The Society of America Gastrointestinal and Endoscopic Surgeons (SAGES)

Overall Mission and Background
SAGES, the Society of American Gastrointestinal and Endoscopic Surgeons, was founded in 1981 with the mission of improving quality patient care through education, research, innovation and leadership, principally in gastrointestinal and endoscopic surgery. Representing a worldwide community of over 6,000 surgeons, SAGES seeks to bring excellence in, and access to, minimally invasive surgery (MIS) and emerging techniques to patients around the globe. You can read more about SAGES at www.sages.org.

SAGES Clinical Guidelines and Training for Standards of Practice in Surgical Procedures
SAGES has been at the forefront of best practices in laparoscopic and endoscopic surgery by researching, developing and disseminating the guidelines and training for standards of practice in surgical procedures. Guidelines are developed under the auspices of the organization and its various committees, and approved by the Board of Governors. Each clinical practice guideline has been systematically researched, reviewed and revised by the Guidelines Committee and also evaluated by an appropriate multidisciplinary team. Guidelines are scheduled for periodic review to allow incorporation of pertinent new developments in medical research knowledge, and practice. SAGES Clinical Guidelines are available at www.sages.org/publications/guidelines/.

SAGES Surgical Education (Fundamentals)
In 2004, SAGES Fundamentals of Laparoscopic Surgery™ or FLS—the nation’s first ever hands-on skills test for performing minimally invasive surgery—became a requirement for board certification by the American Board of Surgery (ABS), the national certifying body for general surgeons and related specialists. FLS includes a comprehensive hands-on skills training component and assessment tool designed to teach the physiology, fundamental knowledge, and technical skills required in basic laparoscopic surgery.

FLS set the stage for FES, the Fundamentals of Endoscopic Surgery™, also required by the ABS, and designed by SAGES to teach and evaluate the fundamental knowledge, clinical judgment and technical skills required in the performance of basic gastrointestinal (GI) endoscopic surgery (endoscopy). Both courses are required of graduating surgical residents in order to be eligible for board certification in general surgery. For more information, visit www.flsprogram.org and www.fesprogram.org.

SAGES recently launched the Fundamental Use of Surgical Energy™(FUSE) program, designed to educate surgeons and affiliated staff about the safe use of surgical energy-based devices in the OR, endoscopy suite, and other procedural areas. The FUSE web-based didactic curriculum is available online, for free, at www.fundamentals-didactics.com and covers topics such as principles of electrosurgical devices, integration of energy systems with other devices, and prevention of operating room fires.
SAGES SMART Enhanced Recovery Task Force
SAGES Surgical Multimodal Accelerated Recovery Trajectory (SMART) Initiative, combining minimally invasive surgical techniques with enhanced recovery pathways for perioperative care, improves outcomes and patient satisfaction. The mission of the SAGES SMART Enhanced Recovery Task Force is to promote the integration of Enhanced Recovery care principles as a cornerstone of minimally invasive surgery to improve safety, efficiency and outcomes of GI surgery.

Great advances have been made in improving patient recovery using minimally invasive surgical techniques, but outcomes can be further improved by combining laparoscopic surgery with an enhanced recovery care plan to deliver evidence based care throughout the perioperative period: preop, intraop and postop. The goal of SAGES SMART enhanced recovery program, to combine multiple perioperative interventions to maximize the value of minimally invasive surgery, but surgeons can’t do this alone.

SAGES Patient Information or Healthy Sooner™
At HealthySooner.org, a patient education project of SAGES, the mission is to improve the overall value of patient care through promoting the adoption of and access to minimally invasive surgical techniques. SAGES has developed SAGES Patient Information Brochures so patients can learn if they may be a candidate for less invasive surgery, questions to ask their surgeon or physician, common procedures, how to prepare, what happens during the operation and what to expect after surgery. More info at Healthysooner.org.

SAGES Education and Research Foundation
The SAGES Education & Research Foundation was created with the vision of a healthcare world in which all operative procedures are accomplished with the least possible physical trauma, discomfort, and loss of productive time for the patient. The mission of the SAGES Foundation is to advance laparoscopic, endoscopic, and emerging minimal access surgical methods by supporting reproducible scientific research, graduate and postgraduate education, and public information. For more information visit www.sagesfoundation.org.

SAGES Go Global: Leveraging Laparoscopy and Endoscopy to Change Global Health
The mission of SAGES Go Global is to promote global collaboration and exchange of knowledge to optimize patient care. Through its webcasting and International Proctoring Courses (IPC) SAGES operates on an international level providing surgical educational world-wide improve health care in low resource regions.

SAGES Go Global, since its founding in 2006, has:
- Held over 21 International Proctoring Courses (IPCs).
  - Collectively these sites have performed over 4,000 basic laparoscopic cases making the majority of the sites not only self-sustainable but a model for duplicating training efforts that expand across each country.
- Conducted an annual webcast from the SAGES Congress and broadcast content to over 67 countries, including, U.S. Armed Forces and Royal Armed Forces. More than 8,000 surgeons worldwide have participated in the webcast.
- Added telementoring to the IPC curriculum in 2009 as a means of expanding educational efforts and to enhance sustainability.
• Held an annual Haiti Lecture Series, now in its second year.
• Provided “Best International Paper Awards” which are travel grants that allow for international presenters to participate in SAGES at the annual congress, in hands-on courses, and as a member.
• Piloted a Train the Trainers course in Mongolia in 2013, led by Drs. Raymond Price and Mike Marohn, to assist local faculty with developing training techniques. In partnership with the Swanson Foundation, the Ministry of Health, and the Mongolia Surgical Society, this program has now reached over 4,000 laparoscopic cases performed. A Train the Trainers Course was also officially launched in June of 2014 in Argentina.
• Launched the Academic Exchange program fall 2014, an observership exchange program with the Chinese Medical Association (CMA).
• For more information, please visit www.sages.org/projects/global_affairs/.

Safe Cholecystectomy Task Force

Over 750,000 cholecystectomies are performed each year in the United States. Patients benefit from reduced pain, faster return to normal activities, and reduced risk of surgical site infection with a laparoscopic approach compared to an open operation.

The Problem: Bile duct injury rates have increased since the introduction of laparoscopic cholecystectomy, occurring in about 3 per 1,000 procedures performed. Bile duct injuries after cholecystectomy can be life altering complications leading to significant morbidity and cost. Because bile duct injuries are relatively infrequent, definitive studies comparing methods to minimize these complications will likely never be performed.

The Safe Cholecystectomy Task Force has identified six strategies surgeons can employ to adopt a universal culture of safety for Cholecystectomy and minimize the risk of bile duct injury. You may find more information on the SAGES Safe Cholecystectomy Program and six strategies here http://www.sages.org/safe-cholecystectomy-program/

1. Use the Critical View of Safety (CVS) method of identification of the cystic duct and cystic artery during laparoscopic cholecystectomy.
2. Perform an Intra-operative time-out during laparoscopic cholecystectomy prior to clipping, cutting or transecting any ductal structures.
3. Understand the potential for aberrant anatomy in all cases.
4. Make liberal use of cholangiography or other methods to image the biliary tree intraoperatively.
5. Recognize when the dissection is approaching a zone of great danger and halt the dissection before entering the zone. Finish the operation by a safe method other than cholecystectomy if conditions around the gallbladder are too dangerous.
6. Get help from another surgeon when the dissection or conditions are difficult.

Hernia Task Force

Hernia Task Force members are developing a procedure-based training focused on decision-making in managing recurrent inguinal hernias. The program will be rooted in best evidence, aimed at practicing surgeons, and delivered through an interactive, web-based platform (virtual patient simulation) that is accessible to learners on demand and in a safe environment. The goal of the program is to provide surgeons with opportunities to practice and develop critical thinking and problem-solving skills through interactive virtual patient cases intended to enhance performance of inguinal hernia surgery.
Quality, Outcomes & Safety
The Medicare program has transitioned to paying physicians based on quality of care delivered, not quantity. Despite a mandate by the Health and Human Services to cut reimbursements for poor quality care, there are no agreed upon defined metrics to be used for surgical care. The SAGES Quality, Outcomes and Safety Committee works to help define validated quality metrics for minimally invasive surgical procedures that could be used to evaluate and improve the services we provide our patients.

Curriculum Task Force
SAGES has formed a Curriculum Task Force (CTF) that is creating training pathways in Biliary, Hernia, Foregut, Colorectal, Endoscopy, and Robotic Surgery that lead to mastery of performance. The new curriculum is called the SAGES UNIVERSITY MASTERS PROGRAM. The CTF is organizing all the enduring materials of the society and using them to create training pathways focused on first achieving competency, then proficiency, and finally mastery. The resulting program will resemble a college curriculum that begins with 100-level courses and finishes with graduate courses. Masters events will be available on an ongoing basis focused on foregut, hernia, and colorectal surgery as well as flexible endoscopy.

Robotics Task Force
SAGES Robotics Task Force provides a balanced view on innovative robotic techniques; defines training so that patient safety is always in the forefront; evaluates clinical trials, research and procedure development to determine robotic outcomes; and creates a facilitated forum that will inform and educate surgeons on the value of robotics in the growing field of MIS.

Telementoring Task Force
SAGES has recognized a gap in the curriculum of teaching practicing surgeons new procedures – support in the operating room during the early part of the learning curve. This support used to be provided by live in-room mentoring from a visiting surgeon, but the logistics and legal hurdles required to provide this support today are becoming insurmountable. To fill this gap, SAGES has embarked on a concentrated effort to use telementoring to support surgeons in their own operating room while they progress through the early part of their adoptive learning curve. Thus, the primary goal of the SAGES Telementoring Task Force is to make this mode of communication available to any surgeon who requires it. On August 20-22, 2015, SAGES hosted the Project 6 Summit bringing stakeholders in the field of telementoring together to identify and overcome barriers to its implementation. A white paper will soon be published from these proceedings, and the work of this group is driving strategy to move the field forward.

SAGES HELPS
Through SAGES HELPS, Humanity Education Leadership Perspective Support, SAGES Annual Meeting participants engage in several projects to support communities where the annual meeting is hosted. Projects have included blood drives, bone marrow drives, book drives, medical instrument drives, involvement in Habitat for Humanity projects and more. For more information, please visit www.sages.org/projects/humanitarian/.

SAGES Humanitarian Mission
As part of the SAGES Humanitarian Mission, SAGES members generously participate in a variety of community and medical volunteering programs in the U.S. and abroad. By visiting the Humanitarian Registry, members can share their own experiences, perspectives and knowledge gained from volunteering and learn about others experiences as well. For more information, please visit www.sages.org/humanitarian-service/.
Surgical Endoscopy

*Surgical Endoscopy* is the official journal of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES). *Surgical Endoscopy* represents the surgical aspects of interventional endoscopy, ultrasound, and other techniques in the fields of gastroenterology, obstetrics, gynecology, and urology, as well as in gastroenterologic, thoracic, traumatic, orthopedic, and pediatric surgery. It offers a worldwide forum for discussion of aspects of interventional endoscopy and ultrasound as integral elements of surgical practice. It also affords the international surgical community a focal point for the exchange of information on practice, theory, and research in various medical and surgical disciplines. For more information, visit [http://www.sages.org/publications/journals/](http://www.sages.org/publications/journals/).