/15_MeasuresCodes.asp#TopOfPage.

What is the description of the measure #22?

The specifications describe measure #22 as “Percentage of non-cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics and who received a prophylactic parenteral antibiotic, who have an order for discontinuation of prophylactic parenteral antibiotics within..."
24 hours of surgical end time.” This text gives a high-level description of measure #22.

What are the instructions?

The instructions explain when and by whom the measure should be reported. According to the instructions, measure #22 should be reported “each time a procedure is performed during the reporting period for patients who undergo non-cardiac surgical procedures with the indications for prophylactic parenteral antibiotics.” The instructions further state that “there is no diagnosis associated with this measure.” The instructions also state that “clinicians who perform the listed surgical procedures as specified in the denominator coding will submit this measure,” clearly indicating who should report the measure.

What is the “frequency?”

The frequency refers to how often the measure should be reported. Measure #22 should be reported each time an applicable procedure is performed during the reporting period (full- or half-year).

How do I report measure #22 via claims?

The measure specifications for measure #22 indicate that it is a claims and registry measure, meaning it can be reported using either the claims-based or the registry-based method. This article looks at the claims-based method only. The Current Procedural Terminology (CPT) codes and patient demographics identify the patients who are included in measure #22, otherwise known as the “denominator.” For this measure, the denominator is defined as “all non-cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics and who received a prophylactic parenteral antibiotic.” Measure #22 also includes specific denominator instructions to further define eligibility for reporting purposes: “CPT Category I procedure codes billed by surgeons performing surgery on the same patient, submitted with modifier 62 indicating two surgeons (or dual procedures) will be included in the denominator population. Both surgeons participating in the PQRS will be fully accountable for the clinical action described in the measure.” Additionally, the instructions state that “patients may be counted as having ‘received a prophylactic parenteral antibiotic’ if the antibiotic was received within 4 hours prior to the surgical incision (or start of procedure when no incision is required) or intraoperatively.”

Beginning on page 64 of the 2011 PQRS Measure Specifications Manual, there is a listing of all surgical procedures and CPT codes that qualify patients as eligible to meet this measure’s inclusion requirements (see Table 1, pages 8 and 9). It is important to review the CPT codes associated with each measure reported. Also, note that the included procedure codes may change from year to year, so it is important to review the 2011 measure specifications before beginning to report for this year.

I’ve identified a patient in the denominator for measure #22. Now what?

CPT II codes, or quality data codes (QDCs), are used to report the clinical action required by the measure on the claims form, otherwise known as the “numerator.” For measure #22, the numerator is defined as “Non-cardiac surgical patients who have an order for discontinuation of prophylactic parenteral antibiotics within 24 hours of surgical end time.” Additional instructions state, “There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic parenteral antibiotic is to be discontinued within 24 hours of surgical end time or specifying a course of antibiotic administration limited to that 24-hour period (for example, ‘to be given every 8 hours for three doses’ or for ‘one time’ IV dose orders) or documentation that prophylactic parenteral antibiotic was discontinued within 24 hours of surgical end time.” Further instructions note that “the correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The ‘correct combination’ of codes may require the submission of multiple numerator codes.”

For measure #22, there are three choices of correct combinations: 4049F and 4046F; 4049F
Table 1. 2011 PQRS Measure Specifications Manual (page 64): Measure #22: Perioperative Care: Discontinuation of Prophylactic Antibiotics (Non-Cardiac Procedures)

<table>
<thead>
<tr>
<th>Surgical procedure</th>
<th>CPT code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integumentary</td>
<td>15734, 15738, 19260, 19271, 19272, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 19361, 19364, 19366, 19367, 19368, 19369</td>
</tr>
<tr>
<td>Le fort fractures</td>
<td>21346, 21347, 21348, 21422, 21423, 21432, 21433, 21435, 21436</td>
</tr>
<tr>
<td>Mandibular fracture</td>
<td>21454, 21461, 21462, 21465, 21470</td>
</tr>
<tr>
<td>Spine</td>
<td>22325, 22612, 22630, 22800, 22802, 22804, 63030, 63042</td>
</tr>
<tr>
<td>Hip reconstruction</td>
<td>27125, 27130, 27132, 27134, 27137, 27138</td>
</tr>
<tr>
<td>Trauma (fractures)</td>
<td>27235, 27236, 27244, 27245, 27269, 27758, 27759, 27766, 27769, 27792, 27814</td>
</tr>
<tr>
<td>Knee reconstruction</td>
<td>27440, 27441, 27442, 27444, 27445, 27447</td>
</tr>
<tr>
<td>Laryngectomy</td>
<td>31360, 31365, 31367, 31368, 31370, 31375, 31380, 31382, 31390, 31395</td>
</tr>
<tr>
<td>Vascular</td>
<td>33877, 33880, 33881, 33883, 33886, 33891, 34800, 34802, 34803, 34804, 34805, 34825, 34830, 34831, 34832, 34900, 34901, 35091, 35102, 35131, 35141, 35151, 35161, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631, 35632, 35633, 35634, 35636, 35637, 35638, 35642, 35645, 35646, 35647, 35650, 35651, 35654, 35656, 35657, 35660, 35661, 35665, 35666, 35671, 36830</td>
</tr>
<tr>
<td>Glossectomy</td>
<td>41130, 41135, 41140, 41145, 41150, 41153, 41155</td>
</tr>
<tr>
<td>Esophagus</td>
<td>43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116, 43117, 43118, 43121, 43122, 43123, 43124, 43130, 43135, 43300, 43305, 43310, 43313, 43320, 43325, 43327, 43328, 43330, 43331, 43332, 43333, 43334, 43335, 43336, 43337, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43429</td>
</tr>
<tr>
<td>Stomach</td>
<td>43500, 43501, 43502, 43510, 43520, 43605, 43610, 43611, 43620, 43621, 43631, 43632, 43633, 43634, 43640, 43641, 43653, 43800, 43810, 43820, 43825, 43830, 43831, 43832, 43840, 43843, 43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870</td>
</tr>
<tr>
<td>Small intestine</td>
<td>44005, 44010, 44020, 44021, 44050, 44100, 44120, 44125, 44126, 44127, 44130, 44132, 44133, 44135, 44136</td>
</tr>
<tr>
<td>Colon and rectum</td>
<td>43880, 44025, 44110, 44111, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44155, 44156, 44157, 44158, 44186, 44202, 44204, 44205, 44206, 44207, 44208, 44210, 44211, 44212, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44615, 44620, 44625, 44626, 44640, 44650, 44660, 44661, 44700, 44950, 51597</td>
</tr>
<tr>
<td>Anus and rectum</td>
<td>45108, 45110, 45111, 45112, 45113, 45114, 45116, 45119, 45120, 45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45171, 45172, 45190, 45500, 45520, 45540, 45541, 45550, 45560, 45562, 45563, 45800, 45805, 45820, 45825</td>
</tr>
</tbody>
</table>


with 1P and 4046F or 4042F; or 4049F with 8P and 4046F. 4049F indicates documentation that the order was given to discontinue prophylactic antibiotics within 24 hours of surgical end time, non-cardiac procedure. 4046F indicates documentation that prophylactic antibiotics were given within four hours before surgical incision or given intraoperatively. 4049F with 1P modifier indicates documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 24 hours of surgical end time. 4042F indicates documentation that prophylactic antibiotics were neither given within four hours before surgical incision nor given intraoperatively. 4049F with 8P modifier indicates the order was not given to discontinue prophylactic antibiotics within 24 hours of surgical end time, and that it was a non-cardiac procedure, with the reason not otherwise specified. Two CPT II codes are required on the claim form to correctly submit this measure. Both
Can you provide a step-by-step overview of the process for submitting a claim form?

CPT II codes can be reported on claim form CMS 1500 or via electronic form ASC X12N 837. Figure 1, page 10, is an example of the CMS 1500 claim form.

Based on Figure 1, the steps for reporting via claims include the following:

- **Step 1:** Look in the measure specifications for measure #22 to see if this procedure, 44120, is listed in the table of surgical procedures for which there are indications for prophylactic parenteral antibiotics. If so, continue to step 2.
  - **Step 2:** On the CMS 1500 claim form, the CPT procedure code 44120 is listed on line 1.
  - **Step 3:** On line 2, the CPT II code, 4049F, is listed, which indicates documentation that order was given to discontinue prophylactic antibiotics within 24 hours of surgical end time, non-cardiac procedure. Additionally, 4046F is listed, which indicates documentation that prophylactic antibiotics were given within four hours prior to surgical

---

Table 1 (continued). 2011 PQRS Measure Specifications Manual (page 64): Measure #22: Perioperative Care: Discontinuation of Prophylactic Antibiotics (Non-Cardiac Procedures)

<table>
<thead>
<tr>
<th>Surgical procedure</th>
<th>CPT code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biliary surgery</td>
<td>47420, 47425, 47460, 47480, 47560, 47561, 47570, 47600, 47605, 47610, 47612, 47620, 47700, 47701, 47711, 47712, 47715, 47720, 47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47802, 47900</td>
</tr>
<tr>
<td>Pancreas</td>
<td>48020, 48100, 48120, 48140, 48145, 48146, 48148, 48150, 48152, 48153, 48154, 48155, 48500, 48510, 48511, 48520, 48540, 48545, 48547, 48548, 48554, 48556</td>
</tr>
<tr>
<td>Abdomen, peritoneum, &amp; mentum</td>
<td>49215, 49568</td>
</tr>
<tr>
<td>Renal transplant</td>
<td>50320, 50340, 50360, 50365, 50370, 50380</td>
</tr>
<tr>
<td>Gynecologic surgery</td>
<td>58150, 58152, 58180, 58200, 58210, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290, 58291, 58292, 58293, 58294</td>
</tr>
<tr>
<td>Acoustic neuroma</td>
<td>61520, 61526, 61530, 61591, 61595, 61596, 61598, 61606, 61616, 61618, 61619, 69720, 69955, 69960, 69970</td>
</tr>
<tr>
<td>Cochlear implants</td>
<td>69930</td>
</tr>
<tr>
<td>Neurological surgery</td>
<td>22524, 22554, 22558, 22600, 22612, 22630, 35301, 61154, 61312, 61313, 61315, 61510, 61512, 61518, 61548, 61697, 61700, 61750, 61751, 61867, 62223, 62230, 63015, 63020, 63030, 63042, 63045, 63047, 63056, 63075, 63081, 63267, 63276</td>
</tr>
<tr>
<td>Cardiothoracic (pacemaker)</td>
<td>33203, 33206, 33207, 33208, 33212, 33213, 33214, 33215, 33216, 33217, 33218, 33220, 33222, 33223, 33224, 33225, 33226, 33233, 33234, 33235, 33236, 33237, 33238, 33240, 33241, 33243, 33244, 33249, 33254, 33255</td>
</tr>
<tr>
<td>General thoracic surgery</td>
<td>0236T, 19272, 21627, 21632, 21740, 21750, 21805, 21825, 31760, 31766, 31770, 31775, 31786, 31805, 32095, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32215, 32216, 32220, 32222, 32310, 32320, 32402, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32500, 32501, 32800, 32810, 32815, 32900, 32905, 32906, 32940, 33020, 33030, 33033, 33050, 33020, 33300, 33310, 33320, 33321, 33322, 34051, 35021, 35211, 35216, 35241, 35246, 35271, 35276, 35311, 35526, 37616, 38381, 38746, 39000, 39010, 39020, 39220, 39545, 39561, 60521, 60522, 64746</td>
</tr>
<tr>
<td>Foot &amp; ankle</td>
<td>27702, 27703, 27704, 28192, 28193, 28293, 28415, 28420, 28445, 28465, 28485, 28505, 28525, 28531, 28555, 28585, 28615, 28645, 28675, 28705, 28715, 28725, 28730, 28735, 28737</td>
</tr>
</tbody>
</table>


---

the CPT code and the appropriate CPT II code should be submitted on the same claim form.
Figure 1: Procedure 44120: Enterectomy, resection of small intestine; single resection and anastomosis—Example claim form
incision or given intraoperatively. Together, this combination of CPT II codes is one of the three options of correct combinations stated previously.

- **Step 4:** Lines 2, 3, and 6 are CPT II codes that correspond to other PQRS measures (#20, #21, and #23). Measures #20, #21, and #23 are often reported by eligible professionals when measure #22 is reported because these four measures are perioperative care measures. CPT procedure code 44120 corresponds with these perioperative measures as well, so the CPT II codes are listed on the same claim form.

- **Step 5:** Be sure billing software and clearinghouse can correctly submit PQRS CPT II codes, or quality-data codes (QDCs).

- **Step 6:** Regularly review the remittance advice notice from the carrier to ensure the denial remark code N365 is listed for each QDC submitted. This indicates that claims have made it to the CMS national claims history file.

Surgical practices that follow these steps should be able to successfully report via claims in PQRS 2011 to receive incentive payments. There are various ways to report for PQRS, and as previously stated, this article has only covered the claims-based method for individual measures. Please refer to the correct measure specifications manual if you choose another method. Table 2 on this page is a matrix that lists all 11 options for reporting in PQRS 2011.

For more background information regarding the PQRS program, go to [http://www.cms.hhs.gov/pqri/](http://www.cms.hhs.gov/pqri/) and access the resources posted at [http://www.facs.org/ahp/pqri/index.html](http://www.facs.org/ahp/pqri/index.html). If you have any further questions regarding PQRS, contact Caitlin Burley at cburley@facs.org.

**Ms. Burley** is Quality Associate, Division of Advocacy and Health Policy, Washington, DC.
Negotiating the EHR vendor contract

by Jenny Jackson, MPH; Steven J. Fox, Esq.; and Vadim Schick, Esq.
General considerations

Throughout the process, remember that everything is negotiable, including price, payment terms, limitations of liability, and warranties. Also, it is important for one to hold his or her cards close to their vest. Some providers make the mistake of advising a vendor that it has been selected as the winner of the request for proposal process, and all that remains is to enter into a contract. By doing so, such providers may inadvertently undermine their bargaining position. In certain cases, a dual-track negotiation process, where a provider negotiates with two vendors at the same time, may even be worthwhile. It is much more effective to select the top two vendors, and advise the preferred vendor that if negotiations break down, the second choice is waiting in the wings. These approaches tend to keep the pressure on the preferred vendor and generate additional concessions. Nevertheless, both parties should aim for a fair deal and keep in mind that they will have to work together in the future.

Software

Surgical practices should keep in mind the following key points related to EHR software when negotiating the EHR contract. First, the contract should identify the minimum hardware and any third-party products that are required to run the system’s applications. The contract also should give full ownership of all data to the provider and state that all data will be returned to the provider if the contract is terminated for any reason. This provision is particularly important.

Abbreviations and acronyms used in this article

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASP</td>
<td>application service provider</td>
</tr>
<tr>
<td>EHRs</td>
<td>electronic health records</td>
</tr>
<tr>
<td>HIT</td>
<td>health information technology</td>
</tr>
</tbody>
</table>
| HITECH Act   | Health Information Technology for Eco-
                           nomic and Clinical Health Act       |
| ONC          | Office of the National Coordinator for Health Information Technology |
| PHI          | protected health information         |
| SaaS         | Software as a Service                 |

Nationwide adoption of electronic health records (EHRs) is the goal of the Health Information Technology for Economic and Clinical Health Act (HITECH Act) included in the American Recovery and Reinvestment Act of 2009 (commonly referred to as the stimulus bill). The HITECH Act provided funding for health information technology (HIT) infrastructure, training, dissemination of best practices, telemedicine, inclusion of HIT in clinical education, and other types of federal and state aid to health care providers seeking to implement EHR systems. In addition, the legislation provided significant financial incentives through the Medicare and Medicaid programs to encourage health care providers to adopt and use certified EHR. Eligible professionals may qualify for tens of thousands of dollars in incentive payments for demonstrating that they are meaningfully using their EHR systems through reporting of quality measures. Hospitals will be eligible for up to several million dollars in incentive payments if they are able to successfully achieve meaningful use of HIT. Incentive payments for physicians and hospitals will continue for several years, but will be phased out over time. Starting in 2016, Medicare proposes penalizing health care providers who fail to achieve meaningful use of certified EHR technology.

Given the HITECH Act’s incentives and the dramatic changes occurring in both the hospital and the physician practice environments, there is much to think about when it comes to purchasing and implementing an EHR. One of the most significant challenges many hospitals, surgeons, and their affiliated providers will face is the daunting task of negotiating an EHR vendor contract. These agreements outline various areas of vendor and provider accountability. A carefully negotiated contract can minimize future problems with the EHR vendor and create an equally beneficial relationship for the vendor and provider. A successful EHR contract negotiation should include the important issues outlined here to increase the likelihood of a beneficial implementation and adoption of an EHR system for the provider. The American College of Surgeons presents these guidelines as one part of its efforts to make the EHR contract negotiation process easier for its members.
for cloud-based, application service provider (ASP) or Software as a Service (SaaS) licensing models, in which the vendor has exclusive control of the provider’s information. Such information includes patients’ protected health information (PHI), which resides on remotely hosted servers (for example, the “cloud”). In addition, the contract should indicate what will happen if the vendor is acquired by another company, files for bankruptcy, goes out of business, or otherwise experiences financial difficulties that affect its ability to deliver services. In any of these cases, it is essential that a provider have the ability to continue operating the EHR system and have immediate access to all of its data and its patients’ data.

User license

It is essential to determine the correct type of license for the provider’s particular needs. There is no such thing as a “standard” license. For example, there are shrink-wrapped licenses, typically used for off-the-shelf software; site licenses, covering a specific geographical location; enterprise-wide licenses, encompassing an entire business or institution; named user or concurrent user licenses; and ASP or SaaS licenses, governing the right to use software on a subscription-type basis. Each of these arrangements, and other types of licenses, has its own inherent set of unique issues, which must be carefully analyzed.

Another important consideration in determining the type of license a surgical practice needs is how many people will have access to the EHR. An EHR contract can define a single user as one physician, several mid-level providers (nurses and physician’s assistants), as well as administrative staff. However, additional costs may be associated with each user and each computer running the software. If so, negotiate additional license fees up front, rather than agreeing to pay “then-current” fees in the future. Define the pricing for the number of users, how many computers the software may be installed on, and if it may be used in multiple offices.

Other license terms must also be carefully reviewed using the following questions: Will the license be perpetual, for a fixed term or renewable annually? Will there be a single payment of license fees or are they to be paid for as long as the license remains in effect? Is any third-party software included in the system that may require a sublicense? If all of these issues are not addressed properly, significant problems and unexpected price increases could occur during the term of the agreement.

Implementation

Implementation will be one of the most significant and crucial expenditures, because its success is key to the project. Nonetheless, not all vendors offer implementation services, so surgical practices will need to negotiate both the cost and payment terms associated with implementation.

Initial implementation tasks may require the transfer and conversion of existing data, either from another system or paper records. The contract should specify who is responsible for those tasks as well as the costs for accomplishing them.

An essential component of implementation is agreeing upon the implementation project plan and setting up an implementation timeline, which includes testing of the EHR product by the surgical practice (commonly referred to as “acceptance testing”) to verify that the EHR system performs in accordance with the vendor’s representations, including EHR documents and specifications. Achieving “acceptance,” the successful completion of acceptance tests, will usually trigger first productive use or first live use of the software (that is to say, the system starting to process actual live patient data). In addition, acceptance is often used as a payment milestone for the final or penultimate payment.

In the event a vendor fails to achieve acceptance of the EHR system or a particular component thereof, the surgical practice should retain the right under the contract to get a full refund of all fees paid, including all related license and implementation fees. Moreover, in this post-HITECH Act era, the provider’s total damages for a vendor’s failure to successfully complete acceptance testing may be greater than just the amounts paid to the vendor, and the practice should consider a right to seek additional damages.

Interfaces

Interfaces, which allow disparate technology and systems to communicate with each other, are an often-overlooked area of contracting. If a prac-
tice has pre-existing hardware or software that will need to transmit or receive data to or from the EHR, the vendor will need to provide one or more interfaces to accomplish this task. Similarly, interfaces may be necessary to communicate between the EHR system and hospitals or other practices. Other examples of necessary interfaces include scanners, fax machines, laboratory systems, and pharmacy systems.

Pricing and payments

It is best to negotiate objectively measurable performance milestones that the vendor must achieve before payment is required. These milestones should be coordinated with detailed acceptance testing criteria. For example, 10 percent of the contract price may be paid upon execution, 20 percent upon delivery, 30 percent upon completion of installation, and the remaining 40 percent upon final acceptance. However, be aware that vendors are increasingly resistant to the use of these types of milestones, opting instead for date-based milestones—often blaming their position on revenue recognition rules. Nevertheless, the use of carefully drafted performance milestones is highly recommended. Otherwise, the contract may require most of the purchase price to be paid before the provider is satisfied that the software performs as promised. As a general rule, it is better to link payments to vendor’s performance obligations (for example, completion of acceptance testing or go-live) than to calendar dates (for example, contract signing or one year after the effective date of the agreement).

Warranties

Most vendors provide minimal or no warranties in their standard contracts. It is crucial for providers to secure warranties for the following items: system compliance with functional and performance specifications, compatibility of components, viruses and disabling devices, prevention of unauthorized access or usage of system, sunset issues, availability of support/maintenance, and many other important issues.

If the vendor’s product is essential to achieving meaningful use, then the vendor should also warrant to fully cooperate with the provider to enable it to achieve meaningful use. The vendor should warrant that its product is, and will remain, certified by one of the Office of the National Coordinator for Health Information Technology Authorized Testing and Certification Bodies (ONC-ATCBs). Considering the fast-approaching expiration date on qualifying for the maximum incentive payments, a vendor’s breach of these warranties would have a significant negative financial impact on a surgical practice. Hence, if a practice fails to qualify for the HITECH incentive payments because of its vendor’s failure to obtain certification, remain certified, or cooperate fully with the practice, the practice should be entitled to a refund of all fees paid to the vendor under the agreement. The practice may also seek additional amounts, such as liquidated damages or penalties related to the amounts of incentive payments lost or Medicare penalties incurred due to failure to qualify as a meaningful user of certified EHR.

The contract also should include specific language that ensures the system will comply with all Health Insurance Portability and Accountability Act (HIPAA) and government requirements related to the confidentiality and security of patient and provider information. Continuing compliance with all state and federal laws should come at no additional cost to the provider.

In addition, the EHR contract should specify the conditions under which a breach of contract has occurred, including, but not limited to, the system failing to perform as specified in the software’s documentation or in the contract itself, consistent poor performance of the system, breach of contract terms or warranties, or negligence by the vendor. In the event of such termination for cause, the vendor should refund all fees, costs, and charges paid under the contract, with the amount dependent upon when the breach occurs.

Training and support

The contract should also specifically address training, service obligations, updates, and maintenance. Along with implementation, these items are likely to constitute a major expense.

Staff training will be a key factor in the provider’s successful use of the EHR system and
in receiving the meaningful use incentives. As a result, all aspects of training should be identified in the contract, including how many hours are included, who is covered, and details about the training, such as scope and subject areas covered, training materials, and procedures. As part of the initial contact, the practice should also specify how additional or follow-up training, if needed, would be handled.

The preliminary contract also should address and clearly define the hours and days support is available, including time zone and what types of support are available. The contract should address the consequences if the vendor fails to meet the support requirements. For a clinical system, such as an EHR, timely support is crucial to the product’s success. The vendor must commit to providing such support, as well as uptime and downtime metrics.

All technology requires occasional updates, and it is important to identify how often updates occur, if the practice is expected to install all updates, and, if appropriate, whether all updates are included in the support fees (after all, that is why providers pay support fees). Maintenance may add significant additional costs to the vendor contract, including for new software releases, new functional capabilities, and other product upgrades or enhancements. The contract should specify what is included in the maintenance agreement and how maintenance costs are calculated.

Confidentiality, privacy, security

Another set of hidden dangers relates to confidentiality, privacy, and proprietary rights. Most contracts contain terms protecting the vendor’s trade secrets and restricting access to the software. However, it is rare to find similar protections for the user. Surgical practices should protect their proprietary interests in their patient and other practice-related information and insist on mutual confidentiality, with strict limitations on the vendor’s use of the practice’s patient information. This safeguard is especially important in light of the substantial changes to existing HIPAA rules, as mandated by the HITECH Act and the accompanying regulations. Privacy and security issues now are directly related to a provider’s ability to amend and/or terminate the contract for a vendor’s failure to comply with applicable laws, fair allocation of compliance costs, and requirements for vendors to enter into business associate agreements.

Termination and transition

Vendors should be prohibited from terminating the contract, except for a very serious breach by the practice. Even if such a breach occurs, the agreement should afford the practice sufficient time to cure the breach and should require the vendor to notify multiple executives and representatives of the breaching party.

After termination or expiration of the contract, the vendor should offer the practice at least six to 18 months of transition services, including helping the practice transfer its data to a new supplier. The practice should, of course, pay for such services, but at negotiated contract rates, rather than the vendor’s then-current standard rates, which are typically higher.

Top five tips for negotiating contracts

- Everything is negotiable, including costs and the small print/large print waivers or warnings; do not hesitate to negotiate caps on liability or indemnification provisions.
- Ask an attorney who is familiar with HIT contracts to review the contract (which should be provided initially in a modifiable format by the vendor), including terms and conditions that could result in additional costs or penalties to the provider.
- EHR software should satisfy all federal and state regulatory requirements (including privacy and security obligations) and become certified by an ONC-ATCB for purposes of achieving meaningful use.
- Include all written and verbal agreements in the contract, including any representations, warranties, and software documentation.
- Link all payments to vendor’s performance obligations rather than calendar dates (for example, link payments to completion of implementation milestones, acceptance, or go-live dates, rather than contract signing or a number of months after the effective date of the agreement).
Limitation of liability and indemnification

The limitation of liability clause is often one of the most contentious areas of negotiation. However, failure to adequately address this issue may result in the provider’s inability to recover or even claim damages for actual losses suffered as a result of breach of contract or negligence by the vendor. It is essential to “carve out” from the limitation of liability a number of areas, including breach of confidentiality and privacy; personal injury, death, and property damage; intellectual property infringement; and vendor’s breach resulting in the provider’s failure to achieve meaningful use in a timely manner.

A good contract should also contain strong indemnification provisions and warranties. The indemnification should protect the purchaser from HIPAA and privacy/confidentiality violations by the vendor; third-party claims for bodily harm, injury, or death caused by the vendor’s personnel or software; and claims that the software infringes on third-party patents, trademarks, or copyrights, or misappropriates trade secrets.

Most troubling, perhaps, are the indemnification obligations some vendors impose on providers. It is not uncommon for vendors to require providers to indemnify them for any third-party claims brought against the vendor as a result of the vendor-provider relationship, even where the vendor is at fault. Agreeing to such a provision could be disastrous for practices that have existing contracts with malpractice insurance carriers that exclude such indemnifying arrangements from coverage. In other words, if a surgeon agrees to indemnify an EHR vendor and incurs damages as a result of this obligation, that surgeon’s malpractice insurance company may refuse to cover such damages.

SaaS/ASP models

Some vendors offer traditional software and equipment products as well as ASP, remote hosting, and SaaS models of their EHR systems. These subscription-type models pose a few significant additional risks to providers. One of the biggest disadvantages for providers using these models for their EHR systems is that they have no actual access to, or possession of, their data independent of the vendor. Thus, the vendor could conceivably hold such practice’s data hostage (perhaps because of a payment dispute). These situations also raise concerns about what happens if the vendor ceases business operations. Providers need to negotiate broad protections and rights to access their data in such deals, including: barring vendors from ever holding provider’s information, including PHI, hostage; mandating regular backups of data; and explicit provisions regarding return of any provider data, including PHI, to the provider upon termination of the agreement, especially if the agreement is terminated due to the vendor going out of business.

Conclusion

The acquisition process for HIT systems is generally complex, intensive, and critically important to all of the participants. Although this article addresses some of the important issues to consider when negotiating an EHR contract, there are many other considerations to keep in mind. However, surgical practices that follow these guidelines are likely to negotiate contracts that protect them and that benefit both parties by creating a trusting, sustainable partnership.

Nonetheless, even a carefully negotiated contract may have shortfalls. A successful EHR contract negotiation does not mean that all of the items discussed in this article are included in the contract. The inability to secure each of these items does not mean the negotiation has failed. The most important factor is the successful implementation of the EHR. It is also important that the contract be equally beneficial for both the vendor and practice, because both parties will have to continue their relationship to ensure sustained success of the EHR once it is in place.

If you have any questions or comments on this article, contact Jenny Jackson at jjackson@facs.org or 202-672-1506.

Ms. Jackson is the Practice Affairs Associate, Division of Advocacy and Health Policy, American College of Surgeons, Washington, DC.

Mr. Fox and Mr. Schick are health IT attorneys at Post & Schell, PC, in Washington, DC.
Breaking down barriers for minorities and cancer patients:

A profile of LaSalle D. Leffall, Jr.

by Diane S. Schneidman
For nearly a half century, LaSalle D. Leffall, Jr., MD, FACS, has graced the American College of Surgeons (ACS) with his unwavering dedication to surgical education and patient care. In the process, he has broken down boundaries both within this organization and throughout the surgical and patient care community. As examples, he was the first African-American President of the College, the American Cancer Society, and the Society of Surgical Oncology (SSO). This profile of Dr. Leffall highlights some of his accomplishments and some of the historic events that he has witnessed and helped to shape throughout his career.

Childhood

Dr. Leffall was born May 22, 1930, in Tallahassee, FL, and raised in the small town of Quincy, FL. Both of his parents were involved in public education. His father, LaSalle D. Leffall, Sr., was a high school principal, and his mother, Martha, was an elementary school teacher. Needless to say, they placed a strong emphasis on education. “It was their strategy for success, both for themselves and for their children,” Dr. Leffall said. They instilled in him the belief that “with a good education and hard work, combined with honesty and integrity, there are no boundaries.”

He took that message to heart and dared to dream big. As a child, he decided to pursue a career in medicine. “When I was nine years old, I was coming home from school, and I came across this little bird a block in front of my house. The bird couldn’t fly because its wing was broken,” Dr. Leffall recalled. He took the bird home and with the help of his father and some tongue depressors and tape borrowed from the town physician (who was married to Dr. Leffall’s godmother), he splinted the wing. Then he put the bird in a cardboard box with some food and water.

“After a few days, that little bird started flying around the room, and I realized it was time to let the little bird go. It was then that I told my friends, ‘I’m going to be a doctor,’” he added. “My godmother’s husband used to talk to me about becoming a doctor and healing people, but it was really the experience with the bird that made it concrete for me.”

Academic success

Dr. Leffall went on to attain some remarkable academic achievements. He graduated valedictorian from high school at age 15. He graduated summa cum laude from Florida A & M in Tallahassee. He started medical school at Howard University in Washington, DC, at age 18 and graduated at the top of his class. By the time he was 22, he was starting his residency.

As a medical student and resident at Howard, Dr. Leffall encountered four individuals who would forever influence the way he would practice medicine and surgery. “Before I went to medical school, I did not want to be a surgeon specifically. I wanted to be a physician,” he said. “But when I got there, I saw that the surgeons were the ones who wanted to do things. They were the ones who seemed to have the most enthusiasm and dynamism. They also seemed to place the greatest emphasis on providing high-quality care.”

One key figure whom he encountered was Charles R. Drew, MD, FACS, best known for his research concerning blood and plasma transfusions and blood banking. “He had received a lot of acclaim for that, but the thing that I’ve never forgotten is a statement he made to us students. He said, ‘Excellence of performance will transcend artificial barriers created by man.’ What he taught us was that, while we were living in a time of racism and segregation, if we did our job well enough, people would notice,” Dr. Leffall said.

Another Howard Medical School educator who influenced Dr. Leffall was Montague Cobb, MD, professor of anatomy. “He meant so much to me because he emphasized scholarship, and he was...
a leader in civil rights in medicine. He tried to get qualified black physicians on hospital staffs,” he said.

But Dr. Leffall credits two people with his decision to pursue a career as a surgical oncologist: Burke “Mickey” Syphax, MD, FACS, and Jack White, MD, FACS, both of whom were closely associated with Dr. Drew.

Dr. Syphax replaced Dr. Drew as program director of the surgical residency program after he died April 1, 1950, in an automobile accident on his way to a medical meeting in Tuskegee, AL. “Dr. Syphax is the man from whom I learned most of the surgery that I know,” Dr. Leffall said. “He was known as ‘the master of the abdomen’ and served as chair of the department of surgery from 1957 to 1970.”

Dr. White, who was a resident of Dr. Drew’s, impressed Dr. Leffall with the stories he told when he returned from doing a two-year fellowship in cancer surgery at Memorial Sloan–Kettering Cancer Center in New York, NY. “He came back from that experience and talked about it, and I said that I wanted to be a part of that. Dr. White knew that I was interested in cancer surgery, and he recommended me for training at that institution,” Dr. Leffall said.

He finished his training at Freedmen’s Hospital, now known as Howard University Hospital, in 1957 and completed the two-and-one-half-year fellowship in surgical oncology at Memorial Sloan Kettering in 1959. He performed two years of obligatory military service as chief of general surgery in the U.S. Army hospital in Munich, Germany, in 1960 and 1961, and then joined Howard’s faculty in 1962. He was selected to be chair of the department of surgery in 1970—a position he held for 25 years. Since 1992, he has been the Charles R. Drew Professor of Surgery—the first endowed chair in the history of Howard’s department of surgery.

Dr. Leffall has chosen to remain at Howard throughout his career. “I look at it this way: had it not been for Howard University accepting me as a medical student and as a resident, there is the distinct possibility that I would not be a physician or surgeon today. I wanted to be a physician very, very badly. As the graduate of a black college in the south in 1948, from a pragmatic point of view, there were only two medical schools I could go to—Meharry [Medical College] in Nashville, TN, and Howard in Washington, DC. There were no other schools in the south that would take black medical students,
and the white medical schools in the north didn’t take many black students unless they had gone to the institution’s undergraduate school. Meharry did not accept me. Howard did,” Dr. Leffall said. “I felt, and still feel, that I owed Howard so much that once I got there, I believed I should stay there. And that’s what I have done all these years.”

Eliminating disparities
Since he completed his surgical training, Dr. Leffall has seen many avenues to medical success open up to young African-Americans. Indeed, it is no longer rare for black students to be accepted at all medical schools and to be offered opportunities to train at leading academic medical centers throughout the nation.

“What we’ve seen in medicine has been a reflection of the broader civil rights struggle,” he said. “Young black students—men and women—have a good chance of getting into all medical schools, and I think that’s good. What has pleased me also is that blacks now have opportunities to become chiefs of surgery. There are black chiefs of surgery at institutions all over the country. So not only do we see blacks getting into medical schools, but having leadership roles in surgery all over the country.”

Although African-Americans have made important inroads toward achieving equality in the medical profession, they still suffer the consequences of the health care disparities that persist in the U.S. Over the years, Dr. Leffall has been a leading proponent of studies on cancer health disparities among minority populations. In fact, he moderated the first conference on that subject in February 1979.

More than 30 years later, “We have made progress in terms of helping to get rid of some of the disparities in care, but the cause of disparities is multi-factorial. Some people say the root cause of disparities is socioeconomic status; that is to say, as long as people are poor, they are going to continue to get poor care. Well, I don’t think that has to be true, and there are things taking place now at the federal and state governmental levels to ensure that all patients have access to quality care. We’re not there yet, but we’re working toward getting there,” Dr. Leffall said. “We have to continue to emphasize that all patients deserve the best care, regardless of race, ethnicity, or socioeconomic circumstance.”

Teaching today
In addition to his achievements in drawing attention to health care disparities, Dr. Leffall said he takes pride in his accomplishments as a surgical educator who has taught and trained thousands of medical students and surgical residents. Although he retired from operating at age 75, “I still teach students and surgical residents, and I love that,” he said. He has been able to remain committed to surgical education after all these decades because of the “zeal and the enthusiasm that I see in the young men and women whom I teach.”

Dr. Leffall is optimistic about the future of patient care in this country. “Very often, people at my level, my colleagues, ask me what I think about the young people who are coming into medicine...
today. I tell them I think they have the same zeal, the same enthusiasm, the same desire to help patients that we had when I went to medical school in 1948,” he said. “I think that bodes well for the future of medicine. We have committed men and women who want to make certain patients are getting the highest quality care.”

However, for surgical residents to maintain their passion for patient care, they need fervent role models. “We have to let young men and women know how exciting surgery can be, how exciting it is to have patients come to you because they want to get the best care. We must emphasize that surgeons need to always give their best, and must adhere to the highest ethical standards,” Dr. Leffall said. “One of the major challenges facing the profession today is making absolutely certain that we let young men and women know that this is an exciting profession that demands the best from them.”

Patient care

In addition to teaching and training a couple of generations of surgeons, Dr. Leffall has found great satisfaction and has taken pride in providing high-quality care to tens of thousands of patients. “I think medicine is the greatest profession in the world because we help people retain and regain their health. If you don’t have your health, you don’t have anything. Our goal is to cure when possible and to relieve pain and suffering always,” Dr. Leffall said. “The one thing I’ve always tried to do is give my very best. Sometimes my very best didn’t always work out.”

More often than not, his very best did lead to positive outcomes, sometimes with results that were better than anyone could have anticipated. For example, Dr. Leffall once operated on a patient with cancer of the mouth. “We had to take out part of his mouth and his upper jaw,” he said. The man sang in his church choir and was concerned that he would have to give up his avocation. “After his wounds had healed, we fitted him with a prosthetic device,” Dr. Leffall said. He asked the man to accompany him to American Cancer Society meetings and to say his name without the prosthetic in place. “He would say something that was inaudible. Then I’d ask him to put in the prosthetic device. I would ask him to say his name and give his age, and the words came out clearly. Then he would sing “The Lord’s Prayer.” Every time I heard it, my eyes got a little watery [because]...when he asked me whether he would ever be able to sing again, I said probably not. But with this prosthetic device, I think his voice sounded even better than before.”

Another patient who Dr. Leffall feared would face a negative outcome had metastatic breast
cancer that had gone into the armpit. She had received radiation and chemotherapy, and another physician told her that nothing more could be done to help her. Dr. Leffall stepped in and operated, although he wasn’t sure that the procedure would lead to remission. It did. The patient lived at least 18 years after the operation.

“So you’ve got to be careful not to deny a patient something because you don’t think it will work,” he said. “That story always reminds me that we need to always give patients hope—that there’s a possibility that something can be done to help them. Of course, you don’t want to overdo something and make them surgical or medical invalids, but you have to offer realistic options.”

Leadership
Throughout his career, Dr. Leffall has played an active leadership role in a number of surgical and cancer-related organizations, including the College. He attended his first Clinical Congress as a resident in 1955 and became a Fellow in 1964. Since then, he has served on numerous ACS committees, including the Finance Committee, the Communications Committee, and the Committee on Development. Furthermore, he served as the ACS Secretary from 1983 to 1992 and was elected President in 1995.

“I was told as a surgical resident that the one thing you must always look forward to is becoming a Fellow of the American College of Surgeons. Why? Because it represented the highest standards in surgery—the highest standards in patient care. The College represented the best with its emphasis on patient care, on surgical research, and on surgical education,” Dr. Leffall. “From that time to now, everything I knew about the College has remained true.”

He noted that during the Past-Presidents’ luncheon at the 2010 Clinical Congress, in Washington, DC, ACS Executive Director David B. Hoyt, MD, FACS, gave a report on the College’s recent and ongoing activities. “I was so pleased to be in an organization that is working to make sure patients get the highest quality surgical care,” Dr. Leffall said. “That’s what we are about. If we ever forget that, we might as well forget everything [we know about] medicine.”

In addition to the ACS and the SSO, Dr. Leffall is a member of the following surgical societies: American Surgical Association, Society for Surgery of the Alimentary Tract, Southeastern Surgical Congress, Society of University Surgeons, Pan-Pacific Surgical Association, Society of Head and Neck Surgeons, Southern Surgical Association, and the Society of Black Academic Surgeons.

During the course of his involvement with these organizations, Dr. Leffall has seen the fragmentation that once dominated organized medicine begin to fade. “I see a willingness to work more closely together on the issues of importance to our members, such as reimbursement and government regulation,” he said. By working together, organized medicine is more likely to help create a health care system that is better for everyone. “And when I say everyone, I mean our patients. We may be teachers of medicine. We may be practicing physicians, as most of us are. We may be administrators. We may be researchers. But in the end, we all hope that the policies we put forth are going to help patients. Everything we do should be designed to help the patient.”

In addition, Dr. Leffall has led several groups focused on cancer care. Besides serving as president of the American Cancer Society, from 2002 to 2007, he chaired the Susan G. Komen Breast Cancer Foundation—now called Susan G. Komen for the Cure. Most recently, he chaired the President’s Cancer Panel. Former President George W. Bush appointed him to that position in 2002. The two other members of the panel were Margaret L. Kripke, PhD, professor of immunology; Vivian Smith, Chair Emerita, University of Texas, M.D. Anderson Cancer Center, Houston; and Lance Armstrong, cancer survivor and seven-time Tour de France winner.

The President’s Cancer Panel examines a different topic every year. In 2010, the panel studied advances in cancer research since former President Richard Nixon signed the National Cancer Act in 1971. However, “the report that garnered the most discussion—some good and some a little unfavorable—centered on what we can do to reduce environmental cancer risks,” Dr. Leffall said. “As a matter of fact, it was the subject of an op-ed piece in The New York Times. Nicholas Kristof wrote it. Some people thought we had gone too far, but we thought it was something we needed to explore.”

Dr. Leffall says that his one regret as a cancer
At the 1995 ACS Clinical Congress: Dr. Leffall delivering his Presidential Address.

Honors

Dr. Leffall’s many contributions to cancer have been recognized by institutions throughout the country. In 1987, M.D. Anderson Hospital and Tumor Institute and Intercultural Cancer Council established The Biennial LaSalle D. Leffall, Jr., Award, for surgeons who have also made significant contributions to cancer prevention, treatment, and education in minority and economically disadvantaged communities.

In 1989, the citizens of his hometown, Quincy, FL, named a street, a path, and the surgical wing in the Gadsden Memorial Hospital after him, and the Leffall Chair in Surgery at Howard University was established in February 1996.

Dr. Leffall also has given back to the surgical and patient communities. In 1997, he and his family established the Martha J. and LaSalle D. Leffall, Sr., Endowed Scholarship Fund and Endowed Professorship in Science at Florida A & M, in honor of his mother and father. He also provides financial support for the LaSalle D. Leffall, Jr., Surgical Society, which was formed in March 1995 and has as one of its main goals providing funding for student and resident research. He also supports the College through active membership in the Fellows Leadership Society.

Grace notes

When he’s not busy enriching the lives of surgical residents and patients, Dr. Leffall enjoys watching tennis matches, traveling with his wife, visiting art galleries and museums, and reading autobiographies and history books. As a college student, he also developed an affinity for modern jazz. Saxophonist Cannonball Adderley was a fraternity brother and a classmate at Florida A & M.

Whenever Mr. Adderley was on tour with a band that was playing in Washington, he and Dr. Leffall would meet and listen to music. “Once, he was playing a record by a jazz musician named John Coltrane, and when it was over he said, ‘How did you like that grace note?’” Dr. Leffall was unfamiliar with the term. His friend explained that a grace note is one whose timing does not affect the rhythm of the bar. “It’s something that’s a little extra. It’s an ornament. When you hear something particularly beautiful, most often that was a grace note.” After mulling over this description, Dr. Leffall decided that surgeons need to provide the grace notes in their patients’ lives. “We have to give our best, and then we have to think about something that is just a little extra we can do that will let our patients know that we genuinely care about them,” he said. “I like to say that the object of our affection and our attention is the surgical patient.”

Acknowledgment

The photos on pages 20–22 are reprinted with permission from Dr. Leffall’s autobiography, No Boundaries: A Cancer Surgeon’s Odyssey (Washington, DC: Howard University Press, 2005).

Ms. Schneidman is Manager of Special Projects, Division of Integrated Communications, Chicago, IL.
Invigorating a state ACS chapter:

The Georgia experience

by James K. Elsey, MD, FACS; Harold L. Kent, MD, FACS; Kathy D. Browning; and Don K. Nakayama, MD, FACS

Three years ago, the Georgia Chapter of the American College of Surgeon (ACS), facing declining membership and finances, began an effort to invigorate the organization by broadening its membership through a merger with another organization of general surgeons, solidifying its finances, and engaging young surgeons and surgical trainees. The result is a reorganized chapter, the Georgia Society of the ACS (GSACS), with a new set of bylaws that combine the educational mission of the old chapter with the more political goals and practice-based concerns of community surgeons. At its most recent annual meeting, August 27–29, 2010, in Atlanta, GA, the new GSACS had tripled its attendance to more than 140, and was supported by 16 vendors, double the number from the 2009 conference the previous year (see photos, pages 26–28).
Finding a common cause

Several years ago, many surgeons in Georgia facing difficult social and economic issues felt that they had few advocates representing their interests. Neither the state ACS chapter nor the Georgia Surgical Society, the other major surgical organization in the state, had addressed political issues. Academic and hospital-employed surgeons dominated the state ACS chapter, and the Georgia Surgical Society had an educational focus and intentionally avoided social and political topics.

In 2005, a group of 30 largely private surgeons in community practices formed the Georgia Society of General Surgeons (GSGS), which had a practice-based and political issues focus. By 2009, membership in the GSGS grew to 200 surgeons, nearly all in active community practices. The effort was led by two surgeons in Albany, GA: Christopher Smith, MD, FACS, and V. John Bagnato, MD, FACS, whose plans to open an ambulatory surgery center (ASC) were blocked by a large community hospital.

Drs. Smith and Bagnato and the GSGS led a political effort in the statehouse to pass a measure that identified general surgery as a medical specialty, thus allowing general surgery practices to own and operate an ASC. At issue were the state certificate of need (CON) rules that excluded general surgery from a list of medical fields considered “single specialties,” and thus not allowing them to operate ASCs independent from hospitals—a common practice among such practices as plastic surgery, otorhinolaryngology, and orthopaedic surgery. State CON definitions held that general surgeons had “multiple specialty” practices and thus were barred from opening an ASC independent from an existing hospital or existing ASC.

The GSGS became involved in statehouse politics in an effort to change the definition of general surgery as a single specialty under CON rules. Its members formed a political action committee (SURGPAC) and hired a lobbyist with statehouse connections. John T. Perry, MD, FACS, gained considerable political experience during this period as SURGPAC chair. Despite vigorous opposition by the state hospital association, the measure passed.

Both the state chapter and the national ACS organization supported the GSGS in its endeavor.
Grace Rozycki, MD, FACS, who was then Chapter President, and W. Lynn Weaver, MD, FACS, Past-President and a chapter Councilor, testified before the state board governing CON rules. National support came from Thomas R. Russell, MD, FACS, then-ACS Executive Director, who wrote letters to the board backing the GSGS. LaMar S. McGinnis, Jr., MD, FACS, Past-President of the ACS, and Thomas Gadacz, MD, FACS, who, at the time, was chair of the department of surgery at the Medical College of Georgia and a former ACS Chapter President, gave GSGS leadership support and advice. These actions, as well as the GSGS, received national exposure through coverage in the Bulletin of the ACS, and editorials in General Surgery News.

Fresh from this important political victory, the Georgia chapter and the GSGS began discussions on a merger to form a single more effective organization that would meet future challenges. Trauma system funding, a severe and dangerous problem in Georgia, emerged as a unifying issue that engaged both the chapter and the GSGS.

In late 2008, the leadership of the two organizations began a series of dinners, meetings, and conference calls that ended in an agreement to attempt a merger. James K. Elsey MD, FACS, co-author of this article, represented the chapter in his role as president at that time. Thomas E. Reeve, III, MD, FACS, and John Harvey, MD, FACS, represented the GSGS. In May 2009, Harold L. Kent, MD, FACS, and Don K. Nakayama, MD, FACS, co-authors of this article and representatives of both organizations, combined mission statements and bylaws to form a preliminary draft. The staff of the ACS Division of Member Services made helpful suggestions and reviewed various versions of the bylaws to assure compliance and consistency with other state chapters. Representatives negotiated a final draft, which was sent to the memberships of both organizations for review and approval in August 2009 at the Georgia Chapter annual meeting.

Inclusion through standing committees

With the launch of a new organization came a new name that combined the “Georgia Society” from the old GSGS group with the Georgia Chapter, to form the GSACS. The interests of the two founding organizations were addressed through membership in standing committees and representation on its board of directors.
Standing committees for private practice and rural surgery were formed to specifically address major issues of community surgeons in active practice. Other standing committees for women surgeons and young surgeons were formed to give representation to those important groups, as well. The chairs of the four committees were given voting positions on the board. Three standing committees (Committee on Trauma [COT], Cancer, and Education) from the former Georgia Chapter were retained, along with their chairs, who also had a voting position on the board. The SURGPAC chair, GSACS officers (president, president-elect, vice-president, secretary, treasurer), and the immediate past-president completed a 14-member board of directors with the president as its chair.

The bylaws specified that the president name a nominating committee of at least one surgeon each from private and rural practices, along with two others, for candidates for offices and committee chairs. The committee took care in selecting officers from both founding organizations, with attention to geographical considerations. While candidates were eligible from the floor during the annual meeting, the nominating committee’s choices were all elected by acclamation.

Combining financial resources

Treasurers from both organizations and outside accountants and legal consultants carefully reviewed the separate accounts. The treasuries from both organizations were then merged into a single account, with the GSACS treasurer having sole check-writing authority. Set-up and transparency of the merged account was greatly facilitated with the use of a computerized bookkeeping program.

A central task for the executive director was to increase revenue. The merged organization chose the GSGS Executive Director Kathy D. Browning (co-author of this article), who had working experience with surgeons in the single specialty effort, to direct a single administrative structure. The former Georgia chapter survived largely on unrestricted monetary support from vendors supporting its annual meeting. Recent restrictions by pharmaceutical and device manufacturers made obtaining such grants more difficult. No one was able to definitely state when the $100 membership fee was established—a level that had not changed for many years.

The board gave the executive director an incentive to increase vendor support and overall
membership by paying her a percentage of fees generated at the annual GSACS conference and other meetings. After some debate, annual fees were raised to $300—a substantial increase, but less than the $500 to $800 annual fees of some national organizations, including the ACS. Only one surgeon declined to renew his membership.

Thus in one year the GSACS was able to establish a financial foundation with a strong five-figure account balance, something the former Georgia Chapter was never able to sustain. Finances are separate from SURGPAC accounts, which, like the American College of Surgeons Professional Association (ACSPA)-SurgeonsPAC, are kept independent from the rest of the organization.

A focus on young surgeons

Membership in GSACS must be worth the money and time of surgeons who are starting in practice. The GSACS annual meeting is in August, a time when young families are winding down summer vacations but children are still out of school. Meeting locations are selected to offer outside activities for families, and rates at destination hotels are negotiated for the most affordable option.

A young surgeons’ committee—a standing committee with representation on the board—is charged with addressing concerns of young surgeons. Communication with the membership is via e-mail, along with links to Facebook and Twitter. Subjects covered at the Clinical Congress meeting have direct relevance to current practice issues. For example, the most recent GSACS meeting included two hour-long discussions on hospital employment of surgeons and the use of electronic and social media in surgical practices.

A priority was to have the GSACS support residents at state training programs, welcoming them as new colleagues in the field, and encouraging them to practice in the state. Residency program directors encourage attendance, and provide departmental funds to cover registration, travel, and per diem costs. Residents present clinical and basic science research projects where cash prizes for the three best presentations are given. The research competition of the state COT is part of the meeting, with the winning paper going on to the regional COT competition. Mock oral boards have been part of the annual chapter meeting. Residents face examiners from other training programs not known to them, a situation that more closely approximates the setting of the oral examinations given by the American Board of Surgery. A breakout session at the annual conference addresses a topic of immediate relevance to surgical trainees, such as what to look for in a postgraduate specialty fellowship program.

A “Surgical Olympics” is held, which is a friendly competition that has been adopted by several surgical organizations at their meetings, including the ACS. Tests of surgical skill are timed and judged by GSACS members, intentionally chosen from the private surgical community. Thus not only do programs earn bragging rights for members, but young trainees are connected

Dr. Elsey is a general and vascular surgeon in private practice in Atlanta, GA.

Dr. Kent is a general and bariatric surgeon in private practice in Brunswick, GA.
socially with surgeons in practice. Smiles and warm feelings attest to the success of the activity.

The GSACS provides $250 scholarships to cover fees and expenses of two medical students from each of the six Georgia medical schools (Emory, Morehouse, Medical College of Georgia, Mercer Macon, Mercer Savannah, and the Philadelphia College of Osteopathic Medicine). The recent annual meeting had a special luncheon for medical students featuring a panel of residency program directors in the state, moderated by Dr. Weaver, advising students on the interview and selection processes.

An informal barbecue dinner for the families of residents and medical students, rather than a banquet, was held at the meeting. Games, bubble machines, and prizes engaged young children. Older practicing surgeons sat among younger attendees in an effort to welcome them into the organization. This low-key collegial event proved to be the highlight of the weekend and an invaluable forum for future relationship building.

**SURGPAC**

Support of SURGPAC is voluntary and supported by a separate fee. The SURGPAC chair has a seat on the board, but political priorities are governed by the chair and separate SURGPAC board. Through its focus on state issues and offices, SURGPAC complements the ACSPA-SurgeonsPAC, which has an emphasis on national issues and federal offices. The GSACS sponsored a meeting, which will be held yearly, introducing members to the state legislative process and educating members on lobbying and politicking in local and state matters. The SURGPAC continues to focus on state issues and the support of local and state candidates that support SURGPAC priorities.

**Sustaining the effort**

The initial effort to form the GSACS was successful because of the buy-in and support of the leadership and membership of the two founding organizations—the ACS chapter and the GSGS. Key to the initial success was forming a stable administrative structure and revenue stream. Its continued success depends upon engagement of practicing surgeons—particularly young surgeons just starting practice—through attention to local issues and relevant educational services. GSACS’ future lies in welcoming surgical trainees and medical students to a collegial organization that seriously addresses issues that challenge our chosen field.
Using simulation to train oncology surgeons:

Gynecologic oncologists practice OR’s touch, feel—and pressures

by Jeannie Glickson
A gynecologic oncology surgeon sits at the console of a da Vinci Surgical System at the Albert Einstein College of Medicine/ Montefiore Medical Center in the Bronx, New York, NY. The surgeon manipulates a patient robotic cart that has four arms—one arm controls the camera, and the other three operate the instruments. The surgeon maneuvers the surgical instruments mounted on the robotic arms. The device senses the surgeon’s hand movement and translates them electronically into scaled-down micro-movements. The surgeon views a magnified, high-resolution, three-dimensional image of the surgical site, which enhances the ability to recognize and control small blood vessels. The surgeon has inflated the patient’s abdomen with carbon dioxide gas, which permits a viewing space for the laparoscopic image.

Welcome to the revolutionary operating room—a revolution defined by minimally invasive surgical (MIS) procedures, electromechanical technology, robotic equipment, and simulated training.

To Richard M. Satava, MD, FACS, professor of surgery at the University of Washington Medical Center in Seattle, these developments are part of the revolution of medical education in which paradigm shifts occur every 50 to 100 years. Surgical advances that occur in the next decade will probably endure for three generations of surgeons, he said. “From about 1800 to 1900, if you wanted to be a doctor, you went to school, where you got attached to a mentor who would show you the way, and give you instructions on how to do your job. When that mentor decided you had learned enough, you got a license to practice,” said Dr. Satava. “It was a system based on an apprenticeship model.”

“But around the turn of the century,” he continued, “things began to change, as medicine began to standardize its practices. Now, you had to go to medical school and attend lectures, and you had to pass standardized tests. This formalized medical education presented more rigorous and technical lectures and uniform means of testing students. And if you wanted to become a surgeon, you would have to spend additional years in specialty surgery training.” This paradigm change came as a result of the Flexner report on medical education in 1910, which Dr. Satava refers to as the surgical residency model that increasingly improved on itself and endured for 100 years. It was based on training residents using real patients and cadavers.

**Most recent paradigm shift**

In the late 1990s, medicine began its next revolution, this time with the simulation model, according to Dr. Satava. “Simulation is truly revolutionary for medical education,” Dr. Satava said. “With simulation, performance becomes a quantifiable measure of cognitive as well as motor skills. Everything you do is precisely measured in milliseconds and centimeters, based on benchmarks established by practicing surgeons. Everything you do is quantified.

“There’s even an eye tracker that watches your eyes,” Dr. Satava added. “It views exactly what you are looking at on the screen, and it can perceive the location of your eyes. If your eyes are wandering, you’re not doing the procedure correctly. It doesn’t matter that the simulator is not as complex as the human body. The human body is so complex that it can’t be recreated in simulation. Maybe in a thousand years, we can.

“But that’s not the intent of education, anyway,” he continued. “When you’re teaching someone, there is more value in presenting something simply. It’s hard to learn on a system that is too complex.”

Simulated training places surgical residents in an environment in which they can practice laparoscopic procedures, view videos, and receive

---

immediate feedback on how well they did—long before they approach a real patient. Simulation provides an answer to the decline in the number of patients available for training purposes, the need for patient safety, and concerns about ethics and medical liability.¹

Surgical simulation is the replication of an actual surgical procedure that allows learning to take place at any time. As Dr. Satava pointed out, “You don’t have to be out in a ward in the middle of the night any more to learn a new skill.” Because resident work hour restrictions limit the amount of time that a resident spends in the surgical rotation, surgical simulation can be helpful in ensuring that residents are trained properly.

There are many types of surgical simulators, ranging from simple to complex. All effective simulators share the ability to teach the fundamentals and prepare residents for work in the operating room (OR). The use of simulators in continuing education programs can also help practicing surgeons keep up-to-date with advances in surgical technique. Gynecologic oncologist surgeons who were interviewed for this article have varying experiences with simulation, but they generally agree that simulation can enhance surgical skills. These surgeons do not think, however, that simulation can replace traditional training and the operating room experience.

Simulation as part of the curriculum

Due to the benefits MIS procedures afford patients—reduced bleeding, less pain, faster healing, shorter recovery times, fewer complications and infections, and reduced hospital stays—the demand for the use of laparoscopic procedures will only continue to increase.² As a result, all surgical residents must learn to perform laparoscopic procedures and to complete tasks within a certain time frame and with a limited number of errors.

In an effort to standardize training, the McGill University Health Centre in Toronto, ON, developed the simulated McGill Inanimate Systems for Training and Evaluation of Laparoscopic Skills (MISTELS) program that measures five surgical tasks: peg transfer, pattern cutting, endoloop application, extracorporeal knot tying, and intracorporeal knot tying. The Laparoscopic Training Simulator (LTS) is a variation of MISTELS, presenting tasks and time limitations, along with a specific number of allowable errors.³ Practice on these simulators has resulted in enhanced operating room performance.⁴⁵

At first glance, a laparoscopic simulation might appear to be just another computer game for the “Nintendo generation” of surgeons. But simulation is part of a total curriculum, and, as Dr. Satava noted, simulated training must incorporate “the basic principles of adult education, curriculum design, setting of quantitative performance metrics for outcomes, and validation of the curriculum.” Then, and only then, he insisted, should simulation be added to the curriculum.

Robots revolutionize the OR

Laparoscopic, arthroscopic, and thoracoscopic surgical procedures have become fully integrated into essentially all surgical subspecialties—from orthopaedic to gastrointestinal, cardiovascular, endocrinial, and gynecologic. Robotic technology in the OR offers MIS options for major surgical procedures. A robot is a combination of hardware and software that is programmed to communicate and interact with the environment. Robotic technology avoids many minimally invasive surgical obstacles. Using simple MIS procedures, the human eye perceives only a two-dimensional view of the surgical site, while robotic equipment provides a three-dimensional view.⁶ Another drawback of MIS is the uncomfortable ergonomics it creates, as a surgeon must stand while holding long instruments. With robotics, surgeons can sit while performing procedures.⁷ Robotic instruments also provide more freedom of hand movement than traditional laparoscopic instruments.⁷

Robot technology also eliminates the “fulcrum effect,” which in traditional laparoscopy forces surgeons to move their hands in the opposite direction of the instrument’s tip. In addition, the robotic computer filters out human hand tremors.⁷ And, robotic computers allow the surgeon to select the scale, either up or down, of the ratio of the size of hand movements to the movement of the instrument tips.⁸
ZEUS versus da Vinci

In the evolution of robotic equipment, da Vinci was not the only technology created. In October 2001, the Food and Drug Administration (FDA) cleared the ZEUS Surgical System to assist in the control of blunt dissectors, retractors, graspers, and stabilizers during laparoscopic and thoracoscopic surgeries.9

ZEUS has three robotic arms that are mounted on the operating table, one of which is the automated endoscopic system for optimal positioning (AESOP) robotic system. AESOP is a voice-activated robot used to hold the endoscope. The FDA cleared AESOP to hold and position endoscopes in 1994, and voice activation was added later. ZEUS differs from the da Vinci system in that the AESOP part of ZEUS responds to voice commands. A surgeon might say: “AESOP move right.” The positioning arm then would move right until the surgeon gives a “stop” command.9

The da Vinci and ZEUS systems do not generate movement on their own; their movements are an extension of the surgeon’s hands and fingers.10

The surgeon’s tactile perception while using the robot is one area in need of development. The robotic system does not relay force feedback, lacking the tactile sensation of an operation; however, according to Dr. Satava, surgeons have been able to compensate.

Montefiore: On board with two da Vinci robots

The da Vinci robot (see photo, this page) broke new ground as the first system approved by the FDA for general laparoscopic operations in 2000. In 2005, the FDA approved its use for gynecologic surgery. The Albert Einstein College of Medicine/Montefiore Medical Center purchased two da Vinci robots—a standard one to use on the east campus and a more advanced Si for the west campus, according to Dennis Yi-Shin Kuo, MD, associate director of gynecologic oncology at the Einstein College Medical Center. The more advanced Si provides for a clearer three-dimensional image and an enhanced ergonomic environment, he said.

The center purchased a single console machine, rather than a dual console. Dr. Kuo noted that with one console, the teacher lacks the ability to stop the student in mid-procedure, as a driving instructor with dual control might suddenly stop a student driver who has a lapse of judgment.

Residents and fellows train on the system with an online course on the da Vinci robot during off hours, according to Dr. Kuo. “A dry run in the early evening involves a limited number of residents and fellows so that they have hands-on experience with the robot, learning about docking the patient’s cart and controlling the surgeon’s console,” Dr. Kuo said. “Then, they are supervised as they go through the docking process with patients. They must perform adequately as an assistant surgeon before being able to sit at the console.”

Critique essential to the learning process

Dr. Kuo, who learned how to use robotic equipment approximately five years ago, now evaluates residents learning how to use the equipment. “As the evaluator, I critique the students on the specifics of the procedures, giving them a score
from one to nine for each step, and I offer comments verbally,” he said.

“It is a two-way street,” Dr. Kuo added. “The trainer and learner give each other feedback on how well the laparoscopic procedure worked, and how well the practitioner performed the procedure.”

There are several simulation programs being developed to mimic the robot, which will enhance the educational process,” Dr. Kuo said. One such program, Intuitive Surgery’s da Vinci trainer, he noted, should be on the market soon.

Robotic equipment is a breakthrough, but it is also complex to operate, and it is costly, making it very expensive for smaller hospitals. “More than 1,500 da Vinci robots have been sold throughout the world,” Dr. Kuo said. They cost approximately $1.5 million each.

The learning curve for mastering robotic equipment is very individualized, according to Dr. Kuo. “You have to know the procedures, and a little bit about the instruments. And you need to acquire a sense of moving and clutching the instruments. It’s a test of dexterity and hand motor skills. Some people pick it up very fast.”

The bottom line, according to Dr. Kuo: Simulation training on the da Vinci robot is helpful, but it demands that an experienced surgeon also be present. And although training is important, he noted that it is still not a live operation, where a host of additional challenges can arise.

“The skin wall of a person with a very high body mass index,” he noted, as an example, “might be extremely thick and create unique problems for the surgeon. The manipulation of the instruments inside the trochars of a patient with a very high body mass index and a very thick abdominal wall can create a lot of friction between the instruments and the trochars. A lack of tactile feedback with the da Vinci robotic instruments allows us to operate with ease while pivoting through a very thick abdominal wall, a much more challenging task if the procedure were done with straight laparoscopic instruments.”

**Novel teaching approach to hysterectomy**

The University of South Alabama also purchased two da Vinci models. Like Montefiore, the medical center opted not to purchase dual control. Michael A. Finan, MD, FACS, chief of gynecologic oncology at the university’s Mitchell Cancer Institute and a professor of obstetrics and gynecology, needed to find a dry lab model to use with the robotic equipment.

“When we got the robot, it was clear that simulation helped those being trained with their dexterity. But there was really no way for residents to practice a realistic hysterectomy with it,” Dr. Finan said. “The company provided us with a model, like a little rubber pad with bumps on it that we could move from one bump to another. We tried a porcine lab, but that was not a good mimic of the hysterectomy and bears little resemblance to the anatomy of the female pelvis.”

Use of an animal lab poses separate issues. Not only are there logistical concerns in maintaining an animal lab, Dr. Finan pointed out, but it’s also expensive. According to Dr. Satava, now that Modular Immune In Vitro Construct Technologies has completed a prostate surgical simulation, their next simulator will include the hysterectomy model.

In searching for a solution, Dr. Finan gathered items from his home garage. He picked up a package of birthday balloons, some nylon stockings, rubber bands, along with wood, nails, and screws, and created a dry model to use in simulation. He sewed beer huggies to represent the vaginal cuff and fixed them to the angled surface of the model, mimicking the vaginal structure (see figure, this page). Total cost of the dry model: little more than $16.
“My idea was to lay it out clearly for others,” he said. “I wanted to show others how simple it is to create this kind of dry model. The surgeon and his colleagues published a paper in the Journal of Robotic Surgery, in which they presented a list of household supplies and instructions for building the dry model. They noted the safety and efficacy of training residents with the dry model.  

Simulated setting enhances learning  

“I think it’s absolutely critical that residents have a calm, simulated environment where they can learn the process without a live patient or actual bloody tissue,” Dr. Finan said. The surgeon and his staff accumulated three years of data, from August 1, 2006, through July 31, 2009, by measuring the amount of time it took residents to perform surgical procedures in the dry lab, as well as the OR. During that time, 16 residents completed the dry lab, and 228 robotic cases were performed, 190 of which were hysterectomies. The authors noted that not all residents can master the eye-hand coordination needed to perform robotic surgery, and some do not have the ability to operate without haptic feedback. As a result, mastering robotic training is not mandatory to graduate from the program.

The training program at the University of South Alabama begins with participation in a dry lab, and is followed by patient case and bedside assistance. The training culminates in residents completing entire robotic hysterectomy procedures under careful supervision. The researchers found no significant difference in patient complications in resident cases versus the cases handled by attending surgeons.

Dr. Finan is optimistic about the continued refinement of robotic equipment for simulating medical procedures. “It’s hard to imagine that real procedures could be replaced by a computer simulator, but some day, we will have what airline
pilots have—a simulated model that would react like real tissue,” he said.

A lab devoted to simulation

At the University of Washington School of Medicine in Seattle, where Barbara Goff, MD, is a surgeon and professor of gynecological oncology, there is an entire simulation lab called ISIS (Institute for Simulation and Interprofessional Studies) devoted to teaching skills to residents and fellows (see photo, page 36).

“All of the surgical specialties have joined together and pooled resources to create the lab,” Dr. Goff said. “You might look at it and not be terribly impressed with what you see. The lab is filled with simulators, most of them fairly simplistic. We don’t have a lot of high-tech instruments in the lab, but what we’ve learned is that less expensive models are often as effective for training.” The goals, she pointed out, are to teach residents basic skills and set a foundation for performing in the operating room. Simulation training has to be on a schedule, she added. “Once-a-year training is worthless,” she said. “Residents need to practice in the lab, learn the basics, and learn the language of surgeons. They need supervision. Residents on their own can learn bad techniques.”

Simulation definitely has its limitations, Dr. Goff added. “I am a cancer surgeon, and cancer has thousands of variations. You cannot replicate cancer in simulation. The best that you can do is have a firm grasp of the fundamentals and be able to use them and think on your feet in an operating room.” Simulation, she said, “can help residents learn basic skills like closing an abdominal wall, setting up ports, or completing a suture.” She added that experienced fellows being retrained for more complicated procedures, such as a colostomy or a transverse colon urinary diversion, probably need to make use of the school’s animal lab.

An experience from Dr. Goff’s own training illustrates the importance of simulated practice. “As a medical student, I once spent two hours tying knots in the leg of a bypass patient, and the surgeons said it took them less time to perform the bypass. The point is that medical students shouldn’t be tying knots on actual patients. I could have learned the fundamentals of doing that with simulation.”

She said that the evidence suggests that surgeons can learn many fundamental skills and specific procedures with simulators. Evidence also supports the theory that surgeons trained initially with simulators perform better in the operating room than those who have not had that kind of training. “That’s part of basic training,” Dr. Goff said. “Every profession has it. Bus drivers get trained and tested before they have the basic skills and competence to drive routes alone. The same needs to be true in medicine.”

The challenge, she said, is finding time in the lab and having faculty available to review the residents’ work. Professors at the University of Texas MD Anderson Cancer Center in Houston are doing what they can to make simulation a part of medical training. Gynecologic oncology surgeon Pamela Soliman, MD, MPH, who performs MIS on patients with cervical, endometrial, and early-stage ovarian cancers as well as fertility-sparing procedures for young women with cervical cancer, noted that current residents are trained with a ProMIS simulator that allows users to interact with virtual and physical models and receive feedback. The ProMIS Curriculum is based on validated approaches to skill development and is designed to be integrated with an existing curriculum, Dr. Soliman said. Modules may use virtual or physical models. The curriculum also includes an MIS training course for all surgical fellows.

“We didn’t have training simulators when I was a resident,” said Dr. Soliman. “During my fellowship, I had hands-on experience with actual procedures. I received advanced laparoscopic training. However, much of what I learned about robotic surgery, I learned after I completed my training.” She said that the division of surgery at MD Anderson is in the process of selecting and purchasing robotic simulation equipment for the trainees.

Use of simulators plateaus

“Simulators work really well when you’re just starting out,” Dr. Soliman said. “I think there’s a point where the use of simulators plateaus, because actually being in surgery is different
than using a simulator. I just don’t think that the simulator alone makes you comfortable working in the OR.”

“Training with simulation helps make residents feel more comfortable,” Dr. Soliman said. “In fact, when I know that certain residents have had more simulated practice, I feel more comfortable bringing them into the OR.”

Michael M. Frumovitz, MD, FACS, MPH, associate professor, assistant fellowship director, and head of resident rotation at MD Anderson, said he encourages residents to practice with the simulators. “If someone is proficient on the simulator, it’s obvious in the operating room,” he said. “Their skill level is significantly higher than those who haven’t trained with one,” he said.

“In medicine,” he said, “You learn most of what you know on the job, but I strongly maintain that non-patient simulators improve performance, and we really should focus more on using them here.”

“Cost is always a factor. It’s something that you always have to consider,” Dr. Soliman said. Simulators are important for training, especially learning basic skills, she added, but nothing can compare to being in the OR.

“Simulation exercises change very quickly,” Dr. Goff said. “But what we’ve learned is that you don’t need simulation equipment that can run up to a half million dollars. Developing an effective surgical simulation program requires a commitment to the concept and finding the time and space. Most importantly, it requires desire on the part of the trainees to devote the hours of practice needed to make themselves accomplished surgeons.” This directive supports Dr. Satava’s view that “medical training is not about the simulator; it is about the curriculum.”

“We’re surgeons,” Dr. Goff added. “We don’t have a lot of time on our hands. Training of residents as well as practicing fellows needs to be quick but effective, and simulation can help.”

The Bulletin of the American College of Surgeons extends its appreciation to the staff of the Society of Gynecologic Oncology, who provided valuable resources in the development of this article.

References


For the past two years, many state budgets have been in dismal condition. The legislatures have responded by considering and adopting a wide range of revenue proposals, including various types of taxes to cover budget shortfalls. Some of these new taxes, including provider taxes and taxes on elective cosmetic procedures, would affect physicians directly.

Provider tax

In general, when a provider tax is imposed, the state collects revenue from specified categories of health care providers. Many states use the tax as a mechanism to generate new in-state funds and then match them with federal funds so that the state can get additional federal Medicaid dollars. In most cases, it is the intent of the state to “reimburse” Medicaid providers the cost of the tax by increasing Medicaid payments. However, the intent is not always acted out, and oftentimes the state chooses to designate provider tax revenue to fund a variety of state programs.

For both fiscal year (FY) 2009 and FY 2010, 44 states and the District of Columbia had at least one Medicaid provider tax. During 2010, a number of states introduced legislation to establish, expand, or change provider taxes and fees. Those states were Arkansas, Michigan, Oklahoma, Vermont, and Washington.

Michigan promised an increase in Medicaid reimbursement when the state legislature sought to implement a 3 percent gross receipts tax on physician practices. In 2009, the proposal was introduced in the form of H.B. 5386, the Quality Assurance Assessment Tax. The Michigan House approved the new tax, but the bill failed to move out of the Senate. In 2010, the tax was included in then Gov. Jennifer Granholm’s (D) budget proposal, and called for imposing a $300 million tax on Michigan’s health care system. Again, physicians in the state successfully defeated the plan.

Numerous arguments can be made against implementing provider taxes at the state level. First and foremost, a provider tax unjustly targets physicians’ offices, which are already paying business taxes. As a result, the tax may force physicians to move out of the state and practice elsewhere, creating a workforce shortage and affecting patient access. Also, Medicaid funding is intended to be a social responsibility and funding of the program should not fall to physicians, but, rather, to society as a whole.

Cosmetic procedure tax

In 2004, New Jersey became the first state to enact legislation that placed a six percent gross receipts tax on elective cosmetic procedures. The bill was introduced by Assemblyman Joseph Cryan (D), who claimed the tax would provide a significant stream of revenue to the state.

Unfortunately, the New Jersey legislature did not address several important issues when considering passage of the bill. First, the tax undermined the value of cosmetic procedures in improving the psychological health of the patient. Second, the tax placed an impossible burden upon physicians who perform reconstructive surgery, requiring them to define medical necessity. Finally, the tax created a competitive disadvantage for cosmetic surgeons in New Jersey due to the close proximity of New York and Philadelphia.

In addition to neglecting these issues, the bill failed to bring in any significant amount of money to the state. The New Jersey Department of Taxation experienced a 59 percent shortfall on projected revenue estimates. Instead of producing money for New Jersey, the tax was actually costing the state money. It is estimated that for every six percent gross receipts tax on cosmetic procedures, the state lost $1 million.

Ms. Macias is Regional State Affairs Associate, Division of Advocacy and Health Policy, Chicago, IL.


continued on page 56
The choice of employment setting for surgeons affects their financial risk and reward, work hours, practice autonomy, institutional relationships, and administrative responsibilities. The most common setting for surgeons continues to be group practice, and that applies to both rural and urban areas. In the past decade, there has been an overall decline in the number of surgeons in solo practice. This has occurred in rural places as well, where solo practice has been more common partly due to the smaller number of surgeons who could form group practices.

**Group practice growing**

Between 2001 and 2009, the number and proportion of surgeons employed in the three main types of practice settings—hospitals, solo practice, and group practice—shifted considerably. The number of surgeons employed in group practice increased by more than 50 percent between 2001 and 2009, to the point where 54 percent of all practicing surgeons were employed in group practice by 2009. The more prevalent choice of group practice has come primarily at the expense of employment settings outside the two other main types; “other settings” dropped from 15 percent to 10 percent of practice types. Concurrent with expansion in group practice employment, there was a sharp decline in both the number and proportion of surgeons employed in solo practice between 2001 and 2009; in 2001 there were 35,364 surgeons (27 percent of total) in solo practice compared with 29,310 (21 percent) in 2009. The number of surgeons employed by HMOs, non-hospital government, and other entities (defined in Figures 1 and 2 on this page as “other setting”) also declined substantially (by 35 percent) between 2001 and 2009.
Rural surgeons

Since there are typically fewer providers and smaller hospitals in rural areas, the employment options for rural surgeons tend to be more limited. Our analysis shows some differences in the employment setting for rural surgeons. For example, the proportion of surgeons employed in solo practices was higher in rural areas than urban areas for all years. However, that proportion declined by 17 percent between 2001 and 2009. Additionally, there was a greater increase in the number of hospital-employed surgeons in rural places than urban places. Between 2001 and 2009, the number of surgeons employed by a hospital increased by more than 50 percent in rural places, versus 20 percent for all surgeons. In 2001, a total of 591 (4.5 percent) rural surgeons reported working as hospital employees, compared with 901 (6.9 percent) in 2009.

Implications

Anticipating the effects of health care reform on the surgical profession is difficult; however, language in the Affordable Care Act (ACA) suggests that future payment changes may favor organizational structures resembling accountable care organizations (ACOs). As such, surgeons may need to align with ACO-type organizations. These are, by definition, large entities that will favor group practices, and the transition process may be easiest for providers accustomed to employment in group practices or hospitals. Additionally, group practice settings may offer greater professional flexibility, protection, and fewer practice-entry barriers for surgeons, thus making this type of practice more attractive to future cohorts of medical students who choose surgery as a career. This is particularly important given the recent decline in the number of surgeons relative to population in the U.S.

Data and methodology

American Medical Association (AMA) Physicians Masterfile data were analyzed from 2001, 2003, 2004, 2005, 2006, and 2009. Providers with a self-reported primary specialty in one of 53 surgical specialties were included in the analysis. (For a list of specialties included in this analysis, go to http://www.acshpri.org/documents/surgical specialties2010.pdf.) Only providers who identified their practice type as “direct patient care,” were 69 years old or younger, and who reported a practice location within a U.S. county or county-equivalent (for example, Federal Information Processing Standard [FIPS] codes) were included in the analysis. Physicians were excluded from the analysis in a given year if they reported being in residency training, semi-retired, or if they reported their primary present employer was the U.S. government, locum tenens, medical school, or other non-patient care employment. For the purpose of this analysis, counties were defined by FIPS codes, regions by the U.S. Census Bureau, and rural/urban was defined using the U.S. Office of Management and Budget’s core-based statistical area definitions for metropolitan and micropolitan areas. Rural areas were a composite of micropolitan and unclassified areas.

Limitations

Analysis with AMA Physician Masterfile data have inherent limitations because of the methodology used to construct the dataset. First, the file reflects self-reported data, and respondents are prone to various interpretations of questions or response categories. In particular, specialty codes may not accurately reflect the true breadth of a provider’s practice content. Additionally, the response categories for the question about present employment setting, on which this analysis is based, may not be exhaustive or appropriately descriptive of the range of employment settings.

Ms. Poley is a research associate at the Cecil G. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, and an investigator for the ACS Health Policy Research Institute (HPRI).

Mr. Newkirk is a graduate research assistant at the Cecil G. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, and the ACS HPRI.

Ms. Thompson is a research associate at the Cecil G. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, and project manager for the ACS HPRI.

Dr. Ricketts is professor of health policy and management and social medicine, University of North Carolina Schools of Global Public Health and Medicine, Chapel Hill. He is Managing Director of the ACS HPRI.
The American Medical Association (AMA) House of Delegates (HOD) interim meeting took place November 6–9, 2010, in San Diego, CA. Uncertainty about the effects of the health system reform laws as well as post-midterm election fatigue created a subdued meeting climate.

The American College of Surgeons (ACS) delegation was well-prepared to advocate on behalf of the Fellowship under the leadership of John H. Armstrong, MD, FACS (see box, this page, for the complete ACS delegation).

**Highlights**

The Surgical Caucus sponsored the educational session titled Surgical Quality and Outcomes: ACS and NSQIP®. Clifford Ko, MD, FACS, Director of the ACS Division of Research and Optimal Patient Care, was the featured speaker and discussed the continuum of quality initiatives in which the College is actively engaged.

The Executive Committee of the Surgical Caucus was elected. The Nominating Committee presented the following slate of candidates to the Caucus, which was unanimously approved:

- Charles Drueck III, MD, FACS (General Surgery), Chair
- Michael B. Simon, MD (Anesthesiology), Chair-Elect
- Michael M. Deren, MD, FACS (Cardiothoracic Surgery), Secretary
- Chad A. Rubin, MD, FACS (General Surgery), Treasurer
- C. Bob Basu, MD, FACS (Plastic Surgery), Member-at-Large

The Executive Committee also includes the following:

- Cynthia J. Goto, MD, FACOG (OB/GYN), Member-at-Large
- David G. Gerkin, MD (OPH), Member-at-Large
- John H. Armstrong, MD, FACS (General Surgery), ACS Representative
- Susan Pike, MD, FACS (OPH), YPS Representative
- SreyRam Kuy, MD (General Surgery), RFS Representative

Another important moment occurred two days before the opening of the House, when Michael Maves, MD, FACS, and the AMA Board of Trustees jointly announced that Dr. Maves will end his term as executive vice-president/chief executive officer of the AMA in June 2011, after 10 years of service. A search firm has been engaged to find Dr. Maves’ replacement.

**Resolutions**

- Effective AMA action to preserve Medicare benefits for patients (substitute Resolution 202). This resolution was adopted and commits the AMA to a well-funded priority legislative and grassroots campaign to ensure passage of national legislation that will enable Medicare patients to keep their benefits when they privately contract with any physician of their choice. The AMA’s Medicare Patient Empowerment Act, the result of House activity for balance billing and private contracting from last June’s meeting (A-10), will serve as the centerpiece legislation.
- Government regulation of

### November 2010 ACS Delegation to the AMA HOD

- John H. Armstrong, MD, FACS, Delegation Chair, Gainesville, FL
- Carlo Dall’Olmo, MD, FACS, Flint, MI
- Sanjay Parikh, MD, FACS, Bronx, NY
- Richard Reiling, MD, FACS, Charlotte, NC
- Chad A. Rubin, MD, FACS, Columbia, SC
- Patricia Turner, MD, FACS, Baltimore, MD
- David B. Hoyt, MD, FACS, ACS Executive Director, credentialed as an alternate delegate
- Jacob Moalem, MD, FACS, Rochester, NY, ACS Young Physicians Section delegate
- Brook V. Nelson, MD, completed term as an ACS-endorsed regional delegate for the Resident and Fellow Section
resident education and training (Resolution 219). An ACS initiative, this resolution was cosponsored by the Congress of Neurological Surgeons, American Association of Neurological Surgeons, American Academy of Facial Plastic and Reconstructive Surgery, and the American Society of Plastic Surgeons. It passed with little debate, and was brought forward in response to Public Citizen, the Committee on Interns and Residents, and the American Medical Student Association petitioning the Occupational Safety and Health Administration (OSHA) in September 2010 to consider regulating resident work hours. (OSHA expressed interest in the request.)

In 2001, OSHA declined to take on this issue and deferred to the Accreditation Council on Graduate Medical Education. The AMA will now oppose any efforts by the federal government, including OSHA, to regulate resident work hours. (OSHA expressed interest in the request.)

In an effort to address potential issues related to the development of ACOs, the HOD adopted Resolution 819. These principles recommend that ACOs be physician-led, increase access to care, improve the quality of care, and ensure the efficient delivery of care. For a copy of the principle, go to http://www.ama-assn.org/ama1/pub/upload/mm/2010i/addendum-ref-comm-j.pdf#page=54.

• Return to play after suspected concussion (Resolution 910). Recent media attention on the concussion policies of both the National Football League and college/high school sports organizations encouraged delegates to adopt Resolution 910. This resolution directs the AMA to promote requirements that “athletes participating in school or other organized youth sports and who are suspected by a coach, trainer, administrator, or other individual responsible for the health and well-being of athletes of having sustained a concussion, should not return to play or practice without the written approval of an MD or DO.”

• Helmet use by snow skiers and snowboarders (Substitute Resolution 911). In a related matter, the House adopted a resolution to support laws requiring the use of helmets by children ages 17 and younger while snow skiing or snowboarding, and to encourage adults to use helmets when doing the same. This reflected the continuing efforts by states and the trauma community to address serious injury prevention concerns.

Getting involved

The College’s delegation is engaged and active within the AMA HOD, and seeks the input of Fellows for ideas for resolutions to submit at future meetings. In addition, surgeons running for AMA office (either councils or the Board of Trustees) are welcome to seek ACS endorsement. Questions on the endorsement process, suggested resolutions, or other HOD-related issues may be directed to Jon H. Sutton at jsutton@facs.org.

Mr. Sutton is Manager, State Affairs, Division of Advocacy and Health Policy, Chicago, IL.

Did you know... THAT THE AMERICAN COLLEGE OF SURGEONS’ (ACS) public website, www.facs.org, is undergoing a major redesign to update and streamline the look and navigation of the site? The purpose of this project is to create a more user-friendly site and to strengthen the College’s brand by ensuring that all of its programs and products are clearly and strongly identified with the ACS. As there are more than 6,000 pages on the public website, the update process will be phased in during the course of the next several months. Thus far, the Trauma Program, National Accreditation Program for Breast Centers, and the Nora Institute for Surgical Patient Safety pages have been updated. It is anticipated that the redesign will be completed by early spring.
LaMar S. McGinnis, MD, FACS, Past-President of the American College of Surgeons (ACS) will serve as vice-chair of the board of directors of Joint Commission Resources (JCR), the not-for-profit affiliate of The Joint Commission. Suet Wun Lim, MD, will serve as chair of the board for 2011.

Dr. McGinnis has served as an ACS commissioner on The Joint Commission board of commissioners since 2005. He has served on The Joint Commission executive committee since 2009, and is currently chair of the governance committee. Dr. McGinnis has also served as a commissioner on the JCR board of directors since 2009, and is currently serving as secretary of the JCR executive committee. He served as vice-chair of the JCR executive committee in 2009. He also chaired the JCR accreditation committee. Dr. McGinnis is senior medical advisor and liaison at the American Cancer Society.

Dr. Lim has served as an outside international director on the JCR Board since 2004. He is currently vice-chair of, and previously served as a member-at-large on, the JCR executive committee. Dr. Lim has served on the JCR accreditation committee since 2004, and the JCR human resources and compensation committee since 2009. He is chief executive officer (CEO) of Tan Tock Seng Hospital in Singapore.

In addition to the appointment of the chair and vice-chair, the JCR announced the appointments of Nabil Kronfol, MD, DrPH, and Tamra E. Minnier, RN, MSN, FACHE, to the board of directors. Both will serve three-year terms through December 31, 2013.

Dr. Kronfol is president and founder of the Lebanese HealthCare Management Association, a professional not-for-profit association that aims at the further development of the science of management in the health sector, and of the health care delivery systems in Lebanon and the Middle East. He is also a professor of health administration at the University of Balamand, Lebanon, and at the faculty of public health, Lebanese University. Dr. Kronfol earned a doctor of public health (health services administration) and master of public health from the Harvard University School of Public Health, Boston, MA, as well as a doctor of medicine from the American University of Beirut. He has authored and edited numerous books and publications regarding health care in the Middle East.

Ms. Minnier is chief quality officer for the University of Pittsburgh Medical Center (UPMC). In addition, she serves as CEO for UPMC’s Sim Medical facility, and as executive director of UPMC’s Beckwith Institute for Innovation in Patient Care. Ms. Minnier earned a master of science in the graduate program of nursing administration along with a bachelor of science from the University of Pittsburgh. She is an adjunct faculty member at the University of Pittsburgh and Chatham University, and has served on the national faculty for the Institute for Healthcare Improvement. Ms. Minnier is a member of Sigma Theta Tau, the National Honor Society of Nursing, the American Organization of Nurse Executives, and the American College of Healthcare Executives. She is a frequent presenter at health care quality and safety conferences and has authored articles for numerous health care and nursing publications.

JCR is governed by a 17-member board of directors. Board members include doctors, nurses, a lawyer, a health insurance executive, business and health care executives, and quality experts from the U.S. and around the globe.

JCR is the official publisher and educator of The Joint Commission. JCR is an expert resource for health care organizations, providing consulting services, educational services, and publications to assist in improving quality and safety and to help in meeting the accreditation standards of The Joint Commission. JCR provides consulting services independently from The Joint Commission and in a fully confidential manner.

For more information on JCR, visit http://www.jcrinc.com.
Members in the news

Julian E. De Lia, MD, FACOG, FACS, was recently awarded the Pacesetter Award by Cornell’s New York Hospital Queens. Dr. De Lia has been a Fellow of the American College of Surgeons since 1983, and is the founder and medical director of the International Institute for the Treatment of Twin-to-Twin Transfusion Syndrome, Wheaton Franciscan Healthcare-St. Joseph, Milwaukee, WI. The Pacesetter Award is presented each year to an individual who has had a major impact on the advancement of patient care, medical education, research, and the well-being of the community.

Dev A. GnanaDev, MD, FACS, medical director and chairman, surgery department, Arrowhead Regional Medical Center, Colton, CA, has been honored with the John P. McGovern Compleat Physician Award. The award is a national award presented annually by the Houston Academy of Medicine to recognize a physician who exemplifies the ideals of Dr. William Osler, including medical excellence, humane and ethical care, commitment to medical humanities and writing, research, and harmony between the academic and medical practitioner. The award is named after its first recipient, John P. McGovern, MD, who founded the American Osler Society.

Currently, Dr. GnanaDev is a clinical professor of surgery at Western University of Health Science, Pomona, CA; clinical associate professor of surgery at Loma Linda University, Loma Linda, CA; and a member of University of California, Riverside School of Medicine Advisory Board. He also has served as a representative of San Bernardino Hospitals to the American College of Surgeons, and was president of the Tri-County Surgical Society.

Edward Partridge, MD, FACS, a former Chair of the American College of Surgeons’ Commission on Cancer and Past-President of the Alabama Chapter, has been named president of the American Cancer Society national board of directors for 2010–2011. Dr. Partridge is a renowned women’s cancer doctor and leader in the fight to reduce race- and ethnicity-based cancer disparities.

Grace S. Rozycki, MD, FACS, chief of the division of trauma/surgical care at Emory University, Atlanta, GA (see photo, this page), was installed as the president of the Southeastern Surgical Congress during the group’s business meeting, February 14. Dr. Rozycki, a professor of surgery at Emory, is a member of the Surgery News and e-FACS.org editorial boards.

Remembering Jameson L. Chassin, MD, FACS

A commemorative event for friends and associates of Jameson Chassin, MD, FACS, a Fellow of the American College of Surgeons (ACS) since 1952, will be held on Sunday, March 20, 2011. This celebration of Dr. Chassin’s life will take place at noon at the Harvard Club of New York City. At that time, the family will announce a fund in Dr. Chassin’s name, to be administered by the College, for the purpose of recognizing a meritorious resident in general surgery.

For further information, contact Martin Wojcik at the ACS Foundation, 312-202-5376 or mwojcik@facs.org.
The National Ultrasound Faculty of the American College of Surgeons has developed “Ultrasound for Surgeons: The Basic Course, 2nd Edition” on CD-ROM for surgeons, surgical residents, and anyone interested in ultrasound imaging.

The 2nd Edition includes:

- Updated graphics using 3-D medical modeling developed by NASA researchers to teach ultrasound and rapidly demonstrate key ultrasound skills
- Targeted clinical applications are highlighted, including Head and Neck, Breast, Vascular, Abdominal, Thoracic, Critical Care/Trauma, Foreign Objects, and Fractures
- Cue Cards to view and print to prompt learners on three commonly performed scans
- Easier navigation and support of the CD-ROM
- Four CME credits available

The CD-ROM provides the learner with basic education and training in ultrasound imaging as a foundation for specific clinical applications.

To purchase the NEW edition, go to www.acs-resource.org or call 888-711-1138.
ACOSOG news

Reconciling axillary staging controversy in neoadjuvant therapy

by Judy C. Boughey MD, FACS; David M. Ota MD, FACS; and Heidi Nelson, MD, FACS

If the results of the American College of Surgeons Oncology Group (ACOSOG) Z1071 show that sentinel lymph node (SLN) surgery can reliably assess axillary disease in women with node-positive breast cancer receiving preoperative chemotherapy, then in the future, SLN surgery could replace routine axillary dissection for these patients, thereby decreasing the side-effects associated with surgery for breast cancer. Additionally, the results of this study will further understanding of the reliability of SLN after preoperative chemotherapy, which may be translated to node-negative patients.

Surgical techniques in breast cancer have become less invasive with the adoption of SLN surgery for early-stage breast cancer. As new techniques evolve, it remains important to evaluate the accuracy of these techniques before expanding their use to additional patient populations. For SLN surgery, one of the largest areas of debate is its use in patients receiving preoperative (neoadjuvant) chemotherapy.

ACOSOG is currently conducting Z1071, which is a phase II study evaluating the role of sentinel lymph node surgery and axillary lymph node dissection following preoperative chemotherapy in women with node-positive breast cancer (T0-4, N1-2, M0) at initial diagnosis.

Timing of SLN surgery

Use of preoperative therapy with chemotherapy or endocrine therapy is increasing in the treatment of breast cancer patients. When preoperative chemotherapy is utilized, there remains significant debate among breast surgeons about nodal staging of these patients. Some surgeons routinely perform SLN biopsy at the time of initial diagnosis, prior to chemotherapy. The advantage of that approach is that it provides standard staging of the axilla for planning of adjuvant radiation, and avoids any potential effect of chemotherapy on the axilla and lymphatic mapping.

However, more patients require axillary lymph node dissection (ALND) with this approach, and each patient undergoes two operations—initial SLN at presentation, and then a definitive breast procedure after completion of chemotherapy.

The alternative approach preferred by some surgeons is to perform SLN surgery after completion of preoperative chemotherapy. This approach has the advantage of necessitating only one operation for most patients, and overall fewer patients require ALND. It provides evaluation of the axilla after completion of therapy, and axillary response to chemotherapy is a strong predictor of outcome. Multiple reported studies including several meta-analyses have shown that SLN after completion of chemotherapy in node-negative patients has an acceptable SLN identification rate and false negative rate.

This debate has been discussed in multiple national forums, including the American Society of Breast Surgeons, the Society of Surgical Oncology, and a National Cancer Institute-sponsored state of the science meeting on preoperative therapy in invasive breast cancer. Given this ongoing debate, ACOSOG designed Z1071 for a group of patients whom the majority of surgeons treat in a similar fashion—those patients who are known to be node-positive at the time of presentation. For these patients, SLN surgery is not routinely utilized, and most surgeons perform ALND at the time of definitive breast surgery, after chemotherapy, based on smaller retrospective studies reporting a high false negative rate of SLN surgery in this setting.

With improved individualized patient care, rates of pathological complete response with
preoperative chemotherapy are increasing, with rates as high as 65 percent. For patients who are node-positive at presentation and who have a good response to chemotherapy, the question often arises as to whether an ALND is required for all of these women, knowing that up to 40 percent of node-positive patients will convert to node-negative after the neoadjuvant chemotherapy. ACOSOG Z1071 is designed to answer this question.

**Trial accrual**
The target accrual for Z1071 is 660 patients with node-positive (N1 or N2) breast cancer undergoing neoadjuvant chemotherapy. All women in this study undergo axillary ultrasound to assess response after completion of chemotherapy; they also undergo SLN surgery and ALND at the time of operation. The study was activated on July 15, 2009, and has been accruing well, with 484 of 660 patients accrued. The anticipated date of closure of this study is June 2011.

**Minimizing false negative rates**
The protocol includes several recommendations to try to keep the false negative rate as low as possible. Previous reports have shown that use of blue dye alone has a higher false negative rate for SLN surgery; therefore use of dual agents (radiocolloid and blue dye) is recommended. Additionally, the false negative rate for SLN is known to be higher when fewer than two SLNs are removed, and therefore the protocol requires removal of at least two SLNs. We encourage all surgeons participating in the study to ensure that all SLNs are resected prior to performing the ALND.

**Impact**
If Z1071 results show that SLN surgery after completion of neoadjuvant chemotherapy has an acceptable false negative rate, this finding would change the surgical care of node-positive breast cancer patients. Node-positive patients undergoing neoadjuvant chemotherapy would undergo SLN surgery for nodal staging, and only patients with positive SLNs would undergo completion ALND. Patients with negative SLNs after completion of preoperative chemotherapy would be spared the morbidity of complete ALND, significantly impacting the surgical morbidity associated with the treatment of node-positive breast cancer.

Additionally, this approach may potentially lead to increased use of neoadjuvant chemotherapy for node-positive patients. It is also important to note that if the false negative rate of SLN after completion of chemotherapy for node-positive disease is documented and acceptable, critical information will be available to guide the debate on timing of SLN surgery in node-negative patients.

Details of ACOSOG Z1071 are available on the ACOSOG website at http://www.acosog.org. ACOSOG Z1071 has also been endorsed by the North Central Cancer Treatment Group, the National Surgical Adjuvant Bowel and Breast Project, the Cancer and Leukemia Group B, and the Southwest Oncology Group.

**References**


Dr. Boughey, the study chair, is associate professor of surgery, Mayo Clinic.

Dr. Ota, of Durham, NC, and Dr. Nelson, of Rochester, MN, are ACOSOG Co-Chairs.
Find your dream job or recruit your ideal candidate

May we recommend a simpler way to advance your career?

ACS Career Opportunities, powered through our partnership with HEALTHeCAREERS Network, connects you with more jobs in less time.

Visit us online to:

- **Find hundreds of jobs:** Search by location, specialty, keyword, or company name
- **Utilize Conference Connection™:** An improved way to network at industry events
- **Get job alerts:** Register for e-mails about positions that match your qualifications and interests
- **Sign up for eNewsletters:** Employment best practices and job tips are as close as your inbox
- **Read career advice:** Access articles about landing your dream job
- **Tie it all together:** Easy tools to manage online resumes, jobs and application histories

Questions?

Contact HealtheCareers Network at [http://assoc.healthecareers.com/acs](http://assoc.healthecareers.com/acs), call 888/884-8242, or e-mail info@healthecareers.com for more information.
The following disciplinary actions were taken by the Board of Regents at its October 2, 2010, meeting:

• William A. Yvorchuk, MD, a plastic surgeon from West Fargo, ND, was suspended from the College with conditions for reinstatement of his Fellowship privileges. This action followed disciplinary action by the North Dakota and New Hampshire Medical Boards based on evidence that Dr. Yvorchuk was practicing surgery while impaired by alcohol.

• Michael S. Clarke, MD, FACS, an orthopaedic surgeon from Springfield, MO, had his full Fellowship privileges restored following a period of probation. The probationary period, which began in 2008, followed disciplinary action by the Missouri Board of Registration for the Healing Arts. Dr. Clarke fulfilled the terms and conditions for restoration of his full Fellowship privileges with the ACS.

Definition of terms

Following are the disciplinary actions that may be imposed for violations of the principles of the College.

Admonition: A written notification, warning, or serious rebuke.

Censure: A written judgment, condemning the Fellow or member's actions as wrong. This is a firm reprimand.

Probation: A punitive action for a stated period of time, during which the member (a) loses the rights to hold office and to participate as a leader in College programs; (b) retains other privileges and obligations of membership; (c) will be reconsidered by the Central Judiciary Committee periodically and at the end of the stated term.

Suspension: A severe punitive action for a period of time, during which the Fellow or member, according to the membership status, (a) loses the rights to attend and vote at College meetings, to hold office, and to participate as a leader, speaker, or panelist in College programs; (b) is subject to the removal of the member’s name from the Yearbook and from the mailing list of the College; (c) surrenders his or her Fellowship certificate to the College, and no longer explicitly or implicitly claims to be a Fellow of the American College of Surgeons; (d) pays the visitor’s registration fee when attending College programs; (e) is not subject to the payment of annual dues. When the suspension is lifted, the Fellow or member is returned to full privileges and obligations of fellowship.

Expulsion: The certificate of Fellowship and all other indicia of Fellowship or membership previously issued by the College must be forthwith returned to the College. The surgeon thereafter shall not explicitly or implicitly claim to be a Fellow or member of the American College of Surgeons and may not participate as a leader, speaker, or panelist in College programs.

AWS to turn 30

The Association of Women Surgeons (AWS) will celebrate its 30th anniversary in October of this year. The AWS was founded in 1981 to advance the personal and professional growth of women surgeons and offers wide-ranging programs directed at the advancement of women surgeons at all stages of their surgical careers.

For further information on how to become a member of this group and participate in the exchange of experiences, advice, and strategies among women surgeons around the world, go to https://www.womensurgeons.org/Membership/Join_AWS.asp.
Who will help you help them?

Patients and their families frequently look to surgeons for guidance and advice—especially when dealing with life-limiting illness.

Now a new curriculum from the American College of Surgeons and the Cunniff-Dixon Foundation offers surgeons-in-training and practicing surgeons guidance for the management of problems encountered in palliative care, including advice on personal awareness, self-care, and the surgeon-patient relationship.

*Surgical Palliative Care: A Resident’s Guide* can help surgeons learn what their judgment and skill in the art of surgery can provide for their patients’ comfort, function, and longevity.

To review the content of the manual and discover how it can help you deal with the challenges of life-limiting illness, visit:


Single copies of the manual are available at no cost by contacting dmazmanian@facs.org or by calling 312-202-5311. Multiple copies are also available—you only pay postage costs.
NTDB® data points

Tighten your belt

by Richard J. Fantus, MD, FACS; and Michele M. Mellett, MD, FACS

According to the 2010 U.S. Census, the resident population of the U.S. exceeded 300 million, which represents an increase of 9.7 percent over the 2000 census. The most populous state was California, the least populous was Wyoming, and Texas was the state that had the biggest gain (http://2010.census.gov/news/releases/operations/cb10-cn93.html).

While the population was growing in number, it was also growing in size. During the past 20 years, obesity has had a dramatic increase in the U.S. In 2009, only the District of Columbia and Colorado had an obesity prevalence of less than 20 percent, 33 states had a prevalence 25 percent or greater, while nine states’ prevalence was equal to or greater than 30 percent. Overweight and obesity are labels for ranges of weights that are greater than what are considered healthy for a given height. These ranges have been shown to increase the likelihood of certain disease and other health problems. For adults, these ranges are determined by using height and weight to calculate the body mass index (BMI). An adult with a BMI between 25 and 29.9 is considered overweight, while a BMI equal to or greater than 30 is considered obese (http://www.cdc.gov/obesity/).

Trauma is not immune to the increase in obesity rates. Each year a greater percentage of patients admitted to trauma services are overweight or obese. Obese patients do not have the same outcomes or injury patterns as healthy weight patients. While seat belt use has been one of the factors that has contributed to a 50 percent decrease in motor vehicle crash related injuries and deaths, there is a linear decrease in seat belt use as an individual’s BMI increases. This puts obese motorists at unnecessary risk for death or injury in motor vehicle crashes.*

In order to examine the occurrence of injuries in obese trauma patients in the National Trauma Data Bank® Research dataset 2009, admissions records were searched utilizing the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis codes 278.00 (obesity unspecified) and 278.01 (morbid obesity, BMI ≥ 40). A total of 1,853 records matched these diagnosis codes; 1,824 records had discharge status recorded, including 1,062 discharged to home, 222 to acute care/rehab, and 477 sent to nursing homes; 63 died. These patients were 55 percent female, on average.

50 years of age, had an average length of stay of 9.3 days, and an average injury severity score of 11.2. Of the 765 motor vehicle occupants, only 276 were recorded as having used lap belts. (These data are depicted in the figure on page 53.)

A perennial top 10 New Year’s resolution is to lose weight. This is evident by the $58.6 billion spent by Americans in 2009 in an effort to lose weight (http://www.marketingdataenterprises.com/pressreleases/DietMkt2009PressRelease.pdf). According to the statistics outlined in this article, Americans are not doing such a good job of keeping off the pounds. With all the negative health effects related to obesity, including those seen in trauma patients, the public needs to do a better job this year, and not only tighten their belts, but fasten them as well.

Throughout the year, we will be highlighting these data through brief reports that will be found monthly in the Bulletin. The NTDB Annual Report 2010 is available on the ACS website as a PDF file and a PowerPoint presentation at http://www.ntdb.org. In addition, information is available on our website about how to obtain NTDB data for more detailed study. If you are interested in submitting your trauma center’s data, contact Melanie L. Neal, Manager, NTDB, at mNeal@facs.org.

Acknowledgment

Statistical support for this article has been provided by Chrystal Price, data analyst, NTDB.

Dr. Fantus is director, trauma services, and chief, section of surgical critical care, Advocate Illinois Masonic Medical Center, and clinical professor of surgery, University of Illinois College of Medicine, Chicago, IL. He is Past-Chair of the ad hoc Trauma Registry Advisory Committee of the Committee on Trauma.

Dr. Mellett is associate director, trauma service; associate program director, surgical critical care fellowship; and senior trauma surgeon, Advocate Illinois Masonic Medical Center, Chicago, IL.
Come and see why more and more surgeons are using the American College of Surgeons Web portal:

- Track your CME credits
- Update your profile
- Log your cases
- Explore communities
- Stay informed
- View surgical videos

All this and much more at e-facs.org
dollar that New Jersey has collected from provider taxes, the state actually lost $3.39 in total revenue.†

In March 2006, Assemblyman Cryan introduced a bill to repeal the 6 percent cosmetic procedure tax, arguing the tax was an untested revenue stream that failed to deliver. During the 2008 and 2010 legislative sessions, he again introduced bills to repeal the provider tax, but they saw little movement, and the tax is still in place today.

Despite the poor outcome from the use of the cosmetic procedures tax in New Jersey, at least 11 other states have considered similar legislation in an effort to balance their state budgets. During the 2010 legislative session, the state of Washington introduced legislation (H.B. 3191) that would have placed a 6.5 percent tax on cosmetic medical procedures. Many medical associations, including the American College of Surgeons, the American Medical Association, and the American Society of Plastic Surgery, vehemently opposed passage of the bill. Mr. Cryan also spoke to members of the Washington legislature about the bill’s ineffectiveness, and it was eventually defeated in the Senate.

Even though states are in a difficult position when faced with severe budget shortfalls, taxes that single out physicians and physician practices do not provide them with the revenues states need to solve their financial deficits. For additional information on physician taxes, or to discuss provider tax initiatives being considered in a state legislature, contact Alexis Macias at amacias@facs.org.