



John H. Noseworthy

EDITORS' NOTE John Noseworthy has held his current post as President and CEO of Mayo Clinic since November 2009. Prior to this, he served as chair of Mayo Clinic's Department of Neurology, medical director of the Department of Development, and vice chair of the Mayo Clinic Rochester Executive Board. He received his M.D. from Dalhousie University.

ORGANIZATION BRIEF Mayo Clinic (mayoclinic.org) is a not-for-profit organization committed to clinical practice, education and research, providing expert, comprehensive care to patients with serious and complex illnesses. Mayo Clinic has major campuses in Rochester, Minnesota; Scottsdale and Phoenix, Arizona; and Jacksonville, Florida. The Mayo Clinic Health System serves more than 60 communities in Iowa, Minnesota, and Wisconsin. Mayo Clinic cares for more than a million people a year and is ranked number one in the nation by U.S. News and World Report.

What is the history of Mayo Clinic and what are the keys to its consistent performance?

We bring a team approach to our work. Our founders, Drs. William and Charles Mayo, recognized the need to bring a team of doctors together around the patient. Each person brings his or her unique wisdom to the care of the patient.

That team approach was facilitated by Mayo Clinic's adoption of a single medical record that followed the patient. In those early days, a patient would be seen by multiple doctors at Mayo Clinic, and each doctor was able to see all the previous notes on the patient. In an integrated multidisciplinary group practice, they could immediately see what all the doctors thought. It gave Mayo a 100-year lead in terms of how to integrate care around the patient and work in teams and have transparent results.

This was probably the most dramatic transformational change in healthcare in the past century and it was pioneered here. The rest of the country took up the single medical record 100 years later.

Excellence, Values, and Commitment: Building on the Foundation of Mayo's Founders

An Interview with John H. Noseworthy, M.D., President and Chief Executive Officer, Mayo Clinic

Another important concept at Mayo Clinic is that physicians have always been salaried – there is no financial consideration as they examine the patient and do their work.

From an administrative standpoint, in terms of managing a large organization, the Mayo brothers recognized that physician leaders should work with administrative partners.

We need doctors who understand the needs of patients and administrators to run the business. That physician/administrator partnership is another concept Mayo pioneered.

The values of the Mayo Clinic were clearly marked out at our inception. They include a patient-centered focus as well as teamwork, respect, integrity, and innovation.

Those became foundational pieces in a partnership of salaried physicians working together for the needs of the patient. If anyone put their own interests ahead of the partnership, they were called out on it. Some even had to leave because they didn't realize they were part of a team to help patients – this was not about their own careers.

The Mayo brothers then recognized the need for research and education. Practice, research, and education then became the three shields of Mayo Clinic upon which we expressed our values.

Mayo Clinic became a national and international center for patients who required diagnostic and surgical help. Even in the early days of air travel, Mayo Clinic's leaders put an airport in the then small town of Rochester, Minnesota, to accommodate patients.

That laid the foundation for our identity today, which is a national and international destination center for patients with serious and complex illnesses – it's what we excel in and invest in. Patients come to Mayo Clinic from 140 countries and all 50 states when they have serious problems or require complex diagnoses.

Our research, which underpins our clinical care, is focused on meeting the unmet needs of patients. In 2016, Mayo's total research and education budget exceeded \$1 billion, with \$523 million in funding from Mayo Clinic and benefactors and \$428 million from external sources.

Our education efforts are dedicated to creating the workforce that will support caring for serious and complex patients from around the world.

We standardize the way we provide clinical care across the three campuses and we innovate upon that standard of care. We're transparent with our data and measure our outcomes. We work together every day as a team to drive out waste and cost, while improving surgical and medical outcomes.

In addition, we have embedded engineering experts in the practice to help us solve puzzles. When patients come to Mayo Clinic, they realize we're different by noon on their first day. We answer their needs and get them into and out of the Clinic in a timely manner. The fact that we have a highly engineered system that is designed to give efficient answers quickly and safely to patients allows us to be better doctors.

Are the results Mayo Clinic achieves widely shared?

If by results, you mean our knowledge, then yes, knowledge from all three shields of Mayo Clinic – our practice, research, and education is widely shared.

We share Mayo research through thousands of scientific articles, meetings, and research collaborations. In terms of education, the Mayo Clinic College of Medicine and Science has five schools including the Mayo Clinic School of Continuous Professional Development. In 2016, more than 100,000 medical professionals from around the world participated in 580 continuing education courses offered by Mayo Clinic.

In the practice, we are sharing our knowledge in a different way. We created a digital bank of knowledge that is the basis for the Mayo Clinic Care Network, a group of more than 40 patient-centered, high-quality healthcare organizations in the U.S. and internationally.

Members of the Mayo Clinic Care Network have access to Mayo's knowledge through AskMayoExpert – a database of Mayo's clinical expertise, eConsults with specialists, eTumor boards, continuing education, business consulting, etc. This allows their patients to stay close to home and receive care locally with the benefit of a second opinion from a Mayo Clinic expert.

The Care Network has been a highly successful method to share what Mayo knows with 18 million people. When members have an issue they need help with, they have access to our best practices and standards of care online, and they can consult with us. More than 80 percent of the time, the medical issue can be resolved without the patient leaving their

home base. There is also no cost to the patient to get the knowledge because the local health system pays the fee.

For the few patients who require complex care that cannot be delivered remotely, the patient has streamlined access to Mayo Clinic.

With the growth and scale of Mayo Clinic, is it more difficult to maintain the consistency?

The Florida and Arizona campuses were started 30 years ago. They now have between 500 and 600 physicians each, compared to 2,400 in Rochester and 1,100 in the Mayo Clinic Health System, so they're relatively small, but they are an integral part of our system. We have worked for over three decades to successfully create and maintain the Mayo Clinic culture across all three locations.

Our rankings in *U.S. News & World Report* bear that out. Once again this year, Mayo Clinic is number one in *U.S. News & World Report*. Mayo Clinic took the number one spot in Minnesota and is ranked number one in Arizona and in the Phoenix metro area. It is ranked number one in Florida and is number one in the Jacksonville metro area. Arizona is nationally ranked in 10 data-driven specialties, and Florida is nationally ranked in seven data-driven specialties. Our Arizona clinic is now ranked number 20 nationally. They're able to do this because of the culture and the values that drive our work.

In bringing in talent, is cultural fit and personality as important as the education?

When a physician or scientist is recruited to Mayo, they are called a Senior Associate Consultant. It takes three years for the staff to vote whether that person will become a permanent member of the staff.

That gives new staff members time to get used to Mayo Clinic and know whether it is a good fit for them, and it allows Mayo to retain people who will be happy here. That's important because, if the self comes above the patient and the institution, it's very erosive to our culture.

How critical are the research and educational aspects of Mayo Clinic?

We feel it's essential that we're creating the future for our patients, in diagnostics, therapeutics, and providing safer care. That's all part of our research platform – basic discovery, translation of research, and application into the practice.

Our doctors, whether they are discovery scientists, translational clinical trial specialists, or people primarily in the practice, are part of teams that are all connected to the patient. The doctor in the practice determines if a better diagnosis or treatment is needed for a patient and then decides how to link arms with Mayo's scientists, engineers, and innovators to solve the puzzle.

We are funded internally to do that kind of work, but it's all focused on output to improve the lives of our patients. When something is discovered in the lab, we like to think we can translate that and apply it to patients as fast as possible rather than the 18 years it takes nationally to do it.

In terms of education, Mayo Clinic has five schools that, together with Mayo's

extensive research programs, comprise Mayo Clinic College of Medicine and Science. Programs range from allied health sciences education, through undergraduate, graduate, and postgraduate medical and scientific education, to continuing medical education.

Our national medical school is highly competitive and intentionally small (around 100 students per class). In contrast, we have one of the largest fellowship and residency training programs in the country. Mayo doesn't have a nursing school; instead we do extensive education with our nursing staff to train them in the Mayo model of patient-centered care.

About three-quarters of our staff – from phlebotomists to physicians – have spent some time being trained within the Mayo system, providing them with a solid foundation to do their work.

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Our physicians and allied-health staff are Mayo Clinic to the millions of patients who travel to our campuses for care each year.

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How critical is it that the diversity of your patient base is mirrored within Mayo Clinic's workforce?

Our staff has to look like our patients. We have a very diverse clientele. People have to feel comfortable when they come here. Our staff has to be educated in how to deal with different cultures. We're good at it, but we can always get better. We're heavily invested in diversity and inclusion.

Our community also needs to be welcoming. The town of Rochester has about 120,000 people and it's a Midwestern town. We work with the community to explain that people who come to us are traveling from great distances and are a big part of our economy. It's about all of us meeting the patients' needs so they come back and so that other people will also come here to be treated.

Mayo Clinic is responsible for \$12 billion of Minnesota's economy and \$28 billion of the national economy, as well as 92,000 jobs in the State of Minnesota, where we're the largest private employer. We have a vibrant fly-in practice from 50 states and 140 countries. In 2013, we announced our Destination Medical Center initiative, a 20-year, \$5.6 billion economic development plan aimed at making Mayo Clinic and, by extension, Rochester, Minnesota, one of the leading medical destinations in the world.

We don't have a large tax base in Rochester, so we needed help with infrastructure. The state has agreed to invest \$580 million over the next 20 years in infrastructure improvements to the city. Mayo Clinic is making a \$5 billion investment in Destination Medical Center. Half of that investment is Mayo Clinic and the other half is coming from private investors to create an experience for our patients so they feel welcome and safe.

Mayo Clinic is also heavily invested in technology. How do you ensure that technology doesn't take away from the personal side of the business and the human touch that is so much a part of Mayo Clinic?

Every staff member at Mayo Clinic is focused on our patients' well-being. We think in terms of treating the whole patient, not just their disease. Our patients tell us over and over again that coming to Mayo feels like a different experience, one in which they are truly seen and cared for by everyone – from the lab techs and nurses to the physicians and the house-keeping staff. At Mayo Clinic, we make full use of technology, but we never forget the person in front of us.

If you think back to when you joined Mayo Clinic, did you anticipate you would spend so much of your career here?

No, I didn't foresee spending the bulk of my career at Mayo Clinic. I was used to moving around. Someone told me that once I joined Mayo, I would get a lot of other job offers. Then, I would have to decide whether or not I wanted to stay.

I've been here for 28 years, and I could not dream of leaving. I have never had a bad day at Mayo Clinic because I'm surrounded by people who look at our world – the world of patient care, education, and research – in the same way. I'm surrounded by excellence, values, and commitment. We have a 98 percent retention rate at Mayo Clinic, which is unheard of, because people come here and realize the entire organization is here to help them thrive.

As a leader, how important is it to take moments to celebrate accomplishments?

We celebrate our staff and successes as a team, and we regularly honor our heritage. Most recently, we celebrated being named the number one hospital in the United States by *U.S. News & World Report*.

Mayo Clinic's most precious resource is our staff. Our physicians and allied-health staff are Mayo Clinic to the millions of patients who travel to our campuses for care each year. We intentionally set aside time to recognize and celebrate their contributions through years of service, exceptional work, and commitment to our values.

With all the challenges in healthcare, you still talk about the business with so much excitement. How important is that positive message to draw the next generation into the profession?

There has never been a better time to begin a career in medicine. A service-oriented, intellectually curious, hard-working individual can create a fulfilling vocation in this field, despite the turbulence of the current environment. If someone wants to do this work, he or she will find a path forward. The rewards are far greater than any of the challenges. ●