Mayo Clinic

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Can the way the workplace is constructed—physically, virtually, and managerially—affect employee performance? The Deloitte LLP Center for the Edge report *Work environment redesign*, based on a study of more than 75 organizations, argues that the work environment can have a critical impact on employee productivity, passion, and innovation. The study outlines nine design principles that can help employers gain more value from their people.

This case study explores ways that Mayo Clinic is applying these design principles to enhance its own corporate environment.

Company background and results

Heads of state and common citizens alike travel to Mayo Clinic, a not-for-profit medical practice and medical research group, because of its high-quality medical treatment. The clinic has achieved top rankings on the *US News & World Report* list of "US News best hospitals" every year for the last two decades.[1] Two of its hospitals in Rochester and Phoenix were recognized by Healthgrades, an online information portal, with a 2013 Distinguished Hospital Award for Clinical Excellence.[2] Mayo constantly finds new ways to improve its performance, relying on innovative methods to connect its staff and patients to the right experts and information while helping these parties learn quickly from one another. Ranked on *Fortune* magazine's "100 best companies to
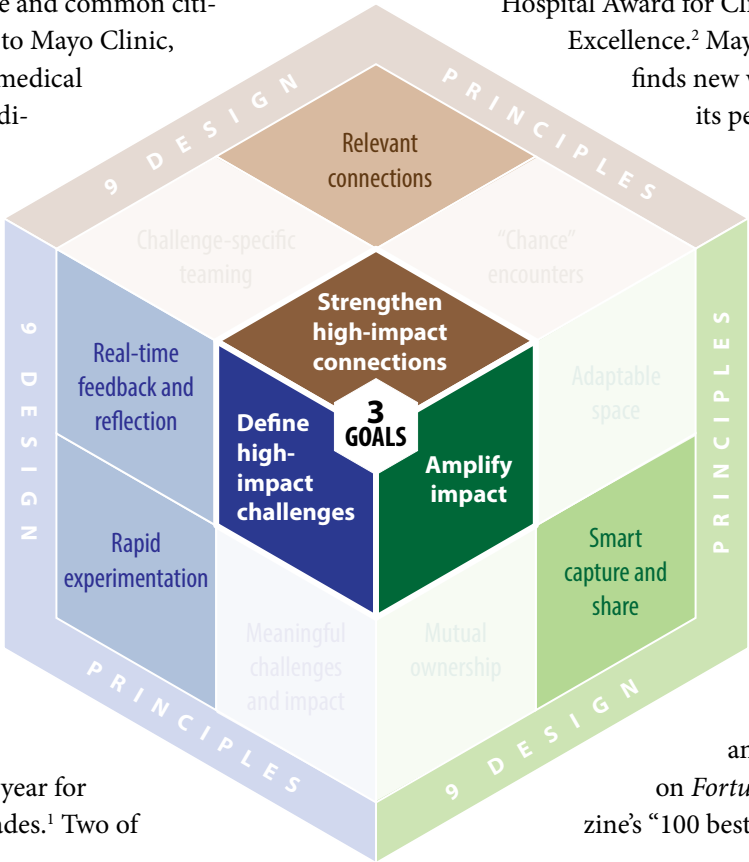

Figure 1. Work environment design principles used at Mayo Clinic

work for" list for the last nine years,[3] Mayo Clinic's collaborative culture translates into significant results.

Relevant connections

Mayo Clinic's tradition of teamwork and learning is supported by a strong technological infrastructure. Through a mobile and tablet app called AskMayoExpert (see figure 2),[4] physicians can access content personalized to their specific situation. In addition to clinical knowledge, including guidelines and resources, the content includes contact information for the most relevant specialists and groups within Mayo Clinic. Specialists are assigned based on subspecialty, and all questions and answers in AskMayoExpert are tagged at multiple levels. Question categories include diagnosis, prevention, treatment, cause, indication for referral, or further follow-up. Answers can be tagged as care process model, FAQ, key fact, quality measure, location, and area of interest (adult versus pediatric, diagnostic versus therapeutic, and so on). Finally, users are able to comment within topics. For issues regarding specific patients, the app provides contact information for a relevant expert.[5] Users frequently decide to connect with others through this system. As Dr. Rick Ishimura, cardiologist and AskMayoExpert project lead, described to *Star Tribune* in late 2010: "Out of the 2,500 physicians we have at Mayo Rochester, about 1,200 have started to use it. Many people use it 10 to 12 times a day. About two-thirds of them find an answer immediately and about a third will go on to contact the experts in the area."[6]

Mayo's collaborative culture and technology allow doctors to make relevant connections. In Leonard Berry's *The Collaborative Organization*, Dr. Keith Kelly relates a story about a junior surgeon who, shortly after joining the staff, was paged by one of his most experienced colleagues for advice. Although startled by the request, the junior surgeon realized that this collaborative problem-solving would help the staff provide the most effective operating options for the patient. Thanks to Mayo's unique style of teamwork, the patient recovered successfully. The junior surgeon realized that even the most senior surgeons needed connections and assistance from all areas of the organization.[7]

Smart capture and share

Mayo Clinic encourages home-grown smart capture and share technologies to enhance its collaborative culture. For example, Mayo Clinic's patient scheduling system, after instantly synthesizing patient availability, travel time, and other important prerequisites to treatment, assigns appropriate physicians and appointments. Once the patient arrives at an appointment, all preceding patient interactions, lab, and exam results are shared with the next clinician in the sequence. With all of this data automatically uploaded and algorithmically processed, the average wait time for an appointment in one department decreased from 45 days to 2 days. Similar efforts remain top priorities as the organization continues to expand to new locations.[8]

In addition, automatic archiving of in-depth problem-solving is cited as a major benefit to staff. For example, if someone at Mayo Clinic is looking at different vendors and deciding which option to select, research and conversations with vendors as well as individual meeting notes and associated outcomes can be made easily accessible through Mayo Clinic's social collaboration platform. Without such a system, the information collected would be as temporary as an employee's notebook; if a similar question surfaces again, the next employee might have to repeat the same process without the pertinent background information. Fortunately, Mayo Clinic's social collaboration tool allows for archiving and tagging that reduces these duplicative efforts.

Rapid experimentation and real-time feedback and reflection

Mayo Clinic's Center for Innovation is one of the first and the largest to be integrated into medical practice. In the center's outpatient lab,

Mayo Clinic hosts outpatient visits in which patients and physicians try out new processes and physical layouts, including reconfigured floor plans. Because patients may have trouble describing specific issues, the simulation is observed by industrial engineers, who can observe a patient's subtle reactions and provide real-time feedback to the Mayo Clinic team about what went well and what could be improved. The outpatient lab enables rapid experimentation that helps new processes and designs make their way into the patient experience. The emphasis on speed and innovation has led to improvements at Mayo Clinic. For example, prototyping teams tested the idea of self-service check-in kiosks by quickly crafting cardboard and paper kiosks. Patients responded positively, leading to prototypes that rapidly improved with each round of user feedback.[9]

Real-time feedback is also facilitated through social networks. According to Dr. Ferris Timimi at the Mayo Clinic's Center for Social Media, social collaboration software

Figure 2. **AskMayoExpert**
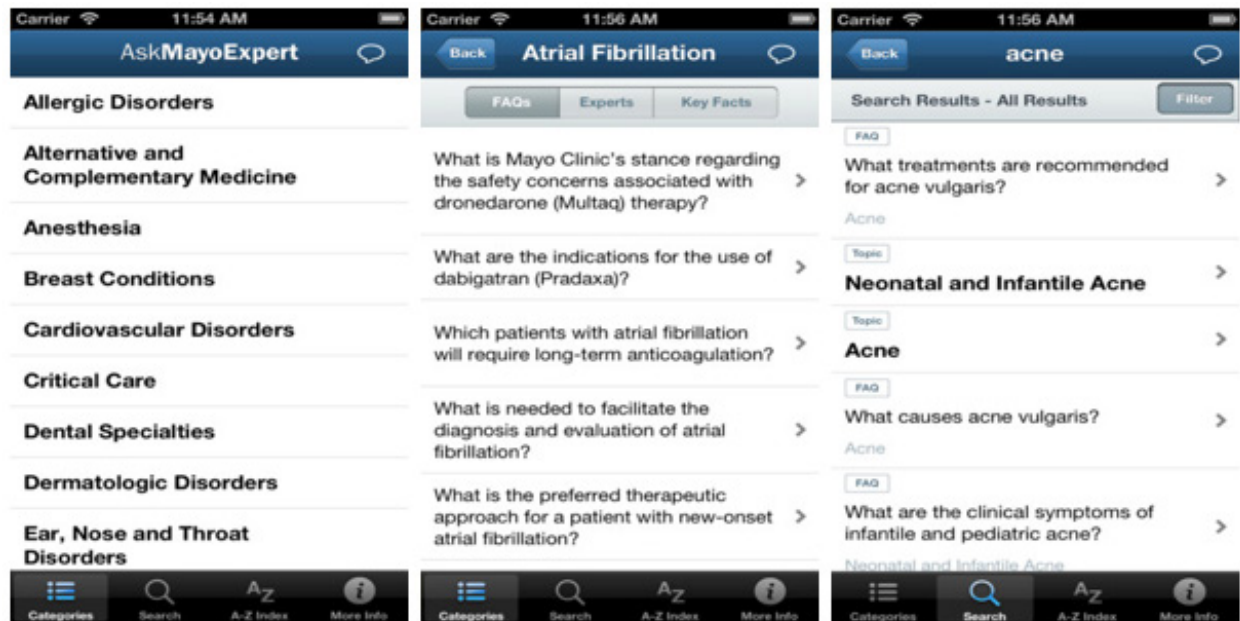
may reflect the most effective tool for real-time engagement at present.[10] Questions that previously took hours to answer via email can be resolved within minutes by crowd-sourced feedback on social collaboration software. Clinicians rely on social networking most when they need to work with other project members separated by geography and time. For example, to integrate their practice, which was spread across multiple floors, Mayo Clinic's transplant coordination staff implemented a social collaboration software group in 2009. Using social collaboration software, the group is able to address real-time practice issues and opportunities and has been able to spread across two separate Mayo Clinic locations.

Lessons learned

- Instant access to specialists encourages frequent collaboration.

- Communicating valuable information first requires a culture of teamwork that can then be augmented by technology.

- By creating an experimentation center and embracing rapid prototyping techniques, companies can obtain valuable feedback on service or process changes.

Endnotes

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3. "100 Best companies to work for," CNNMoney, http://money.cnn.com/magazines/fortune/best-companies/2012/snapshots/71.html, accessed January 2013.

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Kelly Cheng is a consultant in Deloitte Consulting LLP's Strategy & Operations practice. She focuses primarily on growth strategy work in the health care, financial services, and technology sectors. Many of her clients look to emerging technologies to drive growth opportunities. Her work at the Center includes conducting primary and secondary research on talent development and helping to develop the launch strategy for "Pragmatic Pathways," a framework to help companies scale change.

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