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Mayo Clinic: The 2020 Initiative

Dr. John Noseworthy, President and CEO of Mayo Clinic, focused on how to ensure Mayo Clinic's relevance for the next century. Mayo Clinic had formed the 2020 Initiative to develop a strategic plan for transforming the clinic over the next twelve years. Many believed that increased quality, reduced costs or, ideally, both would be achieved through large delivery systems, such as Mayo, taking on responsibility for "population health" – serving the full spectrum of health care needs for a defined population of patients ranging from wellness and primary care to acute hospital treatment and skilled nursing care, all at a fixed price per person.^a Encouraging hospitals and physicians to shift their focus toward population health was an implicit objective of the 2010 federal Affordable Care Act (ACA). Should Mayo, historically a destination medical center focused on providing hospital care to patients with the most complex medical conditions – referred to as tertiary and quaternary care (**Exhibit 1**) – modify its strategy?

The deliberations of the 2020 Initiative's steering committee, chaired by Noseworthy before he became CEO, produced three strategic options for Mayo Clinic: (1) invest significantly to strengthen Mayo's traditional focus on tertiary and quaternary care; (2) maintain the Clinic's "status quo" strategy while awaiting greater clarity around the changes occasioned by the ACA; and (3) aggressively pursue growth through alternative business models that would establish lasting relationships with patients and consumers as a complement to Mayo's existing tertiary and quaternary services. Facing limited capital and concerns about overcommitting the organization, the steering committee recommended the third option to the Board of Trustees. Now, after several years of implementing that growth strategy, Noseworthy wanted to take a step back and assess Mayo Clinic's progress.

History of Mayo Clinic

Dr. William Worrall Mayo (Dr. Mayo) set up a medical practice in downtown Rochester, MN, in 1863.¹ His two sons, Dr. William J. Mayo (Dr. Will) and Dr. Charles H. Mayo (Dr. Charlie),² both moved back to Rochester to join their father's practice, at the time one of the largest in the upper Midwest region of the United States.³ Both continued their father's approach of traveling the world to gain new

^a For more information, please see Regina E. Herzlinger, "Population Health Management – Techniques and Tools," HBS Case No. 314-041 Rev. 2014 (Boston, MA: Harvard Business School Publishing, 2014).

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medical knowledge.⁴ As their reputations grew, physicians traveled to Rochester to learn from “the Mayos’ clinic.”⁵

The Mayo brothers invited partners to join their practice, creating the world’s first private integrated group practice of medicine – composed of doctors from multiple specialties working together to care for patients. This stood in contrast to the sole-practitioner model that dominated physician practice at the time. Dr. Will explained the importance of group practice to patient care:⁶

As we grow in learning, we more justly appreciate our dependence upon each other. The sum-total of medical knowledge is now so great and wide-spreading that it would be futile for one man to attempt to acquire, or for any one man to assume that he has, even a good working knowledge of any large part of the whole. The very necessities of the case are driving practitioners into cooperation. The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary.⁷

This view served as the foundation for what would come to be known as the “Mayo Model of Care,” a set of principles that guided practice during the Clinic’s early years. The Mayo Model of Care emphasized the Clinic’s mission “to inspire hope and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education and research.”⁸

To ensure that their practice survived them, Drs. Will, Charlie and their partners transferred all the assets of Mayo Clinic to the Mayo Foundation in 1919. After Mayo Clinic changed from a private practice to a non-profit foundation, its physicians no longer shared in the Clinic’s financial gains and instead received yearly salaries, unlike those at many other top medical institutions where compensation was typically linked to the volume of care a physician delivered.⁹

By 1987, Mayo Clinic had expanded from its original location in Rochester, MN – the downtown campus, the Methodist campus and the nearby Saint Marys campus – to include clinic campuses in Jacksonville, FL and Phoenix/Scottsdale, AZ. However, the nationwide chain that some predicted for Mayo Clinic after the opening of the Jacksonville and Scottsdale locations never materialized.¹⁰

Mayo Clinic had its own medical school, residency programs, school of health sciences (specializing in training of allied health professionals), and numerous programs for professional development. It was consistently ranked as one of the top hospitals in the nation and, in the 2012 *U.S. News and World Report* ranking, was ranked nationally in 16 adult and 10 pediatric specialties.¹¹

Mayo Clinic employed 61,100 employees, including 4,100 staff physicians and medical scientists and 3,450 residents, fellows and students (**Exhibit 2**). During that year, 588,600 patients were treated at its three campuses, with another 576,400 treated by Mayo Clinic Health System, a family of owned clinics, hospitals and health care facilities that served more than 70 communities in Iowa, Georgia, Wisconsin and Minnesota. The 1,700-bed clinic provided 626,000 hospital days of patient care and had 127,500 surgical patients split roughly evenly between inpatient and outpatient procedures (**Exhibits 3 and 4** provide selected operational and financial performance data, respectively.)

Mayo Clinic had several national, regional and local competitors. National competitors for tertiary and quaternary care included organizations such as Cleveland Clinic in Cleveland, OH; Johns Hopkins in Baltimore, MD; and Massachusetts General Hospital in Boston, MA. Regional and local competitors included other academic medical centers and local provider groups surrounding Mayo’s three campuses (e.g., Banner Health and Dignity Health in Arizona and the University of Florida Health System in Florida).

At the local level, Minnesota was dominated by vertically integrated delivery systems. By 2016, nearly three million of Minnesota's 5.4 million residents would receive care through accountable care models that the State government projected would save \$111 million over three years and lay the foundation for additional savings.¹² Two local competitors—Fairview Health Services in Minneapolis (eight hospitals) and HealthEast Care System in St. Paul (four hospitals)—were ranked among the top 10 health care systems in the United States by Thomson Reuters in 2010 and 2009, respectively.

Fairview included both the University of Minnesota Medical Center and Fairview Southdale Hospital, the latter named multiple times by Thomson Reuters as a top 100 U.S. hospital for cardiovascular care and as a highest-value hospital by the Leapfrog Group in 2008. Fairview had a shared-savings arrangement with Medica, a regional insurer covering approximately 1.5 million enrollees in Minnesota, Wisconsin, North Dakota, and South Dakota.

HealthEast had also received an impressive set of accolades, as one of only two health care organizations nationally to receive McKesson's 2010 Distinguished Achievement Award for using information technology to manage patient flow. It also received the Innovation of the Year in Patient Care award from the Minnesota Hospital Association and the Best Places to Work award for five years in a row by the *Minneapolis/St. Paul Business Journal*.

U.S. Health Care Reform

The 2010 Patient Protection and Affordable Care Act (ACA) aimed to expand health insurance coverage to 31 million of the 54 million¹³ uninsured in the United States, thereby decreasing the number of uninsured Americans from 19% to 8% of the total nonelderly population (**Exhibit 5**). Driving this increase was a mandate requiring most individuals to either obtain health insurance or pay a penalty. The implementation of this individual mandate was supported by (1) the expansion of the state and federal Medicaid program for low income families and (2) the creation of state and Federal government exchanges that would enable individuals who qualified for subsidies to select from a menu of health plans offered in their area. ACA also encouraged providers to reduce cost growth and improve quality in health care delivery. A key provision subsidized the creation of accountable care organizations (ACOs) — in which participating providers (i.e. physicians, hospitals, etc.) would be collectively financially responsible for the care of an enrolled population and share in any savings they generated.¹⁴

Though significant, the changes resulting from the ACA were only one of several trends affecting Mayo Clinic's future. Upcoming federal regulations and budget scenarios could reduce reimbursement for Medicare and Medicaid services. Insurance companies and employers wanted to reduce costs with mechanisms including "narrow networks" that offered access to only a limited number of lower-priced providers; ACOs with fixed-price reimbursement models; and defined-contribution plans that transferred money to employees whose employers had previously purchased health insurance on their behalf.^b All these approaches could limit access to Mayo Clinic services for many patients who might need to pay significantly higher out-of-pocket expenses to be treated at Mayo. In addition, local provider markets were increasingly consolidated and competitive. Against this backdrop, Mayo Clinic wanted to ensure its long-term sustainability.

^b For more information, please see Regina E. Herzlinger, "Aon Hewitt's Privacy Health Insurance Exchange," HBS Case No. 314-037, Rev. March 2013 (Boston, MA: Harvard Business School Publishing, 2006).

The 2020 Initiative

The 2020 Initiative focused on three broad strategic options.

Option 1: Further focus on tertiary and quaternary care

The first option focused on Mayo Clinic's strength in complex tertiary and quaternary care while leaving a substantial portion of primary and secondary care to local providers in a patient's home community. Mayo Clinic had historically been a destination medical center with patients traveling from all over the world for care. Compared to its academic competitors, Mayo Clinic boasted the largest national and international practice in the country, with many patients traveling more than 120 miles to Rochester. Approximately 75-80% of patients treated at Mayo Clinic Rochester received tertiary or quaternary services, a breakdown that had remained relatively steady over time.

Mayo Clinic, however, had already expanded its primary care practice by acquiring both physician practices and hospitals to create Mayo Clinic Health System, a family of clinics, hospitals and health care facilities serving over 70 communities in Iowa, Georgia, Wisconsin and Minnesota. This move expanded Mayo's primary care practice beyond Olmsted County – where the Rochester campus was located – throughout Minnesota and the upper Midwest region of the United States. Returning to Mayo Clinic's traditional focus on tertiary and quaternary care would enhance Mayo's reputation as *the* provider of choice for patients with the most-complex conditions in the world. This strategy was aligned with Mayo's academic goal of performing cutting-edge clinical research to develop innovative treatments for patients.

A potential byproduct of this approach, however, would be a decrease in the share of Mayo Clinic's patients seeking primary and secondary care. Further, a shift toward the most-complex cases might negatively impact Mayo Clinic's margin per case, as leaders felt that the current reimbursement system – largely using a fixed, risk-adjusted payment per discharge based on a patient's diagnosis – inadequately compensated providers for the most-complex cases.^c Additionally, a center that depended on tertiary and quaternary referrals would require patients to have a choice about where they seek care. Some within Mayo Clinic worried that cost control activities, such as narrow networks and local ACOs, might limit the choice of patients who would have otherwise selected Mayo Clinic for their complex care.

Option 2: Maintain status quo

The Steering Committee's second option was to maintain Mayo Clinic's "status quo" strategy while awaiting greater clarity around the changes required by federal health care reform. Despite its passage, there was significant political opposition to the law. Some Steering Committee members recalled the anticipated, but ultimately unsuccessful, attempt by then President William Clinton to implement federal health care reform in 1993. Thus, instead of trying to shape its model around an ambiguous health care landscape, Mayo Clinic might be best served by waiting for better understanding of how various aspects of the new law would be implemented. To this end, Mayo Clinic entered into some bundled payment arrangements with particular payers for select services but did not enter into the federal government's pilot programs for bundled care.

^c For more, see Regina E. Herzlinger and Jo Ellen Slurzberg, "Note on Health Insurance Coverage, Coding, and Payment," HBS No. 313-042, Rev. 2012 (Boston: Harvard Business School Publishing, 2015).

As part of the *status quo* strategy, Mayo Clinic would continue building its tertiary and quaternary practice while also expanding its primary and secondary care practice in the Upper Midwest via Mayo Clinic Health System. Data from the *Dartmouth Atlas of Health Care* suggested Mayo Clinic was high quality and low cost when compared to similar national academic medical centers. For example, end-of-life hospital utilization and spending at Mayo Clinic was generally lower than that for many competing academic medical centers in the United States (**Exhibits 6 and 7**). Mayo Clinic, however, did not discount its commercial fees much in Rochester, which led to higher line-item prices versus local and regional competitors for patients with private insurance.

This strategy was the most passive approach. Mayo Clinic was widely considered an exemplary model of care and was already ahead of many U.S. providers in several attributes that reform hoped to encourage (see **Exhibits 8 and 9** for examples of Mayo Clinic's performance on measures of clinical quality and patient satisfaction relative to national benchmarks). Several members of the Steering Committee thus felt that, unlike many other providers, Mayo Clinic had the luxury of waiting for greater clarity about the final scope of reform. Nevertheless, by waiting, Mayo Clinic might allow many of its competitors to catch up, thereby challenging its national prominence and leadership position.

Option 3: Pursue growth via alternative business models

The final option Mayo Clinic explored was to focus on growth through alternative business models as complements to Mayo's existing lines of business. The goal was to leverage one of Mayo Clinic's largest assets—its base of health care knowledge and information. The Steering Committee noted, "Mayo Clinic is a set of geographic destinations, but it is also a comprehensive platform of knowledge, expertise and delivery proficiency for providing a variety of products and services to a spectrum of markets...Such a model allows Mayo Clinic to serve patients in a number of ways that can meet their needs and sustain Mayo Clinic's viability. It also allows Mayo Clinic to further cultivate its relationships with loyal patients, the extended family of Mayo Clinic supporters, prospective patients, and the larger community. Ultimately, Mayo Clinic could care for, and influence the health of, far more people."¹⁵

The alternative business models considered ranged from new approaches to the physical delivery of care (e.g., concierge medical practices aimed at increasing convenience and access for patients willing to pay for such benefits) to a host of web-based services (see **Exhibit 10** for examples). These new models could meet some combination of two key objectives: (1) cost reduction and (2) reputation and brand enhancement. Though Mayo Clinic had long been known as the preeminent provider of complex hospital care, many on the Steering Committee felt that Mayo was well positioned for success in the expected future context where providers would be rewarded for keeping patients healthy and, in many cases, out of the hospital altogether.

Pursuing this option, however, would require *significant investment* by Mayo Clinic in areas that were not its traditional strength. The biggest risk of this strategy was that Mayo Clinic would compromise its existing strength in the delivery of complex medical care. Like any organization, Mayo Clinic had limited capital to invest, and pursuing this growth option would divert funds traditionally invested in its tertiary/quaternary practice toward unproven business models with unclear revenue potential. Beyond these direct financial concerns, Mayo Clinic ran the risk of the new and unproven businesses commoditizing its brand or, even worse, damaging its reputation as a leading destination for complex medical treatment.

Implementing the Growth Strategy

After extensive deliberation, the Steering Committee recommended that Mayo Clinic pursue the third option, which the Board of Trustees accepted. The Steering Committee realized that effective implementation would require a concrete and easily described goal. To that end, it established the ambitious goal of having Mayo Clinic achieve 200 million consumer “touches” per year by 2020. To define a consumer “touch”, the Steering Committee suggested the following: “Providing a ‘meaningful experience’ in a way that delivers value attributable to Mayo Clinic.” The Steering Committee further defined a “meaningful experience” as one “giving the consumer what they want, when and where they want it, and on their terms.”

To achieve 200 million touches per year, Mayo Clinic focused on six key areas: (1) patients treated at Mayo Clinic sites in Minnesota, Arizona, Florida, and Mayo Clinic Health System; (2) patients treated through Mayo Clinic Care Network, a subscription-based alliance between Mayo Clinic and partner health systems; (3) patients receiving diagnostic tests through Mayo Medical Laboratories, a clinical laboratory that provides specialized testing services to over 4,000 hospitals worldwide; (4) individuals reached through marketing events (e.g., sessions on heart health and pediatric health held at shopping malls and professional sporting events); (5) people reached through social media (i.e., Mayo Twitter accounts); and (6) individuals reached through initiatives of Mayo Clinic’s Global Business Solutions (GBS) group (e.g., digital health information or health services). GBS was charged with developing new business models to drive the 2020 strategy and achieve the majority of the growth needed to reach the 200 million target.

The implementation of the growth strategy was captured by a 3x3 matrix described in **Exhibit 11**. On one axis were the target populations that Mayo Clinic aimed to serve: (1) patients here (i.e., patients during their stay within Mayo’s own facilities); (2) patients there (i.e., patients treated at Mayo Clinic Care Network facilities or former Mayo Clinic patients); and (3) people everywhere (i.e., those who are neither current nor past patients at Mayo’s own facilities or those of its partners). On the other axis were the categories of initiatives: (1) run (i.e., continue to operate existing activities as efficiently and effectively as possible); (2) grow (i.e., expand current activities); or (3) transform (i.e., pursue new products and business models). **Exhibit 12** illustrates the planned distribution of Mayo’s capital investments for projects in each of the resulting nine cells of this matrix.

Patients Here

The majority of Mayo Clinic’s focus and capital investment was in the “here” category, with a continued focus on running and maintaining its facilities in Minnesota, Arizona, Florida and Mayo Clinic Health System. In addition, Mayo Clinic continued to invest in the “here, grow” category with a \$400M investment in new proton beam centers in Minnesota and Arizona. In the “here, transform” category, Mayo Clinic had developed three centers:

- The Center for the Science of Health Care Delivery was created to apply scientific and engineering principles to health care delivery to improve the quality of patient care.¹⁶ The Center has five major programs: (1) Value Analysis (to study the value of health care delivery at Mayo Clinic and other organizations by analyzing cost, utilization, quality, safety, patient-reported outcomes, and other measures); (2) Patient-Centered Outcomes (to examine the entire patient journey with the goal of developing new models of patient-centered health care delivery); (3) Health Care Systems Engineering (to improve health care delivery systems by applying principles from engineering, management and translational science); (4) Population Health Science (to leverage existing health care delivery systems

and community resources to improve community health); and (5) Surgical Outcomes (to improve the quality of surgical patient care at Mayo Clinic and in the U.S. as a whole). Mark Hayward, administrator of the center, noted, “The objective of the Kern Center is to foster collaboration between physicians and scientists to study, design, and implement care delivery models that improve patient outcomes and the patient experience while reducing cost and utilization.”

- The Center for Regenerative Medicine was to enable the repair of diseased, injured or congenitally defective tissues and organs, a vital component of medical and surgical practice in the coming years.¹⁷ The Center integrates both laboratory and clinical research with clinical practice.
- The Center for Individualized Medicine focused on precision medicine, which aims to tailor diagnosis and treatment to each patient, while furthering research and education relative to genomics-based testing and treatment.¹⁸ The Center is divided into two programs: Translation Programs (i.e., biomarker discovery, clinomics, epigenomics, microbiome, and pharmacogenomics^d) and Infrastructure Programs (i.e., bioethics, bioinformatics, biorepositories, information technology, medical genome facility, and education and training).

Both the Center for Regenerative Medicine and the Center for Individualized Medicine established patient clinics that experienced significant growth in the number of patient appointments and referrals during their first two years of operation. Though the volume of patient visits to these two clinics remained relatively small (a few thousand per year), the growth of the clinics exceeded Mayo Clinic’s expectations. In addition, all three centers received support through significant gifts from benefactors. Finally, the three centers spurred the creation of numerous start-up companies that had the potential to generate sizable revenue to support the future operations and growth of the centers. Examples include Mayo Clinic Bioservices, a sample processing and Storage Company, as well as Oncospire, a start-up devoted to discovery and commercialization of molecular markers for cancer. Beyond these centers, Mayo Clinic had taken several steps to expand its owned hospital capacity.

In 2012, Mayo Clinic spent \$64 million to purchase Red Wing Health Services—composed of a 50-bed rural hospital and affiliated medical group in Red Wing, MN—from Fairview Health Services.¹⁹ Mayo Clinic also announced plans to build a new 21-bed rural hospital in Cannon Falls, MN, approximately 40 miles north of the Rochester campus. Mayo also announced several efforts to expand and upgrade capacity at its flagship campus in Rochester. The hospital earmarked \$72 million for the addition of 69 inpatient beds and over 150,000 square feet to the Saint Mary’s campus.²⁰ This project was part of a larger \$6 billion plan, including private investment, to expand and improve Mayo Clinic’s facilities and infrastructure in Rochester over the ensuing two decades.²¹

Patients There

The majority of activity in the “patients there” bucket was focused on the “there, transform” category. In the “there, transform” category, Mayo Clinic developed Mayo Clinic Care Network (MCCN), a subscription-based alliance that entitled partner providers to co-brand marketing materials, access second opinions for complex patients via “eConsult”, provide a web-based clinical information resource, and access Mayo Clinic’s administrative and business-process services. (See **Exhibit 13**.)

^d Clinomics, epigenomics, microbiome, and pharmacogenomics all focus on studying and using genomic data to improve patient care.

Mayo Clinic extensively vetted each organization that applied to ensure the quality of the network and prevent damage to its brand. In its first 36 months, MCCN grew to 30 members in 16 states, Mexico City, and Puerto Rico.

Mayo Clinic's use of partnering to drive expansion stood in contrast to the merger and acquisition (M&A) approach of many other major health care systems. Mayo Clinic's previous small acquisitions in the upper Midwest revealed two major problems with the M&A route. Jeff Bolton, chief financial officer, noted:

What became apparent early on was that potential targets were dilutive from an operating income perspective and came to the party requiring substantial capital for traditional delivery of services. But the real thing that we found was that the integration into the Mayo culture was a "heavy lift". We had to devote a ton of resources to bring these organizations into the Mayo Clinic model of care.

Noseworthy echoed Bolton's concern with the pursuit of an M&A strategy:

As we've looked at consolidations around the country, it's a little hard for us to see how they really help patient care. I can see how being big helps an organization's financial position, purchasing power, and ability to compete to provide high-revenue services, but I don't see how that really serves our mission of having patient-centered care. So we've taken a different strategy. We're not doing mergers and acquisitions; we're basically using our Mayo-vetted knowledge—our information knowledge management system—as an integrator to build Mayo Clinic Care Network.

This strategy provided Mayo Clinic two key benefits. First, it aligned with Mayo's mission of providing patient-centered care, as it enabled more patients to access certain Mayo Clinic resources in their home communities without having to travel to Minnesota, Arizona, or Florida. Second, it provided Mayo Clinic with a network of providers who referred complex patients to its flagship facilities. To date, Mayo Clinic's growth trajectory had not changed with the growth of MCCN, but the mix of patients coming to the hospital had changed with an influx of complex (i.e., tertiary and quaternary) patient referrals.

Patients Everywhere

Like the "patients there" category, the majority of activity in the "patients everywhere" bucket was focused on the "everywhere, transform" segment. To address that segment, Mayo Clinic Global Business Solutions (GBS) focused on taking Mayo-branded products and services to market along three main service lines: (1) healthy living, (2) care management, and (3) benefits management. Healthy living products and services promoted lifestyle choices related to diet, exercise, prevention and wellness. Care management products supported a wide range of activities, such as nursing call lines or other sources of advice, to manage health care and chronic conditions. Benefits management supported the understanding, purchasing, and use of insurance and other health-related benefit products. GBS was also heavily engaged in Mayo's direct-to-consumer strategies. The end goal was to enable Mayo Clinic to utilize its knowledge base to directly help more patients beyond its flagship facilities and its MCCN partner organizations.

Dr. Paul Limberg, medical director of GBS, remarked that as Mayo Clinic developed these products, it needed to ensure that "...anything Mayo commercialized was valued and validated by our practice, education, and research colleagues so that it was authentically Mayo by the time it was marketed to somebody else." If Mayo Clinic did not ensure this link back to its own practice and organization, its

products would be no different than those offered by any other provider of consumer health care services.

Jeff Bolton reflected on Mayo Clinic's approach to the "patients everywhere" category:

From a business perspective, we're trying to monetize our knowledge, but from a health care perspective, we're also trying to push that knowledge out as broadly across the world as we can. Part of our nonprofit mission is making sure that the knowledge we generate is available to other providers, and, ultimately, to consumers who can use it to improve their health and wellness.

Mayo Clinic had made progress towards its goal, and by 2013, was accruing an estimated 46 million consumer touches per year (**Exhibit 14**). This figure included roughly 1.2 million unique patients visiting Mayo Clinic, 4.2 million unique diagnostic tests in more than 130 countries through Mayo Medical Labs, 3.5 million patients through Mayo Clinic Care Network, 5.5 million people through Mayo's social media channels, and 31.7 million people through products and services from GBS (including online resources). GBS initiatives were expected to drive a large portion of the growth required to enable Mayo Clinic to reach the 200 million goal by 2020.

Implementation Challenges

Assuming that the growth strategy pursued over the past five years remained the best approach for Mayo Clinic, Noseworthy knew that its implementation would face significant challenges due to the confluence of internal resistance and an external landscape that was changing rapidly and dramatically.

Internal Challenges

David Herbert, chair of GBS, stated that one of the biggest challenges facing Mayo Clinic internally was whether it could effectively execute a strategy that some criticized as straying from Mayo's traditional core of expertise in delivering medical care in a face-to-face model:

Our first issue is whether we can we identify the knowledge and assets we have internally to serve new markets. Then the question is whether we can effectively execute on delivering to those markets.

Mayo Clinic continued to struggle with getting physicians fully on board with its new strategy. Many physicians, especially in Rochester, MN, wanted to focus on taking care of patients and did not feel the need for new initiatives that might divert resources from the core medical practice. Additionally, there was a relatively low level of awareness among physicians about many of the initiatives being considered by the GBS group.

Limberg added:

As a physician-led organization, physicians are leaders and speak with authority at Mayo. Taking care of patients and not letting the financial factors influence care are things we learn in medical school from day one. When you get into what's good for a population or an organization—particularly when you bring dollars into the equation—it starts to make physicians nervous. So it has been a slower path to get everybody rallied around the idea that this supports our mission and is critical to Mayo Clinic's success. We want

them to see this not as an offshoot but as something that is deeply integrated with what we're all trying to do.

Several Mayo executives noted that the growth strategy required a greater appetite for risk-taking than that historically observed at Mayo Clinic. Herbert said:

If you take undue risks in the medical setting people may get hurt or die. So the risk appetite here, especially relative to the need for capital and growth, can be especially challenging. Operating at the speed of the marketplace, in my opinion, requires an ability to manage risk. I think we *are* managing it, but it has required a transition. It's not an area where we've got deep experience.

Mayo Clinic also needed to determine how to balance its investments between tertiary/quaternary care and its new initiatives. In 2012, tertiary and quaternary care accounted for over 90% of Mayo Clinic's capital investment; roughly 5% was invested in the "everywhere" category of initiatives.

External Challenges

Mayo Clinic also faced a rapidly changing external landscape. As in much of the United States, Mayo Clinic was paid for most of the care it provided on a fee-for-service basis (i.e., hospitals and physicians would get paid on the basis of the volume of in-person care they provided). For the growth strategy to succeed, Mayo Clinic would need to be paid for the value it provided to patients worldwide, the vast majority of whom would not travel to Mayo Clinic's physical locations.

Though the health care industry was shifting towards the idea of fixed payment, this shift was happening quite slowly—both in the U.S. and internationally. Noseworthy noted: "As we, at Mayo Clinic, begin to understand more about value, getting answers quickly and accurately, and not doing redundant things, we think payers will ultimately be willing to pay us for the value we create and negotiate some sort of a bundled payment that provides a fixed amount per person covered."

One of the recent experiments in the U.S. in the shift towards paying for value was Centers for Medicare and Medicaid Services (CMS) establishment of the Pioneer ACO program in 2011. Under its terms, groups of providers would become responsible for the cost and quality of care for a population of "aligned" Medicare beneficiaries.

For the first two years of the program, Pioneer ACOs would share risk with Medicare. If spending were sufficiently below benchmark levels, the ACO would receive a share of those savings; similarly, if spending were sufficiently above the benchmark, the ACO would share risk for the additional costs. If an ACO met performance requirements in these first two years, it would have the opportunity to shift to a "population-based payment arrangement" for the third year of the program. According to CMS,

Population-based payment is a per-beneficiary, per-month payment amount intended to replace a significant portion of the ACO's fee-for-service (FFS) payments with a prospective payments. This new arrangement provides flexibility for participating ACOs to utilize services not normally reimbursable under Medicare (such as phone consultations or telehealth services).²²

Mayo Clinic decided not to apply for this program for a number of reasons. For one, it believed it would see a reduction in payments and would not be adequately paid for the value it provided to patients. In addition, the mechanism for aligning patients with particular ACOs—based on the plurality, but not necessarily the entirety, of their care being with a given ACO—did not require a

patient aligned with an ACO to receive his or her care exclusively from that ACO's providers. Patients could choose to seek care at any Medicare-eligible provider. As a result, a Pioneer ACO could be at risk for the cost and quality of care provided by hospitals or physicians that were not affiliated with it. For Mayo Clinic, the risks of the Pioneer ACO program outweighed its potential benefits. Like Mayo, several other well-known health care systems, such as Cleveland Clinic, Kaiser Permanente, Intermountain Healthcare, and Geisinger Clinic, opted not to apply for the program

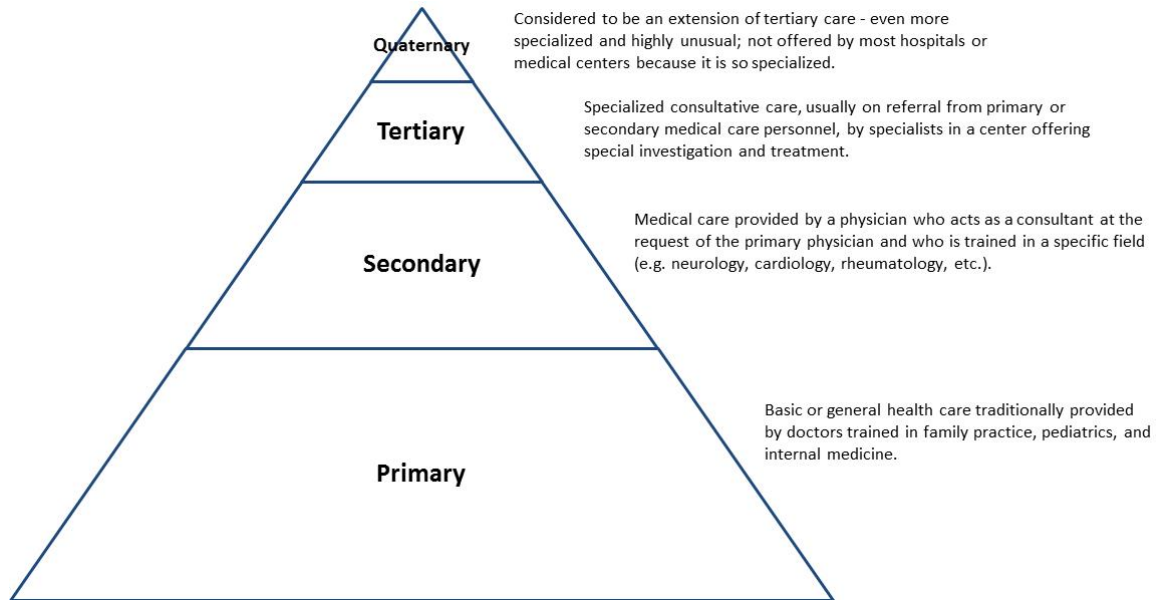
Conclusion

As Mayo Clinic entered the sixth year of implementing its growth strategy, Noseworthy faced several questions. Was growing the alternative business models the right strategy to pursue? Was Mayo Clinic risking its biggest asset—its excellence in tertiary/quaternary care—by trying to treat patients at all levels of the care pyramid? If Mayo Clinic did succeed in meeting its targets for 2020, would it be paid properly for the value it provided to patients along the way? Noseworthy knew that helping Mayo Clinic navigate the coming decade would be a job that would require all of his energy and then some. (See **Exhibit 15** for 2015 report on ACOs' and shared savings programs performance.)

Assignment

1. What Six Factors alignments and business model elements are the key sources of value provided by Mayo Clinic? To what extent do these sources of value differentiate Mayo Clinic from its national and regional competitors?^e
2. Assuming that Mayo Clinic continues to push forward with its strategy of growth through alternative business models, what do you see as the key Six Factors and business model implementation challenges? How should these be addressed?

^e For more, see Regina E. Herzlinger, "Innovating in Health Care—Framework," HBS No. 314-017, Rev. July 2015 (Boston: Harvard Business School Publishing, 2013).

Exhibit 1 Levels of Medical Care

Source: Adapted from http://www.hopkinsmedicine.org/patient_care/pay_bill/insurance_footnotes.html, and <http://patients.about.com/od/moreprovidersbeyonddocs/a/Stages-Of-Care-Primary-Secondary-Tertiary-And-Quaternary-Care.htm>, accessed May 2014.

Exhibit 2 Mayo Clinic Facts—2014

Personnel	
Staff physicians and scientists	4,200
Residents, fellows and others	2,400
Allied health staff (clinic and hospital)	52,900
Total	59,500
Patient Care	
Total clinic patients	1,317,900
Hospital admissions	128,000
Hospital days of patient care	612,000
Research	
Research personnel	
Physicians and medical scientists	619
Allied health professionals	2,189
Research activity	
New human research studies approved by Institutional Review Board	2,672
Active human research studies	9,832
Research publications and review articles in peer-reviewed journals	6,392
Education	
Mayo School of Graduate Medical Education	
Enrollment	1,665
Graduates	676
Mayo Graduate School	
Enrollment	331
Graduates	19
M.S. graduates	31
Mayo Medical School	
Enrollment	216
Graduates	54
Mayo School of Health Sciences	
Enrollment	1,843
Graduates	1,230
Mayo School of Continuous Professional Development	
Physician participants	87,143
Nonphysician participants	40,473

Source: Mayo Clinic, Mayo Clinic Facts, <http://www.mayoclinic.org/about-mayo-clinic/facts-statistics>, accessed December 2015.

Exhibit 3 Mayo Clinic Operational Metrics, 2008-2014

	2014	2013	2012	2011	2010	2009	2008
<u>Personnel</u> ^a							
Staff Physicians and Medical Scientists	4,200	4,100	4,100	3,800	3,700	3,700	3,700
Administrative and Allied Health Staff (Clinic and Hospitals)	52,900	52,200	53,600	50,900	49,100	49,000	50,100
Residents, Fellows, and Students	2,400	3,200	3,450	3,600	3,300	3,200	3,200
Total Personnel	59,500	59,500	61,100	58,300	56,100	55,900	57,000
<u>Patient Care</u>							
Mayo Clinic Patients (Rochester, Florida, Arizona)	NA	645,000	588,600	554,000	533,000	528,000	526,000
Mayo Clinic Health System ^b	NA	615,000	576,400	559,000	548,000	--	--
Total Clinic Patients ^c	1,317,900	1,260,000	1,165,000	1,113,000	1,081,000	528,000	526,000
Hospital Admissions	128,000	131,000	131,000	123,000	123,000	124,000	132,000
Hospital Days	612,000	608,000	626,000	588,000	571,000	567,000	627,000
Total Surgical Patients	NA	128,700	127,500	121,100	120,400	122,000	120,900

Source: Company documents.

^a Including temporary and supplemental employees.

^b Reported for first time in 2010, not reported in for 2014.

^c Individual patients counted once annually.

Exhibit 4 Mayo Clinic Financial Statement Data, 2008-2014**Consolidated Statements of Activities**
(\$ in millions)

	2014	2013	2012	2011	2010	2009	2008
Revenue, gains, and other support:							
Net medical service revenue	8,165	7,902	7,485	6,984	6,736	6,474	6,144
Grants and contracts	375	372	385	369	345	325	329
Investment return allocated to current activities	173	170	155	145	123	101	117
Contributions available for current activities	179	232	158	255	179	106	114
Premium revenue	132	115	113	109	109	106	93
Other	737	631	549	458	452	470	425
Total revenue, gains, and other support	9,761	9,421	8,844	8,318	7,942	7,582	7,222
Expenses:							
Salaries and Benefits	5,872	5,930	5,609	5,141	4,912	4,797	4,628
Supplies and services	2,289	2,139	2,127	1,900	1,725	1,677	1,783
Facilities	669	650	650	615	591	575	591
Provision for uncollectable accounts	--	--	--	--	160	161	161
Finance and investment	96	90	63	52	39	39	60
Total expenses	8,926	8,809	8,449	7,708	7,427	7,249	7,222
Income from current activities	834	612	395	610	515	333	0
Non-current and other items:							
Contributions not available for current activities, net	98	153	73	56	24	78	35
Unallocated investment return, net	230	433	311	(9)	275	315	(745)
Income Tax Expense	(32)	(22)	(20)	(23)	(22)	(4)	38
Contribution received from affiliation			105	16	0	0	0
Other	(1)	9	(5)	0	1	(5)	(4)
Total non-current and other items	295	573	464	40	278	385	(677)
Increase (decrease) in net assets before other changes in net assets	1,128	1,185	859	651	793	718	-677
Pension and other postretirement benefit adjustments	-1,590	1,782	-903	-735	-250	1,228	-1,235
Increase (decrease) in net assets	-462	2,968	-43	-84	543	1,945	-1,987
Net assets at beginning of year	7,654	4,686	4,729	4,814	4,271	2,326	4,312
Net assets at end of year	7,192	7,654	4,686	4,729	4,814	4,271	2,326

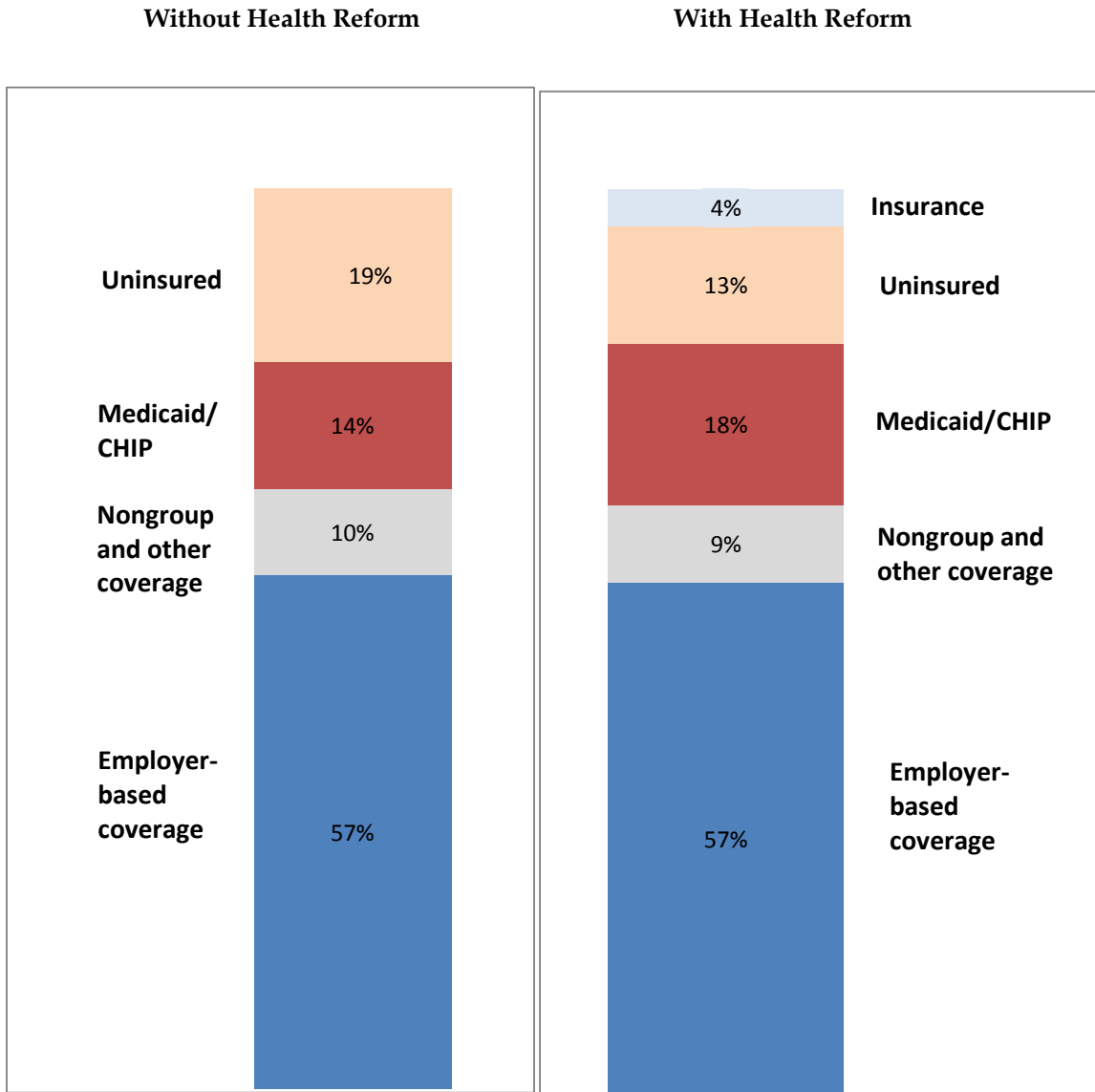
Exhibit 4 (continued) Mayo Clinic Financial Statement Data, 2008-2014

	2014	2013	2012	2011	2010	2009	2008
Assets							
Cash and cash equivalents	55	47	60	141	74	41	42
Accounts receivable for medical devices, net	1,495	1,414	1,328	1,422	1,221	1,107	1,117
Investments - at market	7,179	6,383	5,261	4,237	3,963	3,429	2,738
Other assets	1,227	1,385	894	829	832	900	883
Property, plant, and equipment, net	4,057	3,978	3,774	3,499	3,490	3,512	3,554
Total assets	14,013	13,208	11,316	10,129	9,579	8,989	8,333
Liabilities and Net Assets							
Accounts payable and current liabilities	1,903	1,688	1,585	1,459	1,636	1,542	1,392
Long-term debt	2,450	2,321	2,102	1,632	1,360	1,244	1,360
Other long-term liabilities	2,468	1,545	2,943	2,308	1,769	1,931	3,255
Net assets	7,192	7,654	4,686	4,729	4,814	4,271	2,326
Total liabilities and net assets	14,013	13,208	11,316	10,129	9,579	8,989	8,333

Source: Mayo Clinic financial statements, www.mayoclinic.org, accessed December 2015.

Exhibit 5 Anticipated U.S. Health Insurance Coverage Following the ACA

Health Insurance Coverage - 2015
Total Nonelderly Population - 270 million



Source: Congressional Budget Office, Insurance Coverage Provisions of the Affordable Care Act – CBO’s March 2015 Baseline, Table 2, <https://www.cbo.gov/sites/default/files/cbofiles/attachments/43900-2015-03-ACAtables.pdf>, accessed December 2015.

Exhibit 6 Medicare Enrollee Care Utilization during the Last Six Months of Life for Mayo Clinic and Competitors

Hospital (MARKET)	Hospital Days per Decedent	Physician Visits per Decedent	Percent Enrolled in Hospice	Percent Seeing 10 or More MDs
Mayo Clinic - Saint Mary's Hospital, (ROCHESTER, MN)	9.9	21.3	44.7	52.4
Mayo Clinic Hospital, (PHOENIX, AZ)	9.7	29.1	70.1	62.3
Mayo Clinic Jacksonville, (JACKSONVILLE, FL)	11.2	34.2	65.8	63.0
UCSF Medical Center, (SAN FRANCISCO, CA)	13.2	28.3	39.0	53.4
Beth Israel Deaconess Medical Center, (BOSTON, MA)	12.1	30.3	41.7	64.5
Brigham and Women's Hospital, (BOSTON, MA)	14.9	31.5	41.5	61.5
Massachusetts General Hospital, (BOSTON, MA)	15.5	34.7	44.9	59.9
Johns Hopkins Hospital, (BALTIMORE, MD)	18.1	21.6	40.7	55.2
Duke University Hospital, (DURHAM, NC)	13.6	24.2	47.9	54.8
New York-Presbyterian Hospital, (NEW YORK, NY)	20.2	39.1	24.5	60.9
Cleveland Clinic Foundation, (CLEVELAND, OH)	16.0	35.3	46.2	60.4
National Average	11.8	33.7	47.9	49.5

Source: The Dartmouth Institute for Health Policy & Clinical Practice, The Dartmouth Atlas of Health Care, http://www.dartmouthatlas.org/pages/eol_care_236_hospitals, accessed July 2014.

Notes: Variables were adjusted for age, sex, race, and primary chronic diagnosis. The study population includes fee-for-service Medicare beneficiaries who died in 2010 and who were hospitalized for a chronic illness at least once during their last two years of life. Patients were assigned to the hospital they used most frequently during their last two years of life. If there was a tie between hospitals, the patient was assigned to the hospital associated with the last inpatient admission prior to death.

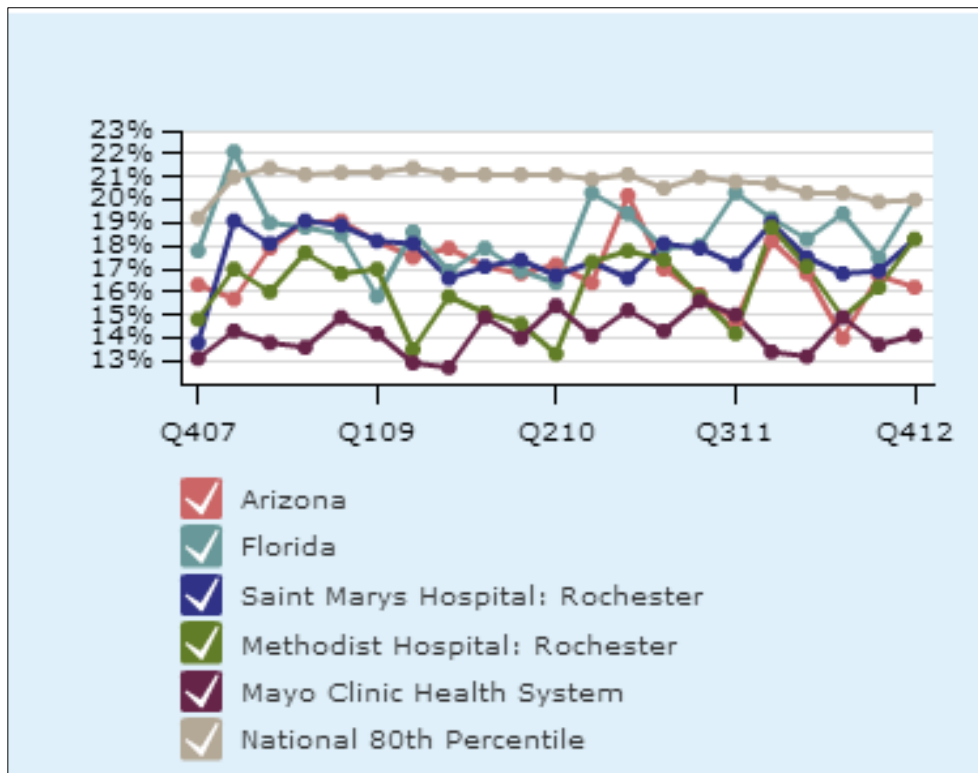
Exhibit 7 Medicare Spending During the Last Two Years of Life for Mayo Clinic and Competitors

Hospital (MARKET)	Total Medicare Reimbursement Per Decedent (Last 2 Years of Life):	Total Medicare Reimbursement Per Decedent (Last 2 Years of Life):
	Value Relative to National Average	Value Relative to National Average
	Hospital	Hospital's Market
Mayo Clinic - Methodist Hospital, (ROCHESTER, MN)	1.25	0.57
Mayo Clinic - Saint Mary's Hospital, (ROCHESTER, MN)	0.91	0.57
Mayo Clinic Hospital, (PHOENIX, AZ)	1.07	0.95
Mayo Clinic Jacksonville, (JACKSONVILLE, FL)	1.06	1.30
UCSF Medical Center, (SAN FRANCISCO, CA)	1.45	0.94
Beth Israel Deaconess Medical Center, (BOSTON, MA)	1.32	1.00
Brigham and Women's Hospital, (BOSTON, MA)	1.43	1.00
Massachusetts General Hospital, (BOSTON, MA)	1.36	1.00
Johns Hopkins Hospital, (BALTIMORE, MD)	1.72	1.01
Duke University Hospital, (DURHAM, NC)	1.05	0.81
Memorial Sloan-Kettering Cancer Center, (NEW YORK, NY)	1.67	1.68
New York-Presbyterian Hospital, (NEW YORK, NY)	1.55	1.68
Cleveland Clinic Foundation, (CLEVELAND, OH)	1.09	1.11
National Average	1.00	1.00
90th Percentile	1.30	1.30
50th Percentile	0.93	0.89
10th Percentile	0.74	0.62

Source: The Dartmouth Institute for Health Policy & Clinical Practice, The Dartmouth Atlas of Health Care, <http://www.dartmouthatlas.org/data/table.aspx?ind=23&tf=23&ch=1&loc=6830&loct=5&rus=1&fmt=45>, accessed May 2014.

Notes: Rates are adjusted for age, sex, race, primary chronic condition, and the presence of more than one chronic condition using ordinary least squares regression. A hospital's market is defined as the hospital referral region (HRR) in which the hospital is located.

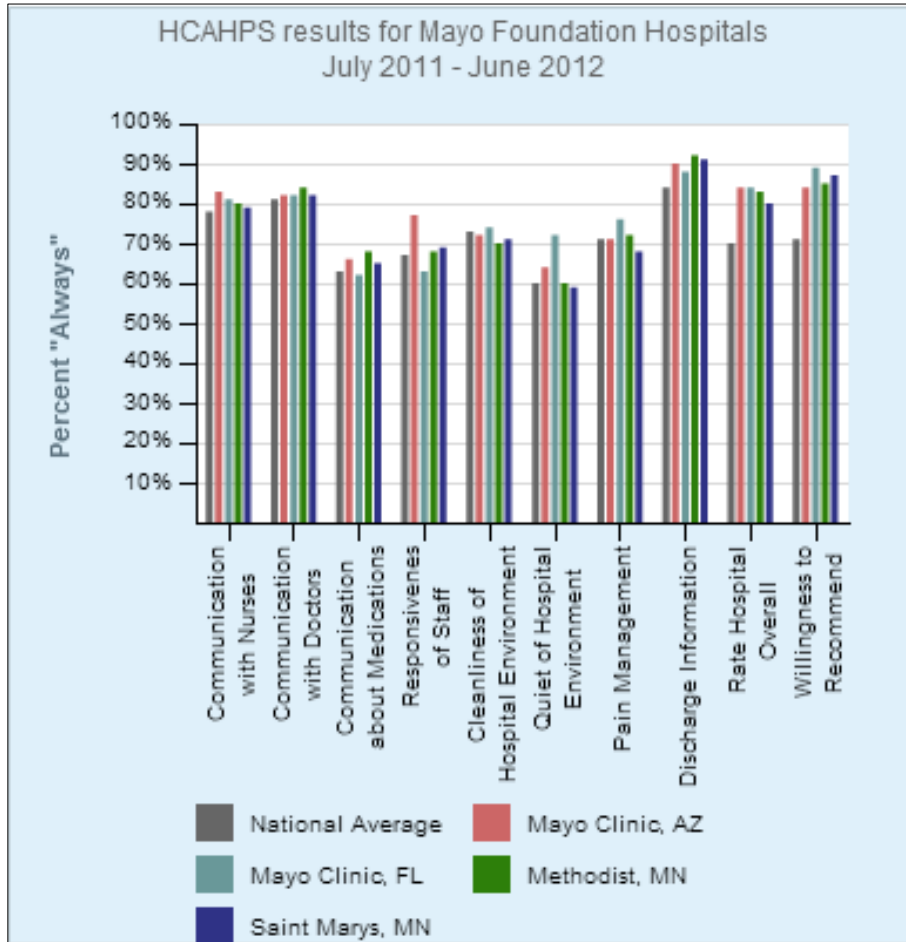
Exhibit 8 Mayo Clinic Readmission Rates vs. National Benchmark



Source: Company documents.

Note: Tracking the number of patients who experience unplanned readmissions to a hospital after a previous hospital stay is another category of data used to judge the quality of hospital care. Depending on the reporting source, readmissions can be defined as any admission to the same hospital occurring within seven, 15 or 30 days after discharge from the initial visit. Mayo Clinic defines hospital readmission as patient admission to a hospital within 30 days after being discharged from an earlier hospital stay. The standard benchmark used by the Centers for Medicare & Medicaid Services (CMS) is the 30-day readmission rate. Rates at the 80th percentile or lower are considered optimal by CMS.

Exhibit 9 Mayo Clinic Scores for Hospital Consumer Assessment of Health Plans Survey (HCAHPS) vs. National Average



Source: Company documents.

Note: The Hospital Consumer Assessment of Health Plans Survey asks consumers and patients to evaluate their experiences with several different aspects of hospital care. The scores listed in the bar graph below indicate how many Mayo patients said that the activities measured in the survey take place "always" in a specific hospital.

Exhibit 10 Examples of Business Models Envisioned as Part of the 2020 Growth Initiative

Core Practice – As repeatedly stated, the heart and soul of Mayo Clinic is the unparalleled patient experience, which we must continuously improve and refine.

iMayo – “Mayo in my pocket” – One can imagine a platform of services available to people electronically customizable for individuals in the manner of Google or iTunes.

Concierge Packages – Mayo Clinic services could be bundled in various packages that would enable patients to pay in a scaled fashion for access and amenities.

Coverage Packages – In today’s fragmented health care environment Mayo Clinic can provide services to help people receive the help and advice they need but have difficulty accessing. For example, Mayo could develop a package of services for the growing Medicare population that would be beyond the scope of normal Medicare coverage but would be of value, such as wellness services.

Personalized Health Care Products – Mayo Clinic could apply its considerable expertise in delivery and coordination of care for patients and families. For example, Mayo Clinic nurses or nurse practitioners would serve as care navigators and coordinators for patients who leave Mayo after a visit and need assistance once they are home.

Virtual Care – It has become conventional wisdom that health care delivery will be transformed by the web. Mayo Clinic should consolidate and accelerate its efforts to provide an unparalleled patient experience on the web.

Mayo Village – The concept of full-service and full-time connectivity to Mayo Clinic can be visualized along a spectrum, from continuing care retirement communities owned by the Mayo Clinic, such as Charter House, to housing developments within the greater Mayo Clinic community.

Health and Wellness - Mayo Clinic has an opportunity and perhaps an obligation to expand its scope beyond the treatment of illnesses to the prevention of them and to the extension of an individual’s health and well-being.

ELS – A mature and possibly commercialized Enterprise Learning System (ELS) is being designed to deliver “what Mayo Clinic knows” to Mayo health care delivery teams and to providers globally who wish to partner with us in providing the best care to every patient every day. This strategy will enhance Mayo Clinic’s reputation globally, strengthen the demand for “patients here” (destination centers) and may add new revenue streams through subscriptions and partnerships.

Source: Company documents.

Exhibit 11 Working Definitions for “Here-There-Everywhere” and “Run-Grow-Transform”*Here-There-Everywhere (Adapted from Mayo Clinic 2020 Report²³)*

Here: This market comprises individuals who are **patients** that have matched our dynamic access criteria and have arrived at one of our owned campuses to interact with Mayo Clinic caregivers for the duration of an episode of care. These owned campuses may be in Arizona, Florida, Rochester, the Mayo Clinic Health System, or any other owned entity. Care for patients, innovation and continuous improvement in the total patient and family experience will remain Mayo Clinic’s core activity and will be the platform from which other products and services are generated.

There: Patient and provider focused - Mayo Clinic’s coordinated interactions with past Mayo patients between episodes of care, providers supporting those patients, or providers who are part of Mayo’s Affiliate Practice Network. The “There” activities connect with Mayo patients beyond the walls of Mayo. Information, consultation, care management and other services can be provided to existing patients or to providers managing patients closer to home.

Everywhere: All individuals, represented by **patients, providers, and people anywhere**. This includes doctors everywhere, plus those interested in interacting or partnering with Mayo Clinic for health and wellness purposes regardless of any intent to be seen in person by a Mayo Clinic provider. To create, connect and apply integrated knowledge to deliver the best health care, health guidance and health information – that is our core business. Virtually everyone can access some aspect of Mayo Clinic’s knowledge and expertise, in a sense, transforming everyone these interactions into a meaningful relationship as a customer, consumer, patient or potential patient. Besides potential revenue and the opportunity to build an extensive philanthropic pipeline, this activity can contribute to maintain excellence in our practice, education, and research.

Run, Grow, Transform (Adapted from Gartner²⁴)

Run: In most Run cases, the basic function is essential to staying in business, and the need for the function is not at issue. These are activities that must be undertaken to keep the lights on, the doors open, or to meet regulatory requirements. Run-the-business investments are never measured by expected growth or revenue. These investments are part of the cost of doing business or the ability to sustain or to stay in business. Run-the-business initiatives are about reducing costs, improving price-to-performance ratios, and lessening risk (which translates to avoidance of catastrophic costs).

Grow: The Grow category is about improvements in operations and performance within current business models to grow top-line revenues, volumes, and appear to external customers as enhanced products, services or experiences. Metrics in this category may be measured in financial terms, such as revenue and earnings, or in operational terms such as product development or sales cycle times, customer retention, or quality. These activities produce measurable operational improvements, not only financial results. A key aspect of a grow-the-business discussion is that the value comes from directly affecting existing business processes and ways of doing business.

Transform: The Transform category is about new horizons—new markets, new products and new business models. At this level, metrics are much harder to define, let alone quantify. By definition, change at this level is massive and deals with who will win and why, and what will be won or lost. Entire industries may rise and fall; within a given company, new business models that deliver new value propositions to new customer segments will supplement or replace older business models. Change at the transform level affects the company and its entire ecosystem, including employees, partners, markets and customers.

Exhibit 12 Planned Capital Distribution—2012-2016

Projected Strategic Capital Availability 2012-2016



Source: Company documents.

Exhibit 13 2013 Members of Mayo Clinic Care Network^a

Name	Location
Altru Health System	North Dakota and Minnesota
ASU Health Services, Arizona State University	Arizona
Dartmouth-Hitchcock	New Hampshire and Vermont
Heartland Health	Missouri
Kingman Regional Medical Center	Arizona
NCH Health care System	Florida
NorthShore University HealthSystem	Illinois
Sparrow Health System	Michigan
St. Alexius Medical Center	North and South Dakota
St. Elizabeth Health care	Kentucky, Ohio and Indiana
Yuma Regional Medical Center	Arizona

Source: Company documents.

^a <http://www.mayoclinic.org/about-mayo-clinic/care-network/about>.

Exhibit 14 Mayo Clinic Number of Consumer Touches

	2010	2011	2012	1Q13
Unique Patients in Mayo Clinic	1,045,000	1,100,000	1,165,000	1,165,000
Unique Diagnostic Test Patients through Mayo Medical Laboratories	4,400,000	4,260,000	4,236,625	4,155,358
Patients through Mayo Clinic Care Network	--	161,500	3,278,672	3,509,121
Additional Consumer Touches through Marketing Events	--	1,733	16,458	13,078
Social Media	2,841,000	3,630,500	5,080,100	5,491,200
Global Business Solutions				
MMSI Lives Covered	232,076	237,878	256,743	261,769
Mayo Clinic Preferred Response	--	--	3,941	3,941
Digital Health Information (.com/.org/corporate web)	15,672,637	20,203,913	27,461,475	29,823,144
Digital Health Services	46,741	98,437	103,804	136,072
Decision Support	90,303	81,000	80,197	68,697
Coaching	40,700	28,800	26,492	19,000
Print Health Information (Books and Newsletters)	1,782,680	1,505,677	1,486,064	1,414,071
Total Consumer Touches	26,151,137	31,309,438	43,195,571	46,060,451

Note: Quarterly numbers are annualized figures based on the totals for each quarter

Source: Company documents.

Exhibit 15 2015 ACO and Medicare's Shared Savings Results**Medicare ACOs Provide Improved Care While Slowing Cost Growth in 2014****Summary of Results****Pioneer Performance Year 3 Results**

Pioneer ACOs are early adopters of coordinated care and tend to be more experienced, have an established care coordination infrastructure, and assume greater performance-based financial risk. The 20 Pioneer ACOs participating in 2014 (Performance Year 3) were accountable for 622,265 beneficiaries, a 2% increase from 607,945 beneficiaries in 2013 (Performance Year 2). These ACOs showed continued strong performance and improvement across financial, quality of care, and patient experience measures.

Financials:

During the third performance year, Pioneer ACOs generated total model savings of \$120 million, an increase of 24% from Performance Year 2 (\$96 million), which was itself an increase from Performance Year 1 (\$88 million). Of 15 Pioneer ACOs who generated savings, 11 generated savings outside a minimum savings rate and earned shared savings. These 11 ACOs qualify for shared savings payments of \$82 million. Of 5 Pioneer ACOs who generated losses, three generated losses outside a minimum loss rate and owed shared losses. These ACOs are paying CMS \$9 million in shared losses. Total model savings per ACO increased from \$2.7 million per ACO in Performance Year 1 to \$4.2 million per ACO in Performance Year 2 to \$6.0 million per ACO in Performance Year 3.

Quality of Care and Patient Experience:

The mean quality score among Pioneer ACOs increased to 87.2 percent in Performance Year 3 from 85.2 percent in Performance Year 2, which was itself an improvement from 71.8 percent in Performance Year 1. The organizations showed improvements in 28 of 33 quality measures and experienced average improvements of 3.6% across all quality measures compared to Performance Year 2. Particularly strong improvement was seen in medication reconciliation (70% to 84%), screening for clinical depression and follow-up plan (50% to 60%), and qualification for an electronic health record incentive payment (77% to 86%). Pioneer ACOs improved the average performance score for patient and caregiver experience in 5 out of 7 measures compared to Performance Year 2, suggesting that Medicare beneficiaries who obtain care from a provider participating in a Pioneer ACO continue to report a positive experience.

Medicare Shared Savings Program Performance Year 2014 Results for ACOs with 2012, 2013, and 2014 start dates

Ninety-two Shared Savings Program ACOs held spending \$806 million below their targets and earned performance payments of more than \$341 million as their share of program savings. No Track 2 ACOs owed CMS losses. Total net savings to the Medicare Trust Funds was \$465 million. These numbers represent an increase from 2013, when 58 ACOs held spending \$705 million below their targets and earned performance payments of more than \$315 million.

Total net savings to the Medicare Trust Funds was \$383 million.

- An additional 89 ACOs reduced health care costs compared to their benchmark, but did not qualify for shared savings, as they did not meet the minimum savings threshold.
- ACOs with more experience in the program were more likely to generate shared savings. Among ACOs that entered the program in 2012, 37 percent generated shared savings, compared to 27 percent of those that entered in 2013, and 19 percent of those that entered in 2014.
- Shared Savings Program ACOs that reported in both 2013 and 2014 improved on 27 of 33 quality measures. Quality improvement was shown in such measures as patients' ratings of clinicians' communication, beneficiaries' rating of their doctor, screening for tobacco use and cessation, screening for high blood pressure, and Electronic Health Record use.
- Shared Savings Program ACOs achieved higher average performance rates on 18 of the 22 Group Practice Reporting Option Web Interface measures reported by other Medicare FFS providers reporting through this system.
- Eligible professionals participating in ACOs also qualify for their Physician Quality Reporting System (PQRS) incentive payments for reporting their quality of care through the ACO. These providers will also avoid the PQRS payment adjustment in 2016 because their ACO satisfactorily reported quality measures on their behalf for the 2014 reporting year.
- The Shared Savings Program continues to receive strong interest from both new applicants seeking to join the program as well as from existing ACOs seeking to continue in the program for a second agreement period starting in 2016.

Source: <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-08-25.html>, accessed December 2015.

Endnotes

¹ Helen Clapesattle, *The Doctors Mayo*, Rochester: Mayo Foundation for Medical Education & Research, 1990, pp 38-52.

² *Ibid.*, pp 26-27, 42.

³ *Ibid.* pp 101-135.

⁴ *Mayo Clinic Tradition and Heritage: The History of Mayo Clinic*. Mayo Clinic, n.d. Web. 18 Dec. 2012. <<http://www.mayoclinic.org/tradition-heritage/>>.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Mayo Clinic Facts and Highlights*. Mayo Clinic, n.d. Web. 18 Dec. 2012. <<http://www.mayoclinic.org/mcitems/mc2000-mc2099/mc2045.pdf>>.

⁹ Helen Clapesattle, *The Doctors Mayo*, pp 358-382.

¹⁰ Richard Gibson, "New Mayo Clinic in Florida Is First Link In Nationwide Chain to Challenge HMOs," *The Wall Street Journal*, October 3, 1986, p. 31. www.proquest.com, accessed July 2014.

¹¹ <http://newsnetwork.mayoclinic.org/discussion/mayo-clinic-lauded-as-one-of-nations-best-hospitals-in-u-s-news-world-report-rankings>, accessed July 2014.

¹² State of Minnesota, "Health Reform in Minnesota," <http://mn.gov/health-reform/health-reform-in-Minnesota/> accessed April 2014.

¹³ Congressional Budget Office, March 20, 2010.

¹⁴ Definition from <http://kff.org/health-costs/issue-brief/emerging-medicare-accountable-care-organizations-the-role>.

¹⁵ John Noseworthy *et al.*, "Mayo Clinic 2020: The Unparalleled Patient Experience," 2008.

¹⁶ <http://www.mayo.edu/research/centers-programs/center-science-health-care-delivery/overview>.

¹⁷ <http://www.mayo.edu/research/centers-programs/center-regenerative-medicine/about>.

¹⁸ <http://mayoresearch.mayo.edu/center-for-individualized-medicine/about-the-center.asp>.

¹⁹ Christopher Snowbeck, "Mayo Clinic paying \$64 million to buy Red Wing clinic," August 13, 2012, http://www.twincities.com/ci_21303618/mayo-clinic-paying-64-million-buy-red-wing, accessed July 2014.

²⁰ Elizabeth Baier, "Mayo announces \$72M hospital expansion project," December 2, 2013, <http://blogs.mprnews.org/statewide/2013/12/mayo-announces-72m-hospital-expansion-project/>, accessed July 2014.

²¹ Sam Black, "Rochester, City of Gold: \$6B Mayo Clinic project sparks land rush," November 1, 2013, <http://www.bizjournals.com/twincities/print-edition/2013/11/01/rochester-city-of-gold.html?page=all>, accessed July 2014.

²² Centers for Medicare & Medicaid Services, "Pioneer Accountable Care Organization (ACO) Model Program: Frequently Asked Questions," p. 3, <http://innovation.cms.gov/Files/x/Pioneer-ACO-Model-Frequently-Asked-Questions-doc.pdf>, accessed March 2014.

²³ John Noseworthy *et al.*