HEALTHCARE QUALITY AND SAFETY (HQS)

HQS 601 Introduction to Healthcare Quality
This course provides a national perspective on the history and evolution of the US healthcare quality movement and the six components for high quality healthcare: safe, timely, effective, equitable, efficient, and patient-centered. Using a mix of local and national leaders in the field, the complexities of quality and the scientific basis for understanding the measurement of quality will be explored, including exposure to quality measures from a variety of organizations and measure comparison sites and the merging of quality outcomes with evolving reimbursement paradigms and models. The association between quality and safety and healthcare economics, regulation, accreditation, information technology, and population health will also be covered.
Taught by: Neha Patel, MD, MS
Course usually offered summer term only
Activity: Lecture
1.0 Course Unit

HQS 602 Learning Health System Seminar Series
This year long monthly seminar series will provide students with knowledge and skills in the learning healthcare system. Through lecture and interactive discussions with leaders across the University of Pennsylvania, students will expand their network of resources and collaborators for the learning health care system where they work.
Taught by: Srinath Adusumalli, MD MSc
Course usually offered in spring term
Activity: Lecture
0.5 Course Units

HQS 603 Healthcare Quality Measurement
This course provides an overview of quantitative and qualitative methods for evaluating quality improvement and patient safety (QI/PS) efforts in healthcare. Through the use of assigned readings, discussion, and assignments, students will develop skills to critique evaluations of existing QI/PS projects and design a robust evaluation of a healthcare improvement initiative. Topics include the principles of good measurement, development of performance measures, intermediate and advanced concepts in statistical process control, and the research methods used in the evaluation of QI/PS interventions.
Taught by: April Taylor
Course usually offered in fall term
Activity: Lecture
1.0 Course Unit

HQS 612 Principles and Practice of Healthcare Quality Improvement
Healthcare delivery is complex and constantly changing. A primary mission of leading healthcare organizations is to advance the quality of patient care by striving to deliver care that is safe, effective, efficient, timely, cost effective, and patient-centered. The goal of this interdisciplinary professional course is to provide students with a broad overview of the principles and tools of quality improvement and patient safety in health care while also guiding them through the steps of developing a quality improvement project. It will provide a foundation for students or practicing clinicians who are interested in quality improvement and patient safety research, administration, or clinical applications. As part of this course, students will design and plan for a real quality improvement project in their area of interest within healthcare using the methods and tools taught in the course.
Taught by: Myers, Greysen
Course usually offered in fall term
Also Offered As: NURS 612
Activity: Lecture
1.0 Course Unit

HQS 640 Coaching in Quality Improvement Work
The purpose of this course is to provide participants with the skills and tools to successfully guide learners in experiential quality improvement (QI) work in healthcare while developing a network of educators with similar roles. Students will be placed into groups based upon their level of experience and confidence in teaching and advising learners in this field. Both groups will discuss topics such as QI project selection, using QI frameworks to structure teaching sessions, key organizational and team factors, providing feedback, common teacher and learner pitfalls in QI, and many others. This will be a blended course with two in-person workshops and monthly asynchronous online educational components with assignments.
Taught by: Elena Huang, MD, Jennifer Myers, MD, Neha Patel, MD, MS
Course usually offered in fall term
Activity: Hybrid Course
0.5 Course Units

HQS 650 Systems Thinking in Patient Safety
This blended online/in-classroom graduate level course integrates principles of systems thinking with foundational concepts in patient safety. Utilizing complexity theories, students assess healthcare practices and identify factors that contribute to medical errors and impact patient safety. Using a clinical microsystem framework, learners assess a potential patient safety issue and create preventive systems. Lessons learned from the science of safety are utilized in developing strategies to enhance safe system redesign. Core competencies for all healthcare professionals are emphasized, content is applicable for all healthcare providers including, but not limited to, nurses, pharmacists, physicians, social workers and healthcare administrators, and may be taken as an elective by non-majors.
Taught by: Keim, Shaw
Course usually offered in spring term
Also Offered As: NURS 650
Activity: Lecture
1.0 Course Unit
HQS 990 Quality Improvement Capstone I
The purpose of the capstone quality improvement project is to provide students with the opportunity to lead and experience each of the 5 phases of quality improvement work: Define - Measure - Analyze - Improve - Control. Although most students identify a project in the Fall semester and execute subsequent phases of the work in the Spring semester, students may choose to formally begin their project at another time. Students may change their capstone project focus with approval of the capstone director no later than one semester prior to graduation from the healthcare quality and safety certificate or masters program.
Taught by: Jessica Hart MD and Patricia Macolino RN, MSN
Activity: Independent Study
1.0 Course Unit

HQS 991 Quality Improvement Capstone II
The purpose of the Quality Improvement Capstone II Course is to provide a culminating experience in the masters program that requires the integration and application of knowledge attained in the coursework. Students will apply this knowledge through completion of a mentored quality improvement project in their healthcare organization. In collaboration with faculty and health organization advisors, students will identify a quality improvement opportunity and use improvement methodology to describe the extent of the problem, analyze the current system, design tests of change (countermeasures), implement at least two plan-do-study-act cycles, and measure results. Students will be required to write and present their work while reflecting on lessons learned and the process of change.
Taught by: Jennifer Myers MD and Kathy Shaw MD MSCE
Activity: Independent Study
1.0 Course Unit