# **MIT Medical**

COVID-19 changes the world, and MIT Medical looks to the future. Fiscal year 2021 was shaped by MIT's continued response to the COVID-19 pandemic—yet it was also a year of hard work, collaboration, and enormous accomplishments. The following report has been structured to chronicle MIT Medical's pandemic response and highlight the projects, programming, and initiatives completed over the year.

#### **About MIT Medical**

MIT Medical is a multispecialty group practice and health resource serving the MIT and Lincoln Laboratory communities. For more than 100 years, we have fostered a tradition of caring—meeting MIT's personal, occupational, and public health needs. At MIT Medical, approximately 350 clinicians and other professionals provide clinical care, wellness programs, public health resources, insurance services, and community support. We serve a diverse population that includes some 23,000 individuals, and approximately half of our patients are students or student family members. Our clinical services include care for people of all ages and focus on the unique needs of the MIT community. We also offer community-focused support and service programs to enhance the health and wellness of students, faculty, and staff, including families and retirees.

#### **Core Values**

- Patients first: Our patients are at the center of everything we do. Every job at MIT Medical contributes to providing accessible, high-quality care. We take the time to listen and respond compassionately to the needs of our patients at every point in their MIT Medical experience.
- Working together: We are all caregivers. Each of us plays an important role within the patient care team. We value each person's contribution, and we treat each other with fairness, kindness, and respect.
- Striving to be our best: Excellence is our goal. We embrace MIT's cultural values of continuous learning, innovating, and problem solving as we work to improve the services we provide. We are flexible and nimble in responding to changing needs of the community we serve.
- Empowering employees: Staff who feel supported will reach their highest potential. Through our commitment to the personal growth, professional development, and overall well-being of our staff, we promote a culture that values its employees, embraces their ideas, fosters positive relationships, and ensures that every employee knows they are essential to the success of MIT Medical.
- Embracing individuality: Unique perspectives nurture learning and growth. By
  actively seeking out diverse points of view and empowering every voice,
  MIT Medical fosters an environment where opportunities for creativity and
  collaboration thrive. We provide an open and welcoming atmosphere for all.

#### Introduction

During FY2021, MIT Medical continued to be the hub of the Institute's coordinated public health response to COVID-19. As it did the rest of MIT, the pandemic transformed MIT Medical. Campus partnerships became essential to responding nimbly to the virus. A constant flow of inter-campus communication broke down administrative silos. In the true spirit of MIT, our pandemic response was ambitious, innovative, and constantly evolving. We built a seamlessly integrated COVID-19 testing and technology infrastructure, hired and trained a testing workforce, and continuously refined and improved our workflows. When vaccines became available, MIT Medical pushed forward with an aggressive vaccination campaign for our frontline health care workers, first responders, and eligible community members.

Our ambitions did not stop at responding to COVID-19. We created programming focused on student mental health and community well-being. We formed affinity groups to strengthen ties within our MIT Medical staff community. We undertook a project to move MIT Optical from the Stratton Student Center to E23. We performed major system upgrades on our electronic medical record management system, introduced electronic prescribing of controlled substances, and refined and improved telehealth. The following pages offer a chronological account of a year filled with hard work and service to the community.

# Quarterly Breakdown of Operations, Accomplishments, and COVID-19 Response

# July-September 2020 Highlights

- July 1: MIT announces flu shots will be mandatory for all MIT students
- July 4: Executive Director Ashley Hague leaves MIT Medical
- July 7: MIT announces only seniors and graduate students will be invited to campus for fall term
- August 16: COVID-19 testing begins for return to campus
- August 30: Human Rights Campaign lists MIT Medical as top performer in the Healthcare Equality Index
- September 1: Electronic Prescribing of Controlled Substances goes live
- September 21: MIT Optical Shop reopens in E23
- Total COVID-19 tests performed this quarter (beginning August 16): 102,982

#### Institute's Testing and COVID-19 Response

FY2021 began during MIT's research ramp-up, which started June 15. To prepare for the ramp-up, MIT Medical worked with stakeholders across campus to build a more robust testing infrastructure capable of performing thousands of tests a day. With the help of the Department of Facilities and architecture and mechanical engineering teams on campus, we built two custom testing trailers that allowed us to perform tests with minimal personal protective equipment (PPE) requirements.

Testing did not just require new infrastructure; performing the required number of tests also necessitated a major expansion of MIT Medical's workforce. Human Resources took the lead in rapidly hiring a large temporary staff for the testing facilities, working with cross-functional teams across the department to assess needs, adapt to challenges, and ensure proper training and onboarding.

Around the same time, MIT Information Systems and Technology (IS&T) launched Covid Pass, an app made in collaboration with multiple departments, including MIT Medical. Covid Pass makes it possible for community members to use their phone or computer to complete the COVID-19 testing and attestation process. Over the course of the year, Covid Pass expanded further to accommodate travel and vaccine reporting.

During phase one of the research ramp-up, we tested more than 3,000 individuals. This process became a template for the August 2020 return to campus. On the first day of testing for return to campus, we performed more than 1,900 tests. In fact, during those initial days, MIT performed a significant percentage of the total number of COVID-19 tests across the entire Commonwealth.

In September, testing capacity increased again as the Johnson Athletic Center opened as a large-scale testing facility where individuals could perform observed COVID-19 tests. Though the one-day record for COVID-19 tests during FY2021 stood at just under 7,000, this facility, combined with the two trailers, made it possible for MIT to perform 10,000 or more tests a day.

#### **Student Mental Health and Counseling Summer Utilization**

From June through August 2020, Student Mental Health & Counseling (SMH&C) saw a 29% increase in the amount of counseling visits. The service, which operated exclusively over telehealth, also saw a significant decrease in no-show rates, attributable to the ease of the telehealth model. Over the course of FY2021, SMH&C clinicians also recorded 19 podcasts covering a wide range of topics, including strategies to reduce stress and anxiety, antidepressants, supporting the mental health of African American students, and living with ADHD. As the pandemic continued, SMH&C also worked with the American Foundation for Suicide Prevention to screen graduate students for stress, depression, and other mental health conditions using a custom version of the foundation's Interactive Screening Program. The survey had a 13% response rate from MIT students, approximately 4% more than the national average. After the screening, students who indicated a need for treatment were connected to appropriate clinicians.

## **Diversity Equity, and Inclusion**

In response to the community dialogues held after George Floyd's murder, MIT Medical assembled nine internal employee affinity groups based on race or ethnicity, gender, sexual orientation, culture, disabilities, parenthood, and generation. These groups create communities of like-minded people who can work together to make MIT Medical a more welcoming place for all. Currently, 30 employees regularly participate in the groups.

In August, MIT Medical earned the distinction of "top performer" on the Healthcare Equality Index, a national LGBTQ benchmarking tool that evaluates health care facilities' policies and practices related to the equity and inclusion of their LGBTQ patients, visitors, and employees.

## **Cerner System Training and Optimization**

Over the year, the department continued to refine our use of Cerner, our electronic medical record and practice management system. We added a Cerner training specialist within the Medical Informatics and Population Health team to support staff members initial onboarding and ongoing training. The work of this training role helps to support provider experience and care quality.

MIT Medical also worked to add electronic prescribing of controlled substances in September 2020. While this addition was required for compliance with Massachusetts law, it also helped ease our migration to virtual care, which was vital due to the pandemic.

## **Optical Shop Relocation**

In July, the MIT Optical Shop began its move from the Stratton Student Center. On September 21, after just over a month of construction, the shop reopened in its new space on the first floor of Building E23.

#### **October-December 2020 Highlights**

- October 1 to November 2: Flu clinics
- October 14: MIT Medical promotes Chief of Staff Brian Schuetz to executive director position
- December 21: MIT Medical receives first shipment of COVID-19 vaccine
- December 28 to December 30: MIT Medical holds first vaccination clinic, starting with patient-facing medical personnel and first responders
- Total COVID-19 tests performed this quarter: 183,078

#### **MIT Flu Clinic**

To prevent a "twindemic," the Institute mandated flu vaccination for all students. For those living and studying on campus, MIT Medical offered flu clinics along with COVID-19 testing at the Johnson Athletic Center. MIT Medical patients and MIT staff members working on campus were also eligible for flu vaccines. Over the course of 19 days of clinics, we administered 1,707 flu shots.

#### Leadership Change

In July, Executive Director Ashley Hague departed MIT Medical. At that time, Medical Director Cecilia Stuopis assumed supervisory responsibility over all executive leadership team members. In October, Chief of Staff Brian Schuetz was promoted to the executive director position.

## **COVID-19 Vaccination Begins**

In December 2020, MIT Medical received its first shipment of Moderna vaccine doses. Our first vaccinated community member was Medical Housekeeper Fatima Rosario, who led the effort to keep MIT Medical's facilities sanitized and safe for patients and staff. Before the end of January 2021, MIT Medical had provided a first dose of vaccine to every frontline health care worker and at-risk staff member who requested one.

## Vaccine Rollout and Screens for At-risk Patients

As Massachusetts planned for the larger vaccine rollout, our Population Health team developed a tool to use data from the Cerner system to identify patients with medical conditions that put them at higher risk of complications from COVID-19, allowing us to prioritize these patients for vaccines. The tool also helped identify patients who were at risk due to gaps and delays in care.

## January-March 2021 Highlights

- February 2 to 9: MIT Medical retrofits of Johnson Athletic Center to create ondemand vaccine clinic
- February 16 to 22: Quarantine (Q)-week for returning students
- February 17: Commonwealth changes vaccine distribution strategy
- Total COVID-19 tests performed this quarter: 239,570

# Approach to COVID-19 Control in Returning Student Population

To prepare for the return of students, MIT mailed more than 2,600 COVID-19 tests to students' homes. The students performed observed swab tests via online conferencing, and then mailed back the samples. Approximately 75 percent of students returned tests. Of the returned tests, only one was positive.

MIT added a second layer of protection for the return of students: Q-week. First, students were tested for COVID-19 when they arrived on campus and were then quarantined for seven days. Masks were required at all times, and while students were allowed to leave their dorms to pick up meals and get fresh air, they were not allowed off campus. After seven days, students were re-tested, and Q-week ended with no identified spread of the virus on campus.

#### Large-scale Distribution

As vaccine supplies became more widely available, MIT Medical began holding regular clinics in Building E23. At the beginning of February, the department began to vaccinate eligible Phase2a patients aged 75 and older.

To ensure readiness for a large-scale vaccination effort, MIT Medical retrofitted the Johnson Athletic Center so that it would stand ready to vaccinate the entire MIT community. However, in mid-February, the Commonwealth announced changes to their vaccine distribution strategy—prioritizing larger vaccination centers over smaller venues

like MIT. Because of this change, MIT quickly pivoted to helping eligible patients find vaccinations in their communities.

## 2021 Getfit Challenge

Community Wellness at MIT Medical's annual getfit challenge began on February 1, and participation in the program increased nearly 6%. Virtual classes led to a striking increase in class participation—up 257% from 2019 levels. A total of 2,569 community members participated, logging a total of 9,657,205 minutes of exercise.

## **April-June 2021 Highlights**

- April 1: MIT initiates pilot for Harvard University Clinical Laboratory testing at Johnson testing facility
- April 30: MIT announces that COVID-19 vaccines are mandatory for students
- May 3: MIT Medical moves to open notes policy
- May 10: MIT holds vaccination clinic in Johnson Athletic Center
- June 7: MIT announces that COVID-19 vaccines are mandatory for faculty and staff
- June 8: MIT Medical begins conducting interdepartmental presentations to address vaccine hesitancy
- June 10: MIT Medical Communications wins Lamplighter Award for best blog in New England for COVID-19 Q&A series
- June 23: Excellence awards presented to two teams and one individual from MIT Medical
- Total COVID-19 tests performed this quarter: 180,736
- Approximate number of COVID-19 vaccinations given in FY2021: 2,500

#### **Testing and COVID-19 Response**

As routine COVID-19 testing became essential, MIT Medical began exploring more cost-effective and convenient testing solutions. In April, we began transitioning to the Harvard University Clinical Laboratory's self-swabbing test in our Johnson Athletic Center test site.

## **Coping with the Pandemic Workshop**

Just weeks after MIT marked the one-year anniversary of the pandemic, Community Wellness at MIT Medical (CW) and SMH&C co-presented a workshop titled "It's OK to not be OK," offering participants coping strategies and self-care skills to deal with tangible and intangible losses, lost opportunities, and changed routines of the pandemic. These workshops were just one example of the more than 40 collaborations CW created with departments and organizations across MIT—collaborations that resulted in over 100 well-being events for faculty, staff, students, and other members of the community.

## **Open Notes Policy**

In May, MIT Medical implemented an open notes policy, which allows patients to view clinicians' visit notes in the patient portal. This policy is expected to enhance the patient experience and improve care quality, transparency, and patient safety.

#### **Telehealth**

Telehealth grew rapidly after being introduced in April in response to the campus shutdown. A total of 35,697 telehealth visits represented approximately 50% of all visits at MIT Medical in FY2021. During the fiscal year, all Student Mental Health & Counseling service were virtual. In the past year, we enhanced workflows to improve the experience for providers and patients. Patient service representatives now conduct telehealth pre-visits with patients to ensure that technical needs are addressed prior to their scheduled appointments. In addition, medical assistants are trained on the video platform and can support clinical providers conducting visits.

In June, MIT Medical also began offering foreign language and ASL interpreter support for telehealth appointments and announced the availability of these services to the community.

#### **Vaccination Clinics**

In mid-May, the COVID-19 vaccine became more widely available, and MIT resumed vaccine clinics in the Johnson Athletic Center. The clinic prioritized Covid Pass participants who routinely accessed campus. In this round of clinics, more than 200 community members received vaccinations.

Additionally, after MIT made vaccines mandatory for faculty, staff, and students, the department developed and presented a suite of programming to combat vaccine hesitancy in the community. Clinicians and staff worked with partners in Human Resources to conduct presentations and information sessions for hesitant staff members, sharing information and resources that convincingly encouraged individuals to get the vaccine with confidence. The campaign also included signage and public health messaging.

#### **Excellence Awards**

In a year dominated by COVID-19, MIT recognized more than 20 MIT Medical staff members for their many contributions to the community. An individual award for Sustaining MIT was given to Susanna "Zan" Barry, senior program manager from Community Wellness at MIT Medical. Since the pandemic began, Zan offered community wind-down sessions nearly every day of the week, including a Thanksgiving session with more than 70 participants.

MIT Medical's Clinical Response Team won an award for Serving the Community. This group of doctors and nurses worked tirelessly from the early days of the pandemic to screen community members and protect them from COVID-19—working outdoors in inclement weather, developing a hotline for individuals who developed symptoms of the virus, and creating quarantine housing. The team continues to develop bold and creative solutions for pandemic response.

Ten MIT Medical staff members were part of the 30-person MIT Covid testing/ CovidApps team, who won an award for Innovative Solutions. This interdepartmental group worked to implement an integrated COVID-19 testing and contact tracing system for the community. Their work has been crucial to the Institute's research ramp-up and phased reopening.

Additionally, the New England Society for Healthcare Communications recognized MIT Medical's Marketing and Communications team in May with a Lamplighter Award for the best public health blog in New England.

# Financials, Utilization, and Human Resources

#### **Turnover**

In FY2021 we had 29 departures, 24% of which were retirements. We made 42 hires, including three physicians, four family nurse practitioners, four registered nurses, and 10 medical assistants.

#### **New Hires**

Date of hire	Name	Job title	Area
7/7/2020	Yan Ni	Physician	Urgent Care
7/13/2020	Najood Alzubaidi	Medical Assistant	Primary Care
7/27/2020	Lakisha McNaughton	Medical Assistant	Primary Care
8/3/2020	Tara Agri	Medical Assistant	Primary Care Lexington
8/3/2020	Elene Scheff	Director	Clinical Quality and Risk Management
8/3/2020	Julisa Paulino	Patient Service Representative	Primary Care
8/3/2020	Chamyra Negron	Lead Patient Service Representative	Primary Care
8/31/2020	Hannah Rogers	Administrative Assistant	Student Mental Health & Counseling
9/1/2020	James Rifino	Physician	Urgent Care
9/28/2020	Ana Gomes	Medical Assistant	Specialties
10/5/2020	Tayla Beckford	Medical Assistant	Pediatrics
10/5/2020	Regina Harvey	Nurse Practice Manager	Primary Care
10/5/2020	Kim King	Patient Service Representative	Primary Care
10/5/2020	Altagracia Kedo	Clinical Lab Assistant	
10/13/2020	Israel Molina	Family Medicine Physician	Primary Care
10/19/2020	Jazmine Stubbs	Medical Assistant	Urgent Care
10/19/2020	Elizabeth Sousa	Registered Nurse	Urgent Care
11/2/2020	Chukwueloka Obionwu	Sports Medicine Physician	One South
12/14/2020	Benvinda Santos	Lead Medical Assistant	Primary Care
12/14/2020	Claudia Teixeira	Medical Assistant Housekeeper	
12/14/2020	Katrina Askew	Supervisor	Student Health Plans
12/14/2020	Audrey Novchich	Family Nurse Practitioner	Primary Care
12/14/2020	Francine Schwartz	Nurse Practitioner	Primary Care

Date of hire	Name	Job title	Area
12/23/2020	Jahvari Freeman	Patient Service Representative	Urgent Care
1/5/2021	Jacqueline Whorf	Medical Assistant	Primary Care
1/11/2021	Srilatha Kadamuthuri	Health Care Data Analyst	
1/11/2021	Camila Azuero	Trauma Specialist	
1/19/2021	Maria Alvarado	Registered Nurse	Primary Care
1/25/2021	Alexandra Hargrave	Patient Services Representative	Medical Specialties
2/8/2021	Pamela Mensah	EHR Training Specialist	
2/16/2021	Benjamin Hull	Patient Services Representative	Primary Care
2/22/2021	Marie Saint-Louis	Pharmacy Technician	
3/1/2021	Lisnarda Chalas	Medical Assistant	Primary Care
3/15/2021	Vandary Moeun	Medical Assistant	Primary Care Lexington
4/5/2021	Stephen Torigian	Medical Technologist	
4/26/2021	Maria Mariano Rodrigues	Patient Service Representative	Dental
5/3/2021	Emma Williams	Supervisor, Administration Clinical Operations	Primary Care
5/10/2021	Shelly Emile	Registered Nurse	Primary Care
5/10/2021	Carly Paquin	Registered Nurse	Primary Care
5/17/2021	Danielle Brandt	Nurse Practitioner	
6/14/2021	Paul Hughes	Medical Assistant	Primary Care
6/28/2021	Sheri Giangregorio	IT Project Manager	

## **Departures**

- Adriane Shilmover, Dentist
- Alexander Smith, Pharmacy Technician
- Ana Antunes, Medical Assistant Housekeeper
- Annjone Goodridge, Patient Service Representative, Urgent Care
- Ashley Hague, Executive Director, MIT Medical
- Byron Williams, Patient Services Representative, Primary Care
- Carol MacDonald, Lead Dental Assistant
- Christine DiAndrea, Clinical Lab Assistant
- Clyde Hunte, Financial Assistant II
- Dalila Avelar, Medical Assistant, Lexington Primary Care
- David Benoit, Senior Financial Analyst
- Dianne Richardson, Senior Document Imaging Representative
- Erin Croft, Patient Service Representative, Primary Care

- Judy Jun, Patient Service Representative, Primary Care
- Julia Cura, Housekeeping Assistant
- Kathryn Newman, Medical Technologist
- Lakisha McNaughton, Medical Assistant, Primary Care
- Linda Chavez, LPN, Specialties
- M Lisa Bosley, Psychiatric Nurse Practitioner
- Marie Saint-Louis, Pharmacy Technician
- Mariyam Gadatia, Registered Nurse, Primary Care
- Matthew Garston, Optometrist
- Nadia Ounis Skali, Associate Chief, Primary Care
- Rebecca Reeves, Financial Analyst
- Richard Gardner, Gastroenterologist
- Shaun Sutcliffe, Registered Nurse, Primary Care
- Sheri Giangregorio, IT Project Manager
- Tayla Beckford, Medical Assistant, Pediatrics
- Vandary Moeun, Medical Assistant, Lexington

#### **MIT Medical Utilization**

MIT Medical saw a total of 84,345 visits, not including flu shots. This was a 2% increase from FY2020, when we had 82,690 patient visits, though visit volumes in both fiscal years were significantly impacted by the pandemic.

Visits to MIT Medical by Major Service Area, Fiscal Year 2021

Major service area	Unique patient visits
Primary Care (including Lexington)	25,210
Student Mental Health and Counseling Services	21,546
Urgent Care	5,660
Specialty and Ancillary Services (laboratory, radiology, and others)	11,896
Dental	6,590
Eye	3,977
Obstetrics/Gynecology	4,907
Pediatrics	4,559
Total	84,345

## **Patient Population**

In FY2021, MIT Medical's patient population decreased as the amount of people accessing health care on campus dropped, in part, due to pandemic related remote working.

# Patient Population of MIT Medical by Group, Fiscal Year 2020 versus Fiscal Year 2021

Patient group	FY2020	FY2021
Students/affiliates/family members	8,885	6,708
Faculty/staff/family members	8,936	7,667
Retirees	1,392	1,190
Others	678	535
Total	19,891	16,100

#### **Health Plan Enrollment**

In FY2021, health enrollment decreased in all plans due to the pandemic, in large part due to more students waiving MIT's insurance as they were studying in a remote model.

# Student Health Plan Enrollment in Fiscal Year 2020 versus Fiscal Year 2021

Health plan type	FY2020	FY2021
Affiliate Extended Insurance Plan	521	368
Student Extended Insurance Plan	6,446	4,643

# **MIT Medical Financial Stewardship**

Overall, FY2021 saw a \$3.1 million favorable budget variance for MIT Medical on a baseline of \$20.6 million net expense. With so much uncertainty, we had set the FY2021 clinical revenue budget at a conservative \$7.4 million—approximately 50% of our FY2019 clinical revenue. While the clinical revenue variance was favorable by approximately \$275,000, total revenue was unfavorable by \$3.8 million. This was due to reduced direct subsidy support from the employee benefit plans.

Expenses were favorable to budget by \$6.9 million, primarily due to lower-than-expected spending on pharmaceuticals (\$3.1 million) as a result of fewer on-site patient visits. Also contributing to this expense variance was a \$1.7 million positive variance in salaries and benefits due to staff vacancies.

Despite higher-than-anticipated claims, the Student Extended Insurance Plan was able to keep a balanced budget and avoid premium increases, ultimately transferring \$405,000 into our emergency reserve.

## **Concluding Thoughts**

Working at MIT has always been a point of pride for everyone in this department. That pride and sense of purpose was only fortified by the partnerships we forged with people and departments across MIT. Thanks to the tireless efforts of our staff and partners, the

campus was protected from COVID-19. Of the nearly 1,200 COVID-19 cases within the MIT community, only 18 could be attributed to on-campus transmission.

By the end of FY2021, MIT Medical had given out more than 2,600 vaccine doses, and over 90% of MIT's on-campus community was fully vaccinated—a number that will grow before the academic year begins. Although vaccinations have provided protection and hope, COVID-19 is far from over, and we are firm in our resolve to stay vigilant against the virus. Yet, due to the dedication of our team and our campus partners, we are confident that we can continue to move forward safely.

MIT is a community committed to making a better world and shaping a brighter future. While we are still determining how COVID-19 will impact that future, at MIT Medical, we are deeply proud to keep this community healthy every day. We look forward to continuing a tradition of excellence while delivering high-quality, innovative care.

Cecilia Stuopis, MD Medical Director and Department Head

Brian Schuetz
Executive Director