ASA’s Innovative Initiatives to Address Quality and Performance Improvement

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American Society of Anesthesiologists
About The American Society of Anesthesiologists

- ASA® is the leading anesthesiology professional society with more than 52,000 members, representing over 100 countries across the globe.

- Since its founding in 1905, the society raises and maintains the standard of the practice of anesthesiology through education, advocacy, quality improvement and a focus on patient care.

- ASA is dedicated to helping physician anesthesiologists provide the highest quality of care in a patient-centered environment.
Learning Objectives

• Identify new and innovative modalities to simultaneously meet the educational and practice improvement needs of clinicians.
• Describe a patient-centric, team-based model of care created to help meet the demands of a rapidly approaching health care paradigm that will emphasize gratified providers, improved population health, reduced care costs and satisfied patients.
• Devise possible strategies to allow providers to demonstrate that they deliver cost-effective, high quality care and exceptional patient experiences
Perioperative Surgical Home (PSH) Model & Learning Collaborative
Current surgical care is highly variable and fragmented

- Caregivers working in silos
- Occurs in disjointed phases
- High cost
- Delays and inefficiencies
- Long lengths of stay
- Unhappy patients

- High complications and suboptimal outcomes
- Unnecessary or prolonged SNF/home postoperative care
Traditional Surgical Management

- Minimal preprocedure planning
- Variable preop assessment
- Provider choice of anesthesia, no standardized protocols
- Intraoperative variability of physician preference items
- Postop management by surgeon, not protocols
- Inconsistent postop follow-up, bounce backs
The Perioperative Surgical Home Model

- Is a patient-centered, physician-led, interdisciplinary, and team-based system of coordinated care.
- Spans the entire surgical episode from the decision of the need for an invasive procedure – surgical, diagnostic, or therapeutic – to discharge and beyond.
- Designed to achieve the triple aim of improving health, improving the delivery of healthcare, and reducing the cost of care.
Perioperative Surgical Home (PSH) Model

Preoperative
- Patient engagement
- Assessment & triage
- Optimization
- Evidence based protocols
- Education
- Transitional care plan

Intraoperative
- Right personnel for patient acuity and surgery
- Supply chain
- Operational efficiencies
- Reduced variation

Postoperative
- Right level of care
- Integrated pain management
- Prevention of complications

Long Term Recovery
- Coordination of discharge plans
- Education of patients and caregivers
- Transition to appropriate level of care
- Rehabilitation and return to function
- Reduced variation

Supporting Microsystems
- Nursing Pharmacy
- Human Resources Laboratory
- Social Services Central Supply
- Info Technology Radiology

Quality Improvement

Database
Examples of Key Enhanced Recovery/Perioperative Surgical Home Strategies

• Pre-op patient risk stratification and optimization
• Meaningful patient/family education
• Evidence based pre-op testing and care protocols
• Pre-op discharge planning
• Multimodal anesthesia focused on limiting opioids
• Carbohydrate loading
Examples of Key Enhanced Recovery/Perioperative Surgical Home Strategies

- Judicious fluid management
- Earlier ambulation and nutrition
- Nausea/vomiting management
- Continuation of care processes through discharge from SNF or home care
- Continuous performance improvement
Benefits of the Perioperative Surgical Home

• Improves surgical outcomes
• Eliminates silos and the fragmented care process
• Decreases unnecessary testing and utilization of healthcare resources
• Assures appropriate cost-effective post discharge care
• Provides cohesive management of the surgical patient beginning with the preoperative period and ending 30/60 days after discharge
• Enhances the patient and family experience
Aligned with the Ongoing Shift from Volume to Value

Because the PSH care model has demonstrated significant reduction in complications, length of stay, and readmissions, it is particularly effective in positively impacting value based payment models, including:

• CMS’ Bundled Payment for Care Improvement (BPCI) Program
• CMS’ Comprehensive Care for Joint Replacement (CJR) Program
• CMS’ Medicare Shared Savings Program (MSSP)
• Medicaid Bundled Payment Programs
• Commercial Accountable Care Organizations (ACOs)
• Commercial Bundled Payment Programs
• PSH content will be shared at various upcoming conferences including:

ANESTHESIOLOGY® 2018
SAN FRANCISCO
OCTOBER 13-17

ANESTHESIA QUALITY MEETING™ 2018
NOVEMBER 17-18 | Schaumburg, IL

PRACTICE MANAGEMENT™ 2019
JANUARY 18 – JANUARY 20 | PARIS LAS VEGAS | LAS VEGAS, NEVADA
Cases from the Perioperative Surgical Home: A Journey to Improve Quality and Patient Safety

Case studies from 6 institutions participating in the PSH Learning Collaborative

• Focus will be placed on the institutions’ journey and improvement on patient care and outcomes
• Discussion will include the challenges that the institutions faced and the solutions for overcoming those challenges
• Launching at 2018 ANESTHESIOLOGY® Annual Meeting with a live session and included in a 6 part webinar series made available in December 2018
• Available for CME and CRNA credit
PSH Education

• For all National Meetings of the PSH Learning Collaborative several continuing education credits have been secured including:

  - ACHE Continuing Education Credits
  - Continuing Nurses Education
  - Continuing Medical Education
PSH Education

• In 2018, the American Board of Medical Specialties approved the ASA to be a Multi-specialty Portfolio Sponsor.
PSH Education

• In 2018, the American Board of Medical Specialties approved the ASA to be a Multi-specialty Portfolio Sponsor.

• This designation means that physicians who are board certified by one of 21 ABMS Member Boards participating in the ABMS Portfolio Program can now earn Maintenance of Certification Improvement in Medical Practice (Part IV) credit for their involvement in the Perioperative Surgical Home (PSH) Learning Collaborative.
Engagement: Collaborating with team-based care members
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- Health Care Professional Associations
- National Hospital/Health System Associations
- Patient advocacy groups
- Premier
Economics: Supporting today, influencing tomorrow

• ASA is active in discussions with CMS and Private Payers to advance the PSH Model
• The goals of the PSH Model are aligned with those of goals of a variety of value-based models in both the public and private sector including: MACRA-MIPS, MACRA-APMs, BPCI, CJR, Medicaid Bundled Payment Programs, Commercial Accountable Care Organizations and Commercial Bundled Payment Programs
The following PSH IAs have been accepted for 2018:

- **PSH Care Coordination**: Allows for reporting of strategies and processes related to care coordination of patients receiving surgical or procedural care within a PSH.

- **PSH Population Management**: Allows for reporting of strategies and processes related to the population management of patients receiving surgical or procedural care within a PSH.

Since both the PSH Care Coordination and Population Management activities are Medium weighted activities that means that for a general clinician under MIPS, simply participating in a PSH pilot will satisfy half of their reporting requirements under the Improvement Activity category of MIPS. Furthermore, those clinicians who are labelled non-patient facing (which CMS has confirmed that most anesthesiologists will fit into) will receive full credit in the IA category.
PSH MIPS Advancing Care Information (ACI) Credit

• The PSH Care Coordination activity received the rare distinction of being eligible for the Advancing Care Information (ACI) bonus.
• Typically, participants would have to report wholly separate measures for both the IA and the ACI measures, however, CMS has recognized the PSH care coordination activity as also counting towards 10% of their ACI score.
• Only one in four activities has been recognized for this bonus and it represents a huge step forward for providers who spend significant time and resources in providing care coordination in a PSH pilot.
ASA has provided PSH related comments to CMS, PTAC, CMMI and Congress including:

- Comments to delay the start date for Episode Payment Models (EPMs), cardiac rehabilitation incentive payment model and changes to the Comprehensive Care for Joint Replacement (CJР)
- Comments on pediatric alternative payment models
- Comments on the comprehensive advanced alternative payment model for colorectal cancer screening, diagnosis and surveillance
- Comments to Congress’ Subcommittee on Health Committee on Ways and Means regarding their request to identify innovative practices and technology in healthcare
Consultation: Providing customized consultation services
The PSH Learning Collaborative

Brings together leading organizations from across the country to learn from each other and subject matter experts to prepare for implementation of the PSH or to optimize performance post-implementation, including:

- Increased adherence to evidence-informed guidelines and pathways
- Improved quality and safety of perioperative care
- Reduced complications and readmission rates
- Reduced surgical costs and superior value
- Enhanced patient and family experiences
Collaborative Methodology

“Knowing is not enough; we must apply. Willing is not enough; we must do.”
- Johann Wolfgang von Goethe

Accelerating Performance Improvement

- Measure with defined metrics
- Report transparently
- Share best practice
- Execute collaboratively
PSH LC 1.0 & 2.0 Members

• 88 unique organizations comprised of:
  • Academic Medical Centers
  • Community Hospital/Health Systems
  • Pediatric Hospitals
  • Physician Group Practices
  • 32 states represented
PSH LC 1.0 & 2.0 Members
PSH Learning Collaborative 1.0 – Pilots Launched

• 32 of 44 organizations (73%) successfully launched one or more pilots
• Collectively, members launched a total of 64 pilots
• The number of PSH cases completed by each pilot ranged from 14 to 2,700+

• The most common pilots include:
  • Orthopedics (20)
  • Colorectal (6)
  • Urology (5)
  • General Surgery (4)
  • ENT (3)
  • Neurosurgery/Neurovascular (3)
  • Spine (3)
A children’s hospital implemented the PSH for adenoidectomy procedures in early 2015. Some of their preliminary results include:

- 32% decrease in pharmacy costs
- 53% decrease in overall costs
- Savings to the hospital of nearly $50,000 across the first 19 cases

An academic medical center implemented the PSH for joint replacement procedures in 2014. Key results include:

- 28% reduction in average length of stay
- Increased percentage of patients going home rather than to a skilled nursing facility from 17.6% to 32.9%
A community hospital implemented the PSH for total hip and knee joint replacements between 2013 and 2015. Some of the preliminary results include:

- Decrease from 11.9% to 1.9% in readmission rates for total hips
- Decrease from 6.3% to 3.7% in readmission rates for total knees
- Estimated savings of $7,655 over target for each BPCI total joint episode
- Decrease from 25% of patients discharged to SNF or inpatient rehab to 7%
- Increase in patients going home without home health to 67%
Pilots Launched in the PSH LC 2.0

• To date 192 pilots planned or underway
• Total number of cases completed exceeds 37,000
• Most common pilots include:
  • Ortho 33
  • Colorectal 28
  • Pediatrics 17
  • General Surgery 13
  • GynOnc 12
  • Urology 11
  • CABG 5
  • Bariatrics 6
Sample Outcomes from PSH LC 2.0 Length of Stay

- Midwest Academic Center reduced LOS for total joints from 4.6 to 2.1 days
- Community Hospital reduced LOS for colorectal surgery from 5.2 to 3.8 days
- Southeast Community Hospital reduced LOS for total joints from 3.0 to 1.8 days
- West Coast Academic Center reduced LOS for urology surgery by 1.3 days
Sample Outcomes from PSH LC 2.0 (continued)

30 Day Readmission Rate

- Pediatric Hospital reduced rate for Laryngeal Cleft patients from 8.3% to 7.5%
- West Coast Academic Center reduced rate for urology patients to less than 10%
- Southeast Community Hospital reduced rate for orthopedic patients by 35%
- Midwest Academic Center reduced readmissions for orthopedic patients by 50%
Sample Outcomes from PSH LC 2.0 (continued)

Post Discharge Care

- West Coast Academic Center increased patients discharged to home by 38%
- Southeast Academic Center increased patients discharged to home by 18%
- Southeast Community Hospital reduced admissions for orthopedic patients to SNF by 22% and admissions to home health by 34%
- Midwest Academic Center reduced readmissions for orthopedic patients by 50%
• Southeast Regional Center reduced total joint cost per case by $1,816 and colorectal cost per case by $1,046
• West Coast Academic Center reduced operational costs for laparoscopic nephrectomies and open nephrectomies cases by 50%
• Southeast Community Hospital demonstrated an average savings of over $4,000 per Orthopedic case
The PSH Collaborative Helped its Members Reduce Costs of Care and Achieve Return on Investment

- Reduced Length of Stay (up to 50%) & Episode of Care Costs (up to $4-10k)
- Improved Quality & Patient Satisfaction (e.g., decreased pain scores by 75%)
- Reduced Hospital Acquired Conditions (up to 30%) & Readmissions (up to 75%)
- Alignment with Bundled Payment and AC0 programs (e.g., reduced SNF use by up to 50%)
PSH Learning Collaborative 2020 Participants
The PSH Learning Collaborative 2020 – Participation Options

The PSH Learning Collaborative 2020 offers two participation options and a bundle payment add-on option to meet the unique needs of organizations interested in health care redesign.

Core Collaborative
• Designed for organizations interested in learning more about the PSH model of care and those in the early stages of implementing a PSH pilot.

Advanced Cohort
• Created for organizations that are looking to optimize or expand their PSH pilot.
PSH Learning Collaborative 2020 Timeline

Two-year timeline provides time to collaborate, transform and measure performance to demonstrate success.

Key benefits of participation include:
• Peer-to-peer networking and shared learning opportunities
• Access to subject-matter experts on a variety of topics
• Tools and resources to support successful implementation and performance optimization

• May 1, 2018 – Launch date
• May 18-19, 2018 – First in-person meeting
• Summer 2018 – First Advanced Cohort PI sprint
• November 9-10, 2018 – Second in-person meeting
• Winter 2018 – Second Advanced Cohort PI sprint
• May 3-4, 2019 – Third in-person meeting
• Summer 2019 – Third Advanced Cohort PI sprint
• Fall 2019 – Fourth in-person meeting
• Winter 2020 – Fourth Advanced Cohort PI sprint
• April 31, 2020 – End date
PSH Scholarship Program

• In January 2018, the ASA launched its first scholarship program, the PSH Scholarship Program as sponsored by ASA Industry Supporters

• The purpose of the PSH Scholarship Program was to create opportunities for institutions to participate in the PSH Learning Collaborative, who would otherwise be unable to afford membership
PSH Scholarship Program

• This scholarship program was overseen by the PSH LC 2020 Scholarship Review Board, chaired by Gary Loyd, MD
• The Review Board established the criteria to apply, an application process, a scoring rubric and selection process
• As a result of their efforts, we had 9 institutions apply for the scholarship
PSH Scholarship Winners
Summary

• Surgical care is fragmented, non-standard, expensive, and fraught with complications and sub-optimal outcomes
• The Perioperative Surgical Home introduces a coordinated system of care
• Providing cohesive management and resulting in few complications, improved outcomes, lower resource utilization and enhance patient/family experience
• Positively impacting emerging value based payment models
What is Anesthesia SimSTAT

- Developed by ASA and CAE Healthcare
- Practicing physicians experience engaging, high-fidelity scenarios in a virtual environment
- Scenarios were designed to enhance competency for solving anesthesia emergencies
- Virtual patients with unique, realistic diseases
- Interactive anesthesia-related equipment, and monitors
- Complete tracking of users’ actions, providing formative performance feedback, and identifying strengths, weaknesses and areas of improvements
- Physicians can fulfill their MOCA 2.0 Part II and IV requirements
Background and Timeline

- March 2015 – Deadline for RFP Submissions
- May 2015 – Demos were conducted
- August 2015 – Strategic direction and recommendation to ASA Board of Directors
- January 2016 – Contract Signed with CAE Healthcare
- January 2016 – Expert Content Development began
- April – June 2017 – Alpha and Beta testing
- July 2017 – Module 1 – Trauma – was released to public
Screen-Based Simulation: Educational Solution

- Scenario-based eLearning created by ASA simulation experts driven by CAE Healthcare’s validated physiology engine in a virtual environment
- Deployed via the ASA Education Center (LMS)
- Based on ASA practice parameters and guidelines or nationally recognized guidelines (MH, ASRA LAST, AHA ACLS)
- Approved for ABA MOCA 2.0™ Part IV – Improvements in Medical Practice (IMP) credits (up to 5 credits per module for a total of 25 possible points) and Part II Patient Safety CMEs (up to 5 credits per module)

CAE Healthcare Validated Physiology used in the Human Patient Simulation (HPS) Manikin

Anesthesia SimSTAT Environment
Content Creation by ASA and Subject Matter Experts

• 5 initial scenarios were designed to reflect a wide scope of practice that will be clinically relevant and appeal to the private practice, non-specialist ASA member while also being relevant and challenging to academic subspecialist anesthesiologists.

• The scenarios were selected to complement each other while being specifically applicable to the screen-based simulation modality.

• Each scenario is based on ASA practice parameters and guidelines (i.e. Difficult Airway Algorithm, Management of Cardiac Stents) or national recognized guidelines (MH, ASRA LAST, AHA ACLS).
Content Creation (cont..)

- The scenario curriculum content represents performance gaps identified in the literature, closed claim manuscripts, the AHRQ MOCA simulation study and the overall MOCA simulation experience.
- Each was designed to be challenging and have a variety of potential diagnosis, thus encouraging repetitive utilization.
- All of the scenarios involve team work and effective communication and take place in several environments including the operating room, a labor and delivery room and the PACU.
Content Creation (cont.)

• An orientation module was developed and made available to learners.
• Based on performance the learner will be provided feedback in terms of the learner’s individual performance and their performance compared to their peers.
• An individualized educational plan of recommended readings including guidelines, practice parameters and manuscripts will be provided based on the learner’s performance.
ASA – Engaging the Information Age Learner

- Provides an engaging learning experience
- Better meets distant and passive learner needs and ABA MOCA requirements
- Improves learner feedback, reporting and administration
- Provides flexibility to develop and deliver new products
Anesthesia SimSTAT – The Drivers

- **AUDIENCE** – migration from digital immigrants to digital natives
- **ACCESS** – immersive training without the need to travel to a simulation center
- **CONSISTENCY** – offering standardized training across membership
- **CONFIDENCE** – not all physician anesthesiologists have experience training in high-fidelity patient simulators or are conformable learning in front of an audience
- **OBJECTIVITY** – in capture, measurement and assessment of cognitive skills, with performance feedback for improvement
Five Initial Scenarios – Targeting the Care Team Training

• Operating Room Modules
  • Trauma in the OR
  • Appendectomy
  • Anaphylaxis Robotic Surgery

• PACU Module
  • Post-operative crisis

• Labor and Delivery Module
  • Obstetrical Crisis
Significant Enhancements

• An interactive orientation tutorial
  • Modules 2-5 includes access to an interactive orientation tutorial environment to help users learn how to navigate the environment, interface with the personnel and equipment, deliver fluids and medications, and perform procedures before attempting a simulated virtual case. Upon completion, learners will be prepared to handle a simulated intraoperative crisis.

• Ability to pause the lesson
  • This pause feature will allow learners to answer a call or page should they be interrupted while taking the course and will also allow for discussions between learners and facilitators as the virtual simulation progresses.

• Improved feedback
  • Tracking of users’ actions, providing simplified, formative performance feedback and identifying strengths, weaknesses and areas for improvement

• Increased eLearning capabilities
  • improved, more robust e-learning pre- and post-simulation components to facilitate learning, self-reflection and performance improvement.
We’ll begin by walking and looking around the operating room.

Use the ‘W-A-S-D’ or the ‘arrow’ keys on your keyboard to walk and look around the operating room.

Walk to the spot marked by the yellow arrow to continue.
The result screen is displayed after the simulation ends. It identifies all the actions that you performed in the simulation, listed in terms of the core competencies.

You will also see the points you received against the maximum number of possible points. Click ‘Move To Free Play Mode’ to close this screen.
Simulation Paused

Resume Simulation
View Resources

*Simulation will end and restart from the beginning in 29 min 59 secs.

If you do not wish to restart the simulation from the beginning, please click the “Resume Simulation” button before the timer runs out.
Post-Simulation Video
Notify the surgeon to halt the procedure as soon as possible and discontinue any volatile anesthetic or succinylcholine.

Call for the MH cart as soon as possible.

Hyperventilate and increase gas flows.

Give IV Dantrolene as soon as possible.
Module 1 - Trauma
Module 2 - Appendectomy
Module 3 – Robotic Surgery
Module 4 - PACU
Module 5 – Labor and Delivery