



**Management Discussion and Analysis
For the Three-Month Period Ended
March 31, 2020**



Mayo Clinic Overview

Mayo Clinic ("Mayo") is a charitable, nonprofit corporation headquartered in Rochester, Minnesota. Mayo provides comprehensive medical care, education in clinical medicine and the medical sciences, and extensive programs in medical research. The Mayo logo of three interlocking shields symbolizes Mayo's commitment to excellence and interdependence in the three areas of education, clinical practice, and research. Mayo Clinic has major campuses in Rochester, Minnesota; Phoenix, Arizona; and Jacksonville, Florida. The Mayo Clinic Health System has over 70 locations in Minnesota, Wisconsin, and Iowa.

Mayo developed from the medical practice of a pioneer physician, Dr. William Worrall Mayo. Born in 1819 near Manchester, England, Dr. Mayo came to America at the age of 25. Dr. Mayo was appointed in 1863 as examining surgeon for the Union Army Enrollment Board in Rochester, Minnesota, and continued to practice there in the years that followed. When a tornado devastated Rochester in 1883, the joint efforts of Dr. Mayo and the Sisters of Saint Francis produced a working relationship that led to the construction of Saint Mary's Hospital in 1889. Dr. Mayo, with his sons, William James Mayo and Charles Horace Mayo, comprised the medical staff of the new 27 bed hospital which has operated continuously to the present day and grown to meet the demand for care, currently comprising 2,059 licensed beds of which 1,280 were staffed. In 1919, the Mayo brothers founded the Mayo Properties Association, transferred to it all Mayo Clinic properties and facilities, the name Mayo Clinic, and the right to receive all future earnings.

In addition to their clinical medical practice, the Doctors Mayo established a center for medical education and research. In 1915, with an initial gift of \$1,500,000, the Mayo brothers established the Mayo Graduate School of Medicine (now known as Mayo Clinic School of Graduate Medical Education), which offers graduate residency training for physicians and scientists working toward certification as specialists of medicine and surgery, as well as fellowships for those planning research and teaching careers in the medical sciences. Approximately 23,000 physicians, practicing throughout the United States and 75 foreign countries, are members of the alumni association of the Mayo School of Graduate Medical Education.

Mayo Clinic's Role in the COVID-19 Pandemic Response

Mayo Clinic is well-prepared and ready to treat patients with COVID-19 across the organization, especially those with serious or complex medical conditions. At the same time, Mayo is ready to safely care for patients facing non-COVID conditions who are in need of the unique and specialized care offered by Mayo Clinic.

Mayo Clinic is also committed to sharing its discoveries in research and treatment without limitation for the benefit of the collective effort to conquer this pandemic. Collaborating with other organizations, Mayo Clinic's unique expertise will help the world respond to the COVID-19 pandemic.

Mayo Clinic is leading the national Expanded Access Program for Convalescent Plasma for the treatment of patients with COVID-19. Announced April 3 by the U.S. Food and Drug Administration, this national expanded access program (EAP) provides investigational convalescent plasma for patients, at least 18 years of age, in acute care facilities who are infected with SARS-CoV-2. These patients have severe or life-threatening COVID-19, or who are judged by a healthcare provider to be at high risk of progression to severe or life-threatening disease. Convalescent plasma refers to blood plasma collected from people who have recovered from COVID-19. That plasma is then used to treat others with advanced illness. The plasma donor must have recovered from, and tested negative for, COVID-19 and be otherwise healthy. The patient is transfused with the donor's plasma, which contains antibodies that can attack the virus and may help lessen the severity of disease.

As of May 12, the EAP for convalescent plasma has touched all 50 states. So far, over 5,300 physicians from over 2,200 sites have enrolled more than 14,700 patients and over 9,300 patients have been infused. Mayo Clinic and collaborators are preparing the program's first safety report on the first 5,000 patients infused. Physicians at any institution in the United States who are treating hospitalized patients with COVID-19 can register their patients' information at uscovidplasma.org.

The convalescent plasma program at Mayo Clinic, which is led by researcher [Michael Joyner, M.D.](#), grew from a national initiative of physicians and investigators from 40 institutions who [self-organized](#) to investigate the use of convalescent plasma during the COVID-19 pandemic. These institutions include Mayo Clinic, Johns Hopkins University, Washington University, Einstein Medical Center, Icahn School of Medicine at Mount Sinai, Michigan State University, as well as numerous other academic medical centers and government agencies seeking to establish a national convalescent plasma program to modify the course of disease.

Mayo is a leader in developing and deploying COVID-19 testing. Mayo has provided testing for patients nationwide since March, and Mayo is still ramping up to meet the nation's needs.

Today, Mayo Clinic can perform more than 8,500 molecular tests and 20,000 serologic tests per day. Mayo is working with industry partners to continuously add capacity for both tests.

To date, Mayo has performed more than 220,000 molecular tests for patients around the country including more than 50,000 for patients in the state of Minnesota.

Molecular tests were made available to Mayo's health care partners on March 19, 2020, and serology tests on April 13, 2020.

Mayo Clinic is collaborating with other organizations to use AI to find COVID-19 hotspots.

This empowers Mayo Clinic and its partners to act as a true system, closely integrated, sharing expertise. (e.g., [MIT Media Lab on social tracking app](#)). There are several AI-driven initiatives around the country using different modeling to track and predict the new hotspots and Mayo Clinic is collaborating with some of the main proponents. While these tools are great for public awareness and may help with mitigation, they do not capture the complexity of the health care environment.

Mayo Clinic has ignited a [COVID-19 Healthcare Coalition](#), a collaborative private-industry response to the novel coronavirus. Its mission is to provide real-time learning to preserve health care delivery and protect the U.S. population.

The Society of Critical Care Medicine (SCCM) and Mayo Clinic have [launched the first global COVID-19 registry](#) that tracks ICU and hospital care patterns in near real-time. Mayo's critical care physicians and researchers will analyze patient data at scale to identify and share best practices in saving lives and reducing the burden on hospital systems and health care workers.

The registry, which is growing daily, features a [dashboard](#) of data based on more than 4,000 patients from 120 healthcare sites in eight countries. Updated regularly, the dashboard tracks data on trends such as mechanical ventilation duration, ICU length of stay, ICU discharge details and the type of medical support patients receive, as well as patient demographics: gender, age, and race.

To safely and conveniently meet the needs of patients and ensure access to care, Mayo Clinic significantly expanded telemedicine and virtual care appointments. Mayo encouraged its patients to create a Patient Online Services account to stay connected with their care teams. The digital tool lets patients message their care teams, review lab results, request prescription refills, request and schedule appointments, and review billing statements and pay their bills online. Patients are also able to schedule video appointments.

Mayo Clinic patients have reported they are satisfied with their virtual visits and Mayo Clinic has improved practice efficiency by implementing virtual visits for those who can safely receive virtual care.

As part of the expansion of virtual care and telemedicine, Mayo Clinic increased video visits by 100-fold, the capacity for monitoring patients in their homes rather than hospitals by 20-fold, and also provided iPads as additional equipment to reduce exposures in medical facilities such as nursing homes and for patients, their families, and staff.

Mayo Clinic is also using telemedicine in hospitals, including telemedicine robots, tablets, and other equipment to decrease exposure. This means that patients who are in required isolation can still communicate with their care team and family, while minimizing the risk for exposure for staff.

Announcements and Awards

Mayo Clinic recognized as best hospital in the world by Newsweek

Mayo Clinic was recently ranked No. 1 by Newsweek in its second annual list of the "World's Best Hospitals". Newsweek noted Mayo's "cutting edge" efforts in cancer research, including targeted immunotherapy, and clinical trials for pediatric patients with brain tumors, along with the pioneering carbon ion therapy treatment center in Florida. Newsweek described the institution as an "industry leader... that meets the economic, political, and medical challenges it faces with speed and skill, while also providing the very best health care to the people they treat".

Mayo Hospitals earn star ratings for overall hospital quality

Mayo Clinic hospitals across the organization have received overall hospital quality star ratings from the Centers for Medicare and Medicaid Services. The ratings provide patients with information about several dimensions of quality. Thirteen hospitals across Mayo Clinic have received star ratings; six of the thirteen hospitals earned five stars – the highest score possible. Mayo Clinic hospitals that received five-star ratings are:

Mayo Clinic Hospital – Rochester

Mayo Clinic Hospital in Arizona

Mayo Clinic Hospital in Florida

Mayo Clinic Health System – Franciscan Healthcare in La Crosse, Wisconsin

Mayo Clinic Health System in Eau Claire, Wisconsin

Mayo Clinic Health System – Red Cedar in Menomonie, Wisconsin

The star ratings measure seven broad categories: mortality, safety of care, readmission, patient experience, effectiveness of care, timeliness of care, and efficient use of imaging. Hospitals that receive five-star ratings are among the top 6.33% of hospitals in the U.S.

Mayo Clinic announces nference as first platform partner

Mayo Clinic and nference Inc., an augmented intelligence company based in Cambridge, Massachusetts, will be its first Clinical Data Analytics Platform partner. The partnership will use nference's knowledge synthesis technology to analyze health information and find new therapies faster. The partnership will focus on identifying targets for new drugs and new indications for existing drugs, optimize clinical trials, and use real world data to improve health care.

Mayo Hospitals receive “A” grades for patient safety

Mayo Clinic hospitals again earned an “A” for patient safety from the LeapFrog Group, an independent, national nonprofit group that collects and analyzes data to help patients choose the hospital that is right for them. The Hospital safety score uses 17 measures of publicly available hospital safety data, combined with 11 additional self-reported survey answers, to produce a single patient safety score.

Forbes recognizes Mayo Clinic amongst Best Employers for Diversity

Mayo Clinic has been named to the Forbes' list of best Employers for Diversity, ranking No. 13 in the health care industry and No. 72 overall. The ranking reflects Mayo Clinic's commitment to equity and inclusion at all levels of the organization.

Mayo Clinic in Rochester named Antimicrobial Stewardship Center of Excellence

Mayo Clinic Hospital – Rochester, including the Children's Hospital, has been recognized as an Antimicrobial Stewardship Center for Excellence by the Infectious Diseases Society of America. The Society awards this designation to select organizations that deliver high-quality care and execute new antimicrobial stewardship principles consistently. This is a first-time honor for Mayo Clinic – Rochester, the antimicrobial stewardship program in Rochester was formalized in 2012 and has since expanded its scope by incorporating additional tools, methods, and partnerships in managing the use of antimicrobials.

Mayo Clinic Care Network

The Mayo Clinic Care Network is a group of carefully vetted, independent health care systems that have special access to Mayo Clinic's knowledge and expertise. The care network helps reach Mayo Clinic's strategic goals by extending Mayo Clinic's reach by building regional and international relationships to improve patient care. The Mayo Clinic Care Network has members in the U.S., Asia, Mexico, and the Middle East. Members added during 2020 first quarter were:

1. Baton Rouge General and The Baton Rouge Clinic AMC in Louisiana
2. Saudi German Hospitals in Riyadh Saudi Arabia

Discussion of First Quarter Results

Mayo's 2020 first quarter results spanned two very different environments, beginning with a continuation of previous year's strong performance for the first 2 ½ months of 2020 and concluding with the ramp down of services and near closure of the outpatient practice on March 23. Mayo Clinic started the quarter with strong performance, with net operating income of \$153.1 million, a 6.7% margin, for the first two months. Volumes and revenue production continued strong through the first half of March but with the onset of COVID-19, medical service revenue finished at \$842 million, resulting in a net operating loss of \$124 million for the month. For the entire quarter, Mayo Clinic produced net operating income of \$29 million, a 0.9% operating margin.

	Three Months Ended March 31,		Change
	2019	2020	From 2019
Revenue (in Billions):	\$3,347	\$3,220	-3.8%
Expenses:	3,106	3,191	2.7%
Net Operating Income	\$241	\$29	-88.0%

Revenue

Total revenue decreased by 3.8% to \$3.22 billion. Net Medical Service Revenue was \$2.81 billion, up 0.7% from the same time period in 2019. The practice experienced strong revenue growth of 8.2% in January and February over last year but was reduced by the contraction of the practice due to COVID-19 in March.

	Three Months Ended March 31,		Change
	2019	2020	From 2019
Revenue (in Billions):			
Net medical service revenue	\$2,789	\$2,810	0.7%
Grants and contracts	157	132	-15.9%
Contributions	38	46	21.1%
Investment	92	121	31.5%
Other	271	111	-59.0%
Total revenue	\$3,347	\$3,220	-3.8%

Operating and Net Income

Net operating income totaled \$29 million, an operating margin of 0.9% for the three months ended March 31, 2020 compared to 7.2% for the same period in 2019.

As a result of both management discretion in expense management and a slower than expected start to certain programmed expenditures, operating expenses had year-over-year growth of 2.7%. Salary and benefit expense of \$1.9 billion represented an increase of 0.5% over the prior year and comprised 60.3% of operating expenses, slightly below 61.7% reported in the year ago quarter.

	Three Months Ended March 31,		Change
	2019	2020	From 2019
Expenses (in Billions):			
Salaries and benefits	\$1,915	\$1,925	0.5%
Supplies and services	947	1,009	6.5%
Facilities	210	223	6.2%
Finance and investment	34	34	0.0%
Total expenses	\$3,106	\$3,191	2.7%

Volatility in financial markets led to investment losses on Mayo's primary investment portfolio of 5.6% for the quarter. Contributions received for endowments and capital projects totaled \$83.1 million. These amounts combined with other smaller non-operating amounts generated non-operating losses totaled \$652.7 million. Net loss (excess of revenue over expenses) for the quarter totaled \$623.3 million.

Cash, Investments, and Balance Sheet Strength

Cash and investments of \$10.55 billion at March 31, 2020, represent a decrease of \$647.7 million since December 31, 2019, due largely to the volatility of the financial markets. The \$10.55 billion includes \$8.20 billion in the Long-Term Fund, Mayo's primary investment portfolio, and \$874 million in segregated reserves. Mayo's Short-Term Fund of \$1 billion and working capital balance of \$537 million provide liquidity to meet the effects of the COVID pandemic. Cash flow from operations was \$281.1 million, offset by investment losses (\$746.0 million) and capital expenditures (\$171.6 million).

Key balance sheet ratios reflect reduced cash and investment balances resulting from investment losses but are otherwise unchanged and suggest stability.

	3/31/2020	12/31/2019	3/31/2019
Days Revenue Outstanding	62.4	61.0	66.2
Days Cash on Hand	252	270	253
Cash to Debt	252%	268%	231%
Debt to Capitalization	35%	33%	35%