

## Academic Organizations Using the IHI Open School Online Courses

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### **A.T. Still University**

Organization type: School

Location: Kirksville, MO, USA

Discipline(s) participating: Medicine

Audience: Students, Residents

Key contact: Kent Campbell, DO, Associate Dean for Academic and Clinical Educational Affairs

Start date of program: July 2012

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of Program: ATSU-KCOM requires all third year medical students to complete the on-line modules for the Basic Certificate as part of their Health Systems and Communication Assessment grade.

### **Al-Azhar University**

Organization type: School

Location: Tanta, Algharbia, Egypt

Discipline(s) participating: Pharmacy

Audience: Residents

Key contact: [Fatma Mokhtar, Professor](#)

Start date of program: June 2013

Required for graduation or elective: Required

Courses included: Select courses

### **Alexandria Technical and Community College**

Organization type: School

Location: Alexandria, Minnesota, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Barbara Lenarz, ADN Program Director](#)

Start date of program: Fall 2013

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: As part of the associate degree nursing program, faculty use the Open School courses to enhance clinical experiences.

### Alfaisal College of Medicine

Organization type: School  
Location: Riyadh, Saudi Arabia  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Amal Saadallah, Head of Safety & Quality](#)  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Medical students who are interested in taking up improvement or research projects at the hospital are required to take:

MHO 101: Achieving Breakthrough Quality, Access, and Affordability  
PS 102: Human Factors and Safety  
PS 100: Introduction to Patient Safety  
PS 103: Teamwork and Communication  
QI 103: Measuring for Improvement

Additional information/feedback from participants: "Our Chapter is still in its formation phase with five student members," says Saadallah. "One of the students is enrolled in an in-depth training toward taking a project."

### Anne Arundel Community College

Organization type: School  
Location: Arnold, MD, USA  
Discipline(s) participating: Physician Assistant  
Audience: Students  
Key contact: [Jo Bondy, Program Director](#)  
Start date of program: March 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The school is using select courses across its curriculum, including population health, patient safety, communication, and quality improvement.

### Appalachian State University

Organization type: School  
Location: Boone, NC, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Jessica Curtis, Student](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate



Summary of program: The Open School courses are used within a course about the fundamental theories and principles of quality management and performance improvement in US health care organizations. The course instructs students on techniques and tools currently used by health care organizations to monitor and improve the quality of their clinical and administrative functions. The course also instructs students regarding leadership and management approaches, and skills necessary to promote a culture of quality in a health services organization.

### **Armstrong Atlantic State University**

Organization type: School  
Location: Savannah, GA, USA  
Discipline(s) participating: Health Services Administration  
Audience: Students  
Key contact: [Janet Buelow, Professor](#)  
Start date of program: 2011  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: In 2011, Buelow decided to assign all the courses so students could get their Basic Certificate. (She assigns the courses in sections throughout the semester and uses cases in between. This is so they can apply the tools as learned.) The IHI Basic Certificate of Completion is required in mandatory quality management courses for both undergraduates and graduates in health services administration programs. "The students not only enjoyed and learned a great deal, but also felt great about getting an IHI certification for their CVs," Buelow says.

Additional information/feedback from participants: "I believe we may be the first health administration program to require the certification, but have no doubt that others will soon be requiring," Buelow says. "The undergrad students apply the tools to cases and the grad students take on real quality improvement projects at local hospitals."

### **Aultman Hospital**

Organization type: Hospital  
Location: Canton, OH, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [John Sutton, Associate Director of Medical Education](#)  
Start date of program: July 2012  
Courses included: Select courses

Summary of program: Resident programs at Aultman (IM, OB, FM, Radiology and Transitional) were struggling with meeting the Residency Review Committee requirements for quality improvement education. Selected lessons from the Open School were assigned to all incoming PGY 1 residents regardless of specialty, and will meet with Sutton twice this year to debrief and participate in a mock RCA. Residents will also develop three questions using the Model for Improvement about an issue they want to improve over the next years of training at Aultman.

Additional information/feedback from participants: "Those who have completed lessons find them valuable, although many have barely begun," says Sutton.

### Augustana College

Organization type: School  
Location: Sioux Falls, South Dakota, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Janet Philipp, Professor and Chair](#)  
Start date of program: 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The IHI Open School Courses are integrated throughout the nursing curriculum. There are 50-55 students in each course. In addition to using the modules, which are discussed in group settings, students utilize a textbook and articles. Here's a crosswalk of how the courses are integrated:

N200 Introduction to Professional Nursing: PFC 101, PS 100, PS 102, PS 103, QI 101  
N340 Therapeutic Nursing Skills Lab for first nursing theory and clinical course: PS 103  
N441 Adult Health Nursing II (senior course): PS201 - students were assigned to the website and looked at scenario through the lens of a nurse and family member.  
N450 Perspectives in Professional Nursing (senior research course): PS 104, QI 101, QI 102, QI 103  
N451 Leadership in Professional Nursing: L 101, PS 103, PS 106, QI 105, QCV 101  
Additional information/feedback from participants: "The South Dakota IHI Open School Chapter has developed the South Dakota Deans' Forum," says Philipp. "This provides a way for deans and faculty from multiple disciplines in several South Dakota schools to discuss the implementation of IHI Open School courses and more ways to connect our programs. Changes to the curriculum will be made based on student feedback."

### Baker College

Organization Type: School  
Location: Auburn Hills, MI, USA  
Discipline(s) Participating: Nursing (Fundamentals Course)  
Audience: Students (Associates Degree)  
Key Contact: [Sharon Heskitt, Associate Professor](#)  
Start Date of Program: 2016  
Courses Included: Select Courses  
Required for Graduation or Elective: Required

### Baptist College of Health Sciences

Organization type: School  
Location: Memphis, TN, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Ivy Anderson, Assistant Professor](#)  
Start date of program: August 2011

Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: In an effort to meet the outcome of one particular course -- to discuss quality and safety concepts to provide an environment that enhances optimal level of care -- learners are required to complete PS 106: Introduction to the Culture of Safety.

### **Bassett Healthcare**

Organization type: Integrated Health System  
Location: Cooperstown, NY, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Edward Bischof, Medicine Residency Program Director](#)  
Start date of program: June 2012  
Courses included: Select courses

Summary of program: This academic year, Bassett began a program of assigning specific IHI modules for the residents to complete on a monthly basis during their educational time. It is too early to determine the success of the program. Bassett is also going to be using the IHI modules for a core group of faculty interested in developing expertise in quality and safety. Hopefully, this faculty would eventually participate in resident education.

### **Baylor College of Medicine**

Organization type: School  
Location: Houston, TX, USA  
Discipline(s) participating: Medicine  
Audience: Students, Residents, Faculty  
Key contact: Anne Gill, Associate Professor of Pediatrics  
Start date of program: July 2011  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: All second-year medical students are required to take a seven-week course on Patient Safety. The course uses the IHI modules as part of the curriculum and students must complete modules PS 100-106 to pass the class. After a brief review by a discussion leader, students work in small groups with a resident facilitator to work through patient safety cases and report out. Students are graded by their peers on group participation and take an exam at the end of the course.

Additional information/feedback from participants: "All students passed the knowledge exam," says Gill. "Strengths of the program included the case discussion and personal stories shared by the discussion leaders.

"Students were less favorable about redundancies between the modules and reviews. The inclusion of residents as group leaders is new this year and is yet to be evaluated."

## Baylor University Medical Center

Organization type: Hospital  
Location: Dallas, TX, USA  
Discipline(s) participating: Medicine  
Audience: Residents, Fellows  
Key contact: [Kaydance Hope, C-TAGME](#)  
Start date of program: October 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: All current and incoming graduate medical education trainee physicians and all program directors (regardless of accrediting agency) are required to complete the basic modules by the end of their current academic year. Coordinators run reports to ensure their trainees have completed the modules. The GME office has oversight to ensure completion.

## Bellin College

Organization type: School  
Location: Green Bay, WI, USA  
Discipline(s) participating: Nursing, Radiology  
Audience: Students, Health Professionals  
Key contact: [Connie J. Boerst, President/CEO](#)  
Start date of program: Fall 2011  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Bellin College realizes the importance of developing health care providers as leaders and team players who are well-versed in quality and safety. To support this initiative, Bellin started an IHI Open School Chapter at the college in 2011. Faculty members as well as students were introduced to the online courses, resources, and the community network. The value added to our current curriculum by including these courses has been noted as our graduates begin the job search. Proof of completion via the Certificate is placed in their professional portfolios. In addition, our students have worked with health care providers on quality improvement projects.

Additional information/feedback from participants: "Many of the students see the value from the courses and take those not assigned on their own," says Boerst. "They see the importance and enhancement it gives them as they are looking for employment post-graduation."

## Blessing-Rieman College of Nursing

Organization type: School  
Location: Quincy, IL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Debra Dickman, Assistant Professor](#)  
Start date of program: 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: In the course, NSG 401: Community Health Nursing, students are required to complete the course TA 101: Triple Aim for Population Health. In the course, NSG 421: Health Policy, students are required to complete PS 100 Introduction to Patient Safety and are assigned to complete one module from PS 101, 102, 103, 104, 105, 106 or QI 101. Each student creates a PowerPoint addressing each of the objectives to be presented in class when patient safety is discussed.

### Bon Secours Memorial College of Nursing

Organization type: School

Location: Richmond, VA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Laura Vasel, Assistant Professor/Curriculum Coordinator](#)

Start date of program: Fall 2014

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Our College of Nursing completed a curriculum revision that will start with the 2014-15 academic year. The curriculum is focused on post-licensure (RN-BSN) students that practice in a variety of health care settings. Specific IHI Open School courses are required assignments throughout the curriculum. In the final practicum, the students will be completing their hours based off the IHI Open School Practicum Course (QI 201) model.

### Boston College

Organization type: School

Location: Boston, MA, USA

Discipline(s) participating: Nursing

Audience: Students, Health Professionals

Key contact: [Kathy Ahern Gould, Nursing Education and Evidence Based Practice Consultant](#)

Start date of program: 2009

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Gould has been using IHI materials in both the clinical and classroom area for a few years. This year, the teacher of record for juniors at Boston College has added three modules to the syllabus as a formal part of the course -- PS 101, PS 103, and PFC 101.

Additional information/feedback from participants: "For my classroom courses on Evidence Based Nursing and Nursing Research, we use the IHI site to examine bundles and EBP care," says Gould. "I have the freedom to design my courses around the framework of quality and safety, allowing me to refer to a significant amount of material. At the end of the course, students always add comments indicating that IHI was one of the best parts of the course. My final exam offers them a space to comment on various articles and materials from IHI. Their favorite topics have centered on Dr. Berwick's Science of Improvement and classic 'Eating Soup with a Fork.'"

### California State University

Organization type: School  
Location: Northridge, CA, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Marsha Chan, Professor](#)  
Start date of program: August 2010  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The IHI Open School courses are used within HSCI 616 - Quality Assurance, a required course for the MHA program at CSUN. Chan has required completion of the core courses for three years and required submission of the Basic Certificate for two years, starting in 2010. The IHI courses are assigned as part of the weekly reading/coursework. The certificate is due prior to the final exam in December.

Additional information/feedback from participants: "The students have found the Open School work to be highly engaging and helpful," says Chan. "I feel the Open School modules provide a much more practical and realistic application of the quality improvement and patient safety material than what I have found in textbooks."

### California State University - Chico

Organization type: School  
Location: Chico, CA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Peggy Rowberg, Associate Professor](#); [Janet Ellis, Nursing Instructor](#)  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The selected IHI Open School courses are used in the leadership and management course within the undergraduate nursing program. Students are required to complete the leadership module (L101: So You Want to Be a Leader Health Care) and PS 103, 104, and 105.

Additional information/feedback from participants: "Students gain insight into effective leadership and issues surrounding an adverse event and talking to patients after an event," says Rowberg.

### California State University - East Bay

Organization type: School  
Location: Hayward, CA, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Toni Fogarty, Professor and Chair](#)  
Start date of program: September 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Completing the Basic Certificate is one of the requirements in HCA 6290 (Health Care Quality Assessment and Improvement), which is one of the required courses in the Master of Science in Health Care Administration (MS-HCA) degree program.

### Cambridge College

Organization type: School

Location: Cambridge, MA, USA

Discipline(s) participating: Allied Health Professions, Business Administration, Health Administration, Health Informatics, Medicine, Nursing, Pharmacy

Audience: Students, Health Professionals

Key contact: [Frances Fairbanks, Community Nurse Advisor](#)

Start date of program: September 2012

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Fairbanks uses the Certificate material to supplement one of her courses. She suggests the students aim for the Certificate, but does not require it. Last semester, 90% of students completed the Certificate and found it very worthwhile.

Additional information/feedback from participants: "My students find the courses very worthwhile and useful," says Fairbanks.

### Cardiff University

Organization type: School

Location: Cardiff, Wales, UK

Discipline(s) participating: Nursing

Audience: Students, Residents, Health Professionals

Key contact: [Aled Jones, Senior Lecturer](#)

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: The undergraduate nursing and midwifery program has a safety & quality component which spans the full three years of undergraduate training. The basis for delivering the safety and quality component is a spiral curriculum where core concepts that are introduced in the first year are re-visited in subsequent years. Those concepts are built on and extended in terms of depth of learning and doing.

In the first year, students are introduced to the concept of quality and undertake quality improvement courses (IHI modules QI 101, 102, 103). A core part of this is an introduction to the six dimensions of quality and the use of the Model for Improvement as a means of organizing and measuring change/improvement.

During the second year, students undertake a project where they gain patient feedback on an aspects of service (e.g. through collecting patient stories). We often use an "Ask One Question" exercise to help students engage and listen to patients' needs.

In the third year, students undertake a quality improvement project. This can be based on aspects of care that need improving identified in their second year, a new aspect that needs improving, or an existing QI project being undertaken within our partner health boards where they undertake clinical placements.

Additional information/feedback from participants: "A student participated in the pilot IHI Open School Quality Improvement Practicum," Jones says. "Students have also started an Open School Chapter."

### Cardiff University

Organization type: School

Location: Cardiff, Wales, UK

Discipline(s) participating: Medicine

Audience: Students

Key contact: [Andy Carson-Stevens, Clinical Lecturer in Health Care Improvement](#)

Required for graduation or elective: Basic Certificate

Courses included: Elective

Summary of program: Third-year medical students are invited to undertake a nine-week health care improvement project. Previous projects have focused on improving the patient experience at a local hospital. Students work with frontline health care professionals, often senior nurses, to interview patients and collect their stories about their experiences of health care. Listening back to the patients' stories, students are able to see health care through the eyes of the patients they meet. Students use the learning from the patient stories, keep a reflective diary for their own professional development, and also work with the health care teams to identify priority areas for improving the patient experience and begin to instigate small changes. Students complete Basic Certification by the end of the nine-week course. All students are expected to have completed Q101 and PS100 before the first group tutorial in order to have a baseline understanding of important concepts, and then progress at a self-directed pace over the subsequent nine weeks.

### Carroll University

Organization type: School

Location: Waukesha, WI, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Angie Brindowski, Assistant Professor of Nursing](#)

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Carroll University baccalaureate nursing students complete a quality improvement project and presentation during their final semester. The focus of the project is to address a practice issue encountered in the capstone clinical experience. The students apply the rapid quality improvement process, PDSA, to an actual clinical problem.



In the past, students reviewed the PDSA process on the IHI web site. The students came back to class with many questions, demonstrating a vague understanding of quality improvement processes and expectations for the project. Their first assignment in the QI project is submission of a well-defined problem with an outline of the small tests of change the group will be completing. The problem statements and tests of change have required multiple revisions in the past two semesters before students could move forward with data collection.

In an effort to assist students in building deep knowledge, beginning in the fall 2012 semester, each group will have an expert -- or super user of sorts -- of the QI 102-104 content in the IHI Open School. QI project groups have four student members. Each group member is required to complete one of the IHI Open School QI courses.

After the students complete the QI course, they are required to complete a WIKI. Students working on the WIKI are from each group in the class. In other words, every group member who completed QI 102 will separate from their QI project workgroup to build the WIKI reference on QI 102. Measurements of success will include each group submitting a well-defined problem with an outline of the PDSA cycles they plan to complete.

### Case Western Reserve University

Organization type: School

Location: Cleveland, OH, USA

Discipline(s) participating: Allied Health Professions, Business Administration, Health Policy, Medicine, Nursing, Public Health, Social Work

Audience: Students, Residents, Health Professionals

Key contact: [Mary Dolansky, Associate Professor](#);

Start date of program: Fall 2012

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The QI modules are integrated into the interdisciplinary course, "The Continuous Improvement of Healthcare," which is required for the MPH program.

### Clayton State University

Organization type: School

Location: Morrow, GA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Jennell P. Charles, Nurse Faculty](#)

Start date of program: 2010

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Faculty use the Open School courses within four-year baccalaureate & master's degree programs in nursing. The programs cover three tracks — educator, leadership, and beginning in the fall, family nurse practitioner. Faculty added the IHI Open School lessons as a required assignment

within the quality and safety content. Students must now complete Lesson 1 of PS 106 and can choose two other lessons.

Additional information/feedback from participants: "Feedback from students has been extremely positive," says Charles. "They really enjoy the videos and all the lessons. [They are] very valuable."

### Clemson University

Organization type: School  
Location: Clemson, SC, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Sheri Webster, Lecturer](#)  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Second-semester senior nursing students complete the QI, PS, and Leadership courses as an out-of-class assignment. These courses are added to their resumes.

Additional information/feedback from participants: "The students have commented that these courses require 6-10 hours to complete, so we adjusted class times and give them one class period off for completing modules," says Webster.

### The College of St. Scholastica

Organization type: School  
Location: Duluth, MN, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Paula Byrne, Chair Traditional Nursing](#)  
Start date of program: September 2012  
Courses included: Select courses  
Required for graduation or elective: Elective

Summary of Program: The College of St. Scholastic is a baccalaureate nursing program that has infused quality and safety concepts across the curriculum. With 112 graduating students every spring, it is the second largest baccalaureate nursing program in Minnesota.

Additional information/feedback from participants: "Students enjoy both the flexibility of using online instruction and approaching the concepts from a different point of view," says Byrne. "As they move into clinicals, they are amazed that these same concepts are alive in the 'real world.'"

### Colorado Mesa University

Organization type: School  
Location: Grand Junction, CO, USA  
Discipline(s) participating: Nursing  
Audience: Students

Key contact: [Kristy Reuss, Professor](#)  
Start date of program: Spring 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: The school is introducing a new course in Health Informatics into a Health Services Administration program. The course will be available to a broad range of clinical programs including nursing, PA/NP, pharmacy, PT, and other non- medical clinical courses of study. Curtin anticipates the program will grow.

### Creighton University

Organization type: School  
Location: Omaha, NE, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: Cindy Constanzo, Graduate Chair  
Start date of program: May 2014  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Required for the course NURS 685

### D'Youville College

Organization type: School  
Location: Buffalo, NY, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Kathleen Curtin, Assistant Professor](#)  
Start date of program: January 2013  
Required for graduation or elective: Elective  
Courses included: Select Courses

Summary of program: The school is introducing a new course in Health Informatics into a Health Services Administration program. The course will be available to a broad range of clinical programs including nursing, PA/NP, pharmacy, PT, and other non- medical clinical courses of study. Curtin anticipates the program will grow.

### Dakota State University

Organization type: School  
Location: Madison, SD, USA  
Discipline(s) participating: Respiratory Care and Health Informatics  
Audience: Students  
Key contact for respiratory care: [Bruce Feistner, Associate Professor and Director](#)  
Key contact for health informatics: [Joyce Havlik, Assistant Professor and Director](#)  
Start date of program: 2012

Required for graduation or elective: Required

Courses included: Select courses

Summary of program:

Respiratory care: Within the Advanced Respiratory Care course (RESP310), PS 202, PS 100, PS 101, PS 102, PS 103, PS 104, PS 105, and PS 106 are required. L 101 is required in Respiratory Case Management (RESP381) and PFC 101 is required in Ethics for Health Professionals (RESP440).

Health Informatics: The curriculum for the associate and baccalaureate degrees in the Health Information Management Programs includes a class called HIM 265 Management of Quality and Other Functions for Health Information Management (HIM). QI 101, QI 102, QI 103, QI 104, and PS 100 were included in the course in the spring 2012 semester.

Additional information/feedback from participants:

Havlik: "Even though we could not complete all courses, students were encouraged to take as many of the courses as they could," she says. "We will be exploring how to implement the Open School courses into other classes."

## Des Moines University

Organization type: School

Location: Des Moines, IA, USA

Discipline(s) participating: Health Administration

Audience: Students, Health Professionals

Key contact: [Sarah Pavelka, Instructor and Faculty Advisor](#)

Required for graduation or elective: Elective

Courses included: Select courses

## Dundee University

Organization type: School

Location: Dundee, Tayside, Scotland

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Sandra Hainey, Lecturer](#)

Start date of program: September 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The undergraduate nursing program runs over a period of three years at Dundee. The 16 IHI Open courses within the Basic Certificate are integrated into a core module which runs over the three years and is shared across adult, mental health, and pediatric nursing students. The courses are split evenly across the three-year curriculum. To further support the use of the courses, completion of each individual module is also a core requirement of the students' personal and professional portfolio -- a mandatory requirement of the program which is based on the NHS Knowledge and Skills Framework.

Additional information/feedback from participants: A brief survey was undertaken after completion of the first block of courses. Students provided very positive feedback about the modules being informative and enjoyable, and increasing their subject knowledge.

### Duquesne University

Organization type: School

Location: Pittsburgh, Pennsylvania, USA

Discipline(s) participating: Health Administration, Health Informatics, Health Science

Audience: Students

Key contact: [Shirley Cousino, Instructor](#)

Start date of program: 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: Undergraduate and graduate students enrolled in the course "Quality and Performance Improvement in HealthCare" are required to complete all of the Open School courses to earn the Basic Certificate.

Additional information/feedback from participants: "Many of our students have secured jobs involved in the area of health care quality improvement and are grateful for the knowledge they have received from the IHI Open School courses," says Cousino.

### East Carolina University

Organization type: School

Location: Greenville, NC, USA

Discipline(s) participating: Dentistry, Nursing

Audience: Students, Residents

Key contact for dentistry: [B. Alex White, Unit Chief of Public Health Dentistry](#)

Key contact for nursing: [Dr. Mary Ann Rose, Professor of Nursing](#); [J. Avery, Clinical Associate Professor](#)

Start date of program: January 2013

Required for graduation or elective: Required

Courses included: Basic Certificate (dentistry), select courses (nursing)

Summary of program:

Dentistry: Faculty have included the IHI Open School materials into a newly developed curriculum at the school.

Nursing: Faculty include the courses on quality, patient safety, and leadership in core coursework for all graduate students entering the master's program, as well as a review for junior-level BSN students.

### Eastern Mennonite University

Organization type: School

Location: Harrisonburg, VA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Don Tyson, Associate Professor of Nursing](#)

Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Within the final semester nursing course "Leadership," Tyson uses a number of the Safety and QI modules for students to better understand the quality improvement process. Students use this information to lead a student meeting discussing safety and quality issues on a particular nursing unit. In addition, students utilize the IHI QI modules to analyze a quality improvement initiative described in an evidence-based nursing journal.

### Eastern Virginia Medical School

Organization type: School  
Location: Norfolk, VA, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Chris Hoedt, Medical Student](#)  
Start date of program: Summer 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Students at EVMS are required to complete all the courses in the summer after their first year of medical school. Then, they take the seven patient safety courses again as a refresher after their second year.

Additional information/feedback from participants: "We're really excited about all of this," says Hoedt. "At EVMS, we learn practical medical education, but the courses will help us learning the interprofessional, on-the-job applications. The IHI [Open School] lessons really break those skills down for you."

Dr. Ronald Flenner, the associate dean of education at EVMS, helped bring this idea to fruition. Flenner, an internist who specializes in infectious diseases, believes the courses add a crucial component to the education of the students at EVMS.

"There are so many opportunities for improving patient safety and quality improvement in health care," Flenner says. "Introducing these topics to students early will be much more effective than doing it later in their careers. They'll be much more likely to retain the information."

### Edgecombe Community College

Organization type: School  
Location: Tarboro, North Carolina, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Barbara Knopp, Faculty](#)  
Required for graduation or elective: Required  
Courses included: Select Courses

Summary of program: ECC features an ADN program, providing entry level education for both RN and PN students. The curriculum is concept-based.

Additional information/feedback from participants: Knopp has required coursework for root cause analysis and introduced other content areas. "Students participated in the Advanced Case Study and presented at local hospital," she says. "[The courses] help raise awareness of the emphasis on QI, risk management, and safety as well as the impact of the changing health care arena."

### Emmanuel College

Organization type: School

Location: Boston, MA, USA

Discipline(s) participating: Nursing

Audience: Students, Faculty

Key contact: [Nola Della-Monica, Assistant Professor](#)

Start date of program: January 2013

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: All MSN students in nursing management/administration or education must now complete the entire Basic Certificate as part of NURS.5111, Advanced Roles in Professional Nursing.

Additional information/feedback from participants: "The IHI courses were elective, but students felt strongly that the Basic Certificate should be completed by all students since it was of great benefit to their practices," says Della-Monica. "Faculty have approved the Basic Certificate as a requirement for completion of NURS.5111."

### Emory University

Organization type: School

Location: Atlanta, GA, USA

Discipline(s) participating: Medicine, Nursing, Public Health

Audience: Students

Key contact: [Nathan Spell, Chief Quality Officer](#)

Start date of program: August 2012

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: The IHI Open School courses are included in a new interprofessional course that teaches basic process improvement concepts and the history/theory of quality improvement in health care. The course intentionally teaches teamwork in this interprofessional environment. Spell uses select basic courses of the IHI online curriculum as a self-study component of the course.

Additional information/feedback from participants: "Student leaders of the Atlanta IHI Open School Chapter were integral to the development of this course," says Spell. "They actually suggested inclusion of these modules as part of the course."

## Endicott College

Organization type: School  
Location: Beverly, MA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Nancy Meedzan, Assistant Professor](#)  
Start date of program: 2009  
Courses included: Select courses  
Required for graduation or elective: Required

Summary of Program: The school has implemented the IHI Open School online modules in select courses and is working toward a more thorough implementation into the curriculum.

## Fanshawe College

Organization type: School  
Location: London, Ontario, Canada  
Discipline(s) participating: Paramedic Programs  
Audience: Students  
Key contact: [Alan Batt](#)  
Start date of program: January 2017  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The Professional Issues in Paramedicine subject at Fanshawe College was selected as the setting for this integration exercise. This subject is a 15-week, two hours per-week class, delivered in the third semester of the program. The subject focuses on issues surrounding quality patient care, professionalism, ethics, and others that are relevant to paramedics. This subject also encompasses the development of strategies to enable students to grow in their personal and professional roles as paramedics. Throughout the course of the subject, students explore diverse topics such as leadership, group dynamics, communications, work culture, patient safety, stress and burnout, advocacy, and ethical issues. The topics in this subject made for an ideal setting in which to embed modules. A number of IHI Open School modules were directly embedded as a component of the weekly schedule for the class. These modules are: PS 101, PS 103, PS 105, PS 202, TA 101, QI 101, L 101, PFC 101.

A percentage of in-class activity marks were awarded to students for the completion of the integrated courses outlined earlier. On completion of the integrated courses, only five courses remained in order to complete the Basic Certificate curriculum. These remaining courses were optional, and students could complete them in their own time to obtain the full certificate if they chose to.

Additional information/feedback from participants: "Out of a class of 42 students, to date 31 students (74%) have completed the remaining courses, and have been awarded the IHI Basic Certificate in Quality and Safety. Evaluations by students have been overwhelmingly positive to date."

## Ferris State University

Organization type: School  
Location: Big Rapids, MI, USA



Discipline(s) participating: Allied Health Professions, Business Administration, Dentistry, Nursing, Pharmacy

Audience: Students, Residents, Health Professionals

Key contact: [Lori Dettloff, R.Ph., Instructor](#)

Start date of program: September 2013

Courses included: Select courses

Required for graduation or elective: Required

### George Mason University

Organization type: School

Location: Fairfax, VA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Barbara Hatcher, Associate Professor of Nursing](#)

Start date of program: 2015

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Faculty will use select Open School courses in several administration courses.

### Georgia Southern University

Organization type: School

Location: Statesboro, GA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Ellen Hamilton, Assistant Professor](#)

Start date of program: September 2012

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of Program: The Certificate is required in a nursing leadership course.

### Gogebic Community College

Organization type: School

Location: Ironwood, MI, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Mary Grace Loreti, Nurse Faculty](#)

Start date of program: Fall 2012

Courses included: Select courses

Required for graduation or elective: Required

Summary of program: Faculty chose specific courses for students to complete in the first year of a two-year Associate Degree Program, and are working toward requiring the Basic Certificate by the completion of the program. Students are required to take the post-tests and print the certificate for

each course completed. The content of each course is tested on indicated course tests throughout the program.

Additional information/feedback from participants: “Students review the courses favorably,” Loreti says.

### **Gouna Technical Nursing Institute**

Organization type: School

Location: El-Gouna, Hurghada, Egypt

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Omnia Helaly, Course Leader](#)

Start date of program: October 2013

Required for graduation or elective: Required

Courses included: Select courses

Summary of program:

In an effort to help students develop their portfolio and develop professionally, the Gouna Technical Nursing Institute Faculty uses QI 105: The Human Side of Quality Improvement and PS 102: Human Factors and Safety with students. Faculty include several teaching strategies to go along with the courses, including assigned reading, group discussion, and workshops.

### **Grand Canyon University**

Organization type: School

Location: Phoenix, Arizona, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Dawna Cato, Assistant Professor](#)

Start date of program: Fall 2013

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Cato integrates the Open School courses into the pre-licensure nursing program curriculum design and development.

Additional information/feedback from participants: “These courses are very beneficial to aspiring nurses to give them a perspective of the IOM's identified core competencies from day one,” Cato says. “In addition, the case study approach and online learning format is ideal for the millennial student populations.”

### **Grand Valley State University**

Organization type: School

Location: Allendale, Michigan, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Nancy Carlson, Affiliate Faculty](#)

Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Selected patient safety courses for beginning med/surg nursing students.

Additional information/feedback from participants: "Students have commented positively on the format of the courses and engaging content," says Carlson.

### Hannibal LaGrange University

Organization type: School  
Location: Hannibal, Missouri, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Donna White, Nursing Faculty](#)  
Start date of program: August 2013  
Required for graduation or elective: Required  
Courses included: Select courses

### Harvard University

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Health Administration, Public Health  
Audience: Students  
Key contact: [Amy Cohen, Director of Educational Technology](#)  
Start date of program: August 2012  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: The IHI Open School courses are used in the Master of Science in Health Care Management program.

Additional information/feedback from participants: "I don't assign the IHI courses as a requirement, although I refer students to them," says Cohen. "I am intrigued by the idea of doing so, however. I'd love to hear how that's working for others!"

### HealthPartners

Organization type: Integrated Health System  
Location: St. Paul, MN, United States  
Discipline(s) participating: Medicine, Residency Programs  
Audience: Residents  
Key contact: [Marcella de la Torre, Manager, Performance Improvement](#)  
Start date of program: 2008  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The Emergency Medicine Residency Program requires QI 101-106. The Occupational Medicine Residency Programs requires all courses. A group of faculty members are taking QI 101-106

Additional information/feedback from participants: "We hope to continue to expand and make courses available to other disciplines," says de la Torre.

### Hunter Bellevue School of Nursing

Organization type: School

Location: New York, NY, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Terri Straub, Nursing Faculty](#)

Start date of program: September 2011

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: In health policy and clinical nurse leadership courses, the students complete various components of the patient safety and quality improvement Open School modules.

Additional information/feedback from participants: "Students find the work very rewarding and clearly are exposed to other organizations that support their professional practice," says Straub.

### Icahn School of Medicine at Mount Sinai

Organization type: School

Location: New York, New York, USA

Discipline(s) participating: Medicine

Audience: Students

Key contact: [Brijen Shah, Assistant Professor](#)

Start date of program: January 2013

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Shah developed a two-week elective for fourth-year medical students offered in the middle of the academic year. Topics were chosen based on a review of core QI/PS topics from the Institute for Health Care Improvement, a literature review, and experience of the instructors. Week one of the course focused on QI and week two on PS. A team based longitudinal process map project was completed during the course where students mapped and analyzed a health care delivery process. Lectures, problem based learning/discussion, role play, and web-based self study modules were utilized. Students were assessed using a pre- and post-survey and evaluation of the process map project. The primary outcomes were change in K/A/S (5-point Likert scale) and performance on five multiple-choice questions. There was both a qualitative and quantitative assessment of these outcomes.

Additional information/feedback from participants: "The students commented on how much they enjoyed the mixed learning format," says Shah. "In addition to lectures, we developed three case-based learning sessions including a mock RCA, having them observe an RCA, and a clinical microsystems

meeting. The capstone project of the course included a process map project which the students thoroughly enjoyed and were very invested in. We have a summary document of their written comments, as well.”

### Iowa Health

Organization type: Hospital

Location: Des Moines, IA, USA

Discipline(s) participating: Medicine

Audience: Residents

Key contact: Douglas B. Dorner, MD, FACS, SVP Medical Education and Research

Courses included: Select courses

Required for graduation or elective: Required

Summary of program: Iowa Health had previously required select courses as part of the residency program’s quality improvement and patient safety curriculum. It is now requiring all incoming residents to complete the select courses prior to their start date.

### Johns Hopkins University

Organization type: School

Location: Baltimore, MD, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Lori A Edwards, Instructor](#)

Required for graduation or elective: Required

Courses included: Select courses

### Kansas City University of Medicine and Biosciences-GME Consortium

Organization type: School

Location: Kansas City, MO, USA

Discipline(s) participating: Medicine

Audience: Residents, GME Core Faculty

Key contact: [Kerrie J. Jordan, MS, C-TAGME](#)

Start date of program: July 2017

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of program: Starting July 1, 2017, all first year residents are expected to complete the KCU GME Core Curriculum that includes a series of online modules offered through a few vendors including the “Institute for Healthcare Improvement (IHI)”. These online modules will guide residents through self-directed learning in order for KCU GME and each residency program to support assessment of resident knowledge to meet expected ACGME core competencies and milestones. The overall time-commitment for these modules is about 34 hours spread over an 18 month curriculum covering the ACGME core competencies, social media, end-of-life care, ethical dilemmas, patient safety, sleep and fatigue management, transitions of care, systems errors, and quality improvement. Upon completion of the IHI series of modules residents will receive the Basic Certificate in Quality and Safety.

### Keiser University

Organization type: School  
Location: Sarasota, FL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Chris Malloy, Physician](#)  
Start date of program: Fall 2016  
Courses included: Basic Certificate  
Required for graduation or elective: Required

### Kennesaw State University

Organization type: School  
Location: Kennesaw, GA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Mary Ann Camann, Associate Professor of Nursing](#)  
Start date of program: August 2012  
Courses included: Select courses  
Required for graduation or elective: Required

Summary of Program: Senior BSN nursing students in the “Transition to Practice Program” are required to complete several of the patient safety modules.

### King Saud bin Abdulaziz University for Health Sciences

*College Of Public Health and Health Informatics*

Organization type: School  
Location: Riyadh, Saudi Arabia  
Discipline(s) participating: Dentistry, Health Administration, Health Policy, Health Science, Medicine, Nursing, Public Health  
Audience: Students  
Key contact: [Dr. Khaled Al-Surimi, Assistant Professor](#)  
Start date of program: January 2014  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Faculty use the IHI Open School modules within the course, Quality Management for Healthcare, which is part of a Master’s in Public Health program. Students complete selected modules within Improvement Capability, Patient Safety, Leadership, and Triple Aim for Populations.

Additional information/feedback from participants: “The feedback from the students attending the courses is often positive, saying the IHI courses are very helpful in promoting their knowledge and skills about quality improvement and patient safety,” says Al-Surimi. “Moreover, I think the leadership and population health courses are very inspiring for the public health professionals and leaders, and are a good contribution by IHI toward the movement of quality improvement in public health and the population-based health thinking.”

### Lewis University

Organization type: School  
Location: Romeoville, IL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: Patricia Brida, RN Faculty  
Start date of program: March 2014  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

### Louisiana Health Sciences Center

Organization type: Hospital  
Location: Shreveport, Louisiana, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Kenna Thompson, Anesthesiology Residency Coordinator](#)  
Required for graduation or elective: Required  
Courses included: Basic Certificate

### Loma Linda University

Organization type: School  
Location: Loma Linda, CA, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Ariane Marie-Mitchell, Physician](#)  
Start date of program: Summer 2011  
Required for graduation or elective: Required  
Courses included: Select Courses

Summary of program: Marie-Mitchell gives her medical students two full days (16 hours) to complete the 13 patient safety and quality improvement courses during the month-long rotation.

Additional information/feedback from participants: “When I found out about the IHI Open School, I thought, ‘This is perfect,’” says Marie-Mitchell, a member of the preventive medicine department and facilitator of the senior rotation in Preventive Medicine & Public Health at Loma Linda. “Why should I reinvent the wheel [to create a curriculum] when IHI is a national leader in the area and has already made the learning interactive and flexible?”

The dean’s office, she says, has been very supportive of the innovative learning experience that also includes time to complete a health care improvement project.

“Students don’t necessarily see this as part of their role in being a good doctor yet,” she says. “But that’s what I try to communicate. No matter what their role is, QI methods give you a way to accomplish things. To me, it is part of good patient care.”

### Loyola University

Organization type: School  
Location: Chicago, IL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Sandra Sojkas](#)  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The IHI Open School courses are used within the BSN and ABSN programs. The IHI leadership course (L 101: So You Want to Be a Leader in Health Care) is required during the leadership course in the program.

### MCPHS (Massachusetts College of Pharmacy and Health Sciences)

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Pharmacy  
Audience: Students  
Key contact: [Mary Amato, Associate Professor of Pharmacy Practice](#)  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Pharm.D. students enrolled in the Medication Safety Professional course (taken by third-year professional students) are required to complete IHI Open School courses PS 100 (Introduction to Patient Safety), PS 101 (Fundamentals of Patient Safety), and PS 106 (Introduction to the Culture of Safety). Also, Pharm.D. students in their fourth year who take an elective rotation in Medication Safety (with Mary Amato, Pharm.D., MPH) are required to complete these courses and QI 101 (Fundamentals of Improvement).

Additional information/feedback from participants: “The feedback from participants has been excellent,” Amato says.

### Mercer University

Organization type: School  
Location: Atlanta, GA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Karen Maxwell, Clinical Assistant Professor](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Select courses are incorporated into the senior-level Leadership and Role Practicum courses.



Additional information/feedback from participants: “We are looking at incorporating several courses throughout the curriculum,” says Maxwell.

### **Mercy University**

Organization type: School  
Location: Dobbs Ferry, NY, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Lisa Martin, Associate Professor](#)  
Start date of program: January 2014  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The courses are used within a Master’s in Nursing Administration program.

### **MGH Institute of Health Professions**

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Alex Hoyt, Assistant Professor](#)  
Start date of program: September 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: Hoyt teaches Health Care Policy and Politics in the School of Nursing. In this course, students are offered an extra credit assignment in which they complete the Certificate and then write a paper applying a PDSA cycle or Root Cause Analysis to a quality improvement effort or error that they have experienced in their clinical rotations or work. The extra credit gives them an additional three percentage points on their grade -- enough to boost them from one grade to the next.

### **Millikin University**

Organization type: School  
Location: Decatur, IL, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Karla Luxner, Associate Professor of Nursing](#)  
Start date of program: August 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: Luxner teaches a master of science in nursing (MSN) leadership course for nurse anesthesia students and entry-into-practice students (who have a bachelor's degree in a field other than nursing). Last year's class assignment was to start an IHI Open School Chapter at Millikin University. Students tried to include pre-professional students (medicine, pharmacy, etc.), but ended up

with interest only from nursing students -- both graduate and undergraduate. This year, the leadership class assignment is to complete the Basic Certificate.

Additional information/feedback from participants: "Faculty are becoming more interested, as well," says Luxner. "I hope they will include [the IHI Open School courses] in the undergraduate nursing program."

### Minnesota State University, Mankato

Organization type: School  
Location: Mankato, MN, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Debra Topham, Associate Professor](#)  
Start date of program: Fall 2013  
Required for graduation or elective: Required  
Courses included: Select courses

### Mohave Community College

Organization type: School  
Location: Colorado City, AZ, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Julie Chew, Nursing Faculty](#)  
Start date of program: February 2014  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

### Mount Mercy University

Organization type: School  
Location: Cedar Rapids, IA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Sharon Guthrie, Assistant Professor](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate is required for the school's MSN program.

### Nebraska Methodist College

Organization type: School  
Location: Omaha, Nebraska, USA  
Discipline(s) participating: Healthcare Operations Management  
Audience: Students  
Key contact: [Ann Greiman, Director of Healthcare Business Programs](#)

Start date of program: Fall 2013  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: The courses are used with the Healthcare Operations Management program, which gives students the foundation for management and leadership and provides an application-based curriculum. Health care leaders will be able to skillfully manage the integration of people, processes, and systems in any health care environment.

### New Jersey City University

Organization type: School  
Location: Jersey City, New Jersey, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Rebecca McCarthy, Registered Nurse](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate is a requirement for students in an RN to BSN program in a course called "Leadership/Management for Nurse Leaders and Managers." Students are required to take and pass assigned modules, and upload the Certificate to Blackboard by a certain date. This is a percentage of students' grade.

Additional information/feedback from participants: "Students reported that they enjoy taking the courses," says McCarthy. "Some students wish that 100 percent of their grade was from taking these courses. Some students said the courses are too time-consuming."

### New York Medical College

Organization type: School  
Location: Valhalla, NY, US  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [William Wang, Assistant Professor](#)  
Start date of program: August 2013  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of Program: NYMC values the diversity of student interests and learning styles. For students interested in quality improvement and patient safety, the school offers two options. The first option is a year-long seminar for the first-year medical students. The seminar consists of lecture series throughout the year, IHI Open School courses, and an optional summer research opportunity at the Metropolitan Hospital Center. The second option is a two-week Selective during the third-year Surgery clerkship. The Selective consists of workshops on various patient safety topics, IHI Open School courses, and a practicum. Additionally, faculty have incorporated discussions on medical errors and patient safety into the Foundation of Medicine course during the first two years and the Family Medicine clerkship in the third year.

### **New York University**

Organization type: School  
Location: New York, NY, US  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [James Pace, Clinical Associate Professor of Nursing](#)  
Start date of program: August 2010  
Required for graduation or elective: Elective  
Courses included: Select courses

### **Northland Community & Technical College**

Organization type: School  
Location: Thief River Falls, MN, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Diane Scott, Registered Nurse](#)  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Clinical I and Clinical II students complete the patient safety courses. Professional Role course students complete the root cause analysis module (PS 104) and quality improvement courses.

Additional information/feedback from participants: "We encourage IHI to be noted on resumes for professional development," says Scott.

### **Northeast Iowa Medical Education Foundation**

Organization type: Family Medicine Residency  
Location: Waterloo, Iowa, USA  
Discipline(s) participating: Medicine, Pharmacy  
Audience: Residents  
Key contact: [Greg Nelson, Administrator](#)  
Start date of program: July 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Residents complete the patient safety modules during the first month of orientation and the quality modules during the first year of residency.

### **Northeastern Ohio Universities College of Medicine (NEOMED)**

Organization type: School  
Location: Rootstown, Ohio, USA  
Discipline(s) participating: Medicine, Pharmacy

Audience: Students

Key contact: [Lisa Weiss, Faculty Physician](#); [Lou Barone, Associate Professor of Pharmacy Practice](#)

Start date of program: 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The College of Medicine has required all medical students to complete the Basic Certificate for the last three years.

Additional information/feedback from participants: "Students find [the Open School courses] valuable as they take them in the M3 year as they are experiencing their clerkship," Weiss says. "We have a follow-up session in the M4 year to discuss some of the issues that the students observed first-hand during their clinicals and how they dealt with these issues."

## NYU Wagner

Organization type: School

Location: New York, NY, USA

Discipline(s) participating: Health Administration

Audience: Students

Key contact: [Cindy Boester, Director](#)

Start date of program: January 2012

Required for graduation or elective: Elective

Courses included: Basic Certificate

Summary of program: The Basic Certificate is integrated into a course on Continuous Quality Improvement in the NYU Robert Wagner Graduate School for Public Service. Faculty emphasizes the forces driving quality improvement in health care today.

Additional information/feedback from participants: "Students love the courses!," says Boester.

## Oakland University

Organization type: School

Location: Rochester, MI, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Ron Piscotty, Instructor](#)

Start date of program: September 2010

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: All students enrolled in the Accelerated Second Degree Bachelor of Science in Nursing program complete the IHI Open School Basic Certificate as part of their Nursing and Systems Leadership course. Additionally, all undergraduate students enrolled in the Bachelor of Science in Nursing program are required to complete PS 102: Human Factors and Safety as part of the requirements for their Nursing Informatics course.

Additional information/feedback from participants: "I have only received positive feedback from my students," says Piscotty. "Many students cite in their course evaluations that the IHI Basic Certificate is one of the most valuable assignments of the course. I have also received feedback from many students that the Basic Certificate provides an advantage in the competitive job market. Potential employers are seeking nurses with evidence of knowledge in quality and safety."

### Ohio State University

Organization type: School

Location: Columbus, OH, USA

Discipline(s) participating: Medicine

Audience: Students, Residents, Health Professionals

Key contact: [Susan Moffatt-Bruce, MD, PhD, Assistant Professor of Surgery](#)

Start date of program: 2012

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: During Part 1 of the LSI Curriculum for medical students, the Institute for Health Care Improvement Open School curriculum is introduced early in training in order to provide a sound understanding of high quality care, as well as to present the necessary tools of process improvement that will facilitate completion of students' quality projects during Part 2 of the curriculum. Students complete several IHI Open School modules in Part 1. The goal of this component (Part 1) is to provide students with fundamental knowledge on patient safety and quality improvement. The information gained from these modules is immediately applicable to students' work in Longitudinal Practice and the Community Health Education project. Additionally, at different points during the year, activities in the Longitudinal Group curriculum focus on various topics covered in the IHI modules.

### Old Dominion University

Organization type: School

Location: Norfolk, VA, USA

Discipline(s) participating: Allied Health Professions, Dentistry, Health Administration, Health Informatics, Health Policy, Health Science, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, Public Health

Audience: Students

Key contact: [Adam Trusty, Student](#)

Start date of program: 2012

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Within the program, students discuss IHI Open School courses and topics related to professional school applications.

### Olympic College

Organization type: School

Location: Bremerton, Washington, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: Anne Mulligan, Nursing Faculty  
Start date of program: July 2014  
Required for graduation or elective: Required  
Courses included: Basic Certificate

### Orlando Health

Organization type: Teaching Hospital  
Location: Orlando, FL, USA  
Discipline(s) participating: Medicine, Resident Quality Committee  
Audience: Residents  
Key contact: [Kwabena Ayesu, Associate Program Director](#)  
Start date of program: May 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: Select courses are now being done by the residents. The goal is for all residents in the programs within the institution (there are nine) to enroll and attain their Basic Certificates.

### Palm Beach Atlantic University

Organization type: School  
Location: West Palm Beach, FL, USA  
Discipline(s) participating: Pharmacy  
Audience: Students  
Key contact: [Barbara Kelly, Associate Professor](#)  
Start date of program: June 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate is a requirement for second-year pharmacy students who will be enrolled in the Introduction to Health Care Delivery & Patient Safety course. This course provides an overview of how pharmacy services and pharmaceutical products are integrated in the health care system of the United States, with a focus on socioeconomic factors and marketplace influences. Health care is explored using a systems approach to identify the most critical processes and discover how they are interrelated. Students learn to recognize key barriers to effective health care, as well as those factors that optimize the functioning of a health care system. Emphasis is placed on developing an appreciation for the complexities of health care, the important roles that pharmacists play within the health care system, and the importance of engagement in quality improvement and patient safety.

### Pensacola State College

Organization type: School  
Location: Pensacola, FL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Angela Sanders, Nurse Educator](#)  
Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Sanders, the Program Director for the Associate Degree Nursing program, teaches the first- and second-semester nursing courses in a five-semester program. During these courses, students are introduced to basic concepts of infection prevention and safety, among others.

Additional information/feedback from participants: "The IHI.org online courses are excellent tools to help students better understand these concepts [of prevention and safety]," says Sanders.

### Phoenix Integrated Residency on Obstetrics and Gynecology

Organization type: Hospital

Location: Phoenix, AZ, USA

Discipline(s) participating: Medicine

Audience: Residents

Key contact: [Patricia Habak, Physician](#)

Start date of program: July 2015

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Faculty will require residents to complete QI101, QI102, and QI103. Residents will then participate in one of four small groups to develop a QI project based in the Women's Care Clinic, an ambulatory care setting.

Additional information/feedback from participants: "While I am considering this to be a required curricular element," says Habak, "completion will not be strictly required for graduation."

### Polk State College

Organization type: School

Location: Winter Haven, FL, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Lorrie Jones, Professor](#)

Start date of program: August 2014

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: The RN to BSN program uses several IHI courses in various courses within the curriculum.

Additional information/feedback from participants: "Students have really liked the courses, and the ability to meet our course outcomes and receive CE credit," Jones says.

### Purdue University

Organization type: School

Location: West Lafayette, IN, USA



Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Pamela Karagory, Clinical Assistant Professor](#)  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The courses are integrated into the sophomore undergraduate BSN program, with 16 students piloting the modules in the Fundamentals of Nursing curriculum. This is the students' first clinical experience, and begins the socialization and their professional development trajectory. The students' readiness to learn is high at this level, and requiring this content highlights the significance of safety, quality, and systems thinking at an early and formative stage of their education.

Additional information/feedback from participants: "The feedback from students has been positive, with some of the group suggesting that IHI courses should be introduced at the freshman level," says Karagory. "The students involved in the pilot believe their knowledge, skills, and attitudes toward safety, quality, and communication is now part of their professional value beliefs."

### Quintana Roo University

Organization type: School  
Location: Chetumal, Quintana Roo, Mexico  
Discipline(s) participating: Medicine, Nursing, Pharmacy  
Audience: Students, Residents, Health Professionals  
Key contact: [Francisco Montes de Oca G. MD, Dean of Health Science Division](#)  
Courses included: Basic Certificate  
Required for graduation or elective: Required

Summary of Program: IHI Open School courses are part of leadership, quality of care, and hospital administration courses. The Basic Certificate is necessary for accreditation in all of these courses, which are required for clinical training and hospital practices. Medical students take IHI courses in an academic course, "Liderazgo y Calidad de los servicios de salud." Students need the Open School certificate to pass the course, which accounts for 50% of their total grade.

### Reading Hospital

Organization type: Hospital  
Location: West Reading, PA, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [David George, MD, Chief Academic Officer](#)  
Start date of program: Spring 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: For the past six years, all Reading Hospital Internal Medicine and Transitional Year Residents participate in a year-long Process Improvement Curriculum. All interns must complete the introductory Patient Safety (PS 100 - PS 106) and Quality Improvement (QI 101 - QI 106) IHI Open School

modules during the orientation period; these modules are also used for remediation for upper-year residents.

The material is reinforced through team-based projects. Teams of approximately six residents and other appropriate stakeholders, along with a faculty supervisor, define a problem and use appropriate methodology to address the problem. Problems are often aligned with organizational priorities. Results are presented to the Hospital's Quality Committee and at the Department of Medicine Grand Rounds.

Additional information/feedback from participants: "Initial resistance to 'yet another requirement' no longer exists," says George. "Residents have developed excellent relationships with nursing, QI departments, etc, and the program has allowed another venue for upper-year residents to demonstrate leadership skills.

"Residents have commonly presented the product of their work and have won awards at regional and national competitions. The hospital leadership has recognized the added value of the residency's QI program to the organization's quality and safety efforts."

### Regis College

Organization type: School

Location: Weston, MA, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Lisa Fardy, Associate Professor](#)

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of Program: Completion of Basic Certificate required of all pre-licensure nursing students enrolled in Community Health Nursing course.

### Regis University

Organization type: School

Location: Denver, CO, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Maureen McGuire, Associate Professor](#)

Start date of program: Spring 2014

Courses included: Select courses

Required for graduation or elective: Required

Summary of Program: Faculty is using the Improvement Capability and Patient Safety courses as part of a Master's-level nursing course called "Health Care Organization and System Leadership."

Additional information/feedback from participants: "Both patient safety and quality improvement are covered in the course and it made sense to use [the Open School] modules instead of trying to recreate [them]," says McGuire. "This will allow the students to get a certificate, as well."

### Rhode Island College

Organization type: School  
Location: Providence, RI, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Marianne Raimondo, Assistant Professor](#)  
Start date of program: September 2014  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Faculty are integrating the Open School courses into a 3-credit undergraduate course in Quality Improvement in Health Care within the Health Care Administration degree program.

### Riphah University

Organization type: School  
Location: Islamabad, Pakistan  
Discipline(s) participating: Health Administration, Medicine  
Audience: Students  
Key contact: Dr. Taj wali  
Start date of program: 2019  
Courses included: Select courses  
Required for graduation or elective: Required

### Rivier University

Organization type: School  
Location: Nashua, NH, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Christine Sullivan, Graduate Faculty](#)  
Start date of program: Fall 2013  
Courses included: Select courses  
Required for graduation or elective: Elective

Summary of Program: The Open School content is integrated into a Doctor of Nursing Practice hybrid course that is transitioning to all online next semester. Twenty-four students are enrolled in the course each semester. Optional Open School modules can be used as quality immersion hours.

Additional information/feedback from participants: “This will likely become a course requirement and the course is mandatory for graduation,” says Sullivan. “It’s a great resource.”

### Robert Morris University

Organization type: School  
Location: Pittsburgh, PA, USA  
Discipline(s) participating: Health Administration  
Audience: Students

Key contact: [Holly Hampe, Assistant Professor of Health Sciences Administration](#)

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of Program: Faculty use the IHI Open School courses within the Health Administration Master's Program.

### Rutgers University

Organization type: School

Location: Newark, NJ, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Edna Cadmus PhD, RN, NEA-BC- FAAN, Clinical Professor and Director of Leadership](#)

Courses included: Select courses

Required for graduation or elective: Required

Summary of Program: The IHI Open School courses are integrated into two leadership tracks for graduate-level students.

Additional information/feedback from participants: "Students find the information valuable to their practice," says Cadmus.

### Saint Joseph Healthcare

Organization type: Hospital

Location: Hamilton, Ontario, Canada

Discipline(s) participating: Health Science

Audience: Residents

Key contact: [Gary Chaimowitz, Psychiatrist, Forensic Psychiatry Head of Service](#)

Start date of program: December 2014

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: Faculty use the courses within a Forensic Psychiatry Program.

### Saint Louis University

Organization type: School

Location: St. Louis, MO, USA

Discipline(s) participating: Medicine, Nursing

Audience: Students

Key contact: [David Pole, Director, Center for Interprofessional Education & Research](#)

Start date of program: January 2016

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program:

We have divided the basic certificate program into two steps for the medicine and nursing students, with a third step which is unique for each program

1. Foundations of Patient Safety which includes the PFC 101 and PS modules. This is for all first year medical students and senior BSN students. Additionally, we have created two live skills modules where the nursing and medical students meet together and have a faculty facilitated large group session where they work in teams to complete activities that require the application of the modules up to that point in the course.
2. Foundations of Quality Improvement - includes the Triple Aim for Populations and the QI modules, along with the Introduction to Leadership L101 courses. This is for second year medical students and senior BSN students. Again the students meet twice during the semester for applied skills sessions and faculty facilitated activities focusing on the application of the content to the clinical setting.
3. Unique components:
  - a. The Senior BSN program has integrated an applied QI project across the senior year where students must identify a project in the clinical setting, define the project, determine the value/purpose statement, identify current state, future state, specific goal and then implement the Plan and Do components of the PDSA cycle. During the spring semester they must complete the Study, and Act steps, followed by a reporting out to clinical supervisors and the unit and leaving the revised PDSA for the unit to continue with. Nursing students must share their QI projects and PDSA process in the live skills sessions with the medical students.
  - b. Unique component for the medical students: All second year students complete the basic certificate prior to the start of the MS3 clinical training. So this year's group that starts clinical clerkship in May, 2017, 180 students have all completed the basic certificate. Additionally, there are two 90 min workshops in the 3rd year clinical orientation where students review the Leadership 101 module and complete the Building a Culture of Safety module. Discussions and faculty facilitated activities engage the students in applying the Culture of Safety and Leading from Where You Are, as personal skills to improve their proactive engagement in their clinical training and use of personal application of the Model for Improvement and PDSA to improve clinical practice skills across each subsequent clerkship.

Next step: The clinical clerkship at the medical school are planning to integrate components of applying the model for improvement into the clerkship since all students enter with foundational skills, Additionally, for the next academic year, all PA students will complete the modules and also engage in the live skills sessions with medicine and nursing students. Finally, a survey will be completed over the summer to identify how many faculty have currently completed and can be engaged to complete the Basic IHI Certificate Program by the end of 2017.

Additional information/feedback from participants:

The first year there was confusion and uncertainty as to why this was added as a required course. Feedback sessions with leaders from each class helped improve the live skills modules and messages regarding integration.

Students are providing feedback that the modules are valuable, provide them with applicable skills addressing real issues in health care, and appreciate the gradual, embedded integration rather than a rushed or concentrated requirement of the IHI certificate courses.

Linking IHI module skills to Entrustable Professional Activities for hand offs, teamwork, and systems approaches to patient safety at the GME/Intern level has also been valuable. Students are also able to apply this content in a longitudinal Interprofessional Team Seminars program that includes graduate health professions students from 10 professions.

### San Juan College

Organization type: School  
Location: Farmington, New Mexico, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Nisa Bruce, Faculty](#)  
Start date of program: August 2014  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Faculty use the IHI Open School courses to give pre-licensure nursing students assignments that will help them gain deeper understanding of patient safety and other programs.

### Samuel Merritt University

Organization type: School  
Location: Oakland, CA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Terri Javidi, Surgical Nurse](#)  
Start date of program: September 2013  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Faculty use the courses within the case management program.

### Simmons College

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Susan Duty, Associate Professor](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Duty will require 110 senior undergraduate nursing students to complete PS 104: Root Cause and Systems Analysis. They will then use the skills gained to do active learning cases throughout the semester.

Additional information/feedback from participants: “The course is a required component of the Clinical Decision-Making course which itself is a graduation requirement,” says Duty. “So I can't say that the college has made the RCA course a graduation requirement, but I have made it a requirement of my course which they need to graduate.”

### Spring Hill College

Organization type: School  
Location: Mobile, AL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Ola Fox, Professor](#)  
Required for graduation or elective: Elective  
Courses included: Select courses

### Southern Illinois University School of Medicine

Organization type: School  
Location: Springfield, IL, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Debra Klamen, Associate Dean of Education and Curriculum](#)  
Start date of program: October 2012  
Courses included: Basic Certificate  
Required for graduation or elective: Required

Summary of Program: The school is now requiring the IHI coursework of all its medical students and is rolling it out through the curriculum. This year, first-, second-, and third-year students will take five of the patient safety modules. Elective credit will be offered to fourth-year students who complete the full Basic Certificate. The following year, more coursework will be added, so that by the end of three years, incoming students will be expected to complete the Basic Certificate by the end of their third year of medical school.

### St. Agnes Healthcare

Organization type: Hospital  
Location: Baltimore, MD, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Maria Morales, Associate program director for IM residency & Hospitalist](#)  
Start date of program: November 2013  
Courses included: Basic Certificate

Summary of program: Internal medicine residents complete the 16 core courses for Basic Certification, which are integrated into the Patient Safety and Quality Improvement curriculum.

### St. Anthony's College

Organization type: School  
Location: San Jose, Antique, Philippines  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Aris Kendell Bungabong, Nursing Instructor](#)  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate in Safety and Quality is a requirement in a professional nursing course of BS nursing students. The modules of IHI Open School are incorporated in the nursing curriculum of the school and comprise the self-directed learning activity of the students.

### State College of Florida, Manatee-Sarasota

Organization type: School  
Location: Bradenton, FL, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Sarah Cloud, Assistant Professor](#)  
Start date of program: August 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: SCF Nursing faculty have integrated the IHI Open School Basic Certificate modules into the RN to BSN nursing curriculum. The IHI Open School courses are assigned within the context of the required -- or core nursing courses -- so that, upon completion of the RN to BSN program, students will have also earned the IHI Open School Basic Certificate.

Additional information/feedback from participants: "Students are encouraged to provide feedback on the IHI courses, which has been overwhelmingly positive. Students express that the coursework is valuable in achieving the overall course objectives, are current, and relevant to their roles on the health care team.

"A few students have had difficulty saving certificates and the faculty have had some difficulty locating and tracking student transcripts on the website, even though students have affiliated with our school when registering for the courses. We would prefer to track student completion electronically via the IHI Open School site, but have had to ask students to print, scan, or send a PDF of their certificate to us for credit because of the difficulties we have had in tracking students online."

### Suffolk University

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Business Administration, Health Administration  
Audience: Students  
Key contact: [Rick Gregg, Operating Director of Healthcare Programs](#)  
Start date of program: September 2012



Courses included: Select courses  
Required for graduation or elective: Required

Summary of Program: Within the MHA program, Population Health 101 is a required course. This semester, a portion of the overall grade for the course was based on completion of the module.

### SUNY Downstate

Organization type: School  
Location: Brooklyn, NY, USA  
Discipline(s) participating: Allied Health Professions, Health Policy, Medicine, Nursing, Occupational Therapy, Public Health  
Audience: Students, Health Professionals  
Key contact: [Karen Benker, Associate Dean](#)  
Start date of program: January 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: As part of the Hospital Management course in the School of Public Health, students in the health policy and management track as well as employees of the hospital, enrolled in IHI courses. In addition to their other course work, they completed the Open School courses in Patient Safety and in Quality Improvement. The format was perfect for busy professionals and students. The material in the courses added clarity and depth to the class discussions.

Additional information/feedback from participants: "The IHI material is accessible to people at all levels of professional development," says Benker. "The lively, engaging format made the IHI component one of the most popular aspects of our course. We will definitely explore integrating more IHI offerings into our academic program."

### Texas A&M University

Organization type: School  
Location: College Station, TX, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Paul Ogden](#)  
Start date of program: Fall 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Texas A&M require students to complete IHI Open School modules in each year of study as part of a four-year, systems-based practice course. After each year, the class comes together for a team-based learning conference that includes a discussion of cases.

Additional information/feedback from participants: "We thought it would be useful to the students on their CV when they transitioned to residency," Ogden says. In 2012, 600 students will participate.

### Texas A&M University at Bryan

Organization type: School  
Location: Bryan, TX, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Courtney West, Assistant Professor](#)  
Start date of program: September 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: First-year students complete MHO 101, PFC 101, PS 100, PS 101, and have two face-to-face sessions to go over material. In the second year, students complete PS 102, PS 106, L 101, PS 103, and PS 105. They also have two face-to-face correlation sessions. In year three, students complete PS 104, QI 101, QI 102, 103 and 104. Fourth-year students complete QI 105 and 106, E PS1, and a patient safety project. They have two seminar classes, as well.

Additional information/feedback from participants: "The program is new and we do not have any feedback at this time," says West.

### Texas Tech University Health Sciences Center

Organization type: Teaching Hospital  
Location: Lubbock, TX, USA  
Discipline(s) participating: Allied Health Professions, Medicine, Nursing, Pharmacy, Physical Therapy, Physician Assistant, Public Health  
Audience: Students, Residents, Health Professionals  
Key contact: [Alexia Green, Professor](#)  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Texas Tech University Health Sciences Center offers multiple courses at its Academic Health Sciences Center, which require students to complete either the Basic Certificate or select courses. Courses are required in nursing, medicine, and allied health courses.

### Texas Tech University Health Sciences Center at Amarillo

Organization type: Hospital  
Location: Amarillo, TX, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: Dr. Shannon Herrick, Pediatrician  
Start date of program: 2015  
Courses included: Select courses

Summary of program: Faculty overseeing the pediatric residency program, which includes 18 residents, have incorporated the Open School courses into the QI curriculum.

### Trinity University

Organization type: School  
Location: San Antonio, TX, USA  
Discipline(s) participating: Health Administration  
Audience: Students  
Key contact: [Ed Schumacher, Professor](#)  
Courses included: Basic Certificate  
Required for graduation or elective: Elective

Summary of Program: The Basic Certificate is used in the quantitative methods course sequence within the program. All students are encouraged to participate and those who complete the Basic Certificate receive a bonus on their exam scores.

### Tulane University

Organization type: School  
Location: New Orleans, LA, USA  
Discipline(s) participating: Medicine  
Audience: Students, Residents  
Key contact: [Chayan Chakraborti, Physician](#)  
Start date of program: January 2011  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: In the first year of use, Tulane used the IHI.org modules and background preparatory materials for in-class interdisciplinary sessions (combined MD and RN students).

In the second year, they continued to use the IHI.org modules as preparatory materials, but expanded from classroom-based exercises to hands-on simulation activities to promote communication, leadership skills, and team building.

Additional information/feedback from participants: "The most frequent comment is that these modules are 'digestible' -- just enough information delivered in the ideal amount of time (about 15-20 minutes)

"As a course instructor, I would love to see some more challenging problems posted as a resource. It is very hard to create challenging patient safety scenarios for evaluation purposes. I am in the process of creating a 'virtual' RCA for learners and would also be very interested in collaborating."

### UNC Gillings School of Global Public Health

Organization type: School  
Location: Chapel Hill, North Carolina, USA  
Discipline(s) participating: Health Administration, Public Health  
Audience: Students  
Key contact: [Larry Mandelkehr, Director of Performance Improvement](#)  
Start date of program: January 2012  
Required for graduation or elective: Elective  
Courses included: Select Courses

Summary of program: The Health Policy Management (HPM) Department offers 1.5 credit hours to Master's students who complete the Basic Certificate of Completion. The program is approximately a year old.

Additional information/feedback from participants: "I have taught "HPM 760/776 - Healthcare Quality and Information Management," a required course in the Masters programs -- both residential and executive (distance) for past four years and require all of my students to complete one course of their choosing to introduce them to the certificate program," says Mandelkehr. "In addition, I have been talking to faculty in the Schools of Medicine and Nursing regarding incorporating the Basic Certificate into their curriculum."

### Universidad De Guadalajara

Organization type: School  
Location: Guadalajara, Jalisco, Mexico  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Ricardo Cruz Martínez, Physician](#)  
Start date of program: August 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

### Universiti Tunku Abdullah Rahman

Organization type: School  
Location: Kajang, Selangor, Malaysia  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Nem-Yun Boo, Senior Professor](#)  
Start date of program: June 2011  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Faculty use patient safety and leadership courses in the second year, the patient-centered care course in the third year, and quality improvement and population health courses in the fourth year. Students have allotted time to complete the courses. On Each Friday during the respective courses, the lecturer-in-charge has a debriefing session with the students, who are also tested in examinations at the end of third and fifth (final) years.

Additional information/feedback from participants: "Both the students and the lecturers-in-charge enjoyed and appreciated the courses," says Boo.

### University at Buffalo

Organization type: School  
Location: Buffalo, NY, USA  
Discipline(s) participating: Nursing

Audience: Students

Key contact: [Sharon Hewner, Assistant Professor](#)

Start date of program: Summer 2012

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: Faculty members at the school, including Susan Grinslade and Hewner, have used many of the courses within the curriculum for a couple years, but thanks to positive feedback, started to require all 16 courses in the summer of 2012. Students in all three nursing programs — the traditional one for four-year students, an accelerated one for those who have a bachelor's degree in other disciplines, and a new online program for those that have an associate's degree in nursing — are required to earn the IHI Open School Basic Certificate of Completion.

Additional information/feedback from participants: Already, faculty members at the school are seeing positive changes in the students because of the increased focus on quality improvement and patient safety. "You can see it in how they are talking about quality outcomes in their Evidence-Based Practice and Nursing Research course," Grinslade says. "And the seniors, in one course, allocate resources and make presentations to a nurse manager to learn about the cost of poor quality. The presentations have just been outstanding."

### University College of the North

Organization type: School

Location: Winnipeg, Manitoba, Canada

Discipline(s) participating: Midwifery

Audience: Students

Key contact: [Elisabeth Dolin, Program Coordinator](#)

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The Basic Certificate is required between years three and four as part of course requirements for Interprofessional Practice (year 3) and Leadership (year 4).

### University Hospital

Organization type: Hospital

Location: San Juan, Puerto Rico

Discipline(s) participating: Medicine

Audience: Residents

Key contact: [Gishlaine Alfonso, Associate Professor in Neurology](#)

Start date of program: September 2013

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The courses are integrated into a neurology training residency program.

## University of Alabama at Birmingham

Organization type: School

Location: Birmingham, AL, USA

Discipline(s) participating: Allied Health Professions, Health Administration, Health Science, Nursing

Audience: Students

Key contact: [Patricia A. Patrician, Associate Professor](#); [Rebecca Miltner, Assistant Professor](#)

Start date of program: January 2012

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The University of Alabama at Birmingham uses the IHI Open School in NHA (Nursing and Health Systems Administration) 631: Advanced Quality Improvement and Patient Safety. It is a three-credit hour course and is required for NHA students. (It is an elective for other masters', PhD, and DNP students.) The IHI modules are mapped to the topical outline/syllabus of the course and account for 20% of the students' grade. Most get the total score, but some get points deducted for lateness.

Additional information/feedback from participants: "Evaluations revealed favorable comments regarding the course in general," says Patrician. "The contact hours came in handy, also."

## University of Alaska Anchorage

Organization type: School

Location: Anchorage, AK, USA

Discipline(s) participating: Allied Health Professions

Audience: Students

Key contact: [Heidi Mannion, Professor](#)

Start date of program: August 2012

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of Program: The medical laboratory science department assigns courses in its "Introduction to Medical Laboratory Science" course and in the "Education and Management" course. Upon completion of the program, students should have completed the Basic Certificate. The medical imaging and medical assisting departments also assign select courses.

## University of Arizona

Organization type: School

Location: Tucson, AZ, USA

Discipline(s) participating: Pre-Healthcare

Audience: Students

Key contact: [Lorre Laws, Instructor](#)

Start date of program: January 2016

Courses included: Basic Certificate

Required for graduation or elective: Required

Summary of Program: I am educating undergraduate students in preparation for their future role as health care professionals. As an RN and PhD candidate, I have completed a number of IHI courses. I am passionate about improving healthcare, and doing my part to educate the next generation. I look forward to my students to being able to actually engage with healthcare improvement and interprofessional collaboration. Thank you for this most exemplary resource.

### University of Beira Interior, Faculty of Health Sciences

Organization type: School  
Location: Covilha, Portugal  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Dr. Luis Patrao, Professor](#)  
Start date of program: 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The IHI Open School courses are used within the patient safety program for medical students at the Faculty of Health Sciences of the University of Beira Interior. During the medical program, students attend face-to-face sessions, along with e-learning sessions, where IHI courses are included. The IHI Open School Basic Certificate is required to achieve the medical degree.

### University of Calgary

Organization type: School  
Location: Calgary, Alberta, Canada  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Joel Fox, Program Director](#)  
Start date of program: March 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: The University of Calgary incorporated the Leadership and basic Patient Safety courses in its curriculum this year. The residents were each given one to two modules to report out on, although all residents were expected to complete the online learning courses. As the supervisor for this section of the course, Fox completed the courses and then was able to determine which residents had actually completed the work.

Additional information/feedback from participants: "Although the residents enjoyed taking the courses, the exercise of discussing the individual modules allowed the group to consolidate the information presented in each module," Fox says. "If I was to try to cover the material with individual teaching sessions, it would simply have been impossible to complete all of the topics contained in the courses. Thanks, IHI!"

### University of California, Irvine

Organization type: Academic Medical Center

Location: Orange, CA, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Cecilia Florio, Clinical Professor](#)  
Start date of program: July 2012  
Courses included: Basic Certificate  
Required for graduation or elective: Required

Summary of Program: The school has a Family Medicine residency track called “Program in Medical Education for the Latino Community (PRIME-LC)” that focuses on giving residents the opportunity to acquire/improve skills in language, cultural awareness, and leadership. The residents in this track are required to complete the Basic Certificate.

### University of California, Los Angeles (UCLA)

Organization type: School  
Location: Los Angeles, CA, USA  
Discipline(s) participating: Medicine  
Audience: Students, Pre-residency training  
Key contact: [Michelle Anne Bholat, MD, MPH, Executive Vice Chair, Family Medicine](#)  
Start date of program: 2007  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The UCLA International Medicine Graduate Program, a recognized program of the University of California Office of the President, is committed to improving the quality, safety, and cost of health care services. This unique pre-residency training program provides 12-16 bilingual Spanish-English physicians the opportunity to compete for a California Family Medicine training program. IHI's Open School Basic Certificate is a required component of the program.

Audience: Residents  
Key contact: [Stella Trip, Primary Care Coordinator](#)  
Start date of program: July 2014  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: Residents take the courses as part of the primary care medicine track. These courses are part of their QI training during the second year of the three-year program. Residents work on QI projects of their own during this year.

### University of California, San Francisco

Organization type: School  
Location: San Francisco, CA, USA  
Discipline(s) participating: Medicine, Nursing, Pharmacy, Social Work  
Audience: Students, Residents, Health Professionals  
Key contact: [JoAnne Saxe, Clinical Professor](#)  
Start date of program: September 2013  
Courses included: Select Courses



Required for graduation or elective: Elective

Summary of Program: The courses are used within a primary care training program for medicine and advanced practice nursing.

### University of Central Florida

Organization type: School

Location: Orlando, FL, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Linda Howe, Associate Professor](#)

Start date of program: January 2012

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Howe teaches Leadership and Management in Nursing in the last semester of a baccalaureate nursing program. She requires all of her students to complete the first 10 modules, including all of the patient safety modules. She also uses some of the videos to teach.

The students build a professional portfolio and write a resume, which include the modules and the Basic Certificate -- if they complete that.

Additional information/feedback from participants: "All the students have commented on how the modules have helped them develop ideas about improving patient safety, doing a root cause analysis, and as basis for possible change projects," Howe says.

### University of Chicago

Organization type: School

Location: Chicago, IL, USA

Discipline(s) participating: Allied Health Professions, Health Administration, Medicine, Social Work

Audience: Students

Key contact: [Julie Oyler, Associate Program Director](#)

Start date of program: August 2010

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: There is a quality and safety track within the medical school. If students select this track, they must complete QI 101 to 106 and PS 101 to 106. They must print out the Certificates and turn them in to track leaders. They also have other QI/PS elective and research requirements. Other graduate students (in health administration and policy, business, and social service) participate in a class where they have to complete selected IHI modules that coincide with the curriculum.

### University of Colorado

Organization type: School

Location: Aurora, CO, USA

Discipline(s) participating: Nursing, Medicine

Audience: Students

Key contacts: [Joan Nelson, Professor](#) (Nursing); [Wendy Madigosky, Director, Foundations of Doctoring Curriculum](#) (Medicine)

Start date of program: August 2012

Required for graduation or elective: Required

Courses included: Select courses for Nursing, Basic Certificate for Medicine

Summary of Program: Entering medical students are required to complete the Basic Certificate of Completion before the end of their second year as part of the professional development curriculum within the foundations of doctoring curriculum. Students currently in their second year are required to complete eight courses by the end of the year: PS 100 – 104, QI 101 and 102, and PFC 101.

### University of Colorado at Colorado Springs

Beth El College of Nursing and Health Sciences

Organization type: School

Location: Colorado Springs, CO, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Lynne Bryant, Senior Instructor](#)

Start date of program: 2009

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: Nursing students in a sophomore-level foundational nursing course take select basic courses on patient safety to introduce concepts of patient safety and quality improvement.

Additional information/feedback from participants: "Feedback from the students is that these courses are accessible, interesting, and valuable," says Bryant.

### University of Dammam

Organization type: School

Location: Dammam, Eastern Province, Saudi Arabia

Discipline(s) participating: Allied Health Professions, Health Informatics

Audience: Students

Key contact: [Duaa Al-Jabri, Faculty Member](#)

Start date of program: January 2013

Required for graduation or elective: Required

Courses included: Select courses

Summary of Program: Select modules have been added to HIMT 327-Quality Management and Improvement in Healthcare, a course taught to third-year undergraduate students in the Health Information Management & Technology program. Completion of the modules are required to pass the course.

## University of Detroit Mercy

Organization type: School  
Location: Detroit, MI, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Patricia Rouen, Associate Professor](#)  
Start date of program: May 2011  
Courses included: Select courses  
Required for graduation or elective: Required

Summary of Program: The school has integrated the IHI Open School modules on quality improvement and patient safety into the master's program, preparing family nurse practitioners and those in the doctor of nursing practice program. Students are engaged in QI work and use the modules to frame, evaluate, and improve quality issues in their individual practice settings.

Additional information/feedback from participants: "Students have described the modules as excellent," says Rouen.

## University of Florida

Organization type: School  
Location: Gainesville, FL, USA  
Discipline(s) participating: Allied Health Professions, Dentistry, Health Administration, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant  
Audience: Students  
Key contact: [Richard Davidson, Professor](#)  
Start date of program: 2010  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: The University of Florida has been using selected lessons in a large interprofessional course (more than 600 students) in preparation for a small group session which describes several patient safety cases, primarily in outpatient settings. The school is considering using additional cases for a planned second-year course and, additionally, in a fourth-year safety and quality session, all of which are interprofessional in nature.

Additional information/feedback from participants: "The feedback from our students has been generally positive, but not as positive as we had expected," says Davidson. "Even first-year students find the lessons (and the quizzes, which count toward their grades) easy to run through without much effort. We have monitored how long they spend on their lessons, and that data shows that many students can complete a lesson in less than two minutes and pass the subsequent quiz.

"When asked about the educational value of the IHI lessons, the evaluation is only moderate and, in fact, is lower than some other aspects of the course. However, we will continue to use the lessons as we are convinced they provide a foundational approach to patient safety in a cost-efficient manner."

Note from the IHI Open School: Some professors have adjusted grades based on the number of attempts and the amount of time a student needs to complete a lesson. Both pieces can be found in the tracking report that the IHI Open School provides.

### University of Georgia College of Public Health

Organization type: School  
Location: Athens, GA, USA  
Discipline(s) participating: Business Administration, Public Health  
Audience: Students  
Key contact: [Joel Lee, Dr. P.H., Professor](#)  
Start date of program: January 2012  
Required for graduation or elective: Elective  
Courses included: Basic Certificate

Summary of program: All students in the Quality Improvement in Health course must meet all the requirements to receive the Institute for Healthcare Improvement Open School's Basic Certificate of Completion. The course provides an introduction to quality improvement in public health and health care delivery from a multi-stakeholder perspective. The theoretical basis for continuous learning at the individual, organization, and systems levels will be presented, with practical skills acquired through case analysis and planning of improvement programs. Specific focus is placed on systems thinking and process analysis and redesign. Specific organizational strategies for improvement of quality including the Institute for Healthcare Improvement, the Baldrige Performance Excellence Award, and other entities such as the Leapfrog Group and Codman Award will be addressed.

### University of Hawaii - John A. Burns School of Medicine

Organization type: School  
Location: Honolulu, HI, USA  
Discipline(s) participating: Medicine  
Audience: Students, Faculty  
Key contact: [Richard Kasuya MD, MEd, Associate Dean for Medical Education](#)  
Start date of program: June 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: All first-year medical students are required to complete PS 100: Introduction to Patient Safety and QI 101: Fundamentals of Improvement as part of two sequential curricular blocks.

### University of Iowa

Organization type: School  
Location: Iowa City, IA, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: [Jacinda Bunch, Lecturer](#)  
Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: The IHI Open School courses are used within a course called Professional Role III: Improving Health Systems. The course covers legal and regulatory processes that impact health care; how disparities influence health care; evidence-based approaches for improving quality of care; strategies for working effectively in intradisciplinary and interdisciplinary teams; and integration of a culture of safety.

## University of Kansas

Organization type: School

Location: Kansas City, KS, USA

Discipline(s) participating: Health Administration

Audience: Students

Key contact: [Robert Lee, Professor](#)

Courses included: Select courses

Required for graduation or elective: Elective

## University of Kansas, Prairie Village

Organization type: School

Location: Prairie Village, KS, USA

Discipline(s) participating: Medicine - Ophthalmology

Audience: Residents

Key contact: [Thomas Whittaker, MD, Vice-Chair and Program Director](#)

Start date of program: April 2015

Courses included: Basic Certificate

Required for graduation or elective: Elective

## University of Maryland

Organization type: School

Location: Baltimore, Maryland, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Sherrie Lessans, Assistant Professor](#)

Start date of program: Fall 2012

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: This is the second semester the school has included select courses in the senior practicum – a last semester student-to-nurse transition course. The students complete seven courses: Patient Safety 100, 101, 102, 103, and 106, and Quality Improvement 101 and 105. The program is an accelerated second degree program, a clinical nurse leader program of study. Students enter the program with a degree in something else and fast track in 16 months to an entry level master's degree in nursing. They graduate as novice nurses and master's level generalists whose practice emphasis is at the bedside. The curriculum is heavily focused on risk identification and shaping health care outcomes. Students have to complete 180 hours of guided bedside clinical time during this practicum with another 90 hours of independent learning experiences called quality and safety resource hours. (These are

experiential learning opportunities to explore factors that shape outcomes for patients.) The seven required IHI courses are meant to be completed prior to specific seminar topics to prepare students for discussion. Students receive quality/safety time for completing the lessons.

Additional information/feedback from participants: “The response has been enthusiastic so far from both students and faculty teaching the course,” says Lessans. “[The IHI courses] are very relatable and pragmatic examples to draw on to spur discussions. We also use lessons learned from IHI courses to prepare students to participate in our course-ending, risk-reduction roundtable where students have to connect the dots between lessons learned in courses and real-life risk-reduction efforts they are completing on their own practicum units. We don't test content, but have talked to students since completion of program and they report being more informed as a result of the courses. It has helped them look at their post-school clinical world through new eyes.

“We encourage students to complete the remainder of the 16 on their own, to get in-depth knowledge but also a resume-worthy certificate,” she adds. “I don't know how many, if any, actually completed all 16 courses for certification.”

### University of Massachusetts, Boston

Organization type: School  
Location: Boston, MA, USA  
Discipline(s) participating: Nursing  
Audience: Students, Health Professionals  
Key contact: Pat Reid Ponte, Chief Nursing Officer  
Start date of program: February 2015  
Required for graduation or elective: Required  
Courses included: Select courses

### University of Memphis

Organization type: School  
Location: Memphis, TN, USA  
Discipline(s) participating: Health Administration, Public Health  
Audience: Students  
Key contact: [Dr. Erik L. Carlton, Assistant Professor](#)  
Start date of program: September 2014  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Students complete the IHI Open School Basic Certificate as part of the Quality & Outcomes Management in Healthcare course, which is required for both the Master of Health Administration and Master of Public Health (with Health Systems Management concentration) degrees.

### University of Michigan

Organization type: School  
Location: Ann Arbor, MI, USA  
Discipline(s) participating: Nursing

Audience: Students

Key contact: [Dr Michelle Aebersold, Clinical Assistant Professor](#)

Start date of program: September 2012

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The Open School courses are integrated into the quality and safety curriculum, which prepares leaders for development and execution of quality improvement and patient safety programs.

## University of Minnesota, Crookston

Organization type: School

Location: Crookston, MN, USA

Discipline(s) participating: Allied Health Professions, Health Administration

Audience: Students

Key contact: [Paula Viker, Program Director](#)

Required for graduation or elective: Elective

Courses included: Basic Certificate

Summary of program: Viker used the Certificate last year in the Quality Improvement/Risk Management class in lieu of a project/paper, and most students opted to complete the Basic Certificate.

The courses are used within Health Management/Bachelor of Applied Health programs, which are offered online. The typical student is an adult working in health care. Many have an associate's degree in a clinical field.

Additional information/feedback from participants: "Students loved that they could earn the Certificate (which looked great at work) and include it on their resume," says Viker "The students who could also earn CEUs for it were thrilled, but there were other students in allied health professions who wished they could have earned CEUs for it as well (I can't remember what professions the CEUs were available to other than nurses).

"The feedback from students was very good and I plan to use it again this spring in the Performance Improvement class."

## University of Minnesota, Duluth

Organization type: School

Location: Duluth, MN, USA

Discipline(s) participating: Business Administration, Health Administration, Health Policy, Public Health

Audience: Students

Key contact: [Jill Klingner, Assistant Professor](#)

Start date of program: Fall 2011

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: The school requires three courses for its introduction to health care course and 14 courses for the Healthcare Quality and Patient Safety Course. The quality course is the capstone course in a Healthcare Management Bachelors in Business Administration (BBA) degree program in the Labovitz School of Business and Economics.

## University of Missouri-Columbia

Organization type: School

Location: Columbia, MO, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Dr. Myra Aud, PhD, RN, Associate Professor](#)

Start date of program: Fall 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: In the nursing school, Aud teaches the leadership and management course for pre-licensure nursing students in their senior year of a four-year baccalaureate program. For the past three semesters (Fall 2011, Spring 2012, and Fall 2012), she has assigned the Basic Certificate as a "homework" assignment. Approximately 110 student nurses have completed the Basic Certificate (Fall 2011 and Spring 2012). The 54 student nurses in her current course (Fall 2012) are working on the Basic Certificate courses now.

In addition, Aud assigns the course on Dignity and Respect (PFC 101) to the students in her gerontological nursing course. Both the leadership/management course and the gerontological nursing course are required courses at Sinclair School of Nursing.

Because of the positive feedback, one of Aud's colleagues has begun to assign them in her online leadership/management course for registered nurses with associate degrees who have returned to school to complete their baccalaureate degrees.

Completion of the Basic Certificate is an assignment in the leadership course, which is required in the baccalaureate nursing program, at the Sinclair School of Nursing.

Additional information/feedback from participants: "The modules are an excellent fit to my course's objectives related to patient safety and quality improvement," says Aud. "Student responses to the Basic Certificate courses have been positive. Also, the students and I hope that adding the certificate to their resume and interview portfolio will have a positive influence on their job search after graduation."

## University of Nebraska

Organization type: School

Location: Omaha, NE, USA

Discipline(s) participating: Allied Health Professions, Medicine, Nursing, Pharmacy

Audience: Students

Key contact: [Paul Paulman, Assistant Dean for Clinical Skills and Quality](#)

Required for graduation or elective: Elective

Courses included: Select courses



Summary of program: Students complete selected modules to support hands-on quality improvement projects.

Additional information/feedback from participants: “The content and concepts incorporate well into the nursing curriculum,” says Instructor Rita Weber.

## University of New England

Organization type: School

Location: Portland, ME, USA

Discipline(s) participating: Allied Health Professions, Dentistry, Health Science, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, Public Health, Social Work

Audience: Students

Key contacts: [Nancy Macrae, Associate Professor, Occupational Therapy](#),  
[E. Maggie Jones, Pharmacy Student](#)

Start date of program: August 2012

Required for graduation or elective: Required

Courses included: Select courses

Summary of Program: Select IHI Open School course are used within the required course IHS 110: Introduction to the Health Professions, where beginning students explore the various health care professions and some of the basic requirements common to all.

Additionally, completion of the IHI Open School Basic Certificate is required to participate in the university's Clarion Case Competition. This the first year of its requirement (2013), and the school hopes that it will provide a basic understanding that is level across all disciplines and student class years. The Clarion Case Competition consists of interprofessional teams of four students (no two students may be from the same health profession) that come together to perform a root cause analysis on a patient/institution case. This case is written and provided to universities at a participation cost by the University of Minnesota. The winning team from UNE will be awarded a cash prize, and a paid-in-full trip to Minnesota to compete at the national CLARION case competition. Last year, the winning UNE team won second place at the national competition.

Additional information/feedback from participants: “As the President of UNE's Interprofessional Student Advisory Team and having been a past attendee at IHI's Open School Student Quality Leadership Academy (summer 2013), I feel very strongly about supporting the education of our students in all aspects of interprofessional/interdisciplinary communication and problem-solving,” says Jones. “This certificate and our Clarion Case Competition are offering students of all health professions at our university the chance to practice working on an interprofessional team, and this will only enhance their abilities once they are out in the real world of health care.”

## University of New Hampshire

Organization type: School

Location: Durham, New Hampshire, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Gene Harkless, Associate Professor](#)

Start date of program: 2011

Required for graduation or elective: Required

Courses included: Basic Certificates

Summary of program: The Basic Certificate is required for all clinical nurse leader graduate students.

## University of North Dakota

Organization type: School

Location: Grand Forks, ND, USA

Discipline(s) participating: Medicine

Audience: Students

Key contact: [Charles Christianson, MD, ScM, Associate Dean for Clinical Education](#)

Required for graduation or elective: Required

Start date of program: July 2013

Courses included: Select courses

Summary of program: Faculty require PS 100-105 and QI 101-106, twelve courses in all.

Additional information/feedback from participants: "This is the first year this has been required, so there are no results yet," says Christianson.

## University of North Texas Health Science Center - School of Public Health

Organization type: School

Location: Fort Worth, TX, USA

Discipline(s) participating: Health Administration

Audience: Students

Key contact: [Liz Trevino, Assistant Dean and Director of MHA Program](#)

Start date of program: Fall 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: Although the MHA program was established in 2008, it was not until fall 2011 that the school required every student enrolled in the program to complete the IHI Open School Basic Certificate. It is required of every student before they conduct their internship. In 2011, it was an extracurricular requirement, but today, it is part of a required course -- HMAP 5050 MHA Portfolio - which represents a series of required activities that aim at providing opportunities for the student to advance and master the MHA program competencies, develop their professional portfolio, and gain professional experience.

Additional information/feedback from participants: "The IHI Basic Certificate has proven to advance the students' knowledge and complements the concepts being addressed in their courses," says Trevino. "Our students have two semesters to complete the Certificate and, as a result of the exposure to IHI, three students were selected this year to participate in the IHI's 2012 Student Quality Leadership Academy."

## University of Oklahoma

Organization type: School  
Location: Oklahoma City, OK, USA  
Discipline(s) participating: Public Health, Health Administration  
Audience: Students  
Key contact: [Dale W. Bratzler, Professor and Associate Dean](#)  
Start date of program: January 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Students in the Masters programs (MPH and MHA) in health administration are required to take a course called Healthcare Quality Management. As part of the curriculum for that class, students are required to complete the 16 courses that make up the IHI Open School Basic Certificate. All 23 students in the class completed the required modules.

Additional information/feedback from participants: "The overall feedback from the students was very positive," says Bratzler. "I did incorporate some of the material from the Open School modules into testing to 'encourage' the students to spend the necessary time to understand the modules.

"Going forward, I believe I will put some specific requirements in place to make sure that the students are completing the modules throughout the semester. Not surprisingly, some students waited until the end of the semester to go through many of the modules."

## University of Rochester

Organization type: School  
Location: Rochester, NY, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Margaret Carno, Instructor](#)  
Start date of program: January 2014  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Faculty use the courses within an accelerated nursing program.

## University of San Francisco

Organization type: School  
Location: San Francisco, CA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Diane Torkelson, Associate Professor](#)  
Start date of program: August 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The IHI Open School courses are used with a course called Health Care Systems Leadership for masters nursing students. The students will be graduating in December 2013 with their MSNs and will be eligible to sit for the Certification Examination for Clinical Nurse Leaders.

Additional information/feedback from participants: "The students are expressing positive comments about the learning modules in the course," says Torkelson. "The modules dovetail with course content and are a great way to bring the material alive to them."

### University of South Carolina - Beaufort

Organization type: School

Location: Beaufort, South Carolina, USA

Discipline(s) participating: Nursing

Audience: Students

Key contact: [Lynne Ornes, Associate Professor](#)

Start date of program: January 2013

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Students go through four of the courses, dealing with dignity and respect, patient safety, and teamwork and communication. They must present the Certificate of Completion from each course to faculty in order to sit for the final exam.

### University of South Carolina - School of Medicine

Organization type: School

Location: Columbia, South Carolina, USA

Discipline(s) participating: Medicine

Audience: Students

Key contact: [Nancy Richeson, Faculty and Course Director](#)

Start date of program: Fall 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

### University of South Carolina Upstate

Organization type: School

Location: Spartanburg, South Carolina, USA

Discipline(s) participating: Health Informatics

Audience: Students

Key contact: [Deshia Leonhirth, Research Associate](#)

Start date of program: Fall 2014

Required for graduation or elective: Elective

Courses included: Basic Certificate

Summary of program: Leonhirth will incorporate the Basic Certificate into a special topics course in Quality Improvement for students in the Masters of Science in Informatics (with a Health Information Management concentration) program for the first time this fall.

Summary of program: Modules for the Basic Certification are spread out over the four years of medical

education. In the fall of 2012, the curriculum committee voted to make completion of the Basic Certificate a graduation requirement.

### University of South Dakota

Organization type: School  
Location: Sioux Falls, SD, USA  
Discipline(s) participating: Social Work  
Audience: Students, Health Professionals  
Key contact: [Jarod Giger](#)  
Start date of program: Fall 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate is required in the Master of Social Work graduate program, which specializes in advanced generalist practice.

### University of South Dakota

Organization type: School  
Location: Vermillion, SD, USA  
Discipline(s) participating: Medicine, Health Sciences  
Audience: Students  
Key contact for medicine: [Ryan Miller, Medical Student](#)  
Key contact for nursing: [Carla Dieter, Professor](#)  
Key contact for health sciences: [June Larson, Professor](#)  
Start date of program: 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program:

Medicine: The USD Sanford School of Medicine Quality and Safety Longitudinal Curriculum was developed based on results of a student-driven pilot project which introduced two IHI Open School courses into an interdisciplinary course in the medical school. Further implementation of courses and small group discussion were also integrated into the internal medicine clerkship. This new curriculum contains both didactic and experiential components, with a focus on small group discussion and collaboration.

Pillar 1 (years 1-2): Students receive introductory lecture and participate in the “Partnering to Heal” (PS 201) online course with small and large group discussion. Students complete 10 additional IHI Open School courses along with three faculty-facilitated, small group sessions to give students the opportunity to discuss courses and/or work through a related case.

Pillar 2 (years 2-3): Students will be required to complete a QI project individually or in a small group using the IHI Open School Quality Practicum. Future projects may involve students from multiple disciplines working together, collaborating with other South Dakota health professions schools.

Pillar 3 (years 3-4): Students formally present their QI projects from Pillar 2 and have the opportunity to complete remaining IHI Open School courses for elective credit. Future opportunities may involve interprofessional simulation activities or other interprofessional activities during this Pillar.

**Nursing:** The concept-based nursing curriculum has integrated the IHI modules throughout the curriculum. Each IHI module has been linked to a specific course within the curriculum based on the concepts within the course, course description, and course outcomes. Faculty use creative methods in introducing these modules along with classroom discussion within their courses. The information learned in the IHI modules are linked to the course concepts. The IHI modules are a requirement of the course to guarantee that each of our BSN students graduates from our program with an IHI certificate of completion. Plans are under way to have discussions on the modules with interprofessional groups.

**Health Sciences:** All undergraduate health science majors are required to complete the IHI Open School Basic Certificate and will include the certificates in their required portfolios at program completion. The Basic Certificate was implemented in 2012, but a new course, HSC 450 - Patient Safety & Quality Improvement, will be implemented in 2013 to better organize the IHI Open School content and add additional supplementary material. Foundations in Patient Safety for Health Professionals by Kimberly Galt and Karen Paschal is also used as a textbook. The class also uses case studies and small group discussion.

Additional information/feedback from participants:

**Miller:** "The combination of students completing courses on their own time and faculty-facilitated discussion of the courses and related case has been found to be very effective for student learning in our pilot studies. We are excited about the potential for integrating students from other health professions schools into QI projects with medical students and undertaking more multidisciplinary simulation activities as a component of the curriculum in the future. The local IHI Open School Chapter in South Dakota provides the forum to make these interactions occur because students are already connected via the multidisciplinary IHI Open School Chapter."

**Larson:** "Hundreds of health science majors have already completed the IHI Open School Basic Certificate. Changes will be made based on additional feedback."

## University of South Florida

Organization type: School

Location: Tampa, Florida, USA

Discipline(s) participating: Nursing

Audience: Students, Health Professionals

Key contact: [Cheryl Zambroski, Associate Professor](#)

Start date of program: Spring 2012

Required for graduation or elective: Required

Courses included: Select courses

Summary of program: Zambroski requires PH 101: Introduction to Population Health in a population health course for the RN to BS program.

Additional information/feedback from participants: "The course is excellent," Zambroski says. "Some students have had a bit of a challenge registering but it is only about 5 or 10% at the very most."

### University of Texas

Organization type: School  
Location: El Paso, TX, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Linda Lawson, Faculty](#)  
Start date of program: August 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The IHI Open School courses are required course work for the Doctor of Nursing Practice (DNP) program.

### University of Texas, Dell Medical School

Organization type: School  
Location: Austin, TX, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Sue Cox, Faculty](#)  
Start date of program: August 2011  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate of Completion is required of all GME residents during their training. Thus far, nearly 400 graduates have earned the certificate.

### University of Texas Health Science Center

Organization type: School  
Location: San Antonio, TX, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Essel Marie B. de Leon, Physician](#)  
Start date of program: July 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The courses will be used in the Pathology department.

### University of Texas Health Science Center at Houston

Organization type: School  
Location: Houston, TX, USA  
Discipline(s) participating: Nursing, Surgery  
Audience: Students, Residents, Faculty Surgeons  
Key contact nursing: [Armilla Henry, Administrative Director of Nursing](#)  
Key contact surgery: [Donald Lesslie III, DO, FACS, Program Director and Vice Chair for Surgical Education](#)

Start date of program: June 2013  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The courses are used within an academic surgical residency that trains 50-55 residents annually, as well as a doctor of nursing practice (DNP) program.

### University of Southern California, Keck School of Medicine

Organization type: School  
Location: Los Angeles, CA, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Armaity Austin, Physician](#)  
Start date of program: July 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Basic Certificate is integrated into the Community Medicine rotation.

### University of Tennessee at Chattanooga

Organization type: School  
Location: Chattanooga, TN, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Susan M Thul, DNP, APRN, CNM](#)  
Start date of program: Spring 2018  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Program summary: IHI Basic Certificate is incorporated into Doctor of Nursing Practice (DNP) clinical course work to serve as a foundation for improvements and initiatives related to quality and safety in health care. DNP students in both direct and indirect care roles benefit from the inclusion of this course work into the DNP program.

### University of Tennessee Health Science Center

Organization type: School  
Location: Memphis, TN, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Kimberlee Norwood, Medical Educator](#)  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Program summary: The University of Tennessee Health Science Center has been using the IHI Open School modules in its Patient Safety Quality Improvement (PSQI) Clerkship curriculum since 2008 for their M4s. In the beginning, the school did not require all of the modules, but in the past year, decided



students should complete the courses. Norwood and the faculty use the IHI modules in addition to their own modules they created.

The program also includes an RCA session with a physician during the ambulatory rotation – the IHI module PS 104: Root and Systems Analysis is required prior to this session. The school is currently under a curriculum revision process and will be combining PSQI, Research, and Community Advocacy into one longitudinal program. When that happens, students will be required to complete the full IHI Certificate by the M3 year. In the new design, students will end with a project in one of the three areas mentioned.

Additional information/feedback from participants: “The new QCV module is an amazing introduction,” says Norwood.

### University of Texas Southwestern

Organization type: School  
Location: Dallas, TX, USA  
Discipline(s) participating: Medicine  
Audience: Students  
Key contact: [Jason Fish, Assistant Professor](#)  
Start date of program: July 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: During the third year, internal medicine ambulatory clerkship, students participate in the IHI Open School online curriculum, which is coupled with discussions around quality improvement.

### University of Texas Southwestern, Austin

Organization type: Residency Training Program  
Location: Austin, TX, USA  
Discipline(s) participating: Medicine  
Audience: Psychiatry Residents  
Key contact: [Emily Doyle, MD, Residency Program Director, Seton Healthcare](#)  
Start date of program: July 2012  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The university requires that all psychiatry residents complete the Basic Certificate of Completion in their second year of training. The online modules are coupled with one hour/month of classroom time for the residents to meet with faculty to discuss concepts from the modules and apply what they have learned. Small groups of residents work together to develop and implement a clinical quality improvement project during the year, and present their projects at the end of the year.

### University of The Incarnate Word

Organization type: School  
Location: San Antonio, Texas, USA

Discipline(s) participating: Health Administration

Audience: Students

Key contact: [Daniel G. Dominguez, Associate Professor and Program Director](#)

Key contact: [Cynthia Purcell, Nursing Instructor](#)

Start date of program: August 2014

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: The Open School courses are used within a graduate program in Health Administration. They are also used in Population Health and Managerial Epidemiology, Leadership, and Quality and Continuous Improvement courses.

The courses are spread across the curriculum for the BSN program and aligned with matching coursework. By graduation, all students have completed and obtained the Basic Certificate. We feel employers in healthcare expect our graduates to come to them with the knowledge and skills obtained through the Basic Certificate courses.

Additional information/feedback from participants: "The basic courses and the Practicum have been especially well received by students in the Quality and Continuous Improvement course," says Dominguez.

## University of Toronto

Organization type: School

Location: Toronto, Ontario, Canada

Discipline(s) participating: Nursing

Audience: Students

Key contact: Kathy Trip, Assistant Professor

Required for graduation or elective: Elective

Courses included: Select courses

Summary of program: The program in which the IHI modules are used includes the first and second clinical course associated with the Nurse Practitioner program. The school has integrated several of the patient safety modules and, in the final clinical course, it intends to integrate a QI module. The patient safety modules integrate very well with the curriculum and are very relevant to the course objectives and clinical practicum experience. The school's final clinical course relates to the role of the NP and the relevance to program planning, development, and quality improvement.

Additional information/feedback from participants: "Faculty have found the IHI modules to be extremely relevant to course content with an easy to access format for students," says Trip. "Students can provide Certificates of Completion to individual course instructors as part of the participation grade assigned in this program.

"Students have commented on the relevance that the PS modules have on their clinical practice and, in fact, one student felt empowered to address a systems issue in her clinical setting as a result of learning she acquired through completion of the IHI modules."

### University of Washington

Organization type: School  
Location: Seattle, WA, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Monica Jarrett, Professor](#)  
Start date of program: March 2014  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: Faculty are incorporating quality improvement content into their curriculum for the Doctorate of Nursing Practice (DNP) degree. Students will be assigned to complete the basic program and document that with the certificate.

### University of Wisconsin Oshkosh

Organization type: School  
Location: Oshkosh, WI, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: Judith Westphal, Assistant Professor  
Start date of program: February 2012  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: IHI Quality Improvement course modules are used in a Leadership and Management course taught to undergraduate nursing students. Students complete all modules and keep copies of the Certificate for each module.

Additional information/feedback from participants: "Students are encouraged to reference completion of the modules when applying for positions upon graduation," says Westphal.

### University of Wisconsin-Milwaukee

Organization type: School  
Location: Milwaukee, WI, United States  
Discipline(s) participating: Nursing  
Audience: Students, Faculty  
Key contact: [Jo Ann Appleyard, Clinical Assistant Professor](#)  
Start date of program: January 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: The school requires its senior nursing students to complete the safety and quality modules as part of their courses entitled Practice, Research & Leadership I and II. The content in the IHI modules supplements the reading and class activities related to quality and safety in these courses, as well as in clinical courses.

Additional information/feedback from participants: "We have had very positive feedback from both faculty and students," says Appleyard. "Several of our students have voluntarily completed their Basic Certificates before they graduate."

### Valparaiso University

Organization type: School  
Location: Valparaiso, IN, USA  
Discipline(s) participating: Health Administration, Health Policy  
Audience: Students  
Key contact: [Tom Blodgett, Doctoral Student, Clinical Nurse Specialist](#)  
Start date of program: Fall 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The IHI Open School program is used in the course "Communication Processes for Health Care Leaders II." This course focuses on health policy analysis, team dynamics, health care quality (and Quality Assurance & Performance Improvement), and patient safety.

### Vanderbilt University

Organization type: School  
Location: Nashville, TN, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Donald Brady, Associate Dean for Graduate Medical Education](#)  
Start date of program: July 2010  
Required for graduation or elective: Required  
Courses included: Select courses

### Virginia Commonwealth University

Organization type: School  
Location: Richmond, VA, USA  
Discipline(s) participating: Health Administration, Nursing  
Audience: Students  
Key contacts: [Kenneth R. White, Health Administration Professor](#); [Suzanne Wright, Nursing Professor](#)  
Start date of program: January 2012  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: White teaches a graduate course called Management of Healthcare Organizations. To supplement a lesson clinical process improvement, he assigns certain modules from IHI. He gave extra credit to students who completed all the modules. Additionally, faculty use the courses within the Doctorate of Nurse Anesthesia Practice program.

Additional information/feedback from participants: "Student feedback was positive, but they think more credit should be given for the modules because they are time-consuming," White says. "I am evaluating that for changes to the spring 2013 semester."

### Weiss Memorial Hospital

Organization type: Hospital  
Location: Chicago, IL, USA  
Discipline(s) participating: Medicine  
Audience: Residents  
Key contact: [Radhika Sreedhar, Faculty](#)  
Start date of program: July 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: This Certificate is part of the residents' training in quality improvement.

### Western Carolina University

Organization type: School  
Location: Cullowhee, NC, USA  
Discipline(s) participating: Nursing  
Audience: Students  
Key contact: [Colleen Hayes, Assistant Professor of Nursing](#)  
Start date of program: January 2012  
Required for graduation or elective: Elective  
Courses included: Select courses

Summary of program: Hayes uses courses PS 100, PS 101, PS 102, Q 101, and L 101 in my undergraduate nursing leadership course. The course is part of the curriculum in a traditional and accelerated BSN program in a four-year university. Students complete a patient story interview paper after completing the patient safety modules, and a paper about a work or school experience related to leadership after completing the L 101 module.

### Western Governors University

Organization type: School  
Location: Salt Lake City, UT, USA  
Discipline(s) participating: Allied Health Professions, Nursing  
Audience: Students  
Key contact: [Tammy Nelson, Course Mentor](#)  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The school uses the IHI Basic Certificate as a portion of one assessment in a health professions course taken by prelicensure nursing students, BSN students, and MSN students regarding organizational leadership. At any given time, there are approximately 600 students in this course.

Additional information/feedback from participants: "Almost all the feedback I receive about the IHI open school modules is positive," says Nelson. "Many students are interested in the content and enjoy the Basic Certificate content.

"At times, our students struggle with the log-in process (often forgetting to identify themselves as full time students throughout the profile process) and a percentage of our students struggle with downloading the basic certificate. I am unsure of what causes that actual problem and I generally print out their certificate and email it to them. Overall, we love the IHI Open School Basic Certificate courses."

### Wichita State University

Organization type: School

Location: Wichita, KS, USA

Discipline(s) participating: Nursing

Audience: Students, Faculty

Key contact: [Pamela Martin, Instructor of Nursing](#)

Start date of program: 2011

Required for graduation or elective: Required

Courses included: Basic Certificate

Summary of program: Basic Certificate courses are "leveled" into the four semesters of the undergraduate nursing program. In their final semester, students spend a total of ten clinical days practicing the soft leadership skills of communication, collaboration, delegation and teamwork, while critically evaluating safety and quality initiatives on acute-care medical-surgical units. Using the knowledge and skills they've gleaned from IHI coursework, each student team completes a "virtual" QI Project. While students don't actually intervene to improve care, they use their quality improvement knowledge and skills to better understand the identified quality issue, the approaches taken by staff to fully diagnose the problem, the improvement strategies implemented by staff, and then draw conclusions and make recommendations. Students gain insight not only into how quality improvement happens on a nursing micro-unit, but begin to imagine themselves performing these activities. They engage in evidence-based practice activities, learn more about core measures, HCAHPS and NDNQI, and begin to grapple with the complexities of improving systems. The project culminates in a team presentation to classmates, faculty and nursing unit managers.

Additional information/feedback from participants: Nursing students state that the virtual project helps them consolidate safety, quality improvement and EBP knowledge into a working "blueprint". Nursing alumni state that completion of the IHI Basic Certificate and QI Project gives them a "one-up" during the employment interview and feel better prepared to contribute to unit-based improvement efforts on hire.

### Worcester State University

Organization type: School

Location: Worcester, Massachusetts, USA

Discipline(s) participating: Nursing

Audience: Students, Health Professionals

Key contact: [Rani Gollamudi, Resident](#)

Start date of program: January 2013

Required for graduation or elective: Elective

Courses included: Basic Certificate

## The Wright Center Graduate Medical Education

Organization type: Residency Program  
Location: Scranton, PA, USA  
Discipline(s) participating: Medicine  
Audience: Residents, Faculty Members  
Key contact: [Rani Gollamudi, Resident](#)  
Start date of program: January 2013  
Required for graduation or elective: Required  
Courses included: Basic Certificate

Summary of program: The Wright Center for Graduate Medical Education (WCGME) is an independent, non-profit educational institution for graduate medical education in the Scranton, PA, area. Founded in 1976 as the Scranton Temple Residency Program, WCGME has grown significantly over the decades and is now the region's main source of highly-qualified and trained primary care physicians in the area. The IHI Open School Basic Certificate has been made mandatory for all the residents and faculty members at WCGME as of January 30, 2013.

Additional information/feedback from participants: "Our residents and faculty members just started the online courses with IHI.org," Gollamudi says. "We will post the feedback in the next two months."

## Wright State University

Organization type: School  
Location: Dayton, OH, USA  
Discipline(s) participating: Business Administration, Medicine, Public Health, Nursing  
Audience: Students  
Key contact: [Sabrina Neeley, Assistant Professor](#); [Sherrill Smith, Assistant Professor](#)  
Start date of program: January 2012  
Required for graduation or elective: Required  
Courses included: Select courses

Summary of program: Wright States requires first-year medical students in its Healthcare Leadership elective to complete the L 101: So You Want to be a Leader in Health Care and PS 103: Communication and Teamwork as part of the course. This course is required for students in our MD/MPH and MD/MBA programs, and is an optional course for any other first-year medical student. The content from the modules is included as part of the discussion in the class.

Additional information/feedback from participants: "Students who took the class during spring 2012 said they found the IHI information interesting and motivating," says Neeley. "Several said they planned to complete other IHI Open School modules, and have become more involved with our own IHI Chapter."

## Xavier University

Organization Type: School  
Location: Cincinnati, OH, USA  
Discipline(s) Participating: Health Administration

Audience: Students

Key Contact: [Eileen Alexander, Assistant Professor](#)

Start Date of Program: Spring 2016

Courses Included: Select Courses

Required for Graduation or Elective: Required

Summary of program: Understand and manage quality principles and process management systems in the context of contemporary quality systems, their history and commitment to customer focus. This course gives students a broad based understanding of quality principles, management systems, place present day quality systems and initiatives in historical context, and manage and modify quality systems to maintain customer focus.