

# ABDOMINAL CORE HEALTH QUALITY COLLABORATIVE FOUNDATION

## ANNUAL REPORT 2020



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# PRESIDENT'S MESSAGE



2020 was a year unlike any other. We have all faced unprecedented challenges and serious concerns about the well-being of our families, colleagues, communities, friends, and especially our patients. In 2020 the world changed, and so did the Collaborative. Yet, amidst the uncertainty, the determination and dedication of our team of surgeons, partners, and patients to enhance patient care never faltered.

Although throughout the year elective surgeries including most hernia and abdominal wall cases were put on hold, I'm proud to report that the Collaborative continued to move forward, focusing our energy on opportunities to further involve and inspire stakeholders. With the changing environment, the Collaborative transformed how we engaged with each other. We developed and delivered online interactive programs such as our new QC Core Insights monthly series, offering continuous opportunities to learn from and engage with peers remotely.

One of the most significant changes to come about in 2020 was the transformation of our organization into the Abdominal Core Health Quality Collaborative. This new branding embodies our holistic approach of utilizing real world data across interrelated specialties to improve the continuum of care of patients. ACHQC surgeons care for abdominal core conditions beyond hernias and, importantly, our new name acknowledges the role the QC plays as part of a comprehensive team dedicated to enhancing and supporting the long term health and quality of life of patients with abdominal diseases.

Notably in 2020, we:

- Managed and grew our ACHQC Registry of real world data. At the conclusion of 2020, the Registry included data collected on over 72,600 operations performed by 450 surgeons in 42 states across the USA.
- Developed virtual educational programs including "QC Core Insights" - which provides critical review of "Hot Topics" in hernia and abdominal core health. The program is freely delivered on a monthly basis via Zoom with "on-demand" video recordings on our website.
- Developed free downloadable data-driven information to enhance outcomes including patient guides for pre-rehabilitation and post-surgical recovery as well as pain management and opioid reduction strategies.
- Continued rigorous assessment of data from the Registry by our Analytics Team which resulted in 14 peer-reviewed papers published in high caliber journals in 2020, bringing the total peer reviewed publications to 55 since our inception.
- Launched new Committees within the Collaborative to further focus and support Patient Advocacy, Residents /Fellows, Research, and our diverse Membership.

This was an extraordinary year to say the least and the ACHQC continued to thrive. On behalf of the ACHQC Board, thank you to our surgeons, health care providers, Foundation Partners, and importantly our patients for your ongoing support. You are the Core of our story and we would not be here, delivering programs, fulfilling our mission, and supporting our community without you.

The road ahead in 2021 may still throw us a few curves, but I have no doubt that due to your ongoing commitment and dedication to our endeavor, our Collaborative will continue to expand, innovate, and truly impact the patient experience.

Michael Rosen, MD  
President & Medical Director  
Abdominal Core Health Quality Collaborative  
rosenm@ccf.org



# ACHQC MISSION

***To maximize the quality and value of health care for patients who suffer from hernia disease and diseases of the abdominal wall or abdominal core through collaborative learning.***

## **2020 Notable Achievements**

- Transformed into the Abdominal Core Health Quality Collaborative
- Registry grew to over 72,600 cases performed by 450 surgeons in 42 states across the USA
- Launched QC Core Insights premier virtual educational program, offered free to all on a monthly and “on-demand” basis
- Developed free downloadable data-driven patient guides and opioid reduction strategies
- 14 peer-reviewed papers published in high caliber journals, bringing the total peer-reviewed publications using QC data to 55 since inception
- Launched new Committees within the QC to further focus and support Patient Advocacy, Residents/Fellows, Research, and our diverse Membership

# 2020 LEADERSHIP

With our transformation into the ACHQC in 2020, our Board of Directors expanded to 12.



Michael Rosen, MD  
President  
ACHQC Medical Director



Benjamin Poulouse, MD, MPH  
Vice President  
ACHQC Director of  
Quality & Outcomes



Jeremy Warren, MD  
Treasurer



Randy Janczyk, MD  
Secretary



Ajita Prabhu, MD



Jake Greenberg, MD, EdM



William Hope, MD



Rebecca Petersen, MD



Michael Reinhorn, MD, MBA



Arielle Perez, MD, MPH



Flavio Malcher, MD



Nicole White, MD



Carol Goddard  
ACHQC Executive Director



Nicole Goddard  
ACHQC Privacy & Security

# ACHQC COMMITTEES

\* New in 2020

## \* MEMBERSHIP & SURGEON OUTREACH COMMITTEE

Co-Chairs: Todd Harris, MD & David Krpata, MD

## \* QUALITY IMPROVEMENT COMMITTEE

Chair: Ragnar Peterson, MD

## \* PATIENT ENGAGEMENT & ADVOCACY COMMITTEE

Co-Chairs: Harriet Schwartzman & Eric Beauford

## \* DATA INTEGRATIONS COMMITTEE

Co-Chairs: Jeremy Warren, MD & Clayton Petro, MD

## \* RESEARCH COMMITTEE

Chair: Richard Pierce, MD

## \* RESIDENT/FELLOWS COMMITTEE

Chair: Kevin Baier, MD

## VARIABLES & DEFINITIONS COMMITTEE

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

## DATA USE & PUBLICATIONS COMMITTEE

Chair: Corey Deeken, PhD

## RESIDENT/FELLOW RESEARCH GRANT REVIEW

Co-Chairs: Jacob Greenberg, MD, EdM & David Webb, MD

## INGUINAL HERNIA TASK FORCE

David Chen, MD; Jeffrey Blatnik, MD & Richard Pierce, MD

## OPIOID REDUCTION TASK FORCE

Chair: Michael (Micki) Reinhorn, MD

## ABDOMINAL CORE SURGERY REHABILITATION WORKING GROUP

Chair: Ben Poulouse, MD, MPH



# SPOTLIGHT: Q&A WITH ACHQC TEAM

## WHY CHANGE TO ABDOMINAL CORE HEALTH QUALITY COLLABORATIVE?

**Benjamin Poulouse, MD, MPH:** There has been a long recognized need for a new concept in the management of the abdominal wall and its diseases. The concept of abdominal core health emphasizes the multidisciplinary aspect of our field and it really resonates with patients who come to us wanting to focus on health and not dwell on disease. Our surgeons care for abdominal core conditions beyond hernias and importantly our new name acknowledges the role we play as part of a comprehensive care team dedicated to enhancing and supporting the long term health and quality of life of our patients.



## HAS THE REGISTRY CHANGED WITH THE TRANSFORMATION INTO THE ACHQC THIS YEAR?

**Ajita Prabhu, MD:** The ACHQC Registry is the most comprehensive real-world data repository for hernia repairs in the US. With the Collaborative's new, broader focus on diseases of the abdominal core, in 2020 our Registry expanded to include information on treatment of diastasis, cancer and tumors, chronic pain, and core muscle injuries. We now routinely can collect data on patients' pre-habilitation and rehabilitation courses. What's particularly exciting is that we have access to world-class analysts who can serve as resources to our participants. And, we have the ability to perform embedded registry studies, allowing for streamlined, rapid data collection to answer research questions.



## HOW DID COVID-19 IMPACT THE ACHQC THIS YEAR?

**Mike Rosen, MD:** Without a doubt, the pandemic posed challenges to our Collaborative. While surgeons were often restricted from operating throughout the year, we had the opportunity to consider ways we could focus on deepening our connection – albeit virtually - with our members, partners, and importantly the patients we serve. In addition to becoming "Zoomers", we launched new Committees within the QC including those specifically engaged on driving Patient Advocacy, Residents /Fellows, Research, and Membership. I'm really excited about how energized our Committees are and the inspiring ideas that have already been generated by these teams.



## WHY DID YOU JOIN THE ACHQC AND WHY DO YOU THINK OTHERS SHOULD PARTICIPATE?



**Arielle Perez, MD, MPH:** The ACHQC is a very beneficial platform to follow our patients' outcomes after surgery. It helps us evaluate our own outcomes versus outcomes of other surgeons.



**Flavio Malcher, MD:** I'm always looking for improvement opportunities with reliable information. The ACHQC offers an easy and fast way to maintain your case log with secure data storage and an opportunity to study your results compared to the nationwide experiences of others performing similar surgeries.



**William Hope, MD:** The ACHQC is a hernia initiative that helps with tracking of patients and quality improvement. We act like a small society where you can get education and be part of a great group.



**Nicole White, MD:** As surgeons it is important for us to control our own data and be critical of our outcomes. Participating in the ACHQC allows me to contribute to collection of real world data and offers me visibility to on-demand outcomes analysis of key performance measures as opposed to waiting for years to see outcomes.



**Randy Janczyk, MD:** I joined the ACHQC to provide data to support science to drive better patient outcomes. Others who join will find the ACHQC an opportunity to contribute to science and also a valuable resource to learn about one's own practice.

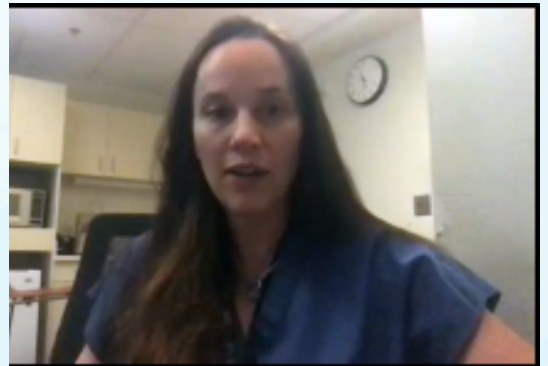
## HOW HAS PARTICIPATING IN THE ACHQC HELPED YOU?

**Michael (Micki) Reinhorn, MD, MBA:** Through my participation in the QC, I've been able to meet like-minded people who believe in a growth mindset. There's a huge sense of camaraderie among this group. Everyone in the QC is passionate about building people up. Through the ACHQC and the work of the Opioid Task Force, we can monitor pain and corresponding opioid usage and offer suggestions for post-operative pain management while reducing routine opioid prescribing patterns.



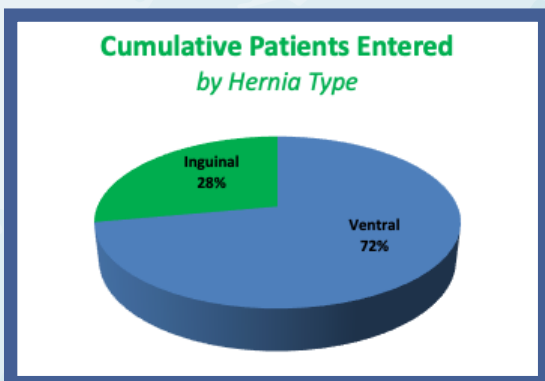
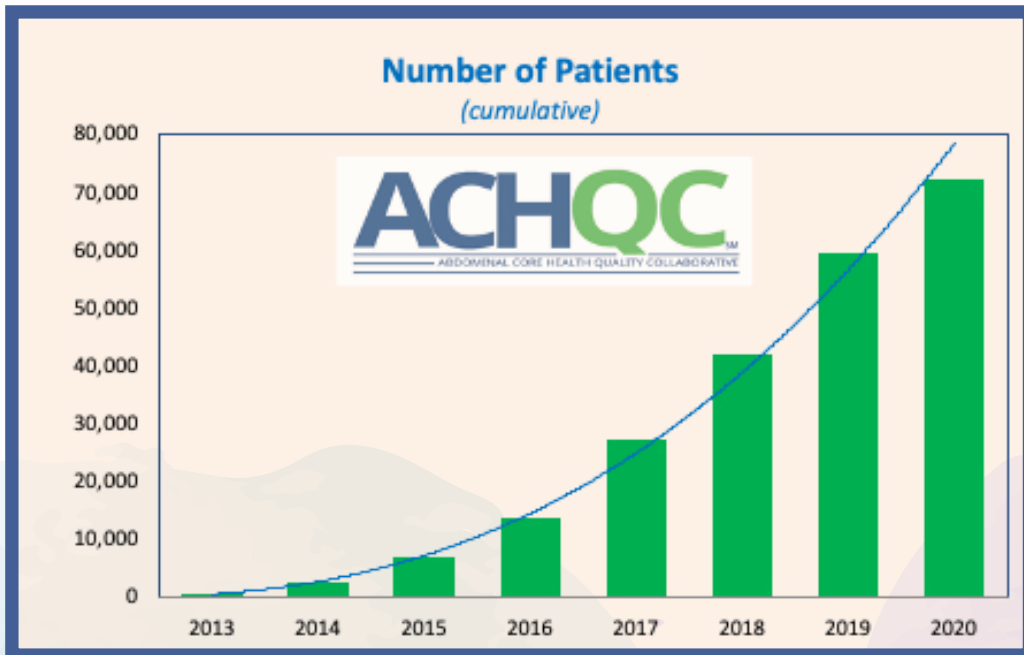
**Todd Harris, MD:** Participation in the Collaborative distinguishes me as a leader in my community. I really appreciate the opportunity for peer-to-peer discussions. After the last QI Summit, I took some of the information and best practices I learned and applied them to my practice in order to provide better care for my patients.

**Rebecca Petersen, MD:** The QI Summit is an extraordinary experience. The Summit offered opportunities share tips and tricks and really meet in small groups. I have definitely implemented approaches that I learned at the Summit into my practice including the opioid reduction strategies.

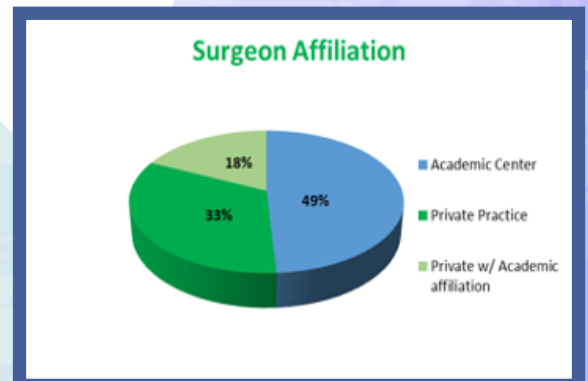


# 2020 PROGRESS

Although elective hernia surgeries were impacted by COVID-19 in 2020, at the close of the year the ACHQC Registry had grown to over 72,600 ventral and inguinal hernia cases performed by over 450 surgeons in academic and private practice settings across the United States.



Inguinal hernias now represent 28% of cases in the ACHQC Registry.



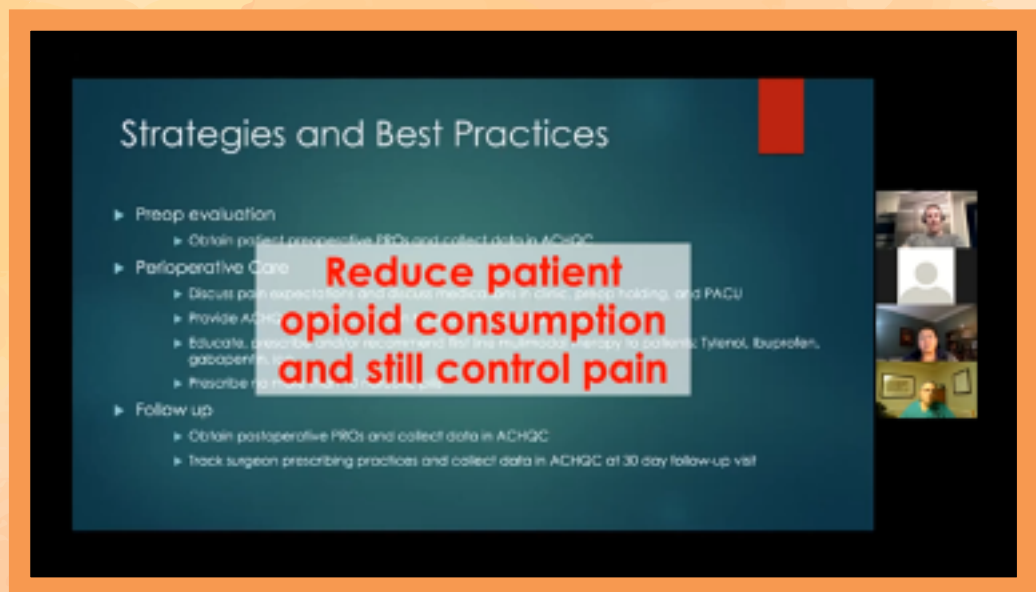
Participants include academic and private practice surgeons.

# COLLABORATIVE IMPACT & QI INITIATIVES

## PROFESSIONAL DEVELOPMENT

The ACHQC is committed to ongoing professional development for surgeons and other patient caregivers and offers participation in the ACHQC free of charge to all US based surgeons and abdominal core health specialists.

Since our inception, the Collaborative has delivered a wide range of opportunities to research, measure, and review quality metrics to enhance patient centered hernia care. In 2020, ACHQC members shared their research and practices virtually, allowing continuous and widespread dissemination of information amidst the global pandemic.



# SPOTLIGHT: QC CORE INSIGHTS

Launched in November, 2020, **QC Core Insights** is a live monthly open-access online program providing timely, data-driven information and opportunities for interactive collaborative learning throughout the year.

**QC Core Insights** features talks on “Hot Topics” in Abdominal Core Surgery and review of recent publications, ACHQC quality initiatives and data analyses. Each session incorporates a 10-15 minute presentation by the author of the work followed by 2 invited discussants offering critical point/counterpoint review and open participant discussion.

Following our inaugural **QC Core Insights**, participants were surveyed regarding the quality and value of the program. Attendees found the program extremely valuable with 100% of respondents rating the overall value of the **QC Core Insights** discussion as Excellent or Good. All survey respondents indicated that they would recommend attending future **QC Core Insights** to their colleagues.

**QC Core Insights** are open to any interested participant and is offered free of charge. Sessions are recorded and available on our website for “on-demand” viewing.

“This is important for us because our “typical” means of information-gathering and learning is currently impaired due to the pandemic.”

- QC Core Insights Attendee



*December 7, 2020 QC Core Insights discussion on Embedded Randomized Control Trial: Heavy Weight vs. Medium Weight Mesh in Ventral Hernia Repair. Clayton Petro, MD presented and Dr. Jeremy Warren and Dr. Eugene Dickens were the discussants during the session.*

# RESEARCH GRANTS

The ACHQC encourages residents and fellows to use the wealth of data collected in our Registry as a means of enhancing their research training. The ACHQC Resident/Fellow Grant is conferred on a competitive basis by submission of a Grant application that is reviewed and evaluated by the ACHQC Resident/Fellow Research Grant Review Committee.

The ACHQC Foundation congratulates Dr. Ryan Lamm who was awarded the 2020 ACHQC Resident/Fellow Research Grant for his project titled "Are short-and long-term outcomes in cancer-related ventral incisional hernia repair worse than in the general population? An Abdominal Core Health Quality Collaborative (ACHQC) database study".

Dr. Lamm will present his research at the ACHQC 2021 Quality Improvement Summit.

## 2020 RESIDENT/FELLOW RESEARCH GRANT RECIPIENT



*"Are short-and long-term outcomes in cancer-related ventral incisional hernia repair worse than in the general population? An Abdominal Core Health Quality Collaborative (ACHQC) database study"*

**Ryan Lamm, MD**  
PGY3 Surgical Resident  
Thomas Jefferson University Hospital, Philadelphia PA  
Mentor: Francesco Palazzo, MD, FACS

## PAST RECIPIENTS: RESIDENT/FELLOW RESEARCH GRANT

### 2018

**Aldo Fafaj, MD**

*"Registry-based, Randomized Controlled Trial Comparing Intra-operative Foley Catheter versus No Catheter for Minimally Invasive Inguinal Hernia Repair"*

**IbnaIwalid Saad, MD**

*"Perioperative Analgesia with Transversus Abdominis Plane (TAP) Block versus Epidural Analgesia: Analysis from the Americas Hernia Society Quality Collaborative"*

### 2017

**Angela Kao, MD**

*"Comparison of Outcomes After Parital (PME) versus Complete Mesh Excision (CME)"*

### 2017 Cont

**Luciano Tastaldi, MD**

*"AHSQC-embedded Randomized Controlled Trial - Telescopic Dissection vs. Balloon Dissection for Laparoscopic TEP Inguinal Hernia Repair"*

### 2016

**Thomas Gavigan, MD, MSc**

*"Prospective Cohort Study of Patients Undergoing Parastomal Hernia Repair Using the Americas Hernia Society Quality Collaborative"*

**Ivy Haskins, MD**

*"Development and Validation of a Ventral Hernia Decision Support Tool Using the AHSQC"*

# SHARING COLLABORATIVE EXPERIENCES

Analyses of ACHQC data were presented virtually at international conferences focused on Abdominal Core Health throughout the year. Topics included:

- Randomized Controlled Trial of Heavyweight and Medium Weight Mesh in Open, Retromuscular Ventral Hernia Repair
- ACHQC Opioid Task Force Update & Recommendations
- The Efficacy of Liposomal Bupivacaine on Postoperative Pain Following Abdominal Wall Reconstruction
- Is There an Ideal Plane for Mesh Placement During Incisional Hernia Repair? An Analysis Using the Americas Hernia Society Quality Collaborative
- Results from Complex Abdominal Reconstruction at a Non-Academic Institution can Favorably Compare to Major Academic Centers
- Risk Factors for Incisional Hernia Recurrence and Surgical Site Occurrence or Infection in the Abdominal Transplant Population – An Americas Hernia Society Quality Collaborative (AHSQC) Analysis
- HerQLes Assessment of Individual Components: A 5 Year AHSQC Analysis
- Proposing A Systemic Approach to Repairing Flank Hernias: A Single-Center Experience
- The Utility of Botulinim Toxin A (BTA) in Abdominal Wall Reconstruction (AWR): A Retrospective Analysis of the Americas Hernia Society Quality Collaborative

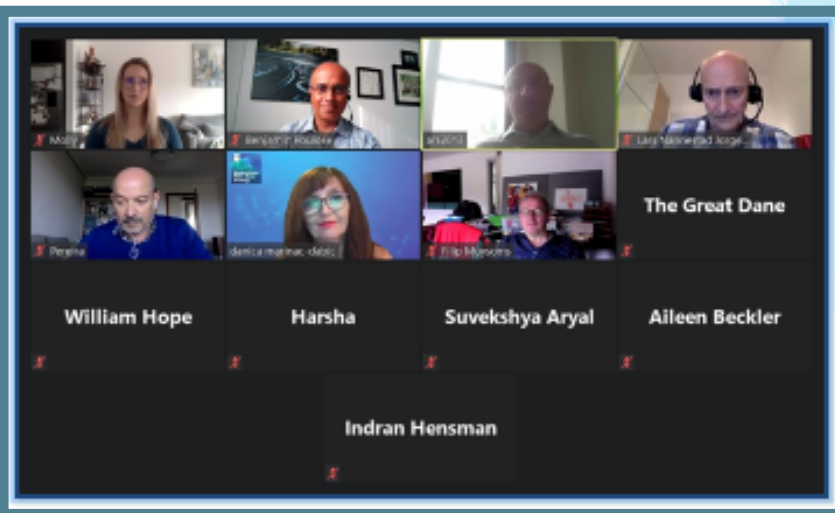


*Michael (Micki) Reinhorn, MD chairs The Opioid Task Force meetings each month.*

# SPOTLIGHT: COORDINATED REGISTRY NETWORKS & GLOBAL HARMONIZATION

The ACHQC guides a strategic Coordinated Registry Network (CRN) tasked by the FDA's Medical Device Epidemiology Network Public- Private Partnership and the National Evaluation System for health Technology (NESTcc) to help address key clinical questions and surveillance of techniques and devices essential to hernia patient outcomes.

Representatives of MDEpiNet, FDA and registries from around the world participated in the first annual Abdominal Core Health International Symposium in September 2020. These global thought leaders are committed to developing strategies for harmonization of real world data collection registries to track outcomes and support robust post-market surveillance.



Representatives from across the world attended the first annual Abdominal Core Health International Symposium in September 2020.



## GLOBAL TEAM:

- Filip Muysoms, MD, PhD  
(EuraHS, Belgium)
- Ferdinand Kockerling, MD  
(Herniamed, Germany)
- Lars Jorgenson, MD  
(Danish Hernia Database, Denmark)
- Thue Bisgaard, MD  
(Danish Hernia Database, Denmark)
- Agneta Montgomery, MD  
(Swedish Hernia Registry, Sweden)
- Jean-Francois Gillon, MD  
(Club Hernie, France)
- Jose Antonio Pereira Rodriguez, MD  
(Evereg, Spain)
- Harsha Chandraratna, MBBS  
(Australian Hernia Clinical Quality Registry, Australia)
- Chris Hensman, FRACS, MS  
(Australian Hernia Clinical Quality Registry, Australia)
- Alex Karatassas, FRACS, MS  
(Australian Hernia Clinical Quality Registry, Australia)
- William Hope, MD  
(ACHQC, USA)
- Benjamin Poulouse, MD, MPH  
(ACHQC, USA)

# PEER REVIEWED PUBLICATIONS

The ACHQC recognizes the critical need for robust evidence as a resource to support and encourage meaningful improvements which can impact the patient experience. Our advanced analytics team performs hundreds of rigorous analyses of real-world data collected in the ACHQC Registry each year. These efforts resulted in 14 peer-reviewed papers published in high caliber journals in 2020, expanding our compendium of peer reviewed publications to 55 since the inception of the Collaborative.

## 2020 Publications:

**Comparing 30-day Outcomes Between Different Mesh Fixation Techniques in Minimally Invasive Inguinal Hernia Repair.** Tish S, Krpata D, AlMarzooqi R, Huang LC, Phillips S, Fafaj A, Tastaldi L, Alkhatib H, Zolin S, Petro C, Rosen M, Prabhu A. *Hernia*. 2020 Jan 20. doi: 10.1007/s10029-020-02123-8. [Epub ahead of print].

**Abdominal Core Quality of Life After Ventral Hernia Repair: A Comparison of Open Versus Robotic-Assisted Retromuscular Techniques.** Guzman-Pruneda FA, Huang L, Collins C, Renshaw S, Narula V, Poulouse B. *Endosc*. 2020 Jan 28. doi: 10.1007/s00464-020-07386-x. [Epub ahead of print].

**Robotic-assisted and Laparoscopic Hernia Repair: Real-World Evidence From the Abdominal Core Health Quality Collaborative (ACHQC).** LaPinska M, Kleppe K, Webb L, Stewart T, Olson M. *Surg Endosc*. 2020 Mar 31. doi: 10.1007/s00464-020-07511-w. [Epub ahead of print].

**The Effect of Fixation Methods on Outcomes in Laparoscopic Ventral Hernia Repair.** Hope W, Bilezikian J, Appleby P, Faulkner J, Smith A. *Surg Technol Int*. 2020 Mar 26;36:sti36/1286. [Epub ahead of print].

**Is concomitant cholecystectomy safe during abdominal wall reconstruction? An ACHQC analysis.** AlMarzooqi R, Tish S, Tastaldi L, Fafaj A, Olson M, Stewart T, Prabhu A, Krpata D, Petro C, Rosen M. *Hernia*. 2020 May 16. doi: 10.1007/s10029-020-02208-4. [Epub ahead of print].

**Is There an Advantage to Laparoscopy Over Open Repair of Primary Umbilical Hernias in Obese Patients? An Analysis of the Abdominal Core Health Quality Collaborative (ACHQC).** Fafaj A, Tastaldi L, Alkhatib H, Tish S, AlMarzooqi R, Olson MA, Stewart TG, Petro C, Krpata D, Rosen M, Prabhu A. *Hernia*. 2020 May 23. doi: 10.1007/s10029-020-02218-2. [Epub ahead of print].

**Non-coated Versus Coated Mesh for Retrorectus Ventral Hernia Repair: A Propensity Score-Matched Analysis of the Abdominal Core Health Quality Collaborative (ACHQC).** Thomas JD, Fafaj A, Zolin SJ, Horne CM, Huang LC, Phillips S, Rosenblatt S, Petro CC, Krpata DM, Rosen MJ, Prabhu AS. *Hernia*. 2020 Jun 3. doi: 10.1007/s10029-020-02229-z. [Epub ahead of print].

**Advantages of a Fixation-Free Technique for Open Retromuscular Ventral Hernia Repair.** Etemad SA, Huang LC, Phillips S, Stewart TG, Pierce RA, Schneeberger SJ, Poulouse BK. *Plast Reconstr Surg*. 2020 Jun 23. doi: 10.1097/PRS.00000000000007165. [Epub ahead of print].

**Registry-Based Randomized Controlled Trials: A New Paradigm for Surgical Research.** Zolin S, Petro C, Prabhu A, Fafaj A, Thomas J, Horne C, Tastaldi L, Alkhatib H, Krpata D, Rosenblatt S, Rosen M. *Journal of Surgical Research*. 2020 Jun 23. doi: 10.1016/j.jss.2020.05.069.

**Hybrid Robotic Transversus Abdominis Release Versus Open: Propensity-Matched Analysis of**

**30-day Outcomes.** Abdu R, Vasyuk A, Reddy N, Huang LC, Halka JT, DeMare A, Janczyk R, Iacco A. Hernia. 2020 Jun 30. doi: 10.1007/s10029-020-02249-9. [Epub ahead of print].

**Appropriate Patient Selection Facilitates Safe Discharge From the PACU After Laparoscopic Ventral Hernia Repair: An Analysis of the AHSQC Database.** Haskins IN, Vaziri K, Huang LC, Phillips SE, Farrell TM, Perez AJ. Surg Endosc. 2020 Jul 1. doi: 10.1007/s00464-020-07761-8. [Epub ahead of print].

**Opioid Use After Inguinal and Ventral Hernia Repair.** Millard J, Moraney R, Childs J, Ewing J, Carbonell A, Cobb W, Warren J. Am Surg. 2020 Aug 11. doi: 10.1177/0003134820942179. [Epub ahead of print].

**Evaluating outcomes for robotic-assisted inguinal hernia repair in males with prior urologic surgery: a propensity-matched analysis from a national database.** Angus A, DeMarre A, Iacco A. Surg Endosc. 2020 Oct 1. doi: 10.1007/s00464-020-08020-6. [Epub ahead of print].

**Patient-Reported Outcomes of Robotic vs Laparoscopic Ventral Hernia Repair With Intraperitoneal Mesh: The PROVE-IT Randomized Clinical Trial.** Petro CC, Zolin S, Krpata D, Alkhatib H, Tu C, Rosen MJ, Prabhu AS. JAMA Surg. 2020 Oct 21. doi: 10.1001/jamasurg.2020.4569. [Epub ahead of print].



**Viewpoint**  
December 18, 2019  
**Abdominal Core Health—A Needed Field in Surgery**  
Benjamin K. Poulouse, MD, MPH; Glau L. Adrales, MD, MPH; Jeffrey E. Janis, MD<sup>2</sup>  
► **Author Affiliations**  
JAMA Surg. 2020;155(3):185-186. doi:10.1001/jamasurg.2019.5055

Poulouse BK, Adrales GL, Janis JE. Abdominal Core Health—A Needed Field in Surgery. JAMA Surg. 2020;155(3):185-186.

# FOUNDATION PARTNERS

Our Foundation Partners demonstrate a steadfast commitment and dedication to the ACHQC Foundation's mission to improve the quality and value of patient care. The support of Foundation Partners is crucial to our ability to continue to manage and expand the ACHQC Registry and offer quality improvement programs and resources free of charge to surgeons, patients, and clinical care teams across the country.

With sincere gratitude and thanks, the ACHQC recognizes our 2020 Foundation Partners:

## PLATINUM LEVEL



**Medtronic**  
Further, Together

## GOLD LEVEL



 **Allergan**

INTUITIVE  
SURGICAL®

 **BD**   
has joined BD

## SILVER LEVEL



**COOK**®  
BIOTECH

  
Creative Technologies  
Worldwide

**ETHICON**  
PART OF THE *Johnson & Johnson* FAMILY OF COMPANIES