

MIT Medical

MIT Medical provides multiple health services for MIT's diverse 22,000-member community. In addition to being a health insurer and multispecialty group practice, MIT Medical plays an increasing and evolving role in maintaining and improving the health and safety of the MIT community as a whole.

Approximately 360 MIT Medical staff members provide clinical care, public health services, wellness programs, and community support. Our Community Care Center provides and coordinates care for all who receive primary care at MIT Medical.

MIT Medical has reviewed and revised its strategic focus areas, which are as follows:

- Improving patient navigation and engagement
- Maximizing value
- Improving overall community health
- Supporting international endeavors
- Managing and developing staff talent

In collaboration with MIT Human Resources and the Office of the Vice President for Finance (VPF), MIT Medical is developing strategies to deal with health care reform.

The Commonwealth of Massachusetts' insurance requirements for students are met by the many services provided in our campus facility and by a supplemental insurance plan that covers prescriptions and medical care delivered outside of the E23 facility.

Employees and their family members can receive care at MIT Medical with either of MIT's two employee health plans:

- The MIT Traditional Health Plan offers coverage through primary care providers (PCPs) at our Cambridge campus and at Lincoln Laboratory facilities.
- With the MIT Choice Plan, employees and family members can select PCPs of their own choice at MIT Medical or within the Blue Cross Blue Shield of Massachusetts network. Some family members can choose PCPs at MIT Medical while others have PCPs closer to where they live, work, or attend school. More than 1,600 Choice Plan members have chosen PCPs at MIT Medical.

Our staff plays an active role in campus-wide emergency preparedness planning and management. This was especially evident during the spring of 2013, as our community was rocked by the Boston Marathon bombings and the tragic death of MIT police officer Sean Collier. Our student emergency medical technicians were on-site first responders, while our Mental Health and Counseling Service supported many of those directly and indirectly affected by these horrific events.

During FY2013, working with members of VPF and the benefits area of Human Resources, we developed analytic systems that have provided and will continue to

provide important insights into our use of health care resources. This will inform and support decisions regarding the provision of health care services for our community.

MIT Medical's total number of care encounters increased over the past year, including face-to-face encounters, telephone communications, and online communications through our secure patient portal. These changes are consistent with the transitions in health care delivery occurring both locally and nationally.

Our annual fitness challenge, getfit@mit, continues to grow. Additional wellness programs are being piloted at Lincoln Laboratory and on campus within MIT's Department of Facilities and the Office of the Dean for Student Life, with the goal of developing a platform to create programs that will enhance the health and wellness of the MIT community.

Our electronic medical record (EMR) system has met federally defined "meaningful use" requirements under the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act. These requirements include privacy and security measures and use of EMRs for generating and transmitting prescriptions, checking for drug allergies, recording clinical information about patients, and other tasks.

Major infrastructure renovations in FY2013 led to improvements in patient privacy, workflow, and the general appearance of the building, and the renovations were completed with no interruptions in patient care.

Clinical Services

During FY2013, MIT Medical conducted more than 126,000 visits at both campuses, including services for employees of Lincoln Laboratory, Draper Laboratory, and the Whitehead Institute. Nearly 6,000 of those visits occurred at Lincoln Laboratory. The following table details our clinical visit statistics by patient demographics.

Visits to MIT Medical, FY2013

Patient Population	Number of Visits
Students, affiliates, and family	57,687
Faculty, staff, and family	55,667
Retirees and family	10,103
Others	2,957
Total	126,414

Adult Primary Care Medical Service—Howard M. Heller, MD, MPH, Associate Medical Director for Primary Care, and Stephanie Shapiro, MD, Chief of Adult Primary Care

Strategic Focus

The Adult Primary Care Medical Service of MIT Medical aims for continuous improvement in providing high-quality, cost-effective, appropriate, and timely access to care. Between 2008 and 2012, with the implementation of email and telephone reminders, our appointment “no show” rate declined by 20%, making approximately 512 more appointments available in FY2013. We continuously monitor wait times for appointments, which remain below established wait-time standards for all types of visits.

Accomplishments

During FY2013, we achieved the following:

- Began assessments of race, ethnic, and gender disparities in care. Among other areas, we are looking at colon cancer screening and diabetes management.
- Recruited two new physicians and two new nurse practitioners, despite a competitive local market for primary care providers. We are continuing our strategic shift toward family practitioners for greater flexibility in meeting current and future needs.
- Met national health care reform goals for “meaningful use” of electronic health records. As a result, we received \$274,689 in incentive funds from Medicare.
- Enhanced services for international travelers. We increased pre-travel group counseling sessions threefold, reaching approximately 400 students. We also created a video for those unable to attend live sessions. We established closer relationships with several MIT international programs, offices, and committees, which improved our ability to assist MIT travelers with critical health needs while abroad.
- Improved clinical performance indicators. We have seen steady improvements in clinical indicators such as colon cancer screening and pneumococcal immunization for patients over the age of 65.

Initiatives

During FY2014, we plan to continue reviewing elements of care to assess possible racial, ethnic, or gender disparities. Another goal is to broaden support for international and global MIT programs.

Community Care Center—Maura Rowley, RN, Clinical Coordinator, and Janis Puibello, MS, FNP-BC, Acting Director of Nursing

Strategic Focus

The Community Care Center (CCC) coordinates medical services and resources at MIT Medical, elsewhere on campus, and in the larger community to make sure patients receive the care they need from hospital to home. Nurse care managers in the CCC help arrange home care services, transportation to medical appointments, outpatient rehabilitation services, and home medical equipment and supplies. When appropriate, “house calls” are made to sick students in their dorm rooms. In addition, the CCC provides on-site care, including infusions, observation, and post-procedure and wound care.

Accomplishments

During FY2013, we achieved the following:

- The CCC’s new clinical coordinator started in September 2012.
- Each nurse care manager developed a unique caseload of patients with complex medical needs, providing more consistent and comprehensive patient follow-up.
- Nurse care managers continued to attend weekly Dean on Call meetings to increase communication regarding the care of students who have been recently hospitalized or have had other health issues requiring medical intervention.
- The CCC staff was involved in planning, managing, and staffing campus-wide flu clinics.
- Nurse care managers made 2,242 unique patient contacts, an increase of 749 patients over last year.
- A total of 687 patients received direct on-site care visits within the CCC, an increase of 427 patient visits over FY2012.
- Each morning, nurse care managers continued to review overnight phone calls from patients by going over reports from FONEMED, our overnight phone-triage service. A total of 374 calls were reviewed.
- Nurse care managers made 30 dormitory, hospital, or home visits.

Initiatives

In FY2014, we plan to:

- Continue working with MIT Medical’s Information Services team to improve the electronic medical record system and streamline the documentation process
- Provide additional in-service opportunities for MedLinks, MIT’s peer health counselors
- Launch a pilot employee health and wellness program in conjunction with Community Wellness at MIT Medical

Dental Service—Grace M. Collura, DMD, Chief

Strategic Focus

The Dental Service at MIT Medical is committed to the improvement of oral health and hygiene through preventive care, emergency treatment, and maintenance. We work to identify oral disease to improve dental health and overall general health.

Our primary goal is to deliver the highest level of patient-centered care for students, faculty, staff, and their families. Since dental care and medical care are coordinated in one system, patients have the unique opportunity of receiving integrated treatment on campus. With recent medical studies continuing to link dental care to overall health, we are pleased to offer such comprehensive services at MIT Medical.

Accomplishments

During FY2013, we continued to add technological advancements into our practice. We began using intra-oral cameras and fluorescence-technology cavity detectors. Not only is this technology more accurate than traditional dental X-rays, but it also serves as an educational tool for patients, who are able to clearly see areas of tooth decay and other oral conditions. In addition, a major upgrade of our electronic dental software system resulted in further improvements in efficiency, diagnostic ability, and overall service production.

Our dentists continued to be active members of the Institute community, supporting MIT's strategic initiatives in health promotion and wellness. Our clinicians participated in pre-professional student advising and the Health and Wellness Fair.

Initiatives

In FY2014, we plan to maintain revenue generation while also preparing renovations for the Dental Service area with the help of an ergonomic specialist; the goal is to make each area more efficient for dentists and technicians to use and more comfortable for patients. Plans also include continuing efforts to introduce new procedures such as porcelain restorations.

Eye Service—Robert B. Gross, OD, Chief

Strategic Focus

MIT Medical's Eye Service strives to provide prompt, courteous, comprehensive eye care of the highest quality to the MIT community. We are a full-service eye care center offering:

- Comprehensive optometric examinations
- Ophthalmologic consultation and treatment
- Co-management of cataract surgery
- Contact lens services
- Eyeglass services (at MIT Optical)

Accomplishments

During FY2013, we achieved the following:

- Cemented our competence with Medflow, our new electronic medical record system for eye care. Although our appointment queue lengthened during our rigorous training period, we are now back to handling our original workload and meeting our goal of no more than a two-week wait for routine visits. All Medflow training and software customization was done by internal “super users” – five Eye Service staffers who received four days of specialized training several months prior to the go-live date—saving us time as well as money.
- Continued to track patients with diabetes and remind them to have annual eye exams. Working in collaboration with the Primary Care Service, we achieved a compliance rate of 79%, much higher than that of most health care organizations.
- Added new products to our contact lens practice, giving our patients access to the newest innovations. For example, we now are offering a daily astigmatic lens that has been extremely popular with patients.
- Continued to experience success at MIT Optical, which is thriving despite fierce competition from both vision care plans and online eyewear sources.

Initiatives

During FY2014, we plan to continue meeting new federal requirements for medical diagnosis coding. In July 2013, we upgraded our EMR to a more robust system of coding that will be required for all health care providers as of October 2014. We also plan to continue monitoring the rapidly changing landscape for detection and treatment of various eye diseases.

Lincoln Laboratory/Lexington Facility—Toby Walter, RN, MS

Strategic Focus

MIT Medical/Lexington provides a comprehensive west-suburban site for Lincoln Laboratory employees, MIT Health Plan members and their families, and retirees. Our family practice offers comprehensive primary care for all age groups. Located within a large research and development facility with more than 2,500 employees, the medical facility also focuses on occupational health, employee screening, and care for work-related injuries.

Our full-time team includes a family practice physician, a family practice nurse practitioner, and a practice coordinator/triage nurse who is additionally certified as a breastfeeding counselor. A Mental Health and Counseling Service provider is available weekly for employee assistance and to handle referrals from primary care providers. David V. Diamond, MD, an occupational specialist, provides additional primary care coverage.

On-site phlebotomy, point-of-care laboratory testing, EKG (electrocardiogram), and prescription drug pickup services also are available.

Accomplishments

During FY2013, we achieved the following:

- Successful transitions to a new practice coordinator and a new family nurse practitioner.
- Our largest flu clinic to date, with over 2,200 immunizations given. We offered free flu shots to all Lincoln Laboratory employees and consultants. Clinics were held at the laboratory's main campus, in our facility, and, for the first time, at the Haystack and Forbes Road facilities.
- Health-related workshops for employees. Medical providers, in close collaboration with Community Wellness program manager Katherine Barlett, held workshops for employees on topics such as summer health and children and sleep issues. Barlett works closely with MIT Medical and laboratory administration to identify priorities and develop programming. Our one-day health screening event continues to be a success.
- Staff involvement in health-related Lincoln Laboratory administrative committees, including the workplace violence task force. We also took part in tabletop exercises regarding readiness and response in the case of significant events.
- Capital improvements. We updated equipment, including exam-room computers and made improvements in the facility's physical appearance with new flooring, carpeting, and paint.
- Continued high patient satisfaction scores on Press Ganey surveys. Our patients consistently rate our clinical providers, support staff, and facility well above the national average.

Initiatives

In FY2014, we plan to continue providing a high level of primary care to members of the Lincoln Laboratory and MIT communities and to explore options for continued growth.

Medical Specialties—David V. Diamond, MD, Associate Medical Director

Strategic Focus

The goal of Medical Specialties within MIT Medical is to provide convenient, cost-effective, and integrated specialty care for the most common specialty needs of our various patient populations.

Accomplishments

During FY2013, we achieved the following:

- Provided on-site specialty care in the following medical subspecialties: allergy, dermatology, pulmonary, cardiology, rheumatology, occupational and environmental medicine, endocrinology, sports medicine, infectious diseases, diabetes education, and neurology

- Continued to provide on-site care in the surgical subspecialties of urology, otolaryngology, ophthalmology, and orthopedics
- Monitored access to care and patient satisfaction quarterly and remained at or above MIT community standards
- Maintained relationships with many highly regarded specialists in the Boston area, developing specific written agreements with hospital and ambulatory testing sites to provide expedited access, testing, and reporting for expensive high-tech procedures at reduced costs to our patients and to MIT

During the past year neurologist Amar Elkhalfa, MD, joined our consulting staff, replacing Dr. Davender Khera. Pulmonologist Victor Pinto-Plata, MD, replaced Dr. Michael Wechsler, and endocrinologist Joshua Safer, MD, ended his 10 years of service to MIT Medical.

Initiatives

During FY2014, we plan to:

- Initiate a system of soliciting patient feedback on outside consultant and facility referrals
- Evaluate newer technologies in cardiac monitoring and the use of digital photography
- Recruit an on-site dermatologist and another endocrinologist to replace staff members who have left

Mental Health and Counseling Service—Alan E. Siegel, EdD, Chief

Strategic Focus

The Mental Health and Counseling Service at MIT Medical addresses the mental health and counseling needs of the entire MIT community. We help people identify and understand personal problems and transform that understanding into positive action. By working closely with students who are having difficulty adjusting to college life, we enable them to take full advantage of the academic and social opportunities at MIT. Through our outreach and prevention activities, we provide information about how people at MIT can help individuals in distress and direct those in crisis to appropriate care.

Accomplishments

We met our ongoing goal of providing responsive care to the Institute community. Our measures include the following.

- *Wait times for appointments:* Patients had no wait for urgent consultations and waits of less than one week for intake consultations or psychopharmacology. We have no waiting list for consultations.
- *Number of students seen:* More than 20% of MIT students were seen in the Mental Health and Counseling Service last year. Once again, we provided services to more students than six of our seven Ivy-plus collaborative institutions.

- *Clinician productivity:* At key data points during the year, all Mental Health and Counseling Service clinicians had either met or exceeded expectations for clinical productivity.

The spring semester was marked by profound distress and disruption on campus due to the Boston Marathon bombings and the tragic death of our own MIT police officer Sean Collier. The staff of the Mental Health and Counseling Service responded by providing support and healing interventions to the entire MIT community, reaching out to the campus and coordinating our efforts with local first-responder and crisis groups. We held daily drop-in groups that were open to all members of the community, and our staff shifted their schedules so that any individual or group needing support could receive it without delay.

In collaboration with colleagues in MIT's Division of Student Life, we worked to support the new area directors' initiatives and provided training on how to recognize when a student or colleague is in emotional trouble. More graduate resident tutors, resident advisors, faculty, and administrative officers received this training in FY2013 than in past years. Four of our clinical staff members serve as advisors and guides to students who are actively developing peer-support organizations designed to reduce the stigma associated with seeking help and to encourage the identification of students at risk.

Initiatives

In FY2014, we plan to:

- Finalize development and operation of the Peer to Peer and Peer Ears student peer-support organizations
- Increase outreach to new support staff, faculty, and administrative staff to provide training on our services and how to access them
- Develop and implement the use of a new depression screening instrument for all Mental Health and Counseling Service patients
- Evaluate the value of expanding outreach services by developing a new position, associate director for community outreach, and exploring the use of drop-in sessions in residence halls

Nursing Service—Jan Puibello, MS, FNP-BC, and Colleen McDonald, MS, FNP-BC

Strategic Focus

MIT Medical's Nursing Service is committed to serving the Institute community at all stages of the health care continuum. Nursing care is provided by adult and family nurse practitioners (NPs), certified nurse midwives (CNMs), psychiatric clinical nurse specialists (PCNSs), and registered nurses (RNs) in the Community Care Center and in the ambulatory setting.

Accomplishments

Primary Care

NPs provided care for acute and chronic illnesses or injuries, educated patients in health promotion and disease prevention, and worked in collaboration with physicians. In FY2013, Primary Care, Urgent Care, and Pediatrics NPs and RNs provided a total of 17,392 visits.

Four NPs (three of whom are designated as primary care providers), three full-time RNs, and one part-time RN provided 10,696 adult Primary Care visits, approximately 30% of all visits in this area.

Specialty and Subspecialty Care

NPs, PCNSs, and CNMs provided consultation, specialty, and subspecialty assessments and care, including group and individual counseling, medical screening and surveillance, sports medicine, obstetrical and gynecologic care, and community outreach.

NPs in Dermatology, Occupational Health, Orthopedics, Mental Health, and Obstetrics and Gynecology (OB/GYN) at MIT Medical provided a total of 10,753 patient visits.

CNMs delivered 86 of the 192 babies born to our patients.

Clinical Precepting

NPs and CNMs precepted seven advanced-practice graduate nursing students.

Minor Procedure Room

An RN performed or assisted with 132 procedures in the minor procedure room, including minor surgery and pretest screenings. This RN also works with our diabetes educator and nutritionist to coordinate care and education for patients with diabetes.

Ambulatory Nursing

Anticoagulation clinic. Primary Care triage nurses are certified in anticoagulation and manage the care of approximately 200 patients, continually monitoring and assessing more than 3,500 tests measuring anticoagulation blood levels, intervening to adjust dosage levels as needed, and providing patient education.

Public health. NPs provided more than 1,200 travel medicine visits, a record high. NPs are now providing telephone evaluations to meet the needs of MIT's growing population of international travelers. NPs presented group educational sessions to the D-Lab (Development through Dialogue, Design, and Dissemination), G-Lab (Global Entrepreneurship Lab), and MIT International Science and Technology Initiatives program.

Influenza vaccination. Nurses were part of the effort to vaccinate the MIT community against influenza, during which 13,492 individuals were vaccinated.

Initiatives

In FY2014, we plan to:

- Continue our public health outreach initiatives. This includes MERS (Middle East respiratory syndrome) preparedness and education.
- Improve access to care. We will analyze nursing triage patterns to maximize the use of available appointments in all care areas.
- Expand travel medicine/international health group education efforts. Through programs such as Skoltech, we will support the health of MIT's international community.
- Begin a nursing clinical education series. This will serve to enhance knowledge regarding specific medical conditions and facilitate the participation of NPs in primary care rounds.
- Recruit and retain. We will recruit for a chief nurse and a part-time medical specialties triage nurse. At the same time, we will engage in efforts to retain and develop our existing staff.

Obstetrics and Gynecology Service—Chana S. Wasserman, MD, Chief

Strategic Focus

MIT Medical's Obstetrics and Gynecology Service (OB/GYN) is dedicated to providing care to women from late adolescence through menopause. Working in collaboration with Primary Care, Surgery, the Mental Health and Counseling Service, and Community Wellness, we provide well-rounded and closely integrated care.

Our gynecologic services range from comprehensive offerings in birth control to management of menopausal issues. OB/GYN clinicians provide surgical services and collaborate with other laparoscopic and gynecologic oncology specialists. Obstetrical care includes options for midwifery or physician care. We collaborate with maternal fetal medicine specialists and reproductive endocrinologists at Mount Auburn Hospital, Beth Israel Hospital, Brigham and Women's Hospital, and Massachusetts General Hospital to provide high-risk obstetrical care and infertility services.

Accomplishments

During FY2013, we achieved the following:

- *Record number of births.* The number of births among MIT Medical patients was much higher than in previous years. This year we had 229 births (no twins), as compared with 189 (including six sets of twins) in FY2012, 210 in FY2011, 196 in FY2010, and 183 in FY2009. The overall cesarean section rate (both primary and repeat) was 17%, similar to last year.
- *Awards and nominations.* Annie Liau, MD, received the MIT Medical Infinite Mile Award for Lifetime Contribution in June 2013. Also nominated for Infinite Mile Awards were Nicole Napier (Collaborative Effort), Eleashea Passley (Support Staff Excellence), and Jill Lamson (Clinical Excellence).

- *New staff member.* We welcomed Tenelle Taylor to our staff of medical assistants. She has already proven herself to be an excellent member of our team.
- *Community involvement.* We advised and precepted students and residents from local schools and hospitals, educated new MIT students and parents about MIT Medical's OB/GYN offerings, and served on a wide variety of committees at MIT Medical and affiliated hospitals.
- *Vaccination protocols.* Based on new national recommendations, we have been administering Tdap (tetanus, diphtheria, and pertussis) vaccinations to our pregnant patients during the third trimester. We continue to administer influenza vaccines to our obstetrical population and Tdap and HPV (human papillomavirus) vaccinations to our gynecologic patients.
- *Clinical education.* We educated clinical providers about new ASCCP (American Society for Colposcopy and Cervical Pathology) guidelines for the management of abnormal cervical cancer screening tests and have been incorporating these guidelines in the treatment of our patients.

Initiatives

In FY2014, we plan to implement an electronic medical record system for our prenatal patients. In preparation for the rollout this fall, we have devoted many hours to planning for a smooth transition and have added computer terminals to our exam rooms. We will train our staff on the new software and then perform a pilot with 20 patients before transitioning all new prenatal patients from our paper chart to the new EMR. We also plan to begin providing on-site urogynecologic consultations. Dr. Katherine Hanaway, a urogynecologist, will offer consultative services twice a month at MIT Medical, making these referrals more convenient for our patients.

Occupational and Environmental Medicine Service and Employee Health Service—David V. Diamond, MD, Chief, and Jacqueline Sherry, RNP, Clinical Coordinator

Strategic Focus

These services aim to provide the best preventive, consultative, diagnostic, and therapeutic care for work- or environment-related illnesses and injuries that occur at MIT. We work closely with, and consult with, MIT's Environment, Health, and Safety Office (EHS); the Security and Emergency Management Office; and the clinical staff of MIT Medical. We continually fine-tune our program to meet the ever-changing research environments and health needs of our community.

Accomplishments

During FY2013, we achieved the following:

- Worked on developing a health-risk assessment program for employees in conjunction with Community Wellness at MIT Medical and MIT Human Resources (HR)

- Transitioned from tuberculosis skin testing to more accurate and efficient immunological sera testing as part of our TB surveillance programs
- Began reporting student injuries and illnesses related to research work as part of our safety monitoring program
- Presented lectures on ergonomic safety and animal allergy to employee groups
- Participated in meetings and activities of MIT Medical's biosafety and risk management committees, EHS, MIT's Emergency Operations Center (EOC), and the Cambridge Department of Public Health
- Increased the influenza vaccination rate among MIT Medical employees from 81% to 89%.

Initiatives

During FY2014, we plan to:

- Further develop and deploy our "Well Check" health risk assessment program at on-campus group events and for all new MIT employees
- Develop global metrics for the health of the MIT community in conjunction with Community Wellness at MIT Medical and the department's Information Systems team, allowing us to target areas of health risk
- Help make environmental changes and modify employee benefits to enhance community health in coordination with HR; MIT's Department of Athletics, Physical Education, and Recreation; EHS; and others
- Better monitor and manage work-related injuries with the goal of improving care, reducing lost work time, and lowering costs
- Develop further educational and outreach programs for areas in which there is a high risk of injury

Pediatrics Service—Jocelyn O. Joseph, MD, Chief

Strategic Focus

The Pediatrics Service at MIT Medical provides health care for the children of staff and faculty, graduate student families, postdoctoral scholars, and visiting scholars. We offer families a caring and welcoming environment. Our goal is to honor cultural differences and respect diverse types of families while delivering outstanding pediatric health care.

Accomplishments

We want families to feel comfortable while their children are receiving care in Pediatrics, and our newly renovated waiting room provides a warm and inviting feel to the service. We look forward to distributing more patient education material in the waiting room and acquiring new furniture.

Community outreach and involvement continues to be an important focus of our service:

- Pat Bartels, FNP-BC, was part of an MIT Medical team conducting evening educational sessions at the Eastgate and Westgate graduate student housing complexes. She also served as a health care consultant to the MIT Day Camp and to the Technology Children's Centers.
- We provided health care talks to children and teenagers in the greater Boston area.
- We mentored and precepted high school, graduate nursing, college, and Harvard Medical School students. In addition, we served as resources for MIT students and students from other colleges with an interest in health care careers and for MIT colleagues interested in health care research.

We added Dr. Amy Zisa to our team in October 2012. An energetic, enthusiastic, and compassionate provider, Dr. Zisa is helping us follow the American Academy of Pediatrics' new health promotion and disease prevention guidelines. In addition, she now serves as a liaison between Pediatrics service providers and the Cambridge Hospital psychiatric fellow who sees MIT families in Pediatrics once a week, a role previously held by Pat Bartels. We also have added a two-day-a-week per diem RN who does immunizations and provides phone advice to parents, easing the workload for providers.

Dr. Joseph continues to work with Dr. Maureen Lynch, chief of pediatrics at Harvard University Health Services, meeting twice a year to discuss relevant concerns and current practice trends.

Dr. Joseph received this year's MIT Reverend Dr. Martin Luther King Jr. Leadership Award and also was nominated for the Harvard Medical School's 2013 Charles McCabe, MD Faculty Prize for Excellence in Teaching Award.

Initiatives

In FY2014, we plan to:

- Continue to improve patient wait times, patient flow, and system issues to ensure patient, provider, and staff satisfaction. Our work will serve as a pilot for the whole of MIT Medical.
- Continue outreach activities to improve patient education and care, working collaboratively with various members of the MIT community.
- Increase Menactra (meningitis/meningococcal disease) immunization rates in children older than 11 years of age.
- Perform routine cholesterol screening on children ages 9 to 11 and others with risk factors.
- Achieve a 100% flu immunization rate among high-risk patients.

Surgical Service—Lawrence T. Geoghegan, MD, Chief

Strategic Focus

In addition to general surgery, the Surgical Service offers surgical specialties in orthopedics, urology, and otolaryngology. These specialties provide weekly on-site clinics. General surgery clinics are offered Monday through Friday.

We perform minor surgery in MIT Medical's well-equipped operating room. Surgeries requiring more than local anesthesia are performed at Mount Auburn Hospital or Massachusetts General Hospital.

Accomplishments

The Surgical Service logged more than 1,000 patient visits; similar volumes were seen in orthopedic and urology specialty clinics.

Dr. Geoghegan presented a lecture on abdominal pain to MIT Medical's clinical staff. He also led several small group sessions focusing on acute and chronic surgical issues, using actual clinical cases, for Urgent Care staff. In addition, Dr. Geoghegan attended the "Breast Cancer: New Horizons, Current Controversies" conference sponsored by the Harvard Medical School, the Dana-Farber/Brigham and Women's Cancer Center, and the Massachusetts General Hospital Cancer Center.

Initiatives

In fall 2014, Dr. Geoghegan will present a synopsis of the "New Horizons" conference to MIT Medical clinical staff.

Urgent Care Service—Brian Ash, MD, Medical Coordinator, and Janis Puibello, MS, FNP-BC, Nursing Coordinator

Strategic Focus

The Urgent Care Service provides care for the MIT community from 7 am to midnight, 365 days a year. Services are offered on a walk-in basis for students, individuals covered by the MIT Health Plan and MIT Choice Plan, retirees, and employees with occupational injuries.

Accomplishments

During FY2013, the Urgent Care Service had 16,767 patient visits, representing a 2% decrease in volume from FY2012.

We added eight new associate medical staff physicians, bringing our total number of associate physicians to 16. These physicians staff Urgent Care evening shifts, weekends, and holidays. Most are attending physicians or senior fellows from Massachusetts General Hospital or Brigham and Women's Hospital with CRICO (Controlled Risk Insurance Company) malpractice coverage that covers their work at MIT. During FY2013, we changed the recruitment and selection process for Urgent Care physicians with an eye toward creating a service that is well positioned to provide patient-centered

care. During hiring, we now place an increased emphasis on evaluating candidates' communication skills, ability to work well in teams, and history of functioning well in situations where care is handed off between shifts.

In addition, we recruited more family practice nurse practitioners to the nursing per diem staff, and these NPs will help cover staff vacations and work on weekends and holidays, strengthening our pediatric weekend services. We also recruited additional triage RNs, expanding our staff on holidays and weekends.

We continued to work closely with various MIT and MIT Medical departments, including Adult and Pediatric Primary Care, Mental Health and Counseling, the Community Care Center, Community Wellness at MIT Medical, the Dean on Call network, and other areas of the Institute. We also maintained and built on our prior collaboration with MIT-EMS.

Initiatives

In FY2014, we plan to continue to provide high-quality, easily accessible urgent care services to members of the MIT community. Our plans also include reevaluating workflow based on patient volume, patient acuity, and wait times in order to improve our service. We have started using a new workflow assessment tool to evaluate these data and will be doing periodic reviews of the information we obtain.

Administrative Services

Information Systems and Medical Records—Shelagh M. Joyce, Director

Strategic Focus

Information Systems (IS) and Medical Records have two major objectives: using technology that improves care for our patients and providing software solutions that promote effective and streamlined workflows for MIT Medical clinicians and staff.

Accomplishments

In FY2103, we achieved the following:

- Automated workflows for processing patient charges. This collaborative effort between IS and the business office included the IS team training more than 120 clinicians and 60 support staff. Eliminating paper and bringing this process online have saved the department more than \$30,000.
- Expedited scanning of reports. All outside test results and hospital admission, surgical, and clinical notes from outside providers are now being scanned into patients' electronic medical records within 24 hours of receipt, providing clinicians with more timely information to use in caring for their patients.
- Met the federal government's stage 1 meaningful use standards under the HITECH Act. This law provides financial incentives to health care organizations whose EMR use results in improved patient care. Stage 1 standards include privacy and security measures and use of the EMR for such tasks as generating

and transmitting prescriptions, checking for drug allergies, and recording clinical information about patients.

- Simplified and restructured clinical and administrative on-call schedules. Schedules are now easier to read and coordinate, eliminating the possibility of double booking or lapses in on-call coverage.

Initiatives

Plans for FY2014 include ensuring that MIT Medical is in compliance with new federal requirements for medical diagnosis coding. We have already started this process by upgrading our practice-management and EMR software platforms and making plans for intensive testing and training. This change, mandated to take effect in October 2014, increases the number of codes from 14,000 to 68,000. We also plan to refine and enhance MIT Medical's security and privacy initiatives. This includes implementing a "second-generation" firewall to increase network security, continuing to monitor network traffic to identify and prevent problems, maintaining a regular schedule for auditing EMR access, and continuing to train all staff members on our security and privacy policies and procedures.

Operations—Deborah Friscino, Director

Strategic Focus

Operations supports the strategic and operational initiatives of MIT Medical, including timely access to care, responsible use of resources, and provision of coordinated and culturally sensitive care.

Accomplishments

Continuing Initiatives

- Administered influenza vaccine to 13,492 members of the MIT community through large clinics at the Student Center and daily clinics in E23.
- Hosted the daylong "Explore Culture" event for all MIT Medical staff in January. The program focused on cross-cultural communication and challenges facing people new to MIT.

Licensing and Accreditation

- Completed MIT Medical's transition to an ambulatory clinic as mandated by the Massachusetts Department of Public Health
- Maintained accreditation by the Joint Commission as an ambulatory care center and by the College of American Pathologists as a clinical laboratory
- Granted annual relicensure of the mammography unit by the Massachusetts Department of Public Health and the US Food and Drug Administration

New Initiatives

- Successfully upgraded mammography equipment to perform tomography, a state-of-the-art technology that creates three-dimensional images of breast tissue for better examination while using limited radiation. This service is available to anyone covered by an MIT-sponsored health plan.
- Renovated the pharmacy and Pediatrics Service waiting areas for increased comfort and privacy.
- Launched a space-planning effort that will allow us to improve infrastructure, modernize, and reorganize our use of space in ways that support the future delivery of health care.

Initiatives

In FY2014, we plan to:

- Continue implementing our talent-development pilot program, which allows staff to evaluate their strengths and passions against core competencies necessary for success at MIT. The program's emphasis on continual learning and sharing knowledge is increasingly important, given that we expect as many as half of our current staff to transition out over the next 10 to 15 years.
- Continue welcoming new staff through a six- to nine-month complement of well-designed and well-coordinated experiences. Since staff face challenges after the initial "honeymoon period" that can result in dissatisfaction, delayed time to maximal productivity, and increased turnover, this program includes peer connectors, monthly informal gatherings with other new employees, and a series of training sessions on topics such as the culture of MIT, resources for help, and an overview of how the organizational systems work together for patient care. So far, feedback from participants has been positive.
- Begin efforts to continuously improve patient engagement and access to care through a variety of creative processes involving staff and technology. This activity also is related to MIT's evolving international focus.

Emergency Preparedness—David V. Diamond, MD, Associate Medical Director; Deborah Friscino, Director of Operations; and Robert Bright, Facilities and Safety Manager

Strategic Focus

In partnership with Occupational, Environmental, and Employee Health Services at MIT Medical, our senior leadership team, and other MIT offices, we provide preventive, diagnostic, and consultative approaches to security and disaster preparedness. We help identify and anticipate hazards that could affect the MIT community by developing emergency response protocols, emergency communications plans, and medical emergency care plans.

Accomplishments

In FY2013, we achieved the following:

- Conducted security training for more than 150 MIT Medical staff members in collaboration with MIT's Emergency Operations Center and the MIT Police. The training included instructions on responding to an active shooter scenario.
- Held two large-scale influenza vaccination clinics in conjunction with EOC, providing 13,492 vaccinations for members of the MIT community.
- Participated in several EOC activities, including responding to the following emergencies: Hurricane Sandy in October 2012, a loss of electrical power throughout Cambridge in November 2012, a blizzard in February 2013, and an emergency involving a shooter on campus in April 2013.
- Remained open for all scheduled operating hours despite dealing with the effects of several major emergencies.
- Conducted a review of building security and made improvements to MIT Medical's physical security and emergency response protocol.
- Provided medical support at MIT's presidential inauguration and annual Commencement exercises.
- Participated in emergency preparedness efforts with the Cambridge Emergency Health Planning Group.

Initiatives

In FY2014, we plan to:

- Continue to serve in leadership and support roles within EOC
- Work with MIT's emergency response leadership in their efforts to improve the Institute's emergency resiliency and sustainability plan
- Continue to collaborate with emergency responders in the Cambridge community
- Lead the Institute's efforts to minimize the health and operational impacts of seasonal influenza and other health hazards

Marketing and Communications—David Tytell, Manager

Strategic Focus

The Marketing and Communications team provides the MIT community with timely materials about MIT Medical's clinical services and public health initiatives, community health and wellness programs, the MIT Health Plan, and various clinical and administrative entities within MIT Medical. Our communication channels include websites, social media, brochures, letters, videos, posters, digital signage, and other written and graphic materials.

Accomplishments

In FY2013, we achieved the following:

- Helped improve the website for getfit@mit, MIT's annual fitness challenge, by adding a mobile minutes upload and upgrading the web platform software.
- Enhanced our Mental Health and Counseling Service web pages to include advice and help for the MIT community in the case of traumatic events. These pages were loaded and in place before the tragic events surrounding the Boston Marathon bombings.
- Upgraded the internal MIT Medical intranet, a major communication vehicle for employees. The upgrade included migrating the site to a server supported by MIT Information Services and Technology.
- Relaunched two program-specific websites for Community Wellness at MIT Medical: the MIT Spouses & Partners group and associated website support programs for the families of students, staff, and faculty, particularly international families. The MedLinks program and associated website support trained student volunteers who are available as health resources in all student residences.
- Debuted digital signage in our first-floor patient waiting room.
- Launched a rebranding effort that included business cards and stationery.
- Promoted Urgent Care Service hours and after-hours contact information by running a comic strip advertisement in *The Tech* and distributing T-shirts to students.
- Worked with the Benefits Office regarding open enrollment in an effort to streamline communications with employees in the spirit of "one administration/one voice."
- Aided in crafting the MIT Medical strategic plan in close collaboration with the MIT Medical Operations Group.
- Provided advisory assistance for various websites through the Office of the Executive Vice President and Treasurer's Connect committee.

Initiatives

In FY2014, we plan to:

- Redesign and rebuild the MIT Medical website, including reviewing and redrafting all content. We also will develop a social media strategy to work in tandem with the new website. This is our highest-priority project for FY2014.
- Reassess the effectiveness of all printed materials with the goal of refreshing and redesigning materials as necessary.
- Finalize, publish, and help implement the marketing and communications components of the new MIT Medical strategic plan.
- Expand digital signage to additional locations throughout E23.
- Create a new interdepartmental newsletter to enhance communication between administration and staff.

Finance—Mary Murray and Lucy Walsh, Acting Co-directors

Strategic Focus

Finance seeks to support the strategic focus of MIT Medical by delivering cost-effective, patient-focused services with both efficiency and a high level of customer service. As a key operational arm of MIT Medical, Finance is charged with managing patient financial services, budgeting and fiscal management, health plan administration, purchasing, and the organization's capital management.

Accomplishments

Accomplishments this year included information enhancements, business process improvements, and changes in business models. We undertook these activities strategically with an eye toward MIT's broad goals and in consideration of the possible impacts of health care reform legislation.

Information Improvements

Finance relies on data to support decisions, to identify and resolve issues, and to monitor business activities. We use health care data from disparate sources that are not always consistent, requiring manipulation and categorization to generate actionable information. In FY2013, we continued to improve this process, including:

- Developing new quarterly cost reports to monitor the Institute's health care costs. These reports track charges throughout the year and changes from the prior year and include all medical costs for active employee plans.
- Acquiring a new database tool. By applying business intelligence to medical claim data across all employee and student health plans, we will improve our ability to analyze the Institute's medical expenses.

Business Process Improvements

Finance continuously strives for optimal efficiency and cost-effectiveness. Areas of focus this year included:

- Implementing an electronic charge-capture process. Streamlining data collection for patient visits supports billing and enhances revenue.
- Upgrading our billing system and electronic medical record system. This upgrade puts MIT Medical in compliance with new federal requirements for medical diagnosis coding to be implemented in the fall of 2014.
- Modifying our registration and referral workflows. This will accommodate the new fee-for-service arrangement with Harvard Pilgrim Health Care for Draper employees, who no longer have access to the MIT Traditional Health Plan.

Business Model Changes

Since we operate within dynamic regulatory and insurance-coverage environments, we need to frequently evaluate and change our business models, both to comply with new requirements and to leverage advantages that become available. In FY2013, this included:

- Modifying benefit designs to comply with requirements of the Affordable Care Act, including system changes to eliminate copays for contraceptives and other preventive services
- Executing a contract with Mount Auburn Hospital for direct reimbursement of colonoscopies at a significant savings over the Blue Cross Blue Shield of Massachusetts rate

Initiatives

In FY2014, we plan to continue monitoring the health care landscape, including the evolution of health care reform and the transition to a new, enhanced nationwide medical coding methodology. As always, our work will focus on MIT's mission and goals, especially MIT's global expansion and how we can best support the changes that may come as a result.

Specifically, we will complete the implementation of the new medical diagnosis coding system, which will require extensive training of clinical staff, and continue to collaborate with MIT's benefits and finance offices in responding to requirements of the Affordable Care Act.

Performance Improvement and Risk Management—Ruth Fishbein, Director

Strategic Focus

MIT Medical supports clinical excellence with technology and metrics, resulting in care that is patient centered, safe, effective, timely, efficient, and equitable. Performance improvement and risk management activities focus on communication, access to care, and consistency of practice.

Accomplishments

During FY2013, we achieved the following:

- *Care for patients with diabetes.* We provided clinical services, patient education, and care management that met or exceeded 90% of NCQA (National Committee for Quality Assurance) measures of clinical quality. Our World Diabetes Day community event in November provided education and awareness activities for the campus community.
- *Improvements in women's health services.* Clinical staff were trained on new Pap test guidelines. We also introduced 3D breast tomosynthesis, state-of-the-art technology for early cancer detection, which is available to all women in the MIT community regardless of health plan.
- *Clinical information management.* In our ongoing development of electronic clinical-support systems, we developed a medication dashboard that allows the pharmacy and clinicians to monitor appropriate dosages of high-risk medications.
- *CRICO risk appraisal and planning (RAP).* We participated in a patient safety review done by our malpractice carrier (CRICO). CRICO's final report

acknowledged MIT Medical's commitment to quality, to meeting patients' needs, and to providing the highest level of care. It also cited our leadership's commitment to patient safety and our well-developed risk management program. CRICO's \$100,000 RAP grant will be used to address identified opportunities for improvement.

- *Patient satisfaction.* Patient surveys, while generally positive, indicate that all service areas need to improve communication with patients when delays result in waits to see a clinician after arriving for appointments. The Pediatrics Service is piloting a project to address this concern. The results will inform further activities.
- *Continuous compliance with Joint Commission standards.* During accreditation visits, Joint Commission surveyors "trace" the care of patients through observation, clinician and staff interviews, and clinical record reviews. To be prepared for Joint Commission surveys and to remain continuously compliant, MIT Medical staff members conduct regular "mock tracers."
- *Development of a closed-loop system.* We are designing closed-loop workflows to assure safe and effective patient care. For example, we revised the workflow for processing outside test and consult reports to include electronic scanning of reports and electronic notification of clinical providers. We are currently piloting a patient follow-up appointment system to ensure that patients requiring follow-up visits are scheduled for the appropriate visit in a timely manner.

Initiatives

In FY2014, we plan to:

- Implement RAP grant-funded activities. We will be enhancing our patient-safety program to address identified potential vulnerabilities. Activities will include redesigning the event-reporting system, conducting a department-wide clinical risk vulnerability assessment, and improving our communication to promote a culture of safety.
- Remain prepared for a Joint Commission survey. MIT Medical is committed to maintaining accreditation compliance. We are prepared for an unannounced survey that may come at any time within the next 18 months.
- Continue the development of closed-loop systems for patient follow-up appointments and clinical test results.

Community Wellness at MIT Medical—Maryanne Kirkbride, MS, MBA, RN

Strategic Focus

Community Wellness at MIT Medical contributes to the health of virtually all parts of the MIT community. We guide individuals in learning about and pursuing healthier lifestyles and work with groups to build communities and create environments where making healthier choices is easier.

Our services are tailored to MIT's fast-paced, high-achieving culture, because a healthier campus supports higher achievement, improves our lives, and may minimize the human and financial burden of chronic illness over time.

Because we know that more than half of all diseases are associated with potentially preventable health risks, we are addressing the following key wellness priorities identified by the US Department of Health and Human Services and the National Institutes of Health:

- Physical activity
- Good nutrition and weight management
- Tobacco treatment
- Adequate sleep
- Stress management
- Sexual health
- Social connectedness/healthy relationships
- Violence prevention

Accomplishments

Nutrition and Fitness

The number of participants in *getfit@mit*, our 12-week team-based winter fitness challenge, reached 3,785 (an increase of 14.5%). New this year were mobile exercise-entry capabilities and an end-of-challenge 5K race.

We continue to serve as part of the Eating Concerns team at MIT Medical and co-led the “Making Peace with Food and Body Image” support group, which includes 20 sessions per year.

MedLinks Peer Advocacy Program

We added 20 new students to the program this year for a total of 140, with at least one MedLink in nearly all of the FSILGs (fraternity, sorority, and independent living group) residences and dormitories.

In addition, we logged more than 2,000 interactions during the school year, almost 25% of them helping people with emotional issues including loneliness, stress, and challenging relationships.

Graduate Student Outreach and Support

We provided wellness content for the monthly Graduate Women's Lunch, delivered on-site programming in graduate residences, and presented workshops for graduate resident tutors, graduate student leaders in the REFS (Resources for Easing Friction and Stress) program, Graduate Women at MIT members, and graduate students taking part in the Office of the Dean for Graduate Education's Power Lunch series.

Violence Prevention and Response

We trained more than 1,500 undergraduates, graduate students, staff, and faculty on violence prevention and response during the course of the year and worked closely with our colleagues to implement Title IX processes. In addition, we logged more than 100 calls on our 24-hour hotline and managed 99 new cases.

Health Coaching

We successfully piloted a six-week group health coaching program for MIT employees on creating sustainable behavior change around healthy eating and exercise. Also, we continued a second-year pilot of individual health coaching, providing 156 free sessions for MIT faculty, staff, and students hoping for behavior change related to fitness and nutrition, smoking cessation, and healthy sleep habits.

Campus Health and Wellness Training

We facilitated 189 campus training sessions and 121 ongoing group sessions on a wide variety of health and wellness topics.

We provided suicide awareness training to 180 faculty, staff, and students, with 95% of participants demonstrating an increase in their knowledge of suicide prevention.

Effective Use of Technology and Media

Our website with downloadable resources, including sleep tips and mindfulness meditation MP3s, garnered 27,422 page views (as compared with 8,228 the previous year).

We produced audio and slideshow content for MIT Together, MIT's largest student-support web resource.

We conducted a pilot study with 110 undergraduates to understand health and sleep patterns using the smartphone app Ginger.io, created by an MIT startup.

Tobacco Treatment

We piloted cost-effective group classes for tobacco treatment and monitored the tobacco-free perimeter around MIT Medical (E23).

Workplace Wellness Programming

We conducted a pilot "Know Your Numbers" biometric screening program for employees in the Division of Student Life and the Department of Facilities. After screening 16% of the staff members in those areas, we identified waist circumference, body mass index, and (slightly) elevated blood pressure as areas for follow-up.

We partnered with Harvard Pilgrim's "Mind the Moment" program to offer department-based mindfulness programs for employees and graduate students at the Koch Institute for Integrative Cancer Research and the Media Lab. In follow-up surveys, participants indicated an increase in perceived productiveness at work and a decrease in distractibility. Participants also noted improved sleep, more energy, better focus, and better decision making.

MIT Spouses and Partners

Celebrating its 40th year at the Institute in FY2013, this group helps newcomer wives, husbands, and significant others of MIT students, staff, and faculty support one another as they face such issues as adjusting to the loss of their family network, learning to communicate in English, and dealing with isolation and financial worries.

This year we improved and expanded “Career Connect,” providing training for 60 spouses exploring new work and life possibilities while at MIT. In addition, we provided programs and services for more than 500 members, including 200 meetings and events focused on information sharing and networking, a network of neighborhood and “language anchor” volunteers who work in specific off-campus communities, an ESL (English as a second language) information fair (in conjunction with the Graduate Student Council) that provided educational resources to 75 international newcomers, and a twice-a-year kids’ clothing and toy exchange in collaboration with MIT Facilities’ “Choose to Reuse” initiative.

Initiatives

In FY2014, we plan to:

- Finish developing our MIT-specific employee health and wellness biometric screening intervention, Well Check, and implement it with 500 to 1,000 staff members depending on funding
- Identify areas for improvement in preventive programming and evaluation, working in partnership with MIT Human Resources, MIT Health Plans, and others at MIT Medical
- Optimize collaboration with the Division of Student Life in student health promotion, working in partnership with the division’s Wellness Implementation Team
- Analyze our existing health promotion and wellness programming to better understand our current impact and improve our ability to meet the needs of the Institute community

Appointments, Separations from Service, and Promotions, FY2013

Medical and Administrative Staff Appointments

Janet Lorang	Nurse Practitioner	8/6/12
Marie Caggiano	Physician	8/13/12
Joy Yang	Licensed Social Worker	9/4/12
Maura Rowley	Clinical Coordinator	9/17/12
Maureen Dobrowsky	Nurse Practitioner	10/1/12
Maria White	Referral and Resource Coordinator	10/1/12
Caitlyn McCourt	Program Manager	10/15/12
Amy Zisa	Pediatrician	10/23/12
Hungwan Cheung	Pharmacist	12/3/12
Carroll Eastman	Physician	1/22/13
Ken Gagne	Web Producer	1/22/13

Separations from Service

Tara Gardner-Brown	Nurse Practitioner	7/26/12
Deborah Sigman	Nurse Practitioner	8/1/12
Lisa Damtoft	Webmaster	9/5/12
Duan-I Lee	Pharmacist	10/31/12
Amy Helfman	Webmaster	12/1/12
N. Martha Pedraza	Physician	12/31/12
Kristine Ruzycski	Chief of Nursing Services/Student Health	3/4/13
Peggy Meehan	Director of Finance	4/26/13
Rita Fischer	Licensed Social Worker	6/7/2013

Promotions

Elizabeth Carbone	Senior Program Manager	1/1/13
Kate McCarthy	Senior Program Manager	1/1/13
Jennifer Tassi	Senior Program Manager	1/1/13
Carol Clark	Human Resource Coordinator	5/1/13
Howard Heller	Associate Medical Director	5/1/13
Stephanie Shapiro	Chief of Adult Primary Care	5/1/13

William M. Kettyle, MD
Medical Director

Annette Jacobs
Executive Director