

HEALTHCARE QUALITY AND PATIENT SAFETY

Degree Types: MS, MD/MS

The Master's program in Healthcare Quality and Patient Safety is designed to meet educational goals while allowing students to continue their careers or medical education, making the program accessible to medical students, clinicians, and working healthcare professionals. This program is designed for both clinical and non-clinical healthcare professionals who want to focus their career development on these important areas in health care. This 2-year, part-time program can be pursued by those living outside the Chicago area. Students travel to Northwestern University's Chicago or Evanston campuses for the classroom-based intensive sessions and complete the Capstone project remotely.

The program focuses on the knowledge, skills, and methods required for improving the systems of healthcare delivery. The topics covered include: healthcare quality context and measurement, changing systems of care delivery and healthcare redesign, healthcare disparities, accountability and public policy, safety interventions and practices, health information technology, simulation and the science of teamwork, human factors, risk assessment methods, governance, and application of leadership skills. Additionally, students learn about the external environment that shapes health policy, particularly with regard to quality and safety.

The Master of Science degree program includes nine courses and begins during the summer quarter. The core of the program consists of four, 5-day Immersion sessions, held in-person at the Chicago or Evanston campuses. In addition to these high-contact sessions, six courses enrich Immersion coursework through distance learning sessions held remotely. Synchronous, distance learning sessions for each applicable course are held one evening per week following Immersion Sessions. The nine course curriculum covers introductory topics in healthcare quality and patient safety, advanced topics in healthcare quality and patient safety, an introduction to US health systems, and fundamental methods for healthcare quality and patient safety. The curriculum also includes a business course—*The Business of Quality and Safety Improvement*—taught by distinguished faculty from Northwestern's Kellogg School of Management. The Master's program concludes with a two-quarter mentored Capstone project, in which students design, implement, and evaluate a quality or safety improvement project in their home organization and receive feedback and mentoring through group mentored sessions.

After completing this Master of Science degree, graduates will have acquired the necessary skills and knowledge to be competitive for leadership positions in healthcare and research institutions, governmental and policy bodies, and careers in academia. Graduates will be well prepared to be leaders in the next generation of quality and safety specialists, designing and implementing quality and safety initiatives across health care plans, hospitals, state and federal agencies, and voluntary organizations throughout the country.

Additional resources:

- Department website (<https://www.feinberg.northwestern.edu/sites/cehs/our-programs/healthcare-quality-patient-safety/>)

- Program handbook(s) (<https://northwestern.box.com/s/1kk5bklt74nlqs634kal50bfnrwc26ax/>)

Degrees Offered

- Healthcare Quality and Patient Safety MS (<https://catalogs.northwestern.edu/archives/2020-2021/tgs/healthcare-quality-patient-safety/healthcare-quality-patient-safety-ms/>)
- Healthcare Quality and Patient Safety MS/MD (<https://catalogs.northwestern.edu/archives/2020-2021/tgs/healthcare-quality-patient-safety/healthcare-quality-patient-safety-ms-md/>)

Healthcare Quality and Patient Safety Courses

HQS 401-0 Introduction to Healthcare Quality (1 Unit)

This course introduces students to the history, definitions, and measurement of healthcare quality. Students achieve familiarity with measurements of quality in healthcare in a variety of healthcare settings as well as with public policy drivers of quality improvement. Interactive exercises and discussions engage students in the challenges of behavior change, reliable quality measurement and quality improvement, and the role of public policy as a driver of improvement.

HQS 402-0 Introduction to Patient Safety (1 Unit)

This course introduces students to the epidemiology of patient safety and relevant theory, content, tools, and methods in the field of patient safety, including systems thinking. Patient safety problems and high-risk contexts for error occurrence are introduced. Through interactive exercises and discussion, students conduct risk assessments and learn the legal and regulatory requirements of healthcare organizational leadership. Students also consider the roles of varied healthcare stakeholders in building a safer healthcare system.

HQS 420-0 Introduction to US Health Care System (1 Unit)

Course Aims: Be able to state and explain the structure, key facts and important issues pertaining to the U.S. health system. Be able to research topics for further study by becoming familiar with the relevant literature and be able to analyze problems in this sector by understanding applicable frameworks.

HQS 430-0 Capstone Class I (1 Unit)

Students develop and implement, in a healthcare context, a focused improvement project in healthcare quality or safety. This course provides a group-mentored experiential learning opportunity to engage in the practice of healthcare quality and patient safety innovation and improvement. The Capstone Program encourages students to develop a project in areas needing substantial improvement, test their skills and leadership capacities, reach beyond their current professional roles, and imagine future leadership in quality and safety.

HQS 435-0 Capstone Class II (1 Unit)

This course is a continuation of HQS 430-0: Capstone Class I. In a group-mentored context, students continue the application of their Capstone Project and present on challenges they have encountered and how these challenges have been overcome. Students receive directed feedback to increase the potential for success of the Capstone Project and to reach their leadership goals and capacity.

HQS 440-0 Fundamental Methods for Healthcare Quality and Patient Safety (1 Unit)

Students gain working knowledge of approaches to measuring healthcare quality improvement patient safety efforts. Topics include performance measurement and methods for statistical process control assessment, emphasizing application of these techniques in local and national quality

improvement efforts. Students develop knowledge and practice skills to evaluate and use empirical knowledge in healthcare quality and safety and to critically evaluate literature-based evidence and other information disseminated with regard to national efforts.

HQS 499-0 Independent Study (0.5-1 Unit)

This course provides Healthcare Quality and Patient Safety students with an opportunity to explore an area of interest related to patient safety and quality improvement. The primary objective of the Independent Study is to facilitate the student's career advancement goals.

Prerequisites: HQS 401-0 and HQS 402-0.

HQS 501-0 Advanced Healthcare Quality (1 Unit)

Students achieve advanced familiarity and skills with definition and measurement of quality in a variety of health care settings, practice how to critique and improve measures, understand the evidence and techniques for effective improvement science, develop leadership capacity and analytic skills, and gain skills to construct a credible, coherent quality improvement plan for a healthcare organization.

HQS 502-0 Advanced Patient Safety (1 Unit)

Students achieve advanced familiarity with patient safety theory, content, and skills, including application of High Reliability Organizational principals, to develop mastery in the field. In groups, students develop and apply evidence-based safety practices to address important safety problems. Through this, students develop proficiency in applying patient safety practices, methods, and Implementation Science frameworks; develop skills in safety redesign and improvement; and develop methods for patient safety education.

HQS 510-0 The Business of Healthcare Quality and Safety Improvement (1 Unit)

This course is taught by distinguished faculty from Northwestern's Kellogg School of Management and is designed to teach organizational and management theories through which students can apply their quality and safety knowledge and skills in the context of an organization. Topical content areas covered by this course include leadership, culture, negotiations, operations, organizational behavior, leading effective teams and change management.