

What Is Ahead for Mayo Clinic?

John H. Noseworthy, MD



President and Chief Executive Officer, Mayo Clinic, Rochester, MN.

This year, 2014, marks the 150th anniversary of Mayo Clinic. This sesquicentennial year we will recognize Mayo Clinic's past and present in multiple ways, including articles in *Mayo Clinic Proceedings*; individual programs at the 3 Mayo Clinic group practices in Minnesota, Florida, and Arizona; content shared broadly through electronic media; and more.¹⁻⁵ This sesquicentennial year is also an appropriate time to examine the future of Mayo Clinic, taken in the context of the ongoing changes in health care in our nation and in the world. As such, it is my pleasure to share with you a vision for the future of Mayo Clinic from the perspective of the Clinic's leadership.

Mayo Clinic and its more than 57,000 employees are currently engaged in a disciplined exercise to guide Clinic innovation to 2020 and beyond. At the highest levels of decision making and resources, we will leverage our strong patient-centered culture of teamwork and excellence in patient care, medical education, and research to preserve, strengthen, and perpetuate our humanitarian, not-for-profit mission for generations. Rather than predicting how health care will play out in the future, I will review the principles that guide our decisions and share where Mayo is investing its resources.

Guiding Principles and Future Delivery Models

Mayo Clinic's primary value, "the needs of the patient come first," is unwavering and will forever drive our daily decisions. It is what our patients tell us they value the most about Mayo Clinic. It is also the single most important factor that focuses the compassion and expertise of our staff and the way we work together to harness the diverse strengths of an entire team on one patient at a time. These values and teamwork set Mayo Clinic apart not just in clinical practice but also in the way we approach medical research and education in support of our clinical practice. We will

use every effort to revitalize and refresh the trust our patients place in us every day and to deliver on our promise to provide the highest-quality care by integrating our practice with basic, translational, and clinical research and creating the optimal workforce to accomplish these goals. Our care model will use time-tested methods, new technologies, and the results of communications and health care delivery research to better connect with our patients, wherever and whenever they need us, and we will increasingly personalize the care we provide.

On balance, we promise to unceasingly invest in our staff, our training and research activities, our facilities, and all aspects of our integrated practice to ensure that our patients can depend on seamless, face-to-face care as the backbone of our practice model. New methods of communication and care delivery will supplement and enhance this traditional model of care delivery, not supplant it.

In addition to providing care for patients who travel to our destination sites in Minnesota, Florida, and Arizona for complex diagnostic and surgical services, we are committed to providing exemplary models of community-based care for local and regional patients. Our community-based models are similarly focused on delivering high-quality care that results in outstanding clinical outcomes and on providing that care affordably over time. As is true with care in the 3 major group practices, each of our local and regional care delivery practices relies on a team of health care professionals practicing at the apex of their licensure and joined together with others in an integrated practice to care for our patients. Such a model also allows for the transfer of local and regional patients to one of the larger group practices should the acuity of care or need for additional resources dictate it.

The emergence of our hyperconnected world paired with changing cultural expectations for immediacy across geographic distances creates opportunities for Mayo Clinic to touch the lives of untold millions of people through digital technology. We are aggressively

developing innovative digital platforms to minimize the need for patients to travel to a Mayo Clinic site except when essential. These innovations (including remote monitoring, telemedicine, and expanding social media platforms) will allow patients to access our expertise from their homes and local care facilities. As these platforms mature, Mayo Clinic will transition from “a place” to visit for care to a relevant and accessible “resource” capable of delivering a continuum of personalized services, many available without the patient leaving home.

We must do all we can to make our care affordable to our patients. Our efforts are increasingly focused on both the quality of our care (better safety, better outcomes through efficient integration of services) and reducing what people are required to spend on that care. Our broad efforts to work differently in all aspects of what we do at Mayo Clinic (including literally hundreds of practice redesign process improvement initiatives) will allow us to pass along savings to our patients while delivering better care. In summary, Mayo must be both trusted and affordable if we are to remain indispensable to our patients and competitive in the marketplace.

Three Imperatives to Transform Health Care

As we look outside of Mayo Clinic, health care in our country is at a crossroads. As a nation, we must address our most pressing health care problems: fragmentation, uneven quality, and lack of information and tools to reduce health care spending. Health care in America is too expensive—patients struggle to pay their bills, and the solvency of the Medicare trust fund is concerning. Mayo Clinic has identified 3 imperatives to transform health care: deliver knowledge, create value, and fund excellence.

Deliver Knowledge to Address Fragmented Care. Today, health care organizations are increasingly consolidating services through mergers and acquisitions. For-profit and not-for-profit health care institutions and insurers are merging in various combinations with a focus on financial return. It is unclear whether this approach will provide better care in an already fragmented system.

Mayo Clinic has chosen a different path. We recognize that Mayo’s most scalable and

differentiated asset is our knowledge. Therefore, rather than engage in the extensive consolidation of organizations (eg, mergers and acquisitions), Mayo is pursuing a business model based on the diffusion of knowledge as a practice integration tool to improve the efficiency and safety of medical care.

In this approach, Mayo Clinic is creating a comprehensive information and knowledge management system that codifies what we know and how we work to increase the safety and efficiency of our practice. *AskMayoExpert* is a part of this digital platform that includes care process models, order sets, alerts, and decision support tools to provide guidance to health care providers for thousands of clinical scenarios.

Mayo Clinic is now sharing these tools across the organization and more broadly through the Mayo Clinic Care Network (MCCN). Members of the MCCN are high-quality practices across the United States and internationally who share Mayo’s patient-focused ethos. Members of the MCCN subscribe to Mayo’s integrated patient care tools to provide better care for their patients in their home communities. In this model, Mayo Clinic serves as a partner to assist in providing medical expertise through eConsults, *AskMayoExpert*, and administrative consulting, as requested. In addition, we will extend Mayo’s reach and provide humanitarian assistance to developing and emerging nations using our integrated patient care tools for the promotion of health through health guidance programs.

We also are developing a strategy to deliver health guidance information globally to individuals and families who subscribe to our knowledge tools, and, through a variety of products and services, we will ultimately deliver individualized services to persons globally.

These types of tools help equip us to evolve the way we train the health care workforce of the future. This workforce faces the convergence of several issues: rapid technological advancements, vast amounts of new health care knowledge, new care models and reimbursement methods, and unprecedented growth in demand for health care services. We must create systematic tools and methods that allow our health care workforce to deliver seamless, high-quality care focused squarely on the needs of each patient.

Create Value to Address Uneven Quality in Health Care.

As a nation, we must provide higher-quality care at a lower cost. Mayo Clinic has embraced the goal of creating value to address the issue of uneven health care quality and excessive health care spending. The integration of our medical practice with our world-leading discovery, clinical and translational research, and academic programs creates a model of care that meets a range of patient needs, from complex subspecialty care to instantly available online health guidance. Our research efforts address the continuum of understanding the biology of health and disease and developing novel diagnostics and therapeutics; practice efforts evaluate clinical outcome data to determine what is most effective for patients. We have created the Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery to quantify the quality and the costs of our services to drive better outcomes at a lower cost.

One recent significant step in this strategy is the creation of Optum Labs, a strategic research alliance with Optum, a subsidiary of United-Health Group (Minneapolis, Minnesota), which serves more than 85 million people worldwide. There is extraordinary potential for this open innovation laboratory to understand the key variables that determine best care at lowest cost. The Optum Labs initiative will be made even more powerful as other academic medical centers, research universities, pharmaceutical and device companies, policy makers, and payers join the alliance. The alliance allows health care organizations to create a data-driven, transparent system to identify effective strategies (initially relying on existing data but going forward to evaluate value prospectively), how much they cost, and who is using them best. It is a welcome springboard for future innovation to improve quality and drive down the costs of health care. This effort will use the power of big data tools to advance value in health care; we trust that the promise will be realized in the near future.

Fund Excellence. Funding for medical research in the United States is at risk. Our nation's standing as a leader in engineering, science, mathematics, medical research, and technology depends on continued funding by both the government (eg, the National Institutes of Health) and the private sector.

Mayo Clinic continues to invest in initiatives that will benefit the future of patient care. In addition to funding a broad array of competitive discovery and translational research programs, we have recently launched centers for individualized medicine (personalized, genomic-based diagnostics and therapeutics), regenerative medicine (stem cell-based research to promote organ repair and organogenesis), and the science of health care delivery (create value, ie, better clinical outcomes at a lower cost).

Philanthropic support has been critical to the success of Mayo Clinic dating from the transformative generosity of the Mayo brothers.¹⁻⁴ We continue to benefit from the support of our grateful patients and others who are inspired by our commitment to our purpose. We trust that this support will continue to strengthen and speed our efforts to create the future of health care for our patients.

In the arena of reimbursement, we must move toward a system that funds the right behavior. Mayo Clinic strongly advocates for health care payment reform. The Affordable Care Act has begun to motivate various health care sectors (providers, hospitals, payers, and device and pharmaceutical companies) to cooperate to reduce costs predominantly for the provision of primary care and population health services. Mayo Clinic believes that effective payment reform must recognize the full spectrum of types of care (eg, beyond primary care to include intermediate and complex care) and reward those that provide the best clinical outcomes at lower costs. Data on desired outcomes and cost metrics can and should be readily available so that patients, families, and payers can make informed decisions about where to seek care.

Summary

The uncertainty and volatility of contemporary health care presents significant opportunity for Mayo Clinic. Mayo has a market advantage based on contributions from a steadfast, nimble, and courageous staff, who are creating value—better outcomes at affordable costs—as part of a system that invests in excellence. The commitment to our primary value—the needs of the patient come first—will be continually reinforced as we leverage our past success and ensure that Mayo Clinic is the most trusted name in health care.

Correspondence: Address to John H. Noseworthy, MD, President and Chief Executive Officer, Mayo Clinic, 200 First St SW, Rochester, MN 55905 (beck.lavonne@mayo.edu).

REFERENCES

1. Lanier WL. Celebrating the sesquicentennial of Mayo Clinic: 150 years of advances in medical practice, education, research, and professionalism. *Mayo Clin Proc.* 2014;89(1):1-4.
2. Olsen KD, Dacy MD. Mayo Clinic: 150 years of serving humanity through hope and healing. *Mayo Clin Proc.* 2014;89(1):8-15.
3. Berry LL, Seltman KD. The enduring culture of Mayo Clinic. *Mayo Clin Proc.* 2014;89(2):144-147.
4. Warner MA. You trained at Mayo Clinic? Wow! *Mayo Clin Proc.* 2014;89(3):284-290.
5. Mayo Clinic Sesquicentennial website. <http://150years.mayoclinic.org>. Accessed February 2, 2014.