

# HEALTHCARE QUALITY AND SAFETY (HQS)

## **HQS 6010 Healthcare Quality: Landscape, Standards, and Measurement**

This week-long hybrid course (in person + virtual online) 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.

Summer Term

1 Course Unit

## **HQS 6020 Learning Health System Seminar Series**

This 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.

Spring

0.5 Course Units

## **HQS 6030 Evaluating Quality Improvement and Patient Safety Programs**

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.

Fall

1 Course Unit

## **HQS 6060 Applied Clinical Informatics in Quality Improvement**

This intensive graduate institute applies core clinical informatics concepts in the context of quality improvement and patient safety initiatives. Content covered addresses foundational theories, frameworks, and policies of clinical informatics relevant to quality improvement and patient safety as well as practical application of informatics tools relevant to quality improvement efforts and local governance structure. Learners will be exposed to a variety of informatics leaders from across both the University of Pennsylvania Health System and Children's Hospital of Philadelphia. The course is offered in both abbreviated (0.5 CU) and comprehensive (1.0 CU) versions. Those taking the comprehensive course will have exposure to material on advanced analytics strategies and hands-on data management. A hybrid structure of in-person days with one virtual day, and optional offers hours is intended to allow flexibility for learners while maximizing beneficial interactions and active participation between learner, instructors, and building the UPHS/CHOP informatics community.

Summer Term

Also Offered As: BMIN 6060

0.5-1 Course Unit

## **HQS 6070 Safety and Quality Leadership in Healthcare Systems**

This six week hybrid course will help develop core skills for emerging leaders of safety and quality in healthcare systems. The course will include a combination of self-assessments, encounters with exemplary leaders, group exercises, individual activities and readings that will provide the participants with a range of experiences designed to further student's own leadership journey.

Summer Term

1 Course Unit

## **HQS 6080 Using Quality Improvement to Achieve Health Equity**

This course provides learners with the tools to address health and health care inequities using quality improvement methods. Learners will be able to explore the upstream causes of health and healthcare inequities including historical and current day practices rooted in racism, sexism, classism, and queer-and-transphobia, among other practices of oppression. This course explores different methods for the purposes of using them in conjunction with quality improvement (QI) frameworks to ensure health equity as a positive outcome of QI efforts. Common QI frameworks and outcome measures will be reviewed with a focus on how to use them in health equity QI work. In addition, the course includes topics of leadership and change management in order to support successful collaborations resulting in health equity. Learners will apply these themes in a final project, engaging an example of an inequitable processes or care to design a QI project with the goal of improving health equity.

Spring

1 Course Unit

## **HQS 6120 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 inter 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.

Fall

Also Offered As: NURS 6120

1 Course Unit

**HQS 6130 Principles and Practice of Healthcare Quality Improvement II**

Building on prior coursework that provided a broad overview of the principles and tools of quality improvement in healthcare, this course will provide students with in-depth knowledge of quality improvement (QI) methods, tools, and measures with a strong focus on focus on implementation and sustainment of change. Additional content includes change management, measuring for improvement, sustainment of interventions, QI scholarship, and professional development. Using assigned readings, class lectures, discussion, experiential learning, and in-class exercises, students will apply the methods and tools taught in this course to conduct a quality improvement intervention in their healthcare organization. Students will incorporate concepts related to knowledge-based care, patient-centered care and systems-minded care when developing process improvement changes. Additionally, students will reflect on knowledge gained from the application of these process improvement tools and the challenges of implementing changes in a healthcare organization. This is a hybrid course with virtual and in person components.

Spring

Also Offered As: NURS 6950

1 Course Unit

**HQS 6400 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 three in-person workshops and monthly asynchronous online educational components with assignments.

Fall

0.5 Course Units

**HQS 6500 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.

Spring

Also Offered As: NURS 6500

1 Course Unit

**HQS 9910 Quality Improvement Capstone**

The purpose of the quality improvement capstone course is to provide a culminating experience in the master's program that requires the integration and application of knowledge attained in prior coursework. Students will build on the skills obtained throughout the master's program while continuing to lead and experience cycles of improvement work while measuring their results. Students will be required to write a final report and deliver an oral presentation for this course.

Fall, Spring, and Summer Terms

Also Offered As: NURS 6960

1 Course Unit