

DISCOVERY AND INNOVATION:

**WORKING TOGETHER TO PROVIDE SUPERIOR HEALTHCARE**

*The Strategic Commitments of Brigham and Women's and Faulkner Hospitals*



## LETTER FROM THE PRESIDENT



This is a time of great change in healthcare. We at Brigham and Women's and Faulkner Hospitals (BW/F) are setting the course for our future amidst a backdrop of tremendous uncertainty—in our local market, at the state level, and nationally. No one knows precisely how reform will change the healthcare landscape—except to say that we will be asked to do more with fewer resources. This will have far-reaching implications for the important work we do every day.

One thing is certain—although we cannot predict the future, we can prepare for it. This is why we have chosen to title our strategic plan *Discovery and Innovation: Working Together to Provide Superior Healthcare*.

We view this time of change as an opportunity to think boldly about who we are and how we can best advance our mission and vision. BW/F has a long history of strategic adaptation, so it is fitting that we are actively engaged in defining the next chapter. We have an incredibly strong foundation of excellence on which to build as we explore how we will deliver the highest quality, affordable care to our patients, advance discovery and innovation in research, train the next generation of clinicians and other healthcare professionals, and improve the health of the communities we serve, both locally and globally.

Our strategic plan has been designed to best express our mission and vision in light of the many challenges on the horizon. We have involved hundreds of physicians, nurses, researchers, educators, community health experts, and administrative staff in the process of understanding the current state of our institution, identifying core assumptions about the future, and selecting a set of strategic commitments that will sustain us. This plan takes into account several important “truths” about what will be required for our future success, specifically:

- ◆ We must consistently deliver high-quality care at a reasonable cost. This is not negotiable.
- ◆ We must provide value to those we serve, including patients, their families, referring physicians, payers, and community partners, which means we must understand what these different stakeholders value.
- ◆ We must coordinate and integrate the work we do within and across each of our mission areas.
- ◆ We must demonstrate our excellence in ways that show how the care we deliver is better and provides more value to patients and families, specifically through our efforts to push the boundaries of innovation, research, and education.
- ◆ We must optimize the use of our precious assets, inside our own institution and with our partner institutions, and embrace a philosophy of stewardship to ensure that we provide the highest quality affordable care to our patients and their families.
- ◆ We must be nimble and able to adapt quickly as the healthcare environment changes.

I am honored to present this strategic plan as the blueprint for our efforts over the next five years.

I am tremendously proud of the people who contributed to the development of this plan and who dedicate themselves to the important work of helping BW/F lead the way to superior care every day.

With all best wishes,

A handwritten signature in black ink that reads "Betsy".

Elizabeth G. Nabel, MD  
President

## INTRODUCTION:

# A STRATEGIC VISION FOR 2020

**We see great potential in more deliberately integrating all that we do at BW/F. While each facet of our mission represents individual excellence in clinical care, research, education, and community health, we know it is the combination of this exceptional work that distinguishes us. As we look ahead to the future, we believe that further integrating our work—both within each of our mission areas and across them—will enable us to provide greater value for those we serve. It is the right thing to do, and it will take the commitment of every member of the BW/F family to make it possible.**

Our existing strengths provide the platform from which to continue our efforts to transform BW/F into an integrated system—a system that is truly greater than the sum of our individual parts. Yet what has contributed to our past success is likely to be different from what we need to do to succeed in the future.

For instance, we must consider the benefits of shifting from:

- ◆ an over-emphasis on episodic care of individual patients to include an ability to optimize patients' health throughout their lives, and ultimately, to an ability to manage the health of populations;
- ◆ care managed largely by individual providers to care coordinated and provided by inter-professional teams wherever that care is needed;
- ◆ a focus on department- and discipline-specific education to one that includes inter-departmental and inter-professional collaboration;
- ◆ building on the strengths of individual, investigator-led research to team-based, multi-disciplinary, and convergence research that brings together concepts and tools of the life, physical, and engineering sciences;
- ◆ individual efforts in community engagement to a collective approach to advancing our local, national, and global community health efforts;
- ◆ siloed data repositories to integrated health information technology that enables information exchange with our patients, providers, and network partners, and makes it available as needed to foster research and education; and
- ◆ volume-based reimbursement to value-based reimbursement.

These shifts will require us to adapt how we work—as individuals, across departments, and between and among the unique set of assets that we have in the BW/F family. We have an exceptional opportunity to advance our mission and vision through a set of strategic commitments that will help us prepare for and secure our future success.

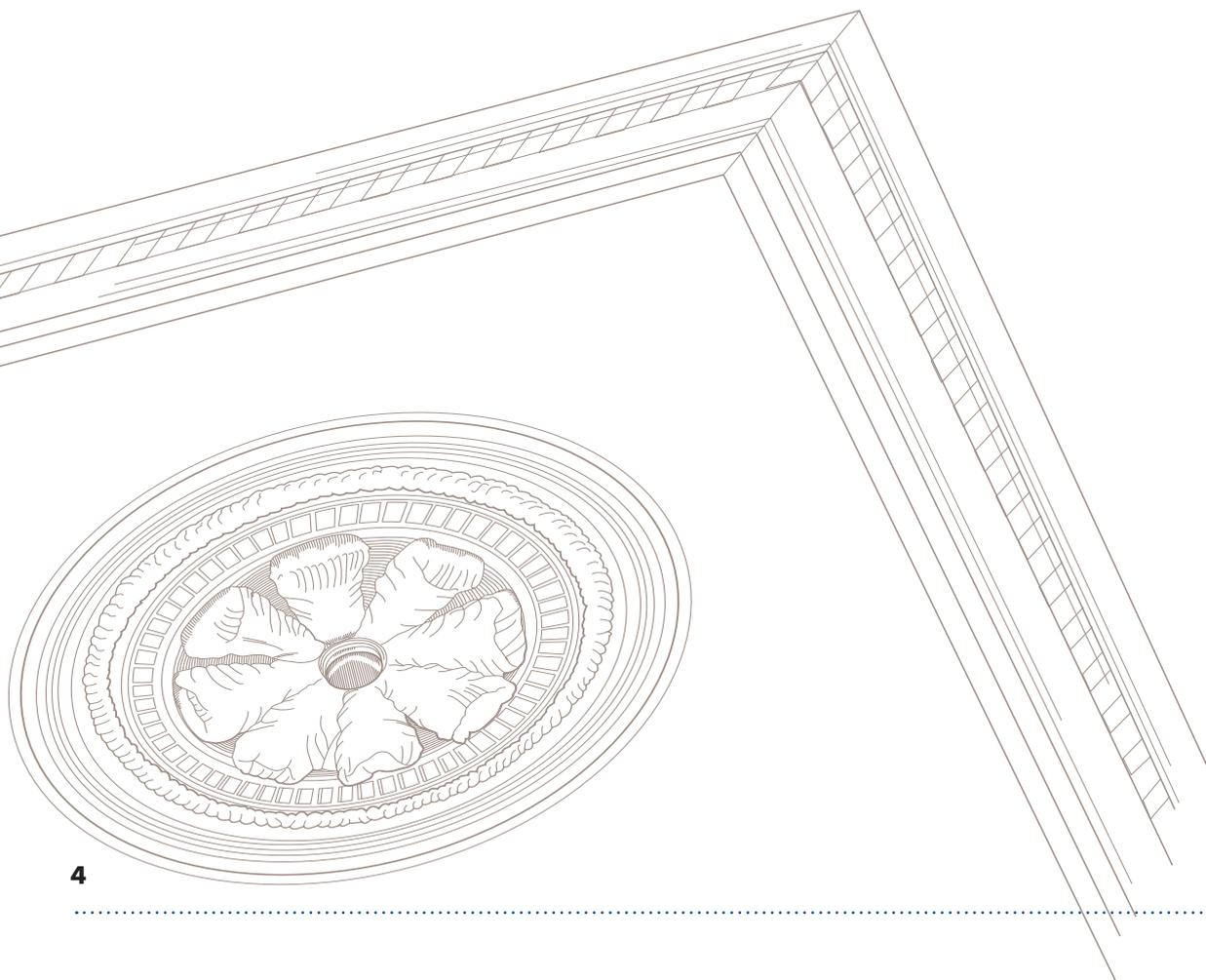


# BRIGHAM AND WOMEN'S/FAULKNER FAMILY: **OUR PAST AND PRESENT**

## **A Legacy of Exceptional Performance**

A founding member of Partners HealthCare, we are a world-renowned leader in patient care, research, innovation, education and community health. For the 18th consecutive year, we have secured a place on the *U.S. News & World Report* Honor Roll of America's Best Hospitals, ranking eighth in 2011. We were also recently recognized by the University HealthSystem Consortium (UHC) as being one of five top-performing academic medical centers in the country in a quality and safety benchmarking study. Moreover, for more than a decade, BWH has ranked second in National Institutes of Health (NIH) funding for free-standing hospital grantees in the U.S.

To build on our legacy of excellence, we must first understand the current state. A shared understanding of our strengths and the opportunities in our mission areas provide a foundation on which to build, as we evolve to meet the challenges of a rapidly changing healthcare landscape.



## PATIENT CARE

### OUR STRENGTHS:

We have a history of leadership in every area of adult medicine as well as neonatal care. Patients come to BW/F from around the corner and around the world to access care across our distributed campus which includes:

793 inpatient beds and 63 operating rooms at the main hospital in Boston's Longwood Medical Area

- ◆ 150 inpatient beds at Faulkner Hospital where every room is private

160 ambulatory practices located in the Greater Boston area across our distributed campus, including two community health centers, two full-service ambulatory care buildings in the community, and several practices at Faulkner Hospital

- ◆ Our network partners, such as the joint cancer center with Dana-Farber, South Shore Hospital, and a network of clinical affiliations throughout New England to extend our expertise into community settings

- ◆ In addition, BW/F employs approximately 15,000 dedicated staff who provide expert clinical care and operational support and who conduct groundbreaking research. BW/F is home to the first use of anesthesia in childbirth, modern neurosurgery, the first test tube fertilization of a human ovum, the first successful human organ transplantation, the first successful mitral valve surgery, and, most recently, the first full-face transplant in the country.

Finally, BW/F continues to advance medicine on all fronts, with centers of excellence in cardiovascular care, oncology, neuroscience, orthopedic and arthritis care, and women's health.

### CHALLENGES AND OPPORTUNITIES:

Delivering high-quality, affordable, safe care consistently requires diligence in setting priorities and taking advantage of efficiencies where available. For example, the main campus is specially designed to deliver tertiary and quaternary care, yet 67 percent of the 2010 discharges could be classified as secondary care. Going forward, we must match patients' healthcare needs with the appropriate level of resources. We must focus on care coordination amongst disciplines and across the care continuum, and optimize the use of our varied sites of care, including strengthening provider networks. This will enable us to provide the right care at the right location with the right expertise, which will contain costs as well as improve the patient care experience.



# RESEARCH

## OUR STRENGTHS:

BWH has a long history of leading the world in innovative research and in bringing science to the diagnosis and treatment of illness. Research and innovation are core values of BW/F—where science, learning, and clinical care intersect to benefit our patients and their families. BW/F has more than 3,700 researchers (physician scientists, nurses, and clinical and research fellows), nearly 1,000 principal investigators, and approximately 2,800 professional and technical staff in 42 research locations. In 2005, BWH established the Biomedical Research Institute (BRI), which fosters groundbreaking, interdepartmental and interdisciplinary research within the hospital's research community. The BRI includes eight disease-focused research centers and five resource- and technology-based programs and enables our diverse community of clinicians and scientists to communicate more effectively, providing numerous opportunities for them to collaborate on research aimed at curing, treating, and preventing a host of human diseases and conditions.

BW/F's substantial commitment to research is reflected in the number of important discoveries and innovations, the size and scope of our research portfolio, our volume of scientific publications, and support for the BRI. BWH is home to a number of the world's best-known, prospective cohort studies (e.g., Nurses' Health Study, Physicians' Health Study, Women's Health Study, Women's Health Initiative) and has made many pivotal discoveries over the decades. Some examples of the many pioneering discoveries, studies and innovations include:

- ◆ The JUPITER<sup>1</sup> trial, which identified high-sensitivity C-reactive protein (hsCRP) as a biomarker for risk of cardiovascular disease and demonstrated that lowering hsCRP and LDL cholesterol reduced the risk for a cardiovascular event by 44 percent
- ◆ Identification of genetic risk factors that contribute to rheumatoid arthritis
- ◆ Development of nanoparticles as innovative targeted drug delivery systems
- ◆ Pioneering vitamin D studies such as the VITamin D and OmegA-3 Trial (VITAL), investigating whether vitamin D3 or omega-3 fatty acids reduce the risk for developing cancer, heart disease, and stroke
- ◆ "AMIGO," the advanced multi-modal image-guided operating room, consisting of three sterile procedure rooms, that houses real-time imaging modalities like X-ray fluoroscopy and ultrasound, as well as cross-sectional digital imaging systems like CT, high-field strength MRI and high-resolution PET
- ◆ The OurGenes, OurHealth, OurCommunity<sup>®</sup> project, which is studying the influence of genes, environment, and lifestyle on human health in order to develop better ways to prevent and treat disease

<sup>1</sup> Justification for the Use of Statins in Primary Prevention: An Intervention Trial Evaluating Rosuvastatin

---

- ◆ The Phenogenetic project, which is designed to discover the impact of genetic variation on the function of the human body
- ◆ Designed a new Web-based formula called the Reynolds Risk Score that, for the first time, can more accurately predict risk of heart attack or stroke among women
- ◆ Found that using both bar-code technology and electronic medical administration record (eMAR) together substantially reduces transcription and medication administration errors, as well as related potential adverse drug events
- ◆ Led the study that proved how a simple surgical checklist lowers the incidence of complications and death by more than one third in hospitals around the world

### **CHALLENGES AND OPPORTUNITIES:**

We see tremendous opportunity to further integrate our research, education, and clinical care by eliminating barriers that exist between and among departmental, disciplinary, and institutional boundaries. We can enhance interactions between the research community in life sciences, medicine, engineering, and business to solve important and difficult problems. We have an opportunity to strengthen our position as a leader in personalized and regenerative medicine, recasting the importance of research to the broader community and branding BWH as a leader in “bringing the science of medicine to patient care.” Our health information technology, although advanced, needs ongoing enhancements to more effectively support and enable future research efforts, including hospital comparative effectiveness research and biostatistics analyses, which are critical to our efforts to advance as a learning healthcare system. Most importantly, our research mission is furthered by our investigators. We must continue to create mechanisms to develop and retain talent to support research activities in the institution. Our talent will be empowered by a strategic investment in the design of their career paths, marketing of our success in the academic medical research enterprises, active integration with other disciplines, the efficient utilization of research space, and the identification of new funding sources.



## EDUCATION

### OUR STRENGTHS:

As a major teaching affiliate of Harvard Medical School, BW/F has a longstanding tradition of clinical training and educational excellence.

We have accredited programs that are among the top-ranked in the country. We educate and train over 700 residents and fellows each year, in more than 44 ACGME residency training programs and 51 fellowships.

Our faculty are leaders in their fields, which enables us to attract the best students from the most prestigious medical schools in the country. Students know when they come here that they will be exposed to a variety of leading clinical and research professionals as well as cutting-edge technology and state-of-the-art facilities. Our programs are designed to train the next generation of healthcare leaders, and we benefit enormously from the high caliber of our trainees who are a source of new talent, new ideas, and new leadership.

### CHALLENGES AND OPPORTUNITIES:

Medical and health professional education will require major reengineering to keep pace with the expected transformation of the delivery system. The number, mix, and skill set of medical professionals are changing, and we expect even more dramatic changes in the coming decade. To sustain our reputation and the caliber of education and training we provide, we see broad opportunities to shift how we provide education today and make investments in infrastructure that will promote collaboration between and among our departments and the many sites within which we operate. A more collaborative approach and infrastructure reflect the kind of preparation we believe our trainees will require as they are called upon to address the complexities of disease, care management requirements, and regulation. The cost of education is never fully covered by indirect graduate medical payments and new funding sources should be developed to prepare for the future as resources become scarcer and demands for clinicians more intense.

## COMMUNITY ENGAGEMENT

### OUR STRENGTHS:

BW/F has a longstanding commitment to addressing and overcoming health disparities in underserved communities locally, nationally, and globally. BW/F's community engagement efforts routinely bring together health professionals from BW/F departments with community health centers, schools, and other community-based organizations to identify and overcome barriers to healthcare and related services, and to address the social factors contributing to health and well-being.

Specific initiatives include:

- ◆ Locally, our Center for Community Health and Health Equity (CCHHE) focuses on improving the health status of Boston residents, with an emphasis on local neighborhoods, which have disproportionately poor health and social indicators. In 2010, CCHHE served more than 6,200 community members, students, patients, and employees in 21 programs such as the Passageway domestic violence intervention program for patients and employees, the Perinatal Case Management Program focused on improving birth outcomes for vulnerable women and infants, and the award-winning Student Success Jobs Program that is building a pipeline for racially and ethnically diverse young people to become healthcare professionals.
- ◆ Nationally, the Brigham and Women's Outreach Program brings together BW/F clinical staff with clinical colleagues in the Indian Health Service (IHS) in New Mexico to improve the health status of American Indian/Alaskan Natives (AI/AN). Physician and nurse volunteers provide a mix of patient care and teaching of the local medical staff, as well as remote teaching and consultative activities from Boston via telemedicine technology.
- ◆ Globally, the Division of International Health and Humanitarian Programs within the Department of Emergency Medicine continues to advance field programs, capacity for international health research, and educational programs dedicated to international health, development, and humanitarian assistance. Most recently, we demonstrated our presence in disaster relief and emergency response following the earthquake in Haiti and recent tsunami in Japan; in Haiti, over 150 medical personnel treated more than 5,000 patients. We also recently built infrastructure, educated future clinicians, led research, and mobilized communities to support adequate care delivery in locations such as Rwanda, where a health team comprised of BW/F and Massachusetts General Hospital professionals serves to support the development of Team Heart, an organization that conducts a heart surgery mission at King Faisal Hospital. The Division of Global Health Equity within the Department of Medicine also works closely with Partners in Health to provide care to vulnerable communities in more than 10 countries.

## CHALLENGES AND OPPORTUNITIES:

Service to the underserved locally, nationally, and globally has been the result of individual and group commitment, organizational investment, and a network of essential partnerships. Despite the strong position occupied by BW/F in community engagement efforts at all levels, and the many synergies in health needs that exist among these communities, there are opportunities to advance this work. One opportunity is to build on models that work across diverse geographies, such as those programs that offer treatment to HIV patients globally and locally. Cultural competence in care delivery, population health management related to prevention and wellness services, and mental healthcare access are areas ripe with opportunities. As a growing discipline, we recognize that an infrastructure to pool experts and best practices, along with incentives for other disciplines to engage in this important mission is necessary. Program evaluation and dissemination of best and evidence-informed practices, expanding training and leadership in community health, and identifying funding to sustain promising programs are also essential to advancing the BW/F community engagement mission.



# STRATEGIC ASSUMPTIONS

**In the early stages of our strategy work, we surveyed more than 700 clinical and administrative leaders across BW/F and Dana-Farber Cancer Institute to understand their perspectives about our current strengths, challenges, and the external environment. Because we cannot predict exactly how the future will unfold, we must use assumptions as the basis for our strategic decisions.**

Being clear about our assumptions allows us to stay the course if what we have assumed becomes true, and to adapt our strategy if things play out differently than we anticipated. It is important for these assumptions to be well understood throughout our institution to ensure that everyone is clear about the core concepts on which strategic decisions have been made. There is broad agreement about a number of important assumptions that serve as the basis for our strategic direction. They include:

- ◆ While the strength of the BW/F reputation is important and will help sustain the institution in the short-term, our reputation alone will be insufficient to ensure long-term success.
- ◆ The same is true for quality and patient safety. Providing high-quality care will be necessary, but quality alone will be insufficient for future success.
- ◆ Research and education are critical to BW/F's future. Both research and education represent core contributions to our ongoing excellence, and also play a significant role in attracting clinicians, trainees, researchers, patients, and funding to the hospital.
- ◆ BW/F is committed to improving access and health outcomes for underserved populations at the local, national, and global levels.
- ◆ BW/F is highly susceptible to losing volume if we cannot reduce our cost structure and better utilize our distributed campus. It will be very difficult to replace lost volume.
- ◆ We need to improve coordination of care (or even pursue consolidation opportunities) within the BW/F system, between BW/F and the other entities within Partners HealthCare, with our network partners, and with our referring physicians.
- ◆ We need to reduce variation in clinical practice and operations.
- ◆ It is not clear precisely how reimbursement will change, but we know we will be asked to do more with fewer resources.

## OUR STRATEGIC COMMITMENTS

We aspire to transform healthcare through science, education, and compassionate care, locally and globally. As we look ahead to the next 5-10 years, we see great opportunity to fulfill this vision by committing to the following:

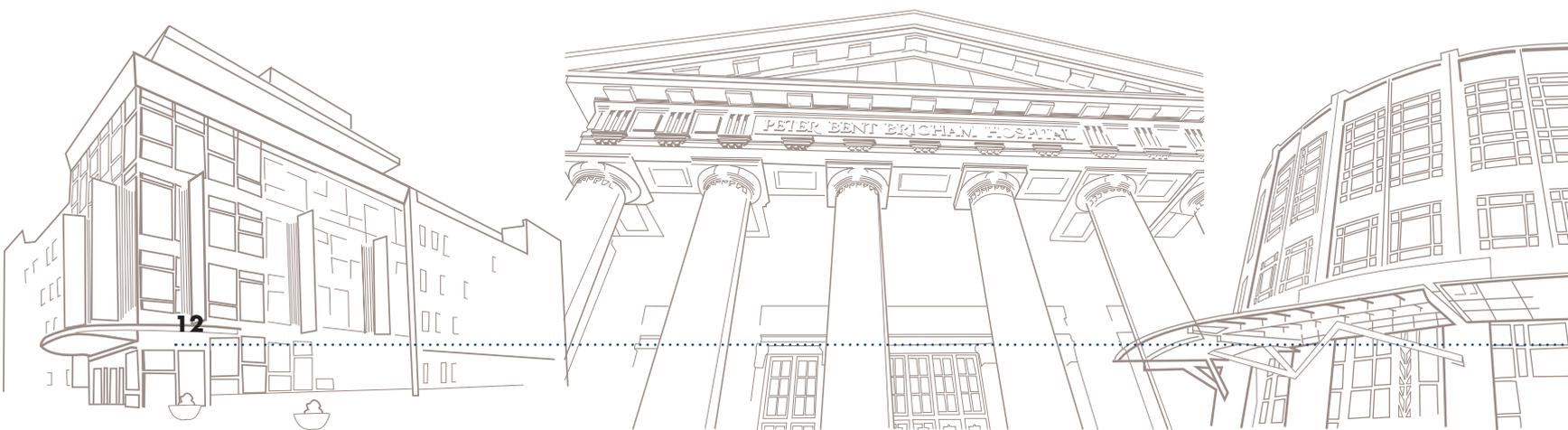
- ◆ Seamless high-quality patient- and family-centered care
- ◆ Cutting-edge innovation and discovery
- ◆ Leadership in education
- ◆ Engaged workforce
- ◆ Health equity
- ◆ Affordable care for patients
- ◆ Demonstrated excellence

On the following pages, we define each of these statements, including why we believe they are so important, and what strategies we will use to bring them to life.

# STRATEGIC COMMITMENT: **SEAMLESS HIGH-QUALITY PATIENT- AND FAMILY- CENTERED CARE**

**Create a coordinated, seamless care system that provides a reliably excellent experience to patients, families, and providers.**

**RATIONALE:** We continue to make tremendous progress in building our distributed campus, through model initiatives including the integration of Faulkner Hospital and Brigham and Women’s Hospital and our Dana-Farber/Brigham and Women’s Cancer Center. We are now at a point where we have a unique set of assets and a critical mass of success to conduct research, train the next generation of clinicians, support communities in need, and deliver patient- and family-focused care to those we serve, whether that care is preventive, acute, episodic, or chronic. Our challenge going forward is to ensure that each part of what we do can work seamlessly together—for patients and families—and all that we do is in the service of advancing our mission. The concept of a “seamless care system” cuts across everything we do, and provides opportunities for us to further strengthen our relationships with Partners entities, those institutions with which we have strategic network and community partnerships today, and other providers and institutions with which we may partner in the future.





## Strategies

- ◆ **Ensure** that patients receive the care they need (including care to maintain their health) and that they receive that care at the right time and in the right setting—right care, right time, right place.
- ◆ **Design and implement**, in concert with Partners, specific innovative care models for the evaluation, treatment, and on-going management of acute and chronic conditions by primary and specialty care providers across the seamless campus.
- ◆ **Manage** the health of patient populations by effectively stratifying patients' risk and providing special coordination and services to high-risk patients, with a particular emphasis on vulnerable populations.
- ◆ **Enable** improved integration, coordination and seamless transitions of care across all disciplines and services by optimizing navigator systems (IT and staff resources) that make it easy for:
  - ◆ patients to receive their care at BW/F and with our partnering providers and institutions;
  - ◆ educators and trainees to access resources that support their scholarly activities and patient care;
  - ◆ researchers to access available resources and collaborate and exchange information; and
  - ◆ those advancing community engagement efforts locally, nationally, and globally to better coordinate their efforts.
- ◆ **Make it easy for our referring physicians and their patients to access BW/F** by developing a best-in-class referral and access system that provides robust, seamless, customer service through one centralized access point for all BW/F services.
- ◆ **Consistently and routinely incorporate findings** from bi-directional education and research initiatives to enable the replication and dissemination of best practices in clinical care, research, education, and community and global health.

# STRATEGIC COMMITMENT: **CUTTING-EDGE INNOVATION AND DISCOVERY**

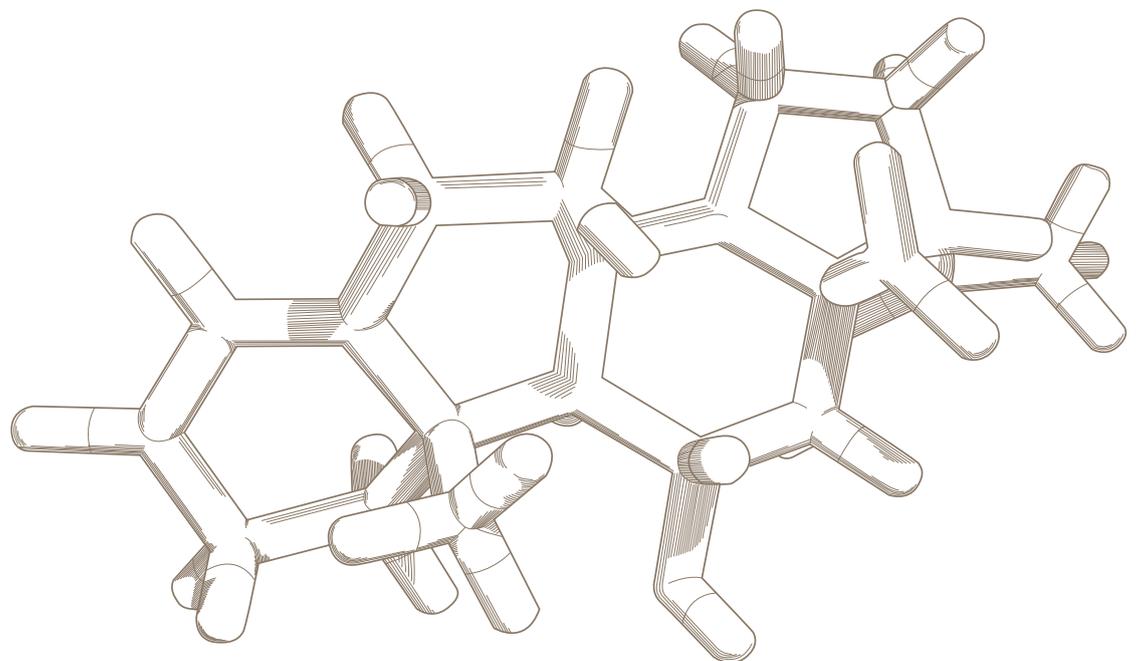
**Innovate and differentiate through research, education, clinical care, and community engagement.**

**RATIONALE:** BW/F is dedicated to expanding the boundaries of scientific and health services research and to extending our tradition of excellence in medical education to improve healthcare delivery. Innovation is at the core of our academic mission. We know the innovation and excellence that is fostered by our academic mission is something that contributes greatly to our distinctiveness. We recognize that further integrating our efforts will continue to enhance our reputation, and enable BW/F to stay at the forefront of delivering high-quality, cost-effective care.



## **Strategies**

- ◆ **Strengthen** our leadership position in translational research, covering the spectrum from basic science to population health.
- ◆ **Build** on existing strengths to establish national prominence in personalized medicine by conducting state-of-the-art clinical and translational research and developing and implementing prevention and targeted therapies based on the best evidence.
- ◆ **Promote increased multi-disciplinary research and integration with clinical care across BW/F**, with flagship opportunities in select areas, including regenerative medicine (including stem cells, tissue engineering, transplant, bioengineering), targeted therapeutics, systems (patho)biology, and systems medicine.
- ◆ **Expand** our health services research efforts to advance our expertise and culture of innovation to set new standards and milestones in healthcare delivery.
- ◆ **Commit** to and **invest** in a culture of continuous process improvement and learning across all we do.





## Strategies

- ♦ **Develop** a Brigham Education Institute (BEI), to serve as a central, cross-department resource for medical education and educators. The BEI will be led by an Executive Committee that will provide strategic guidance on BW/F-wide education issues.
- ♦ **Promote and facilitate** collaboration among educators in teaching, program development, optimal use of medical simulation, medical education research, sharing of material resources, and space to conduct specialized teaching activities and faculty development.
- ♦ **Develop and test** the comparative effectiveness of inter-professional (e.g. MD, RN, SW, RPh, etc.), team-based care models for all care settings, and adapt education models to support best practices.
- ♦ **Maximize** the leadership development of our trainees across each of our mission areas.

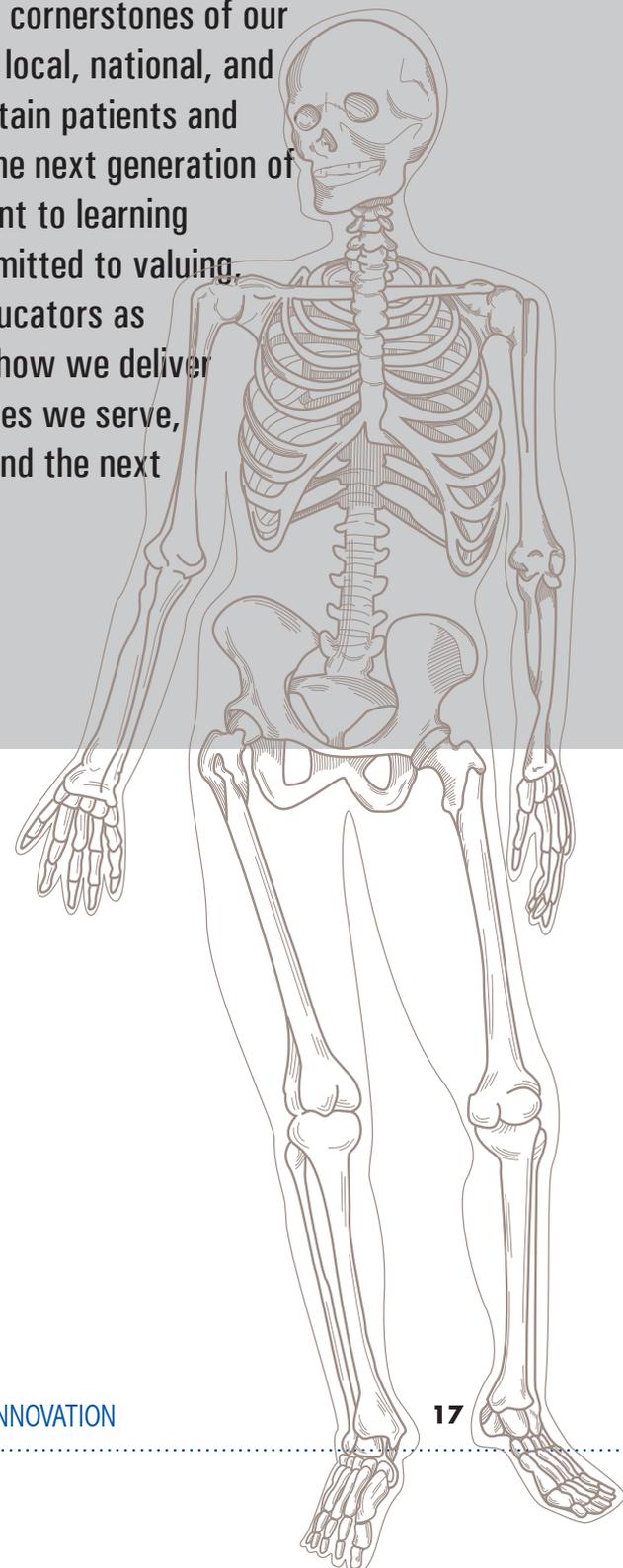


## STRATEGIC COMMITMENT:

# LEADERSHIP IN EDUCATION

**Distinguish our institution as a *learning healthcare organization*, continuing our tradition of life-long learning to attract and retain the best faculty, students, and healthcare providers and furthering our legacy of leadership in healthcare education.**

**RATIONALE:** Medical education is one of the cornerstones of our mission. It is an important contributor to our local, national, and international reputation, helps attract and retain patients and faculty, and enables us to recruit and train the next generation of physician faculty leaders. But our commitment to learning goes beyond medical education. We are committed to valuing, nurturing, supporting, and celebrating our educators as we strive to continuously learn and improve how we deliver care, promote health equity in the communities we serve, and train both current healthcare providers and the next generation of healthcare leaders.



# STRATEGIC COMMITMENT:

## ENGAGED WORKFORCE

**Partner with our workforce to build and sustain a culture of inclusion, high performance and excellence.**

**RATIONALE:** We are only as good as our employees: support staff, physicians, nurses, and staff who care for our patients, researchers who define leading-edge innovations in science and care delivery, educators who train our next generation of clinicians, and the many people who dedicate themselves to improving the health of vulnerable populations. We are dedicated to creating an environment that values, supports and respects diversity. Simply put, the employees of the Brigham and Women's/Faulkner family are our most precious resource. For this reason, we will continue to study and invest in the needs and careers of the talent we hire, train, and retain. We will engage our workforce in fulfilling their personal and professional potential, and provide them with the support and tools they need to succeed. We will develop and support a culture of inclusion that appreciates difference of perspective and identity integral to organizational excellence. In exchange, we have high expectations and standards for every employee and will hold ourselves accountable to meet our goals and shared expectations to advance our mission and the important work we do every day.

### Strategies

- ♦ **Design** innovative employee programs that create a culture of "wellness" at BW/F and optimize the health and well-being of all BW/F employees.
- ♦ **Develop** a BW/F service compact to establish shared expectations about commitments to each other that support mutual accountability and an engaged, productive, and diverse workforce. Integrate diversity of personal experience, thought and perspective in all aspects of BW/F mission and operations and commit financial and human resources to support equity and inclusion in patient care, research, teaching, service and scholarly work.
- ♦ **Create** a welcoming environment, free from bias and intolerance, where individual contributions are acknowledged and respected, productivity is enhanced, and professional potential is nurtured and achieved.
- ♦ **Recruit** and retain people who have the right attitude, aptitude and desire to achieve our mission and vision and give them the tools to achieve their full personal and professional potential.
- ♦ **Provide** staff and managers with the tools and training necessary to meet or exceed their performance expectations.



DISCOVERY AND INNOVATION



# STRATEGIC COMMITMENT:

## HEALTH EQUITY

**Promote health equity and reduce health disparities for our patients, their families, our employees, and vulnerable members of our community locally, nationally, and globally.**

**RATIONALE:** Community engagement has been a major institutional focus since our inception and remains crucial to our mission. Our commitment is demonstrated by a long-standing tradition of serving the needs of people within our own neighborhoods, as well as nationally and globally, through programs that have sought to promote wellness and health equity and efforts to reduce health disparities. We seek to expand efforts that contribute to improvements in quality of care, provide access to comprehensive care for populations in need, mitigate the social and economic determinants that contribute to poor health outcomes, and expand the evidence base for effective interventions.

### Strategies

- ◆ **Deliver** high-quality, culturally- and linguistically-competent healthcare to our patients and their families.
- ◆ **Promote** community engagement leadership and diversity by developing education and employment opportunities within local, national, and global programs for medical students, nurses, residents and fellows, other healthcare professionals, and underserved community residents.
- ◆ **Build** incentives and rewards to promote participation in community engagement, including the creation of career pathways and recognition of the value of community service through institutional policies and support.
- ◆ **Expand** community-based research efforts to measure the impact of healthcare delivery models and community-level interventions to advance our expertise and increase the knowledge base required to enable the replication and dissemination of evidence-based practices.
- ◆ **Expand** communication and integration across disparate local, national, and global programs by instituting a Community Engagement Executive Committee to ensure a coordinated approach to community engagement efforts.

## STRATEGIC COMMITMENT:

# AFFORDABLE CARE FOR PATIENTS

**Provide the most affordable care we can, through the most efficient and effective use of all of our resources.**

**RATIONALE:** As healthcare costs continue to rise, local, state, and national efforts are taking aim at reducing the overall cost of healthcare. The precise implications of reform remain to be seen, but one thing is certain—healthcare providers will be asked to do more with fewer resources. We must take targeted action to reduce our cost structure. This work goes beyond an initiative or a project. We must fundamentally change the way we think about how we use our resources—across all of our mission areas—and embrace a philosophy of stewardship in all of our endeavors. Our goal is to provide affordable care to all who need it.

### Strategies

- ◆ **Decrease** our overall costs by maximizing the use of our assets and eliminating unwarranted variation in all of our endeavors, including clinical care, research, education, and community engagement.
- ◆ **Manage** populations of patients who seek primary care at BW/F to improve health and better use limited resources to appropriately provide preventive interventions or effective disease management models.
- ◆ **Price** our services to reflect our goals of high value, affordable care delivery in concert with Partners' policies.
- ◆ **Establish** a reputation for being a high-value care delivery organization.
- ◆ **Educate** and inform patients and clinicians about the cost of care relative to outcomes.
- ◆ **Increase** the quality and optimize the size and effectiveness of training and educational programs to enhance learning for BW/F trainees and improve the efficiency of how those programs are delivered.
- ◆ **Affirm** patient affordability as a philosophy of the BW/F culture.



## STRATEGIC COMMITMENT:

# DEMONSTRATED EXCELLENCE

**Consistently define and demonstrate excellence in all we do.**

**RATIONALE:** BW/F is committed to excellence in all we do. We believe excellence is being the place where patients want to receive care; the organization researchers want to work for to foster innovation; the training ground that attracts our future clinicians, researchers, and educators; and the employer of choice for physicians, professionals, technicians, and staff in the Boston area. Our reputation was built on a spirit of excellence that has been sustained for more than a century. With increasing transparency of quality and cost data and greater pressure to provide high-quality care at a reduced cost, we have to rely on more than our reputation to attract patients, physicians, researchers, educators, and trainees. We need to demonstrate our excellence to patients, referring physicians, and payers, and, perhaps most importantly, to ourselves and to the communities we serve. The more we can learn from each other about the great work being done between and among our departments and our many partners, the greater our ability to find what works, prove it, communicate it and spread it consistently across our institution. Today and well into the future, we must demonstrate that we consistently provide high-quality, safe, affordable care.

### Strategies

- ♦ **Expect** every clinical, research, education, or community engagement activity in which we engage will meet or exceed our performance expectations. Offer appropriate support to enable success, and hold ourselves accountable where we do not excel.
- ♦ **Define** and develop metrics that matter to the people and communities we serve (patients, families, referring physicians and payers) for every activity we undertake in each of our mission areas.
- ♦ **Set standards** in quality and safety, and exceed them consistently across everything we do.
- ♦ **Identify**, spread and communicate our excellence within BW/F and beyond.
- ♦ **Assess** and improve our services on a regular basis in order to maximize value for patients.



## BRIGHAM AND WOMEN'S HOSPITAL/FAULKNER HOSPITAL

### BRIGHAM AND WOMEN'S/ FAULKNER HOSPITAL BOARD OF TRUSTEES

George Marshall Moriarty, Chair

Robert L. Barbieri, MD  
Paul M. Braverman  
O'Neil A. Britton, MD  
Margaret Duggan, MD  
Steven R. Haley  
Albert A. Holman, III  
Andres Lopez  
Joseph Loscalzo, MD, PhD  
James Manzi  
Elizabeth G. Nabel, MD  
J. Dale Sherratt  
Scott M. Sperling  
Alexander L. Thorndike  
Mary Ann Tynan  
Ron M. Walls, MD  
Rev. Gloria White-Hammond, MD  
Linda Whitlock  
Gwill York  
Michael J. Zinner, MD

### TRUSTEES EMERITI

Michael A. Bell  
Joan Cave  
Gretchen S. Fish  
John H. McArthur  
Terrence Murray  
Gerald Schuster  
Neil W. Wallace

### FAULKNER HOSPITAL BOARD OF TRUSTEES

Mary Ann Tynan, Chair

Helen Anderson  
Edward Baker-Greene  
Paul M. Braverman  
O'Neil A. Britton, MD  
Michele Courton Brown  
Arthur Cook  
Margaret M. Duggan, MD  
Michael Fee  
Gretchen S. Fish  
Patricia Galvin  
Arthur Gutierrez  
Erling Hanson, Jr.  
E. James Hutchens  
Marie-Louise Kehoe  
Pardon Kenney, MD  
Kathleen LaPoint  
Richard Larson, MD  
John Lewis, MD  
Andres Lopez  
Pamela Mason  
Nancy Mayo-Smith  
Katherine McGowan, MD  
William Mrachek  
Paul Norton  
William Phinney  
Benjamin Smith, MD  
Janet McGrail Spillane  
James Taiclet  
Robert Tarpy, MD  
Alexander L. Thorndike  
John Woodard

### EXECUTIVE LEADERSHIP/ PRESIDENT'S COUNCIL

Elizabeth G. Nabel, MD  
President, Brigham and Women's and  
Faulkner Hospitals

Allen L. Smith, MD, MS  
President, Brigham and Women's  
Physicians Organization (BWPO)

Mairead Hickey, PhD, RN, FAAN, FAHA  
Executive Vice President and  
Chief Operating Officer

Michael L. Gustafson, MD, MBA  
Chief Operating Officer, Faulkner Hospital

Stanley W. Ashley, MD  
Chief Medical Officer

James W. Asp, II  
Vice President and Chief Development  
Officer

O'Neil A. Britton, MD  
Chief Medical Officer, Faulkner Hospital

Barbara E. Bierer, MD  
Senior Vice President of Research

David W. Bates, MD, MSc  
Senior Vice President for Quality and  
Safety and Chief Quality Officer

Erin McDonough, MBA  
Senior Vice President of Communication  
and Public Affairs

Jackie A. Somerville, PhD, RN  
Senior Vice President of Patient Care  
Services and Chief Nursing Officer

Jessica Dudley, MD  
Chief Medical Officer, BWPO

William Johnston, MPA  
Chief Operating Officer, BWPO



James Bryant  
Chief Compliance Officer

Michael L. Reney, MBA  
Chief Financial Officer

Arthur Mombourquette  
Vice President of Support Services  
and Interim Vice President of  
Human Resources

David O. McCready, MBA, MHA  
Vice President, Clinical Services,  
Department of Medicine

Sharon A. Vitti, MPA  
Vice President, Women's Health  
and Ambulatory Services

Trishia S. Lichauco  
Chief of Staff, Office of the President

Judy Hayes, RN, MSN  
Vice President and Chief Nursing Officer,  
Faulkner Hospital

Wanda McClain, MPA  
Executive Director, Community Health  
and Health Equity

#### **CHAIRS**

Robert L. Barbieri, MD  
Chairman, Department of Obstetrics and  
Gynecology and Reproductive Biology

Michael A. Gimbrone, Jr., MD  
Chairman, Department of Pathology

James D. Griffin, MD  
Chairman, Department of  
Medical Oncology

Jay R. Harris, MD  
Chairman, Department of  
Radiation Oncology

Thomas S. Kupper, MD  
Chairman, Department of Dermatology

Joseph Loscalzo, MD, PhD  
Chairman, Department of Medicine

A. John Popp, MD  
Chairman, Department of Neurosurgery

Martin A. Samuels, MD  
Chairman, Department of Neurology

Steven E. Seltzer, MD  
Chairman, Department of Radiology

David A. Silbersweig, MD  
Chairman, Department of Psychiatry and  
Chairman, Institute for the Neurosciences

Thomas S. Thornhill, MD  
Chairman, Department of  
Orthopedic Surgery

Charles A. Vacanti, MD  
Chairman, Department of  
Anesthesiology, Perioperative and  
Pain Medicine

Ron M. Walls, MD  
Chairman, Department of  
Emergency Medicine

Michael J. Zinner, MD  
Chairman, Department of Surgery

#### **STRATEGIC LEADERSHIP TEAM**

Barbara E. Bierer, MD  
Jessica E. Dudley, MD  
Michael Gustafson, MD, MBA  
Mairead Hickey, PhD, RN, FAAN, FAHA  
Joseph Loscalzo, MD, PhD  
Trishia S. Lichauco  
Wanda McClain, MPA  
Erin McDonough, MBA  
Megan Murray, MD, MPH, ScD  
Elizabeth G. Nabel, MD  
Sanjay Pathak, MBA, MPH  
Michael L. Reney, MBA  
Julia Sinclair, MBA  
Allen L. Smith, MD, MS  
Jackie A. Somerville, PhD, RN  
Michael J. VanRooyen, MD, MPH, FACEP  
Sharon A. Vitti, MPA  
Anthony D. Whittemore, MD  
Michael J. Zinner, MD

#### **CLINICAL INNOVATION AND CARE REDESIGN COMMITTEE**

Mairead Hickey, PhD, RN, FAAN, FAHA,  
Chair

Allen L. Smith, MD, MS, Chair

Dale S. Adler, MD  
Vicki Amalfitano  
Stanley W. Ashley, MD  
Robert L. Barbieri, MD  
Barbara A. Bauman, RN  
O'Neil A. Britton, MD  
Martha Burke, MSW, LICSW  
William Churchill, RPh, MS  
Jonathan Coblyn, MD  
Susan Dempsey  
Jessica E. Dudley, MD  
Joseph P. Frolkis, MD, PhD  
Michael L. Gustafson, MD, MBA  
Omar Hasan, MBBS, MPH  
Carolyn Hayes, RN, PhD, NEA-BC  
Judy Hayes, RN, MSN  
Nancy Hickey, RN  
Joanne Hogan, RN  
Paula A. Johnson, MD, MPH  
Cynthia Kavanagh  
David O. McCready, MBA, MHA  
Karen Sax McLoughlin  
Mary Lou Moore, MSN, RN, CCRN  
Sanjay Pathak, MBA, MPA  
Angelleen Peters-Lewis, RN, PhD  
Eric Poon, MD, MPH  
Janet E. Porter, PhD  
Lawrence N. Shulman, MD  
David A. Silbersweig, MD  
Julia Sinclair, MBA  
Jackie A. Somerville, PhD, RN  
Scott J. Swanson, MD  
Thomas S. Thornhill, MD  
Joan Vitello  
Sharon A. Vitti, MS  
Susan Wheeler, MBA  
Anthony D. Whittemore, MD  
Richard D. Zane, MD  
Nikhil Wagle, MD

## COMMUNITY ENGAGEMENT

Wanda McClain, MPA  
Executive Director, Center for Community Health and Health Equity, Co-Leader

Megan Murray, MD, MPH, ScD  
Division of Global Health Equity, Co-Leader

Michael J. VanRooyen, MD, MPH, FACEP  
Department of Emergency Medicine, Division of International Health and Humanitarian Program (DIHHP), Co-Leader

Molly Steinberg, MBA, MSW  
Deland Fellow, Project Staff

Christian Arbelaez, MD  
Department of Emergency Medicine

MaryCatherine Arbour, MD  
Hospitalist, Newton-Wellesley Hospital

Heidi Behforourz, MD  
Medical Director, Phyllis Jen Center

Chip Bolman, MD  
Chief, Division of Cardiac Surgery

Martha Burke, MSW, LICSW  
Director of Social Work and Clinical Services

Mark Davis, MD  
Department of Emergency Medicine, Institute for International Emergency Medicine and Health

Matt Fishman  
Vice President for Community Health, PHS

Anne Goldfeld, MD  
Infectious Disease Division, Department of Medicine

Paula A. Johnson, MD, MPH  
Executive Director, Connors Center for Women's Health and Gender Biology

Michelle Keenan  
Center for Community Health and Health Equity

Tom Kieffer  
Executive Director,  
Southern Jamaica Plain Health Center

Anne Levine  
Vice President of External Affairs,  
Dana-Farber Cancer Institute

Shahim Lockman, MD  
Infectious Disease

Miriam Mahler, CNM, MPH  
Department of Obstetrics and Gynecology/Midwifery

Rhonda Martin, RN  
Department of Patient Care Services

Katherine McManus, RD  
Director of Nutrition and Behavior Modification,  
Department of Nutrition

Paula McNichols  
Executive Director,  
Brookside Community Health Center

Nawal Nour, MD  
Department of Obstetrics and Gynecology

Piper Orton  
Director of Women's Health Programs,  
Connors Center for Women's Health and Gender Biology

Angelleen Peters-Lewis, RN, PhD  
Executive Director, Women and Newborns Nursing and Clinical Services

Cynthia Peterson  
Administrative Director,  
Foxboro Ambulatory Site

Joe Rhatigan, MD  
Department of Medicine, GHE Residency Program Director,  
Division of Global Health Equity

Robert Riviello, MD, MPH  
Trauma, Burns and Critical Care

Selwyn Rogers, MD  
Director of Surgical Critical Care,  
General Surgical Specialties

Stephanie Rosborough, MD, MPH  
Department of Emergency Medicine,  
Director of the International Emergency Medicine Fellowship, DIHHP

Annette Rubin  
Director, Cardiovascular Wellness Division

Tom Sequist, MD, MPH  
General Medicine and Primary Care

Sonya Shin, MD, MPH  
Division of Global Health Equity

Tracey Sylven  
Director of Community Health and Benefits, Faulkner Hospital

Dinah Vaprin  
Director, Communication & Public Affairs

Sharon A. Vitti, MPA  
Vice President of Women's Health and Ambulatory Services

Lisa Whittemore, MSW, MPH  
Senior Administrator of Primary Care

## PATIENT AFFORDABILITY

Michael Roney, MBA, Chair

Mairead Hickey, PhD, RN, FAAN, FAHA, Chair

Shelly Anderson, MPM  
Stanley W. Ashley, MD  
O'Neil A. Britton, MD  
Susan Dempsey, MBA  
Michael L. Gustafson, MD, MBA  
Judy Hayes, MSN, RN  
Nancy Hickey, RN  
William Johnston, MPA  
Pardon Kenney, MD  
Edward Liston-Kraft, PhD  
Vincent McDermott  
Erin McDonough, MBA  
Arthur Mombourquette

Mary Lou Moore, MSN, RN  
Sanjay Pathak, MBA, MPH  
Janet E. Porter, PhD  
Susan Schade, MBA  
Julia Sinclair, MBA  
Jackie A. Somerville, PhD, RN  
Milenko Tanasijevic, MD  
Thomas Walsh, MBA  
Susan Wheeler, MBA  
Sharon A. Vitti, MPA  
Michael J. Zinner, MD  
David O. McCready, MBA, MHA

## EDUCATION

Barbara E. Bierer, MD, Chair  
Senior Vice President of Research

Joseph Loscalzo, MD, PhD, Chair  
Chairman, Department of Medicine

Erik K. Alexander, MD  
Director of Medical Student Education,  
Department of Medicine

Stanley W. Ashley, MD  
Vice Chairman and Residency  
Program Director, Department of Surgery

Elizabeth M. Breen, MD  
Director of Medical Student Education,  
Department of Surgery

Edmund S. Cibas, MD  
Cytology Fellowship Program Director,  
Department of Pathology

Mitchel B. Harris, MD  
Former Fellowship Program Director,  
Department of Orthopaedics

Joel T. Katz, MD  
Vice Chairman for Education and  
Residency Program Director,  
Department of Medicine

Robert W. Lekowski, Jr., MD, MPH  
Residency Program Director, Department  
of Anesthesiology

Graham McMahon, MD, MMSC  
Director of Clinician-Educator  
Faculty Development,  
Department of Medicine

Tracey Milligan, MD  
Residency Program Director,  
Department of Neurology

Stacy E. Smith, MD  
Residency Program Director,  
Department of Radiology

Debra F. Weinstein, MD  
Partners Vice President for  
Graduate Medical Education

Ruth Tuomala, MD  
Residency Program Director,  
Department of OB/GYN

## Staff Support

Christine Imperato  
Senior Director of Operations,  
Department of Medicine

Anna Mancusi, Analyst, CFAR  
Center for Applied Research

## RESEARCH

Barbara E. Bierer, MD, Chair  
Senior Vice President of Research

Joseph Loscalzo, MD, PhD, Chair  
Chairman, Department of Medicine

Elliott M. Antman, MD  
Medicine/Cardiology

Yolanda L. Colson, MD, PhD  
Surgery/Thoracic

Jill M. Goldstein, PhD  
Psychiatry

Caprice C. Greenberg, MD, MPH  
Surgery

Elizabeth W. Karlson, MD  
Medicine/Rheumatology

Susan E. Hankinson, SCD  
Medicine/Channing

Daniel J. Pallin, MD, MPH  
Emergency Medicine

Marc Sabatine, MD, MPH  
Medicine/Cardiology

Frederick J. Schoen, MD, PhD  
Pathology

Sebastian G. Schneeweiss, SM, SCD, MD  
Medicine/Pharmacy

Emily Stern, MD  
Radiology

## PRE-CLINICAL RESEARCH TASK FORCE

Richard S. Blumberg, MD, Chair  
Medicine/GI

Michael B. Brenner, MD, Chair  
Medicine/Rheumatology

Paul D. Allen, MD, PhD  
Anaesthesia

Philip L. DeJager, MD, PhD  
Neurology

Julianne Glowacki, PhD  
Orthopedics

Ron Kikinis, MD  
Radiology

Annarosa Leri, MD  
Anaesthesia

Calum A. MacRae, MD, MBChB  
Medicine/Cardiology

Tanya Mayadas-Norton, PhD  
Pathology

Cynthia C. Morton, PhD  
Obstetrics/Gynecology

Christine E. Seidman, MD  
Medicine/Cardiology

David I. Soybel, MD  
Surgery



## PHOTOGRAPH IDENTIFICATION

### FRONT COVER:

#### 1st row – From left:

J. Stephen Bohan, MD, MS, Executive Vice Chair and Clinical Director, and Michael Wilson, MD, PhD, both of Emergency Medicine; the Carl J. and Ruth Shapiro Cardiovascular Center

#### 2nd row – From left:

Nora Osman, MD, Department of Medicine, Associate Director of the Office for Multicultural Faculty Careers, Director of the BWH Office of Multicultural Affairs, and Assistant Clerkship Director for Internal Medicine; BWH surgery resident Evan Matros, MD, Elof Eriksson, MD, Chief of the Division of Plastic and Reconstructive Surgery, Bohdan Pomahac, MD, Director of Plastic Surgery Transplantation and Director of the Burn Center, and Julian Pribaz, MD, Plastic Surgery

#### 3rd row – From left:

A newborn in the BWH NICU; Terri McNeil, BSN, RN, with a patient; 15 Francis Street entrance

#### 4th row – From left:

Pamela Flatley, Molecular Technician, Center for Advanced Molecular Diagnostics; Jacqueline Chasse, BSN, RN, with a patient; Colleen Feltmate, MD, Obstetrics and Gynecology

5th row – Roger Russell, MD, Anesthesiology, Perioperative and Pain Medicine, and a patient in Haiti

6th row – Antonio R. Gargiulo, MD, and Serene Srouji, MD, both of Obstetrics and Gynecology and the Center for Reproductive Medicine

Page 1: BWH President Elizabeth G. Nabel, MD

#### Page 3 – From left:

Emergency Medicine's Michael Wilson, MD, PhD, resident Shada Rouhani, MD, J. Stephen Bohan, MD, MS, Executive Vice Chair and Clinical Director, and resident Ken Bernard, MD

Page 5 – Minerva Bonifacio, Patient Care Assistant, and a patient

Page 7 – Endris Asfaw, Molecular Technician, Center for Advanced Molecular Diagnostics

Page 9 – Rachael Maiocco, Physical Therapist, with a patient in the Dominican Republic as part of Operation Walk

Page 13 – Hilda Gallegos-Dargon, RN, Case Manager and Certified Diabetes Educator, Brookside Community Health Center, and Fidencio Saldana, MD, BWH and Faulkner cardiologist

Page 15 – Amelia Lindgren, Research Assistant, Center for Advanced Molecular Diagnostics

Page 16 – James M. Kirshenbaum, MD, Director of Acute Interventional Cardiology and Co-Director, Clinical Cardiology Services, during multidisciplinary morning rounds

#### Page 19 – From top:

Patricia Fuller Murray, Certified Unit Coordinator, who benefited from a BWH Workforce Development program, with BWH Career Coach Amy Zydanowicz; BWH employees at the 2011 Partners in Excellence event

#### Page 20 – From top:

Wanda Lopez-Rodriguez, MD, Newborn Medicine, with a patient at Brookside Community Health Center; Doug Tewodrose, a Boston public high school student in the Center for Community Health and Health Equity's Student Success Jobs Program, and Carol Poskay, Pharmacy Services intern and Northeastern student; Paul Farmer, MD, PhD, Chief, BWH Division of Global Health Equity, caring for a patient in Haiti.

Page 23 – Audra Robertson, MD, MPH, Obstetrics and Gynecology, with a patient.

Page 25 – From top: in the BWH AMIGO suite (Advance Modality Image Guided Operating), Dan Kacher, MS, Clinical Engineer, and Janice Fairhurst, RT (MR), Chief MRI Technologist; Prem Shekar, MD, Cardiac Surgery, with a patient.

#### Page 27 – From top:

Steven Lee Chang, MD, MS, Urology, at Faulkner Hospital; Practice Assistants Amanda O'Brien and Katelyn Sankey, and Patricia Coffey, Patient Access Coordinator, at Brigham and Women's/ Mass General Health Care Center in Foxborough

Page 31 – Wilma Frieson-Gaskin, RN, Care Coordination, and Pavel Nelyubin, RN

Inquiries and additional copies:

Office of Communication  
& Public Affairs  
Brigham and Women's Hospital  
321 Columbus Avenue, 5th Floor  
Boston, MA, 02116  
Telephone: 617-534-1600

© 2012  
Brigham and Women's Hospital  
All rights reserved.

Discovery and Innovation:  
Working Together to Provide Superior Healthcare  
was produced by the Office of Communication  
& Public Affairs at Brigham and Women's Hospital.

Elizabeth G. Nabel, MD  
President, Brigham and Women's and Faulkner Hospitals

Erin McDonough, MBA  
Senior Vice President of Communication & Public Affairs

Dinah Vaprin, Director of Communication & Public Affairs

Editorial: Gillian Buckley  
Design: Heidi Price Design  
Photography: Tony Rinaldo Photography



BRIGHAM AND  
WOMEN'S HOSPITAL



FAULKNER HOSPITAL  
Brigham and Women's Health Care