A Purpose-Driven Organization

An Interview with Louis A. Shapiro,
President and Chief Executive Officer, Hospital for Special Surgery (HSS)



Louis A. Shapiro

EDITORS' NOTE Lou Shapiro assumed his current position in October 2006. Prior to this, he served as Executive Vice President and Chief Operating Officer of Geisinger Health System's Clinical Enterprise. He began his career at Allegheny General Hospital in Pittsburgh and then joined McKinsey & Company as a leader within their healthcare practice. Shapiro is a fellow of the American College of Healthcare Executives, former Chair of the Greater New York Hospital Association Board of Governors (2014-2015), and on the board of Crutches 4 Kids.

INSTITUTION BRIEF New York-based Hospital for Special Surgery (HSS.edu; HSS) is the world's leading academic medical center specializing in orthopedics, rheumatology, and their related specialties. HSS provides care to patients from all 50 states and more than 100 countries and – through the HSS Education Institute – provides education to medical professionals in more than 150 nations. The HSS Research Institute spans molecular and translational science to advance diagnosis and treatment, and the HSS Innovation Institute accelerates the invention of breakthrough devices and practices. HSS is the first hospital in New York State to achieve its fourth consecutive designation as a Magnet™ Hospital by the American Nurses Credentialing Center, the gold standard for nursing excellence. It is the only hospital in New York State that has maintained a significantly lower infection rate than the state average for hip replacement five years in a row. HSS is the official hospital of the New York Giants, New York Mets, New York Knicks, New York Liberty, and the New York Red Bulls. It is also the official hospital of New York Road Runners for the New York City Marathon. In 2013, HSS was named the first National Medical Center of the United States Olympic Committee's (USOC) National Medical Network. HSS is also one of only three hospitals in the United States designated as a Medical Center of Excellence by FIFA.

Will you highlight how having a clear focus and mission differentiates HSS?

I believe the greater the complexity and rate of change in a market, the greater the imperative of clear focus and mission. It helps to simplify, align, and energize. It's best when that clear focus and mission is centered on something that can be differentiated by quality, which creates a dynamic where ever-higher quality becomes a highly motivating, never-ending pursuit for the entire organization. At that point, focus and mission become purpose and really drive culture.

When we peel the onion back and look at HSS, there are a number of things that we have going for us that may be indicative of organizational success.

These include a laser focus on doing one, valuable thing really well. Organizations that do just one thing should be able to do it better than organizations that do many things, regardless of the industry. Our one thing is musculoskeletal healthcare. It's a broad topic, but it's a high-value and focused topic.

Second, we focus on talent as a priority strategy. Unless one is in a completely people-devoid industry, talent is important, so recruiting and retaining the best and brightest individuals at all levels, in all jobs, is critical.

Third, we surround talent with everything they need to be successful, like technology, process, and culture. HSS surgeons are the best in the world at what they do, but they will tell you that the HSS 'ecosystem' is a big part of their success.

Fourth is giving aspiration and inspiration to our talent. If we're not reaching for something that might seem to be unreachable, then the organization is not going to be able to go as far as it can. If we're inspired by what the organization is working to accomplish, it allows us to continue to move forward.

These are reasons why HSS is in the unique position it's in and why it has many opportunities available going forward in spite of all of the turmoil in the external environment.

HSS is an institution with a long history and heritage, but there is such a focus on innovation at its core. How important is that, and will you touch on the developments in research that take place at HSS every day?

The status quo, regardless of what we have accomplished and the position we're in, is unacceptable. Organizations that are just trying to stay the way, intentionally or unintentionally, are going to die. The world is changing too quickly.

We are working to transform our business model from its status as an academic medical center with leading patient-care teaching and research whose core competency is to take care of patients who have musculoskeletal problems. We look to transform our organization to an enterprise that is musculoskeletal-focused but also leverages the massive knowledge that is derived from being the largest and highest-caliber organization of our type. In doing so, we will also positively change the industry.

We're trying to do this by doing three things: constantly challenging the status quo, focusing on what we do at our core, and relentlessly pursuing 'better.' We work toward continuous incremental improvement regardless of the level of performance we have achieved and create increased value for everyone who either accesses or pays for care. This is how we define leadership.

Emanating from that leadership position is the process of leveraging our knowledge. We are working to do that in two ways: one is through replicating our business model globally where possible and appropriate, both domestically and internationally, and helping others benefit from the knowledge that we have created based on our leadership position. We advise other organizations that do what we do, but help them do it better. Alternatively, we may partner with an institution to introduce an HSS model of care in another geography. This must be at a level where we can ensure that we can replicate efficiency, quality, and financial performance because, without financial performance, we can't afford to invest in quality.

Second is innovation, which is based on utilizing our highly-leveraged knowledge that results from our leadership to develop new services and products that we can get out to the world to benefit human beings without them needing to come here for care. That can be through innovation in care delivery, through digital health solutions

we disperse for the treatment of the complex problems that we deal with at HSS, or through sharing technology that comes out of our life sciences and research area.

Our focus on healthy longevity is very exciting. The success of the healthcare industry in combatting things like cancer, cardio-vascular disease, and brain disease is causing people to live longer. However, as people live longer, their musculoskeletal systems are breaking down and contributing to a massive decline in quality of life. Our challenge is to reverse or slow the aging process associated with the musculoskeletal system. This comes down to issues related to genomics and biologics in stem cells and other research that will help us understand why bone and tissues break down and how we can stop that from happening so that people who live longer can remain healthier.

These are all examples of the innovation that is emanating from the leadership position we provide at our core. If we can accomplish all of these things, it will reflect the new HSS and what we mean when we talk about our transformation.

How important is prevention and wellness, and can more be done to educate people about how to guard against many of these issues?

We're spending more time on those activities and trying to educate the public. Obesity and lack of appropriate exercise is an issue. Some of our physicians will say that exercise is the best medicine.

We started a sports injury prevention program that is focused on children. We received a several-million-dollar gift that is significantly focused on the sport of soccer and the epidemic of ACL injuries in children. This is an exercise in understanding issues that could be prevented as children perform sports.

There is also other research being done on the impact of different cycles of biochemistry in people which might make them more prone to injury. We're looking upstream to avoid problems downstream. It's one thing to fix the problem in the best way possible after it occurs, but it's much better to go upstream, whether it be through science or health and wellness, to prevent it from occurring in the first place.

Wellness and prevention could be the silver bullet to fix the healthcare industry in the U.S.

Do you get concerned that technology will interfere in the doctor/patient relationship?

We will do everything in our power to make sure that doesn't happen here. At day's end, technology is an enabler, although there is an application of technology that provides some degree of separation between the patient and the caregiver.

Telemedicine and remote monitoring should be viewed positively as enablers but, overall, healthcare involves people who are providers taking care of people who are patients. This person-toperson relationship is very important. The people who are patients want to make sure they feel the people who are providers are taking care of them.

The care element should not get lost as the industry goes through difficult changes based on economic pressures or technology evolution.

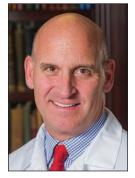
How do you define what makes an effective leader in the CEO role?

There are different ways to characterize leadership. There are three things good leaders need: to love what they do, to be inspired by what they do, and to desire to be a part of making things happen that allow them to achieve their goals.

A leader's job is to create an environment that allows other leaders within their organization to check off those three boxes. We have to hire the right people, onboard them the right way, and create an environment where they can do what they love. For them to be inspired by what they do, we need to have a purpose-driven organization where people exude pride when they hear what the organization is trying to accomplish. Part of making this happen involves creating an environment where everyone knows their role as an individual and as a member of the team and knows where the organization is going. •

Safety and Quality

An Interview with Todd J. Albert, M.D., Surgeon-in-Chief and Medical Director and Korein-Wilson Professor of Orthopedic Surgery, Hospital for Special Surgery



Todd J. Albert

EDITORS' NOTE Dr. Todd Albert is also the Chairman of the Department of Orthopedic Surgery and a Professor of Orthopedic Surgery at Weill Cornell Medical College and Surgeon-in-Chief and Medical Director at Hospital for Special Surgery. Previously, Dr. Albert was Chairman of the Department of Orthopedics and President of The Rothman Institute at Thomas Jefferson University Hospital in Philadelphia. He graduated from the University of Virginia School of Medicine and completed his residency in Orthopedic Surgery at Thomas Jefferson University Hospital where he was named outstanding chief resident, and performed a fellowship in spinal surgery at the Minnesota Spine Center.

How do you define your roles and focus your efforts at HSS?

As the Medical Director, I oversee the safety and quality of all the patients we care for. We have an amazing team of people that have historically looked after that and obtained outstanding results. This role is all about protecting the patients and overseeing anything that comes up to make sure they get the best care.

As Surgeon-in-Chief, while it includes being the Medical Director, that role involves being the point leader for all of the surgeons and physicians at HSS. I'm a surgeon so I live their lives in a sense, but I also have to listen to them and be their spokesman. I need to be in their heads to be their advocate and respond to their needs and, at times, help guide to an orderly outcome if there is disparity in thought or direction.

It's a huge advantage to be a single specialty-focused hospital.

When bringing in talent, how much does culture fit matter?

The culture of HSS is what makes us what we are. Our culture is our strategy because if I was asked to re-create it, I don't think I could. It's a culture that began with our creation in 1863 when the hospital was opened. The culture comes from being a relatively small, single-specialty hospital that grew to the biggest musculoskeletal specialty hospital in the world. Along the way, there has always been a culture of delivering the highest quality care and taking pride in that. There is an insistence that care be delivered at that level.

It's a huge advantage to be a single specialty-focused hospital. Our advantage is not being distracted by having the heart surgeon, the transplant surgeon, and the GI surgeon at the table when we're talking about the delivery of care to every patient that walks through the doors here.

Everyone here cares that patients have a perfect experience.

Creating a Knowledge Factory

An Interview with Leonard Achan, Chief Innovation Officer, Hospital for Special Surgery



Leonard Achan

EDITORS' NOTE Leonard Achan has held his current post since 2016. He is also Co-Founder and Chairman of Quality Reviews, Inc. In addition, he has held roles as Chief Communications Officer and Senior Associate Dean, Global Communications, Branding & Reputation; Chief of Access Services; Senior Vice President Digital and Social Media; Vice President and Assistant Dean of Executive Services & International Business Development; and Director of Hospital Operations, Capacity Management and Physicians Relations with Mount Sinai. He received his B.S.N. from Adelphi University and his Master's in Advanced Practice Nursing from NYU. He is also a fellow of the Wharton School of Business at the University of

Pennsylvania.

How do you define your role and your areas of focus?

Our vision within the musculoskeletal health realm is to create a knowledge factory. It's not moving from, but complementing our focus factory.

In a world of mergers and acquisitions, with full-service institutions losing focus or being forced to change, combine, or close, HSS has been able to maintain its focus on musculoskeletal health since its inception.

When it comes to innovation coming out of an organization that has been able to remain focused and build knowledge and intellectual property know-how, that ultimately is what we do. This is not because of some marketing position, but it's evidence-based on our ability to drive the outcomes we have and do no harm. This allows us to improve lives and have the safety, patient satisfaction, and clinical scores that we do.

It's an amazing foundation upon which to build ideas and innovate, whether in life science, care delivery, drugs, therapeutics, devices, or leveraging digital technologies like mobile, artificial intelligence, and machine learning data to build digital platforms to improve healthcare.

At a very high level, my role is to put the infrastructure, people, and processes in place to get information and knowledge out into commercialized products that impact patients all over the world.

We're number one at what we do, but there's also only so much we can do. It's about our real mission-driven purpose beyond our brick-and-mortar facility, which is to take what we've done for our patients and get the treatments to people that might not be able to come to see us. We can only do that through innovation.

How important is it to engage the physicians in these efforts?

What differentiates us is how the organization and its history have been built upon the surgeon, physician, and research verticals. The reason that we have the number one position we do and the clinical outcomes that we do is because we have been able to recruit, train, and retain the talent here.

We have taken a long approach in establishing a culture. Our makeup is really different. Many of our physicians are entrepreneurial in nature, because they're running private practices. It is the number one priority to get them excited about taking our knowledge and scaling it to help more people. ●

Value in Healthcare

An Interview with Catherine H. MacLean, M.D., Ph.D., Chief Value Medical Officer, Hospital for Special Surgery



Catherine H. MacLean

EDITORS' NOTE Catherine MacLean, M.D., Ph.D., was appointed to her current post in August of 2015. Dr. MacLean, a rheumatologist, earned a Bachelor of Science in pharmacology from University of California; a Medical Degree from Washington University School of Medicine; and a Doctorate in Health Services from UCLA School of Public Health. Prior to joining HSS, she served as the Staff Vice President at WellPoint's Center for Quality Measures and Improvement.

How do you define your role within HSS?

Value in healthcare is about the quality of healthcare in relation to the price we pay

for it.

There is a lot in that definition and, as a starting point, we recognize that we all must be responsible stewards of our healthcare dollars, meaning that we need to avoid care that is unsafe, avoid duplicative care, and avoid inappropriate care. This has been the focus of most value initiatives across the country.

These three things feed into quality but, additionally, we need to be thinking about improving the health of the patients we're treating. Patients don't come to a hospital to avoid a complication; they come to a hospital to get better. We absolutely need to avoid complications, but that isn't good enough.

A big focus of the work I'm doing is thinking carefully about that entire value proposition, how we can provide the highest quality care for our patients both in terms of improving health outcomes and avoiding complications, while also maintaining the extraordinarily high patient satisfaction that we have built over the years.

Part of my work is in incorporating the routine assessment of quality components and reporting those back into routine care delivery.

Every hospital has a quality department and a revenue cycle department. Often, these are looked at in silos, but we need to look at things in real time and build this information into our electronic health record and other systems we use to assess quality.

Is it important for you to engage HSS' doctors in this work?

We've had a number of research registries for years where our clinical staff and our research staff have been looking at patient-reported outcomes and the impact of all manner of clinical activities on those outcomes.

We kicked off an initiative at the end of last year where, for every patient who has a procedure done at HSS as an inpatient or outpatient, we're collecting a PROMIS global health assessment. Our goal is that, by the beginning of next year, we will be collecting a PROMIS global on everyone.

We've worked closely with our clinical staff to determine which measures are the best for each of the diseases, and we're in the process of building up the operation to do that measurement for everyone.

Developing Scientific Programs

An Interview with Lionel B. Ivashkiv, M.D., Chief Scientific Officer, Hospital for Special Surgery



Lionel B. Ivashkiv

Professor of Medicine and Immunology at Weill Cornell Medicine. He holds the Richard L. Menschel Research Chair and is the David H. Koch Chair in Arthritis and Tissue Degeneration at HSS. Dr. Ivashkiv is also an Attending Physician and Director of the David Z. Rosensweig Genomics Research Center at HSS.

Will you define your role with HSS and the broad areas of focus you address?

My role is to develop the scientific programs that are going to have the biggest impact on the discovery side. This involves the cre-

ation of new knowledge, but it's also very important that we work on translating these discoveries and moving them into the clinic to improve the care of our patients.

As the CSO, I oversee the entire spectrum of clinical, translational, and basic research. One of my jobs is to integrate those so we can identify the most important problems in the clinic, work on them at the bench, and bring back any discoveries and findings to our patients.

How critical to your success is the commitment from HSS on research?

A great strength of HSS is our combination of excellence in the clinical and research areas. We're one of the few institutions that really works on bringing those two together.

We're also one of the few in the world that is solely focused on musculoskeletal conditions in orthopedics and rheumatology. That allows us to leverage the power of numbers and resources. This is not just because of our resources in science, but also our access to large populations of patients that we can study.

One of my goals as CSO has been to move from model systems, where things are often studied in mice and flies, to the study of humans and patients. That is where we can really learn what is causing the problem, and it is the most direct path to helping solve it.

A big initiative has been to introduce genomic approaches to study our patients. Tightly linked with that is the introduction of precision medicine, where we study our patients in exquisite detail. This includes clinical characterization and very sophisticated imaging, but also the investigation of tissue and blood samples to look for molecular pathways and signatures.

We're trying to bring this all together so we can come up with the best treatment for the patient from the start of care.

Another very important area we're getting into is gaining an understanding of the variability in an individual's response to therapy and injury. Surgeons will often say they can perform the same procedure on two different people and do the same great job technically, but the outcomes are different. A big effort is underway to understand this so we can improve our outcomes and prevent complications.

Integrated Radiology

An Interview with Hollis Potter, M.D., Chairman, Department of Radiology and Imaging, Coleman Chair in MRI Research, Hospital for Special Surgery



Hollis Potter

EDITORS' NOTE Dr. Hollis Potter is a Board-Certified Radiologist specializing in Musculoskeletal MRI since 1990. She has published 224 scientific articles and 64 book chapters. Dr. Potter has presented and been invited to speak locally, nationally, and internationally at orthopedic and radiologic scientific meetings. She is funded for MRI research in both clinical and basic science projects. Her MRI laboratory is actively funded by the NIH NIAMS for translational MRI research.

When it comes to choosing the right radiologist, is that process well understood by patients?

Increasingly, it is. Ideally, we'd like to show that, if one has their MRI done at a specialty facility and interpreted by an experienced radiologist with expertise in that area, they'll have a better surgical outcome, less time in the operating room, and a more rapid rehabilitation period.

This is tough to do. It has been demonstrated in a research arena, but in order to do it in the most robust way, one would have to truly randomize patients to an HSS MRI interpreted by a senior radiologist with vast expertise and then to a private practice with more junior people who haven't specialized.

The frustration I've had for so long is that people agonize over choosing a surgeon or a cardiologist, but they never think at all about the radiologist. Often, there is a misconception that their surgeon will take care of it and read the MRI. However, the surgeons at HSS rely heavily on pre-operative imaging. Many of the surgeons get an MRI before they examine the patient so that they can examine the patient in light of the imaging findings. The patient comes in with a definitive diagnosis that is matched with their physical symptoms and refined by the physical exam of the surgeon. This allows them to come up with the best treatment plan. Radiologists at HSS are very integrated into the entire plan of care.

Where is innovation taking place within radiology and imaging?

It starts with meeting an unmet need – finding out what the surgeons complain about the most and coming up with an imaging solution to solve those problems. With regards to pain after joint replacement, pain is often generated by soft tissue; MRI is the best means to evaluate soft tissue. The hurdle we had to overcome was that we were putting a big piece of metal inside a patient and putting it in a large magnet. We had to show it was safe and also reduce some of the artifact generated by the metal.

We now have NIH funding in this area at our MRI lab, and it has opened a new imaging market for us.

Orthopedic surgeons refer their patients to us because we show them things their standard imaging can't. It's tremendous for the patients because we can find the cause for their pain and get them more quickly on the road to recovery.