Online Course Summaries

Improvement Capability

Patient Safety

Leadership

Quality, Cost, and Value

Person- and Family-Centered Care

Triple Aim for Populations

The IHI Open School provides online courses in improvement capability, patient safety, leadership, person- and family-centered care, triple aim for populations, and quality, cost, and value. These courses are free for students, residents, and professors of all health professions, and available by subscription to health professionals. Courses available at www.IHI.org/LMS

QI 101: Fundamentals of Improvement

Lesson 1: Errors Can Happen Anywhere — and to Anyone

- Errors, like the wrong-site surgery at Beth Israel Deaconess, can happen to anyone.
  - The CEO, Paul Levy, investigated, corrected, and apologized instead of blaming, punishing, or covering up. He was transparent about the error.
- According to the National Academy of Science's Institute of Medicine, between 44,000 and 98,000 Americans die in hospitals each year due to mistakes in their care.

Lesson 2: Health Care Today

- Many health care systems, including the one in the United States, provide expensive care that isn't distributed equally.
  - With a lot of will — and skill in the area of quality improvement — you can make a dent in these inequalities.
- The Department of Health and Human Services has created a website called Hospital Compare, a powerful online tool to enable consumers to learn about the quality of specific hospitals and compare them to other hospitals.
  - You can find the site at http://www.hospitalcompare.hhs.gov/

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

- In 2001, the IOM released a report, *Crossing the Quality Chasm: Health Care in the 21st Century*, that identified six key dimensions of our health care system and setting aims for each dimension. You can remember the dimensions with the acronym STEEEP:
  - **S**afe, **T**imely, **E**quitable, **E**fficient, **E**ffective, **P**atient-centered

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

- **Every system is perfectly designed to get the results it gets.**
  - So, logically, the only way to get different results is to change the system.
- W. Edwards Deming and Walter Shewhart are known as the founders of the Science of Improvement.
- Deming's System of Profound Knowledge is a simple way of understanding the key aspects of any system that you need to think about if you want to bring about a change. It includes:
  - **Systems thinking**. What is the whole system that you're trying to manage? How do the different parts interact with and rely on one another?
  - **Variation**. What is the variation in results trying to tell us about the system?
  - **Theory of knowledge**. What are the predictions about the system's performance? What are the theories that form the basis for these predictions?
  - **Psychology**. How do people in a system react to change, and what are the important interactions among people in the system? What motivates people to act as they do?

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

The Model for Improvement, developed by Associates in Process Improvement, is a simple yet powerful tool for accelerating improvement. This model has been used successfully by hundreds of health care organizations in many countries to improve many different health care processes and outcomes.

The model has two parts:

- Three fundamental questions
- The Plan-Do-Study-Act (PDSA) cycle to test changes and determine if the change is an improvement

1. **Aim:** *What are we trying to accomplish?*
   - A good aim addresses an issue that is important to those involved; it is specific, measurable, and addresses these points: How good? By when? For whom (or for what system)?
   - Struggling to pick an aim? Remember STEEP, the six Institute of Medicine dimensions—Safe, Timely, Effective, Efficient, Equitable, and Patient-centered.

2. **Measures:** *How will we know a change is an improvement?**
   - Outcome Measures = Where are we ultimately trying to go?
   - Process Measures = Are we doing the right things to get there?
   - Balancing Measures = Are the changes we are making to one part of the system causing problems in other parts of the system?

*Remember: Plotting data over time (with a run chart) is a simple and effective way to determine whether the changes you are making are leading to improvement.

3. **Changes:** *What changes can we make that will result in improvement?*

   - Five useful way to develop changes: Critical thinking, benchmarking, using technology, creative thinking, and change concepts.
   - Change concepts: Eliminate waste, improve work flow, optimize inventory, change the work environment, producer/customer interface, manage time, focus on variation, focus on error proofing, focus on the product or service.

4. **PDSA Cycle(s):** *Plan-Do-Study-Act*
   - Plan: Plan the test or observation, including a plan for collecting data.
   - Do: Try out the test on a small scale.
   - Study: Set aside time to analyze the data and study the results.
   - Act: Refine the change, based on what was learned from the test.

QI 103: Measuring for Improvement

Lesson 1: Measurement Fundamentals

- **How will data help you?**
  - Data will help you understand current performance**.**
  - Data will help you come up with ideas to improve the process**.**
  - Data will help you test changes to see if they lead to improvement**.**
  - Data will help you ensure those improvements are being maintained**.**
- **Measuring for improvement is quite different from measuring for research.** When you're working on an improvement project, you don't pick a hypothesis and stick with it until the end. In improvement work, if you see that a change is not leading to improvement, you adjust your hypothesis and, through a series of small tests of change, or PDSA cycles, refine the change.
- A refresher on the three different types of measures:
  - **Outcome Measures:** How is the system performing? What is the result?
  - **Process Measures:** Are the parts/steps in the system performing reliably and as planned?
  - **Balancing Measures:** Did the changes we made to improve one part of the system mess up other parts of the system?
- When selecting your measures for a project, take these factors into account:
  - What are you trying to measure?
  - What specific measure did you select for this purpose?
  - How are you defining the measure?
  - What's your data collection plan?
  - Who is responsible for collecting the data?
  - What's your baseline measurement?
  - What are your targets or goals for this measure?

Lesson 2: Displaying Data

- A run chart is a great tool for displaying and learning from data. Here's how to make one:
  1. **Plot time along the X axis**. Choose the appropriate time increment based on your improvement project — minutes, hours, days, weeks, months, etc. Note that individual patients could also be the unit plotted on the X axis. In this case, the patients would be placed in time order (e.g., chronologically as they presented at the reception desk).
  2. **Plot the variable you're measuring along the Y axis.** A good scale is one that is easy to plot, easy to read, and leaves enough room for future data that might be larger or smaller than the values in your initial run chart. In a good scale, most of the data will lie near the middle half of the graph.
  3. **Label both the X and Y axes, and give the graph a useful title.** For the project in the neonatology unit at SAMSO, your run chart for your outcome measure might be called "Number of Central Line Infections per Catheter Days."
  4. **Calculate and place a median of the data on the run chart.** The median is the number in the middle of the data set when the data are ordered from the highest to the lowest. The median comes in very handy when you're interpreting the chart, as you'll see shortly. The median is also the position of the fiftieth percentile.
  5. **Add other information as needed.** Add a goal or target line, if appropriate. Annotate unusual events, changes tested, or other pertinent information.

- To count the number of runs on a chart, count the number of times the line crosses the median and add 1.
- One of these four rules will tell you if your chart is showing a non-random pattern:
    - **Rule 1:** A shift in the process is indicated by six or more consecutive points above or below the median.
    - **Rule 2:** A trend is indicated by five or more consecutive points all increasing or decreasing.
    - **Rule 3:** Too many or too few runs indicate a nonrandom pattern. (Note: This one is complicated—we'll explain it in detail in another course.)
    - **Rule 4:** An "astronomical" data point is a pretty good signal of a nonrandom pattern.
- A **Shewhart Chart** (popularly known as a control chart) is a statistical tool used to figure out whether variation is within a predictable range, or whether it's an indication of a change in the system.
    - A Shewhart Chart can be useful, but for many improvement projects, an annotated run chart is all that is needed to learn whether the changes made have led to an improvement in the measure of interest.

Lesson 3: Learning from Measures

- **Sampling** can be a simple, efficient way to help a team understand how a process is performing.
    - Remember, measurement for improvement is meant to speed learning and improvement, not slow it down. To move to each next step in the improvement process, a team needs just enough data to make an informed decision about how to proceed.
    - Ideally, a good sample will have the same shape and location as the total population, but will have fewer observations.
    - An improperly pulled sample could result in a positive or negative sampling bias. Here are three basic ways to control sampling bias:
        - **Simple random sampling** is a selection of data from a sample of the population by use of a random process, such as random numbers obtained from a computer or a random number table.
        - **Proportional stratified random** sampling is more like dividing the population into separate categories, then taking a random sample for each category.
        - **Judgment sampling** relies on the judgment of those with knowledge of the process to select useful samples for learning about the impact of your changes on process performance.
        - **Stratification** is the separation and classification of data according to specific variables (such as time periods), demographics (such as age), or factors. The goal of stratification is to find patterns in data that will help us understand the causal factors at work.

QI 104: The Life Cycle of a Quality Improvement Project

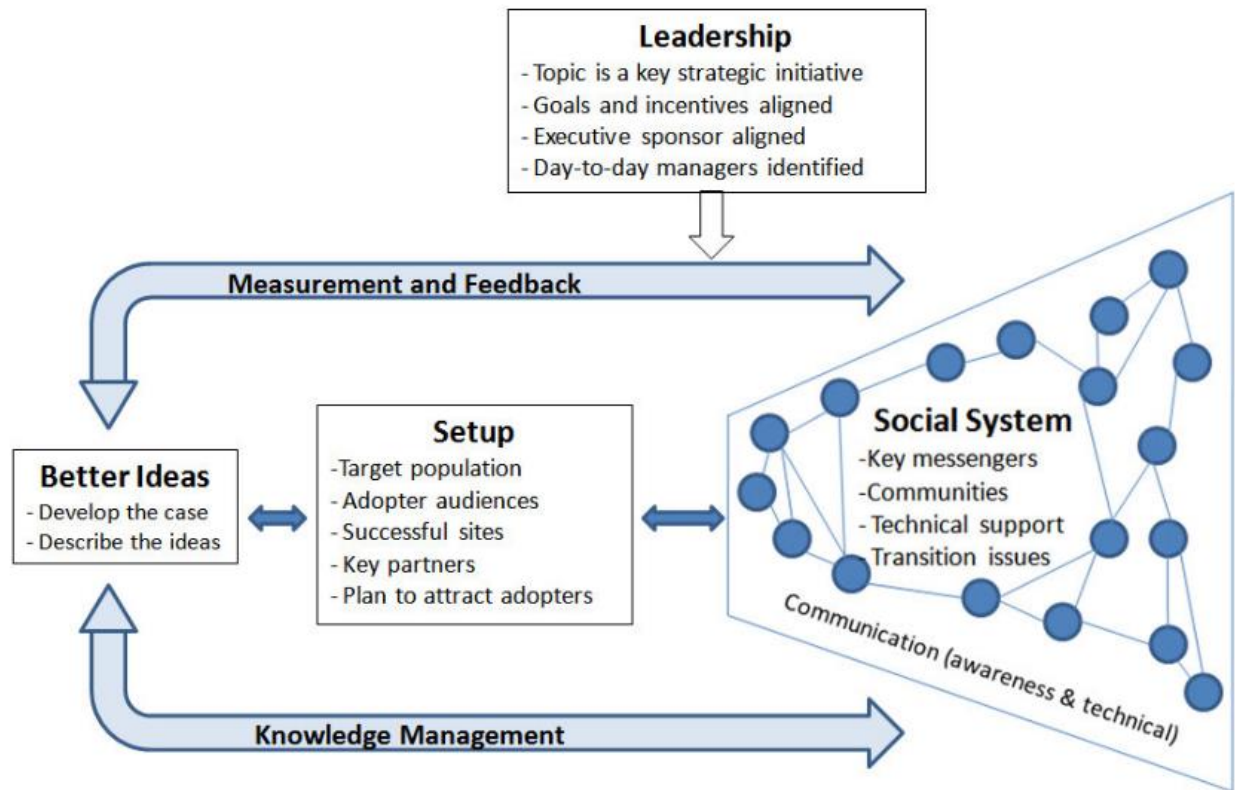<u>Lesson 1: The Four Phases of a Quality Improvement Project</u>

- The life cycle of an improvement project has four phases:
    1. **Innovation** — coming up with new ideas for changes
    2. **Pilot** — testing a change on a small scale
    3. **Implementation** — making the change the new standard process in one defined setting (like a clinic office or an ICU)
    4. **Spread** — implementing the new process in several settings
- Here are six techniques (first presented in QI 102) for coming up with **innovative ideas** for change:
    1. Critical thinking about the current system
    2. Benchmarking
    3. Take the patient's perspective
    4. Using technology
    5. Creative thinking
    6. Using change concepts
- Why do a **pilot** test? Because when you're trying a new process – even one that seems watertight – it's very likely that some part of it doesn't work very well. By piloting change ideas – that is, testing them on a small scale – you build knowledge while minimizing risk.
- After the pilot, the logical next step is to **implement** the change: make it the new standard process in one defined setting. But simply declaring the change to be implemented and assuming it will happen is a recipe for failure. It takes effort to implement and adopt a change.
    1. You can't expect to eliminate anxiety, but you can reduce the anxiety around change by providing information on why the change is being made.

<u>Lesson 2: Spreading Changes</u>

- Sociologist Everett Rogers identified five characteristics of ideas that **spread** naturally:
    1. **Relative advantage.** "Is this idea clearly better than what's in place? How will this make things better than they are now?"
    2. **Compatibility.** "Is this idea consistent with the way we currently function?"
    3. **Simplicity.** "Is this idea going to be easy to learn and use?"
    4. **Trialability.** "Will people have a chance to test this idea in a safe setting?"
    5. **Observability.** "Will we be able to observe the results of the idea relatively quickly?"
- The key components of the framework for spread include:
    - **Leadership:** Setting the agenda and assigning responsibility for spread.
    - **Setup for Spread:** Identifying the target population and the initial strategy to reach all sites in the target population with the new ideas.
    - **Better Ideas:** Describing the new ideas and evidence to "make the case" to others.
    - **Communication:** Sharing awareness and technical information about the new ideas.
    - **Social System:** Understanding the relationships among the people who will be adopting the new ideas.
    - **Knowledge Management:** Observing and using the best methods for spread as they emerge from the practice of the organization.
    - **Measurement and Feedback:** Collecting and using data about process and outcomes to monitor and make adjustments to the spread progress.

A Framework for Spread

Leadership
- Topic is a key strategic initiative
- Goals and incentives aligned
- Executive sponsor aligned
- Day-to-day managers identified

Measurement and Feedback

Setup
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Plan to attract adopters

Better Ideas
- Develop the case
- Describe the ideas

Social System
- Key messengers
- Communities
- Technical support
- Transition issues

Communication (awareness & technical)

Knowledge Management

- Using this framework, the waiting time for a primary care appointment in the VHA decreased from 60.4 days to 28.4 days in two years — a reduction of 53 percent! Two years later, the waiting time dropped below 25 days.

QI 105: The Human Side of Quality Improvement

Lesson 1: Overcoming Resistance to Change

- Why do health care professional resist change? Many projects come up against one or more of these barriers outlined by author Herbert Kaufman:
  - **The expected autonomy or independence of health care workers**: Often, health care professionals perceive themselves as single providers working independently to provide patient care.
  - **Stability that comes with routine**: Routines such as standard operating procedures, certain recurring behaviors, or institutionalized ways of communicating create stability for people.
  - **Programmed behavior or behaviors that result from processes within a system, including division of labor, recruitment, reward structures, and promotions**: This is when a system or process can hinder change.
  - **A limited focus or tunnel vision, resulting from only being able to see the impact of change from one individual perspective**: Sometimes people become so focused on their part of the puzzle that they cannot see how a change in a process will affect the whole system or process of care, which they are just one part of.
  - **A real or perceived limit on resources**: People involved in a change may think it will take too much time, money, or equipment, and thus they are reluctant to try it.
  - **An accumulation of policies, procedures, regulations**, and other things that constrain the ability to change: Often, a change is perceived as "just one more thing" in a long list of things to do.
- For any given change or innovation, sociologist Everett Rogers said there were five categories of adopters:
  1. **Innovators:** Innovators are always ready to try the latest, greatest thing, even before it's ready for prime time.
  2. **Early adopters:** Early adopters aren't as venturesome as innovators for a given change or idea; however, they are among the first ones willing to try the idea.
  3. **Early majority:** This group's adoption of an innovation indicates the stage at which the masses begin to accept it.
  4. **Late majority:** Late majority adopters can be seen as skeptical about a given innovation. They may be driven to adopt the change out of economic need, peer pressure, or policy, rather than personal interest.
  5. **Laggards:** Laggards may take a long time to understand and accept an innovation. They'll adopt the change only because they have no other alternative.
- Psychologist Kurt Lewin proposed that organizational change happens in three phases:
  1. Unfreezing: Loosening the attachment to the current behavior or practice.
  2. Change or transition: When the process of change actually occurs.
  3. Freezing (or re-freezing): Making sure the change can continue to operate as designed.

Lesson 2: What Motivates People to Change

- There are many assessment instruments that can help the members of a team better understand their individual strengths and preferences, including StrengthsFinder 2.0, Strength Development Inventory, and **Myers-Briggs Type Indicator.**
- The Myers-Briggs Type Indicator consists of four parts:
    - Extraverts vs. introverts
    - Sensing vs. intuition
    - Thinkers vs. feelers
    - Judging vs. perceiving

Lesson 3: Culture Change versus Process Change

- **Process** *changes* are changes in the way a task is performed — whether it's the way you admit a patient, administer a medication, or just brush your teeth in the morning.
- **Culture changes** are more fundamental types of changes, typically involving a shift in the perspective and values of a group. Culture changes often involve a transformation to a new way of thinking that lead to new norms of behavior.
    - Using hand washing as an example, changing people's attitudes toward hand hygiene would be a **culture change** and changing the way people actually clean their hands would be a **process change.**
- So how are you supposed to change an organizational culture? One way is to use process change to target aspects of the culture that need improvement.
    - **Use positive deviance**, the idea of identifying whom is performing the best and then identifying the attributes of successful performance – rather than focusing on what *not* to do.
    - **Use data to make decisions** – it provides an objective look at what's happening.
- A common misconception is that changes in organizational culture will necessarily result in process improvement. But if an improvement team focuses *all* its efforts on changing culture and attitudes, behavior and outcomes are unlikely to shift.
- Process change and culture change must work together to achieve improved performance. While one does not always accompany the other, both are critical to achieve success.

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

Lesson 1: The Challenges of Quality Improvement

- Why is health care slow to adopt quality improvement methodology? Popular responses include:
    1. A lack of time
    2. A resistance to change
    3. An ineffective top-down approach
    4. A lack of funding
- Crew resource management (CRM), a training system introduced in airlines in the 1980s, dramatically improved aviation safety.
    1. Defects per million opportunities in aviation: 3.4
    2. Defects per million opportunities in health care: 100,000

Lesson 2: Strategies to Sustain Your Quality Improvement Journey

- Follow your personal compass, a concept promoted in Dr. Don Berwick's 2012 Harvard Medical School Commencement Address: http://jama.jamanetwork.com/article.aspx?articleid=1199158
- Friends and colleagues – like famous painters Renoir, Monet, and Cezanne – can help steer you on the right path toward improvement
- Several resources can help you expand your professional social network:
    - Journals and publications (e.g., Journal of Patient Safety, Health Affairs)
    - Online social networks (e.g., Twitter and Facebook)
    - Organizations focused on improvement (e.g., WHO and IHI)
    - Professional conferences

Lesson 3: Stories of Improvement Success

- Several strategies can help quality improvement "stick" in your organization:
    - Find allies – in leaders and on the frontlines: Maxine and C. diff
    - Let frontline staff identify improvement priorities: Tom and cystic fibrosis
    - Display data in innovative ways: Malcolm and his standing meeting
    - Use stories to engage hearts: Dimple's patient
    - Speak in the language of systems: Jen's first QI project

PS 100: Introduction to Patient Safety

Lesson 1: Understanding Medical Error and Patient Safety

- How can health care practitioners prevent inadvertent harm to their patients?
  - The first step is to acknowledge that such harm occurs and may be the result of medical error.
- According to the World Health Organization, patient safety means offering "freedom … from unnecessary harm or potential harm associated with healthcare."
- According to Institute of Medicine's 1999 report *To Err is Human*, **between 44,000 and 98,000 Americans die in hospitals each year** due to mistakes in their care.
- Why is health care so dangerous?
  - Diagnosing and treating patients is incredibly complex.
  - Practitioners are often inadequately trained or prepared to deliver care as a well-integrated team.
  - Errors often occur as a result of flawed processes or systems of care — not because of negligent or irresponsible individuals.
  - The culture of safety — "the attitudes, beliefs, perceptions, and values that employees share in relation to safety" — that exists in most health care organizations is weak compared to many other high-risk, complex businesses such as the airline, petroleum, and nuclear power industries.
- Making dramatic improvements in patient safety will require the following commitments from both individuals working in health care and the organizations in which they work:
  - Acknowledge the scope of the problem of medical errors and make a clear commitment to redesign systems to achieve unprecedented levels of safety.
  - Recognize that most patient harm is caused by bad systems and not bad people, and therefore we must end our historic response to medical error, which has been saddled with finger-pointing and shame.
  - Acknowledge that individuals alone cannot improve safety; it requires everyone on the care team to work in partnership with one another and with patients and families.

Lesson 2: Understanding Unsafe Acts

- Unsafe acts are categorized as either errors or violations.
  - The first type of error is called either a **slip** or a **lapse.**
    - An example of a **slip** is accidentally pushing the wrong button on a piece of equipment — you and others can see that you pushed the wrong button.
    - An example of a **lapse** is some form of memory failure, such as failing to administer a medication — no one can see your memory fail, so the error is not observable.
  - The second type of error, in which an action goes as intended but is the wrong one, is a **mistake.**
- A **violation** is a deliberate deviation from an operating procedure, standard, or rules.

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

- Here are five behaviors that any practitioner can do to improve safety for patients in his or her direct care:
    - Follow written safety protocols.
        - For example: Sanitize and wash your hands to reduce the spread of infection.
    - Speak up when you have concerns.
        - For example: Report unsafe working conditions, close calls, and adverse events.
    - Communicate clearly.
        - For example: Use SBAR – Situation, Background, Assessment, Recommendation.
    - Don't let yourself or others get careless.
        - For example: Confront "drift," when colleagues make slow, incremental moves away from safe actions.
    - Take care of yourself.
        - For example: Get an appropriate amount of sleep and control your stress.

PS 101: Fundamentals of Patient Safety

Lesson 1: To Err Is Human

- Latent errors are defects in the design and organization of processes and systems that can lead to failures and errors.
    - Latent errors, first suggested by psychology professor James Reason, are often unrecognized or just become accepted aspects of the work.
    - Latent errors lead to *active errors,* whose effects are felt immediately.
- To prevent errors, you need to **design processes that make it easy for people to do things right, and hard to do things wrong.**

Lesson 2: Responding to Error

- Blaming and punishing an individual does not address the underlying issues that led to an event and does not prevent a recurrence.
    - Only about 5 percent of medical harm is caused by incompetent or poorly intended care.
    - In contrast, 95 percent of medical harm involves conscientious, competent individuals involved in circumstances that lead to a catastrophic result.
- **The Josie King story** is an example of responding to error – and, in this case, tragedy – without blaming or seeking punishment.
- Although blaming and punishing individuals for errors are not appropriate responses, individuals should still be accountable for their actions.

Lesson 3: Identifying and Reporting Errors

- Every error may represent an opportunity to improve a process; however, in order to improve, these errors must be recognized and made known so they can be analyzed.
- *Voluntary reporting systems, used to capture data about errors,* are used internally in many health care organizations and can take many forms, including paper-based or computerized forms or hotlines.
    - *Some local, state, and national requirements also mandate error reporting.*
- Estimates are that voluntarily reported medical errors reflect 10 to 20 percent of actual errors.
    - Errors are not always recognized when they occur.
    - Fear of punitive response inhibits reporting.
    - Reporting systems are sometimes cumbersome.
- When an error occurs and you recognize it, you should report it, so that system-wide learning and performance improvement can take place.

Lesson 4: Error versus Harm

- **The Swiss cheese model** is a useful way to think about errors in complex organizations. Imagine several slices of Swiss cheese lined up next to one another. Usually the holes do not all line up. If you try to pass a string through all the slices, each slice would act as a barrier.
    - However, something might be all the way through by using different holes in the slices, and every once in a while, all the holes might line up.
- As we work in health care to achieve greater safety for patients, it is essential to keep in mind the following points about error and harm:
    - Not all errors reach patients or cause harm; however, organizations must still learn from these as there may be opportunities to improve processes.
    - **Errors that lead to serious patient harm are rarely the result of just one error involving one person.** Rather, there are typically a series of errors or breakdowns in process, most of which have probably been occurring for some time, just not all at once.
    - Sometimes there is not a clear source of error; however, that does not diminish the harm experienced by the patient. Organizations must always consider these events as opportunities to make the system better.

PS 102: Human Factors and Safety

Lesson 1: Understanding the Science of Human Factors

- According to the World Health Organization, human factors is an established science that uses many disciplines (such as anatomy, physiology, physics, and biomechanics) to understand how people perform under different circumstances.
  - We define human factors as: *the study of all the factors that make it easier to do the work in the right way.*
- Issues that impact human performance and increase risk for error include the following:
  - Factors that are in play before action takes place. These are predisposing mental and physiological states, such as fatigue, stress, dehydration, hunger, and boredom.
  - Factors that directly enable decision making, such as perception, attention, memory, reasoning, and judgment.
  - Factors that directly enable decision execution, such as communication and being able to carry out the intended action.
- The science of human factors is particularly useful for understanding human behavior in safety-critical situations, such as providing health care.

Lesson 2: Changes Based on Human Factors Design Principles

- The science of human factors – the study of the interrelationship between humans and their environment – has identified design principles that include the following:
  - **Simplify.** Simplifying involves taking steps out of a process.
  - **Standardize.** Standardizing removes variation and confusion, and promotes predictability and consistency.
  - **Use forcing functions and constraints.**
    - Forcing functions make it impossible to do a task incorrectly. They create a hard stop that you cannot pass unless you change your actions.
    - A constraint is the state of being checked, restricted, or compelled to avoid or perform some action.
  - **Use redundancies.** A typical example is double-checking someone's work.
  - **Avoid reliance on memory**. Checklists are a valuable tool to reduce this reliance.
  - **Take advantage of habits and patterns.**
    - Habits are those actions we perform in consistent circumstances and are triggered by our surroundings.
    - A pattern is a recognizable regularity in events.
  - **Promote effective team functioning.** Teamwork and communication are promoted in many industries.
  - **Automate carefully.** Technology can sometimes – but not always – be helpful.

Lesson 3: Using Technology to Mitigate the Impact of Error

- Examples of technology in health care include computerized prescriber orders entry systems (CPOEs), bar-coding systems, and intravenous medication infusion pumps.
- Technology should facilitate how you do your work, not dictate it.

PS 103: Teamwork and Communication

Lesson 1: Why Are Teamwork and Communication Important?

- A team is **"a group of people who work together in a coordinated way, which maximizes each team member's strengths, to achieve a common goal."**
- Communication is a critical element in effective teamwork. Teams that do not communicate well are not truly teams, but merely groups of individuals working side by side.
- Effective teamwork and communication are critical to functioning safely in health care. They help groups navigate competing priorities, overcome issues associated with human factors, and reduce the risk of error.
- No matter what role you will fill in a health care organization, you will be a member of a patient care team, and thus you have a responsibility to communicate effectively and value the contributions of other team members.

Lesson 2: Basic Tools and Techniques

- Effective teams use specific, structured techniques and behaviors that help communicate the appropriate messages in an efficient manner. These techniques and behaviors include:
  - **Briefings:** Short, structured meetings in which the patient care team comes together to talk about a patient, procedure, or situation.
  - **Debriefing**: A concise exchange that occurs after such events have completed to identify what happened, what was learned, and what can be done better next time.
  - **SBAR**: Situation, background, assessment, recommendation.
  - **Critical language:** An agreed-upon set of terms that indicates to all members of a patient care team that there is a problem.
  - **Psychological safety:** When an individual feels comfortable expressing an opinion, mentioning problems, or correcting errors.

Lesson 3: Communication During Times of Transition

- Ineffective handoffs — due to complexity and issues related to human factors — can increase the likelihood of error and patient harm.
- Verbal repeat back can be a useful communication tool when making a handoff. The tool involves four actions:
  - The sender concisely states information to the receiver.
  - The receiver then repeats back what he or she heard.
  - The sender then acknowledges that the repeat back was correct or makes a correction.
  - The process continues until participants verify a shared understanding.

Lesson 4: Developing and Executing Effective Plans

- By using communication tools and team behaviors, patient care teams can prevent errors. And **YOU** are a critical member of a patient care team.

PS 104: Root Cause and Systems Analysis

Lesson 1: Root Cause Analysis Helps Us Learn from Errors

- A **root cause analysis** (RCA) is a systematic approach to understanding the causes of an adverse event and identifying system flaws that can be corrected to prevent the error from happening again.
    - By definition, RCAs are *retrospective*: they look back at an error that occurred.
    - An RCA is not appropriate in cases of *negligence* or *willful harm*.
- Laying events out in chronological order is one way to understand the past, but when we start to group events into categories, we begin to see them in a different way.
- Focusing on system causes, rather than blame, is the central feature of root cause analysis.
    - A systems approach to error asks, "What circumstances led a reasonable person to make reasonable decisions that resulted in an undesirable outcome?"
- **Accidents in health care almost never stem from a single, linear cause.** They come from a mix of active failures, work conditions, and deeply embedded latent failures – what some safety experts call contributory factors – that all align precisely to slip through every existing defense.

Lesson 2: How a Root Cause Analysis Works

- Typically, an RCA team consists of four to six people from a mix of different professions.
    - The team should include individuals at all levels of the organization who are close to and have fundamental knowledge of the issues and processes involved in the incident.
        - Experts disagree on whether people involved in the event should be on the team.
        - Some RCA teams include patients and family members.
        - It's important for clinical and administrative leaders to support RCAs.
- There are six steps common to most RCAs:
    - **Step 1: Identify what happened.** The team must try to describe what happened accurately and completely.
        - To organize and further clarify information about the event, some teams create a flowchart, a simple tool that allows you to draw a picture of what happened in the order it occurred.
    - **Step 2: Determine what should have happened.** The team has to determine what would have happened in ideal conditions.
        - It can be useful to create a flow chart based on this information and compare it to the chart from Step 1.
    - **Step 3: Determine causes ("Ask why five times").** This is where the team determines the factors that contributed to the event.
        - Teams look at direct causes (most apparent) and contributory factors (indirect in nature) during this process.
        - Some experts recommend that RCA teams "ask why five times" to get at an underlying or root cause.
        - One useful tool for identifying factors and grouping them is a **fishbone diagram** (also known as an "Ishikawa" or "cause and effect" diagram), a graphic tool used to explore and display the possible causes of a certain effect.
            - Seven different factors influence clinical practice and medical error: patient characteristics, task factors, individual staff member, team factors, work environment, organizational and management factors, institutional context.

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- **Step 4: Develop causal statements.** A causal statement links the cause (identified in Step 3) to its effects and then back to the main event that prompted the RCA in the first place.
    - By creating causal statements, we explain how the contributory factors – which are basically a set of facts about current conditions – contribute to bad outcomes for patients and staff.
    - A causal statement has three parts: the cause ("This happened …"), the effect (" … which led to something else happening …"), and the event (" … which caused this undesirable outcome").

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

- **Step 5: Generate a list of recommended actions to prevent the recurrence of the event.** *Recommended actions* are changes that the RCA team thinks will help prevent the error under review from occurring in the future.
    - Recommendations often fall into one of these categories:
        i. Standardizing equipment
        ii. Ensuring redundancy, such as using double checks or backup systems
        iii. Using forcing functions that physically prevent users from making common mistakes
        iv. Changing the physical plant
        v. Updating or improving software
        vi. Using cognitive aids, such as checklists, labels, or mnemonic devices
        vii. Simplifying a process
        viii. Educating staff
        ix. Developing new policies
    - Some actions are more effective than others at dealing with the root causes of error. The National Center for Patient Safety defines strong, intermediate, and weak actions:
        i. A strong action is likely to eliminate or greatly reduce the likelihood of an event.
        ii. An intermediate action is likely to control the root cause or vulnerability.
        iii. A weak action by itself is less likely to be effective.
- **Step 6: Write a summary and share it.** This can be an opportunity to engage the key players to help drive the next steps in improvement.
    - To organize and further clarify information about the event, some teams create a flowchart**,** simple tool that allows you to draw a picture of what happened in the order it occurred.

PS 105: Communicating with Patients After Adverse Events

Lesson 1: The Importance of Communication when Things Go Wrong

- There are a number of reasons for not communicating when something bad happens:
    - A psychologically reactive need to preserve a sense of self
    - Fear of admitting responsibility for making an error that may have hurt someone
    - Fear of anger from the patient and/or someone in authority
    - Fear of loss of job or position
    - Threat of censure
    - Threat of medical malpractice claims
    - Fear of colleague disapproval
    - Fear of negative publicity
- Disclosure and communication should not be used interchangeably
    - **Disclosure:** The discussion of clinically significant facts between providers and/or other personnel and patients or their representatives about the occurrence of an adverse event that could reasonably be anticipated to result in harm in the foreseeable future.
    - **Communication:** This conveys "a sense of openness and reciprocity" and implies a continual dialogue.
- Communicating with a patient after an adverse event does not eliminate the risk of a lawsuit.
    - However, good communication has been show to lower your risk of being sued.

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

- The first action upon discovering an adverse event is *always* to take care of the patient's physical needs.
- Take these four steps immediately after an adverse event:
    - Step 1: Care for the patient.
    - Step 2: Communicate with the patient.
    - Step 3: Report to appropriate parties.
    - Step 4**:** Check the medical record.
- Resist the impulse to fiddle with potentially malfunctioning equipment after an adverse event.
- When you initially communicate, **keep it simple, express empathy and compassion**, and **don't place blame.**
- The physician who is responsible for the patient's care is the best choice to have an initial conversation with the patient.
    - The physician is most familiar with the patient, the patient's clinical condition, and future treatment options.

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

- According to research, physicians can feel "upset, guilty, self-critical, depressed, and scared" after an adverse event.
- Recent research has found that caregivers ask for the following support after an adverse event:
    - Early identification of suffering.
    - Provision of ongoing emotional support from peers.
    - Coordination of the institution's overall event response to include gossip control.
    - Inviting second victims to become members of the event-related improvement team.
- Caregivers and organizations frequently, and incorrectly, assign all blame to the individuals involved in an adverse event – this is known as **"the fundamental attribution error."**

- After the immediate response, a staff member in patient services, a social worker, or the hospital ombudsperson should head up the effort to support the patient and family.
  - How well an institution supports a patient after an adverse event has a strong effect on how the patient feels about the event.

Lesson 4: The Apology

- **Apologizing effectively is not something that comes naturally to most people; it is a skill to be learned and practiced.**
- Four components of an apology: Acknowledgment; Explanation; Expression of remorse, shame, and humility; and Reparation.
- Psychologist Aaron Lazare notes 10 healing mechanisms associated with an apology:
  1. Restoration of self-respect and dignity
  2. Feeling cared for
  3. Restoration of power
  4. Suffering in the offender
  5. Validation that the offense occurred
  6. Designation of fault
  7. Assurance of shared values
  8. Entering into a dialogue
  9. Reparations
  10. A promise for the future
- The physician providing the care is typically the best person to issue an apology.
  - However, in certain situations, other health care professionals may be more appropriate.

Lesson 5: To Communicate or Not To Communicate

- **No matter who delivers the news, honest communication with the patient is the best approach.** The way the incident is handled will influence the reaction of the patient and her family.
- Three guiding principles around communication with patients:
  - When an adverse event causes harm, or when a significant intervention is required to prevent harm, there must be communication with the patient and/or the family.
  - If the senior members of the care team feel that it's not in the patient's best interest to know about an adverse event immediately, then it may make sense to defer the communication or to communicate initially with just the family or a proxy representing the patient.
  - It is probably not necessary to communicate with a patient about a near miss that does not cause harm.

PS 106: Introduction to the Culture of Safety

Lesson 1: The Power of Speaking Up

- A culture of safety is an atmosphere of mutual trust in which all staff members can **talk freely about safety problems and how to solve them, without fear of blame or punishment.**
- Why is hard to speak up in health care?
    - The typical culture of health care makes it hard to speak up because it is hierarchical in nature.
    - Further, health care has traditionally been a culture of individual experts.
    - When you're a junior staff member in a technical field such as health care, you may not feel confident that the problem you're observing is really a problem.
- *It is never okay for others to make you feel hesitant about voicing a safety concern.*
- A culture of safety includes:
    - **Psychological safety.** People know their concerns will be received openly and treated with respect.
    - **Active leadership.** Leaders actively create an environment where all staff are comfortable expressing their concerns.
    - **Transparency.** Patient safety problems aren't swept under the rug. Team members have a high degree of confidence that the organization will learn from problems and use them to improve the system.
    - **Fairness.** People know they will not be punished or blamed for system-based errors.

Lesson 2: What Is a Culture of Safety?

- In **psychologically safe** environments, people believe that if they make a mistake others will not penalize or think less of them for it.
    - They also believe that others will not resent or penalize them for asking for help, information, or feedback.
- **Active leadership** skills – sharing information, inviting other team members to contribute their expertise and concerns, and making oneself approachable – make it easier for everyone to speak up.
- A **transparent** organization is comfortable investigating errors and sharing the findings internally so others can learn and avoid a similar mistake.
- People will be transparent only if we think that we would be treated reasonably; that's where the concept of **fairness** comes in.
    - To determine if a mistake calls for system redesign or disciplinary action, you can use the Fairness Algorithm:
        - Did the individuals intend to cause harm?
        - Did they come to work drunk or impaired?
        - Did they do something they knew was unsafe?
        - Could two or three peers have made the same mistake in similar circumstances?
        - Do these individuals have a history of involvement in similar events?

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

- Even if you don't work in a safety-oriented culture, here are four concrete actions you can do right away that will quickly have an impact on your patients and your peers:
    - Actively set a positive tone when working with a team.
        - Set a common goal, invite everyone into the conversation, and make yourself approachable.
    - Routinely use structured types of communication.
        - SBAR, briefings, and debriefings can all be useful.
    - Learn how to differentiate between system error and unsafe behaviors.
        - Use the Fairness Algorithm that we discussed in Lesson 2.
    - Be respectful to all your colleagues and patients.
        - You need to be approachable for the benefit of the patient.
- And here are two actions you can try when you start to take on more responsibility and manage others within an organization:
    - Agree on specific language – also known as **"critical language"** – to be used when any team member has a safety concern.
        - This is essentially a code word or sentence that means, "Stop and talk to me – I think we have a problem!"
    - Discuss errors openly in order to learn from them. Encourage others to do so as well.
        - It takes confidence and humility to admit your own mistakes, but it's powerful for others – particularly those junior to you – to hear you do so.
- Here are four questions you should ask to get a good sense of the culture of an organization *before* you start working there:
    - Do the leaders here create an environment in which you feel safe speaking up? When someone voices a concern, do people stop, listen, and validate it?
    - When you do voice a safety concern, do people senior to you act quickly to remedy the unsafe situation?
    - Do you know how to tell the difference between unsafe behavior and unsafe systems?

Do people openly discuss mistakes as a source of learning?

PS 202: Preventing Pressure Ulcers

Lesson 1: Why Work on Preventing Pressure Ulcers?

- A pressure ulcer, also known as a bed sore, is a localized injury to the skin and/or underlying tissue, usually over a bony prominence.
- Pressure ulcers usually appear on a patient's tailbone, back, heels, elbows, and areas subjected to device-related pressure.
- Pressure ulcers are separated into four stages or categories:
    - Stage I: Skin may be painful, but there are no open wounds or tears.
    - Stage II: The skin actually breaks away and forms an ulcer.
    - Stage III: The sore gets worse, extending into tissue below the skin.
    - Stage IV: The sore reaches into muscle and bone, and causes serious, extensive damage.
- Elderly, obese, and/or malnourished patients are more likely to develop pressure ulcers. Other risk factors include:
    - Incontinence
    - Limited mobility (the patient can't reposition himself)
    - Poor nutritional/hydration status (the patient isn't eating enough or drinking enough water)
    - Skin in continuous contact with a hard surface
- More than 2.5 million acute care patients in the United States suffer from a pressure ulcer each year.

Lesson 2: Assessing Patients

- A strong pressure ulcer assessment process involves both initial assessment and reassessment. There are two parts to an initial assessment:
    - A risk assessment: A standardized approach to evaluating a patient's risk for developing a pressure ulcer.
        - The Braden Scale is the most popular risk assessment tool.
    - A skin assessment: A thorough examination of the patient's skin to see if he or she already has a pressure ulcer or an area that looks like it could develop into one.
        - Consider visual cues (such as a sticker, a sign, or a bracelet) to help identify at-risk patients.

Lesson 3: Responding to Patients

- For at-risk patients, it is important to:
    - Inspect skin daily.
        - This should involve a thorough examination of all problem areas.
    - Manage moisture.
        - Wet skin can lead to rashes and is more likely to break down, resulting in pressure ulcers.
    - Optimize nutrition and hydration.
        - Malnourished patients are twice as likely to develop skin breakdowns.
    - Minimize pressure.
        - Repositioning and using pressure-redistribution surfaces are two useful strategies.

Lesson 4: How to Implement a Pressure Ulcer Prevention Program

- To be successful at creating or modifying a pressure ulcer prevention program:
    - Form an interprofessional skin care team.
    - Use the Model for Improvement:
        - Set a clear, specific aim.
        - Develop some change ideas.
        - Select a pilot unit.
        - Run tests using the PDSA cycle.
    - Educate staff.
    - Involve patients in your prevention work.

L 101: Becoming a Leader in Health Care

Lesson 1: Taking the Leadership Stance

- You can lead even without a position of power — but first you have to take a **leadership stance.**
- No matter your position, here are seven good strategies any leader can use:
    1. Form a clearer picture of the real situation — by gathering data, not just listening to opinions. Ask, how big a problem is this, really?
    2. Reframe the problem so that it broadens the issue beyond the "unfair blame" issue.
    3. Connect the problem of the powerless to the strategic and business concerns of the powerful.
    4. Connect the problem of the powerless to the hearts of those in power.
    5. Seek out a powerful ally.
    6. Start looking for strong ideas about how to solve the problem.
    7. Put it together in an action plan.

Lesson 2: The Leadership Stance Is Not a Pose

- What do leaders do when faced with a new problem or challenge?
    o Leaders take the stance — a "get it done" sort of attitude — so that they are ready for action.
    o A good early action by leaders is to get a grasp of the real situation — not just by hearing everyone's opinion about the problem, but by gathering objective data.
    o Once they have gathered data, they use the power of that information to move forward to solve the problem.
    o In moving toward action, leaders find a way to create a **workable level of unity.**

Lesson 3: Influence, Persuasion, and Leadership

- What influences people to make a change? There are three different types of people:
    1. Some people are logical (or "rational"): They will be moved by data, evidence, and carefully crafted logical reasoning — and nothing else.
    2. Others are more formal (or "physical") in their approach to any problem, and will be looking for signs that those with power and authority agree. They will be watching the political signs in the room, and will not get on board until the change is formally endorsed as a policy or they see something in writing.
    3. But the majority of people tend to be influenced most powerfully not by logic or formal authority. For these emotional people, the connection needs to be made to their hearts.

Lesson 4: Measuring Leadership

- Writer, consultant, innovator Peter Drucker came up with a list of 10 things every **good leader** should know:
    1. An effective leader knows that a leader is someone who has followers.
    2. An effective leader knows that a leader is not someone who is loved or admired.
    3. An effective leader knows that leaders are highly visible.
    4. An effective leader knows that leadership is not rank, privileges, titles, or money.
    5. An effective leader asks, "What needs to be done?" rather than "What do you want?"
    6. An effective leader asks, "What can and should I do to make a difference?"
    7. An effective leader asks, "What are the organization's mission and goals?"
    8. Effective leaders are extremely tolerant of diversity and do not look for carbon copies of themselves.
    9. Effective leaders are not afraid of strength in their associates.
    10. Effective leaders submit themselves to the "mirror test."

QCV 101: Achieving Breakthrough Quality, Access, and Affordability

Lesson 1: Two Mustangs

- Even though health care is unique, there are still many lessons – about reliability, agility, and problem solving – that organizations can learn from other high-risk industries, such as automobiles and aviation, which focus on safety and continuous improvement.
- In any complex system (health care or otherwise), the large number of interlocking parts (people, processes, departments, materials, etc.) makes it **almost impossible to design the system perfectly the first time around.**
    - In other words, you can't think your way to perfect care by creating a neat design on paper.
    - You have to discover your way to perfect care after you see how the design works in practice and continuously improve it.
    - We must keep getting better and better if we're to have any chance at delivering affordable, high-quality care to all patients.

Lesson 2: How to Make Complex Systems Fail

- The case of Mrs. Grant shows us what can happen when many small hazards come together to create one enormous hazard.
- The little problems that crop up in our daily routine become so familiar that we start assuming they're completely normal. **This tendency is called "normalizing deviance."**
    - These little problems are "weak signals" that the system isn't working the way it should. These problems can combine in ways that can be deadly for patients; it's essential to call them out and work to fix them.

Lesson 3: Solving Problems in Complex Systems

- It's very important that organizations have a deliberate and reliable way of responding to concerns and **"weak signals"** workers raise.
- Here are the conditions that allow staff members to escalate problems effectively. If these conditions are in place, organizations have a better chance of seeing and solving problems before they have a chance to result in harm:
    - The people doing work must recognize they have a problem.
    - Someone must be responsible for solving that problem.
    - The people doing work must be able to notify the responsible person in a timely way.
    - The responsible person must show up without blame and with a desire to solve the problem collaboratively.
    - There must be enough time and resources to solve the problem.
- Here's an example to illustrate the importance of these five conditions: The issue is a missing nursing gown. Without a new gown in each room, it is easier to transfer infections. In order to address the problem:
    - The nurse had to recognize that the missing gown was a problem, rather than a normal condition of work.
    - The organization had to have designated a person (Mary) with the span of responsibility to deal with that problem.
    - The nurse had to be able to reach Mary right away.
    - Mary had to respond with concern and openness.

- o Several people involved in the process of distributing and using gowns had to be given enough time to meet and talk over the problem.

If organizations reliably provide these conditions, they make it possible for staff to report many small problems – which can lead to the **resolution of big problems** in the future.

PFC 101: Dignity and Respect

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

- The Children's Hospital of Philadelphia defines person- and family-centered care as a series of values or principles:
  - Dignity and Respect
  - Information Sharing
  - Participation
  - Collaboration
  - Access
  - Care Coordination
- Providing person- and family-centered care is **also critical to creating an environment that fosters safety and quality of care.**

Lesson 2: First Impressions

- When she was a child, Lauren Sampson created "Lauren's List," four simple rules for health care providers when they make their first impressions:
  - Please knock on my door.
  - Please introduce yourself.
  - Please explain why you are here.
  - Please tell me if something might hurt.
- Building on those rules, here are some basic behaviors that **demonstrate dignity and respect**:
  - Acknowledge the patient and family; make eye contact, ideally at the level of the patient and family.
  - Introduce yourself to the patient and family by the name you prefer to be called. Make sure your introduction includes your title and a description of your role. Avoid using medical jargon or titles that do not have value or meaning for patients and families.
  - Ask family members how they would like to be addressed and ask the patient or family if there are designated family members with whom the staff should communicate about the plan of care. Don't make assumptions about the role of friends or family members and their access to information.
  - If possible, partner with the patient and family to decide the best time for a meeting, procedure, or discussion.
  - Be open, nonjudgmental, and accepting when patients and family members share their points of view.

Lesson 3: Privacy and Confidentiality

- Here are some essential behaviors providers need to practice to **respect their patients' privacy and confidentiality:**
  - Use a hushed voice when speaking with patients and families or when sharing information in public areas.
  - When possible, find a private area for talking with patients and families.
  - Never discuss patient information in public areas – elevators, hallways, cafeterias, parking areas, or on the phone in a patient registration area.
  - Ask patients for permission to discuss their care with family members present. Some patients may prefer to speak with you one-on-one about sensitive matters.

- o Make sure systems and staff keep patient information confidential. Angle computer screens away from public areas and store patient printouts, lab results, insurance information, and other private paperwork out of public view.

Lesson 4: Culture and Belief Systems

- Here are some basic things you can do to show **respect for the culture and belief systems of patients and families:**
    - o Avoid assumptions about a patient's or family's culture or beliefs.
    - o Learn by asking patients and families about their culture and preferences.
    - o Ask patients and families how you can help make them more comfortable.
    - o Keep in mind that some patients and families may be reserved about expressing their needs, and that this may be cultural as well.
    - o Refrain from placing judgment on beliefs and preferences that are different from your own.
- Here are some basic things you can do when you are caring for a patient and family whose **primary language is not the language spoken in your setting**:
    - o For patients and families with limited English proficiency (or whatever the primary language spoken in your setting), ask them which language they prefer and offer the assistance of an interpreter, if available.
    - o Before the conversation with the patient or family member begins, speak briefly with the interpreter to tell him or her what you hope to accomplish with the discussion, and give the interpreter a brief description of the patient's situation. Position the interpreter to the side and slightly behind the patient or family member.
    - o Introduce the interpreter to the patient and family members.
    - o Look at the patient or family – not at the interpreter – when you speak so you can gauge their reaction to what you're saying.
    - o Use short sentences and avoid jargon.

Lesson 5: Creating and Restful Healing Environment

- Here are some basic things you can do to create a **restful and healing environment for patients:**
    - o Think about how much noise you are making when the patient or family members are sleeping (either at night or during a nap).
    - o When possible, bundle services that need to happen during the night, such as taking vital signs and administering pain medication, at the same time.
    - o At night, use lighting judiciously so that you can safely provide care while limiting disruption to the patient.
    - o Perform as many nonessential services as possible during waking hours – 6:00 AM to 9:00 PM. If you must enter a room after 9:00 PM, switch to your "silent mode" and perform the task as quietly as you can.

Take everything you need into a room when you enter to limit the number of times you open the door.

PFC 102: A Guide to Shadowing: Seeing Care Through the Eyes of Patients and Families

- **"Patient and family shadowing"** is the direct, real-time observation of patients and families as they move through each step of a **care experience**. Shadowing patients and families allows you to observe all the **caregivers** and **touchpoints** in the care process as they happen.
    - A **"care experience"** can be any aspect of the patient's and family's health care journey, in any inpatient or outpatient setting.
    - A "**touchpoint**" is any place patients and families go during their care experience, such as the waiting room, exam room, lab, or any other place to which they travel.
    - A "**caregiver**" is any person whose work touches a patient's or family's experience, including doctors, nurses, therapists, pharmacists, technicians, aides, dietitians, appointment schedulers, parking attendants, janitors, hospital leaders, supply chain employees, medical records clerks, financial representatives, etc.

- Shadowing can help you to:
    - Empathize with patients and families.
    - Reveal inefficiencies and needed changes.
    - Create a sense of urgency for improvement among you and your colleagues.

- Shadowing includes **five steps**:
    1. **Establish your purpose.** What care experience would you like to examine? What do you hope to learn? Who will do the shadowing?
    2. **Set up.** Ensure all parties on both sides of the shadowing experience — including patients, families, providers, and staff — are well-informed and on board.
    3. **Follow, observe, and record.** As you move through the care experience, document everything that occurs at every step of the process, including everyone with whom the patient and family come into contact.
    4. **Create a care experience flow map and observational summary.** Organizing your findings in a thoughtful way helps you to identify opportunities for improvement and prepares you for sharing with others.
    5. **Report your findings.** An important part of shadowing is to present your notes and observations, in both a verbal and written report, to people in the organization who can help make improvements.

PFC 103: Having the Conversation: Basic Skills for Conversations about End-of-Life Care

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

- In some ways, developing skills for effective conversations with patients and families — especially conversations about end-of-life care — is harder than developing technical skills like placing IVs or taking blood pressures.
- In the last century, pretty much everything has changed about how and where people are dying in the US. In general, we're living much longer. And we're dying for different reasons.
- Although dying has changed, the way we care for patients at the end of life has not kept pace. Today, there is increasing evidence that too many people are dying in ways they would not choose.
- There's a big difference between a "good" death and a "hard" death. The goals to achieve a "good" death are simple:
    1. First, people need to "have the conversation" about end-of-life care wishes with their families — to let their loved ones know what matters most to them. They need to have this conversation before a medical crisis occurs: at the kitchen table — and not in the intensive care unit.
    2. Second, clinicians need to strive to understand what matters most to patients, and then provide care that aligns with their wishes as much as possible.

Lesson 2: The Conversation Begins with You

- The Conversation Project, which began in 2010, is a national campaign dedicated to helping people talk about their wishes for end-of-life care — and to transforming our culture by bringing discussions about dying out in the open. The goal is to make it easier to initiate conversations about dying, and to encourage people to talk now, and as often as necessary, so that their wishes are known when the time comes.
- More than 100,000 people have [downloaded the Conversation Starter Kit](#), a tool on The Conversation Project website that helps people get ready to "have the conversation."

Lesson 3: Understanding and Respecting Your Patients' Wishes

- Just as there is a checklist of steps you use to place a central venous catheter with sterile technique, there are essential pieces of a conversation or family meeting focused on the end of life. Here's a 10-step guide you can use:
    1. Do your homework before the meeting. Review the patient's medical issues, recent events, test results, and consultants' recommendations.
    2. Have a pre-meeting with other members of the care team so that everyone has a shared understanding of the issues.
    3. Create the right setting. Make sure everyone can sit, and that there are tissues if necessary. Don't have these conversations in a busy hallway!
    4. Determine what the patient and family understand about the current medical situation.

5. Give a brief, understandable medical summary.
6. Use silence and pay attention to the emotions of the moment.
7. Explore values, goals, and treatment preferences.
8. Recommend medical care that contributes to the goals.
9. Translate the goals into a care plan.
10. Summarize and follow up.
- Using open-ended questions (e.g., "How is your breathing?" instead of "Do you have shortness of breath?") and reframing the question are two valuable tools you can use when having conversations with patients.

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

- Sometimes the language we use to describe treatment options to patients and their families is very technical. We think we're being clear, but patients have no idea what we're talking about. It's always important to use words that patients and families can understand. Learn more in Atul Gawande's *New Yorker* article.
- Loaded, "TV" phrases can give the patient the wrong idea about end-of-life care. Be careful when using phrases such as "Give me the whole enchilada," "Pull the plug," and "Becoming a vegetable."
- Cultural background can also play a role in decision making before death. For example, there are documented cultural differences in how patients choose therapies, make medical decisions, weigh the costs of care, and prioritize life extension over quality of life. Cultural variation also exists in:
  o The level of interest in details
  o The desire to return to or be buried in one's home country
  o The need for pastoral counseling
  o The reluctance to sign "DNR" orders
  o The definition of death
- In partnership with IHI, The Conversation Project is working to help hospitals become "Conversation Ready." These organizations are testing new tools and strategies related to end-of-life care, with the goal of sharing them throughout the health care industry.
  o What does it mean to be "Conversation Ready"? Many health care organizations do not have processes in place to prompt discussions with patients and families about end-of-life wishes, or to record, access, and follow those wishes.
- Here are some steps you can take to start changing the culture related to end-of-life care today:
  o Have "the conversation" with your own family.
  o Ask to be present at a death.
  o Continue to care for patients even if a cure is no longer possible.
  o Share stories of good deaths and stories of hard deaths with people you trust.
  o Share stories of what it's like to care for patients at the end of life — what you did well, what you wished you had done better, what you're unsure about, what you need help with.
  o Develop your skills for listening to what matters to patients.
  o Explain care options to patients in language they can understand.
  o Provide care consistent with patients' wishes, one patient at a time.
  o Learn more at TheConversationProject.org.

TA 101: Introduction to Population Health

<u>Lesson 1: What is Population Health?</u>

- Population is "any group of individuals for whom consideration of health or health care at the level of the group is likely to advance health."
  - Examples include the residents of Cambridge, coal miners, and patients with diabetes.
- Health is "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity."
  - If you're thinking that there's a lot more that influences the <u>health</u> of a population than the <u>health care</u> they receive — you're right!
- **Population health is "health outcomes of a group of individuals, including the distribution of such outcomes within the group."**
  - There are a number of factors (such as individual behavior, the social environment, and the physical environment) that influence a person's health.
- The Wisconsin Public Health Model illustrates a variety of factors and outcomes that influence the health of a population.

It's not enough to improve clinical care for only one patient at a time. We also have to focus on improving the health of a whole population.

<u>Lesson 2: The Small (But Powerful!) Impact of Health Care</u>

- Health care accounts for only a small percentage of premature deaths.
  - Three killers – obesity, smoking, and alcohol abuse – are responsible for the largest percentage of deaths in the United States – and they are all preventable through population-health interventions.
- New technologies (such as electronic medical records) and new ways of thinking about patients (shared decision-making) are changing how care is provided.
- Herd immunity, when the vaccination of a portion of the population also provides a measure of protection for people without immunity, is another way to promote population health.

<u>Lesson 3: Population Health in Action</u>

- A medical-legal partnership in Cincinnati, a medical-agricultural connection in New Mexico, and an innovative eye care doctor in India are all examples of population health in action.
- The IHI Triple Aim strives to improve the health of the population, enhance the patient experience of care, and reduce (or at least control) per capita costs of health care.
  - Populations in Bolton, England, and Montgomery County, Maryland are examples of success stories.
- Social media tools and schools dedicated solely to population health are making the topic more prominent in health care today.