

o what's right for the patient. This proclamation is the bedrock of the American College of Surgeons (ACS). It is our lodestar and the cardinal principle of the original Oath of 1913 and of the Fellowship Pledge that Initiates make today.

Our calling, our mission, our passion are education and quality. These two objectives have been the watchwords of our College since the beginning. They are today and will be tomorrow.

Development and great progress in American surgery have come from surgeons—not imposed from without—who recognized the shortcomings of the present and set out to correct them for the future.

In this address, I would like to tell you the story of the College—the who, what, why, and how of the organization's evolution:

- Who: Individual surgeons recognizing a pressing need for change.
- What: Improved education to ensure quality.
- Why: Surgical education and training were characterized by a lack of standards.
- •How would this be done?

An organization would eventually be formed that would have as requirements for membership standards for surgical competence and character of the applicants, affirmed by their peers. The organization would advance the science of surgery and the competent practice of its art and eliminate the incompetent and occasional operator—to do what's right for the

Within 25 years of its founding, the College established standards for educating surgeons, standards for hospitals, and standards for graduate training for general surgery and the surgical specialties. These accomplishments did not happen simultaneously but sequentially. As one set of standards was set, it became evident that another would be required—to do what's right for the patient.

# Dr. Martin's vision

Who was Franklin H. Martin, MD, FACS—and why did he decide to take on these challenges?

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To fully understand Dr. Martin's vision, we must examine the state of medical education in the late 19th and early 20th century. It was deplorable. Abraham Flexner issued a report in 1910 titled Medical Education in the United States and Canada.1 The Flexner Report, as it is commonly referred to, noted 155 existing medical schools and placed each of them in one of three divisions.<sup>1,2</sup> Group I included 22 schools that required two or more years of college work for entrance; Group II comprised 50 schools that demanded actual graduation from a four-year high school or its "supposed equivalent"; and Group III was composed of 83 schools that asked "little or nothing more than the rudiments or the recollection of a common school education."

State Boards of Medical Examiners were no help. A total of 82 different boards were operating in 49 states and territories; all required only a written examination. A graduate of a medical school who passed a state board examination and received a medical license could enter practice the same day—without any formal postgraduate training or restrictions on scope of practice. Internship was not required for licensure until 1914.3 Those individuals who wanted to become a surgeon would apprentice themselves to an established surgeon upon whose skill and knowledge their education depended. Furthermore, it required that the senior surgeon remain current. This relationship often lasted years. No standards were in place for medical education, for postgraduate training, or for hospitals.

Now a bit more about Franklin Martin and what drove him. He was born in 1857 in Ixonia, WI. He was raised and went to school in a rural setting and he worked in various manual labor jobs as a teenager. In his autobiography, Dr. Martin wrote that in 1876, "on a blistering day in August" as he was working in the fields, he saw the local doctor, nicely dressed, drive by in his buggy. At that moment, he decided he would "be a doctor."

Dr. Martin found an apprenticeship; entered Chicago Medical College, IL, in 1877; graduated in March Dr. Martin wrote, "There was little consolation in the fact that I had done the best I know. What was it that I did not know?"



Dr. Martin in 1913

1880; obtained a two-year internship at Mercy Hospital; and opened his practice in Chicago. He wrote, "In those good old days, surgeons developed and were not made to order...one learned his surgery by seeking out emergency cases...those more interested in gynecological surgery literally learned it by operating on our patients." After one year of practice, he performed his first abdominal operation, a bilateral oophorectomy "in a large west room of an apartment," which led to the death of the patient on his third post-op day. He wrote, "There was little consolation in the fact that I had done the best I know. What was it that I did not know?"

He obtained an appointment to Women's Hospital of Chicago in 1887 and developed a successful practice in gynecologic surgery. Driven to improve graduate education, Dr. Martin and others established the Postgraduate Medical School and Hospital in 1889. In 1905, he founded *Surgery, Gynecology & Obstetrics (SG&O)*, which he said was edited by "practical men of authority in their respective specialties." This publication, which later became the *Journal of the American College of Surgeons*, was an overnight success.

In 1903, a group of prominent surgeons founded a travel club, The Society of Clinical Surgery. Members would go to each other's clinics and observe surgical technique demonstrations. Although Dr. Martin was not a member of this club, he saw the value of this concept, and in 1910 he had the thought, "Why not make a demonstration?" In an editorial published in \$G&O, he wrote of his plan "...to invite to a clinical meeting every man in the United States and Canada who is particularly interested in surgery, to observe the principal clinics in one of the large medical centers." He called this program the Clinical Congress of Surgeons of North America (CCSNA), and the first

meeting took place in Chicago, November 7–10, 1910. It was an overwhelming success. The CCSNA was the first organized program devoted to postgraduate medical education.<sup>3</sup>

In 1912, on the train traveling to the third annual CCSNA, Martin wrote that he realized "there must be a change." By the time he arrived, he had a written plan proposing a College of Surgeons of the United States and Canada. The five-point plan for the College, which he presented to the assembled physicians, and would involve the following:<sup>4</sup>

- A standard of professional, ethical, and moral requirements for every authorized graduate who practices general surgery or any of its specialties as in the Royal Colleges
- A supplementary degree for operating surgeons
- Special letters to indicate Fellowship in the College
- A published list of members
- The appointment of a committee of twelve with full power to proceed with the plans

Martin proposed "...this largest organization of surgeons on the American continent" would assume "...the responsibility and the authority of standardizing surgery."

Articles of Incorporation for the American College of Surgeons were issued by the State of Illinois on November 25, 1912. In May 1913, an organizing committee met and prepared a charter and bylaws to be proposed at the first meeting in November 1913.

14

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Article ll of the *Bylaws* stated, "The object of the College shall be to elevate the standard of surgery, to establish a standard of competency and character for practitioners of surgery, to provide a method of granting fellowships in the organization, and to educate the public and the profession to understand that the practice of surgery calls for special training, and that the surgeon elected to fellowship in this College has had such training and is properly qualified to practice surgery."

John M. T. Finney, MD, FACS, the first ACS President, stated in his Presidential Address to the Fellows, "The American College of Surgeons...stands only for the good of humanity and the uplift of professional standards of morality and education. If it does not fulfill its special mission...it is your own fault."

The American College of Surgeons was the first professional organization to take upon itself the responsibility to set standards for education and training of medical graduates and to educate the public and profession as to who was qualified to practice surgery.

Of the founding 17 Regents, five had college degrees, all had taken one- or two-year internships, and two had additional hospital experience. Seven had spent some time in Europe. Only one—Canadian Walter Chipman, MD, FACS—had both undergraduate and medical degrees, several years of hospital graduate training, and then certification, all acquired in the U.K.<sup>3</sup> The founders were most concerned that this new organization serve to "elevate the standards of surgery," to do what's right for the patient. At the organizing meeting in May 1913, Albert J. Ochsner, MD, FACS, said, "The young...who come into the profession... will have made good not only technically and scientifically but morally."<sup>7</sup>

In November 1913, the Regents formally adopted the name American College of Surgeons and the initials FACS to denote membership. The Clinical Congress of Surgeons of North America became the Clinical Congress of the American College of Surgeons in 1917.<sup>4</sup>

# **Requirements for Fellowship**

Each applicant was required to report the complete records of 50 consecutive major operations as surgeon and 50 abstracts of major operations in which they were surgeon or first assistant; but a problem became apparent. Hospital records were found to be incomplete or nonexistent, so that many could not complete the application. At the Regents' meeting in 1915, Charles H. Mayo,



# THE OATH, 1913:

... "to place the welfare of my patients above all else."

..."I pledge myself not to stoop to secret money trades with consultants."

# FELLOWSHIP PLEDGE, 2016:

"I pledge to place the welfare and rights of my patients above all else."

"I will take no part in... improper financial dealings that induce referrals." John M. T. Finney, MD, FACS, the first ACS President, stated in his Presidential Address to the Fellows, "The American College of Surgeons...stands only for the good of humanity and the uplift of professional standards of morality and education. If it does not fulfill its special mission...it is your own fault."



Dr. Finney

MD, FACS, said, "In this entire country there is not even a minimum of hospital standards." The Committee on Hospital Standards was established with Ernest Amory Codman, MD, FACS, as chair.

In 1916, ACS Director John Bowman, MD, FACS, reported at the annual meeting of the Fellows that the problems with incomplete hospital records and facilities would be addressed with the proposed hospital survey process and said, "This work is not merely something, which we *may* do; it is something which we *must* do. It is our business to know what real training in surgery means." He went on to describe the distribution of a "series of pamphlets...to set out the essentials which make hospitals the right sort of institution for the care of the sick...written so simply that the man who moves his lips when he reads can understand."

# The Minimum Standards published

In 1918–1919, College staff visited 692 general hospitals of 100 or more beds. The plan was to report the results of the surveys with names of the hospitals at the 1919 Annual Meeting. When the Regents learned that only 89 of 692 hospitals met the Minimum Standards, the report was not delivered; the data were burned. The object of the standards was to help hospitals meet them. In his Presidential Address that year, William J. Mayo, MD, FACS, said, "...the College will demand special training...it is our duty to see that these facilities are developed." By 1920, more than 400 hospitals met the standards. George D. Stewart, MD, FACS, in his 1928 Presidential Address, reported that the American Automobile Association published a yearbook that contained a list of all the hospitals in America approved by the

American College of Surgeons. Hospitals prominently displayed the certificate of approval.

By 1950, the hospital verification program consumed so many resources of the College that an independent body, now known as The Joint Commission, was created in 1952 to take up this work.

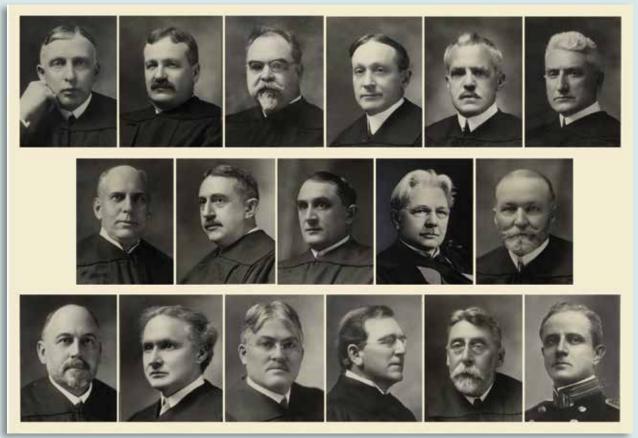
# **Surgical training**

Hospitals were the training ground of surgeons. With the hospital standards in place, it was time to establish standards for graduate training programs. Malcolm T. MacEachern, MD, FACS, ACS Associate Director, led this effort. In 1936, the Regents required that applicants for Fellowship who received a medical degree after 1938 must have three years of hospital service, and two years in a hospital approved by the College.3 The next year the requirement that the medical school be approved by the College was added. A comprehensive survey of graduate training in surgery by College staff in 1937-1938 concluded that there was "no basic standard of uniformity in the methods of graduate training." In 1938, the criteria for training and a manual for hospitals that sought approval for their training programs were established. The standards focused on the hospital and the resident and prescribed regular inspection of the hospitals. The College established the first Residency Review Committee, as it is now known, in the U.S.

The importance of the standards for hospitals and standards for surgical training cannot be emphasized enough. These programs, instituted by an organization of volunteers, fundamentally and profoundly changed how medicine was practiced and physicians were trained in the U.S. Patients were no longer operated

16

# MEMBERS OF THE ORIGINAL BOARD OF REGENTS OF THE ACS



Left to right, top row: Walter W. Chipman, John M.T. Finney, Rudolph Matas, William D. Haggard, Edward Martin, and Franklin H. Martin.

Middle row: George E. Armstrong, George E. Brewer, Charles H. Mayo, Robert E. McKechnie, and John B. Murphy.

Bottom row: Frederic J. Cotton, Herbert A. Bruce, George W. Crile, Albert J. Ochsner, Harry M. Sherman, and Charles F. Stokes.

on in the home. Surgeon training was standardized. If the College had ceased to exist at this point, it would have more than fulfilled the expectations of Drs. Martin and Finney and of the other founders—but that did not happen.

The College has continued to be dedicated to inspiring quality, to maintaining the highest standards, and to ensuring better outcomes. Medical knowledge and technology are continuously and rapidly expanding. The College has kept pace by developing educational and training resources to prepare surgeons to enter practice and for practicing surgeons to adapt. There have been many quality and educational programs (they are inextricably linked) carried out by the College since its founding. I would like to focus on three programs—the Commission on Cancer (CoC), the Committee on Trauma (COT), and the Committee

on Emerging Surgical Technology and Education (CESTE)—as examples of how the Fellows continue to recognize opportunities for improvement, seize them, and establish standards to ensure quality.

### **Commission on Cancer**

The ACS Committee on Treatment of Malignant Diseases with Radium and X Ray was established in 1922. In keeping with the quality efforts of the hospital approvals program, the "Minimum Standard for Cancer Clinics in General Hospitals" was issued in 1930. The primary purpose of this body was to ensure that patients would receive quality cancer care in their community hospitals. In 1953, the committee issued a manual titled A Standardized Method for Reporting Cancer End Results. The influence of Dr. Codman

1. That physicians and surgeons privileged to practice in the hospital be organized as a definite group or staff. Such organization has nothing to do with the question as to whether the hospital is "open" or "closed," nor need a affect the various existing types of staff organization. The word STAFF is here defined as the group of doctors who practice in the hospital inclusive of all groups such as the "regular staff," the visiting staff, "and the "associate staff."

2. That membership upon the staff be restricted to physicians and surgeons who are (a) full graduates of medicine in good standing and legally iscenses to practice in their respective states or provinces; (b) competent in their respective fields and (c) wordy, in character and in matters of professional ethics; that in this latter connection the peacetic of the division of fees, under any gaine whatever, be profulsted.

1. That the Staff initiate and, with the accordant of the covern-

3. That the staff initiate and, with the approval of the governing board of the hospital, adopt rules, regulations, and policies governing the professional work of the hospital; that these rules, regulations, and policies specifically provide:

(a) That staff meetings be held at least once each month. (In large hospitals the departments may choose to meet separately.)
(b) That the staff review and analyze at regular intervals their clinical experience in the various departments of the hospital, such as medicine, surgery, obstetrics, and the other specialities; the clinical records of patients, free and pay, to be the basis for such review and analyses.

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for such review and analyses.

4. That accurate and complete records be written for all patients and filed in an accessible manner in the hospital—a complete case record being one which includes identification data; complaint; personal and family history; history of present illnes; physical examination; special examinations, such as consultations, clinical laboratory. X-ray and other examinations; provisional or working diagnosis; medical or surgical treatment; gross and microscopical pathological findings; progress notes; final diagnosis; condition on discharge; follow-up and, in case of death, autopsy findings.

supervision be available for the study, diagnosis, and treatment of patients, these to include at least (a) a clinical laboratory providing chemical, bacteriological, serological, and pathological services; (b) an X-ray department providing radiographic and fluoroscopic services.



18|

Dr. Bowman



Dr. MacEachern

was never-ending. Recognizing the multidisciplinary nature of optimal cancer treatment, other organizations joined the College to create the Commission on Cancer. The cancer hospital accreditation program now covers 70 percent of incident cancers, with more than 1,500 participating hospitals.11 The National Accreditation Program for Breast Centers, initiated in 2008, has 650 accredited centers. The accreditation process for all of the College programs is used not only for initial survey to verify achievement of program standards, but also for reverification. The National Cancer Database contains more than 30 million cancer cases.

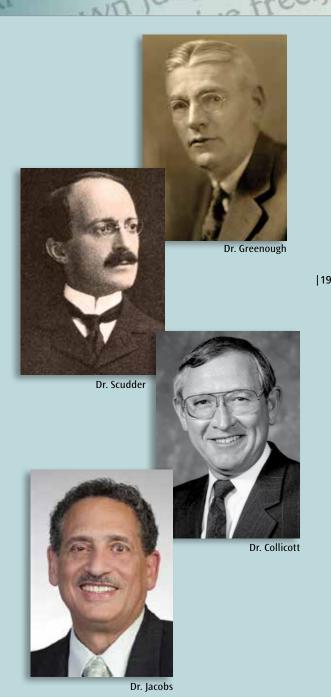
### **Committee on Trauma**

The American Surgical Association formed a committee to evaluate the results of treatment of simple fractures of the femur in 1890. At the annual meeting in 1921, a report was issued that recommended the use of a standard fracture report form, which was recognized by the College. In 1922, the Regents established the Committee on Treatment of Fractures with Charles Scudder, MD, FACS, as Chair. The original organizational structure, with area chairs and local chairs, emphasized the grassroots participation of Fellows and continues to the present. A Manual on Treatment of Fractures was issued in 1931, and the COT was formed in 1939. An updated manual, Resources for Optimal Care of the Injured Patient, first issued in 1976, is now in its sixth edition.

That same year, an airplane crash involving James K. Styner, MD, FACS, and his family occurred in rural Nebraska. No appropriate facilities or standardized approaches for evaluation and management of severely injured patients were available in the area. In a widely read editorial, Dr. Styner noted that folks were probably tired of hearing him criticize the treatment he received prior to transport to Lincoln.12 He enlisted the participation of several other surgeons in developing a trauma training course for physicians in Nebraska. Paul Collicott, MD, FACS, at the time a practicing surgeon in Nebraska as well, participated and took the lead in developing the course called Advanced Trauma Life Support® (ATLS®) modeled on Advanced Cardiac Life Support (ACLS), also developed by a group led by a Fellow in Lincoln. ATLS was approved by the COT in 1979 and by the Board of Regents in 1980. In 1980, 41 courses trained 460 students. In 2015, 3,113 courses trained more than 48.000 students. Since the first course, more than 1.5 million students have participated in more than 75,000 courses. ATLS now ranks as the College's most widely known and successful educational and quality program. Successful completion of ATLS is required for American Board of Surgery certification. ATLS and other courses of the College are used not only for initial training, but also for periodic retraining to maintain knowledge and skills.

The trauma center verification program began in 1987. At present, more than 450 programs have COT accreditations, and 29 have both adult and pediatric center accreditation.

Another current Fellow and ACS Regent, Lenworth M. Jacobs, Jr., MD, MPH, FACS, recognized the dearth of experience surgeons had in managing penetrating trauma and led a group in developing a course in Advanced Trauma Operative Management, ATOM, which the College adopted in 2008. Furthermore, in response to the tragedy at Sandy Hook Elementary School in Newtown, CT, he formed the Hartford Consensus™ to improve the nation's ability to respond to mass casualty incidents.



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**DEC 2016 BULLETIN** American College of Surgeons



Dr. Carrico

201



#### Dr Jones

# Committee on Emerging Surgical Technology and Education

The laparoscopic surgical revolution began June 22, 1988. On that day in Marietta, GA, J. Barry McKernan, MD, FACS, assisted by William Saye, MD, a gynecologist, performed the first laparoscopic cholecystectomy in North America. By September of that year, Eddie J. Reddick, MD, FACS, and Douglas O. Olsen, MD, FACS, in Nashville, TN, reported their case on the national news and the next year at the Clinical Congress they had a booth with a continuous loop video of the procedure; surgeons flocked to see it. Practicing surgeons began to attend courses—usually over a weekend—that were often commercial ventures, were for the most part observational, and lacked hands-on experience. Attendees would return home, have the hospital order the equipment, and begin to operate on patients. It was "see one, do one, and teach one." The learning curve for laparoscopic cholecystectomy was steep; complications soared.

The College recognized that the courses were informal exercises that were irregular in quality and focused only on techniques. There was no standardized curriculum and no documentation of skills acquisition. In 1992, the Regents established CESTE with Jim Carrico, MD, FACS, as chair. The committee's charges were as follows: develop a system and a process to evaluate/reevaluate new technology; develop standards for teaching and assessment of skills; recommend standards for credentialing surgeons in new technology; and initiate outcomes research. Two of the most important education and quality programs of the late 20th century, the Accredited Education Institutes (AEI) and the Division of Research and Optimal Patient Care (DROPC) sprang from CESTE.

In 2001, Ajit K. Sachdeva, MD, FACS, FRCSC, an internationally recognized scholar and early champion of surgical simulation, was recruited to lead the Division of Education in developing new, innovative programs. In 2005, the Regents adopted the AEIs, which provide standardized education and training to adopt new technology or a new procedure, and

are useful for all stages of a surgeon's career from residency to retooling as surgical practice evolves.

In 2004, R. Scott Jones, MD, FACS, 82nd President of the ACS, became founding Director of DROPC and assumed responsibility for bringing the Veterans Affairs (VA) National Surgical Quality Improvement Project to the College. More than 750 non-VA hospitals now participate in this most important, risk-adjusted outcomes measurement program aimed at quality improvement.

Loyal Davis, MD, FACS, 43rd President of the ACS, wrote, "No other medical organization, voluntarily entered into by its Fellows, has exerted such a profound influence on the discipline and art of surgery in the United States."5

# The future belongs to you

So, that is the who, why, what, and how.

Now where do we go? That is up to you.

Surgeons have been responsible for the development and progress of surgery since the early 20th century. The 21st century belongs to you. Our College is the largest organization of surgeons in the world. I want to encourage you to participate in all the activities of the College—for your benefit, and for the benefit of your patients. Participate at the local, state, and national levels and establish personal relationships with leaders at all levels. Be an advocate for our education and quality programs, join the online ACS Communities and your state chapters, and serve as a Governor. Attend the annual Leadership & Advocacy Summit, in Washington, DC. Most importantly, attend the annual Clinical Congress to keep abreast of the latest developments in our profession and to network with other Fellows.

This is your College. It will be what you make it. I am confident that there are those among you who will become leaders to continue the evolution and progress of the College, to inspire quality, to maintain the highest standards, and to ensure better outcomes.

Remember these words by Emily Dickinson: "Surgeons must be very careful when they take the knife! Underneath their fine incisions stirs the culprit—life!"13 Welcome to the American College of Surgeons. ♦

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