

MASTER OF SCIENCE IN CLINICAL SERVICE OPERATIONS



Building leading clinical service operations that save time, save money, and save lives







Message from the Program Directors

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. These include 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. This innovative program equips students with the clinical operations skillset and knowledge that are essential to lead health care organizations through transformational change in the United States and internationally.

This is a critical time for the future of health care delivery. We hope you will consider applying for this transformational learning experience.

Sincerely,

Mars Bloom

Mara Bloom, JD, MS
Vice President

<u>Massachusetts Gene</u>ral Hospital

J. Kevin Tucker, MD Vice President, Education Mass General Brigham



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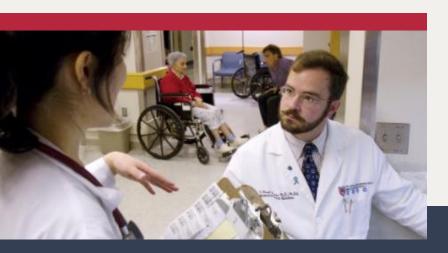
The Master of Science in Clinical Service Operations program provides physicians, clinicians, nurses, allied health professionals, industry professionals, executives, and administrators with the operations management training they need to lead teams, optimize efficiency, and improve the patient experience.

A hospital is far more than a building that houses care providers; it's a complex network of staff, physicians, patients, infrastructure, and technology. When designed and managed well, it's much greater than the sum of its parts. However, the challenge lies in how to organize a department, a hospital, or a system to ensure patients receive the best care most efficiently. How can we use data and technology to restructure service lines or to adjust processes to better connect patients with their care providers—and to build more collaborative, more engaged care teams? How can we evaluate, select, and integrate the best new technologies into our care settings?

Available in full-time (one-year) and part-time (two-year) options, this program is designed for health care professionals, industry 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 and have at least five years of clinical experience or requisite work experience in a clinical setting.

Upon completion of this clinical leadership program, you'll be able to:

- Improve overall clinical operations, foster innovation, and facilitate systemwide improvements within hospitals
- Build collaborative teams comprised of multi-disciplinary stakeholders who are proficient in engaging with a hospital's corporate functions
- Evaluate productivity and financial measures, manage budgets, and understand regulatory compliance



UPON SUCCESSFUL COMPLETION OF THIS PROGRAM, YOU'LL BE WELL-POSITIONED TO PURSUE LEADERSHIP ROLES INCLUDING:

- Administrative Director
- Advanced Practice Clinical Director
- Allied Health Director
- C-Suite Health Executives
- Chief Patient Experience Officer
- Clinical Operations
 Director
- Clinical Research Director
- Health Care Industry Director
- Nursing Director or Manager
- Program Director
- · Service-Line Director



Welcome to the community.

When you enroll in a master's program at Harvard Medical School, you join one of the world's premier learning communities. Harvard University is home to an unbelievable wealth of talent, creativity, and curiosity. We're eager to have you not only benefit from that tradition, but also contribute to it.

LEARN. EXPLORE. APPLY.

You'll study alongside peers with wide-ranging life experiences, belief systems, and perspectives as you build the skills to advance your career. To help you make the most of your experience, our faculty and staff advisers—whose ranks include some of the most respected experts in the field—provide close guidance and support at every step of the way.

Outside the classroom, Harvard hosts countless virtual and in-person events over the course

of the year that provide intellectual, academic and cultural enrichment. You will hone your professional practice through interactions with the thousands of leading clinicians and researchers in the area.

After completing your program, you'll continue to benefit from one of the greatest alumni networks in the world. Wherever your path leads, you'll always be part of Harvard's community.

Course of Study

The Master of Science in Clinical Service Operations program is designed to provide in-depth training on the core skills and knowledge required by clinical operations leaders at all levels—from running a small unit or department to leading a hospital service line or even managing an entire hospital. The curriculum covers key topics, including:

- Clinical health care operations management
- Financial planning and management in health care organizations
- Leadership and teamwork
- Quantitative science and data analytics for health care service operations
- Effective health care resource management
- Supply chain management
- Health care service line planning and operations
- Integrating new technology into health care delivery
- · Operations skillsets for clinical leaders, industry professionals, and health care executives
- Creating a learning organization in health care settings
- Value-based health care

The program also includes a seminar series in which students are exposed to real-world experiences and case studies through lectures, journal clubs, and peer capstone feedback sessions.

Finally, students complete a capstone project – an intensive, hands-on experience at their home organization.

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The program was less about theories on how to get things done and more about tangible learnings that could be applied right away. I would leave class and immediately apply those learnings in my new role at work.

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- Kristen Dulling, BSN, RN, MS Class of 2021



Learning Methods

The program's core curriculum seamlessly integrates 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.

Through classroom work, team assignments, and leadership exercises, students will complete a mentored clinical operations capstone project. 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.

KEY ASPECTS OF THE MCSO LEARNING EXPERIENCE

- Skills-based learning
- · Interactive lectures
- Group projects
- · Seminar series
- Capstone project



Program Pathways

The Clinical Operations pathway is designed for clinicians and administrators aspiring to leadership roles in clinical operations, this pathway prepares students for roles such as service line chief, administrative director, nurse director, or chief patient experience officer, and more.

The Executive Leadership pathway is designed for executive-level clinicians and administrative leaders who wish to study leadership principles. Led by senior health care leaders, students will explore topics such as health care finance, human resource management, and change management to become more effective in their professional lives. Students should have 10 years experience in a senior-level management role.

The Industry Leadership pathway is for leaders in the health care industry who seek a deeper understanding of health care dynamics and how it relates to innovation. It prepares individuals for senior roles and provides a framework to think strategically about stakeholder perspectives. Ideal for clinicians and administrators contemplating a shift to an industry role, this pathway also serves professionals in the biotech, pharmaceutical, device, manufacturing, information technology, digital health, or insurance industries who seek to expand their knowledge about clinical operations to improve product offerings or enhance innovation.

Capstone

The capstone experience, conducted at your home hospital or organization, is an operations-based project that allows you to apply the tools, strategies and methods from the program's coursework to develop a solution to a real-world problem in health care delivery. Under the guidance of an executive sponsor at your home institution, the capstone will include: researching evidenced-based best practices; collecting external and internal data; working with organizational stakeholders to understand patient and staff pain points; mapping clinical workflows; developing robust solution sets that mitigate risk; preparing comprehensive financial, staffing and capital plans; and developing implementation plans with measure and metrics to monitor outcomes. You will also have access to an HMS Advisor who will provide valuable feedback on your project.

Past capstone projects have focused on aspects of clinical operations, such as patient throughput, operational efficiency, implementation of new technology, reducing over-utilization, and reducing patient wait days.

Each student is paired with a capstone mentor and will produce a capstone report. The report evolves throughout the program, with portions of the report being submitted at key milestones. Students will receive feedback from their personal executive sponsors, capstone directors, HMS advisors, and assigned peer.

Each student is required to conduct a capstone project at their home institution.

Examples of capstone projects include:

Improving patient outcome and clinical operation by reducing the length of stay for patients who are diagnosed with congestive heart failure.

Improving Patient Flow in South City Hospital's COVID-19 Vaccination Center in Karachi, Pakistan

Establishment of a craniofacial center of excellence **Shifting transfers of** emergency department patients from the academic medical center to community hospital sites Integrated behavioral health within the medical home Electronic health record system implementation planning project for the Oncology Center at North York General Hospital, Ontario, Canada

Leading clinical operations is complex and multifaceted... today's health care leaders need advanced skill sets to effectively manage the patient experience, staffing, service lines, supply chain, and new technologies.

—Mara Bloom Program Co-Director



Harvard Medical School attracts the best and brightest faculty from all around the world. As a student in this program, you'll have access to outstanding teachers and mentors. The program faculty are drawn from Harvard Medical School and a network of nearly 12,000 faculty at our affiliated hospitals.



Who Leads the Program?



Mara Bloom, JD, MS Program Director Senior Vice President Massachusetts General Hospital



J. Kevin Tucker, MD Program Director Vice President, Education Mass General Brigham



Ann Prestipino, MHA Senior Vice President Mass General Brigham Industry Pathway Leader



Preeti Sharma, MBAProgram Manager
Harvard Medical School



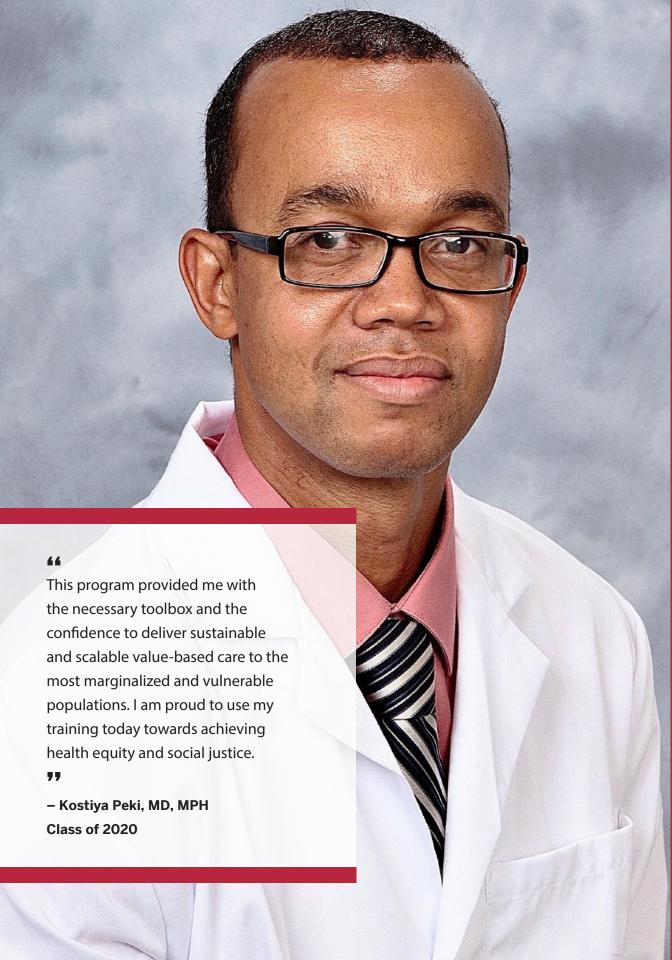
Harry W. Orf, PhD Industry Pathway Leader Life Sciences Advisor Siena Construction Corporation

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Kevin Tucker, Program Director,Master of Clinical Science Operations program







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I have gained a new level of confidence in my leadership skills and enhanced my ability to interpret complex situations. The expert faculty provided superior real-life course material that challenged me as a student and as a professional.

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- Jessica Shearman Class of 2020



LEARN MORE AND APPLY

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