

The Brigham and Women's Hospital, Inc. Institutional Environment

1. **Description of Institutional Environment**

Brigham and Women's Hospital is a world-class academic medical center based in Boston, Massachusetts. The Brigham serves patients from New England, across the United States and from 120 countries around the world. A major teaching hospital of Harvard Medical School, Brigham and Women's Hospital has a legacy of clinical excellence that continues to grow year after year.

The Brigham is a part of Brigham Health, which includes 1,200 doctors throughout New England working across 150 outpatient practices. An international leader in virtually every area of medicine, Brigham Health has led numerous medical and scientific breakthroughs that have improved lives around the world.

U.S. News & World Report ranks Brigham and Women's Hospital among the best hospitals in many specialty areas, including cancer, cardiology and heart surgery, diabetes and endocrine disorders, ear, nose and throat, gastroenterology and GI surgery, geriatric care, gynecology, nephrology, neurology and neurosurgery, orthopedics, pulmonology, rheumatology, and urology.

Brigham and Women's Hospital is part of [Mass General Brigham](#), a single, integrated health care system that consists of 16 member institutions that encompass a range of health care organizations. In addition to our academic medical centers, these include top-tier specialty hospitals, community hospitals, a rehabilitation network, a health insurance plan, a physician network, a teaching organization and many locations for urgent and community care.

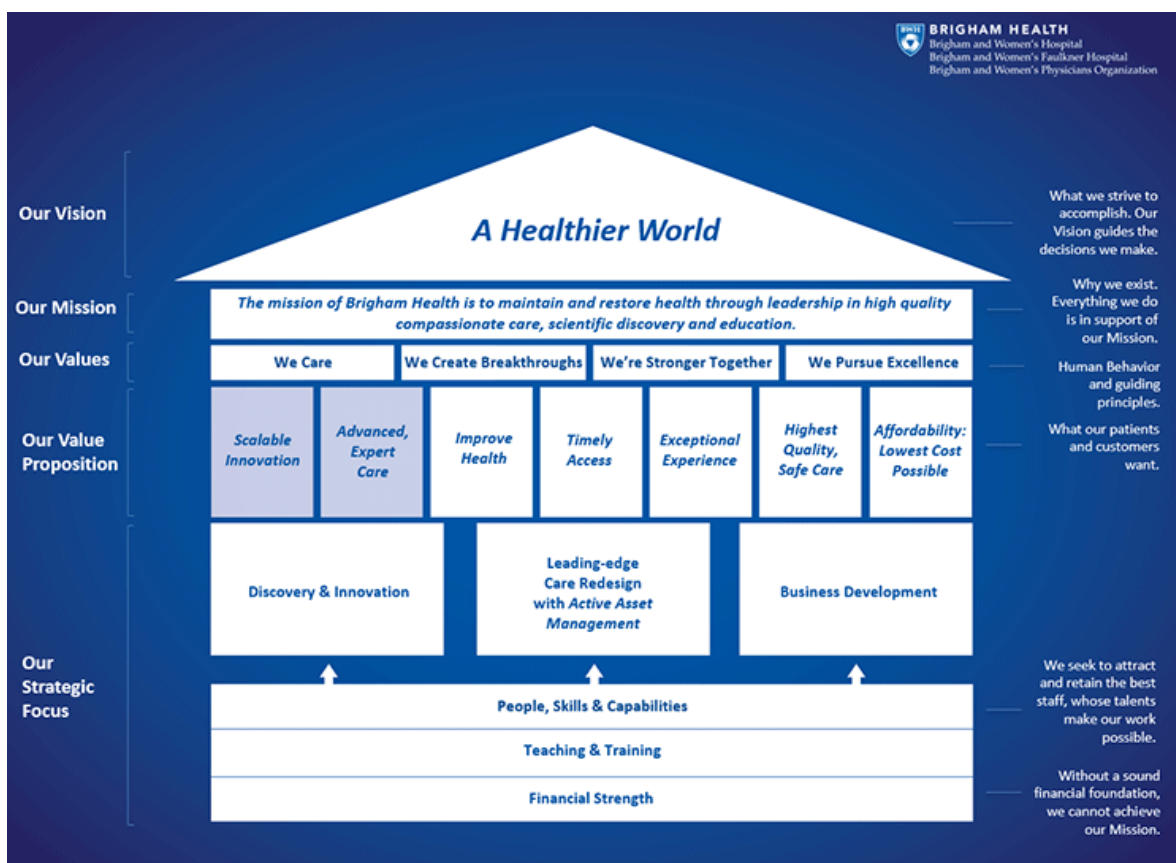
Mass General Brigham was formerly known as Partners HealthCare when it was founded in 1994 by Brigham and Women's Hospital and Massachusetts General Hospital. With the recently adopted Mass General Brigham name, we aspire to more closely connect with patients and communities. Working together as one system, our health care organizations can leverage their collective expertise, resources and compassion to better serve patients and the community.

Throughout Brigham Health, every decision made is guided by a vision of a healthier world, and delivered through its mission of maintaining and restoring health through leadership in compassionate care, scientific discovery and education.

To deliver on our mission, there are five essential elements that we must provide to our patients and their families: (1) improve health, (2) provide timely access, (3) deliver an

exceptional patient service experience, (4) provide highest-quality and safe care, and (5) deliver care at the lowest possible cost. What makes the Brigham stand out among our peer institutions is our commitment to creating scalable innovation and delivering the most advanced, expert care. These two areas are what we believe set Brigham Health apart – the highly specialized and individual care we offer in all settings, from an exam room to a virtual visit or in an ICU receiving highly specialized, compassionate care; and the remarkable discoveries and innovations that improve our understanding, prevention and treatment of diseases.

At the foundation of all we do are two crucial components of success: an environment that attracts, supports and retains the best staff; and financial strength.



The [BWH Research Institute \(BRI\)](#) is one of the most powerful biomedical research institutes in the world and the second largest recipient of National Institutes of Health (NIH) funding among independent hospitals in the United States. With over \$640 million in total research funding and over 1,000 principal investigators, BWH has long had great success in research as measured by the number of important discoveries made, the size and scope of its research portfolio and the volume of publications annually.

BWH is a training ground for physicians, nurses, and allied health professionals. We have 1,100 trainees in over 140 of the most sought after training programs in the world, and also host Harvard Medical School students in rotations throughout our programs. As our global health services expand, our clinical trainees have rich opportunities to contribute and learn in challenging environments around the world.

Brigham Health Mission Statement:

The mission of Brigham Health is to maintain and restore health through leadership in high quality compassionate care, scientific discovery, and education.

2. Operations

Brigham and Women’s Hospital (BWH) is a 793-bed nonprofit teaching affiliate of Harvard Medical School and a founding member of Partners HealthCare, an integrated health care delivery network. BWH is the home of the Carl J. and Ruth Shapiro Cardiovascular Center, the most advanced center of its kind. BWH is committed to excellence in patient care with expertise in virtually every specialty of medicine and surgery. The BWH medical preeminence dates back to 1832, and today that rich history in clinical care is coupled with its national leadership in quality improvement and patient safety initiatives and its dedication to educating and training the next generation of health care professionals. Through investigation and discovery conducted at its Biomedical Research Institute (BRI), BWH is an international leader in basic, clinical and translational research on human diseases, involving more than 900 physician-investigators and renowned biomedical scientists and faculty supported by more than \$485 M in funding. BWH is also home to major landmark epidemiologic population studies, including the Nurses’ and Physicians’ Health Studies and the Women’s Health Initiative.

Identification and Characteristics (FY20)

Name and Address:	The Brigham and Women’s Hospital, Inc. 75 Francis Street Boston, MA 02115-6110
Telephone Number:	617-732-5500
Hospital Website:	www.brighamandwomens.org
CMS Certification Number:	220110
Type of Facility:	Short Term Acute Care
Type of Control:	Nonprofit with 501c3 Status
Tax Exempt Status:	501(c)(3) described under 509(a)(1), specifically 170(b)(1)(A)(iii)(Hospital)

Federal ID. Number (EIN):	04-2312909
Total Staffed Beds:	804
Total Patient Revenue:	\$7,630,150,336
Total Discharges:	42,328
Total Patient Days:	280,628
Verified Trauma Program Type:	Level I Trauma Center
Joint Commission Accreditation:	12/08/2018 - Accreditation with Full Standards Compliance
Teaching Status:	Major teaching hospital; affiliated with Harvard Medical School; member of the Council of Teaching Hospitals and Health Systems (COTH)
Number of interns and residents:	548 Full-time employees

HOSPITAL (including swing beds)

Routine Services:	658 beds; 218,780 inpatient days
Special Care:	146 beds; 46,848 inpatient days
Nursery:	15,000 inpatient days
Total Hospital:	804 beds; 280,628 inpatient days

3. Clinical Services

Cardiovascular Services

- Cardiac Cath Lab
- Cardiac Rehab
- Cardiac Surgery
- Carotid Stenting
- Coronary Interventions
- Electrophysiology
- Vascular Intervention
- Vascular Surgery

Emergency Services

- Emergency Department

Neurosciences

- Electroencephalography (EEG)

Oncology Services

- Chemotherapy
- Radiation Therapy

Organ Transplant (Medicare certified)

- Heart Transplant (06/20/1987)
- Kidney Transplant (06/20/1980)
- Liver Transplant (08/19/1996)
- Lung Transplant (08/19/1996)
- Pancreas Transplant (06/20/1980)

Orthopedic Services

Arthroscopy
Joint Replacement
Spine Surgery

Other Services

Hemodialysis
Obstetrics

**Radiology / Nuclear Medicine /
Imaging**

Computed Tomography (CT)
Computed Tomography-Angiography
(CTA)
Digital Mammography
Intensity-Modulated Radiation
Therapy (IMRT)
Magnetic Resonance Angiography
(MRA)
Magnetic Resonance Imaging (MRI)

Positron Emission Tomography
(PET)
Single Photon Emission
Computerized Tomography (SPECT)

Rehabilitation Services

Physical Therapy

Special Care

Coronary Intensive Care (CCU)
Surgical Intensive Care (SICU)

Surgery

Inpatient Surgery
Radiosurgery
Robotic Surgery

Wound Care

Wound Care

4. Brigham Research Institute (BRI)

Our science, communication and funding are completely intertwined; each piece of the puzzle plays an equal role in the BRI's overall success. We are constantly making progress in all of these areas by setting up a staff and infrastructure that reflects our mission. In the near future we hope to gain more resources as well as more space for research at BWH, in order to plan strategically to advance monumental and life changing collaborations. The BRI supports all investigators and all research, and strives to support a culture of innovation and discovery. At BWH, science is part of the cure.

Launched in 2005, the BRI's overarching mission is to accelerate discoveries that improve human health; supporting strategies include fostering groundbreaking, interdepartmental, and interdisciplinary research, ranging from basic fundamental studies to clinical innovations. The BRI strives to provide a clear voice (internally and externally) for the entire BWH research community, raise the profile of research at BWH, develop mission-centric collaborations with external entities and engage the scientific community in fundraising.

Strategies:

- Foster groundbreaking, interdepartmental, and interdisciplinary research
- Provide a clear voice, both within and beyond the hospital, for all BWH researchers
- Raise the profile of research at BWH
- Develop mission-centric collaborations with external entities
- Engage the scientific community in fundraising

5. *BRI Research Oversight Committee (ROC)*

The BRI is governed by the ROC which is made up of the BRI Executive Committee, department chairs or their representatives, BRI Center and Program Co-Chairs, elected members and various BWH/Partners leaders and ad hoc members. The ROC was established to foster transparency and accountability in the decision-making process for the research enterprise and to plan new strategic initiatives; the composition of the ROC is intended to collectively reflect the diversity of the BWH research community.

Research entities that are distinct from Hospital departments may request representation on the ROC by sending a brief statement of interest to BWHBRI@partners.org.

6. *BRI Research Centers*

The Brigham Research Institute (BRI) research centers were designed to enhance, synergize, and stimulate interdepartmental and individual research at Brigham and Women's Hospital. The centers bring scientists together to develop collaborative research initiatives not tenable by individuals and single departments alone.

The BRI's 10 disease-focused research centers are supported by four resource and technology-based programs, which provide tools applicable across the scientific disciplines. Together, this infrastructure encourages communication and interactions among scientists and clinicians and facilitates opportunities for clinical, translational, and basic research.

Centers & Programs

- Cancer
- Cardiovascular,
- Diabetes & Metabolic Disorders
- Lung
- Genomics
- Infectious & Immunologic Diseases
- Women's Health
- Regenerative Medicine
- Musculoskeletal
- Neurosciences
- Patient-Centered Outcomes & Comparative Effectiveness

The BRI supports our research community by sponsoring and co-sponsoring events, including Discover Brigham, leadership retreats, industry liaisons, scientific symposia and poster sessions; BRI has hosted >400 events .

The BRI provides a voice for BWH scientific community and works to bring greater visibility to BWH Research and has built >250 websites for PIs, studies and centers

The BRI has strong governance and provides transparency and representation; the Research Oversight Committee has met >100 times and six senior faculty members have served as BRI Director

The BRI supports communication projects in collaboration with other BWH departments, including the research connection email & LIVE lunch series, the research navigator portal and the research pages on Brighamandwomens.org

Science: In science we bring together individuals across departments, who would not have been connected otherwise, such as researchers and physicians in a wide variety of disciplines. Our culture, which involves a large exchange of information within the hospital, has created a collaborative and innovative environment for our researchers and community at BWH. In order to effectively connect people, the BRI contains 10 research focused centers that are open to any researcher in this area looking to form collaborations and develop their work through seminars, symposia, funding opportunities and other resources. The incredible scientific research happening at the Brigham on a daily basis creates a unique and powerful collaboration among researchers and clinicians.

Communication: Communication within the Brigham community and visibility among the rest of the world is important to the BRI. We are constantly developing our infrastructure, expanding our online presence and raising the visibility of the research enterprise associated with the Brigham and Women's reputation. We have become a world renowned institution and intend to live up to those standards. The BRI strives to drive collaboration between the Brigham and among the rest of the world.

Funding: In terms of funding, we have been diversifying our funding portfolio extensively. Proportionally, the BWH's NIH funding has decreased; we have recently established other funding sources (philanthropically, VC funding) which have had big implications on indirect cost for the institution.

7. Cores and Consultation Services at BWH/BRI

Core facilities provide high quality, cutting edge research services by our in-house experts and constitute a major educational resource for our growing research enterprise. To view all core facilities at MGB (inclusive of BWH and MGH facilities) visit the [MGB Core Facilities web site](#).

Antibodies

- BWH-BRI Antibody Core Facility

Cell Culture

- Cell Culture and Microscopy Core
- Clinical Research
- Center for Clinical Investigation (CCI)
- Circulating Tumor Cell Core

- Tissue and Blood Repository
- Research Patient Data Registry

DNA Sequencing

- DNA Sequencing Core

Flow Cytometry

- Flow Cytometry Core

Imaging

- BWH Research Imaging Core
- CCI Translational Technology Research Program
- Harvard Catalyst Imaging Consulting Program
- SAIL Preclinical Imaging Core
- Tumor Imaging Metrics Core

Microscopy

- Cell Culture and Microscopy Core
- Confocal Microscopy Core

Pre-Clinical/Surgical Facilities

- Transgenic Core

Quantitative/Analysis

- CCI Biostatistical Consulting Services

Tissue/Blood/Clinical Specimen

- Cohort Biorepository
- CCI Laboratory and Specimen Processing
- Tissue and Blood Repository
- Research Patient Data Registry

Other Service Cores

- BWH Sleep and EEG Core
- CFAR Virology Core
- MGB Research Computing Cloud and Database Services
- MGB Research Computing High Performance Computing

8. *Biomedical Research by Department*

- Anesthesiology, Perioperative and Pain Medicine
- Cardiac Surgery
- Center for Neurologic Disease (Basic Neuroscience Research)
- Center for Personalized Genetic Medicine
- Cognitive and Behavioral Neurology

- Dermatology
- Emergency Medicine
- Epilepsy and Sleep Neurology
- General and Gastrointestinal Surgery
- General Neurology
- Headache and Pain
- Medical Physics and Biophysics
- Medicine
 - Aging
 - Allergy and Clinical Immunology
 - Cardiovascular Medicine
 - Channing Division of Network Medicine
 - Endocrinology, Diabetes, and Hypertension
 - Engineering in Medicine
 - Gastroenterology, Hepatology, and Endoscopy
 - General Internal Medicine and Primary Care
 - Genetics
 - Global Health Equity
 - Hematology
 - Infectious Diseases
 - Medical Communications
 - Medical Oncology
 - Palliative Medicine
 - Pharmacoepidemiology and Pharmacoeconomics
 - Preventive Medicine
 - Pulmonary and Critical Care Medicine
 - Renal Medicine
 - Rheumatology, Inflammation, and Immunity
 - Sleep and Circadian Disorders
 - Women's Health
- Movement Disorders
- Multiple Sclerosis and Neuro-Immunology
- Neurology
- Neuro-Critical Care
- Neuro-Oncology
- Neuro-Ophthalmology
- Neuromuscular Disease
- Neurosurgery
- Obstetrics and Gynecology
- Ophthalmology
- Oral Medicine & Dentistry
- Orthopaedic Surgery
- Otolaryngology

- Pathology
- Pediatric Newborn Medicine
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Psychiatry
- Radiation Oncology
- Radiology
- Stroke and Cerebrovascular
- Surgery Research
- Surgical Oncology
- Thoracic Surgery
- Translational Medicine
- Transplant Surgery
- Trauma, Burn, and Critical Care
- Urology
- Vascular Surgery