

## MESSAGE FROM THE PRESIDENT

**Michael Rosen, MD**



As the Medical Director of the Americas Hernia Society Quality Collaborative, I would like to congratulate the stakeholders involved in this tremendous endeavor. Thank you to the patients who have allowed us to learn from their diseases, the Foundation Partners who have committed to this mission, allowing true quality improvement, the FDA for their continued support and guidance, and the surgeons who have dedicated the

energy and effort to allow us to become this robust community, and changing the way we will practice hernia surgery. In today's healthcare climate, it is critical that our profession collaborates to assure that we can provide the highest quality care to our patients. The AHSQC is truly a landmark initiative. 181 surgeons and roughly 200 sites have come together to add value to the practice of hernia repair. We are honored to report that we are providing data on over 11,000 patients undergoing hernia surgery. This comprehensive data source, now allows the opportunity to answer some of the key questions that have plagued hernia surgery for decades. The impact the AHSQC can have on enhancing care of our patients, is powerful.

It is with great pride, that I share with you our newsletter highlighting many of the AHSQC's successes. We appreciate your contribution to the AHSQC and thank you for your significant support in making the AHSQC successful.

## 2016 AHSQC LEADERSHIP

### President/AHSQC Medical Director

Michael Rosen, MD

### Vice President/AHSQC Director for Quality Outcomes & Data Assurance

Benjamin Poulouse, MD, MPH

### Treasurer

Alfredo Carbonell, DO

### Secretary

Randy Janczyk, MD

### Members at Large

Ajita Prabhu, MD

Jake Greenberg, MD, EdM

William Hope, MD

Stephen McNatt, MD

Guy Voeller, MD

**11,087 Enrolled Patients**  
**181 Participating Surgeons**

## NEWS FROM THE VARIABLES AND DEFINITIONS COMMITTEE

Co-chairs: Ajita Prabhu, MD & Eric Pauli, MD

The AHSQC is a live, dynamic Collaborative continuously working to enhance the detail of the data collected within the registry. If you have thoughts or modifications to how variables are collected/ reported, please do not hesitate to submit your ideas to our Variables and Definitions Committee. The Committee evaluates these suggestions and submits quarterly updates to the database administrators. Two examples of variable changes that were a result of membership input include: incorporating the option for multiple meshes within a single patient and capturing the hybrid robotic surgical approach. Your suggestions help make the data set more complete and robust. If you're thinking you would like to see things captured differently, likely others are too. Please send comments and suggestions via email to the Committee co-chairs: [prabhua@ccf.org](mailto:prabhua@ccf.org) and [epauli@hmc.psu.edu](mailto:epauli@hmc.psu.edu).

## NEWS FROM THE DATA USE AND PUBLICATIONS COMMITTEE

Chair: Corey Deekan, PhD

Thank you to the reviewers of the AHSQC participant research proposals. Reviewer comments and feedback are incredibly valuable and essential to assuring AHSQC research projects are of high caliber. Your time spent assisting as a reviewer is greatly appreciated!

All AHSQC participants are invited to request AHSQC data reports for research and quality improvement projects. Please submit your request to the Data Use and Publications Committee. Please email [datahelp@ahsqc.org](mailto:datahelp@ahsqc.org) to obtain a request form.

## 2016 AHSQC MILESTONES

- Hit 10K ventral hernia cases - enrollment rate continues to increase
- Established an AHSQC funded trainee research grant
- Established AHSQC as a CMS QCDR (Qualified Clinical Data Registry)
- Enhanced value and quality of care through analysis of key metrics
- Identified actionable ways to reduce wound events
- Moved the needle in reducing early readmissions
- Expansion to inguinal hernia planned by year end

## AHSQC - 10,000+ CASES!

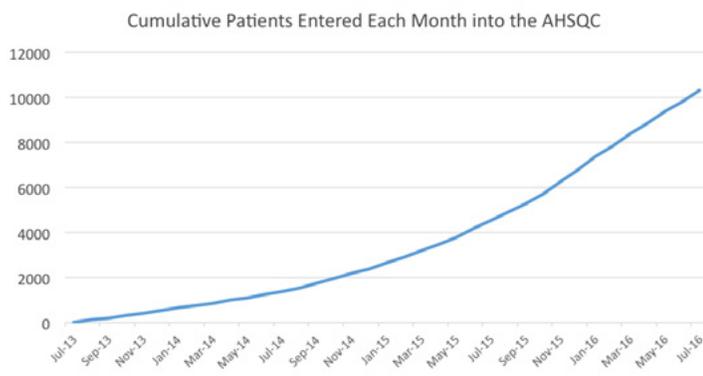
Thanks to your commitment and belief in the importance of the AHSQC, strong growth continues.

In July the 10,000th case was entered into the AHSQC registry. This is a significant milestone which we proudly shared with a widely distributed press release. Beyond our collaboration with surgeons and Foundation Partners, we are grateful to have the FDA also recognize the importance of our efforts to enhance patient care. **“Clinical registries provide useful real-world data to inform health care providers in their clinical practice and help augment the FDA’s understanding of the benefit-risk profile of medical devices,”** states Binita Ashar, M.D., Director of the Division of Surgical Devices at the FDA’s Center for Devices and Radiological Health.

Over the past year alone, the AHSQC has grown 127%, and in just 2 years we’ve gone from 3,000 patients and 85 surgeons participating at the end of 2014 to over 11,000 cases & 180 participating surgeons at the date of this publication.

We are humbled and honored to receive such tremendous support and thank all participants and partners for your continued efforts.

The full press release can be found on our website or by [clicking here](#).



## AHSQC-DATA-DRIVEN RESEARCH GRANTS

The AHSQC Foundation is proud to award two Resident/Fellow Research Grants for research related to ventral hernias utilizing the AHSQC database. Grant awardees were announced in August and they will present their research findings at the AHS Annual Meeting in March 2017. Dr. Ivy Haskins will present ‘Development and Validation of a Ventral Hernia Decision Support Tool using the AHSQC.’ The other recipient, Dr. Thomas Gavigan, will present his findings for ‘Prospective Cohort Study of Patients Undergoing Parastomal Hernia Repair using the AHSQC.’

## UPCOMING ATTRACTIONS...

### Inclusion of Inguinal Hernias

Encouraged by our positive momentum and motivated to expand our mission, we’re excited to announce the AHSQC database will soon allow for the inclusion of inguinal hernia procedures. Thanks to the hard work of our Inguinal Hernia Task Force, development of the module is well underway. We will be previewing the inguinal module at the AHSQC meeting in October and have a full launch and training planned for January 2017.

## DID YOU KNOW?

**For 2016, AHSQC has been established as a CMS Qualified Clinical Data Registry**

*OK... Great...*

*But what does this mean? And, why should we care??*

A Qualified Clinical Data Registry (QCDR) is a CMS approved registry that collects data for outcome reporting, designed to improve the quality of care provided to patients. Individual providers and group practices who satisfactorily participate in 2016 PQRS (Physician Quality Reporting System) through a QCDR may avoid the 2018 negative payment adjustment (-2.0%) penalties with the upcoming value based payment model.

As is often the case, third party payers and state Technical Advisory Groups may follow CMS and adjust their payment models to encourage reporting of outcome measures.

Establishing the AHSQC as a QCDR was an important goal, as we believed it was critical that hernia-specific outcome measures be developed by hernia surgeons who actually operate on patients. The AHSQC QCDR Task Force, leading the effort, is comprised of 11 surgeons selected by the AHS leadership who are not only experts in our field, but also represent the wide practice of hernia surgery. This team worked diligently to create 8 outcome measures that can be used for value based payments.

### QCDR Task Force:

Gina Adrales, MD, MPH	Karl LeBlanc, MD, MBA
J. Scott Roth, MD, MBA	Brent Matthews, MD
Jacob Greenberg, MD, EdM	Eric Pauli, MD
Dana Telem, MD, MPH	Ben Poulouse, MD, MPH
Kristi Harold, MD	Guy Voeller, MD
William Hope, MD	

You can find the specification document on the AHSQC website or by [clicking here](#). Quality metrics will be available for participants to view starting in August. We encourage you to use these metrics and track your results compared to the collaborative as a whole. Additionally the AHSQC will review these outcome measures and other AHSQC collected data to identify high performance sites and characterize best practices which can be evaluated and shared across the collaborative.

## SAVE THE DATES

### AHSQC Quarter 3 Meeting / General Session

Tuesday, October 18, 2016 - 6:00 - 8:30pm  
Renaissance Washington DC  
During ACS Clinical Congress

### AHS 18th Annual Hernia Repair AHSQC Session

March 9, 2017 - 6:30 - 8:45 am  
Cancun, Mexico

## IN CASE YOU MISSED THE AHS ANNUAL MEETING...

The 2016 AHS Annual meeting included presentations by a number of our participants. With a robust data set within the AHSQC, analyses of aggregate groups identified several easily actionable items that can help us improve clinical outcomes for our patients.

Here's a quick recap. A full recording and the presentations can be viewed on the website or by [clicking here](#).

## AREAS OF IMPROVEMENT FOR PATIENT OUTCOMES

### Drains

Alfredo Carbonell, DO presented analyses of drain use in 1,100 patients (915 drains, 185 no drains) who underwent open retromuscular sublay VHR. When the groups (drain/no drain) were compared directly, no differences in surgical site infection (SSI) or surgical site occurrence (SSO) rates were observed. However, when adjusted, odds ratios reflected that retromuscular drain use was protective against SSOs ( $p < 0.05$ ). A second analysis of a 2:1 matched cases (357 drains:182 no drains) demonstrated that drains are being used in more complex cases – patients with higher BMI, longer OR time, and TAR procedures. When the matched groups were analyzed, no statistically significant differences in SSI, SSO or SSOPI (surgical site occurrence requiring procedural intervention) rates were noted. Thus use of drains – even in complex cases - does not convey an increased risk of wound complications - and retromuscular drain use may in fact be protective against SSOs such as cellulitis and seroma.

### Bowel Prep

David Krpata, MD assessed the impact of bowel prep on surgical site occurrences. With an overall rate of 11.6% within the AHSQC, he took a deeper look at bowel prep use in Class I hernia repairs. Comparing outcomes using 3:1 matched groups, patients who received bowel prep had a significantly higher rate of post-operative SSI and SSOs. No difference in SSI/SSO rates was identified when comparing Class II/III hernia groups. Based on these findings, it was recommended that bowel prep be removed from pre-operative protocols in elective VHR.

### Chlorhexidine Scrub

Ben Poulouse, MD evaluated the use of pre-hospital chlorhexidine gluconate (CHG) scrub on 30-day post-operative wound events (SSI, SSO, SSOPI) in 3,924 patients. Multiple analyses demonstrated that prehospital CHG was associated with a significant increase in wound events. It can be hypothesized that the CHG may be negatively impacting the native dermal environment by altering the positive “good” bacteria residing on the skin. Thus, it is recommended that CHG scrub not be used in patients undergoing ventral hernia repair.

### Contemplating Chevrel

Guy Voeller, MD reviewed mesh positioning options – onlay, underlay, sublay - noting there still is no strong rationale for selecting one method over the others. He evaluated a matched cohort of patients within the AHSQC receiving onlay with fibrin glue fixation (90 patients) or sublay mesh placement (171 patients). No significant differences in wound events (SSI, SSO, SSOPI) between the groups were found. Dr. Voeller suggested in some patients there may be advantages to the Chevrel approach, with immediate adhesive fixation of the entire mesh, but cautions technique is critical.

### Robotics

Robotics – the current “Hot Topic” surrounding hernia repair – was the subject of another of Ben Poulouse’s talks. Using the AHSQC data, a 3:1 matched open (321) vs robotic (111) elective class I retromuscular repairs were evaluated, looking primarily at length of stay. Results indicated the LOS for robotic cases was significantly lower than LOS for open cases (mean 2.1 days vs 5.1 days). Additionally, no significant differences in wound outcomes or readmissions between the two groups were identified. Of note, the robotic cases were more likely to be performed on smaller, non-recurrent hernias using a transversus abdominis release (TAR) and less likely to use drains. Based on these real-world outcomes, it is suggested that the benefit of robotic retromuscular VHR to reduce hospital stay should be taken into consideration when evaluating approaches for VHR in appropriate patients.

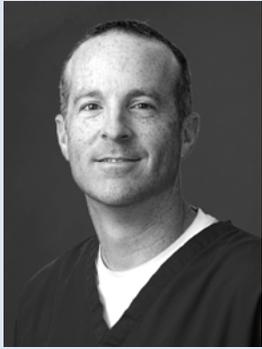
## AHSQC KEY TAKE AWAYS FROM ANNUAL MEETING 2016:

- In 1,100 patients, retromuscular drain use was protective against SSOs
- In 1,227 patients, bowel prep was associated with increased SSI/SSO in wound class I VHR, no effect on wound class II/III VHR
- In 3,924 patients, prehospital chlorhexidine scrub associated with increased wound events in wound class I VHR
- In 442 patients, robotic retromuscular repairs in class I VHR associated with reduced length of stay compared to open (2.1 days vs 5.1 days)

***Thank You to our 2016 Gold Foundation Partners. We appreciate your ongoing support and dedication to improving hernia patient care.***



## AHSQC SURGEON SPOTLIGHT: Eugene Dickens, MD, FACS



It's a common question—"How can I possibly incorporate AHSQC into my already incredibly busy schedule?"

While our leaders often comment "data entry is fast and easy," we wanted to take this question to others, particularly the hard working private

practitioners in our ranks and ask their opinion.

Dr. Gene Dickens, a community-based private practitioner from Tulsa, OK, has been an AHSQC participant since August 2015. He was kind enough to share his thoughts on the AHSQC.

"I decided to join the AHSQC in an effort to find a vehicle that could independently assess outcomes following incisional hernia repair. I joined the AHSQC to put my data into the hands of those most respected and trusted to measure the outcomes fairly.

The learning curve is very short; it is not difficult to enter cases into the AHSQC. It takes a MAXIMUM of 5 minutes to enter all the data into the database. I do this at the time of surgery, and usually immediately postop.

The AHSQC has enhanced my practice by allowing me to measure my outcomes over time. I can get real time information on my outcomes and compare them against the field and my peers on a routine basis. I can use this to see if there is a way to improve my outcomes if I am a low performer. I can take advantage of suggestions to enhance my surgical approach, which emerge as a result of the AHSQC aggregate analyses and initiatives.

The pooled data allows us as a group to get POWERFUL data to see if trends emerge. It allows us to learn in a much shorter time frame and potentially improve our offering to patients. I can use this information to market myself to referring providers or directly to patients.

The AHSQC is the best way to truly measure quality and outcomes for this disease process. I don't believe any previous method is universally applicable or accepted. I can also use the AHSQC quality metrics to help me avoid CMS payment penalties.

I believe any surgeon performing hernia surgery should participate in the AHSQC. As surgeons we like to complain, but often we don't have any meaningful way to make positive change. The AHSQC is doing just that."

## UPDATE ON THE NATIONWIDE AHSQC REDUCTION IN READMISSIONS INITIATIVE

In an effort to identify best practices to reduce 30-day readmissions, a detailed analysis of cases entered between July 2013 – May 2015 was performed. Findings indicated that patient contact between discharge and a regularly scheduled 30-day postoperative visit seemed to play a role in reduced readmissions. To prospectively evaluate this observation, beginning in November 2015 the entire AHSQC was invited to participate in a quality improvement initiative which involved patient contact via a questionnaire or a clinic visit prior to regularly scheduled 30-day postoperative visits. From November 2015 - May 2016, 3007 patients were entered; 1242 receiving some form of contact prior to 30-days and 1765 not. A comparison of outcomes clearly indicated that questionnaire or clinic visit administered prior to routine 30-day postop follow up REDUCES readmissions. Within the AHSQC alone, 29 readmissions were avoided, saving approximately \$337,270. It is recommended that post-discharge, pre-30 day patient contact be implemented as standard practice following ventral hernia repair.

- Implementing the AHSQC Reduction in Readmissions Questionnaire resulted in a 58% reduction in risk adjusted 30-day readmissions.
- A clinic visit prior to routine 30-day postop visit was associated with a 52% reduction in 30-day risk adjusted readmissions
- Within the AHSQC, Reduction in Readmissions Initiative: 29 readmissions avoided; saved \$337,270
- It is recommended that post-discharge, pre-30 day patient contact be implemented as standard practice following ventral hernia repair.

### FOCUS ON FOLLOW-UP

We are thrilled to report an 88% 30-day follow-up overall within the AHSQC. Fantastic job everyone! That said, there's some room to improve. We've set a goal of >95% 30-day follow-up captured in the database. Please make every effort to help us hit this objective. Big Kudos to those who have already exceeded this target, with 100% follow-up and at least 25 patients!

Anthony Falvo, MD  
Rick Gemma, MD  
Sharon Grundfest-Broniatowski, MD  
Javier Herrera, MD  
Jeffrey Janis, MD

Kent Kercher, MD  
Richard Miller, MD  
Sean Orenstein, MD  
Samuel Szomstein, MD  
Amber Shada, MD

### PLEASE UPDATE CONTACT & STATUS INFORMATION ON PATIENTS ENROLLED BETWEEN 2013-2015

AHSQC is preparing to initiate a targeted outreach to subsets of patients in order to increase the availability of longer-term outcomes data. It is very important that the most current contact information (phone, address, email) is available within the database in the Demographics section. Also, it is critical to be sure any deaths or recurrences are recorded (click on 'status' at top right after selecting patients) so these families/patients will not be contacted. In addition to recording this under 'status' also be sure to record any additional clinical follow up after 30-days postop if available. Thank you for your assistance!

**For any questions regarding the AHSQC or how to sign up, please contact [shelby@ahsqc.org](mailto:shelby@ahsqc.org)**