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Improvement Capability

QI 101: Fundamentals of Improvement

Serious errors occur at the best hospitals and clinics – despite the best efforts of talented and dedicated providers. 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, you'll get a sense of the scope of the problem, from an up-close and personal look at a wrong-site surgery at a major academic hospital... to a high-level picture of the current quality of care in the US and around the world. Then you'll begin to work on a solution to the problem, using the roadmap for change offered by the Institute of Medicine's six aims for improvement – and a theory of how to change systems.

Estimated Time of Completion: 1 hour 15 minutes

Lessons

Lesson 1: Errors Can Happen Anywhere—and to Anyone

Lesson 2: Health Care Today

Lesson 3: The Institute of Medicine's Aims for Improvement

Lesson 4: How to Get from Here to There: Changing Systems

Course Objectives

After completing this course, you will be able to:

- 1. Conclude that serious errors can occur even in excellent health care settings.
- 2. List constructive approaches to responding to errors.
- 3. Compare the US health care system to those of other countries with respect to quality, safety, equity, and cost.
- 4. List the six dimensions of health care, and the aims for each, outlined by the Institute of Medicine (IOM) in 2001.
- 5. Give examples of how specific organizations have made significant improvements in care by pursuing each of the IOM aims.

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QI 102: The Model for Improvement: Your Engine for Change

This course will teach you how to use the Model for Improvement to improve everything from your tennis game to your hospital's infection rate. You'll learn the basic steps in any improvement project: setting an aim, forming a team, selecting measures, developing ideas for changes, testing changes using Plan-Do-Study-Act (PDSA) cycles, and measuring to determine if the changes you are testing are leading to improvement.

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: Measuring

Lesson 4: Developing Changes

Lesson 5: Testing Changes

Course Objectives

After completing this course, you will be able to:

- 1. Use the Model for Improvement to plan and execute your own personal improvement project.
- 2. Identify the key elements of an effective aim statement.
- 3. Identify three kinds of measures: process measures, outcome measures, and balancing measures.
- 4. Explain how to use change concepts to come up with good ideas to test.
- 5. Develop tests of change on a small scale, using the Plan-Do-Study-Act (PDSA) cycle.

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QI 103: Measuring for Improvement

Measurement is essential in any improvement work: It tells you if the changes you are testing are leading to improvement. But measurement for improvement is different from measurement for research. In this course, you'll learn how to use three basic kinds of measures: outcome, process, and balancing measures. You'll learn how to collect, display, and interpret data – to ensure that measurement accelerates the pace of change, rather than slowing it down.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: Measurement Fundamentals

Lesson 2: Displaying Data

Lesson 3: Learning from Measures

Course Objectives

After completing this course, you will be able to:

- 1. List some of the key differences between measurement for improvement, measurement for accountability, and measurement for research.
- 2. State the value of plotting data over time.
- 3. Interpret and identify the basic elements of a run chart.
- 4. Explain the basics of sampling: why and how.

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QI 104: The Life Cycle of a Quality Improvement Project

The first three IHI Open School quality improvement courses introduced you to the fundamentals of improving health care. In this course, you're going to see how people in real health care settings actually use these methodologies to improve care. You'll start by learning the four phases of an improvement project's "life cycle": innovation, pilot, implementation, and spread. Next, you'll delve deeper into the theory of spreading change — both the foundational work by sociologist Everett Rogers and IHI's Framework for Spread. Finally, 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

Lessons

Lesson 1: The Four Phases of a Quality Improvement Project

Lesson 2: Spreading Changes

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 the four phases of an improvement project.
- 2. Explain how an improvement project moves through each one of these phases.
- 3. List sociologist Everett Rogers's five attributes of innovations that spread, and apply them to an improvement project.
- 4. Identify and describe the components of IHI's Framework for Spread.
- 5. Use the Framework for Spread to plan a simple spread project.

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QI 105: The Human Side of Quality Improvement

If you want to improve a complex system, you'll probably need to convince the people around you to do things differently. But a change that seems sensible and beneficial to you may feel threatening to others. In this course, you'll learn why culture change is crucial to the success of many improvement projects. You'll discover the most common reasons people resist change, and then you'll practice responding in a way that mitigates that resistance. You'll also learn how new ideas typically spread through a population, and what you can do to help different parts of the population adopt the change. Finally, you'll learn different ways to motivate people – and which methods are likely to be most effective in a health care setting.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: Overcoming Resistance to Change

Lesson 2: What Motivates People to Change

Lesson 3: Culture Change Versus Process Change

Course Objectives

After completing this course, you will be able to:

- 1. Identify three common barriers to change.
- 2. List Everett Rogers' five stages of diffusion of innovations.
- 3. Describe how to leverage differences among people for positive outcomes.
- 4. Define the concepts of intrinsic and extrinsic motivation, and evaluate the relative effectiveness of each.
- 5. Describe how activities related to improving processes can influence the culture of an organization.

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QI 106: Mastering PDSA Cycles and Run Charts

This course will expand on core concepts taught in Quality Improvement 102: The Model for Improvement: Your Engine for Change. You'll learn how to use two essential tools for clinical quality improvement: a PDSA (Plan-Do-Study-Act) template and a run chart template. Working through simulated health care scenarios, you'll practice using these tools and increase your knowledge of how to plan a series of tests of change, collect data, graph your results, and interpret what your graph is trying to tell you.

Note: To make the most of this course, you'll need Microsoft Word and Excel; versions 2010 or 2013 will work best.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: Using a PDSA Template for Tests of Change

Lesson 2: A Deeper Dive into PDSA

Lesson 3: Using a Run Chart Template to Display Data

Lesson 4: A Deeper Dive into Run Charts

Course Objectives

After completing this course, you will be able to:

- 1. Use a PDSA template to help you plan a PDSA cycle.
- 2. Execute a series of PDSA cycles to sequentially test changes.
- 3. Create a run chart using an Excel template to display data.
- 4. Interpret a run chart to determine if changes are leading to improvement.

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QI 201: 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 and the lessons learned.

(Note: We will provide feedback and award the IHI Open School Practicum Certificate only on student projects. Professionals are welcome to participate in the Practicum, 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.
- 3. List a family of measures including outcome, process, and balancing measures for your 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 clinical quality improvement project.
- 7. Create a summary report that summarizes the learning from your clinical quality improvement project.

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QI 202: Quality Improvement in Action: Stories from the Field

This course will cover the transition from learning about quality improvement (QI) to practicing it every day, outlining both challenges and solutions.

You will hear from students, frontline health professionals, and board members about their high (and sometimes skewed) expectations of using quality improvement in the workplace. You'll learn how — and why — some of them failed and how they coped with the harsh realities they faced. Then, you'll learn strategies they used to finally make positive changes within their systems and for their patients — and how to do the same thing on your health care journey.

Estimated Time of Completion: 3 hours

Lessons

Lesson 1: The Challenges of Quality Improvement

Lesson 2: Strategies to Sustain Your Quality Improvement Journey

Lesson 3: Stories of Improvement Success

Course Objectives

After completing this course, you will be able to:

- 1. Explain three reasons why health care professionals may be resistant to integrating quality improvement.
- 2. Summarize why a top-down approach to integrating quality improvement hasn't always worked in health care.
- 3. List several ways to expand your social network in health care.
- 4. Explain how data and patient stories can help engage staff to get involved in quality improvement work.

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Patient Safety

PS 100: 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 around the world. Next, you'll learn the basics of the psychology of error and try your hand at identifying unsafe acts in real health care cases. Finally, you'll learn five essential behaviors that any health care worker can adopt right away to improve the safety of patients.

Estimated Time of Completion: 1 hour 25 minutes

Lessons

Lesson 1: Understanding Medical Error and Patient Safety

Lesson 2: Understanding Unsafe Acts

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 unintended harm to patients that occur in health care.
- 2. Describe the impact of medical errors on patients, families, and practitioners.
- 3. Explain one classification system for medical errors and harm based on the work of James Reason.
- 4. Identify five behaviors that any practitioner can engage in to improve safety for patients in his or her direct care.

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PS 101: Fundamentals of Patient Safety

This course provides a comprehensive introduction to the field of patient safety. You'll learn the different types of errors, why errors occur, and how they can be prevented. You'll understand effective and ineffective strategies for responding to errors when they do occur – especially with the goal of reducing, and ultimately eliminating, the chance that they'll occur again. You'll learn about the different kinds of error-reporting systems, and the effectiveness of each. Finally, you'll learn about the difference between error and harm – and why reducing harm is the appropriate target of efforts to improve safety.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: To Err Is Human

Lesson 2: Responding to Error

Lesson 3: Identifying and Reporting Errors

Lesson 4: Error versus Harm

Course Objectives

After completing this course, you will be able to:

- 1. List the main types of errors utilizing Reason's classification system.
- 2. Explain effective and ineffective strategies for responding to errors when they do occur.
- 3. Discuss the value and limitations of voluntary reporting systems.
- 4. Analyze the similarities and differences between error and harm.

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PS 102: Human Factors and Safety

This course is an introduction to the field of "human factors": how to incorporate knowledge of human behavior, especially human frailty, 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. Apply the basic concepts of the science of human factors to healthcare scenarios.
- 2. Describe how changes to processes can mitigate the effects of factors that contribute to error.
- 3. Define the basic concepts of simplification, standardization, constraints and forcing functions, and redundancies.
- 4. Define the risks and benefits of the use of technology in the creation of safe care.

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PS 103: Teamwork and Communication

No matter how safe we make the design of systems in which we work, there is no substitute for effective teamwork and communication. 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 teamwork and communication on safety. You'll learn essential communication tools, such as briefings, SBAR, and the use of critical language. Finally, you'll learn how to use these tools when they are most essential—at transitions in care, when errors are most likely to occur.

Estimated Time of Completion: 1 hour

Lessons

Lesson 1: Why Are Teamwork and Communication Important?

Lesson 2: Basic Tools and Techniques

Lesson 3: Communication During Times of Transition

Lesson 4: Developing and Executing Effective Plans

Course Objectives

After completing this course, you will be able to:

- 1. List the attributes of an effective team.
- 2. Report why effective teamwork is important to patient safety.
- 3. Define SBAR.
- 4. List characteristics and behaviors of effective team leaders.
- 5. Describe how to conduct an effective briefing.
- 6. List at least two mechanisms to encourage safe patient care transitions.
- 7. Define verbal repeat back.
- 8. Identify benefits of planning in patient care.

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PS 104: Root Cause and Systems Analysis

This course introduces students to a systematic response to error called root cause analysis (RCA). The goal of RCA is to learn from adverse events and prevent them from happening in the future. The three lessons in this course explain RCA 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 an 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 Root Cause Analysis Can Help Improve Health Care

Course Objectives

After completing this course, you will be able to:

- 1. Explain how adverse events can be used as learning opportunities.
- 2. Determine which adverse events are appropriate for root cause analysis (RCA).
- 3. Describe how RCA works and be able to follow it at a local hospital or clinic.
- 4. Explain how you can use RCA to address system problems in health care.

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PS 105: Communicating with Patients After Adverse Events

You chose to work in health care in order to care for people. So when you accidentally harm a patient, it can be exceptionally hard to talk about it. In this course, you'll learn why communicating with patients after adverse events can feel so difficult for health care professionals — and why it's nonetheless essential. You'll learn what to say to a patient, and how to say it, immediately after such an event occurs. You'll also learn how to construct an effective apology that can help restore the trust between the caregiver and the patient. You'll find out what kinds of support both patients and caregivers may need after an adverse event. Finally, you'll consider how to communicate when an error causes minor harm to a patient or does not reach the patient at all.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: The Importance of Communication When Things Go Wrong

Lesson 2: Responding to an Adverse Event: A Step-by-Step Approach

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

Lesson 4: The Apology

Lesson 5: To Communicate or Not to Communicate

Course Objectives

After completing this course, you will be able to:

- 1. Explain why communication is important after an adverse event.
- 2. List the steps a clinician should take after an adverse event occurs.
- 3. Describe the perspective of the patient after an adverse event.
- 4. Describe the impact of adverse events on providers.
- 5. Explain the importance and structure of an effective apology.
- 6. Summarize the debate about whether all events and errors should be communicated to patients.

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PS 106: Introduction to the 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 mistakes and errors, 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 course.

Estimated Time of Completion: 2 hours

Lessons

Lesson 1: The Power of Speaking Up **Lesson 2:** What Is a Culture of Safety?

Lesson 3: How Can You Contribute to a Culture of Safety?

Course Objectives

After completing this course, you will be able to:

- 1. Explain the importance of speaking up about safety concerns and comment on why this is difficult
- 2. Describe the elements of a culture of safety.
- 3. Give examples of ways in which a culture of safety can help improve the care you provide.
- 4. Identify ways you can foster a culture of safety in your day-to-day work.

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PS 201: 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 202: 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: Becoming a Leader in Health Care

When you think of a leader, what comes to mind? A president? A CEO? No matter what your position or formal title is, you can be a leader. In this course, you'll zoom in on a hospital that's having some trouble with infection control. As you grapple with this 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 how to measure your effectiveness as a leader. Written reflections and discussions are key to this course—don't skip them! Periodically you'll be directed to a Google Group where you can post your answers and discuss them with other students. (When you post for the first time, you'll be asked to verify your email address or sign in to Google if you already have an account. You do not need a Gmail address to post.)

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: Taking the Leadership Stance

Lesson 2: The Leadership Stance Is Not a Pose

Lesson 3: Influence, Persuasion, and Leadership

Lesson 4: Measuring Leadership

Course Objectives

After completing this course, you will be able to:

- 1. Identify three ways to take a leadership stance, even if you are not in a formal leadership position.
- 2. List at least three reactions that followers might have when leaders initiate action—and understand what's behind each reaction.
- 3. Describe three kinds of approaches leaders use to persuade others to make changes.
- 4. Describe how to assess the effectiveness of leaders.

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Quality, Cost, and Value

QCV 100: An Introduction to 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: An Introduction to 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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QCV 101: 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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Person- and Family-Centered Care

PFC 101: 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 providing patient- and family-centered care is an essential component of safe, reliable 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 and their families.

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PFC 102: 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 103: 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 regarding 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 patients and families ask 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 Population Health

This course will introduce you to the concept of population health — a different way of thinking about how and why some of us enjoy healthy lives and others do not. We'll learn about a number of interventions and factors (some may be new to you) that influence our health outcomes. We'll learn about the roles health professionals play when promoting and practicing population health. And, finally, we'll see examples of several successful interventions that are improving health and health outcomes for different populations around the world today.

Estimated Time of Completion: 1 hour 30 minutes

Lessons

Lesson 1: What is Population Health?

Lesson 2: The Small (But Powerful!) Impact of Health Care

Lesson 3: Population Health in Action

Course Objectives

After completing this course, you will be able to:

- 1. Discuss the continuum from providing health care to individuals to providing health care to a population.
- 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.

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Graduate Medical Education

GME 1: 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 2: 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 3: 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 4: 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 5: 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: 30 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 6: 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 7: 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 201: 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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