Does the dialogue need to be driven by the health systems?

It needs to be driven by important people in the Senate and the executive branch of the Administration, in addition to leaders in academic medicine and in public health institutions.

Most importantly, we're missing the imperative on the federal level to really address these problems.

What will the hospital of the future look like and will it only be for your sickest patients?

The hospital of the future will increasingly host more ICU beds. It will have a higher level of telemedicine and patients will have hospital beds at home and will be monitored by telemedicine and apps. A caretaker will be dispatched from the care team to visit patients in the home. I see a broader, larger, and more effective ambulatory platform with much more connectivity and much more care coordination. There will be fewer inpatient beds, which will be only for those with more acute and more intense needs, and there will be a lot more going on at home.

How important is scale for today's health systems? Is it required to survive?

It's critical. A mission-driven hospital in a community with a high number of Medicaid and Medicare patients, can only provide the necessary services by having size and scale. This can decrease corporate expenses and supply-chain costs. Small populations with an adverse selection could become disproportionate and can't be divided over a much larger population if they're small. Scale helps manage this risk.

This means size and scale is critical for the missions we have to provide in economically diverse communities if we're going to be full-spectrum hospitals that are able to take on risk.

Is it valuable to incorporate a hospitality component within hospitals and how do you convey to your people that this is essentially a service business?

When I began working in medicine, we had doctors who viewed themselves as iconic figures. If a patient called for an appointment, they would often face multiple-week waits. It wasn't that they were concerned about providing service but that they were doing patients a favor by allowing them to be seen.

That's a destructive value system. We have changed to become an industry that is closer in some respects to the hotel industry. Access has to be terrific, appointments have to be easy to make, food has to be great, service has to be wonderful, and the place has to be spotless.

We have many more resources than we could have conceived of 20 years ago that are engaged in the hospitality component of our industry.

How important is community outreach and involvement for your employees?

It's more important than ever. One of the biggest problems we have is the patient whose disease is identified too late or the patient who hasn't gone for an annual physical. Much of wellness is prevention and disease can't be prevented if contact isn't made.

To ensure the fiscal health of the institution as we take risk and the health of our communities, we have to get people engaged. This isn't something we do out of benevolence but out of mutual interest. Clearly, it's very important for our institution to show we're good citizens of the community as well.

Is the necessary talent still being attracted to healthcare? What do you tell young people about a career in medicine?

This year, we've seen the best pool of applicants we've ever had. They have great MCATs and great GPAs, and have come in greater numbers than we've ever seen before. Despite the indebtedness that medical school creates, we have the best talent coming into medicine that we've ever had.

Whether that talent winds up taking a path within medicine that is driven by their financial needs rather than by what they would really like to do in medicine, or what the community needs, is another story.

The big problem concerns the next generation of scientists, because we sit at the cusp of the greatest revolution in biology with the most extraordinary opportunities. However, the funding of grants is now at a horribly low level. We haven't had any change in real dollar value for the past 16 years. This means that what the dollar buys today in healthcare research is about what it could buy 20 years ago, but we have many more people who need grants. Statistics reveal that 93 out of 100 grants are turned down, and the average first grant is given at the age of 42. This means that young people see no future and they're leaving science. This is catastrophic considering what the country and medicine need to be doing to prepare for the future. ●

Research That Changes Medicine

An Interview with Dennis S. Charney, M.D., President for Academic Affairs, Mount Sinai Health System

Dennis S. Charney, M.D.

EDITORS' NOTE *Dr. Dennis Charney is also the Anne and Joel Ehrenkranz Dean of the Icahn School of Medicine at Mount Sinai, and a world expert in the neurobiology and treatment of mood and anxiety disorders. His career began in 1981 at Yale, where, within nine years, he rose from Assistant Professor to Professor of Psychiatry, a position he held from 1990 to 2000. While there, he chaired the NIMH Board of Scientific Counselors. In 2000, NIMH recruited Charney to lead the Mood and Anxiety Disorder Research Program and the Experimental Therapeutics and Pathophysiology Branch. That year he was also elected to the Institute of Medicine of the National Academy of Sciences. His scientific research has been honored by every major award in his field. In 2004, Icahn School of Medicine at Mount Sinai recruited Charney as Dean of Research. In 2007, he became the Dean of the School and Executive Vice President for Academic Affairs of the Medical Center. In 2013, he was named to his current post. Charney has written more than 700 publications, including groundbreaking scientific papers, chapters, and books.*

What makes the Icahn School of Medicine at Mount Sinai so special?

It has to do with not being a part of a major university. We consist of a medical school that trains medical students. We also train scientists – Ph.D. students – and doctors and their specialty house staff, and post-doctoral students who are becoming researchers.

We have a seamless relationship with our hospital, so we have one board of trustees, and the mission of the hospital and the school are in sync.

When we raise money, we're doing it to change medicine and to recruit scientists whose mission is to discover new ways of treating human disease, as well as to build clinical programs in which we treat those diseases.

We're not competing with the priorities of a major university. We're focused like a laser beam on research that changes medicine and on delivering exceptional care to those who need it most.

Also, the CEO, Dr. Kenneth L. Davis, and I have been best friends for 30 years, which is unique in medicine. We have a very generous board of trustees, so philanthropy makes a difference. The CEO and I have built an environment in which creative ideas are valued, innovation is the coin of the realm, and challenging tradition is the norm. This allows us to achieve things that were not thought possible, be it delivering care to the underserved or coming up with research findings that have the possibility of fundamentally improving treatments for the most serious diseases.

The most important part of my job is identifying great talent and providing the environment that allows the main limitation to be their imagination and not resources.

Are physician-scientists harder to find?

The key to great science is coming up with an idea that nobody else has had. That's creativity, which is a different kind of intelligence.

Most physician-scientists now are mainly scientists, because in order to achieve true scientific breakthroughs, they can't be spending more of their time in the clinic. The value of the physician-scientists is that they learn medicine, and that context helps their science.

Mount Sinai

A Hunger for Excellence

An Interview with Jeremy H. Boal, M.D.,
Executive Vice President and Chief Medical Officer,
Mount Sinai Health System

Dennis S. Charney, M.D. continued

How critical is entrepreneurship and information technology, and how have those become part of the culture of how the institution operates?

We're in the midst of a revolution in medicine whose potential has not yet been realized. This, in part, relates to our ability to sequence the human genome – 10 or 15 years ago, it cost $1 billion to sequence a single genome and now it costs well under $1,000.

We're identifying genes that place people at risk for a variety of diseases, but generally we have not yet taken advantage of that to come up with new treatments.

The obstacles to this include the need to process big data analytics, which is new to medicine. We must have the availability of high-performance computing to handle the enormous volumes of data, and the data scientists to manage it. Data science has developed into a new field because of the enormous amounts of data coming out on the human genome, which has to be analyzed.

The best places have to link data scientists, who come from a tradition of mathematics, and physicists who are developing new ways of sequencing the human genome, with biological scientists and physicians who bring the knowledge of disease and how those diseases are treated. This is what we're doing at Mount Sinai.

Within the health system, your focus has been on developing the structure for complementary clinical institutes that will serve as centers of excellence. Would you talk about that structure and why it's critical when looking at the future of medicine?

The clinical institutes include a diabetes institute, a clinical neuroscience institute, a cardiovascular institute, and others.

To provide the best care to a patient with these types of diseases, we need a team that can involve more than one specialty. For example, if we're going to treat people with diabetes, we want to have folks who are experts on diabetes on the team. However, those individuals with the disease might also have issues with their cardiovascular system, their eyes or their kidneys, and we don't want to have silos where it's hard for a patient to go from their diabetes experts to their other doctors.

The idea of clinical institutes is to provide the kind of integration so the patient doesn't have to shop or reach doctors – it's one-stop shopping, the doctors are talking to each other, and they're developing the best treatment plan for the whole patient.

Why did you feel the partnership with Rensselaer Polytechnic Institute was important and has that partnership evolved the way you had hoped?

Rensselaer hasn't had a close relationship with a medical school and we don't have an engineering school, so coming together is a win-win proposition. Our collaboration includes work around new devices for surgery, tissue engineering, IT as it relates to new apps, and new sensors that allow us to monitor the patient from the home and get actionable information into the doctor's office.

Exciting developments are taking place every day with the advances that have taken place across so many different areas through cutting-edge technology. For someone who has seen it, are you still surprised and excited by what goes on there?

The excitement is always pushing the envelope and trying to do better. We're still at that stage at Mount Sinai. Our healthcare system has given us unique opportunities in terms of training and research, and delivery of healthcare to the patients who need it most.

We have a motto at Mount Sinai – another day, another breakthrough – and that still holds. ●

Jeremy H. Boal, M.D.

EDITORS' NOTE *Prior to his current role, Dr. Jeremy Boal held the position of Chief Medical Officer for the North Shore LIJ Health System. From May 2007 until December 2010, he served as Medical Director of the Long Island Jewish Medical Center. Prior to his tenure at North Shore LIJ, he was on faculty of the Icahn School of Medicine at Mount Sinai, where he served as Vice Chair for strategic planning and faculty practice services for the Department of Medicine. He also was Executive Director of Mount Sinai's Visiting Doctors Program. A board-certified internist with additional certification in geriatrics, Boal began his career at Mount Sinai Medical Center as a medical resident in 1994. He received his medical degree from the Medical College of Wisconsin, Milwaukee, and a Bachelor of Science degree from McGill University, Montreal, Canada.*

What makes Mount Sinai so special and a place you have wanted to be?

At its core, the organization is incredibly mission-driven and excellence-oriented, and it's this combination that I find so compelling.

It starts at the board level and is reflected in the leadership team, but it permeates the organization. If there is an opportunity to do better, to drastically improve our performance, or to innovate, we grab it and that distinguishes this organization. There is a hunger for excellence across the board, and an unwillingness to settle or to make excuses. We don't stop to pat ourselves on the back for our achievements but are preoccupied with being better and doing better across all our missions.

With regard to serving our communities, the board genuinely cares about that and they take that responsibility very seriously and, as a result, we all do.

Has it been difficult to maintain the culture and how do you avoid losing that when the organization is growing rapidly?

When these entities that now make up Mount Sinai Health System came together, each had different cultures. We used the merger to define what the vision and values were going to be for the health system. We then operationalized those through a series of changes in the way we do business, which is fostering a unified culture.

Before we signed the deal, we were already bringing together all of the clinical and administrative leadership from all hospitals weekly. This "Quality Leadership Council" is solely focused on looking at the performance of our various entities, identifying best practices, and challenging us to do better and to standardize our practice, as well as to support each other when there are struggles.

From the very first moment, we wanted to make sure that we were clear this merger wasn't about size or a defensive posture but about excellence. The only way to demonstrate this was to make it a priority.

We also recognized early on that if we relied solely on the leaders of the facilities to spread the message to their people, by the time the message got to the frontline staff, it could be very garbled. In collaboration with those leaders, we asked every hospital to develop a process for having their C-suite leaders interact on a regular basis with the frontline managers to ensure the message was clear.

By inculcating a shared set of values across leadership and having the leadership work directly at the front lines, we're accelerating the process of spreading those values. ●