# Improving Clinical Care

An Interview with Michael P. Ast, MD, Associate Professor of Orthopedic Surgery and Chief Medical Innovation Officer, HSS

**EDITORS' NOTE** *Dr. Michael Ast is an Associate Professor of Orthopedic Surgery and the Chief Medical Innovation Officer at HSS in New York City. His clinical practice focuses on rapidrecovery, short-stay and outpatient joint replacement surgery. He is also nationally recognized for his expertise on the clinical and business aspects of joint replacement surgery performed in ambulatory surgery centers. Dr. Ast grew up in Staten Island, New York, and* 

attended Temple University in Philadelphia, where he graduated magna cum laude in Biology and Phi Beta Kappa. He completed his Medical Degree at Temple University School of Medicine and returned to New York for his residency training in orthopedic surgery at North Shore-Long Island Jewish Medical Center and a fellowship in Adult Reconstruction and Joint Replacement surgery at HSS. Before returning to HSS, he previously developed and directed one of the largest and most successful outpatient joint replacement programs in the northeast.

**INSTITUTION BRIEF** HSS (bss.edu) is the world's leading academic medical center focused on musculoskeletal health. At its core is Hospital for Special Surgery, nationally ranked number one in orthopedics (for the 13th consecutive year) and number three in rheumatology by U.S. News & World Report (2022-2023), and named a leader in pediatric orthopedics by U.S. News & World Report "Best Children's Hospitals" (2022-2023). HSS has a main campus in New York City and a growing network of related facilities. In addition to patient care, HSS is a leader in research, innovation, and education. Through HSS Global Ventures and the HSS Education Institute, the institution is collaborating with medical centers and other organizations to advance the quality and value of musculoskeletal care and to make world-class HSS care more widely accessible nationally and internationally. HSS is the official hospital for a number of professional sports organizations and teams including the New York Giants, New York Mets, New York Knicks, Brooklyn Nets, UFC, US Rowing, US Biathlon, US Lacrosse, and USA Basketball. HSS is one of only three hospitals in the United States designated as a Medical Center of Excellence by FIFA



Dr. Michael P. Ast

#### Will you provide an overview of your role and areas of focus? I have dual roles within HSS. My first

is that I am a practicing orthopedic surgeon and Associate Professor of Orthopedic Surgery. My clinical practice focuses on hip and knee replacement surgery and specifically on rapid recovery and ambulatory hip and knee replacement where patients are discharged on the same day of their surgery. I also serve as the Vice-Chair of the HSS Innovation Institute and the Chief Medical Innovation Officer. As the Chief Medical Innovation Officer, my

role is to help guide the clinical value of our innovation endeavors. In partnership with Jordan Harmon, our Chief Innovation and Commercialization Officer, and the rest of our Innovation Institute team, I try to ensure that the Institute's projects focus on providing enhanced clinical value to our practitioners and patients while remaining practical to implement in clinical practice.

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### Will you discuss the mission of the Innovation Institute?

The mission of the Innovation Institute is the same as the mission of our organization, which is clinical excellence, education, research, and innovation. Our goal is to help develop and bring to market the next generation of innovative devices, techniques, and pathways to address complex care so that our practitioners can continue to get our patients back to what they love to do in life.

How is HSS bringing innovative technology to market to advance patient outcomes?

At HSS we have two ways that we develop innovation. First, we help physicians, providers or other individuals in the field develop their ideas and bring the next generation of treatment options to fruition. We call this "inside out" innovation. Second, we partner with world class organizations to help them develop and test their newest innovations within our fields of expertise. We call that "outside in" innovation.

#### How valuable has it been to have your background as a surgeon with both academic and private practice experience to understanding the challenges of a clinical practice and how innovation can offer solutions?

Having practiced in a private practice setting and practicing now in an academic setting has allowed me to see through both lenses, helping me, along with our team, guide solutions to problems that exist across the spectrum and can be practically implemented in any practice environment. It also allows me to better understand the challenges that are different and the ways that design or implementation of treatment options may need to vary depending on the setting.

#### Will you discuss the importance of data integration and analytics to help achieve the goals of the HSS Innovation Institute?

One of the organization's strengths is the amount of clinical data produced within our organization on an ongoing basis. Access to this data, along with partnering with our HSS Center for Analytics, Modeling & Performance, allows us to test new ideas, devices, algorithms, and other innovations at a level of speed and clinical relevance that few other organizations can match.

## What makes HSS so special for you and how do you define the HSS difference?

I started here as a patient, and understanding the patient experience from start to finish reminds us that our singular focus is improving clinical care. I take great pride working in a mission-driven organization that truly focuses on clinical excellence, education, research, and innovation and feel honored to have a role in this great organization. Without question, the difference here is the people and the culture. Culture as a Strategy and Leadership by All, two focuses of our organization, can be seen every day in every hallway, every operating room, and every patient interaction. Having lived it from all sides, including as a patient, the family member of several patients, a surgeon, and as a leader reminds me every day of what an incredible organization this is and how grateful I am to be a part of it.