The Master in Clinical Service Operations (MCSO) program provides physicians, clinicians, nurses, allied health professionals and administrators with the operations management training they need to lead teams, optimize efficiency and improve the patient experience. Designed with working professionals in mind, MCSO is an intensive, 36-credit residential program that can be completed in nine months with the full-time option or in two years with the part-time option.

Through a blend of traditional teaching methods and novel learning approaches, the program incorporates innovative case studies, hands-on simulations and a comprehensive capstone project in clinical operations at a Harvard Medical School-affiliated hospital.

Given the rapid change across all sectors of health care, the importance of formal training in operational aspects of health care has never been more critical. Health care organizations require high-performing, collaborative teams that can work together seamlessly to deliver value-based care, ensure patient satisfaction and achieve better outcomes.

In this complex environment, health care leaders must be able to navigate multidisciplinary service lines and new platforms that underpin “the DNA” of every health care operation—from electronic medical records, real-time accounting systems and just-in-time delivery of materials to a highly specialized workforce and artificial intelligence–driven technology at the bedside.

As patients and families increasingly focus on value, efficiency and supportive care services, leaders must also be skilled at implementing and refining patient-centered programs. The MCSO program equips students with the clinical operations skillset and knowledge that are essential to leading health care organizations through transformational change in the United States and internationally.
Who Should Apply

The Master in Clinical Service Operations program is designed for health care professionals and administrators who aspire to leadership positions in operations management.

Applicants should hold an advanced degree, such as an MD, PhD, BSN or MBBS. Typical applicants have at least five years of clinical experience or requisite work experience in a clinical setting. Applications will be considered based on a combination of experience and education.

Ideal candidates include:
- Administrators
- Advanced practice clinicians
- Allied health professionals
- Clinical leaders
- Clinicians
- Medical directors
- Nurses
- Physicians

Students accepted into the program must demonstrate, through grades and performance in graduate level training, the potential to learn effectively in a rigorous educational environment.

APPLICATIONS DEADLINES AND TUITION INFORMATION

Please visit [hms.harvard.edu/cso](http://hms.harvard.edu/cso) for more in-depth application and tuition information.

The program begins on September 3, 2020.
Program Objectives

Upon completion, you will be able to:

• Improve overall clinical operations, manage operational workflows, optimize supply chains and facilitate hospital and system-wide innovation to provide value-care and an outstanding patient-centered experience.
• Build collaborative teams of multi-disciplinary stakeholders, including physicians, advanced practice providers, nurses and administrators who are well equipped to work with a hospital's corporate functions.
• Evaluate productivity and financial measures, manage operational, organizational and capital budgets, assess physician and staff compensation and understand regulatory compliance and audits.
THE LEARNING MODEL

Our innovative approach to learning incorporates both traditional and novel teaching methods. The core curriculum is designed to ensure the seamless integration of core learning objectives across modules, while simultaneously allowing students to master the practical skills to apply these important concepts in the real world. Because collaboration is critical in clinical operations, students will learn how to work in teams and develop networks.

Along with classroom work, team assignments and leadership exercises, the program features a capstone project—a mentored clinical operations experience at an HMS-affiliated hospital. In this fast-paced clinical setting, students will apply their newly acquired skills and practical knowledge as they implement, interpret, refine and present their projects throughout the academic year.
Learning Methods

SKILLS-BASED LEARNING
Students will benefit from practical experience in clinical operations. Content will be integrated across domains—clinical operations management, financial and strategic planning, resource planning, quality and safety, systems design, performance improvement and information systems integration. The theory presented in each core curriculum topic will be further integrated during complementary hands-on sessions.

These exercises include analyzing case studies, applying new skills and LEAN thinking concepts in areas such as performance improvement and modeling business and strategic plans. At simulation facilities across the Harvard affiliates, students will have the opportunity to practice skills application and scenario planning.

INTERACTIVE LECTURES
While traditional lectures are used in the core curriculum to deliver key learning objectives, the program also incorporates contemporary teaching methods, such as short lectures and associated practice sessions, as well as an innovative flipped classroom.

SEMINAR SERIES
Each seminar will focus on providing access to real-world clinical management experiences. Clinical and administrative leaders will be invited to share their career paths and students will be able to take advantage of networking opportunities. Students will gain new insights through feedback on their capstone and other projects and through a journal club, where they can research “hot topics” in clinical operations.

CAPSTONE PROJECT
A six-credit capstone project is the key component of the program. During this intensive experience, students will work with and shadow clinical operation professionals at an HMS-affiliated hospital. Focused on clinical operations, past capstone projects have included patient throughput, operational efficiency, implementation of new technology, reducing over-utilization and reducing patient wait days.

Each student will be assigned a capstone mentor and will receive a capstone report. The report will build throughout the program, with portions of the report being submitted at key milestones. Students will receive feedback from their personal mentor, peers and lecturers.
# Program Timeline

## Full-Time Schedule

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<td>Clinical Operations Management and Workflows (4 credits)</td>
<td>Effective Healthcare Resource Management (2 credits)</td>
<td>Healthcare Service Line Planning and Operations (4 credits)</td>
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<td>Financial Planning and Management in Healthcare Organizations (4 credits)</td>
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<td>Quantitative Science and Clinical Research in Healthcare Service Operations (3 credits)</td>
<td>Supply Chain Management (2 credits)</td>
<td>Integrating Technology into Healthcare Delivery (4 credits)</td>
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<td>Capstone and Practicum (3 credits)</td>
<td>Leadership and Teamwork (2 credits)</td>
<td>Creating a Learning Organization in Healthcare Settings (2 credits)</td>
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<td>Seminar Series: Real World Experience in Managing Healthcare Organizations (1 credit)</td>
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<td>Clinical Service Operations Skillet (3 credits)</td>
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## Part-Time Year 1

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# Core Courses

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<tr>
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**EVALUATION OF CAPSTONE PROJECT**

The Capstone Committee will be composed of the primary site mentor, their faculty facilitator and a program representative. A structural framework for the capstone thesis will be provided. Students must meet regularly with their Capstone Committee and submit progress reports on each occasion.
Upon successful completion of the Master in Clinical Service Operations program, graduates will be well positioned to pursue leadership roles including:

- Allied Health Director
- Administrative Director
- Advanced Practice Clinical Director
- Chief Operating Officer
- Chief Patient Experience Officer
- Clinical Operations Director
- Clinical Research Director
- Nursing Director or Manager
- Program Director
- Service-Line Director
John Kevin Tucker, MD is Medical Director of DCI Brigham/Faulkner Hospital, Director of the BWH/MGH Joint Nephrology Fellowship Program, the largest renal fellowship program in the United States and an Assistant Professor of Medicine at Harvard Medical School. Dr. Tucker has received recognition as an outstanding teacher during his tenure at the University of Alabama at Birmingham and in 2006 from the Brigham and Women's Hospital, Renal Division. Through partnering with DCI Brigham/Falkner he has managed the efforts to more fully develop ambulatory peritoneal dialysis at the Brigham and Women's Hospital. He has been a member of the American Society of Nephrology since 1996 and a member of the Training Program Directors Executive Committee since 2009. His clinical and administrative activities serve to enhance his excellence in Teaching and Education Leadership.

Mara Bloom, JD, MS has been executive director of the Massachusetts General Hospital Cancer Center since 2009. She brings passion, energy and vision to this position, as well as a commitment to keeping one of the world's great cancer centers in the global vanguard of cancer care and research. Ms. Bloom oversees clinical and research operations at all MGH Cancer Center facilities, including the main campus and all satellite and affiliate sites. Working closely with leadership across the myriad research and clinical disease centers and programs of the Cancer Center, Ms. Bloom is guiding the development of its strategic direction. Ms. Bloom has been actively involved in leading the training of operations staff at the MGH Cancer Center. An attorney by training, Ms. Bloom came to discover that health care was her calling as director of oncology services at New York-Presbyterian Hospital. Fitting about 50 meetings into a typical 60-hour workweek, she inspires and engages colleagues throughout the Cancer Center who share her desire to bring its front-line caregivers, researchers and staff the resources they need to continue providing the best patient experience and highest quality of care. Building upon the MGH Cancer Center's unique assets—including a multidisciplinary model that incorporates the latest therapies and technologies and a collaborative culture among physicians and scientists—Ms. Bloom is helping her colleagues evolve Cancer Center operations to advance next-generation paradigms of cancer care.
COURSE DIRECTORS

Clinical Operations Management and Workflows:
Ann L. Prestipino, MPH, Senior Vice President, Massachusetts General Hospital
Peter Dunn, Vice President, Perioperative Services and Healthcare System Engineering, Massachusetts General Hospital

Financial Planning and Management in Health Care Organizations:
James Heffernan, Senior Vice President, Chief Financial Officer and Treasurer, Massachusetts General Hospital Physicians Organization,
John Szum, Chief Financial Officer, CRICO

Leadership and Teamwork:
Ajay K. Singh, MD, MBBS, FRCP, MBA, Senior Associate Dean, Postgraduate Education, Harvard Medical School

Quantitative Science and Clinical Research in Health Care Service Operations:
Inga T. Lennes, MD, MPH, MBA, Senior Vice President of Performance Improvement and Service Excellence, Massachusetts General Hospital Physicians Organization
Lara Henshaw Archer, MBA, Executive Director, Ambulatory Management & Practice Improvement, Massachusetts General Hospital

Effective Healthcare Resource Management:
David O. McCready, MBA, MHA, President, Brigham and Women's Faulkner Hospital

Supply Chain Management:
Susan Dempsey, MBA, Vice President of Clinical Services, Brigham and Women's Faulkner Hospital

Integrating New Technology into Health Care Delivery:
Trung Do, MA, MBA, Vice President of Business Development, Partners HealthCare

Health Care Service Line Planning and Operations:
Susan Chapman Moss, MPH, Senior Vice President of Strategy, Partners HealthCare
Shelly Anderson, SVP of Strategy, Clinical Operations, and Imaging Services, Brigham Health

Creating a Learning Organization in Health Care Setting:
Anthony Weiss, MD, MBA, MSc, CPE, FAPA, Chief Medical Officer, Beth Israel Deaconess Medical Center

Clinical Operations Skillsets:
Gaurdia Banister, RN PhD NEA-BC FAAN Executive Director, The Institute for Patient Care, Director, Yvonne L. Munn Center for Nursing Research, Connell - Jones Endowed Chair for Nursing and Patient Care Research

Capstone & Seminar Series:
John Kevin Tucker, MD and Mara G. Bloom, JD, MS
Master in Clinical Service Operations Program

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