

IHI Open School Online Courses: Course Catalog

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Key

100 = Introductory concepts for all health care audiences

200 = Intermediate concepts and specialized topic areas

300 = Project-based learning

*Basic Certificate in Quality and Safety = The Open School offers a certificate of completion to learners who complete 13 essential courses: *QI 101–105, PS 101–105, TA 101, PFC 101, & L 101*

About Us

The IHI Open School’s multimedia online courses cover a range of topics in quality improvement, patient safety, system design, leadership, and population management. Through narrative, video, and interactive discussion, the courses offer a dynamic learning environment to inspire students and health professionals of all levels.

Courses are broken into digestible 15- to 40-minute lessons — each focused on practical learning around a narrow topic — designed for busy learners and educators. Institutional faculty and organizational leaders around the world rely on the courses as an easy way to bring essential training to students and staff.

Visit [ihio.org/education/ihioopenschool/courses](https://www.ihio.org/education/ihioopenschool/courses) to learn more about how the Open School can help improve your interactions with patients, the safety within your organization, or any of the systems in which you live and work.

Improvement Capability

QI 101: Introduction to Health Care Improvement

As the Institute of Medicine (IOM) declared in 2001, in words that still ring true, “*Between the health care we have and the care we could have lies not just a gap, but a chasm.*” This course launches you on your journey to becoming a health care change agent.

First, it presents a high-level picture of the current quality of health care. Then, we’ll share how six aims for improvement from the IOM are driving improvement efforts all over the world. Finally, we’ll introduce you to Walter Shewhart, W. Edwards Deming, and a special type of science — the science of improvement.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: Health and Health Care Today

Lesson 2: The Institute of Medicine’s Aims for Improvement

Lesson 3: Changing Systems with the Science of Improvement

Course Objectives

After completing this course, you will be able to:

1. Describe common challenges for health care systems around the world.
2. List the six dimensions of health care, and the aims for each, outlined by the Institute of Medicine in 2001.
3. Explain the value of improvement science in health care.

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QI 102: How to Improve with the Model for Improvement

This course will teach you how to use the Model for Improvement, developed by a group called Associates in Process Improvement, to improve everything from your tennis game to your hospital's infection rate.

You'll learn the basic steps for introducing change in any system: setting an aim, selecting measures, developing ideas for changes, and testing changes using Plan-Do-Study-Act (PDSA) cycles. As you go along, you'll have the opportunity to use the same methodology to start your own personal improvement project.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: An Overview of the Model for Improvement

Lesson 2: Setting an Aim

Lesson 3: Choosing Measures

Lesson 4: Developing Changes

Lesson 5: Testing Changes

Course Objectives

After completing this course, you will be able to:

1. List the three questions you must ask to apply the Model for Improvement.
2. Identify the key elements of an effective aim statement.
3. Identify three kinds of measures: process measures, outcome measures, and balancing measures.
4. Use change concepts and critical thinking tools to come up with good ideas for changes to test.
5. Test changes on a small scale using the Plan-Do-Study-Act (PDSA) cycle.

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QI 103: Testing and Measuring Changes with PDSA Cycles

In this course, we'll take you through basic concepts you need to know to run successful PDSA (Plan-Do-Study-Act) cycles in a clinical setting.

First, we'll teach you how to plan and conduct small-scale tests of change. We'll discuss how you can establish a helpful set of measures and how to design a data collection plan that facilitates rapid learning, using techniques such as sampling.

Next, we'll focus on studying the data you've collected, and we'll explain why a run chart is such a valuable tool at this stage of the process.

Finally, we'll show you how to act on your learning, possibly by increasing the size or scope of your next test cycle.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: How to Define Measures and Collect Data

Lesson 2: How to Use Data for Improvement

Lesson 3: How to Build Your Degree of Belief over Time

Course Objectives

After completing this course, you will be able to:

1. Describe how to establish and track measures of improvement during the “plan” and “do” phase of PDSA.
2. Explain how to learn from data during the “study” phase of PDSA.
3. Explain how to increase the size and scope of subsequent test cycles based on what you're learning during the “act” phase of PDSA.

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QI 104: Interpreting Data: Run Charts, Control Charts, and other Measurement Tools

In this course, we'll delve into how to draw an effective run chart.

We'll show you how adding helpful elements such as a baseline median, goal line, and annotations of your tests of change can create a compelling picture of your progress toward improvement.

We'll teach you the difference between common cause and special cause variation. And we'll show you how to detect signs of special cause variation by applying four rules to a standard run chart or by drawing a control chart.

Once you've got that down, we'll introduce you to three more excellent tools for displaying data and learning from the variation you're seeing.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: How to Display Data on a Run Chart

Lesson 2: How to Learn from Run Charts and Control Charts

Lesson 3: Histograms, Pareto Charts, and Scatter Plots

Course Objectives

After completing this course, you will be able to:

1. Draw a run chart that includes a baseline median, a goal line, and annotations.
2. Describe the difference between common and special cause variation.
3. Explain the purpose of a Shewhart (or control) chart.
4. Apply four rules to identify non-random patterns on a run chart.
5. Explain when and how to use the following tools for understanding variation in data: histograms, Pareto charts, and scatter plots.

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QI 105: Leading Quality Improvement

The first four IHI Open School quality improvement courses taught you basic improvement methodology, which you can apply to improve health care processes and make care safer. But when you assume a leadership role in a clinical improvement project, you'll need more than just technical knowledge.

In the real world, you'll need to know the steps for managing the project through to completion. You'll need to understand the psychology of change, and you'll need skills in interdisciplinary teamwork.

In the real world, the human side of quality improvement — that is, the ability to rally a group around a cause — is every bit as important as having a good idea for a change.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: The Four Phases of a Quality Improvement Project

Lesson 2: Change Psychology and the Human Side of Quality Improvement

Lesson 3: Working with Interdisciplinary Team Members

Course Objectives

After completing this course, you will be able to:

1. Describe how to lead an improvement project through four key phases.
2. Identify and describe the components of IHI's Framework for Spread.
3. Apply strategies to assess and overcome resistance to change.
4. Apply strategies to work effectively with interprofessional colleagues.

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QI 201: Planning for Spread: From Local Improvements to System-Wide Change

Previous courses in the Quality Improvement catalog focused on testing and implementing a change in one location. This advanced course is about the next logical step: spreading the change.

You'll learn about the theory of how change spreads, according to the foundational work of psychologist Kurt Lewin and sociologist Everett Rogers.

Then you'll learn how to help a new idea spread across a population, both by motivating the people within the population to adopt the change and by developing new ideas that are inherently more likely to spread.

Finally, we'll introduce IHI's Framework for Spread, and you'll follow a detailed case study about how an organization used the methodologies you're studying to improve patient care at the bedside throughout Central Texas.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: How Change Spreads

Lesson 2: Tactics for Spreading Change

Lesson 3: Case Study in Spreading Innovations: Transforming Care at the Bedside

Course Objectives

After completing this course, you will be able to:

1. Describe how change spreads according to Kurt Lewin and Everett Rogers.
2. Assess the likelihood that a new idea will spread.
3. Apply IHI's Framework for Spread to spread an innovation across an organization.

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QI 202: Achieving Breakthrough Quality, Access, and Affordability

How does an organization go from providing ho-hum, average care to providing breakthrough quality, access, and affordability to patients? In this course, you'll learn to apply a basic framework for designing, operating, and improving complex systems of care that can lead to rapid gains in performance.

First, you'll learn that while advances in technology have led to much better patient outcomes over the past few decades, they've also made for a much more complex health care system. That complexity makes it impossible to predict exactly how the system will perform dynamically, which in turn means that constant, broad-based innovation is absolutely required as staff members discover "weak signals" of system failure. Improving big clinical problems such as central line infections, you'll learn, requires that staff members report tiny, apparently harmless problems as they occur — and it requires that senior leaders actually do something about those problems.

By the end of this course, you'll identify the "weak signals" of system failure all around you, and you'll also figure out exactly what your organization needs in order to respond effectively.

Estimated Time of Completion: 1 hour 45 minutes

Lessons

Lesson 1: Two Mustangs

Lesson 2: How to Make Complex Systems Fail

Lesson 3: Solving Problems in Complex Systems

Course Objectives

After completing this course, you will be able to:

1. Explain why system complexity requires us to take a methodical approach to system design, operation, and improvement.
2. Explain how the absence of this methodical approach will cause complex systems to fail predictably.
3. Propose specific applications of this methodical approach to the design, operation, and improvement of health care.

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QI 301: Guide to the IHI Open School Quality Improvement Practicum

This course is designed to walk you through the process of conducting a quality improvement project. It will call on your knowledge and learning from many other IHI Open School courses, and help you apply quality improvement skills in a real-world setting. Unlike other courses in our catalog, you will submit documents after several of the lessons.

To help make sure your project is headed in the right direction, we will review the project charter you submit after Lesson 2 and provide written feedback. Then, at the end, after you turn in your summary report, we will provide additional feedback about your project.

(Note: We will provide feedback and award the Practicum Certificate only on student projects. Professionals are welcome to participate, but we aren't able to offer direct feedback at this time.)

Estimated Time of Completion: 1 hour 15 minutes + project time

Lessons

Lesson 1: Putting Quality Improvement into Practice

Lesson 2: Starting Your Project

Lesson 3: Looking for Changes? Try Cause and Effect Diagrams

Lesson 4: Spell Improvement with P-D-S-A

Lesson 5: Data: Collect and Display

Lesson 6: Summarizing Your Project

Course Objectives

After completing this course, you will be able to:

1. Use the Model for Improvement to plan and carry out a quality improvement project in your local health care setting.
2. Develop a charter to guide you through a clinical quality improvement project.
4. Develop a cause and effect diagram to help you understand your theories for accomplishing your aim.
5. Use multiple Plan-Do-Study-Act (PDSA) cycles to test changes in a health care setting.
6. Construct a run chart that tracks measures over time for your improvement project.
7. Create a summary report that summarizes the learning from your project.

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Patient Safety

PS 101: Introduction to Patient Safety

No one embarks on a health care career intending to harm patients. But much too often, patients die or suffer injuries from the care they receive. In this course, you'll learn why becoming a student of patient safety is critical for everyone involved in health care today.

First, you'll learn about the human and financial toll of medical error and adverse events around the world.

Next, you'll learn why blame is rarely the appropriate (or helpful) response to error.

Finally, you'll learn four essential behaviors that any health care professional can adopt right away to improve the safety of patients.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: Understanding Medical Error and Patient Safety

Lesson 2: Responding to Errors and Harm

Lesson 3: A Call to Action — What YOU Can Do

Course Objectives

After completing this course, you will be able to:

1. Summarize the scope of medical errors and preventable harm to patients in health care.
2. Describe the impact of medical errors on patients, families, and providers.
3. Explain why blaming and punishing individuals for errors rarely improves patient safety.
4. Identify four ways any provider can improve safety for patients in his or her direct care.

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PS 102: From Error to Harm

This course provides an overview of the key concepts in the field of patient safety.

You'll learn the relationship between error and harm, and how unsafe conditions and human error lead to harm — through something called the Swiss cheese model. You'll learn how to classify different types of unsafe acts that humans commit, including error, and how the types of unsafe acts relate to harm.

Finally, you'll learn about how the field of patient safety has expanded its focus from reducing error to also encompass efforts to reduce harm.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: The Swiss Cheese Model

Lesson 2: Understanding Unsafe Acts

Lesson 3: A Closer Look at Harm

Course Objectives

After completing this course, you will be able to:

1. Explain the Swiss cheese model of error.
2. Define active failures and latent error and discuss their roles in causing harm.
3. List the main types of unsafe acts utilizing James Reason's classification system.
4. Identify at least one example of how health care has reduced harm.

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PS 103: Human Factors and Safety

This course is an introduction to the field of human factors: how to incorporate knowledge of human behavior in the design of safe systems.

You'll explore case studies to analyze the human factors issues involved in health care situations. And you'll learn how to use human factors principles to design safer systems of care — including the most effective strategies to prevent errors and mitigate their effects.

Finally, you'll learn how technology can reduce errors — even as, in some cases, it can introduce new opportunities for errors.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: Understanding the Science of Human Factors

Lesson 2: Changes Based on Human Factors Design Principles

Lesson 3: Using Technology to Mitigate the Impact of Error

Course Objectives

After completing this course, you will be able to:

1. Explain how human factors principles apply to health care.
2. Describe how changes to processes can mitigate the effects of factors that contribute to error.
3. Define simplification, standardization, constraints, forcing functions, and redundancies.
4. Discuss the risks and benefits of using technology to improve patient safety.

Contributors

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PS 104: Teamwork and Communication in a Culture of Safety

Effective teamwork and communication are critical parts of the design of safe systems. In this course, you'll learn what makes an effective team through case studies from health care and elsewhere. You'll analyze the effects of individual behavior for promoting teamwork, communication, and a culture safety. Finally, you'll learn several essential communication tools, such as briefings, SBAR, and critical language.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: Why Are Teamwork and Communication Important?

Lesson 2: How Can You Contribute to a Culture of Safety?

Lesson 3: Basic Tools and Techniques for Effective Communication

Course Objectives

After completing this course, you will be able to:

1. Explain why effective teamwork is essential for promoting patient safety.
2. Define a culture of safety and discuss the features of a strong safety culture.
3. Identify four behaviors anyone can use to promote teamwork, communication, and a culture of safety.
4. Use structured communication techniques to improve communication within health care.

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PS 105: Responding to Adverse Events

In this course, we're going to describe and advocate a patient-centered approach to use when things go wrong. This approach to adverse events and medical error centers on the needs of the patient, but it is also the best way to address the needs of a caregiver in the wake of an adverse event. Finally, we'll introduce a systematic response to error called root cause analysis, the goal of which is to learn from adverse events and prevent them from happening in the future.

Estimated Time of Completion: 1 hour 45 minutes

Lessons

Lesson 1: Responding to an Adverse Event: A Step-by-Step Approach

Lesson 2: When and How to Apologize to Patients

Lesson 3: The Impact of Adverse Events on Caregivers: The Second Victim

Lesson 4: Learning From Errors through Root Cause Analysis

Course Objectives

After completing this course, you will be able to:

1. Describe four steps to take in the immediate aftermath of an adverse event.
2. Explain when you should apologize to a patient and how to apologize effectively.
3. Discuss the impact of adverse events on providers.
4. Explain how you can use root cause analysis to address system problems in health care.

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PS 201: Root Cause and Systems Analysis

The goal of a root causes analysis (RCA) is to learn from adverse events and prevent them from happening in the future. The three lessons in this course explain RCAs in detail, using case studies and examples from both industry and health care. By the end, you'll learn a step-by-step approach to completing a RCA after an error — and improving the process that led to the error.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: Root Cause Analysis Helps Us Learn from Errors

Lesson 2: How a Root Cause Analysis Works

Lesson 3: How a Root Cause Analysis Can Help Improve Health Care

Course Objectives

After completing this course, you will be able to:

1. Explain how to use adverse events as learning opportunities.
2. Determine which adverse events are appropriate for a root cause analysis.
3. Describe how RCA works.
4. Explain how you can use RCA to address system problems in health care.

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PS 202: Building a Culture of Safety

As long as human beings provide health care, mistakes and errors will occur. However, health care providers can reduce the likelihood of such occurrences, and limit their impact, by fostering a “culture of safety.” This is an environment that encourages people to speak up about safety concerns, makes it safe to talk about mistakes and errors, and encourages learning from these events.

How providers can create and foster a culture of safety is the focus of this advanced course.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: Leading Health Systems through Adverse Events

Lesson 2: What Does a Culture of Safety Look Like?

Lesson 3: Tactics for Leading Cultural Change

Course Objectives

After completing this course, you will be able to:

1. Discuss your opinions on one hospital’s response to a serious adverse event.
2. Explain the four components of a culture of safety: psychological safety, fairness, transparency, and effective leadership.
3. Describe the process of culture change and identify at least three tactics to accelerate it.

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PS 203: Partnering to Heal: Teaming Up Against Healthcare-Associated Infections

Partnering to Heal: Teaming Up Against Healthcare-Associated Infections is a computer-based, interactive learning tool for early-career clinicians, health professional students, patients, and visitors on preventing healthcare-associated infections. The training video was created by the U.S. Department of Health & Human Services (HHS), in consultation with subject matter experts from various disciplines and sectors, as well as patient advocates, as part of a wider effort that works closely with public and private sector partners to improve the quality, safety, and affordability of healthcare for all Americans.

The dramatization is intended to increase awareness of the risks of healthcare-associated infections and the opportunities for preventing such infections. It is not intended to reflect common clinical care. Certain scenes demonstrate a worst-case scenario of how lapses in medical judgment, communication, teamwork, and attention to infection control practices might impact patient outcomes. The intent is to provide a training tool for use by health professionals, students, patients, and their families about patient safety concepts, rather than provide an accurate or comprehensive depiction of conditions caused by specific pathogens.

This interactive video, authored in part by Vet-Work Learning Solutions, Inc., was funded in whole or in part by the U.S. Department of Health and Human Services under U.S. Government contract HHSP233200900228A.

Department of Health and Human Services (HHS) hosted materials are available free of charge on the HHS website at <http://www.hhs.gov/partneringtoheal>.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: Partnering to Heal

Course Objectives

After completing this course, you will be able to:

1. Identify when and how to speak to colleagues and other providers about safety practices and improvement efforts.
2. Explain the role of the patient and family in preventing healthcare-associated infections.
3. Identify effective methods to communicate the importance of safety practices.
4. List at least three approaches to working with those skeptical about the importance of safety practices and improvement efforts.

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PS 204: Preventing Pressure Ulcers

Pressure ulcers, or bed sores, continue to be a significant problem in health care today. They cause unnecessary harm to patients, increase length of stay, and cost organizations millions of dollars every year. They are also preventable. In the four lessons of this course, we'll quickly explain the basics of pressure ulcers, and then spend the bulk of our time talking about how to prevent them and treat them. We'll highlight exemplary organizations, share the latest research, and provide video tips that you can put to use in your local setting.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: Why Work on Preventing Pressure Ulcers?

Lesson 2: Assessing Patients

Lesson 3: Responding to Patients

Lesson 4: How to Implement a Pressure Ulcer Prevention Program

Course Objectives

After completing this course, you will be able to:

1. Explain the importance of preventing pressure ulcers.
2. Define the key elements in pressure ulcer assessment.
3. Define the key elements in pressure ulcer prevention.
4. Apply a range of tools and methods for responding to at-risk patients.
5. Outline how to implement a reliable pressure ulcer prevention program.

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Leadership

L 101: Introduction to Health Care Leadership

When you think of a leader, who comes to mind? A president? A CEO? This course will teach you a different idea of leadership: No matter your position or formal title, you can be a leader. In this course, you'll learn about a hospital that's having some trouble with infection control. As you grapple with the case, you'll learn that leadership isn't a position of authority – it's an action. You'll learn how to persuade different types of people and build enough unity to move forward. Finally, you'll learn some strategies for sustaining your leadership journey over time.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: What Makes a Leader?

Lesson 2: Practical Skills for Leading Teams

Lesson 3: Strategies to Sustain Your Health Care Leadership Journey

Course Objectives

After completing this course, you will be able to:

1. Describe several characteristics of leaders, who may or may not have formal positions of authority.
2. Describe different techniques for persuading different types of people.
3. Explain why achieving a workable level of unity among teammates is essential for effective team functioning.
4. List several ways to help sustain your health care leadership journey over time.

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Person- and Family-Centered Care

PFC 101: Introduction to Person- and Family-Centered Care

The relationship between patient and provider is changing. Many health care systems aim to provide not only high-quality services, but also patient-centered care that advances the unique health goals of each person and family. In this course, you'll learn about the ideal relationship to promote health — especially for underserved people who face the greatest barriers to health — as well as some practical skills to make the relationship a reality.

Estimated Time of Completion: 1 hours 30 minutes

Lessons

Lesson 1: Patient-Provider Partnerships for Health

Lesson 2: Understanding Patients as People

Lesson 3: Skills for Patient-Provider Partnerships

Course Objectives

After completing this course, you will be able to:

1. Describe the partnership model of patient-provider relationships.
2. Explain why the partnership model can improve health.
3. Discuss how social conditions, faith, culture, and trust affect the patient-provider relationship.
4. Identify at least four skills to improve clinical interactions with patients.

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PFC 102: Dignity and Respect

What does it mean to treat patients and families with dignity and respect?

It means that health care providers listen to and honor patient and family perspectives and choices. Providers incorporate patient and family knowledge, values, beliefs, and cultural background into the planning and delivery of care. Providers anticipate patient and family needs, and meet those needs in a clean, safe environment. The health care team provides emotional support to patients and families, and strives to alleviate their fear and anxiety.

How can providers accomplish all of this? By learning and then practicing the specific skills described and illustrated in this course.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: An Introduction to Patient- and Family-Centered Care

Lesson 2: First Impressions

Lesson 3: Privacy and Confidentiality

Lesson 4: Culture and Belief Systems

Lesson 5: Creating a Restful and Healing Environment

Course Objectives

After completing this course, you will be able to:

1. Explain why patient- and family-centered care is an essential component of safe care.
2. Describe and use specific skills for treating patients and their families with dignity and respect, especially when first meeting patients and their families.
3. Describe and use specific skills for ensuring patients' privacy and confidentiality.
4. Describe and use specific skills for respecting patients' and families' cultures, languages, and belief systems.
5. Describe and use specific skills for creating a restful and healing environment for patients.

Contributors

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PFC 201: A Guide to Shadowing: Seeing Care through the Eyes of Patients and Families

In this one-lesson course, we'll introduce you to patient and family shadowing, a valuable exercise for health professions students and health care professionals at any stage of their career. You'll learn five steps for using shadowing to better empathize with patients and families. You'll see how empathy can help you in your daily work, and how it can drive a sense of urgency to start testing and spreading changes to improve care.

Estimated Time of Completion: 30 minutes

Lessons

Lesson 1: A Guide to Shadowing: Seeing Care through the Eyes of Patients and Families

Course Objectives

After completing this course, you will be able to:

1. Define patient and family shadowing.
2. List five steps for conducting a successful shadowing project.
3. Describe how to interact with patients, families, and clinical staff involved in a shadowing project.
4. Discuss how you can use your shadowing experience to create a care experience flow map, observational summary, and final report.
5. Explain how shadowing can help you come up with ideas for changes to improve care.

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PFC 202: Having the Conversation: Basic Skills for Conversations about End-of-Life Care

In conjunction with the Boston University School of Medicine and The Conversation Project, the IHI Open School offers this course to introduce students and health professionals to basic skills for having conversations with patients and their families about end-of-life care wishes.

This course will also help you develop skills to have conversations with patients and their families about their preferences for care at the end of life. As part of developing these skills, the course invites you to “have the conversation” yourself, with a family member or other loved one.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: Conversation: An Essential Element of Good End-of-Life Care

Lesson 2: The Conversation Begins with You

Lesson 3: Understanding and Respecting Your Patients’ Wishes

Lesson 4: Changing the Culture: Better Ways to Care for Patients Nearing the End of Life

Course Objectives

After completing this course, you will be able to:

1. Conduct conversations with patients and families to learn their wishes for end-of-life care.
2. Explain available treatment options to patients and families in terms they can understand.
3. Demonstrate how to answer difficult questions related to end-of-life care.
4. Facilitate conversations with patients and families to help them make decisions about end-of-life care, based on an understanding of what matters most to them.

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Triple Aim for Populations

TA 101: Introduction to the Triple Aim for Populations

You might think we do a pretty good job of providing care to individuals with illnesses and diseases. But it's important to take a step back and consider the factors contributing to illness. It's important to realize that things like education, the environment, and wealth (and how it's distributed) play an enormous role in health outcomes, too.

In this course, you'll learn that to make progress against many of the most important threats to human health, it's not enough to improve clinical care for one patient at a time. We also have to focus on improving the health of entire populations.

The Triple Aim for populations is a three-part aim: better care for individuals, better health for populations, all at a lower cost. This course will explore why each dimension is an essential part of improving health and health care, and how you can promote the Triple Aim in your organization and daily work.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: Improving Population Health

Lesson 2: Providing Better Care

Lesson 3: Lowering Costs of Care

Course Objectives

After completing this course, you will be able to:

1. Describe the three components of the IHI Triple Aim for populations.
2. Explain the responsibilities of clinicians and health care systems in optimizing population-level outcomes with available resources.
3. Understand medical care as one determinant of the overall health of a population, and the relationship of health care quality and safety to population health.
4. Provide examples of population-level interventions designed to improve overall health and reduce costs of care.

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TA 102: Improving Health Equity

This three-lesson course will explore health disparities — what they are, why they occur, and how you can help reduce them in your local setting. After discussing the current (and alarming) picture in Lesson 1, we'll dive into Lesson 2 and learn about some of the promising work that is reducing disparities in health and health care around the world. Then, in Lesson 3, we'll suggest how you can start improving health equity in your health system and community.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: Understanding Health Disparities

Lesson 2: Initiatives to Improve Health Equity

Lesson 3: Your Role in Improving Health Equity

Course Objectives

After completing this course, you will be able to:

1. Recognize at least two causes of health disparities in the US and around the world.
2. Describe at least three initiatives to reduce disparities in health and health care.
3. Identify several ways you can help reduce health disparities.

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TA 103: Quality, Cost, and Value in Health Care

This course will provide you with an overview of value in health care. We'll start by distinguishing between cost and value, and understanding how both of these concepts relate to quality. We'll introduce you to the growing problem of health care spending, as well as the health care practitioner's role in managing these costs. Finally, we'll explain how to identify and overcome barriers to providing high-value, cost-effective care.

Estimated Time of Completion: 45 minutes

Lessons

Lesson 1: Quality, Cost, and Value in Health Care

Course Objectives

After completing this course, you will be able to:

1. Explain the potential harm of low-value tests and procedures.
2. Distinguish between cost and value in health care.
3. Define resource stewardship in health care.
4. Describe the ethical case for resource stewardship in health care.
5. Identify common barriers to resource stewardship and enablers of inappropriate resource use.

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Graduate Medical Education

GME 201: Why Engage Trainees in Quality and Safety?

In this course, we'll discuss several reasons why organizations should strive to incorporate trainees (medical residents and fellows) in quality and safety work. You will hear from faculty and residents about why this effort is so important — and how it can enhance the overall quality and safety of health care delivery.

Estimated Time of Completion: 30 minutes

Lessons

Lesson 1: Why Engage Trainees in Quality and Safety?

Course Objectives

After completing this course, you will be able to:

1. List at least two reasons why it is important to engage medical residents and fellows in quality and safety work.
2. Describe the benefits of starting quality and safety training during a residency or fellowship.
3. Identify at least three barriers to engaging residents and fellows in quality and safety work.

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GME 202: A Guide to the Clinical Learning Environment Review (CLER) Program

This course will introduce you to the Accreditation Council for Graduate Medical Education (ACGME) Clinical Learning Environment Review (CLER) program. We'll describe how CLER works, and demonstrate how different organizations are responding to the call for better learning environments in graduate medical education. This course will help you become more prepared to take part in a CLER site visit and to engage trainees (medical residents and fellows) in your institution's work in quality improvement and patient safety.

Estimated Time of Completion: 30 minutes

Lessons

Lesson 1: A Guide to the Clinical Learning Environment Review (CLER) Program

Course Objectives

After completing this course, you will be able to:

1. Describe the primary goal of the CLER program.
2. List the six focus areas within the CLER program.
3. Explain the steps involved in a CLER program site visit.

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GME 203: The Faculty Role: Understanding & Modeling Fundamentals of Quality & Safety

Just because you agree that quality and safety are priorities doesn't mean you will feel well prepared to lead the charge in these complex areas. You may be at the very beginning of your own journey toward becoming proficient in quality improvement and patient safety (QI/PS) – and that's okay.

In this course, you'll gain a better understanding of your current knowledge of QI/PS, and then have the opportunity to expand your knowledge where it may be lacking. Even if you haven't received formal training in these areas, we'll show you that teaching QI/PS skills to the next generation relies on faculty like you.

Estimated Time of Completion: 30 minutes

Lessons

Lesson 1: The Faculty Role: Understanding & Modeling Fundamentals of Quality & Safety

Course Objectives

After completing this course, you will be able to:

1. Explain why it is important for faculty members to engage trainees in meaningful QI/PS work that is tied to everyday clinical care.
2. Describe four principles for designing educational experiences in QI/PS.
3. List the core competencies in QI/PS that every faculty member should possess.
4. List several ways faculty can model the use of improvement principles in everyday work.

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GME 204: The Role of Didactic Learning in Quality Improvement

In this course, we'll discuss several reasons why organizations should strive to incorporate trainees (medical residents and fellows) in quality and safety work. You will hear from faculty and residents about why this effort is so important — and how it can enhance the overall quality and safety of health care delivery.

Estimated Time of Completion: 30 minutes

Lessons

Lesson 1: The Role of Didactic Learning in Quality Improvement

Course Objectives

After completing this course, you will be able to:

1. Explain what kinds of topics are important to include in a didactic curriculum on QI/PS for trainees.
2. Give examples of available QI/PS training materials, and explain how they could be integrated into a curriculum.
3. Describe the characteristics of a successful QI/PS curriculum for adult learners.

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GME 205: A Roadmap for Facilitating Experiential Learning in Quality Improvement

In this course, we'll provide a roadmap that will help you engage trainees in experiential learning at the point of care. We'll cover three different models of experiential learning within an adaptable framework. Based on your setting, role, and evolving comfort with quality improvement and patient safety (QI/PS) concepts and tools, you'll choose the best approach for you.

Estimated Time of Completion: 60 minutes

Lessons

Lesson 1: A Roadmap for Facilitating Experiential Learning in Quality Improvement

Course Objectives

After completing this course, you will be able to:

1. Explain the importance of supplementing didactic instruction with experiential training.
2. Describe three different models for experiential learning, and list several pros and cons of each.

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GME 206: Aligning Graduate Medical Education with Organizational Quality & Safety Goals

In this course, we'll present innovative strategies that training programs around the country are using to engage residents in institution-wide quality improvement and patient safety (QI/PS) efforts. This toolbox of change ideas will help you or your institution's quality leaders build successful collaborations between existing QI/PS infrastructures and graduate medical education (GME) programs.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: Aligning Graduate Medical Education with Organizational Quality & Safety Goals

Course Objectives

After completing this course, you will be able to:

1. List and describe four change ideas that are being implemented in training programs around the country to accelerate QI/PS education at the graduate medical education level.
2. Discuss the cultural shift that is occurring, in which organizations are focusing on root cause analysis and systemic improvement as opposed to placing individual blame.
3. Suggest at least two reasons why trainee participation in institutional QI/PS activities and committees is critical.

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GME 207: Faculty Advisor Guide to the IHI Open School Quality Improvement Practicum

Are you ready to see your students and residents put their improvement knowledge into action? The IHI Open School has a unique offering, the IHI Open School Quality Improvement Practicum, that helps new improvers through the process of setting up and conducting a real-world quality improvement (QI) project — but they can't do it without you.

For your trainees, we've created a six-lesson course, *QI 301: Guide to the IHI Open School Quality Improvement Practicum*, that takes them step by step through a health care improvement project. For you, we've created this companion guide.

In this one-lesson course, you'll receive all the knowledge and tools you need to be a Faculty Advisor for the IHI Open School Practicum. With your help, students and residents can use the Practicum to improve the quality of patient care.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: Faculty Advisor Guide to the IHI Open School Quality Improvement Practicum

Course Objectives

After completing this course, you will be able to:

1. Explain the value of using the IHI Open School Quality Improvement Practicum to help clinical trainees conduct quality improvement projects.
2. Describe each of the components of the IHI Open School Quality Improvement Practicum: teacher-learner agreement, project charter, cause and effect diagram, PDSA forms, run charts, and summary report.
3. Describe your role as a Faculty Advisor for a Practicum project, including several specific responsibilities you will have.
4. Describe the qualities of an appropriately focused Practicum project.
5. Suggest improvements to trainees' Practicum documents, including project charters, cause and effect diagrams, PDSA forms, and summary reports.

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