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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 **ihi.org/education/ihiopenschool/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.

#### **Contributors**

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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: Addressing Small Problems to Build Safer, More Reliable Systems

If an organization is to avoid catastrophic failure, staff members need to call out small problems as they arise in daily work. In this lesson, you'll learn that organizations that successfully manage complexity have a deliberate approach to escalating the small concerns and suggestions of employees. Staff members know how to recognize problems, whom to contact, and how to get that person's attention immediately. The leaders, in turn, avoid blame and provide the resources necessary to solve problems.

Estimated Time of Completion: 1 hour

## Lessons

Lesson 1: Addressing Small Problems to Build Safer, More Reliable 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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## **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 because of their experiences within the health care system. In this course, you'll learn why becoming a student of patient safety is critical for everyone involved in health care today, and you will learn a framework for building safer, more reliable systems of care.

Estimated Time of Completion: 1 hour 15 minutes

## Lessons

Lesson 1: Understanding Adverse Events and Patient Safety

Lesson 2: Your Role in a Culture of Safety

Lesson 3: Your Role in Building Safer, More Reliable Systems

## **Course Objectives**

After completing this course, you will be able to:

- 1. Summarize why it is essential to improve patient safety.
- 2. Describe a framework for improving the safety of health care systems.
- 3. Identify four key elements of a culture of safety.
- 4. Explain why systematic learning from error and unintended events is the best response to ensuring patient safety.

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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 alone to encompassing efforts to reduce harm as well.

Estimated Time of Completion: 1 hour 15 minutes

#### 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. Explain why patient safety experts recommend focusing less on reducing errors and more on reducing 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 and implement 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 15 minutes

#### Lessons

**Lesson 1:** Understanding the Science of Human Factors

Lesson 2: Design Principles to Reduce Human Error

**Lesson 3:** The Risks and Rewards of Technology

## **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.

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## PS 104: Teamwork and Communication

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 of safety. You will learn several essential communication tools, such as briefings, SBAR, and critical language, and you will learn how to prevent common problems associated with lapses in communication during critical transition points in health care.

**Estimated Time of Completion:** 1 hour 15 minutes

#### Lessons

Lesson 1: Fundamentals of Teamwork and Communication

Lesson 2: Tools and Techniques for Effective Communication

Lesson 3: Safety During Transitions Across the Continuum of Care

## **Course Objectives**

After completing this course, you will be able to:

- 1. Explain how individual behavior and team dynamics in health care can make care safer or less safe.
- 2. Use structured communication techniques to improve communication within health care.
- 3. Specify possible interventions to improve patient safety and reduce risk during times of transition.

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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.

Estimated Time of Completion: 1 hour 15 minutes

#### Lessons

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

Lesson 2: Communication, Apology, and Resolution

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

## **Course Objectives**

After completing this course, you will be able to:

- 1. Describe four steps to take following an adverse event.
- 2. Explain how to communicate effectively about bad news and when you should apologize.
- 3. Discuss the impact of adverse events on providers.

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## **PS 201: Root Cause Analyses and Actions**

This course introduces learners to a systematic response to error called Root Cause Analyses and Actions (RCA2). The goal of RCA2 is to learn from adverse events and near misses, and to take action to prevent them from happening in the future. By the end of this course, you'll have a step-by-step approach for investigating an event and improving after something goes wrong.

RCA<sup>2</sup> is a trademark of the Institute for Healthcare Improvement. IHI does not endorse any software or training for the RCA<sup>2</sup> process that is not directly provided by IHI.

**Acknowledgement:** This course content is based on the report *RCA*<sup>2</sup>: *Improving Root Cause Analyses and Actions to Prevent Harm*. IHI gratefully acknowledges the members of the expert panel who contributed to the report.

**Estimated Time of Completion:** 1 hour 15 minutes

#### Lessons

**Lesson 1:** Preparing for Root Cause Analyses and Actions

**Lesson 2:** Conducting Root Cause Analyses

**Lesson 3:** Actions to Build Safer Systems

## **Course Objectives**

After completing this course, you will be able to:

- 1. Explain how adverse events and near misses can be used as learning opportunities.
- 2. Determine which events are appropriate for Root Cause Analyses and Actions (RCA Squared).
- 3. Describe a timeline of activities for the RCA Squared review period.
- 4. Describe activities that should take place during the action period of RCA Squared.

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## **PS 202: Achieving Total Systems Safety**

This course will review eight key recommendations for achieving safety on a system-wide level, as proposed by the IHI report Free from Harm: Accelerating Patient Safety Improvement Fifteen Years after To Err Is Human. Lesson 1 will briefly review the complete set of recommendations, with a focus on actions for leaders of health systems. Lessons 2 and 3 will provide a closer review of critical recommendations for supporting the health care workforce and partnering with patients and families.

**Acknowledgement:** This course content is based on the report *Free from Harm: Accelerating Patient Safety Improvement Fifteen Years after To Err Is Human.* IHI gratefully acknowledges the members of the <a href="mailto:expert panel">expert panel</a> who contributed to the report.

**Estimated Time of Completion:** 1 hour 15 minutes

#### Lessons

Lesson 1: Eight Recommendations for Total Systems Safety

Lesson 2: Supporting the Health Care Workforce

Lesson 3: Partnering with Patients and Families

## **Course Objectives**

After completing this course, you will be able to:

- 1. List eight recommendations for leaders to accelerate patient safety and prevent harm.
- 2. Explain three key recommendations for promoting safety among the health care workforce.
- 3. Identify five strategies that empower patient and family engagement in patient safety.

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## PS 203: Pursuing Professional Accountability and a Just Culture

This course focuses on how organizations can create and foster a culture of safety. It will assist leaders in creating, shaping, and sustaining the type of culture needed to advance patient and workforce safety efforts. It is designed to inspire, motivate, and inform you as you lead your organization on its journey to zero harm.

Estimated Time of Completion: 1 hour 15 minutes

## Lessons

**Lesson 1:** A Just Culture Case Study

**Lesson 2:** Building a Culture of Safety

**Lesson 3:** Understanding and Improving Organizational Culture

## **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. Describe six domains of a culture of safety.
- 3. Explain how to use quantitative and qualitative data to assess the culture of an organization.

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## PS x1: 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 <a href="http://www.hhs.gov/partneringtoheal">http://www.hhs.gov/partneringtoheal</a>.

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.

## **Contributors**

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## **PS x2: 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: Key Dimensions of Patient- and Family-Centered Care

What are the key attributes of patient- and family-centered care, and how can you bring them into health care? In this course, you'll learn the four core concepts of patient-centered care as described by the Institute for Patient- and Family-Centered Care and how to apply them. You'll also see how your health care system can involve patients in redesigning care.

Estimated Time of Completion: 1 hour

## Lessons

**Lesson 1:** Key Dimensions of Patient- and Family-Centered Care

## **Course Objectives**

After completing this course, you will be able to:

- 1. Describe four dimensions of patient- and family-centered care.
- 2. Identify practices of health care providers that can promote patient- and family-centered care.
- 3. Discuss how health care systems can collaborate with patients and families on an institution-wide level. 5. Describe and use specific skills for creating a restful and healing environment for patients.

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Jane Roessner, PhD, Writer, Institute for Healthcare Improvement View Profile

## **PFC 103: Incorporating Mindfulness into Clinical Practice**

Clinicians juggle many tasks all day long: assessing patients, making critical decisions, administering medications, documenting care, admitting and discharging patients, and much more. But when the clinician is able to embrace an aware, focused, and present state — that transcends the execution of tasks — that is practicing mindfulness.

This course will show you how to incorporate mindfulness into your practice. You'll learn how it can improve patient safety, quality of care, the patient experience, and joy in work in any health care setting.

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Estimated Time of Completion: 1 hour

## Lessons

Lesson 1: Incorporating Mindfulness into Clinical Practice

## **Course Objectives**

After completing this course, you will be able to:

- 1. Describe the need for mindfulness practices in the health care setting, including how these practices relate to quality of care, patient safety, patient experience, and joy in work.
- 2. Explain the difference between informal and formal mindfulness practice.
- 3. List several examples of mindfulness exercises for the health care setting.
- 4. List four situations in health care when mindfulness is especially important.
- 5. Conduct a body scan.

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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.

## **Contributors**

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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: 1 hour 30 minutes

## 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

## **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.

#### **Contributors**

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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: How Health Care Can Advance 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.

#### **Contributors**

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## TA 103: Increasing Value and Reducing Waste at the Point of 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:** Increasing Value and Reducing Waste at the Point of 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.

## **Contributors**

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# **GME 202: 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.

## **Contributors**

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# **GME 203: Designing Educational Experiences in Health Care 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.

## **Contributors**

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# **GME 204:** 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.

## **Contributors**

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# **GME 205: 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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