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The Collaborative Organization: Leadership Lessons from Mayo Clinic

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I returned from a conference on an earlier flight than scheduled to see my wife and daughter before bedtime that Friday night. I had been home for 45 minutes when I received an emergency call from the operating room. One of our surgeons was in trouble with a young man who had a collagen vascular disease that made his blood vessel walls weak and prone to forming and rupturing aneurysms. The young man was driving home with his rented tuxedo for his wedding the next day when he developed acute abdominal pain and collapsed. He was taken to a nearby hospital in Flagstaff and then his heart arrested. Following resuscitation, he was transported to Mayo where he arrested again before being rushed into surgery. After 23 units of blood, they still couldn't control his ruptured left hepatic artery aneurysm. When I got the call, I rushed to the hospital and was able to gain control of the artery without sacrificing the right lobe of the liver. The next day the patient was off the ventilator and talking with the nurses in the unit like nothing had happened. The following day, our chaplain performed a wedding for the couple in the hospital intensive care unit. The patient was discharged the next week with no problems. What a

great feeling to help that patient. If an opportunity arises to collaborate on a difficult case, there is no hesitancy in jumping in to help.

Liver Surgeon
Mayo Clinic Scottsdale

Stories like this one abound at the Mayo Clinic. Teamwork dramas occur every day—and night—differing only in the specifics of the case. Mayo Clinic is a collaborative organization, a pliable institution that assembles the expertise needed for individual patients. Once the teams provide the necessary care, they disband and reconfigure to meet the medical needs of other patients.

Imagine a huge store that sells everything, with experts in every department who work together to help customers. This is how Mayo Clinic is designed for medical customers. Patients don't get just a doctor; they get, in effect, the "whole company." The Mayo system of integrated, multispecialty, outpatient and inpatient medical care doesn't always work as intended. But it does work most of the time and represents Mayo Clinic's most important competitive advantage.

My familiarity with Mayo Clinic stems from my on-site study of its service culture and systems during 2001–2002. Over a 5-month-period divided between the original Rochester, Minnesota campus and the Scotts-

dale, Arizona campus, my colleague Neeli Bendapudi and I interviewed approximately 1,000 Mayo patients, physicians, nurses, allied health staff, and administrators. We also collected data as participant observers, staying in the hospital as patients, observing surgeries in the operating room, watching physician-patient interactions in the examination room, and going on regular hospital rounds. I even spent a day flying on the Mayo One emergency transport helicopter service.

I came away from my research with a good understanding of how Mayo Clinic developed one of the most powerful and recognized healthcare brands in the world despite opening shop in the middle of a Minnesota cornfield, having a marketing department staff of just one person until 1992, and doing minimal advertising. Mayo Clinic has assembled an outstanding group of clinicians, to be sure. Even as a layperson, I could appreciate the immense talent at Mayo as I observed physicians and nurses doing their work. The talent level, however, is not the only key to understanding Mayo's success. After all, many excellent doctors and nurses work elsewhere. To understand Mayo Clinic is to understand its collaborative culture, a culture that continually elevates the skill and knowledge of the medical staff while pooling their talents to best serve patients.

Mayo Clinic operates three main campuses in Minnesota (Rochester), Arizona (Scottsdale), and Florida (Jacksonville); primary care clinics in more than 60 communities; 21 owned or managed hospitals; and medical technology, publishing, laboratory, and benefits-administration ventures. It has grown rapidly. From 1984 through 2003, the number of physicians and scientists increased from 838 to more than 2,700; the total number of employees expanded from 6,000 to more than 42,000; and patient-care revenues increased from \$345 million to more than \$4 billion. The three campuses served more than 500,000 individual patients in 2003. Mayo Clinic is an academic institution with major commitments to medical

education and research in addition to patient-care.

My purpose in this article is to take readers inside the Mayo Clinic so they may appreciate its leadership model and service system. Mayo Clinic is not perfect and certainly has opportunities to improve. Yet its approach to medical teamwork is truly impressive and holds lessons for all businesses, especially those that create customer value through labor-intensive, skill-intensive services.

PRESERVING THE LEGACY

Historical accounts of Mayo Clinic claim that Dr. William Worrall Mayo's precept that "no one is big enough to be independent of others" made a lasting impression on his sons, Dr. William J. Mayo and Dr. Charles H. Mayo, the founders of the integrated group practice known as Mayo Clinic. In 1910, Dr. William J. Mayo said: "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. . . . It has become necessary to develop medicine as a cooperative science."

Late in his life, Dr. William J. Mayo identified three conditions he deemed essential for Mayo Clinic to sustain itself:

- Continuing pursuit of the ideal of service and not profit;
- Continuing primary and sincere concern for the care and welfare of each individual patient;
- Continuing interest by every member of the staff in the professional progress of every other member.

To a significant degree, these core principles still define Mayo Clinic. States one Mayo physician: "Our culture is fundamentally unchanged over the 20 years that I've been here. I was acculturated in the Mayo way during my first year, and it has been reinforced ever since." Adds Dr. Robert

Waller, a retired Mayo physician who served on the staff for 32 years, including 10 years as chief executive officer (CEO): “Mayo leaders and staff through the years have been willing to change most anything in the way we work except the core values established by our founders.”

Perpetuating Vision and Values

The Mayo brothers most likely would be surprised by the size, scope, and complexity of today’s Mayo Clinic, but, by and large, they would find their patient-first medical team philosophy intact. Mayo Clinic perpetuates their founders’ vision and values in various ways. Photos of the Mayo brothers are featured in Clinic buildings. The lower floor walls of Mayo Rochester’s Gonda Building display a photo history of the brothers. The Rochester campus recently opened a Mayo museum and welcome center. Mayo Rochester staff attend department and educational meetings along with formal dinners in Mayo Foundation House, the former home of Dr. William J. Mayo. All the Mayo campuses sponsor an annual, week-long celebration of Mayo Clinic’s history called “Heritage Days.”

Mayo brothers’ quotations—especially those that refer to placing the patients’ interests first—appear in high-traffic spaces within the facilities. Mayo physicians are called “consultants” to reinforce the importance of conferring about their patients. Building design also encourages collaboration. Wide hallways outside the exam rooms offer ample space for caregivers to consult with one another. The vertical configuration of outpatient facilities enables easy staff movement by elevator to any floor where their expertise is needed.

Story telling and repetition are key reinforcers for values that sustain this culture. States one long-time member of the staff: “I don’t recall a speech or meeting I attended where the core values of the institution were not mentioned.”

Unbinding Self-Interest

Many factors contribute to preserving the Mayo brothers’ vision and values. However, the most important influence is likely the Clinic’s approach to staff compensation. Virtually all Mayo employees are salaried with no incentive payments, separating the number of patients seen or procedures performed from personal gain. One surgeon refers to this tradition as a “disincentive system that works.” Adds another surgeon: “By not having our economics tied to our cases, we are free to do what comes naturally, and that is to help one another out. . . . Our system removes a set of perverse incentives and permits us to make all clinical decisions on the basis of what is best for the patient. Angioplasty versus surgery? The question has nothing to do with who gets paid what.”

Mayo Clinic’s unwavering commitment to salary compensation dates back to 1919 when the brothers established the Mayo Foundation as a non-profit, charitable entity that would own the Mayo Clinic name, facilities, equipment, records, and other assets. The salary system paved the way for an integrated medical practice by removing loss of personal income as a reason not to collaborate. A Mayo physician has no economic reason to “hold on” to patients rather than refer them to colleagues better suited to meet their needs.

HIRING TEAM PLAYERS

Providing clinical healthcare services is unusually demanding work. It is stressful physically and emotionally. Customers expect healthcare providers to know everything, never make a mistake (because the consequences can be catastrophic), and, if necessary, perform miracles. Working at Mayo Clinic compounds the inherent stress because the institution attracts many patients with complex medical problems who view Mayo as their “last hope.”

Not only does Mayo Clinic’s core strategy of integrated, multispecialty medicine

require teamwork; the complexity of the illnesses also compels the team approach. I asked one Mayo gastroenterologist how he copes with stress—after observing him on hospital service dealing with one complicated case after another. He replied: “I get a lot of input from my colleagues.”

Mayo hires at the top of the talent pool, but it goes beyond talent and seeks team players. Its culture, strategy, and prestige require the right kind of talented people, people who view quality in medicine as a team endeavor. Mayo Clinic is as interested in a job candidate’s personal values as his or her curriculum vitae. As *Fast Company* reported in a 1999 article on Mayo Clinic, “Teamwork isn’t optional.”

Mayo Clinic shuns the star system in favor of organizational achievement. Many excellent clinicians would not fit at Mayo, including those who prefer to work independently, covet personal acclaim, lack interpersonal competencies, or seek to maximize their income. Mayo is well known within the academic medicine community for what it is—and is not. Self-selection influences who works at Mayo. States a gastroenterologist: “The Mayo culture attracts individuals who see the practice of medicine best delivered when there is an integration of medical specialties functioning as a team. It is what we do best, and most of us love to do it. What is most inspiring is when a case is successful because of the teamwork of a bunch of docs from different specialties; it has the same feeling as a homerun in baseball.”

Hiring for Life

Mayo has identified the personal attributes that best fit its culture and philosophy. In particular, it looks for people who are committed to high-quality care and service; convey a positive attitude; are enthusiastic, resourceful, and honest; have a strong work ethic unconnected to extrinsic rewards; demonstrate understanding of cultural diversity; and aspire to collaborative work. Of course, many service organizations would

have a similar list of desired attributes for prospective employees. What sets Mayo apart is how hard it works to find the people who actually possess these traits.

The skilled-labor shortages that plague healthcare today do not appear to have lowered Mayo’s hiring standards. In our research, registered nurses expressed surprise at the rigorous interview process they underwent to be hired at Mayo, given the acute nursing shortage. As one registered nurse told us: “Mayo is very particular about whom they hire. With the nursing shortage, I figured with 17 years of experience, I would just walk in the door. There were three people throwing questions at me in the interview. Not everyone who applies for a nursing job here gets it, and that’s incredible.”

Mayo invests in a time-consuming, collaborative hiring process to find staff who will thrive in the Mayo system. “It is not an easy process. We are slow and thorough,” states Matt McElrath, chair of the Division of Human Resources at Mayo Clinic Scottsdale. McElrath explains:

I have come to find at Mayo that it is less about the tools and more about the people and the process. We use traditional methods of receiving resumes, screening them, and selecting candidates for interview. Where we differ is in our collaborative processes. Whether we are hiring a medical assistant or a radiologist, the process involves a wide range of people and may take weeks or months to complete. We get good insight on candidates by involving so many people in the selection process. In addition, our process reinforces how we work as a team. Our culture is pretty clear to candidates; they see what it is like, and we benefit from a fair amount of candidate self-selection as a result.

Mayo uses behavioral interviewing techniques to elicit a candidate’s values. Candi-

dates, for example, may be asked to describe a past project that led to a great accomplishment. Whether candidates answer such questions with the word "I" or the word "we" will be of interest to the interviewer. "A superstar for us is someone who knows how to bring the team together," states McElrath.

Mayo is willing to invest significant resources in selecting new staff members, in part, because management assumes that new hires will stay throughout their career. This is a critical—and unusual—assumption to make, and clearly shapes the staff recruiting process. Many service organizations assume high employee turnover and try to minimize their upfront investment in people who will soon be departing. Mayo Clinic invests upfront to increase the odds of finding people who will fit its culture, be successful, and want to stay. Whereas the national hospital nurse turnover rate hovers around 20%, voluntary turnover for Mayo hospital nurses in 2003 was about 3% at Rochester and about 7% at Scottsdale (a more competitive recruiting market). Voluntary physician turnover rates in 2003 were less than 4% on both campuses.

Living the Legacy

The Mayo care model depends on the Clinic's ability to attract team players. Its deliberate hiring process often succeeds, as the following stories attest:

Recently, I received a phone call from a physician in Wisconsin who was seeing a 15-year-old girl complaining of pain about her knee. A plain x-ray had suggested the possibility of an osteosarcoma (the most common bone cancer of childhood) of her lower femur bone. The doctor called to ask if I would see the patient. As is our usual custom, I said: "Yes, whenever she would like to come." By early afternoon, our pathologists had made a diag-

nosis of high-grade osteosarcoma. Unfortunately, the CT scan of the chest showed multiple lesions consistent with metastatic disease. By mid-afternoon, the patient was in the hands of one of my pediatric oncology colleagues who was discussing the findings on the CT scan with the patient and her parents and preparing for chemotherapy.

*Orthopedic Oncology Surgeon
Mayo Clinic Rochester*

The Mayo One helicopter was requested to the scene of an explosion/fire in a town west of Rochester. The patient had sustained 2nd and 3rd degree burns over 30 to 40% of his body, as well as an inhalation injury. The flight nurses knew this patient would be best served by being transported directly to the burn center, which was 80 miles away in the Twin Cities, rather than transporting to Mayo Clinic's trauma center that was 15 miles away. The weather had worsened, not permitting the helicopter to fly to that destination [the burn center]. However, Federal Aviation Administration weather standards would allow Mayo's fixed wing (FW) airplane to complete the flight. The flight nurses contacted Mayo's Emergency Communication Center (ECC) to arrange transport of our FW aircraft. ECC staff contacted the FW pilots, who had the aircraft out of the hangar, fueled and were awaiting the arrival of the helicopter. Mayo One flew directly from the scene to the airport where the patient was loaded onto the airplane and taken to the burn center. ECC also contacted our Emergency Department so a doctor there could arrange for a

receiving physician at the burn center.

While all of this was going on in the helicopter, the FW nurse at the helipad called an additional flight nurse to come in to work while the helicopter crew was with the patient on board the FW aircraft. With these two nurses, the helicopter was again available for flights, and additional patients were transported during the time the original crew was transporting and caring for the burn patient. The collaboration and teamwork among the flight nurses, ECC, pilots, physicians and additional staff all took place in less than 10 minutes. Due to the teamwork of all involved, the time from the patient's injury to arrival at the burn center was 90 minutes!

*Flight Nurse, Mayo One Medical Transport
Mayo Clinic Rochester*

One of our oncologists called today to review some films taken on a patient he saw with metastatic colon cancer to the liver. We both sat in front of computer screens (he at the Clinic and myself at the hospital) and looked at the films simultaneously. Then, I conferenced in with one of our radiologists to obtain his detailed opinions on some nuances of the images. We then made plans for the patient to have a surgical procedure to resect the majority of the metastatic lesions and perform radiofrequency ablation on the others that could not be resected. I would then install an intra-arterial catheter and pump which the oncologists could access a few weeks after surgery to infuse chemotherapy to reduce the chances of recurrent metastatic cancer to this patient's liver.

Liver Surgeon, Mayo Clinic Scottsdale

Patients as Partners

Teamwork Mayo Clinic style not only means partnering with colleagues, it also means partnering with patients. Mayo Clinic succeeds, in part, by inspiring considerable volunteerism from its staff. Volunteerism is essentially "extra effort," and Mayo Clinic receives it in abundance. The staff members volunteer intensely for each other and for their patients.

I took care of a breast cancer patient who had plastic surgery work that failed. Going into surgery, she thought that she would have her breast removed and then reconstructed. She developed bleeding and they couldn't reconstruct. Now she had a whole other burden. She not only had cancer, but also she was leaving without a breast. I spent a lot of time with her, mostly listening, and we had some "spa" time – (that's what I call it) – washing, rubbing the feet, washing hair or braiding hair, mild massage. I took care of her for three days in a row. I was ready for the patient to leave; you can't get too emotionally attached.

Critical Care Nurse, Mayo Clinic Scottsdale

I took care of a Mayo doctor. This person brought knowledge to the table. He listened to my advice; I gave him choices, and he made decisions. He chose treatment at various times and chose not to have treatments other times. He used his time as well as possible. He was an opera buff. He would say: "Doctor, you have to keep me going for the next opera." We were both fighting an enemy – his disease. He was able to live hard and fight hard for the three years he had once he got the disease. This person took advantage of the time he had and that was very satisfying for me.

Medical Oncologist, Mayo Clinic Rochester

These stories show core values in action. Everyone benefits from the team principle underlying the Clinic's healthcare system. Interdependence, not independence, creates the superior patient-care that distinguishes the organization.

FACILITATING COLLABORATION

Mayo Clinic's culture is rooted in collaborative medicine. The Clinic sees many patients with complex illnesses that require different kinds of expertise, and team-oriented staff are purposefully recruited. Still, an infrastructure is needed to facilitate collaborative service delivery, especially in an organization as big and spread out as Mayo Clinic.

Investing in Infrastructure

Facilitating service collaboration is a pivotal strength of Mayo Clinic. The infrastructure of an integrated, electronic medical record; sophisticated internal priority paging, telephone and videoconferencing systems that connect Mayo campuses; and physical spaces designed to encourage communication provide the jet fuel that powers the culture. Since 1907, when the Mayo brothers' partner, Dr. Henry Plummer, introduced the concept of assigning each patient a unique registration number and maintaining a dossier of medical history for that patient, the medical practice that would become Mayo Clinic has been investing in infrastructure to support a collaborative approach.

Today's Mayo Clinic effects team service through a combination of face-to-face and remote collaboration. Scenes of several doctors conferring over an X-ray or in the hallway outside a hospital or exam room are the norm. Yet, remote teamwork through voice or virtual interaction is just as common. Internal communication systems allow a Mayo Rochester consultant to call or page a consultant on another Mayo campus in a matter of seconds.

Several years ago, a Mayo Scottsdale surgeon was planning a difficult surgery for a patient who is a public figure. The publicity surrounding the patient's illness compounded the pressure of a complex case. The surgeon arranged to consult with 20 doctors from all three Mayo campuses by videoconference. The videoconference, which lasted for an hour and a half and resulted in a consensus on a surgical plan, was arranged in one day's time. Although the number of physicians consulting on this case is unusual, the quick technology-aided pooling of talent is the essence of Mayo Clinic. Mayo physicians truly are consultants to one another.

Mayo's most powerful mechanism for knowledge sharing and the collaborative medicine model it supports is its integrated, electronic medical record or EMR. The EMR provides a cumulative, up-to-date narrative of the patient's medical symptoms, diagnoses, test results, treatment plans, procedures, and other related information. The unusual feature of the EMR at Mayo Clinic is that it captures both outpatient and inpatient information. Other hospitals and clinics may have EMRs, but these usually are separate systems that don't talk to one another or across disciplines in the outpatient practice. The Mayo EMR integrates all of the information into a single repository, minimizing redundancy and maximizing efficiency and communication.

The EMR captures not only what doctors plan to do to treat patients but often their rationale as well. It invites comments from other physicians serving the patient and alerts caregivers to pay attention to specific aspects of the case. In effect, the EMR functions as an electronic medical textbook; it not only enables virtual collaboration, it enables virtual teaching. The EMR makes the team smarter. Physicians often said in interviews that they became better doctors the day they joined the Mayo staff. As Dr. George Bartley, chair of the Board of Governors at Mayo Clinic Jacksonville, wrote in a 2004 new year's letter to his staff: "Our communal medical

record leaves little place to hide one's mistakes."

A gastroenterologist describes how the EMR facilitates collaborative medicine at Mayo Clinic:

The valuable aspect of the Mayo record is that everything is in one place. For nearly 100 years, the paper medical records served this purpose. Now we are in an electronic era, and have an electronic unified location for patient information. It is faster and instantly available from all locations. When a referring physician calls me to discuss a patient, I just pull up the patient's records on one of the terminals located in every office, exam room, and work area. There I instantly have the test results, progress notes, x-ray reports, and even hard copies of images to discuss with him. Contrast this to just a few years ago when we took a message and requested the record from the short- or long-term storage areas and then called back to the referring physician.

A great improvement in patient care is the digitized radiographic images. In the past, the clinic environment required films to be sent up from the file room to the clinical unit, and when in the hospital, daily trips to the radiology file room were required. Now I look at images with my colleagues or patients together on the computer as soon as the radiologist finishes reading them. I am showing my patients their images more often than ever before because it is so easy. I magnify them and zoom in on areas of interest. The patient care is improved, and my time is not spent hunting for the films.

I recall a patient from another state who came to us with terrible pain and digestive problems. Previous

investigations were unrevealing, but digital imaging helped us perform additional investigative procedures. In consultation with the radiologist and her colorectal surgeon – who had instant access to the necessary images while at our hospital because of the electronic record – we diagnosed Crohn's Disease, an inflammatory disorder of the intestine. The patient was placed on medical therapy for her problem.

Teaching for Tomorrow's Patient

Mayo's combination of culture and technology is potent. The culture makes it okay for highly-trained providers to ask for help; the technology makes it easy to provide the help. A Mayo Rochester internist speaks to the cultural influence: "The strong collegial attitude at Mayo allows me to call any Mayo physician at any time and discuss a patient in a tactful and pleasant manner. I do not feel afraid or stupid when I call a world-renowned Mayo surgeon. We respect each other. We help each other. We learn from each other."

Dr. Keith Kelly, a retired Mayo Clinic surgeon, shared a revealing story that would not have occurred at many medical institutions:

A Mayo surgeon recalled an incident that occurred shortly after he had joined the Mayo surgical staff as the most junior member. He was seeing patients in the Clinic one afternoon when he received a page from one of the most experienced and renowned surgeons on the Mayo Clinic staff. The senior surgeon stated over the phone that he was in the operating room performing a complex procedure on a patient with a difficult problem. He explained the findings and asked his junior colleague whether or not what he, the senior surgeon, was

planning seemed appropriate. The junior surgeon was dumb-founded at first that he would receive a call like this from a surgeon whom he greatly admired and assumed had all the answers to even the most difficult problems. Nonetheless, a few minutes of discussion ensued, a decision was made, and the senior surgeon proceeded with the operation. The patient's problem was deftly managed, and the patient made an excellent postoperative recovery. A major consequence was that the junior surgeon learned the importance of intra-operative consultation for the patient's benefit even among surgeons with many years of surgical experience.

Mayo Clinic is a premier teaching institution in the traditional sense: it trains new doctors. But it also is a premier teaching institution in the way Mayo staff teach one another. Caregivers not only share their knowledge in service of today's patients, they also teach each other in service of tomorrow's patients.

LEADING WITH PARTNERS

"Healthcare is a business, but taking care of a patient is not," states Dr. Victor Trastek, chair of the Board of Governors of Mayo Clinic Scottsdale. Trastek's comment emphasizes an inherent tension in medicine: medical organizations must generate sufficient funding to sustain and improve themselves, yet financial matters cannot be the primary concern in caring for people who are ill or injured. Business principles apply to medical organizations—but only to a degree. Operating a hospital cannot be compared with operating a hardware store, and not only because of the greater complexity of a hospital organization. The more important difference between a hospital and hardware store is one of mission. Hardware stores sell products for people to fix or improve things;

hospitals sell services designed to help ill or injured people attain a better state of health. The quality of people's lives—and life itself—is at stake.

In 1908, Dr. William J. Mayo determined that the growing practice needed more sophisticated business management and hired a 21-year-old bank clerk, Harry Harwick, to provide it. So began Mayo Clinic's use of a physician-administrator team model that remains firmly in place to this day.

Team Leadership Model

Mayo Clinic is a physician-led institution. Physicians lead each of its three spheres of activity—clinical practice, education, and research—at all levels of the organization. These physician leaders, however, work with an administrator partner. The underlying rationale is to balance the business-versus-caregiving tension in a way that supports and reinforces Mayo Clinic's core values.

Physician leaders of the various medical and surgical specialty groups, committees, and other entities continue to practice medicine during their leadership tenure, which by design is limited. Physicians rotate out of their leadership assignments and return to full-time practice in their specialty. A typical term for a department or division chair is 8–10 years.

By virtue of their training and continuing contact with patients, physician leaders maintain the patient's interest at the forefront of decision-making. This was the Mayo brothers' way of protecting its patient-first value system. The administrative partner's primary role is to help implement the physician leader's vision in an efficient, fiscally sensible manner. The physician leader of a large unit within Mayo's St. Mary's Hospital in Rochester elaborates on this leadership model:

The primary benefit of partnering a physician leader with an administrator is the ability to combine two very different skill sets into a single patient-centered focus. By partner-

ing a physician leader with an administrator, you really get the best of both worlds. Both individuals in the Mayo environment are typically quite patient-centered; however, the physician will bring in-the-trenches experience to the table, while the administrative colleague will bring an advanced knowledge of management, business, and finance techniques. In the Mayo system, neither the administrator nor the physician leader of a department reports directly to each other. Rather, they both report up the chain of command. The benefit of this arrangement is that the physician and administrative leaders are true colleagues. My administrative partner and I have been able to roll up our sleeves and tackle many difficult issues. In addition, I have been able to rely on his administrative and business expertise to assist in developing and fleshing out the details of proposals that otherwise would lay fallow. In my opinion, the Mayo model is very close to the ideal arrangement. The administrator primarily serves the allied health staff while the physician leader serves the physician and scientist staff. There is considerable overlap in these duties, depending on the circumstance at hand. In addition, the administrator maintains ties to central administration, serving as a liaison between the department and the institutional administrative structure.

With the right administrative partner, a physician leader gets a management coach, confidant, reality checker, and implementer rolled up into one person. Clearly, finding the right person to partner with the physician leader is crucial. As one long-time Mayo administrator put it: "The physician and administrator relationship is much like a marriage. In both cases, success depends on open communication, trust, and confi-

dence in one another. Failure to plan and work toward common goals usually ends in a lack of accomplishment, dissatisfaction with the partner, and dissolution of the relationship." Another administrator adds:

The physician leader and administrator must share a similar vision for the department or the model will not work. While differences in style or implementation strategies can usually be overcome, there must be a commonality of vision for the partnership to succeed. The pairing of administrators and physician leaders at Mayo is far from a random process. Much thought and discussion goes into administrative rotational assignment planning and physician leadership appointments to maximize the likelihood of success and the talents of both physician leaders and administrators.

The administrator role is a challenging one at Mayo Clinic. Administrators are given more responsibility than authority. They must accept the concept of a physician-led organization and yet interact candidly and assertively with their physician partner. They must establish informal influence through their performance to counteract the cultural influence automatically accorded the physician. They must build a network of allies throughout Mayo to get things done. No one needs to know more about how Mayo Clinic functions than administrators. Effecting positive change at Mayo Clinic is difficult enough for physicians, but non-physician administrators must possess intimate knowledge of how the total organization works.

Harry Harwick captures the profile of an effective Mayo administrator in his book, *Forty-Four Years with the Mayo Clinic*:

High on the list of qualifications I would place tact, diplomacy, flexibility of mind and infinite patience. . . Part and parcel of the make-up of the successful medical administrator

must be able to take the long view, to lay long-term plans, to advocate these plans with clarity, to meet opposition gracefully, and to accept slow progress toward chosen goals. These acts underscore another conviction: the man in a hurry to get things done should seek his career in other fields.

Administrators typically rotate to new assignments every four to seven years. Thus, physician leaders likely will have at least two administrator partners during their leadership term. The systematic rotation of administrators is meant to broaden their experience base while providing the physician leader and administrative unit new ideas and energy.

Board and Committee Systems

The Mayo brothers introduced two other shared governance arrangements designed to keep the Mayo ship on course as it grew: the Board of Governors and the committee system. The Board of Governors, composed primarily of physicians who serve defined and staggered terms, is primarily a policy-making body. Each of Mayo's three main campuses has its own Board of Governors; they report up through the Mayo Foundation, which has its own president and CEO, Board of Trustees, and executive committee. The physician leader who chairs a Board of Governors serves as the chief operating officer of that particular campus. Harry Harwick describes the Board of Governors in his book as "...essentially a Supreme Court where policies are judicially considered..."

Mayo's intricate committee system is designed to build institutional consensus for change. Mayo Clinic favors evolutionary change, and the committee system is a key mechanism for debating, testing, and refining proposed changes. In this respect, Mayo functions quite similarly to a university. The committee system also provides training, networking, and proving opportunities for individuals who may become candidates for higher leadership positions.

Of all the shared governance methods used by Mayo Clinic, the committee system arguably has evolved in the least effective manner. The problem is not the concept but the execution. Too often, the committee structure needlessly delays promising ideas and occasionally buries an uncomfortable proposal rather than confronting it. Mayo Clinic is a remarkable organization but not a flawless one. It is impossible to imagine Mayo Clinic without an elaborate network of committees to foster good, careful decision-making grounded in the Clinic's core values and with an institution-wide perspective. It is possible, however, to imagine fewer and smaller committees that accomplish their mission more quickly. Mayo Clinic is working on refining its committee system.

LEARNING FROM MAYO

Few organizations live to be 100 years old, and fewer still are thriving as they embark on their second 100 years. Such is the case, however, with the Mayo Clinic. Although historian Helen Clapesattle marks 1914 as the year Mayo Clinic emerged as a distinct institution, the Mayo brothers were practicing medicine with their father in the late 1800s. It is safe to claim at least 100 years of service for Mayo Clinic.

Mayo Clinic is remarkable not only for its long-term success but also for the durability of the organizational precepts behind this success. With so much attention and energy devoted to new organizational ideas, concepts, and tools, it is refreshing to learn from a world-renowned institution that started with a good idea many years ago and continues to refine and improve the execution of that idea.

Mayo Clinic's team service model warrants a careful look by managers outside of healthcare. The net effect of this collaborative model is that it converges talent where it is needed, encourages and enables internal communications, and fosters organizational competence. These outcomes are especially

important for the many services with dynamics similar to medical services:

- Customer demand for the service is unevenly spread and sometimes urgent.
- Customer needs are diverse, requiring the organization to maintain a portfolio of skills at the ready.
- Speed and accuracy are both essential to performance.
- Multiple service providers contribute to the customer's service experience.
- The service chain is complex with many interdependent parts.

A marketing research firm that receives from a major client an unexpected, urgent project requiring multiple research competencies would benefit from team service capability. So would an express mail service committed to delivering several million pieces tomorrow and contending this evening with thunderstorms in the Southeast, aircraft mechanical problems in four airports, and too much mail to fit in one airplane in three other airports. High reliability organizations, such as atomic energy plants, aircraft carriers, and petrochemical plants, are all candidates for organization designs like the Mayo Clinic.

Managers in organizations that deliver services with such intense dynamics can draw many lessons from Mayo Clinic's story. They can consider how to make their organizations more pliable in terms of molding the firm's resources and talents to each individual customer. They can assess their organization's capability for generating distributed, comprehensive, and current profiles of individual customers and consider investing in this capability as appropriate. They can practice "patient" hiring, using teamwork to find team players, people with the right values as well as the right skill set. They can invest in systems that not only help skilled employees to practice their craft well, but also encourage them to teach it to coworkers. They can ensure that the reward system promotes collaboration rather than penalizes it, that it celebrates team players as the true service stars. They can consider the benefits and drawbacks of shared gov-

ernance and seek models that foster creativity and inclusiveness without inhibiting needed change. Most of all, they can continuously champion the organization's core values and reason for being that vitalize the spirit, bring people together, and inspire extra-effort performance.

It would be too easy to say, "If a health-care organization can do it, any company can do it." In one sense, however, this is the meta-lesson from Mayo Clinic. Mayo Clinic succeeds by preserving its founders' focus on the best interests of the patient and its founders' strategy of collaborative care. Our journey inside Mayo Clinic closes just as it opened—with a story. Lori Plate, a critical care nurse at Mayo Clinic Scottsdale, tells this particular story. She is one of eight Mayo staff members system-wide selected by peers in 2003 to receive the inaugural Mae Berry Award for Service Excellence at Mayo Clinic.

Working in critical care, we often deal with death and dying. It is how our team approached this particular death that represents the ultimate team effort. Mr. M had recently received a terminal diagnosis, and he and his wife of more than 50 years were struggling with the decision of further aggressive treatment versus palliative care. At Mayo, we function as a team with ease, even in the most difficult situations. All the appropriate team members did their part to assist this couple during a very difficult time. Nursing continued to give excellent bedside care. The case manager and social worker spent time with Mr. and Mrs. M detailing options for both hospice and acute care while helping them attend to any personal matters and possible impending arrangements. A family conference was provided at the bedside to allow for Mr. M to participate in the decision-making. Physicians, a social worker, a case manager, the chaplain and nursing were present.

Although Mr. M was ready to make the decision to end aggressive treatment, Mrs. M could not accept the end was near. Treatment continued and everything was done to prolong Mr. M's life. The chaplain prayed with the family and told Mr. and Mrs. M to call at any time if they needed him.

This is where the real teamwork begins. W, the young nurse caring for Mr. M, had never cared for a patient who was so close to death. I, being an experienced 20-year veteran, let her know I was there for her during this difficult time if she needed me. W was both thankful and relieved. Mr. M was becoming more critical as the day went by and Mrs. M was realizing how much he was suffering. At approximately 4 p.m. that afternoon, Mrs. M called W into the room and asked that her husband be made comfortable and be allowed to pass on in peace. W notified the physician and asked me if I could come into the room when Mr. M's passing was imminent.

An hour later, all the appropriate paperwork (do not resuscitate order) was signed allowing for comfort measures and for Mr. M to die peacefully when his time came. Mrs. M was at his side with both W and me nearby to offer support. The other nurses on our pod continued to care for my patients, so I could help W help this couple say goodbye. I consider myself quite skilled and compassionate when it comes to death, but on this day I became the student and watched and learned.

At 6 p.m., Mrs. M requested the chaplain be called to pray with her, as her husband became less responsive and closer to his death. I instructed W on how to page the chaplain – only to find out he was on another pod with another family who was in a similar situation. He said he would be with us in about 20 minutes. Mr. M did not have 20 minutes. Mrs. M was crying and requesting the chaplain so a prayer could be said while her husband passed on. It was very clear Mr. M would not live another 20 minutes. I grabbed the tissues and prepared to comfort Mrs. M and show W the best compassion I had. When I entered the room, I saw W, who was of a different faith, take Mrs. M's hand in one hand and Mr. M's hand in the other and begin to pray. She asked the Lord to bless their 50-year marriage using their first names (I am not sure I would have been able to recall their first names that quickly). Her voice was strong, clear, and sweet and did not waver as she recited the Lord's Prayer while Mr. M took his last breath.

I stood by the entrance to the room and sobbed. My emotions were mixed. Both sadness for Mrs. M's loss and joy that we, the team, provided what the patient needed when it mattered most. W was the ultimate team player. She assumed another's role, making our system flawless when it mattered most.



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My analysis of Mayo Clinic's collaborative service model stems largely from my sabbatical leave experience studying the Clinic's service culture and systems at the Rochester, Minnesota and Scottsdale, Arizona campuses. To prepare this article, I contacted a number of Mayo staff members, both active and retired, with specific queries. Most of the stories and quotes that appear in the article come from this process.

Two books were particularly helpful in providing historical context for the article: Helen Clapesattle, *The Doctors Mayo* (Rochester, MN: Mayo Foundation for Medical Education and Research, 1990); and Harry J. Harwick, *Forty-Four Years With the Mayo Clinic: 1908-1952* (copyrighted 1957, Harry Harwick). Quotes of Dr. William Worrall Mayo and Dr. William J. Mayo come from the Harwick book as do the three conditions Dr. William J. Mayo deemed essential for Mayo Clinic to sustain its success.

The Clapesattle book is readily available and is highly recommended to readers interested in a detailed, well-written, well-documented history of the Mayo family and Mayo Clinic. Other books of interest include: Thomas M. Habermann, Renee E. Ziemer, and Carolyn Stickney Beck, *The Mayo Brothers' Heritage - Quotes & Pictures* (Rochester, MN: Mayo Clinic Scientific Press, 2001); Clark W. Nelson, *Mayo Roots: Profiling the Origins of*

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