

## MIT Medical

### Mission and Vision

For more than 100 years, MIT Medical has provided convenient on-site health care to students, faculty, and staff. As a multi-specialty practice, we provide comprehensive care across the continuum of ages, from preconception to conception to geriatrics. At MIT Medical, we are much more than just a student health service or the company doctor—we are health educators, wellness specialists, and qualified clinicians.

In FY2007, MIT Medical cared for nearly 135,000 patients. This work reaffirms our vision to be recognized as a premier university-based health care system that offers comprehensive, collaborative, and affordable care to the MIT community. In support of this guiding vision, our mission is to deliver integrated medical, psychological, and preventive care to promote healthful living in support of learning and research.

During the past year, we built a strong foundation of providing care and promoting healthful lifestyles by leveraging the following cornerstones and core competencies:

- *Patient care.* We delivered accessible, high-quality, culturally sensitive, personalized health care to students, faculty, employees, affiliates, dependents, and retirees by utilizing the most appropriate medical and information technology.
- *Health promotion.* We worked in collaboration with departments, labs, centers, groups, and individuals to identify and achieve health promotional goals.
- *Health policy.* We provided expert consultation to the Institute on health and health policy issues in support of the overall mission of MIT.
- *Resources.* We utilized the resources of the Institute effectively and efficiently to the best of our ability.
- *Diversity.* We ensured—and will continue to ensure—a healthy, balanced community in which awareness of culture, race, ethnicity, sexual preference, religion, and gender exists for all.

### MIT Medical Department Initiatives

At MIT Medical, we know that the health and welfare of the Institute community are what matter most. Throughout 2006–2007, we promoted this idea through a variety of clinical services initiatives, oftentimes working behind the scenes in the MIT community to advance learning and research.

### The Task Force on Medical Care for the MIT Community

We have successfully implemented many of the recommendations outlined by the Task Force on Medical Care for the MIT Community. For MIT Medical, the work of the task force—in partnership with several campus working groups—gave us an opportunity to take a thorough look at medical care that we provide to the community. To date, we have

introduced several new practices and processes that helped us to improve care access, increase service offerings, and assure that our fiscal foundation is robust and sound.

### **Community Health and Wellness**

By assessing the health and wellness needs of the MIT community, we may eventually decrease the burden of illness, improve our productivity, and enhance the quality of life in our community. Plans are under way to define “wellness” in MIT terms that will help to shape and define our programs. Our goal is to tie this work in with our mission to “deliver integrated care in support of learning and research.” To this end, we aim to implement programs that will fit the MIT culture, reduce the impact of preventable conditions, and decrease health care expenses for our community.

### **Primary Care and Women’s Health**

Several of our advanced practice nurse clinicians have been designated as primary-care providers, giving us additional approaches to care. By adding two internists to the Internal Medicine Service, we have increased the access to care for adults and older adolescents as well.

Nursing Services continues to play a vital role in providing care for our community. Our triage nursing group, for example, actively helps refer patients to suitable caregivers. When appropriate, this group also provides information and education on self-care to those who call, email, or come in for assistance. Our anticoagulation clinic enhances care by efficiently managing medication dosage, which both helps us attain therapeutic goals and minimizes the risks of either under- or over-treatment.

During the past year, we took several actions that enhanced our ability to provide convenient, timely, on-site care for women in the community. By hiring two internists with interest and skills in women’s health, we increased the availability of care providers. While continuing to offer a full complement of services in obstetrics and gynecology (Ob/Gyn), we can conveniently and expertly manage many aspects of women’s health within our Internal Medicine Services department. Close collaboration and sharing of women’s health care services between the Ob/Gyn and Internal Medicine Services will enhance access to care, while ensuring that high-quality care is provided.

### **Care Management**

The addition of a registered nurse trained in care management has significantly improved our ability to coordinate the care of serious and complex medical problems across the continuum of care venues. Our care manager is in touch with local hospitals and is well versed in the needs of our patients and in the resources available in and around our community. While these activities help to improve the care experience for our patients, they also assure the best use of our resources.

### **Dental Care**

The Dental Service has expanded its hours of operation and has improved its efficiency in utilizing space, equipment, and personnel. Schedule adjustments for members of the dental staff have allowed dental care to be more available and more convenient,

minimizing time lost from learning and from work. In parallel, the fiscal foundation for the provision of dental care has markedly improved during the course of this past year.

### **Mental Health**

MIT Medical continues to build a network of cross-functional team members to help identify stress and mental illness campus-wide. Coordinated teams of mental health professionals work together with several student life and faculty groups to provide evaluation and treatment services for students and other members of our community. Through several outreach programs—many of them nationally recognized—the Mental Health Service is actively building bridges within the Institute community. The goals of these outreach efforts are to destigmatize the use of mental health services, to improve the identification of depression, and to decrease the impact of a serious mental illness on both our students and our community.

### **Health Care Information Technology**

Information systems within MIT Medical have been continually evolving to provide ever-more-sophisticated and readily available clinical data. In order to leverage our health information technologies, we are continually assessing and improving the quality, confidentiality, and security of the information used to support and conduct care.

A major update to our laboratory information system was achieved without any impact on day-to-day operations and was transparent to our patients. We installed advanced imaging technology allowing digital X-ray images to be viewed on workstations almost immediately, improving flow of care and the timeliness of review. As a result, clinicians within the department can view X-rays on their workstations and, when appropriate, can share that information with patients as part of the care process. In addition, our electronic medical record system has improved the availability of clinical data, while significantly reducing our reliance on the paper record data as the chronicle of care.

The use of Patient Online—a secure channel that allows patients to correspond with clinicians and make appointments for non-urgent issues—has become quite popular. Each month, more and more patients and clinicians are signing up to use this system, which will ease communications for both patients and clinicians.

### **Operational Advances**

The department continues to play an active role in the operational, educational, and research activities of the Institute. During this past year, we have seen significant developments in the non-clinical realm to improve the infrastructure that supports care.

A more precise understanding of the flow of funds to, through, and within the Medical Department has resulted in the development of mechanisms to ensure adequate and appropriate availability and deployment of resources to meet the health care and wellness needs of our community. Understanding the costs of care, and associating those costs with the appropriate payer(s), has allowed more effective utilization of the resources available.

The Medical Department has also actively participated with other service components of the Institute, as well as with local, state, and federal agencies, in order to ensure that we are at the forefront in emergency preparedness. Whether it is a national threat, such as a pandemic, or a local threat, like a storm or fire, the Medical Department is playing an active role in the planning and testing of our preparedness.

Members of the Medical Department are also deeply involved in many of the educational and research activities of the Institute. At Lincoln Laboratory and across the MIT campus, members of the Medical Department provide presentations, lead discussion sessions, and offer workshops on health and disease-related topics. Medical Department personnel actively support the review of experimental protocols involving human subjects and the evaluation of animal-care activities. Moreover, several of our clinicians participate in pre-professional advising for students who are interested in careers in medicine, dentistry, and health sciences. The department also supports, and members of the department frequently participate in, the popular and informative Catherine N. Stratton Aging Successfully Lecture Series.

At MIT Medical, we believe that care is enhanced when patients, caregivers, and all those involved in the care experience are comfortable with the process. Within the Medical Department, understanding the cultures of our patients—and of our staff—has become an active process. Through our launch of a diversity initiative, we have discovered that cultural competency requires active and ongoing attention. Sharing observations, feelings, and information is only a part of developing an awareness of the diverse needs of our community. We are continually developing tools to help manage cultural issues through discussion groups and workshops where best practices can be shared and practiced.

Indeed, it takes a village to support the care, health, and wellness of the MIT community. The Medical Department is an important component of that village. We are proud of our accomplishments and look forward to finding ways to improve the care experience, while continuing to enhance the health, wellness, and happiness of our community.

## Clinical Services

### Visits

MIT Medical served nearly 135,000 individuals in 2006–2007. Approximately 7,137 of these visits were at our Lexington health care facility on the campus of Lincoln Laboratory, where adult medicine and pediatric services are available. The following table offers a breakdown of the patient population that we serve:

#### Visits to MIT Medical, FY2007

Patient Population	Number of Visits
Students	57,697
Faculty and staff	64,676
Retirees and family	12,575
<b>Total</b>	<b>134,948</b>

## **After Hours Service—David Shein, MD, Chief**

### ***Strategic Focus***

In a city where evening and weekend health care is generally sought in busy emergency rooms, MIT Medical's After Hours Service provides the Institute community, especially its student body, with health care during nights, weekends, and campus holidays. In addition to urgent care, we maintain an 18-bed Inpatient Unit (IPU) with in-house physician coverage.

### ***Accomplishments***

The after hours care team improved access to care by increasing physician staffing. Care is now provided by a staff of two part-time and approximately 10 contract physicians, most of whom are residents, fellows, or junior faculty at Boston-area teaching hospitals.

Understanding the needs of our pediatric population and studying the level of service we deliver to children remains an important area of focus. To this end, we strengthened our service by attracting physicians with experience in both pediatric and adult care, and we hired two part-time physicians to improve the quality of service in these two separate and distinct areas of medicine. Previously, our primary focus was on after hours physicians trained in internal medicine, but with limited experience in pediatrics. By hiring physicians with training and knowledge of pediatrics in the urgent care setting, we have been able to increase access and integrate care among our coordinators in After Hours, Nursing, and Urgent Care Services. This, in turn, has improved care for patients.

The After Hours Service maintained and fostered a relationship with key medical campus resources, including the MIT student ambulance service (MIT-EMS), the Dean-on-Call Service, and the MIT Mental Health Service. Working in concert with each of these care teams, we developed protocols and practices to meet any medical challenge. With the help of many of our staff members, we served as medical ambassadors to the community, participating in several campus-based public health and/or educational initiatives during the year.

Furthermore, after hours physicians provided a link to our partner medical facilities and helped to coordinate services for injured or ill patients who were admitted to area hospitals. In the event that a student was traveling or studying abroad, we also helped coordinate care and health coverage in order to maximize the availability of services anywhere in the world.

## **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 and maintenance. Our team of dental professionals works to identify dental diseases and to intervene with dental and oral care.

As always, the primary goal of the service is to render a high level of patient-centered care for students, faculty, staff, and their families in a way that promotes good oral

health. Attention is paid to providing routine preventive dental care and to meeting emergent needs quickly so that patients can return to work or class. Since dental care and medical care are coordinated in one system, patients are afforded a unique opportunity to receive integrated care on campus. Recent medical reports link the impact of dental care to overall health, and we are pleased to offer such comprehensive services at MIT Medical.

While the Dental Service has been an important part of caring for the whole person in MIT Medical for 35 years, the task force report of October 2005 identified a number of areas for improvement. During 2006–2007, the Dental Service has made substantial progress in implementing changes to improve the clinical, operational, and functional foundation of the practice.

### ***Accomplishments***

Throughout the past year, members of the Dental Service have worked to balance service offerings on site. With last year's addition of Dr. Ekaterini Antonellou-Pantekidis, a specialist in crown and bridgework, services are now offered in oral surgery, prosthodontics, periodontics, hygiene, and general dentistry. This unique combination of specialists allows patients to receive comprehensive care in one location from clinicians who are able to meet as needed to discuss the best approach for complex cases.

Because access to non-emergent care has been a concern, the service worked to decrease appointment wait times. Hours of operation were expanded so that the service is now open until 7 pm three evenings a week. Scheduling systems were reviewed to improve patient flow and to better match clinician availability with patient needs. As a result, the number of visits in the service increased by 8 percent. Due to the resultant efficiencies in space and resources, the service also was able to improve dental productivity.

Direct patient care is one of many priorities for the Dental Service. Therefore, clinicians were active members of the MIT community, supporting MIT Medical's strategic initiatives in health promotion and wellness. Doctors Edward B. Seldin, Gretchen A. Ghent, and Katherine Wang continued to provide pre-professional advising to undergraduate students, presented lectures through the Center for Health Promotion and Wellness, and participated in the Health and Wellness Fair.

As a result of the expansion in service hours, the efficient use of resources, and the improvement in service mix, the department had a strong fiscal performance. In addition, the performance measures set by the task force implementation team were met, and the Dental Service appears to be on track for the upcoming year.

### ***Initiatives***

The Dental Service has been the only ambulatory service without electronic record keeping. In the coming year, we plan to implement electronic record keeping and digital radiography, both of which will improve the quality and speed of communication between clinicians, as well as between clinicians and patients. With this new technology, we will be able to replace X-rays with enhanced quality images that can easily be stored

in patient records. Electronic records will allow clinicians to provide patients with more comprehensive treatment plans and will enhance scheduling.

### **Eye Service—Robert B. Gross, OMD, Chief**

#### ***Strategic Focus***

The MIT Medical Eye Service is a full-service eye-care center offering both optometric and ophthalmologic care. Our team of eye-care professionals provides the MIT community with quality vision and eye care, and our department manages two venues for the sale of both eyeglasses and contact lenses. As the primary health care professionals for the eye, we seek to provide care to aid vision and to prevent vision loss.

#### ***Accomplishments***

This year, the Eye Service focused on helping our most vulnerable patients—those with diabetes and glaucoma. We have taken an active role in the Diabetes Care Group at MIT Medical, establishing a program to monitor the frequency of visits by our diabetic patients. This successful initiative has led to a 75 percent increase in the number of annual eye exams for these at-risk patients—well above the national average. For our glaucoma patients, we have purchased two new pieces of technological equipment to aid in the detection of disease and follow-up care for those with this potentially blinding disease. Both the new digital camera and the confocal scanning laser ophthalmoscope help clinicians diagnose glaucoma earlier than ever.

### **Inpatient Unit—William A. Ruth, MD, Chief**

#### ***Strategic Focus***

The 18-bed IPU of MIT Medical provides an important and well-appreciated source of personalized care for the MIT community. Recognized by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), we provide subacute-level care for members of the MIT community, including students, health plan members, and retirees. The in-patient facility is charged with the management of acute non-life-threatening illnesses and provides post-operative care and end-of-life care for MIT community members. Our special focus is the MIT student population. The IPU is known as the place where students are cared for when they are too ill to be in their dormitory or in their place of residence.

#### ***Accomplishments***

Throughout 2006–2007, the IPU continued to provide integrated care among our After Hours, Urgent Care, and Internal Medicine Services. Primarily staffed by RNs around the clock, we had 310 patient admissions during the year, totaling 1,238 inpatient days. The patients' medical conditions ranged from alcohol intoxication to post-operative care to end-of-life care.

Transient patients are ambulatory patients requiring anything from a stay of a few minutes to several hours in the IPU for intermittent nursing care, such as intravenous hydration, antibiotic therapy, or special medication infusions. Those transient visits totaled 530 for the year. Nurses were trained in some new medication infusions to

increase on-campus patient access to infusion care and help decrease off-campus patient infusion expenses.

Along with caring for the IPU patients, the night nurses provided nursing triage from 11 pm to 7 am for the After Hours Service. In this role, they do telephone and on-site assessments of patients and work with the after hours physician to provide urgent care to patients.

During this past fiscal year, all IPU nursing positions were filled for the first time in several years, leaving no vacancies at the time of this report. This was accomplished through a partnership between MIT Medical and MIT Human Resources. Together, we worked to create the best compensation and benefit plans in the competitive Boston health care market.

## **Internal Medicine Service—David V. Diamond, MD**

### ***Strategic Focus***

The goal of the Internal Medicine Service at MIT Medical is to provide the best primary care to our patients and to coordinate their specialty care. We support and contribute to health promotion for our patients and the MIT community through our clinical roles, as well as by providing clinical and organizational leadership and consultation both within MIT Medical and to MIT as a whole.

### ***Accomplishments***

Internal Medicine increased patient access to medical care by adding three new primary-care physicians to its roster: Dr. Brian D. Marriott, a family practitioner at our Lincoln Laboratory site (in Lexington), and doctors Evelyn S. Picker and Stephanie Shapiro, internists who joined our Cambridge facility. Functionally, these clinicians have increased our primary-care physician choices by 30 percent, and our clinical access hours by nearly the same fraction, including adding valuable and needed pediatric-care access in Lexington.

Furthermore, because we hired two more women physicians, women now comprise 50 percent of our 14 primary-care clinicians on staff, achieving our goal of increased access for women in the community who prefer the care of a woman provider. We also hired two 0.6 full-time-equivalent staff physicians to be the core of our After Hours Service, which allows for better patient care continuity and stability in coverage.

### ***Initiatives***

In July 2007, all primary-care clinicians will migrate from a 15-minute to a 20-minute routine appointment schedule. The 33 percent increase in time allotted for standard visits will support better clinical care by allowing improved patient communication, allowing clinicians and patients additional time to discuss care options. This extra time will also allow clinicians to populate the patient electronic medical record more fully and to document and deliver care with real-time safety and quality support. In addition, we will adopt an electronic prescribing system that utilizes an interaction checking process for more than 90 percent of our medication dispensing.

## **The Lincoln Laboratory/Lexington Facility—Deborah Sigman, APRN, BC**

### ***Strategic Focus***

The Lincoln Laboratory facility of MIT Medical is dedicated to providing comprehensive on-site care to the Lincoln Lab employees, and continues to provide a west suburban site for MIT Medical Health Plan members and retirees. Since opening in 1999, the facility has provided a geographically convenient health care option in Lexington, MA.

Our site is a family practice, incorporating comprehensive primary medical care for all age groups. Services provided include on-site phlebotomy and prescription pickup. Mental health providers are also available every Thursday and Friday for employee assistance and for referrals from primary-care providers.

In addition to primary care, Lincoln Laboratory is designed to offer emergency walk-in care. Located in a large research and development facility that on average boasts a 2,500-employee roster, we focus on occupational health, employee screening, and work-related injury care.

Promoting health and wellness has been another strategic focus of MIT Medical. We maintain close relationships with Lincoln Laboratory administrators in order to be responsive to health-related concerns and to promote wellness via a series of regularly scheduled health programs and topics.

### ***Accomplishments***

The Lincoln Laboratory staffing model was transformed to incorporate a full-time family physician, Dr. Brian D. Marriott, in lieu of rotating in internal medicine physicians from the Cambridge site. This improved our ability to provide continuity of care and has significantly increased the availability of both pediatric and internal medicine appointments. Dr. Marriott joined the practice in September 2006, and we have since seen an increase of approximately 15 percent in pediatrics visits and 10 percent in adult internal medicine visits. This change has also added to the scheduling flexibility of our internal medicine physicians in Cambridge, as they are no longer traveling to our site.

The Lexington site has been successful in offering same-day appointments. On a given day, 20 to 30 percent of patient visits are same-day appointments. This model of practice enhanced our mission to provide efficient care and has improved patient satisfaction.

The MIT Health Plan membership has continued to grow since the opening of the Lexington practice. Our market share has grown from 21.1 percent in 1999 to nearly 30 percent in 2007.

The Lexington site continues to receive the highest Press-Ganey scores as compared to individual clusters in Cambridge. Our patients consistently rate the providers, support staff, and facility well above the national average and MIT mean. We are all very proud of that accomplishment and believe it is related to the patient-centered focus of our care and to our cohesiveness as a team.

Dr. David V. Diamond, chief of medicine at MIT Medical, is frequently utilized as an occupational health expert to address employee concerns regarding potential toxic exposures, and he regularly consults on behalf of patients with the Environmental Health Services team at MIT. Recent presentations have included an avian flu discussion with top administrators and the subsequent development of an action plan specific to the Lincoln Laboratory.

### ***Initiatives***

Every five years, Lincoln Laboratory opens its facility to friends and families of employees and hosts an open-house event. The event attracts thousands of guests who learn more about the facility and its importance to our national defense. In the coming year, the event will take place in September, and MIT Medical will participate by providing medical aid, health screening, and children's activities.

We will continue to look for ways to increase MIT Health Plan memberships. Currently, we participate in twice-monthly orientation programs and in quarterly group leader training to communicate the value of the MIT Health Plan.

### **Mental Health Service—Alan E. Siegel, EdD, Chief**

#### ***Strategic Focus***

MIT Medical's Mental Health Service is focused on treating emotional stress and promoting resilience to help the MIT community manage stress and find newer, more effective ways to live and work at the Institute. The mental health staff addresses both the diversity of the student community and the need for accessibility and services, seeking to decrease the barrier to mental health care with greater responsiveness and improved communications.

#### ***Accomplishments***

Through our community outreach and student life partnerships, the Mental Health Service increased its contributions to the MIT community. Nearly 16 percent of all undergraduates sought counseling services, an increase of 12 percent from the preceding year. Among our graduate student population, 16 percent of all graduates sought counseling as well, an increase of 7 percent from the preceding year. We attribute this increase to substantive changes in our services. For instance, we have made it simpler for someone to meet with a mental health professional by expanding our walk-in hours and by being involved with more community programs. Approximately the same number of employees received treatment in the Mental Health Service as in the last fiscal year.

We have maintained walk-in service hours Monday through Friday from 2 pm to 5 pm for urgent matters. Approximately 75 percent of our patient population is self-referred, so many see the walk-in service as a place to come when they are in distress. Although other times are reserved each day for unscheduled, urgent consults, we "advertise" walk-in appointments as a time for faculty, deans, resident tutors and graduate resident tutors, and MIT department heads to make referrals for community members.

We experienced an unusual spike in overall walk-in service demand from October through April this year. Although these have typically been among the busiest months, we saw a 33 percent increase in October visits and a 47 percent increase in April visits. We believe that these increases reflect an increased awareness in the community about depression, stress, and other acute states, as well as a familiarity and comfort level with the utilization of our services.

The service participated in the Lincoln Lab Support Group for Family Members of Persons with Autism and Asperger's Syndrome. Through a partnership with the Human Resources Department at Lincoln Laboratory, we developed this support group for Lincoln Lab families who have a family member with autism or Asperger's syndrome. Forty individuals attended the first event. Out of this group, 15 people, including parents, siblings, and grandparents, meet regularly to discuss issues and care solutions.

In addition, several other groups were developed for the MIT community. The longstanding Morning Alcohol Group was expanded to include students in addition to employees, providing support to the entire community. The Mental Health team developed a new group for undergraduate and graduate students who have substantive difficulties with interpersonal relationships. Members include people diagnosed with Asperger's Syndrome.

The Skills for Effective Living groups have expanded to assist members of the MIT community who have difficulties in managing emotions and their expressions. These groups, using techniques from empirically validated treatments (e.g., dialectical behavioral therapy), have proven to be most useful to persons with anger management problems and with self-mutilating behaviors.

## ***Initiatives***

### ***College Pilot Study (Adapt@MIT)***

The Mental Health Service is collaborating with five other universities (Columbia University, Cornell University, Harvard University, Princeton University, and the University of Rochester) to leverage successful strategies employed in the US Air Force Suicide Prevention Program. The program emphasizes the importance of community and protective social networks in preventing suicide, the second-leading cause of death in college students. At MIT, this project seeks to expand the stakeholder training experiences that we have offered to the community. As a result, all segments of the Institute community can learn about depression and the risk factors for suicide and violence, with the dual goals of learning how to recognize symptoms and how to help those who are afflicted.

### ***Community Crisis Response Team in Mental Health***

The Mental Health Service is developing a crisis response team that provides coordinated responses to our community when there is a campus tragedy or an unusual event. This past year, the fire in Kendall Square disrupted the lives of a significant number of employees in several MIT programs. In convening the Community Crisis Response Team in Mental Health, we provided a variety of direct crisis services and

consultation to the individuals affected, as well as to the program and departmental managers. We also consulted to MIT Real Estate on how to access similar services for tenants who were not part of the MIT community. Going forward, the team intends to provide timely and effective community response, while supporting and protecting those who intervene.

### *Online Depression Screening and Intervention*

At MIT Medical, we discovered that our graduate students tend to be less connected within the academic community and, believing that this group may be particularly vulnerable, we started outreach using an online screening tool. Working with the American Foundation for Suicide Prevention and Emory University, we administer an online screening tool to target students who are reluctant to seek mental health care. Through many outreach communications, we invite students to participate in an anonymous mental health screening survey. During the scoring of the survey, we have a mechanism to invite at-risk students to participate in a mental health interview and counseling sessions.

## **Nursing Services—Kristine A. Ruzycski, MS, APRN, BC, Chief**

### ***Strategic Focus***

At MIT Medical, nursing is both a science and an art that focuses on promoting wellness and health within the Institute community. Nursing care is delivered via a multidisciplinary approach that assists physicians in delivering care and that helps patients in maintaining care. Our teams consist of adult and family nurse practitioners (NPs), certified nurse midwives (CNMs), psychiatric clinical nurse specialists (PCNSs), and registered nurses (RNs) in both the Inpatient Unit and the ambulatory setting. Within Nursing Services, our physician assistants (PAs) provide medical care to patients under the supervision of a physician.

### ***Accomplishments***

#### *Primary Care*

Our NPs and PAs in internal medicine, urgent care, and pediatrics provided comprehensive primary care to patients with acute and chronic illnesses and injuries, educated patients in health promotion and disease prevention, and worked in collaboration with family medicine, internal medicine, and pediatric physicians. During the past year, the internal medicine, urgent care, and pediatrics advance practice clinicians provided a total of 25,133 patient visits.

Pat Bartels, MS, APRN, FNP-C, pediatrics; Janice M. McDonough, ANP, BC, internal medicine; and Deborah Sigman, MS, APRN, BC, internal medicine at Lincoln Lab, completed a full year in their respective primary care physician (PCP) roles. Patients readily accepted them in those roles, which resulted in a robust practice panel. These additional PCPs supported our strategic initiative to increase access to care for patients.

Pat Bartels, clinical coordinator for the Pediatrics Service, was presented with the Exceptional Preceptor Award by the Massachusetts Coalition of Nurse Practitioners.

Urgent Care hired a new advanced practice clinician, Kitterdige White, PA-C, to replace Mozelle M. Soule.

### *Specialty and Sub-specialty Care*

Our NPs, PCNSs, CNMs and PAs provided consultation, specialty, and sub-specialty assessments and care; group and individual counseling/therapy; special medical screening and surveillance; sports medicine; and community outreach to patients in dermatology, mental health, obstetrics and gynecology, occupational health, and orthopedics.

During the past year, the advanced practice specialty nurses and physician assistants provided 9,538 patient visits. This is a decrease over FY2006 due to the entire year's absence of an NP who was deployed to active military status. Anthony Pasqualone, NP, Orthopedic Service, serves in the US Army Reserve as a lieutenant colonel and was called to active duty in Iraq as of June 2006.

Our CNMs attended 47 deliveries in 2006. This constituted 27 percent of the total Ob/Gyn Service's births for the year, an increase of 5 percent.

### *Minor Procedure Room*

The Minor Procedure Room is staffed by Linda Pascuito, RN, with backup by the IPU nurse manager Cathleen Dwyer. During the past year, the RN either assisted or performed 651 procedures and pre-test screenings.

### *Ambulatory Nursing*

Our RNs provided nursing care to patients in the ambulatory services of internal medicine, medical specialties, urgent care, pediatrics, and obstetrics and gynecology. These RNs provide many patient services, such as telephone and on-site patient triage, immunization administration, blood pressure monitoring, as well as instruction on diabetes care and wound care.

In FY2007, the ambulatory nurses provided a total of 11,285 patient visits, which is an increase of 2,827 patient visits over FY2006. This increase is directly related to a more robust nursing triage system instituted to increase patient access.

All three internal medicine triage nurses are trained and certified to manage the department's anticoagulation clinic. At any given time, our nurses are managing approximately 130 patients in the anticoagulation clinic.

In early 2006, we added a second triage nurse to urgent care to support a new model of care in which every patient presenting to urgent care is seen and triaged appropriately by the RN. This not only has improved patient workflow in urgent care, but also has significantly decreased patient complaints about wait times.

### *Additional Nursing Activities*

We continued to contribute to the Boston-area community by providing our expertise to new nursing students. Our NPs/CNMs clinically precepted 10 NP/CNM students over the last year from six different Boston area universities. In addition, we employed one co-op undergraduate nursing student from Northeastern University for her clinical practicum.

### *Community Outreach*

We hosted several influenza vaccine outreach clinics for students at the Stratton Student Center, the Kasser Sports Medicine Center, and the MIT-EMS staff meeting, where, in total, approximately 500 influenza vaccines were administered.

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

### ***Strategic Focus***

The Obstetrics and Gynecology Service at MIT Medical is dedicated to providing care to women from late adolescence through their menopausal years. Working in collaboration with the Internal Medicine Service, Surgical Service, Mental Health Service, and the Center for Health Promotion and Wellness, we provide well-rounded and closely integrated care to the MIT community.

Our gynecologic services range from comprehensive offerings in birth control to the management of menopausal issues. Our team of clinicians provides surgical services both individually and with other laparoscopic and gynecologic oncology specialists. Obstetrical care includes options for midwifery or physician care. In collaboration with maternal fetal medicine specialists at Mount Auburn and Brigham and Women's hospitals, we assist with high-risk obstetrical care.

### ***Accomplishments***

In the Ob/Gyn Service, it is always a source of great pride to usher new life into the world. During 2006–2007, we attended 174 births, including one set of twins.

Working in collaboration with the Internal Medicine Service and the Center for Health Promotion and Wellness, we developed a protocol that allows patients to obtain hormonal birth control without needing a routine appointment. Through campus outreach efforts, we were able to use the protocol to educate students about contraceptive options and to lower difficulties in access to care.

To help guard against diseases caused by the human papillomavirus, we promoted and offered the vaccine Gardasil, making it easily accessible to our patient population.

By offering basic ultrasound services to patients in their first trimester, we can now quickly assess first-trimester bleeding and pain. We also continue to offer non-stress testing and monitoring so that patients don't need to travel to Massachusetts General Hospital for antepartum surveillance.

Jill Lamson, RNC, NP-C, recently joined our service as a full-time nurse practitioner. With a background in reproductive science, she will be able to help patients in our practice who have infertility issues.

The practice continued to serve as premed advisors for MIT undergraduate students and to educate medical and CNM students with direct involvement in patient care. We also continue to instruct third-year Harvard Medical students on labor and delivery

and in the operating room at Mount Auburn Hospital. In addition, we have a clinician mentoring the Residents' Gyn Clinic at Brigham and Women's Hospital.

### ***Initiatives***

With the departure of Dr. Dawn Anderson, we are currently recruiting for another full-time physician to work at MIT Medical. Dr. Anderson will continue to be available for our patients at her new practice site in Arlington.

In the coming year, we will be piloting a new scheduling approach that increases the number of patients seen by providers, while offering each patient services that more closely match her specific needs.

Students will be invited to group sessions organized by the Center for Health Promotion and Wellness that center on contraception. We will offer briefings about contraceptive options and provide opportunities to access birth control in an expedited fashion.

### **Occupational, Environmental, and Employee Health Services— David V. Diamond, MD, Chief**

#### ***Strategic Focus***

The goal of Occupational, Environmental, and Employee Health Services of MIT Medical is to provide the best preventive, consultative, diagnostic, and therapeutic care for any potential illness or injury that occurs at MIT due to work or the environment. We work closely and in consultation with the Environment, Health, and Safety Office (EHS) of MIT and with the clinical staff of MIT Medical.

#### ***Accomplishments***

Working with EHS and Emergency Operations, we developed a plan for coping with an influenza pandemic. Areas of logistics, services, and communications have all been prepared to handle an anticipated surge in demand and a decline in available healthy staff. New policies have been developed and communicated, and additional supplies and sources of supplies have been identified. In addition, table-top drills were administered at MIT to test our plan. We participated in a Greater Boston Homeland Defense Drill known as Operation Poseidon. We also developed combined communications and learned how to clinically triage eight radiation-exposed mock victims on site.

We continue to play a clinically consultative role regarding a broad range of occupational health issues. Issues that came up this year include:

- Polychlorinated biphenyl contamination near residences
- Fire and smoke inhalation exposures at One Broadway
- The use of tuberculosis and vaccine (i.e., small pox vaccine) research materials
- Indoor air-quality testing related to campus construction
- Potential outdoor air pollution related to campus construction

- Ongoing ergonomic stress from computer use
- Contaminated water concerns in graduate housing
- Potential asbestos exposure due to renovation on the Lincoln Laboratory campus

### ***Initiatives***

In the upcoming year, we intend to further refine our emergency response system, focusing on staff and training, and to participate in further drills and system testing. In the wake of the Virginia Tech tragedies, MIT Medical will develop multidisciplinary emergency response protocols.

In addition, we will work more closely with EHS to integrate our efforts in a campus-wide health initiative for the MIT community. The goal of the health initiative is to help reduce health risks at work, in the environment, and from personal behaviors.

### **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, as well as for graduate students, post-docs, and visiting scholars. We are known for our warm and welcoming environment and for helping families from all over the world. Our focus is to honor cultural differences and to respect diverse types of families while delivering outstanding pediatric health care.

#### ***Accomplishments***

The pediatrics team of MIT Medical this year introduced Meet Pediatrics, an open-house event for the community. Once every three months, expectant parents are invited to the Pediatrics Service for a group discussion on the care of their babies in the hospital and at MIT. We have hosted two successful meetings so far and have two more planned.

Our communication with Mount Auburn Hospital's newborn nursery has improved with a telephone line dedicated to newborn notifications. Members of the newborn nursery staff at Mount Auburn Hospital provide our team members with information on new arrivals. In addition to fostering better communication between the two facilities, this new system allows our staff members to anticipate and schedule new baby appointments.

We continue to be active in the MIT and Boston-area community, serving as mentors to high school, graduate nursing, college, and medical students. We are consultants to MIT Day Camp as well as to the child-care centers on campus. Working with our occupational health staff and with MIT's Emergency Response Team, we have developed protocols for campus emergency evacuations.

During the past year, we have been developing a counseling program to encourage families to adopt a "5-2-1 Jump Up and Go" lifestyle. This program recommends five fruits and vegetables per day, less than two hours of TV or computer screen time per day, one hour of exercise per day, and less than one sugary drink per day. We are also

promoting the Portion Plate, a tool that helps children and parents figure out portion sizes. With the aid of visual cues, the plate teaches children to eat better so that they can learn, grow, and develop appropriately. Studies show that portion control and visual cues can impact food intake and be an effective strategy for weight maintenance.

The practice welcomed newcomers Tashima Williams and Monique Striggles as medical assistants.

## **Surgical Service—Lawrence T. Geoghegan, MD, Chief**

### ***Strategic Focus***

The Surgical Service at MIT Medical is dedicated to improving the care of surgical patients, whether the surgery was a complex or simple procedure. Services are performed at MIT Medical and at both Massachusetts General Hospital (MGH) and Mount Auburn Hospital. MGH provides emergency, elective, and procedure care. Mount Auburn is a Harvard teaching hospital that offers state-of-the-art facilities for surgical care. Routine laparoscopic surgeries, such as cholecystectomy, are performed at both institutions; less routine laparoscopic procedures, such as adrenal surgery, are referred to MGH.

### ***Accomplishments***

We have increased access to care and options for our patients diagnosed with breast disease and who would prefer the care of a female surgeon. Dr. Barbara Smith, an internationally known breast surgeon, and the group practice at the Gillette Center of MGH, have been contracted to work with the MIT patient population. The surgical team has also identified and communicated a list of female general surgeons to primary-care providers for patients who would prefer a female surgeon.

We continue to practice and promote care of breast cancer patients with sentinel node technology. The identification of the sentinel node with isotope injection allows our surgeons to identify and remove one or two lymph nodes in cases of invasive breast cancer. In most cases, this eliminates the need for full auxiliary dissection (i.e., removal of multiple lymph nodes from under the arm), which carries with it a 15 percent morbidity rate. Our surgeons now routinely perform sentinel node biopsy.

With the retirement of two of our long-term surgeons, we have contracted with a multifaceted orthopedics group based at Mount Auburn Hospital and headed by Dr. Robert Miegel. The group provides sophisticated orthopedic care, ranging from simple arthroscopy to total joint replacement surgery.

## **Administrative Services**

### **Information Systems and Medical Records—Shelagh Joyce, Director**

#### ***Strategic Focus***

Information Systems and Medical Records at MIT Medical seeks to improve the health and welfare of our patient population by advancing best practices and standards with

the optimal use of health care information technology and management systems. Our major areas of focus are data quality, training and education, clinical and financial reporting, and electronic health record maintenance.

### ***Accomplishments***

Through a collaborative effort between Information Systems (IS) and several clinical teams, two new clinical systems went online. MIT Medical launched a new picture archiving and communication system (PACS) in radiology and a new system in the lab. The PACS will eliminate the need to manually retrieve and store X-rays and will allow clinicians to read or view images remotely. The lab system replaced a 20-year-old computer system, giving the lab additional functionality and streamlining workflow. This new system will allow us to better track patient specimens and will help us get results to clinicians more quickly. During the implementation process, IS trained various clinicians and staff to use the systems.

Contracts for MIT Medical's two primary computer systems, the Practice Management System (PMS) and the Electronic Medical Records (EMR) system, were renewed. Renewals followed evaluation of vendors by a cross-functional multidisciplinary workgroup.

Working with Information Services and Technology (IS&T), MIT Medical successfully implemented a dual information system in Building W91 (IS&T). In the event of a business interruption or outage in Building E23 (MIT Medical), the system in W91 is designed to back up and manage MIT Medical's system operations. This interruption planning process is a part of our overall emergency preparedness protocol.

### ***Initiatives***

A major IS initiative to improve clinical and financial reporting is under way. MIT Medical has selected InterSystems' Ensemble application to increase reporting capabilities and integrate disparate systems. This application is designed to add rich web interfaces, improve workflow, and improve rules-based business processes and reporting.

During FY2008, we will implement a new PMS-EMR system for the Dental Service and a computer-based training competency system for clinical and administrative staff.

## **Operations—Deborah Friscino, Director**

### ***Strategic Focus***

Operations is dedicated to supporting the strategic and operations initiatives of the MIT Medical Department. This year, major focus areas included: continued improvement in patient care through increased access, appropriate use of resources through the capital expenditure process, and emergency preparedness.

### ***Accomplishments***

We provided infrastructure operational support and improved patient triaging to enhance the services provided to women patients—work that supports the department's

women's health initiative. We also provided more continuity of care to patients at the Lexington facility by hiring a full-time family practitioner.

These changes, other hiring opportunities, and modifications in scheduling protocols have allowed us to reduce wait times in internal medicine and to see more patients at the Lexington facility and in the following services: dental, dermatology, eye, internal medicine, mental health, pediatrics, and urgent care.

We continue to create off-site opportunities for specialized patient care that are more convenient and accessible for patients and that reduce expenses. This year, we added a cardiac testing site in Copley Square affiliated with Massachusetts General Hospital.

Radiology Services received the annual relicensure of its mammography unit by the Massachusetts Department of Public Health and the US Food and Drug Administration.

Renovations in the Mental Health Service area have provided more private offices to accommodate the increase in staff. We have also made aesthetic improvements by revitalizing hallways and waiting areas on the second and third floors.

We have continued our ongoing collaboration with other departments at MIT, the Massachusetts Department of Public Health, and Cambridge hospitals to establish systems and support for citywide emergency response. In September 2006, we participated in an area drill conducted by the US Department of Homeland Security. We will continue to participate in, learn from, and improve our response efforts through such drills in the future.

### ***Initiatives***

With the help of grant funding, the pharmacy is working with an MIT systems engineer to examine the process for prescription refilling. Although our error rate is very low, our goal is to improve workflow and further decrease the chances for error.

With approval from the Committee for the Review of Space Planning, we have embarked upon major renovations that will improve patient care. In the next nine to 12 months, we will expand our urgent care area from five to seven examination rooms and will make other layout changes to enhance efficiency and improve patient flow. In the following year, we plan to expand other areas of the first floor, including the clinical laboratory, the pharmacy, pediatrics, and the waiting areas for the laboratory, surgery, and radiology.

### **Marketing and Communications—Denise Cummings, Manager**

#### ***Strategic Focus***

Marketing and Communications at MIT Medical is charged with reflecting the “voice and image” of the department. Via strategic and tactical communication programs, our team of four communications advisors develops internal and external programs to help promote services, health, and wellness in the Institute community.

## **Accomplishments**

The MIT Medical marketing and communications team led the third annual getfit@MIT Fitness Challenge. Working in collaboration with the Center for Health Promotion and Wellness; MIT Health Plans; the Department of Athletics, Physical Education and Recreation (DAPER); MIT Campus Dining; and IS&T's web consulting services, the team managed an event that was bigger and better than ever.

This year, 2,272 individuals on 335 teams registered for the challenge, a 20 percent increase over the previous year. The challenge is intended to encourage exercise during a time of year when colder weather and shorter days make it difficult to stay active. This year, getfit@MIT had strong support. Accomplishments include:

- A diverse mix of participating teams—49 percent staff, 30 percent students, and 21 percent other (i.e., affiliates, faculty, spouses, and alumni)
- 7,286,970 total minutes exercised
- 46 fitness or wellness events—more than double the number in 2006
- 134 teams that qualified for the grand prize drawing by reaching the exercise goal in at least 10 out of 12 weeks (The grand prize winner was buff2@bates, a team of seven from MIT's Bates Linear Accelerator facility in Middleton, MA)
- 1,100 participants that qualified for the first-ever Onward and Upward prizes by entering minutes every week and showing an overall increase in exercise minutes (two winners were selected by drawing)

The MIT Medical newsletter *health@mit* featured stories on patient-to-patient communications, tips on how to manage a hospital stay, and information on MIT Medical's travel health services. This was the first year "Ask Lucy," our health advice column, was featured on MIT Medical's home page. In past, "Lucy" was featured in the *health@mit* newsletter and was only seen twice a year. With her new home on the web, "Lucy" is now published quarterly, increasing visibility and service to the community.

Working with the health plans staff, the marketing and communications team designed new collateral materials for the student and affiliate health plans. These innovative brochures and postcards were designed to improve health plan usability and to promote changes to the plans.

Working with various clinical teams, the marketing and communications staff worked with several news outlets to promote MIT Medical. Dr. William M. Kettyle, medical director, was featured in the April 25 edition of *Tech Talk* discussing improvements in access and care that were made following the work of the Task Force on Medical Care.

In the May/June edition of the *MIT Faculty Newsletter*, Dr. Alan E. Siegel, chief of mental health, published a feature in response to the Virginia Tech tragedies. The article detailed new mental health programs at MIT Medical and described how the Institute is building a network of advocates and responders. Dr. Kettyle was also featured in the same edition offering an update on specific Task Force on Medical Care recommendations of interest to MIT faculty.

The Student Health Alliance Committee partnered with our marketing and communications team to publish a column that appeared in the May 1 edition of *The Tech*. Featured in the newspaper's "Campus Life" column, the article sought to promote a greater awareness of various health issues. More columns are planned.

In February 2007, MIT Medical welcomed Denise Cummings as the new marketing and communications manager for the department.

### ***Initiatives***

Marketing and Communications at MIT Medical convened a 12-member cross-functional team charged with redesigning the medical website. The goal of the project is to improve the user/patient experience with streamlined navigation, improved content, and more robust functionality. The newly redesigned site is slated for launch in August 2008.

The marketing and communications team is seeking ways to better understand the needs and preferences of the Institute community and, in particular, its patient population. Several branding initiatives are under way to better position services, programs, and offerings to select groups. Working in partnership with the patient communication workshop that is part of MIT Medical's diversity initiative, the team will host a patient focus group of graduate students to gauge communication needs. Our goal is to understand this subset of MIT Medical's patient audience as well as its communication habits and needs. Our ultimate objective is to design communication tactics and programs that best meet the needs of members based upon input from the focus group.

### **Finance—Peggy Meehan, Director**

#### ***Strategic Focus***

Finance at MIT Medical seeks to support the strategic focus of the department 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 manages patient financial services, health plan administration, and the organization's capital.

MIT Medical is supported by more than \$75 million from MIT's General Institute Budget and employee benefit pool, employee and student health plan premiums, and fee-for-service revenues. Our primary tasks include billing patients and insurance organizations \$6 million annually and managing benefits for over 9,000 Traditional and Flexible MIT Health Plan employees and dependents and over 12,000 students and dependents. In addition, the finance unit manages a department-wide accounts payable system and is responsible for the purchase and management of capital equipment and supplies.

#### ***Accomplishments***

##### ***Clinical Services Finance***

Finance managed a new MIT-instituted budget process for FY2008 that was a watershed event for Clinical Services. The new process transformed a practice-based revenue-and-expenses model to one adopting a broader view for provision of medical care campus-wide. These lines of business are the basis for future budget development and reporting:

- Registered students enrolled in the MIT Student Medical Plan (included in tuition)
- Members of the Traditional and Flexible MIT Health Plans
- Medicare retirees
- Members of the MIT Student and Affiliate Extended Insurance Plan
- Users of the Employee Primary Care Benefit
- Other (employees without the MIT plans, student spouses, and dependents, etc.)
- Users of the Dental Service

Under the new process, costs are allocated to lines of business based on utilization. Sources of support are identified for each line of business and include premiums, fee-for-service and copayment revenue, investment income, and support from the General Institute Budget and employee benefit pool.

This new process is the culmination of nearly a year of collaboration between Finance at MIT Medical and the Office of Finance, the Office of Budget Operations, the Controller's Accounting Office, and the Office of Sponsored Programs. This work will continue until the processes are operational and the group has reached its ultimate goal of transparency in MIT Medical Department business.

#### *MIT Health Plans*

MIT Health Plans staff continually strive to take a proactive approach to the changing market, regulatory environment, and the needs of members. Efforts undertaken in the past year include:

*Student Extended Insurance Program.* Analyses and input from students and staff identified gaps in coverage that were addressed this past year. Benefit design changes implemented this year include an expansion of the pharmacy benefit and the addition of limited access to external urgent care and office visits.

*Regulatory changes.* The student health plans operate under state regulations titled "Qualifying Student Health Insurance Programs." Last year, several changes were mandated, the most significant being the discontinuance of the acceptance of non-US-based insurance as an alternative to MIT-sponsored insurance. This year, the regulations eliminated the option to accept foreign coverage even if the carrier has a US-based claims office. As the regulatory changes were implemented, we developed outreach programs to help minimize the impact to students and the Institute.

*External environment.* In order to keep abreast of regulatory and environmental issues related to patient financing, we joined the board of the Massachusetts Association of Health Plans. As active participants in meetings hosted by the Boston Consortium for Higher Education, we have access to information and resources to help us manage costs; we also receive updates to national health care benefits; and we're advised of changes in practice patterns.

*Billing.* MIT Medical's billing function is complicated by the different requirements requested by payers, variances in coverage, types of insurance products, and changing

compliance and reimbursements. The billing staff stayed abreast of issues and incorporated billing changes seamlessly with minimal impact to the department and to patients. This year, work focused on reducing receivables billed through the Controller's Accounting Office and Student Financial Services.

*Dental billing.* The Finance staff was instrumental in the implementation of Dentrix, practice management software that will shorten the revenue cycle through automated billing. Staff also undertook a comprehensive fee schedule review that prompted cost-based fee adjustments and successful contract renegotiations with Delta Dental.

*Medical billing.* Complex and changing billing requirements by external payers, new drugs and treatments, and complicated internal processes necessitate continual evaluation. Our team is always concerned with shortening the revenue cycle and with ensuring that fees cover costs and are comparable to market rates. In FY2007, fees were adjusted for pediatric care and for laboratory fees charged to MIT's Clinical Research Center. Under consideration are coverage for travel vaccines and genetic testing, two areas where advances have significantly increased costs.

## **Performance Improvement and Risk Management— Ruth Fishbein, Director**

### **Strategic Focus**

Performance Improvement and Risk Management at MIT Medical is dedicated to enhancing the quality of patient-centered care through safety, treatment effectiveness, efficiency, and equity. Our focus is in concert with the Institute of Medicine's definition of quality, which states that quality patient care is "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with professional knowledge."

### **Accomplishments**

Members of MIT Medical's quality improvement team developed an evidence-based decision support system to measure and report metrics of care quality and patient outcomes. The report, presented in a "dashboard" model, provides individual clinicians and service chiefs with qualitative and quantitative data related to patient care—for example, treatment effectiveness, timeliness of care, and efficiency of care. In FY2008, all providers and service chiefs will have real-time access to the fully automated clinical dashboard for all major clinical services.

The Medical Department was awarded a grant from the Kenneth B. Schwartz Center to evaluate and improve patient-provider communication and to implement a sustainable infrastructure to support continued work in this area. This project involved surveying patients and training a group of internal medicine providers. Going forward, the department will be working with the Kenneth B. Schwartz Center to conduct bimonthly "Schwartz rounds" focusing on the relationship between patients and providers, particularly as they relate to effective communication. The goal is to enhance our existing Clinical Care Evaluation Program, which includes external expert clinical reviews as well as clinician coaching and mentoring.

MIT Medical was awarded a \$50,000 18-month grant from CRICO/RMF, a medical insurance agency, to use human factors engineering to evaluate the interface of computers and people as they relate to electronic medication prescribing. The twofold goal is to reduce the risks associated with medication errors while improving medication and patient safety.

The Patient Advocate Program has been enhanced with the hiring of a part-time advocate, Wendy Jolles, LICSW, a licensed independent clinician. Our Patient Advocate Program is designed to help patients resolve any issues that emerge in their interactions with MIT Medical. We have developed a process to contact patients within one business day of initial contact to resolve any issues.

As a follow-up to the adoption of a disclosure of adverse events policy, Lucian Leape conducted a training session with clinical staff to discuss when and how disclosure should occur and to develop a fuller policy for disclosure.

### **Initiatives**

The Medical Department expects an unannounced survey by its accrediting body, JCAHO, between October 2007 and October 2008. We are working to assure continuous compliance with standards, including focusing on patient safety and conducting “mock” or simulated patient tracers to prepare staff for the survey. By using a patient’s clinical record, JCAHO can follow a patient through the care process to ascertain the quality and level of care received.

The Medication Reconciliation Workgroup, an interdisciplinary, cross-functional performance improvement team, is developing tools to increase the accuracy of medication information to improve medication safety. Our care teams currently use medication reconciliation forms to assure the accuracy of a patient’s medication information at the time of admission to the Inpatient Unit. We are developing an electronic form for physicians and nurses to use to ensure accurate reconciliation of medications at the time of discharge.

### **Clinical Director for Campus Life—Maryanne Kirkbride, MS/MBA, RN**

#### **Strategic Focus**

The clinical director for campus life (CDCL) is charged with improving the health and well-being of the MIT community and all of its individual members. By striving to make MIT the healthiest and highest-achieving college campus in the country, we help all our community members to reach their personal and professional goals. We especially focus our efforts on advancing teaching, learning, and research.

The philosophy of the clinical director for campus life is to consider MIT a small city or town. We have our own residences, police force, hospital, dining facilities, commercial areas, and local government. Like most cities or towns, the medical facilities also support the health of the community. At MIT, the clinical director for campus life heads this effort through MIT Medical.

By building bridges between services and departments, by bringing students together to work with clinicians, and by using community-wide data to drive prevention programming, the CDCL creates linkages that leverage existing resources to improve overall health.

This year, we have undertaken an initiative to reduce tobacco use on campus. Together with EHS and DAPER, we are laying the foundation to both improve health and to reduce the escalating costs of health care in the future.

## **The Center for Health Promotion and Wellness**

### ***Strategic Focus***

As part of the effort to improve the health of the community, the CDCL oversees the Center for Health Promotion and Wellness at MIT Medical. With a staff of seven health educators, we support the individual and communal practice of healthful living through evidence-based programming designed to help the MIT community adopt and maintain healthful behaviors, attitudes, and lifestyles.

The Center for Health Promotion and Wellness works collaboratively with students, staff, and faculty to create a safe and caring environment that supports the academic, research, and community goals of the Institute. The long-term vision of the center is to measurably improve the health of the campus community and its members.

### ***Accomplishments***

As part of our work in health education, we continued to champion training in cardiopulmonary resuscitation (CPR), the use of the automated external defibrillator (AED), and first aid. We offered the following classes: Basic First Aid, First Aid with Adult CPR, Heartsaver AED (Adult and Child CPR), and Heartsaver CPR Adults, Children, and Infants. Classes were held in a variety of campus venues, including Eastgate and Westgate residence halls and MIT alumni offices. Nearly 130 members of the MIT community were trained, including 50 new MedLinks students.

We helped the MIT community stay healthy and well by offering seasonal wellness classes. Six-week sessions were held in 10-week increments in the fall, winter, spring, and summer months. On average, there were 12 participants for each session; topics ranged from belly dancing to yoga to childbirth classes.

To promote and improve nutrition at MIT, we created and branded the Eat Well at MIT Program. Utilizing a website, <http://web.mit.edu/medical/wellness/eatwell/>, we provided information on food and nutrition to the Institute community. The program was supported with Eat Well water bottles, T-shirts, and workshops to increase awareness.

To help the campus community cope with stress, we promoted 253-CALM: The MIT Relaxation Line. Callers were guided through a two-to-three-minute relaxation break, emphasizing a variety of techniques to promote sleep, reduce anxiety, and enhance mental concentration. In conjunction with the relaxation line, we distributed “MITOasis” relaxation CDs. More than 2,000 CDs promoting relaxation techniques were distributed.

For the second time, the Center for Health Promotion and Wellness received the US Department of Justice Violence Against Women Act grant. This grant seeks to improve significantly response to domestic, sexual, and dating violence and stalking. To promote the program, we led training workshops on various aspects of sexual assault and relationship violence, targeting numerous campus groups, including resident advisors, graduate resident tutors, freshmen advisors, and spouses&partners@mit.

Alliances with student organizations continued to build bridges between MIT Medical and students. With the Student Health Advisory Committee, we developed various programs, including Wellness Week, featuring the Doc-to-Dorm Program. This popular program is a question-and-answer dialogue between MIT Medical clinicians and students.

Our MedLinks Program continues to provide the community with health education. At its annual flu shot clinic, held in the MIT Student Center, the MedLinks Program gave flu shots to more than 400 students. Overall, more than 1,000 MedLinks student interactions were recorded during the academic year.

Through the Community Development and Substance Abuse Committee, we offered the Brief Alcohol Screening and Intervention for College Students, known as BASICS. Nearly 115 students went through one-on-one educational sessions to boost their awareness of alcohol and drug abuse.

### **spouses&partners@mit—Jennifer Recklett, Manager**

#### ***Strategic Focus***

Established in 1972, spouses&partners@mit is an organization affiliated with the Center for Health Promotion and Wellness that provides a support network for the wives, husbands, and significant others of MIT students, staff, and faculty. Our purpose is to help newcomers adjust to MIT and the surrounding Boston area. Many members of the MIT community struggle with the loss of their family support network, have difficulties communicating in English, have financial and career concerns, suffer isolation, and are making cultural adjustments. Since many of our members are newly married or new parents, they often are experiencing major life changes and adjustments.

In addition, spouses&partners@mit helps MIT families get settled in Boston so that they may pursue professional, educational, and parenting goals. We provide two areas of support: 1) information, resources, and referrals to assist members in building a life in the MIT community; and 2) networking opportunities to allow participants the chance to build a social and support network. Our program offers many cultural resources and volunteer activities, including a comprehensive website for newcomers, a weekly gathering for members (babysitting provided), and a variety of programs designed and organized by members. We also offer individual and confidential consultations.

#### ***Accomplishments***

Our new website, <http://web.mit.edu/spouses/>, was designed, written, and programmed entirely by volunteer members of spouses&partners@mit. Launched in FY2007, the website features an appealing design, improved navigation, and greater focus on our

major activities. It provides news, information, and resources found in the *Bridge*, our online newsletter; the *Newcomers' Guide*; and BabyNet, our parent support network.

We organized evening and weekend programs to reach out specifically to our working members. Topics included the work/family balance and changes in relationships after the arrival of a baby. We also held two social events: ice skating and chocolate tasting.

In July 2007, spouses&partners@mit moved to a new home, from the MIT Medical Mental Health Service to the Center for Health Promotion and Wellness. Joining CHPW will strengthen our programs by facilitating collaborations with the CHPW staff and by enhancing the promotion of our activities.

## **FY2007 Appointments, Transfers, and Separations of Service**

### **Medical and Academic Staff Appointments**

Solomon Degefe	Financial Analyst	07/10/2006
Lucy Walsh	Manager, Health Plan	07/31/2006
Brian Marriott	Family Practitioner	08/21/2006
Divya Kumar	Health Educator	11/06/2006
Evelyn Picker	Internist	12/01/2006
Lauren Mayhew	Health Educator	01/01/2007
E. Jill Barton	Senior Financial Analyst	01/29/2007
Denise Cummings	Marketing and Communications Manager	02/20/2007
Robert Arthur	Nurse	03/01/2007
Stephanie Shapiro	Internist	05/01/2007
Beth Jameson	Clinical Coordinator	06/25/2007

### **Transfers**

Allison Parisi	Financial Analyst	9/22/2006
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### **Separations of Service**

Laura Stuart	Health Educator	08/01/2006
Deirdre Neylon	Health Educator	09/02/2006
Linn Morrill	Health Educator	11/06/2006
Dolores Vidal	Nurse Practitioner	11/07/2006
Elliot Thrasher	Orthopedic Surgeon	12/31/2006
Eileen Simpson	Nurse	04/21/2007
Suzanne Ward	Optometrist	04/30/2007

**William M. Kettyle, MD**  
**Medical Director**

**Annette Jacobs**  
**Executive Director**

More information about MIT Medical can be found at <http://web.mit.edu/medical/>.