



# Mayo Clinic

## Making medicine more mobile.

A medical leader brings new innovations to patient care with apps for iPhone, iPad, and iPad mini.

### Company Snapshot

Not-for-profit medical institution founded in 1889

More than one million patients per year from over 140 countries

60,000 staff including 3500 physicians

Campuses in Rochester, MN, Phoenix and Scottsdale, AZ and Jacksonville, FL

Health System spanning more than 70 communities in Minnesota, Iowa, and Wisconsin

[www.mayoclinic.org](http://www.mayoclinic.org)



### Apps in Use



#### Synthesis Mobile IN-HOUSE APP

Gives physicians access to medical resources from hundreds of internal systems, from EMRs to billing data.



#### Mayo Clinic Quarterly IN-HOUSE APP

Replaces paper and PDF in-house directories, enabling instant staff look-up on iPhone and iPad.



#### Patient

Offers patients secure access to their own medical records, plus public information on Mayo Clinic facilities and services.



#### Ask Mayo Expert

Provides a point-of-care resource on medical conditions and treatments for Mayo Clinic Care Network members.

As one of the world's most respected medical research and treatment centers, Mayo Clinic is known for its ongoing innovations in health care. And now there's another breakthrough: Using custom apps for physicians and patients on iPhone, iPad, and iPad mini, Mayo Clinic is transforming the capabilities of individualized patient care.

Since the late 19th century, Mayo Clinic has been at the forefront of medical technology. "We had the development of the heart-lung machine, and the first total hip replacement," says Dr. John H. Noseworthy, President and CEO. "Mayo Clinic is really a model of what health care could be."

The clinic's adoption of iPhone, iPad, and custom in-house apps reflects the Mayo Clinic's commitment to the latest advances.

With more than 15,000 iOS devices on the clinic's network, building apps for this platform was a priority. "iPhone, iPad, and apps make communication easier," says Mark Henderson, Division Chair of the Mayo Clinic IT department. "We're providing real value to our staff, but also ultimately to our patients."

### Better Access to EMR

To make the most of electronic medical records (EMRs) and other data, Mayo developed Synthesis Mobile, a powerful app that taps into hundreds of internal systems, giving physicians like Dr. Brad Leibovich instant access to patient details via iPhone or iPad.

"Now I can sit with a patient, have an eye-to-eye conversation, and show them their CAT scan or a video about treatment options," Leibovich says.

"With this technology, we can be more accurate and more complete which means better outcomes and safer care."  
*Dr. John H. Noseworthy, President and CEO, Mayo Clinic*

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*Mark Henderson, Division Chair, Information Technology, Mayo Clinic*

"I can use Synthesis Mobile to notify staff to change an IV setting, or do order entry and charge capture right from the application."

Synthesis Mobile saves time—a lot of it. "I'm more efficient and faster, and I'm doing less work between patients," says Leibovich. "During the course of a day, Synthesis Mobile saves most physicians at least an hour of their time."

### Apps for Healthier Patients

Mayo Clinic has also developed other iPhone and iPad apps, including Ask Mayo Expert, which provides a point-of-care resource for Mayo Clinic Care Network members, and the Mayo Clinic Patient app, which lets patients securely access their EMRs and exchange messages with physicians.

"For patients dealing with any health issue, information is power," Leibovich notes. "The more we can empower them to understand what's going on with them, the better they'll feel."

"During the course of a day, Synthesis Mobile saves most physicians at least an hour of their time."

*Dr. Brad Leibovich, Mayo Clinic*



### A Secure Ecosystem

With the built-in security features and the development tools in the iOS SDK, building these apps was a smooth process for the Mayo Clinic's IT team.

"The iOS ecosystem absolutely was the right technology for Mayo Clinic," Henderson says. "We looked at a variety of other options, and none of them had what the iOS environment had. iOS provided the security we were looking for—encryption, the VPN environment, and the ability to write applications that leave no data on the device that we would consider confidential."

iOS also makes app creation more efficient. "As we developed our applications, the portability really became evident. What we develop for one device runs on all the iOS devices," Henderson says.

### Intuitive Technology for Better Care

As medical technologies continue to advance, physicians need equally advanced tools to communicate, manage data, and deliver the best possible patient care.

"The future is going to be amazing technology-wise," Henderson says. "Mayo Clinic is just touching the surface of what's possible. In terms of trying to be more efficient and providing the best care, the apps we've written have definitely given us a vision of where we can go in the future."

"It really brings us back to the time when health care was a personal interaction between the physician and the patient," adds Leibovich. "We can integrate iPhone, iPad, and apps seamlessly with patient interactions, without the technology getting in the way."