# TOP RESOURCES OF 2018 For CARDIOTHORACIC SURGEONS



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### 7 Qualities of an Effective Medical Leader Should Possess

Posted by Roger DeLong, CP, PE, MBA on Nov 7, 2018 7:30:00 AM

Think of someone you consider a great leader. Maybe a former manager, coach, mentor or just someone in your social circles who always seems to take charge naturally. qualities medical leaderWhat about this person makes them the right fit for a leadership role? Generally, it's not one thing, but a collection of attributes that primes someone to lead.

But what are the exact qualities someone must possess to not only emerge as a leader but excel in their position? According to a <u>study by the American Association for Physician</u> <u>Leadership (AAPL)</u>, seven traits make medical professionals successful leaders.

#### **ADAPTABLE**

Change is the one constant in the medical profession. Sometimes it feels like the industry is evolving by the minute, and keeping up can be challenging. But instead of bucking progress and holding fast to outdated methods and processes, good leaders strive to be flexible and embrace innovation—and they work to set a positive example for their team.

### **ETHICAL**

Given that ethics are a cornerstone of any medical profession, this one should go without saying. However, successful leaders don't just **follow ethical rules**, they also believe in them. They're bound to doing what is right by their moral compass, and they inspire others to do the same.

### VISIONARY

There's no sugarcoating it. As a medical professional, there are plenty of setbacks, challenges and bad days. But as a leader, one has to see beyond the minutiae of the day-to-day and remember the big picture—and help bring it into focus for others. What we do is bigger than us, and the best leaders ensure their team never loses sight of the importance of our work.

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#### INTROSPECTIVE

While taking pride in your work is essential to success in medicine, developing an ego can be disastrous for one's career and the culture one creates for a team. That's why it's crucial for medical leaders to be introspective. Not only can this help leaders identify their own areas of opportunity, but it's also helpful for self-identifying <u>feelings of burnout</u>.

### VIGILANT

As mentioned, things in the medical industry change regularly. In this fast-paced line of work, vigilance is critical to the well-being of a team and its patients.. The best leaders can recognize when something is amiss and react immediately.

### TACTICAL

Similar to vigilance, being tactical is essential for ensuring positive outcomes. Medical professionals don't often have the luxury to slowly mull over various strategies and test multiple theories before choosing an option. Instead, we have to think on our feet—and think fast. Great leaders can quickly and efficiently plan out their actions, and simultaneously earn buy-in from their team.

### **KNOWLEDGE SEEKING**

One of the best leadership skills isn't just possessing knowledge, but being hungry for more. Great medical leaders understand they don't know everything, but they're always interested in growing their knowledge base and improving in their work. These leaders also drive their direct reports to broaden their skills and continue their education throughout their careers.

It's important to recognize these seven <u>leadership traits</u> are not necessarily innate. While some people are so-called born leaders, it's possible to grow leadership skills throughout one's career. To become a more effective medical leader, honing these qualities is a great place to start.

### **3 Ways Surgeons Can Avoid Malpractice Through Better Communication**

Posted by Roger DeLong, CP, PE, MBA on Oct 15, 2018 7:30:00 AM

Nearly everyone has encountered a colleague whose poor and disruptive behavior affected their team. Whether it's someone who yells, snaps at others, intimidates surgeon behavior malpracticecolleagues or has a flippant or aggressive communication style, negative behavior can affect the vibe of any workplace. But when surgeons misbehave, it can also affect patient safety and lead to an uptick in <u>medical malpractice claims</u>, according to new research.

<u>A Harvard study</u>, published in July 2018, collected and de-identified 360-degree review data for 264 surgeons between 2012 and 2013 and compared it to medical malpractice data from 2000 to 2015. The study concluded that surgeons who exhibited negative behaviors were more likely to also have a malpractice claim, and reports of positive behaviors were associated with fewer malpractice claims.

So what can healthcare organizations and the surgical community do to rectify negative behavior and the resulting risk of claims? Here are three ways to improve surgeon behavior.

#### FOCUS ON IMPROVING SURGICAL CULTURE

Often, behavior issues like poor communication or dismissing colleagues with opposing opinions about clinical decisions and medical treatment plans stem from problems within the organization's culture.

Many times, surgeons who bulldoze over their colleagues, withhold information or take an aggressive, hard-line stance do so because they believe they're protecting their patients. In reality, this sort of behavior is counterproductive and can lead to mistakes.

"Our findings emphasize the importance of respectful communication and teamwork and show that surgery needs a culture change," says the study's lead author, Janaka Lagoo, M.D., in <u>an article published by CRICO</u>. "Ultimately, a surgical culture that promotes teamwork, communication and constant personal and professional growth could be advantageous for patients and physicians alike."

### **IDENTIFY RISKS AND AREAS FOR IMPROVEMENT**

The same Harvard study also discovered that nearly half of the surgeons considered have at least one claim. In other words, behavior isn't always the cause of a medical malpractice claim, and poor outcomes happen even under the watchful eye of the best-trained surgeons.

### **USE 360-DEGREE REVIEWS**

Regular reviews will not only help identify negative behavior but can also foster better collaboration among surgeons and help organizations prepare better action plans for making necessary improvements.

But in addition to organizational and process-related issues like miscommunication, 360-degree reviews can also unearth bigger problems like anger management or substance abuse among surgeons, and allow organizations the opportunity to address these issues before they lead to medical errors and malpractice lawsuits.

The Harvard study only corroborates what most medical professionals already know: At best, bad behavior can lead to frustration among colleagues. At worst, it leads to critical mistakes in the operating room. By addressing cultural and behavioral issues, healthcare organizations can reduce the risk of medical malpractice claims and improve patient care quality.

# TOP CARDIOTHORACIC SURGEONS OF 2018

Advancements in cardiothoracic surgery are continuing today thanks to the work of innovative cardiothoracic surgeons across the country.

In this eBook, we will take a look at some top surgeons making a difference in the field in 2018.

# **Top Cardiothoracic Surgeons of 2018**

### **OUR METHODOLOGY**

This report profiles practicing cardiothoracic surgeons who have made significant contributions in the field of cardiothoracic surgery. The selected surgeons are recognized specifically for their clinical research or involvement in landmark cardiothoracic studies and procedures. They are in no particular order.



### Dr. Joseph Bavaria PENN MEDICINE

#### WHAT HE'S KNOWN FOR:

Pioneering complex aortic surgery, cardiopulmonary transplants and valve surgery.



### Dr. Jennifer (Hirsch) Romano

UNIVERSITY OF MICHIGAN CARDIOVASCULAR CENTER

WHAT SHE'S KNOWN FOR: Focus on congenital heart defects. While his studies began with chemical engineering, Dr. Joseph Bavaria soon realized his passion for medicine. He combines this background and over 20 years of practice to achieve worldrenowned praise as a thoracic and cardiac surgeon.

As a **past president of the Society of Thoracic Surgeons**, Dr. Bavaria leaves a legacy of encouraging greater collaboration in the cardiothoracic surgery community and advancing digital learning. He was also a driving force behind the study of an alternative approach to treating thoracic aortic aneurysms, as opposed to open surgery.

For the past several years, Dr. Bavaria has been named as one of the Best Doctors in America, and is also recognized annually in the Top Docs issue of Philadelphia Magazine.

It wasn't too long ago that Dr. Jennifer (Hirsch) Romano received the <u>Nina Starr Braunwald award</u>—one of the highest honors for women in cardiac surgery. She applied her grant to the development of a tool that could assess the sensory and motor skills of infants after surgery for congenital heart defects.

As the surgical director of pediatric cardiothoracic surgery, Dr. Romano has experience in various types of treatment for congenital heart defects. In 2009, she was part of a team that performed a pre-birth hybrid procedure on an infant suffering from congenital heart defects.

Dr. Romano is a fellow of the American College of Cardiology as well the American College of Surgeons.



### **Dr. Yolonda Colson**

BRIGHAM AND WOMEN'S HOSPITAL

#### WHAT SHE'S KNOWN FOR:

Clinical work in minimally invasive surgery, immunologic diseases of the chest, thoracic surgical oncology and women's lung cancer.



### Dr. Naser Ammash MAYO CLINIC

#### WHAT HE'S KNOWN FOR: Expertise in adult congenital heart

disease and echocardiography

Dr. Yolonda Colson has always enjoyed the intellectual challenge that comes with solving clinical puzzles. In an effort to make a difference in the lives of her patients, as well as other patients, she has helped pioneer studies around new techniques for tumor localization in early-stage lung cancer as well as investigational therapy for sarcoma.

Her years of experience and passion for patient care have led to her role as the **associate administrative chief in the division of thoracic surgery**. She is also director of the women's lung cancer program.

Throughout her career, Dr. Colson has received many honors, including the first Michelle Kessler Leadership Award in Women's Health and the Edward M. Kennedy Award for Healthcare Innovation.

When it comes to the diagnosis and treatment of cardiovascular diseases, Dr. Naser Ammash is regarded as one of the top specialists. While he's best known for his work in congenital heart disease and echocardiography, his expertise extends to aortic syndromes, as well as pregnancy and heart disease.

After completing multiple fellowships, Dr. Ammash has gone on to serve as a consultant in cardiovascular disease and a professor of medicine. He is also a member of the <u>Cardiovascular Board</u> <u>Adult Congenital Heart Disease Exam Committee</u>, making him a crucial advisor of what defines his respective disciplines.

His research has involved the novel percutaneous closure of a left atrial appendage as well as a novel predictor of recurrence of atrial fibrillation post electrical cardioversion.



**Dr. Francis Sutter** LANKENAU HEART GROUP

#### WHAT HE'S KNOWN FOR:

Robot-assisted minimally invasive direct coronary artery bypass grafting



# Dr. Gabriel Aldea

WASHINGTON MEDICINE

#### WHAT HE'S KNOWN FOR:

Specialization in valve replacement and repair, minimally invasive heart surgery and cardiopulmonary bypass surgery for aortic aneurysms. Dr. Francis Sutter has long embraced the concept of minimally invasive surgery. After a fundraising drive where he and his partner raised \$1 million, they were able to purchase a da Vinci Surgical System to help them perform minimally invasive hybrid CABG surgeries in which their internal thoracic arteries (ITAs) were endoscopically harvested. The distal anastomosis was hand-sewn and bypass flow was measured post-anastomosis using a Transonic intraoperative flow probe.

Since that time, Dr. Sutter has performed <u>thousands of robot-</u> <u>assisted heart bypass operations</u>, more than any other surgeon in the U.S. This less invasive procedure has saved patients from the large incisions that traditional coronary bypass surgery requires.

As a strong advocate of and spokesperson for intraoperative flow measurement, Dr. Sutter uses Transonic coronary flow probes to ensure him of the integrity of the anastomosis before closing the patient.

Dr. Gabriel Aldea is the section chief for adult cardiac surgery at the University of Washington Medicine. With more than 30 years of experience, he has dedicated his efforts to introducing better methods for cardiac surgery and evaluating the quality of care as well as outcomes.

Just last year, Dr. Aldea took part in a **novel heart-valve procedure** that utilized a new aortic technique. By using a catheter to replace failed artificial aortic valves, the procedure offers new hope in the advancement of minimally invasive surgery.

Seattle Magazine has recognized Dr. Aldea as one of the top specialists in thoracic and cardiac surgery.



**Dr. Daniela Molena** MEMORIAL SLOAN KETTERING CANCER CENTER

WHAT SHE'S KNOWN FOR: Advancement of esophageal surgery. For Dr. Daniela Molena, the importance of thoracic surgical care in developing countries is clear. That's why she dedicated much of her research to identifying socioeconomic healthcare disparities as well as pathways to lower costs and achieve better results.

This focus has been paired with an interest in developing new technologies and image-based techniques that minimize invasiveness. One example is the <u>minimally invasive</u> <u>esophagectomy (MIE)</u>, which has fewer complications than its open surgery counterpart and is less painful for patients.

Dr. Molena currently works as the director of the esophageal surgery program at the Memorial Sloan Kettering Cancer Center.

# The Future of Cardiothoracic Surgery

### By 2035 — less than 20 years — the <u>average caseload for</u> <u>cardiothoracic surgeons</u> could increase by 121 percent.

While that certainly means you'll be in demand, it also brings to mind the question: What will the cardiothoracic field look like in 2035? Will surgeons be using ultra modern technologies to diagnose and treat patients? Will patients be using technology to help diagnose and treat themselves? What will the world of surgery look like?

In his letter to residents shared with the American Association for Thoracic Surgery, Dr. Edward D. Verrier points out that to succeed in the future, cardiothoracic surgeons must:

- Partner with industry and embrace new technology.
- Have better control of imaging.
- Participate in solid scientific prospective clinical trials.
- Maintain a basic scientific foundation.
- Face change head-on.
- Constructively adapt to disruptive challenges.

# The Role of Technology and Tools of the Future

In their commentary for the Journal of Cardiovascular and Thoracic Surgery, Drs. Tom Nguyen and Isaac George note that vascular surgeons were able to successfully evolve because they were proactive. And because they were proactive, vascular surgeons were able to adapt to the three key areas required for transformation:

- Wholesale clinical adoption
- Aggressive revision of training program paradigms
- Investment in clinical innovation

### Adding More Tools to Your Treatment Toolbox

The right technology can provide the assistance you need to improve outcomes and prepare for the future.

#### ROBOT-ASSISTED MINIMALLY INVASIVE DIRECT CORONARY ARTERY BYPASS GRAFTING (MIDCAB)

In 35 consecutive patients who underwent MIDCAB via a small thoracotomy on a beating heart from 2005 to 2013, their internal thoracic arteries (ITAs) were endoscopically harvested through three ports using the da Vinci Surgical System in a completely skeletonized fashion before performing MIDCAB. The distal anastomosis was hand-sewn using a vacuum stabilizer. Flow was measured postanastomosis using a Transonic intraoperative flowprobe.

#### INTRAOPERATIVE FLOW-MEASUREMENT TECHNOLOGY

Graft patency is a leading factor in both short-term and long-term positive CABG outcomes; with surgical and technological advances, any early graft failure is unacceptable, yet it still happens. Today's <u>intraoperative flow-measurement technology</u> is being used to improve outcomes and reduce costs. With Transonic's newest flowmeter, the Optima 354C, surgeons have access to enhanced CABG patency assessment that fuels efficient decisions and avoids preventable reoperations SEE HOW OUR FLOW-MEASUREMENT TECHNOLOGY CAN HELP YOU

Request a demo today

### Leadership in the OR: How Different Styles Could Impact Outcomes

Posted by Tim Callahan on Jul 30, 2018 8:00:00 AM

Leadership is crucial to success in the OR. Successful surgeons are often marked by their technical skill, knowledge, and diagnostic judgment; but the non-technical skills of good leaders are just as important. Failed communication often results in patient harm and financial risk for hospitals. After reviewing over 23,000 malpractice lawsuits, Circo Strategies <u>found</u> that over 7,000 patient harm cases were due to miscommunication. These cases cost the healthcare system an estimated \$1.7 billion. OR-leadership

With patient health at stake, it's imperative that surgeons learn strong leadership skills. But what does effective leadership actually look like? Depending on who's steering the boat, the personality style of a leader greatly impacts team efficiency and patient outcomes. A **study** presented by the Journal of the American College of Surgeons identified two types of leadership styles in the OR: transactional and transformational. Below, we'll look more closely at which one is most effective when leading your OR team.

### **TRANSACTIONAL LEADERSHIP**

Transactional leadership, or "task-oriented" leadership, is probably the most familiar style of leadership. Transactional leaders tell group members what to do and when to do it. They take charge of group organization, establish a clear chain of command, and motivate team members through reward and punishment strategies. Transactional leadership is more managerial in approach. Businesses and athletics often rely on transactional leadership to achieve success in the corporate world or on the field. While this style may be good for scoring touchdowns or closing a deal, it has some definite **drawbacks** in the OR. Communication often suffers under transactional leadership because it encourages people to follow a strict set of rules and directives. Transactional leaders can be harder to question or challenge, which discourages OR team members from speaking up if they have a suggestion or notice a problem. Team members are also expected to stay in their lane, decreasing their flexibility and creativity when it comes to solving problems. These failures in communication can lead to an **increase** in surgical errors and flow disruption.

### **TRANSFORMATIONAL LEADERSHIP**

A <u>report</u> by SIMAD University defines transformational leadership as "the ability to motivate and to encourage intellectual stimulation through inspiration." The <u>leadership qualities</u> of a transformational leader include leading by vision and example, valuing individual input and relationships, and setting high standards within collective goals. In the BMC Nursing <u>study</u>, researchers found that supervisor support was a key characteristic of transformational leadership that positively correlated with increased job satisfaction.

Transformational leadership may be extremely effective in the OR because it encourages communication and information-sharing in a controlled environment. Team members who work with a transformational leader tend to speak up more because they know their opinions are valued. The results of the <u>JACS study</u> found communication increased by 2 times and information-sharing increased by 5.4 times for every 1 point increase in a surgeon's transformational leadership score.

Justin A. Maykel, MD, <u>suggests</u> that the traditional "aristocratic, domineering surgeon" has been replaced by one who sets patient-centered goals shared with all team members. Effective leadership will ultimately affect patient health for the better. Good leaders will work to understand how their leadership style impacts their OR team, and how it can cause them to sink, remain stagnant, or sail the turbulent surgery seas with confidence.

# GETTING HOSPITAL ADMINISTRATORS TO SUPPORT INTRAOPERATIVE FLOW MEASUREMENT

# **DURING CABG**



**Top Resources of 2018 for Cardiothoracic Surgeons** 

![](_page_16_Picture_1.jpeg)

### How does a product add value to patient care? What is its cost? Does it contribute to improved patient outcomes?

When evaluating different equipment for a hospital, these are all questions that the value analysis committee is likely to ask. The answers help this team of representatives—one that often includes high-level hospital administrators—navigate through numerous equipment requests and prioritize those with the greatest benefit to their hospital and bottom line.

To support the accurate decision-making of the value analysis committee, clinicians need to provide ample data on the value of specific technologies. This means presenting a clear vision of how the equipment aligns with the hospital's strategy, as well as both its short- and long-term objectives.

This guide will offer suggestions on how to present the value of intraoperative flow measurements during coronary artery bypass grafting (CABG) to your value analysis committee specifically hospital administrators.

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# **Effectively Managing Flow in CABG**

"If you can't measure, you can't manage."

![](_page_17_Picture_3.jpeg)

In some cases, flow measurement is assessed simply through clinical observation and the feeling of the vessel. Feeling a pulse only indicates that the vessel is connected to the heart. It is a subjective qualitative measure that is not quantitative.

In other cases, a Doppler probe may be placed on the vessel. This approach, however, doesn't measure volume flow; it just measures velocity, and is less precise and accurate than transit-time volume flow measurements.

The most accurate intraoperative quality check of coronary artery bypass grafts is transit-time flow measurements. Measuring volume flow through bypass grafts is paramount in ensuring functioning grafts and the success of the CABG surgery. As you establish this increased level of quality, the hospital benefits as a whole.

## The Benefits of Transit-Time Flow Measurement in CABG

### **FEWER READMISSIONS**

Readmissions have always been a point of concern for hospitals. But with the advent of CMS's Readmissions Reduction Program in 2012, there is an increased financial incentive to reduce or eliminate readmissions.

Recently, this program's list of applicable surgeries has grown to include **patients admitted for CABG surgery**. That means that if a patient goes home from the hospital and is readmitted within 30 days, the hospital is penalized by a 3% reduction in reimbursement.

By alerting surgeons of flow-limiting problems during surgery and prompting corrective action, intraoperative flow measurement is an effective way to reduce the incidence of postoperative complications and avoid hospital readmissions and their subsequent costs. This also avoids the additional costs that come with the utilization of the OR for reoperations.

In a Medicare Payment Advisory Commission (MedPAC) report to Congress, **CABG surgery was** found to have the highest potentially preventable readmission rate.

#### **IMPROVED PATIENT SATISFACTION**

A hospital's quantity of care was once the metric used to pay providers. In the age of value-based programs, healthcare providers are rewarded financially for the quality of care they deliver.

In this new environment, higher patient satisfaction scores have become especially important. Hospitals are encouraged to treat each patient experience as an investment and leverage tools that support initiatives for improvement. Intraoperative flow measurement is one of the tools that falls under this umbrella. When patients avoid coming back to the hospital after CABG for any reason, their satisfaction scores are bound to increase.

#### **BETTER PATIENT OUTCOMES**

Every hospital wants to have a great track record for surgical success. One of the most powerful ways to measure this is by how your patients feel after surgery—both in the short-term and the long-term.

In the case of CABG surgery, patients with wellfunctioning grafts will feel better and have better outcomes. By detecting unseen blood flow obstructions that prompt re-examination by the surgeon, thus reducing early graft failure following CABG surgery, intraoperative flow measurements with transit-time ultrasound play a vital role in achieving better patient outcomes.

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![](_page_19_Picture_7.jpeg)

## Easily Incorporate Flow Measurement into Operations

#### THE TIME

Intraoperative flow measurement that can help save a graft is a relatively short and simple part of a CABG procedure. In fact, clinicians can measure 3-4 grafts within a matter of 2 minutes or less, making sure that the vital flow needed by the heart continues.

#### THE COST

When you consider the **expenses of CABG procedures**, the cost of reoperations can have a substantial impact. The cost of the equipment per procedure is relatively minimal in comparison to the cost of a reoperation. Hospitals are able to easily recoup their costs within a year and also avoid the hurdles that come with purchasing capital equipment.

#### THE ACCESSIBILITY

Introducing new technology in hospitals can be challenging. Intraoperative flow measurement tools from Transonic streamline this transition with easy-to-use features and functionality. Flow measurement is also beneficial in other applications such as transplant and vascular access surgeries where this technology is used.

![](_page_20_Picture_8.jpeg)

## Validation of Transit-time Ultrasound Flow Measurements

Transit-time ultrasound technology has been robustly validated against other methodologies including beaker stopwatch and angiography. A recent Oxford University study validated transit-time ultrasound with beaker stopwatch in 68 grafts and determined that transit-time ultrasound is "an accurate indicator of left internal mammary artery (LIMA) blood flow during CABG with a clinically acceptable precision." Amin S, Werner, RS, Taggart DP et al, Ann Thorac Surgery 2018 March 29.

#### **REDUCE VENTRICULAR FIBRILLATION AND POSTOPERATIVE COMPLICATIONS**

In a <u>study led by Dr. Stefan Bauer</u>, the incidence of postoperative fibrillation and myocardial infarction were assessed between two groups of patients—one with flow measurement and one without. The group without flow measurement experienced 0.66% fibrillation and a 30% mortality rate, while the group with flow measurement experienced 0.44% fibrillation and a 12.2% mortality rate.

### PREDICT GRAFT PATENCY AT ONE YEAR POST-OP

At Copenhagen University, surgeons sought to identify whether transit-time flow measurement could be used to **predict graft patency at the one-year post op**. In this case, graft failure was defined as greater than 50% stenosis. The clinicians found that transit-time flow measurement is a valuable resource in assessing the risk of graft failure within the first year after CABG surgery.

![](_page_21_Picture_7.jpeg)

"The intraoperative use of flow measurements provide invaluable information in a timely, accurate, cost-effective manner enabling surgical corrections when appropriate. This has significantly reduced the complication related to early technically induced graft failure." **Mindich B, MD** 

## Make Flow Measurement Part of Your Practice

Readmissions are costly for hospitals in terms of finances and patient outcomes. As the pioneer in intraoperative flow measurement, Transonic delivers innovative technology to better manage CABG surgeries, lower costs and keep patients safe.

With the confidence that our intraoperative flow measurement will provide these results, we've established the Transonic CABG Patency Assessment program. If our algorithm indicates that a graft appears patent and a patient is readmitted within 30 days, we will offer credits for future meter usage.

Interested in learning more about this innovative partnership program? Find details here.

![](_page_22_Picture_5.jpeg)

![](_page_23_Picture_0.jpeg)

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# Transonic Systems Inc. is a global manufacturer of innovative biomedical measurement equipment. Founded in 1983, Transonic sells "gold standard" transit-time ultrasound Flowmeters and Monitors for surgical, hemodialysis, pediatric critical care, perfusion, interventional radiology and research applications. Transonic® also provides pressure and pressure volume systems, laser Doppler Flowmeters and telemetry systems.

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