

**amplifire**

HEALTHCARE ALLIANCE

Better brains. Better performance.

# 2021 COURSE CATALOG (Q1)

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## SAFETY AND QUALITY ESSENTIALS LIBRARY

The Safety and Quality Essentials Library has been developed in conjunction with multiple health systems. It is designed to improve patient safety through the prevention of hospital acquired conditions (HACs) while simultaneously promoting the early recognition, management, and communication of conditions that can lead to avoidable harm.

### Infection Prevention Courseware

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### Clinical Support Staff Courseware

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**Target Audience:** Providers / Nurses / Clinical Support Staff

### Learning Objectives

- Reduce the financial burden of unreimbursed Hospital Acquired Conditions (HACs) and CMS penalties
- Improve the knowledge of clinicians to increase the quality of care
- Identify / remediate areas of clinical risk individually and organizationally

### Prevention and Avoidance of Harm Courseware

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## CAUTI Prevention

**Target Audience:** Physicians, Patient Care Technicians, Nurses, Ancillary Care Staff

**Time to Complete:** 25 minutes

**Contributor:** Intermountain Healthcare

**Course Description:** This course recruits learners to become part of the battle against catheter-associated urinary tract infections (CAUTI), the leading cause of avoidable patient harm.

### CAUTI (RN)

- Summarize the prevalence and risk factors associated with CAUTI
- Identify when the indwelling catheters are indicated and when they should be removed
- Display proper insertion and maintenance techniques
- Demonstrate how to position and manage urinary catheter equipment, including catheters, lines, and collection bags
- Distinguish between indications for indwelling urinary catheters and intermittent catheterization
- Explain how to collect urine specimens in the presence of a catheter

### CAUTI (PCT)

- Demonstrate how to position and manage urinary catheter equipment, including catheters, lines, and collection bags
- Identify when urinary catheters need to be replaced and notify appropriate staff
- Perform appropriate cleaning and care of patients with catheters
- Ensure patients with catheters are transported correctly

**Co-Developer:** Intermountain Healthcare

**Author Information:** Course development guided by the expertise of Cherie Frame and Joyce Gamble



## CLABSI Prevention

**Target Audience:** Physicians, Nurses

**Time to Complete:** 30 minutes

**Contributor:** Intermountain Healthcare

**Course Description:** This course reviews best practices used to prevent central-line-associated-bloodstream infections (CLABSI), including relatively simple interventions such as sterile technique, disinfection, and (most critically) hand hygiene, as well as more sophisticated interventions, such as the use of antimicrobial lock solutions and line materials

- Summarize the incidence and risk factors for CLABSI
- State the elements of the CLABSI prevention bundle
- Distinguish between the preferred insertion sites for each CVC type
- Understand how CVCs can become contaminated and how to prevent contamination
- Identify the indications for catheter, needleless catheter, and administration set replacement
- Demonstrate how to aseptically maintain needleless connectors, administration sets, and CVC dressings
- Explain how to disinfect needleless connectors (with or without disinfecting caps)

**Co-Developer:** Intermountain Healthcare

**Author Information:** Course development guided by the expertise of Sharon Sumner, Jean Golden, and Joyce Gamble



## *Infection Prevention and COVID-19 Essentials*

**Target Audience:** Physicians, Nurses

**Time to Complete:** 20–30 minutes

**Contributor:** ECRI Institute, Infection Prevention Partners

**Course Description:** This course reviews infection prevention practices, specifically in the context of the COVID-19 pandemic, and includes questions related to PPE doffing and donning, Isolation and Transmission-Based Precautions, and Equipment shortages.

- Demonstrate the proper application (donning) and removal (doffing) of Personal Protective Equipment (PPE) and identify commonly observed mistakes
- Understand safe response to PPE shortages
- Identify respirator indications (e.g. selection, allocation, proper use, extended use, and reuse)
- Perform appropriate hand hygiene
- Distinguish between Isolation and Transmission-Based Precautions, including Standard, Contact, Droplet, and Airborne
- Perform proper cleaning and disinfection of patient areas
- Clarify interim COVID-19 Guidance from CDC, FDA, OSHA, CMS, and relevant regulatory bodies

**Co-Developer:** ECRI Institute and Infection Prevention Partners

**Author Information:** Course development guided by the expertise of:

Hudson Garrett Jr. (Infection Prevention Partners)

Birgitta Mueller (ECRI Institute)

Paul Anderson (ECRI Institute)

Jim Davis (ECRI Institute)

Andy Furman (ECRI Institute)







## *Preventing and Managing C. difficile*

**Target Audience:** Physicians and Nurses

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham

**Course Description:** This course covers evidenced-based management of C. difficile infections (CDIs), from diagnosis and treatment to management of recurrent CDI.

- Summarize prevalence of and costs associated with CDI and recurrent CDI
- Classify appropriate PPE (selection, doffing, donning) and Contact Precaution procedures to follow when caring for CDI patients
- Employ appropriate testing in the context of suspected and confirmed CDI
- Identify appropriate treatments for CDI, while remaining mindful of antimicrobial stewardship
- Define cleaning products to be used in relation to CDI patients

**Co-Developer:** Mass General Brigham

**Author Information:** Course development guided by the expertise of Erica Shenoy



**Mass General Brigham**



## *Preventing Surgical Site Infections (SSIs)*

**Target Audience:** Nurses

**Time to Complete:** 20–30 minutes

**Contributor:** Providence Health & Service

**Course Description:** This course examines a wide range of SSI prevention strategies, including proper and timely antibiotic use, meticulous environmental and surgical site disinfection, and effective patient temperature and glucose maintenance..

- Summarize SSI rates and risk factors
- In the context of antimicrobial stewardship, demonstrate when to administer prophylactic antibiotics and identify which antibiotics and antibiotic doses are appropriate
- Identify and minimize infection risks posed by healthcare workers (hand hygiene, clothing, PPE)
- Participate in safety culture and process improvements to reduce SSIs
- Classify types of SSIs for reporting purposes
- Perform warming techniques to ensure normothermia
- Employ skin and environmental cleaning practices to prevent SSIs
- Quantify effectiveness of mechanical bowel preparation (MBP)
- Use additional infection prevention measures as required by surgery type (wound protectors, antimicrobial coated sutures, wound irrigation)

**Co-Developer:** Providence Health & Service

**Author Information:** Course development guided by the expertise of Laura Staubitz, Paula Yackley, and Kari Love





## *Safe Injection Practices*

**Target Audience:** Physicians, Nurses, and Clinicians tasked with administering injections

**Time to Complete:** 40 minutes

**Contributor:** Duke Infection Control Outreach Network (DICON)

**Course Description:** This course examines safe and unsafe injection practices surrounding the use of syringes, vials, and other injection equipment in the context of a single or multiple patients.

- Summarize the prevalence of injection outbreaks caused by unsafe injection practices
- Understand safety culture improvements that will increase safe injection practices
- Identify Never Events associated with injections
- Demonstrate appropriate use and disposal of injection equipment, including syringes, vials (single- and multi-dose), and bags, in the context of a single or multiple patients
- Use appropriate PPE and perform hand hygiene prior to performing injections

**Co-Developer:** Duke Infection Control Outreach Network (DICON)

**Author Information:** Course development guided by the expertise of Dan Sexton





## *Sepsis: Recognizing and Managing*

**Target Audience:** Physicians

**Time to Complete:** 30 minutes

**Contributor:** Assorted Partners

**Course Description:** This course explores the recognition and management of sepsis, including early recognition, aggressive treatment, and intensive patient monitoring, as well as presents the tensions between the varying guidelines of CMS's SEP-1, Sepsis-3, and the Surviving Sepsis Campaign.

- Summarize the prevalence of and risk factors for sepsis
- Distinguish between the competing Sepsis guidelines
- Identify when to pursue aggressive treatment and when to monitor
- Differentiate between sepsis, severe sepsis, septic shock, and SIRS
- Employ appropriate diagnostic tools and laboratory tests in the presence of suspected sepsis
- Understand the importance of timing when caring for sepsis patients
- Initiate appropriate volume resuscitation, vasopressors, and other treatment for sepsis patients
- Participate in safety culture and process improvements to improve sepsis outcomes

**Co-Developer:** Assorted Partners

**Author Information:** Course development guided by the expertise of Dan Davis, Paul Marik, Simon Finfer, and Scott de la Cruz



## *Can't Miss Diagnoses: Aortic Dissection*

**Target Audience:** Physicians

**Time to Complete:** 20–30 minutes

**Contributor:** Swedish Medical Center

**Course Description:** This course examines the risk factors for aortic dissection. It also encourages learners to maintain a high degree of suspicion when diagnosing patients to ensure that instances of Aortic Dissection are quickly recognized and treated.

- Summarize the prevalence of and risk factors for Aortic Dissection
- Classify the different types of Aortic Dissections
- Explain the physiology of Aortic Dissections
- Maintain a high degree of suspicion for Aortic Dissections during differential diagnosis
- Treat Aortic Dissections appropriately, based on type
- Order appropriate imaging tests to confirm and/or rule out Aortic Dissections

**Co-Developer:** Swedish Medical Center

**Author Information:** Course development guided by the expertise of Per Danielsson



**SWEDISH**



## ***Can't Miss Diagnoses: Epidural Abscess***

**Target Audience:** Physicians

**Time to Complete:** 20–30 minutes

**Contributor:** Swedish Medical Center

**Course Description:** This course focuses on the classical symptoms of Epidural Abscesses and the forewarned conditions that mimic or mask Epidural Abscesses. The important risk factors will be covered as nearly all Epidural Abscess patients fall in one of the risk category groups. Additionally, this course will enhance your confident knowledge of the essentials for prompt treatment.

- Recognize the risk factors and symptoms of Epidural Abscesses
- Describe how to treat Epidural Abscess patients
- Differentiate between the stages of Epidural Abscess
- Describe the importance of timely Epidural Abscess diagnosis
- Employ appropriate testing to confirm and/or rule out Epidural Abscesses

**Co-Developer:** Swedish Medical Center

**Author Information:** Course development guided by the expertise of Per Danielsson





## *Can't Miss Diagnoses: Necrotizing Fasciitis*

**Target Audience:** Physicians

**Time to Complete:** 20–30 minutes

**Contributor:** Swedish Medical Center

**Course Description:** This course teaches to the signs and symptoms of Necrotizing Fasciitis as well as the appropriate emergency management to achieve best outcomes.

- Describe the risk factors and symptoms of Necrotizing Fasciitis
- Interpret lab findings to diagnose Necrotizing Fasciitis
- Treat Necrotizing Fasciitis appropriately (antibiotics and surgical management)
- Summarize the mortality rate of patients with Necrotizing Fasciitis

**Co-Developer:** Swedish Medical Center

**Author Information:** Course development guided by the expertise of Per Danielsson





## *Cognitive Bias*

**Target Audience:** All Healthcare Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Children's Hospital of Colorado

**Course Description:** This course is a field guide for spotting and naming cognitive biases in the medical context. Some studies conclude that cognitive bias may be responsible for more than 50% of all diagnostic error. This course examines a host of different biases and the affects they have on medical diagnoses and decision-making.

- Differentiate between the various types of cognitive bias
- Recognize when a bias may be apparent at work
- Employ techniques to overcome biases

**Co-Developer:** Children's Hospital of Colorado

**Author Information:** Course development guided by the expertise of Dr. Dan Hyman and Dr. Joe Grubenhoff



Children's Hospital Colorado



## *Serious Illness and COVID-19*

**Target Audience:** Caretakers of Seriously Ill Patients (Social Workers, Chaplains, Healthcare Providers)

**Time to Complete:** 20–30 minutes

**Contributor:** Ariadne Labs

**Course Description:** This course teaches the framework of the Serious Illness Conversation Guide by asking learners to respond to various patient encounter scenarios.

- Apply best approaches to beginning conversations with patients on serious illness care options
- Employ patient and family-centered communication techniques focused on understanding patient priorities, values, and preferences
- Integrate considerations related to addressing emotional needs of patients including anxiety, concern, frustration, or helplessness
- Apply scenario-based training focusing on supporting diversity, equity, and inclusion for all patients that may benefit from serious illness care

**Co-Developer:** Ariadne Labs

**Author Information:** Course development guided by the expertise of Erik Fromme.







## Serious Illness Care

**Target Audience:** Physicians

**Time to Complete:** 20–30 minutes

**Contributor:** Ariadne Labs

**Course Description:** This course uses a well-tested and widely adopted tool, the Serious Illness Conversation Guide, which helps clinicians to have more, better, and earlier conversations with their seriously ill patients with just a little practice. By providing a script that includes patient-tested language and incorporates communication best-practices, instead of worrying about what to say next, clinicians will be able to turn their attention to hearing and responding to their patient. The Guide has been tested extensively with clinicians from many medical and surgical specialties. Without the Guide, conversations often center on medical options and life-sustaining treatment and tend to be longer and less focused. Using the open-ended questions in the Guide, clinicians spend less time talking, more time listening, and they are much more likely to discuss the patient’s prognosis, information preferences, values, and goals.

- Understand what serious illness communication is and where it fits within the advance care planning continuum
- Learn some principles of good communication and suggested language that goes with them
- Feel motivated to continue to learn and integrate serious illness conversations into the care you provide.

**Co-Developer:** Ariadne Labs

**Author Information:** Course development guided by the expertise of Erik Fromme.





## ***Blood Pressure***

**Target Audience:** Clinical Support Staff, including MAs

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course examines a broad range of blood pressure topics including anatomy and physiology of blood pressure, blood pressure management, hypertension management, and hypertension complications.

- Understand the anatomy and physiology related to blood pressure and hypertension
- Practice appropriate techniques for blood pressure measurement
- Differentiate between the categories of blood pressure
- Summarize hypertension management, including medication and lifestyle modifications
- Differentiate between hypertension and other related chronic conditions
- Describe the complications of hypertension, including heart attack and stroke
- Summarize the management of hypertension complications
- Identify common lab tests used in the management of hypertension and complications

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Marin Sawyer, Cora Bennett, Kim Tillery, Rebecca Porcaro, and Priscilla Mullins



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## EKG

**Target Audience:** Clinical Support Staff

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course teaches to how to place EKG leads and position patients properly to ensure accurate EKG readings.

- Identify the proper placement of EKG leads
- Explain how lead and placement positioning can affect EKG tracings
- Describe how to handle electrodes
- Differentiate between common EKG tracings

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Marin Sawyer, Cora Bennett, Kim Tillery, Rebecca Porcaro, and Priscilla Mullins





## General Knowledge

**Target Audience:** Clinical Support Staff

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course covers General Knowledge topics related to the responsibilities of a Clinical Support Staff member, ranging from HIPAA to Documentation to anatomical term review.

- Describe HIPAA regulations and implications for patient privacy
- Use communication tools to ensure effective and error-free communications (STAR, SBAR, etc.)
- Explain medication documentation best practices
- Identify common conditions and their treatments
- Identify best practices for capturing vital signs
- Differentiate between commonly used anatomical terms
- Use screening tools appropriately (e.g. Patient Falls, Depression, etc.)
- Identify common tests and procedures

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Marin Sawyer, Cora Bennett, Kim Tillery, Rebecca Porcaro, and Priscilla Mullins



## Injections

**Target Audience:** Clinical Support Staff, including MAs

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course examines a broad range of injection topics (specifically related to clinical support staff) including injection routes and sites, injection equipment, complications related to injections, and safe injection practices.

- Differentiate between different injection routes and injection sites
- Select appropriate equipment for injections (e.g. needle size, gauge, etc.)
- Use appropriate injection administration techniques
- Identify complications due to injection errors
- Explain how to safely use injection equipment (e.g. needles and syringes)
- Identify appropriate use of medication vials
- Identify common injectable medications
- Describe how to store medications safely

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Marin Sawyer, Cora Bennett, Kim Tillery, Rebecca Porcaro, and Priscilla Mullins



## *Enhancing the Care of Patients with Behavioral Health Issues*

**Target Audience:** Patient-Facing Care Providers / Inpatient and Outpatient Staff

**Time to Complete:** 20–30 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches verbal de-escalation techniques providers can use when faced with situations in which they must manage agitated or challenging patients.

- Identify common verbal de-escalation techniques and non-coercive de-escalation approaches and when to implement them
- Describe how to set clear boundaries and limits with patients
- Identify when situations escalate to the point that they require the involvement of Security or law enforcement
- Understand that staff safety is the ultimate goal when engaging with agitated patients or visitors
- Explain how to form collaborative relationships with patients and their families that help facilitate shared decision-making

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of JoAnn DelMonte, Carrie Kirk, Allison Nicholson, Billie Ratliff, Amanda Thomson, Mary McDaniel, Wendy Berry, Amy Provopulos, Chelsea Carlson, Amelia Walden, Gina Bartlow, Megan Mines, Sarah Patrick, and Kyle Rosen





## *Management of Type 2 Diabetes Mellitus*

**Target Audience:** Physicians (Primary Care and Specialists)

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham

**Course Description:** This course examines the various types of glucose-lowering pharmacological agents, their side effects, and the considerations that guide the use of each.

- Distinguish between the classes of glucose-lowering medications and identify the indications for each
- Understand the contraindications and risks associated with each glucose-lowering medication class
- Explain the side effects of glucose-lowering medications
- Adapt patient treatment regimens in a timely fashion as disease progresses, introducing additional agents as necessary
- Demonstrate how to treat patients by focusing on the disease, rather than the patient's lifestyle choices
- Explain how to start and titrate insulin therapy as disease progresses
- Understand how oral medications interact with injectable insulin

**Co-Developer:** Mass General Brigham

**Author Information:** Course development guided by the expertise of Enrico Cagliero, MD and Stephanie Eisenstat, MD





## *Preventing Patient Falls*

**Target Audience:** Nurses

**Time to Complete:** 20–30 minutes

**Contributor:** Intermountain Healthcare

**Course Description:** This course explores the risk factors that contribute to falls and evidence-based strategies for preventing falls.

- Identify risk factors (patient factors, medications, environmental factors) that contribute to patient falls
- Use the Morse Fall Scale to assess a patient's fall risk
- Define when fall risk assessments should be performed
- Respond appropriately and respectfully to patients to prevent falls
- Explain how to report patient falls in compliance with CMS requirements

**Co-Developer:** Intermountain Healthcare

**Author Information:** Course development guided by the expertise of Cherie Frame and Joyce Gamble





## *Preventing Pressure Injuries*

**Target Audience:** Nurses

**Time to Complete:** 20–30 minutes

**Contributor:** UCHealth

**Course Description:** This course covers pressure injury prevention practices, including risk assessments, patient positioning, and pressure injury prevention equipment.

- Use the BRADEN Q scale risk assessment to determine a patient's pressure injury risk
- Implement appropriate prevention practices based on BRADEN scores
- Manage patient medical devices, clothing, and accessories to prevent pressure injuries
- Employ appropriate pressure prevention equipment (specialty beds, wedges, support surfaces, etc.)
- Identify patient positioning and re-positioning to prevent pressure injuries
- Classify injuries according to the pressure injury stages
- Understand how nutrition, mobility, and activity influence pressure injury risk
- Perform skin assessments to prevent pressure injuries
- Differentiate between pressure injuries and incontinence-associated dermatitis (IAD)

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of Victoria J. Hays, Erica Hamrick, Holly Tiemann, Danielle Schloffman, Kelly Bookman; Brittany Cyriaks, and Jacob Knarr





## Safe Surgery

**Target Audience:** Operating Room and Procedural Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Ariadne Labs

**Course Description:** This course covers the importance of understanding the “why” behind checklists while overcoming the perception that these checklists serve only as a mere tool.

- Demonstrate human dignity and agency in Healthcare as well as philosophy and insights within the Surgery domain
- Understand the benefit of checklist implementation within the operating room
- Emphasize empowerment to all within the operating room, strengthening resilience
- Leverage communication and teamwork

**Co-Developer:** Ariadne Labs

**Author Information:** Course development guided by the expertise of Bill Berry, MD, MPA, MPH and Evan Benjamin, MD, MS, FACP





## *Traumatic Brain Injury*

**Target Audience:** Physicians

**Time to Complete:** 20–30 minutes

**Contributor:** Spaulding Rehabilitation Hospital, Mass General Brigham

**Course Description:** This course covers the treatment of agitated patients, including environmental adaptation, thoughtful medication decisions, and frequent reassessment for continuing or worsening symptoms.

- Summarize the prevalence of TBI and PBA
- Describe the incidence of agitation in relation to TBI patients
- Employ tools to assess agitation in TBI patients
- Perform differential diagnosis before confirming diagnosis of TBI
- Understand how to modulate agitation and disruptive behavior in TBI patients
- Describe treatment options (pharmacologic and non-pharmacologic)

**Co-Developer:** Spaulding Rehabilitation Hospital, Mass General Brigham

**Author Information:** Course development guided by the expertise of Liz Adamoya, Audrien Sarneki, and Rosse Zafante





## *Opioids: Safe Use and Management*

**Target Audience:** Providers tasked with prescribing opioids

**Time to Complete:** 20–30 minutes

**Contributor:** Massachusetts General Hospital, Mass General Brigham

**Course Description:** This course covers guidelines for the safe and effective prescribing of opioids to assist healthcare providers in delivering compassionate, evidence-based, responsible care while improving the quality and safety of patient pain management.

- Describe the scope of non-medical use of opioids, overdose, and opioid use disorder in the United States
- Provide safe and effective pain management for patients
- Perform appropriate opioid prescribing activities (patient agreements, urine toxicology screening, pill counts)
- Differentiate between addiction, dependence, tolerance, and pseudo-addiction
- Use Prescription Drug Monitoring Programs (PDMP) appropriately
- Manage challenging patient encounters related to pain and opioid prescribing by focusing on goals rather than pain eradication
- Understand side-effects of opioids, including analgesic tolerance, nausea, and respiratory depression
- Prescribe naloxone effectively

**Co-Developer:** Massachusetts General Hospital, Mass General Brigham

**Author Information:** Course development guided by the expertise of Darren Cullen, Sarah Wakeman, Chris Gilligan, and Scott Weiner



## COMPLIANCE LIBRARY

The Compliance Library has been developed in conjunction with MedStar Health and Brigham and Women's Hospital. By design, it addresses a variety of topics that have regulatory and accreditation relevance. Like all Amplifire courses, the Compliance Library elements actively engage learners and adapt to each individual's knowledge-base, thereby keeping the content relevant by focusing on un-mastered material.

**Target Audience:** Clinical Audience / Non-Clinical Audience

### Compliance Courses

- Active Shooter\* (2021)
- Corporate Compliance
- Emergency Preparedness and Response
- Fire Safety
- General Safety
- Hazard Communications
- Infection Prevention and Control—Clinical or Non-Clinical
- Laboratory Specimen Collection and Labeling
- Patient Care Assessment and Patient Safety
- Patient Rights—Clinical or Non-Clinical

### Learning Objectives

- Reduce compliance training time by 50-75% compared to traditional methods, while improving content retention
- Identify and remediate cognitive biases that cause compliance-related issues
- Convey the latest compliance best practices to keep the workforce up-to-date



## ***Corporate Compliance***

**Target Audience:** All Healthcare Staff (Clinical and Non-Clinical Providers)

**Time to Complete:** 20–30minutes

**Contributor:** MedStar Health

**Course Description:** This course teaches the basics of corporate compliance, exploring topics ranging from HIPPA to safe technology use. Learners will be able to:

- Summarize the laws and regulations that impact healthcare providers and care of patients
- Describe the importance of and regulations surrounding patient privacy
- Describe the steps needed provide safe technology use.
- Describe the policies related to social media use

**Co-Developer:** MedStar Health



**MedStar Health**





## ***Emergency Preparedness and Response***

**Target Audience:** All Healthcare Staff (Clinical and Non-Clinical Providers)

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham and MedStar Health

**Course Description:** This course explores guidelines staff should follow when faced with an emergency event or potential disaster situation, including what to do when they are at work or at home when an emergency occurs.

- List the factors used to establish the Emergency Preparedness Program (EPP)
- Describe hospital emergency preparedness plans and systems
- Identify Personal Preparedness steps
- Identify the Three Basic Steps to Safety and how to perform them
- Explain the different types of security, facility, medical, and weather alerts
- List the techniques and guidelines used in emergency situations
- Differentiate between the different types of radiation emergencies and how to handle decontamination
- Explain how to respond to fire and weather alerts
- Explain where to find key emergency equipment and information

**Co-Developer:** Mass General Brigham and MedStar Health

**Author Information:** Course development guided by the expertise of Will Marvin (MedStar Health) and Tim Moore (Mass General Brigham)



## **Fire Safety**

**Target Audience:** All Healthcare Staff (Clinical and Non-Clinical Providers)

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham and MedStar Health

**Course Description:** This course teaches about fire safety guidelines, the hospital fire plan, and evacuation steps in the case of a fire emergency.

- Communicate appropriately during a fire emergency
- Distinguish between the types of fire and fire extinguishers
- List steps to be taken during a fire emergency
- Differentiate between smoke zones and locations of defend-in-place

**Co-Developer:** Mass General Brigham and MedStar Health

**Author Information:** Course development guided by the expertise of Will Marvin (MedStar Health) and Jon Boyer (Mass General Brigham)



**Mass General Brigham**



**MedStar Health**



## **General Safety**

**Target Audience:** All Healthcare Staff (Clinical and Non-Clinical Providers)

**Time to Complete:** 20–30minutes

**Contributor:** MedStar Health

**Course Description:** This course teaches general safety topics, ranging from general hazard communication and fire safety to workplace violence and sexual harassment to ergonomics. Learners will be able to:

- Discuss general fire safety and hazard communication
- Identify hazardous situations and warning signs
- Identify precautions when handling hazardous materials
- Identify steps for containing or cleaning hazardous spills.
- Recognize OSHA signage and locations
- Use ergonomic practices to prevent workplace injury, slips, trips, and falls

**Co-Developer:** MedStar Health



**MedStar Health**



## *Hazard Communications*

**Target Audience:** All Healthcare Staff (Clinical and Non-Clinical Providers)

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham and MedStar Health

**Course Description:** This course teaches learners how to appropriately respond to a chemical spill or emergency and determine the level of hazard according to the label assigned to the chemical.

- Explain how to protect yourself in case of a chemical spill
- Identify what protocols to follow during an a chemical emergency
- Interpret labels to identity the level of hazard
- Discuss the update in Safety Data Sheets

**Co-Developer:** Mass General Brigham and MedStar Health

**Author Information:** Course development guided by the expertise of Yuri Wijting (MedStar Health) and Jon Boyer (Mass General Brigham)





## *Infection Prevention and Control—Clinical or Nonclinical*

**Target Audience:** Healthcare Staff: Clinical or nonclinical courses available

**Time to Complete:** 20–30minutes

**Contributor:** MedStar Health

**Course Description:** Infection prevention and control training ensures that healthcare professionals understand how pathogens are transmitted in the work environment from patient to healthcare worker, healthcare worker to patient, patient to patient, and within the same patient. This course explores basic infection prevention practices such as hand hygiene, PPE use, and Transmission-Based Precautions. It also teaches about HAIs, bloodborne pathogens, and antimicrobial stewardship. At the completion of this module, learners will be able to:

- Discuss efforts designed to minimize the risk of occupational exposures to infectious diseases
- Explain methods to prevent the spread of infection
- Discuss the impact of community-acquired and healthcare-associated infections
- Identify barriers and personal protective equipment for protection from exposure to potentially infectious material
- Summarize the engineering, work practice, and environmental controls that protect against healthcare-associated infections
- Describe the chain of infection as it applies to infection prevention and control
- Define key terms related to infection prevention and control

**Co-Developer:** MedStar Health



MedStar Health



## *Laboratory Specimen Collection and Labeling*

**Target Audience:** Nurses, Patient Care Technicians, CNAs

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course orients learners to proper specimen collection and labeling procedures.

- State the significance of laboratory accrediting agencies
- Explain proper patient identity protocols
- State the significance of collected volume
- Explain the effects of contaminated blood cultures
- Support proper specimen collection
- Identify properly labeled specimens

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Michael Nguyen and DeVonna McNeil





## ***Patient Care Assessment and Patient Safety***

**Target Audience:** Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Partners

**Course Description:** This course explores guidelines staff should follow when faced with an emergency event or potential disaster situation, including what to do when they are at work or at home when an emergency occurs.

- List the factors used to establish the Emergency Preparedness Program (EPP)
- Describe hospital emergency preparedness plans and systems
- Identify Personal Preparedness steps
- Identify the Three Basic Steps to Safety and how to perform them
- Explain the different types of security, facility, medical, and weather alerts
- List the techniques and guidelines used in emergency situations
- Differentiate between the different types of radiation emergencies and how to handle decontamination
- Explain how to respond to fire and weather alerts
- Explain where to find key emergency equipment and information

**Co-Developer:** Partners

**Author Information:** Course development guided by the expertise of





## ***Patient Rights - Clinical or Nonclinical***

**Target Audience:** Healthcare Staff: Clinical or nonclinical courses available

**Time to Complete:** 20–30minutes

**Contributor:** MedStar Health

**Course Description:** At the completion of this module, learners will be able to:

- Cite the 5 components of the Patient Bill of Rights and Responsibilities
- Identify the rights guaranteed to patients through the Americans with Disabilities Act
- Understand the Emergency Medical Treatment and Labor Act
- Define protected health information and identify examples
- Abide by the laws identified by the Health Insurance Portability and Accountability Act
- Follow the Minimum Necessary Standard when requesting, viewing, and disclosing patient health records
- Identify the signs of patient abuse and neglect
- Cite the types of information that must be disclosed so patients can make informed decisions
- Identify the dimensions of diversity and be able to classify them as primary, secondary, or organizational dimensions
- Discuss the considerations a patient must make when creating their advance directive
- Recognize differences between living wills and durable powers of attorney, understanding how they affect patient care
- Understand the principles of medical ethics that impact a patient's rights and be able to discuss the differences between medical law and medical ethics
- Understand the regulatory requirements of filing, managing, and resolving grievances

**Co-Developer:** MedStar Health





## THE OBSTETRICS (OB/GYN) LIBRARY

The Obstetrics (OB/GYN) Library is being developed in conjunction with various Alliance Members, and Alliance Partners. Trends over the past decade indicate a decrease in overall neonate adverse events and a substantial rise in maternal morbidity - the OB/GYN library is designed to address this (and many other complex issues) across the continuum of care.

**Target Audience:** Providers and Nurses

### Learning Objectives

- Reduce incidents and near-misses associated with the health

and safety of pregnant women and their unborn children

- Reduce the financial burden of malpractice claims associated with Obstetrics
- Address the most frequently seen rule-based, skill-based, and knowledge-based active and latent errors in Obstetrics
- Target and reduce the most common system errors related to Electronic Fetal Monitoring (EFM) use including fear of conflict, knowledge deficits, and communication failures

### Obstetrics Courses

- [Postpartum Hemorrhage](#)
- [Electronic Fetal Monitoring Certification Prep](#)
- [Shoulder Dystocia](#)
- [Hypertension in Pregnancy](#)



## *Postpartum Hemorrhage*

**Target Audience:** Obstetrics Nurses and Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Assorted Partners

**Course Description:** This course teaches learners how to identify a patient's risk of postpartum hemorrhage, how to manage it, and how to communicate with the patient and care team.

- Define postpartum hemorrhage (PPH)
- Explain the incidence and prevalence of postpartum hemorrhage
- Classify the etiologies of postpartum hemorrhage
- Determine the patient's risk level
- Calculate a patient's quantitative blood loss (QBL) and recognize the difference from estimated blood loss (EBL)
- Define the criteria and management steps for the 4 stages of postpartum hemorrhage
- Identify essential team members on the postpartum hemorrhage management team
- Model effective team communication while treating a patient with postpartum hemorrhage
- Effectively communicate with a postpartum hemorrhage patient
- Describe the contents of the postpartum hemorrhage cart
- Select the appropriate intervention for a patient with postpartum hemorrhage, including surgical, nonsurgical, and medications
- Determine the actions needed to provide rapid blood replacement for a patient with postpartum hemorrhage

**Co-Developer:** Assorted Partners



## *Electronic Fetal Monitoring Certification Prep*

**Target Audience:** Obstetrics Nurses and Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Assorted Partners

**Course Description:** This training teaches EFM interpretation and management skills, while also solidifying learner understanding of key, fundamental principles that lead to proper interpretation and management.

- State basic, essential definitions for best EFM practices
- Understand and use standardized terminology and communication requirements
- Identify appropriate categories for various EFM tracings
- Conduct proper interpretation of EFM tracings in varying scenarios
- Recognize primary, secondary, and tertiary management steps

**Co-Developer:** Assorted Partners



## *Shoulder Dystocia*

**Target Audience:** Obstetrics Nurses and Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Assorted Partners

**Course Description:** This course teaches the various maneuvers used to resolve shoulder dystocia and how to communicate during instances of shoulder dystocia.

- Identify the factors that place patients at higher risk for shoulder dystocia
- Differentiate between the maneuvers to resolve a shoulder dystocia
- Identify the impact of shoulder dystocias on mother and infant
- State the appropriate information needed for documentation, debrief, and team and patient communication

**Co-Developer:** Assorted Partners



## *Hypertension in Pregnancy*

**Target Audience:** Obstetrics Nurses and Providers

**Time to Complete:** 20–30 minutes

**Contributor:** Assorted Partners

**Course Description:** This training will cover the various hypertensive disorders in pregnancy, including increasing your understanding of classifications, proper diagnosis, management, and treatment options.

- Identify the classifications of hypertension in pregnancy
- Understand criteria for adequate diagnosis of each classification
- Understand signs and risk factors for each classification
- Identify proper management and treatment options

**Co-Developer:** Assorted Partners



## ELECTRONIC HEALTH RECORD: EPIC LIBRARY

Research indicates that user ratings on the quality of training are the single greatest predictor of overall Electronic Health Record (EHR) user experience<sup>1</sup>. These findings are leading health systems to re-invest in new and innovative training approaches.

Amplifire developed the Epic EHR training Library in conjunction with UCHealth to help physicians, nurses, and technicians effectively navigate the patient record workflow, reduce onboarding and training time, and optimize overall use of the EHR system.

This library has been shown to cut time spent in classroom training by half, potentially saving tens of millions of dollars.

**Target Audience:** Providers and Nurses

### Learning Objectives

- Optimize the overall use of Epic to enhance EHR investment
- Leverage data to customize training for individual needs

### Inpatient Setting Courseware

- [Inpatient CNA](#)
- [Inpatient Physicians/Providers](#)
- [Inpatient RN](#)

### Outpatient Setting Courseware

- [Outpatient MA](#)
- [Outpatient Physicians/Providers](#)
- [Outpatient RN](#)

### Hybrid Setting Courseware

- [Inpatient/Outpatient Hybrid Physicians/Providers](#)

### Emergency Department Setting Courseware

- [Emergency Department for Physicians/Providers](#)
- [Emergency Department RN](#)
- [Emergency Department Tech/MA](#)

### Specialties Courseware

- [Anesthesiology Physicians/Providers](#)
- [Obstetrics Physicians/Providers](#)
- [Surgery Physicians/Providers](#)

1 - Longhurst, et al. "Local Investment in Training Drives Electronic Health Record User Satisfaction" Applied Clinical Informatics, vol 10., no. 2, 2019, pp. 331-335.



## *Inpatient CNA*

**Target Audience:** Inpatient CNAs

**Time to Complete:** 1 hour

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the inpatient CNA's role.

- Navigate and customize Patient Lists
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Use the Work List to find and document Tasks
- Appropriately document in Flowsheets

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Mandy White, and Mike Schlater





## *Inpatient Physicians/Providers*

**Target Audience:** Inpatient Physicians / Providers

**Time to Complete:** 30–35 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.) and also examines Navigators and Activities specific to the inpatient physician's role.

- Navigate and customize Patient Lists
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Perform Medication Reconciliation
- Find, add, and modify orders and order sets
- Set a patient's pharmacy
- Differentiate between signing, sign and hold, releasing
- Use SmartTools and Notewriter to perform appropriate documentation
- Enter charges appropriately
- List the actions available to the patient through their patient portal

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Catherine Dale, Lesley Wallace, Lucinda Welch and Priscilla Clute







## *Inpatient RN*

**Target Audience:** Inpatient Nurses

**Time to Complete:** 2 hours

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the inpatient nurse's role.

- Navigate and customize Patient Lists
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Use the Brain to find and document Tasks
- Appropriately document in Flowsheets and the LDA Avatar
- Find, add, and modify orders and order sets
- Use the Mar to document medication administration
- Prepare the AVS and Discharge Instructions

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Mandy White, and Mike Schlater





## ***Outpatient MA***

**Target Audience:** Outpatient Medical Assistants

**Time to Complete:** 2 hours

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the outpatient medical assistant's role.

- Navigate and customize the Schedule
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- View and update information in the Rooming navigator
- Appropriately document in Flowsheets
- Find, add, and modify orders
- Use In Basket to manage communications

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, and Patricia Brown





## *Outpatient Physicians/Providers*

**Target Audience:** Outpatient Physicians and Providers

**Time to Complete:** 20–30 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), but also examines Navigators and Activities specific to the outpatient physician's role.

- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Find, add, and modify orders and order sets
- Set a patient's pharmacy
- Differentiate between signing, sign and hold, releasing
- Use SmartTools and Notewriter to perform appropriate documentation
- Enter charges appropriately
- List the actions available to the patient through their patient portal
- Use In Basket to manage communications

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Catherine Dale, Lesley Wallace, Lucinda Welch and Priscilla Clute

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## ***Outpatient RN***

**Target Audience:** Outpatient Nurses

**Time to Complete:** 2 hours

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the outpatient nurse's role.

- Navigate and customize the Schedule
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- View and update information in the Rooming navigator
- Appropriately document in Flowsheets
- Find, add, and modify orders
- Use In Basket to manage communications

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, and Patricia Brown





## *Inpatient / Outpatient Hybrid for Physicians / Providers*

**Target Audience:** Inpatient/Outpatient Physicians, Providers, and Residents

**Time to Complete:** 50–60 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the inpatient/outpatient physician's role.

- Navigate and customize Patient Lists
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Perform Medication Reconciliation
- Find, add, and modify orders and order sets
- Set a patient's pharmacy
- Differentiate between signing, sign and hold, releasing
- Use SmartTools and Notewriter to perform appropriate documentation
- Enter charges appropriately
- List the actions available to the patient through their patient portal
- Use In Basket to manage communications

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Catherine Dale, Lesley Wallace, Lucinda Welch and Priscilla Clute





## *Emergency Department for Physicians/Providers*

**Target Audience:** Emergency Department Physicians / Providers

**Time to Complete:** 50–60 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the Emergency Department physician's role.

- Navigate and use the Track Board
- Use the ED Manager
- Find patient information
- Customize Epic
- Find, add, and modify orders and order sets
- Perform Medication Reconciliation
- Use In Basket to manage communications
- Use SmartTools and complete appropriate documentation

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Patricia Brown, and Rachel Billings

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## ***Emergency Department RN***

**Target Audience:** Emergency Department Nurses

**Time to Complete:** 50–60 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the Emergency Department nurse's role.

- Navigate and use the Track Board
- Use the ED Manager
- Find patient information
- Customize Epic
- Document in the ED and Rapid Intake Narrators
- Find, add, and modify orders and order sets
- Use the MAR
- Use ED Narrator to complete appropriate documentation

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Patricia Brown, and Rachel Billings

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## ***Emergency Department Tech/MA***

**Target Audience:** Emergency Department Techs and Medical Assistants

**Time to Complete:** 50–60 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the Emergency Department tech/MA's role.

- Navigate and use the Track Board
- Use the ED Manage
- Find patient information
- Customize Epic
- Document in the Tech and Rapid Intake Narrators
- Find and act on orders
- Use Tech Narrator to complete appropriate documentation

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Patricia Brown, and Rachel Billings

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## *Anesthesiology Physicians/Providers*

**Target Audience:** Anesthesiologists

**Time to Complete:** 30–40 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the anesthesiologist's role.

- Navigate status boards to find patients
- Navigate and customize Patient Lists
- Search for reports and lab information
- Search for and manage orders, order sets, and phase of care
- Understand Epic iconography (medications, Results Review, etc.)
- Navigate the L&D Grease Board
- Use NoteWriter for complete documentation, including Post-Op documentation
- Use the Preprocedure and Intraprocedure navigators
- Request Outside Records and find consent forms

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, Annette Vizena, and Terri Bauman





## *Obstetrics Physicians/Providers*

**Target Audience:** Obstetrics Physicians and Providers

**Time to Complete:** 40–50 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the obstetric physician's role.

- Navigate the L&D Greaseboard
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Perform Medication Reconciliation
- Find, add, and modify orders and order sets
- Differentiate between signing, sign and hold, releasing
- Use SmartTools and Notewriter to perform appropriate documentation
- Enter charges appropriately

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, and Patricia Brown

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## *Surgery Physicians/Providers*

**Target Audience:** Surgical Physicians / Providers

**Time to Complete:** 25–30 minutes

**Contributor:** UCHealth

**Course Description:** This course teaches learners the basics of Epic use (including Chart Review, Patient Lists, etc.), and also examines Navigators and Activities specific to the surgical physician's role.

- Navigate and customize Patient Lists
- Use the Snapboard
- Find and update patient information in the Patient Chart
- Search for reports and lab information
- Perform Medication Reconciliation
- Find, add, and modify orders and order sets
- Use SmartTools and Notewriter to perform appropriate documentation
- Enter charges appropriately

**Co-Developer:** UCHealth

**Author Information:** Course development guided by the expertise of CT Lin, Lori Reece, and Patricia Brown

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## MEDICAL EQUIPMENT MANAGEMENT LIBRARY

The Medical Equipment Management Library was originally developed in partnership with Providence Health to take on the CRE Superbug appearing in the Olympus Duodenoscope. Through our partnership with the Association for the Advancement of Medical Instrumentation and eventually with Olympus directly, we are expanding this library to other high-risk equipment issues.

**Target Audience:** Providers, Nurses, Reprocessing Technicians, and Imaging Technicians

**Learning Objectives**

- Ensuring technical staff have the proper and proven training to avoid error and infection

### Medical Equipment Management Courses

- Reprocessing: Olympus Evis Exera Q180 Duodenoscope
- Reprocessing: Olympus Evis Exera 160VF, 160F, & Q180V Duodenovideoscopes
- Reprocessing: Olympus TJF-Q190V Duodenoscope
- Reprocessing: Pentax ED-3460TK Video Duodenoscope
- Surgical Sterile Instrument Processing (Centralized Sterile Processing)
- Syringe Infusion Pump Safety
- Mammography
- Imaging Appropriately
- EKG Interpretation Assessment



## *Reprocessing: Olympus Evis Exera Q180 Duodenoscope*

**Target Audience:** Endoscope Reprocessing Technicians

**Time to Complete:** 30–35 minutes

**Contributor:** Olympus America

**Course Description:** This course teaches learners the intricate steps of endoscope reprocessing and encourages them to become defenders of patient safety for those undergoing endoscopy procedures.

- Identify the various parts of an endoscope
- Perform endoscope reprocessing steps from pre-cleaning through sterilization
- Describe how to safely store endoscopes
- Understand the safety issues surrounding endoscope reprocessing, including the potential harm that can be done to patients, the reprocessing technician, and the equipment itself

**Co-Developer:** Olympus America

**Author Information:** Course development guided by the expertise of Melinda Benedict, Jason Ashraf, Liza Ayala, and Stevi Jerrold

**OLYMPUS**<sup>®</sup>



## ***Reprocessing: Olympus Evis Exera 160VF, 160F, & Q180V Duodenovideoscopes***

**Target Audience:** Endoscope Reprocessing Technicians

**Time to Complete:** 35 minutes

**Contributor:** Providence Health & Services

**Course Description:** This course teaches learners the intricate steps of endoscope reprocessing and encourages them to become defenders of patient safety for those undergoing endoscopy procedures.

- Identify the various parts of an endoscope
- Perform endoscope reprocessing steps from pre-cleaning through sterilization
- Describe how to safely store endoscopes
- Understand the safety issues surrounding endoscope reprocessing, including the potential harm that can be done to patients, the reprocessing technician, and the equipment itself

**Co-Developer:** Providence Health & Services

**Author Information:** Course development guided by the expertise of Shannan Hove and Thomas Rowe



## ***Reprocessing: Olympus TJF-Q190V Duodenoscope***

**Target Audience:** Endoscope Reprocessing Technicians

**Time to Complete:** 35 minutes

**Contributor:** Olympus

**Course Description:** This course teaches learners the intricate steps of endoscope reprocessing and encourages them to become defenders of patient safety for those undergoing endoscopy procedures.

- Identify the various parts of an endoscope
- Perform endoscope reprocessing steps from pre-cleaning through sterilization
- Describe how to safely store endoscopes
- Understand the safety issues surrounding endoscope reprocessing, including the potential harm that can be done to patients, the reprocessing technician, and the equipment itself

**Co-Developer:** Olympus

**Author Information:** Course development guided by the expertise of Melinda Benedict, Jason Ashraf, Liza Ayala, and Stevi Jerrold

**OLYMPUS**<sup>®</sup>



## ***Reprocessing: Pentax ED-3460TK Video Duodenoscope***

**Target Audience:** Endoscope Reprocessing Technicians

**Time to Complete:** 35 minutes

**Contributor:** Providence Health & Services

**Course Description:** This course teaches learners the intricate steps of endoscope reprocessing and encourages them to become defenders of patient safety for those undergoing endoscopy procedures.

- Identify the various parts of an endoscope
- Perform endoscope reprocessing steps from pre-cleaning through sterilization
- Describe how to safely store endoscopes
- Understand the safety issues surrounding endoscope reprocessing, including the potential harm that can be done to patients, the reprocessing technician, and the equipment itself

**Co-Developer:** Providence Health & Services

**Author Information:** Course development guided by the expertise of Kelly Pagel





## ***Surgical Sterile Instrument Processing (Centralized Sterile Processing)***

**Target Audience:** Endoscope Reprocessing Technicians

**Time to Complete:** 20–30 minutes

**Contributor:** Banner Health

**Course Description:** This course explores the various steps of and efforts involved in centralized sterile processing, covering vocabulary, best practices, and procedures.

- Define sterilization terms (bioburden, disinfection, antiseptic, etc.)
- Differentiate between the types of cleaning solutions, disinfectants, antiseptics and water
- Explain how to use wraps, pouches, packaging, and labels
- Discuss appropriate implementations of immediate use steam sterilization (IUSS)
- Explain how to appropriate transport equipment
- Describe how to load a sterilizer

**Co-Developer:** Banner Health

**Author Information:** Course development guided by the expertise of Tiffany Solberg, Ayda Menjugas MacDuff, Candace Schlickin, Emily Ellis, and Noelle Trinder





## *Syringe Infusion Pump Safety*

**Target Audience:** RNs, Healthcare Providers tasked with utilization of infusion pumps

**Time to Complete:** 20–30 minutes

**Contributor:** Mass General Brigham

**Course Description:** This course teaches the principles and techniques of syringe infusion pump use that will help learners deliver the best outcomes for patients.

- Identify indications for infusion pump use
- Define mechanical and physical terms associated with infusion pumps (slack, striction, flexure, etc.)
- Describe mitigation methods to prevent medication delivery delays associated with infusion pump use
- Explain how syringe and tubing size, orientation, and compliance impact flow stability and medication delivery
- Identify the factors associated with infusion pump alarms
- Describe how physical positioning of pump in relation to patient impacts medication delivery
- Identify complications and implications associated with air bubbles in infusion pump syringes

**Co-Developer:** Mass General Brigham

**Author Information:** Course development guided by the expertise of Christopher Colvin and Nathaniel Sims



## *Mammography*

**Target Audience:** Breast Radiologists

**Time to Complete:** 20–30 minutes

**Contributor:** Penn State Health

**Course Description:** This course teaches breast radiologists about the multiple imaging modalities, how to interpret images correctly, and appropriate interventional techniques to diagnose benign versus malignant disease.

- Discuss the Breast Imaging Reporting and Data System (BI-RADS), including suspicious microcalcifications, masses, and asymmetries, with all available imaging modalities
- Compare and contrast pre-procedural planning techniques for breast biopsies
- Choose the most appropriate imaging modality to guide percutaneous breast biopsy and discuss post-procedural planning and management
- Utilize radiology-pathology correlation to recommend appropriate follow-up and treatment of patients

**Co-Developer:** Penn State Health

**Author Information:** Course development guided by the expertise of Joe Fotos



**PennState Health**



## *Imaging Appropriately*

**Target Audience:** Physicians and Radiologists

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** This course is designed to assist clinicians in deciding which patients should undergo advanced imaging (CT, MRI, and Ultrasound).

- Identify appropriate imaging tests to run based on patient signs and symptoms

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Alex Klacman





## ***EKG Interpretation Assessment***

**Target Audience:** Acute Care Providers, Telemetry / ICU / ED Providers, Monitor Technicians

**Time to Complete:** 20–30 minutes

**Contributor:** Texas Health Resources

**Course Description:** These courses are meant to assess a learner's ability to interpret EKG waves. There are three versions of this course: Monitor Technician, Acute Care, and ED/ICU/Telemetry. The Acute Care and ED/ICU/Telemetry exams also assess a learner's knowledge of nursing interventions to take based on the EKG wave.

- Identify the different parts of an EKG wave
- Identify the ventricular rate, PR interval, and QRS duration of an EKG wave
- Differentiate between the different EKG waves
- Describe the nursing interventions required based on an EKG interpretation

**Co-Developer:** Texas Health Resources

**Author Information:** Course development guided by the expertise of Alex Klacman





## HOSPICE, PALLIATIVE, AND RESTORATIVE CARE LIBRARY

This library was developed with two key partners:

- American Academy of Hospice and Palliative Medicine
- Association of Rehabilitation Nursing

Due to the effects of chronic diseases on an aging population, the need for caregiving for older adults by formal, professional caregivers will increase sharply during the next several decades.

In 2014, about 67,000 paid, regulated long-term care services providers served about 9 million people in the United States. In

2015, hospice patients received a total of 96,052,577 days of care paid for by Medicare.

Two factors—longer life spans and aging baby boomers—will combine to double the population of Americans aged 65 years or older during the next 25 years. By 2030, older adults will account for roughly 20% of the US population.

**Target Audience:** Practitioners

- **Essentials of Hospice and Palliative Care:** 9 modules
- **Introduction to Rehabilitation Nursing:** 16 modules
- **Restorative Nursing Assistant:** 5 modules



## ***Essentials of Hospice and Palliative Care***

**Target Audience:** Practitioners

**Time to Complete:** 30 minutes for each module listed below

**Contributor:** American Academy of Hospice and Palliative Medicine

**Course Description:** The American Academy of Hospice and Palliative Medicine's 9-module primer provides a critical foundation for practitioners who want to understand the principles of hospice and palliative medicine, including hospice & palliative care principles, pain management, and ethical / legal issues.

The modules below can be purchased separately or as a 9-module bundle.

- **Alleviating Psychological and Spiritual Pain** (*Essentials 2*)
- **Assessing and Treating Pain** (*Essentials 3*)
- **Managing Nonpain Symptoms** (*Essentials 4*)
- **Communication and Teamwork** (*Essentials 5*)
- **Ethical and Legal Issues** (*Essentials 6*)
- **Caring for People with HIV/AIDS** (*Essentials 7*)
- **Caring for Pediatric Patients** (*Essentials 8*)
- **Caring for Patients with Chronic Illnesses: Dementia, COPD, and CHF** (*Essentials 9*)

**Co-Developer:** American Academy of Hospice and Palliative Medicine





## *Introduction to Rehabilitation Nursing*

**Target Audience:** Practitioners

**Time to Complete:** 30 minutes for each module listed below

**Contributor:** Association of Rehabilitation Nurses

**Course Description:** This course from the Association of Rehabilitation Nursing (ARN) is ideal for individual nurses seeking to develop a foundation in rehabilitation nursing, as well as for units and facilities looking to provide consistent, flexible, and personalized rehabilitation nursing training to their staff. Nurses will advance their expertise with evidence-based techniques in areas such as patient and family communication, rehabilitation challenges, and goal setting.

Nurses can earn a total of 12 CNEs of continuing nursing education credit. The modules below can be purchased separately or as a 16-module bundle.

- |                                    |                               |
|------------------------------------|-------------------------------|
| → Introduction to Rehabilitation   | → Neuropathophysiology        |
| → Disability                       | → Dysphagia                   |
| → Safe Patient Handling            | → Bladder Management          |
| → Communication                    | → Bowel Management            |
| → Patient & Family Education       | → Skin Integrity & Wound Care |
| → Pain Management                  | → Sexuality                   |
| → Musculoskeletal & Body Mechanics | → Pediatrics                  |
| → Autonomic Dysreflexia            | → Gerontology                 |

**Co-Developer:** Association of Rehabilitation Nurses







## ***Restorative Nursing Assistant***

**Target Audience:** Practitioners

**Time to Complete:** 30 minutes for each module listed below

**Contributor:** Association of Rehabilitation Nurses

**Course Description:** ARN's Restorative Nursing Assistant Course is ideal for facilities looking to provide flexible and personalized core training to their nursing assistant staff, as well as individual nursing assistants seeking to develop a foundation in restorative nursing practice. Nurses will come away with expertise in the principles of restorative care, how to improve quality of life, and key challenges in caregiving.

The full course is made up of 5 modules, each focusing on a set of restorative nursing topics or concepts, mirroring the content of ARN's *Restorative Nursing: A Training Manual for Nursing Assistants* publication.

The modules below can be purchased separately or as a 5-module bundle.

- **Philosophy of Restorative Nursing: Dispelling the Myths**
- **Mobility & Activities of Daily Living**
- **Swallowing/Communication & Cognition**
- **Bladder, Bowel & Skin Care**
- **Therapeutic Activities & Caregiver Challenges**

**Co-Developer:** Association of Rehabilitation Nurses





## ANALYTICS AND IMPROVEMENT LITERACY LIBRARY

### Analytics and Improvement Literacy for Analysts

Analysts bring the most value to healthcare organizations when they can solve problems and become partners in clinical and operational improvement work. This requires an ability to contextualize and analyze data to surface improvement opportunities—and then communicate those opportunities with their leaders. This program provides analysts with the core competencies needed to move from reactive report writing to proactively discovering insights that lead to meaningful improvements.

#### Key needs addressed

- Provide analysts with the context, value, and role of data
- Empower analysts to generate insight to drive improvement work
- Communicate insights to technical and non-technical audiences with effective data visualization through data visualization

- [Healthcare Data](#)
- [Healthcare Operations](#)
- [Data Analysis](#)
- [Data Visualization](#)
- [Process Improvement](#)
- [Project Management](#)
- [Communication](#)
- [Data Modeling](#)

### Analytics and Improvement Literacy for Leaders

Every day, healthcare leaders swim in an ocean of data, dashboards, and reports. But dashboards and reports alone don't yield dramatic and sustained improvements. This series of powerful learning experiences will enhance leaders' analytics literacy, enabling them to generate more meaningful insight from their data. Learning experiences are delivered in Amplifire, an online platform known for enabling rapid and effective learning that leads to better patient outcomes.

#### Key needs addressed

- Provide leaders with the context, value, and role of data
- Empower leaders to independently generate insight and engage with analysts in complex data analysis
- Propose improvement opportunities in a compelling manner through data visualization

- [Healthcare Data](#)
- [Healthcare Operations](#)
- [Understand and Interpret Analysis](#)
- [Data Visualization Basics](#)
- [Process Improvement](#)



## Healthcare Data

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Develop a basic understanding of the most common forms of data within healthcare, including terminologies, coding systems, groupers, and risk models. Effectively engage with available data and ultimately produce more meaningful insights for improvement.

- Recognize the basic structures of ICD, CPT, HCPCS, and NDC coding systems
- Understand the purpose of SNOMED CT, LOINC, and RxMed
- Describe how clinical terminology is used in healthcare data
- Describe the basic structure and use of a DRG
- Use DRGs to calculate a hospital's CMI
- Understand HCCs, DCCI, Elixhauser Comorbidity Index, LACE, and LACE+ Indices
- Describe how risk models are used to analyze mortality and readmission rates
- Recognize commonly used numerical prefixes
- Identify the medical terms for the location of procedures or conditions
- Describe positional, directional, and basic anatomy medical terms
- Recall terms for conditions of the body and surgical procedures
- Recognize common medical abbreviations

3 modules | 3 CLUs

**Co-Developer:** Health Catalyst





## Healthcare Operations

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Gain a general understanding of the healthcare industry, including the current policy environment, the most common payment and delivery models, revenue cycle and supply chain, and labor management.

- Recognize the metrics government regulators require healthcare providers to report
- Comprehend how value-based care impacts healthcare and drives policy
- Explain the three most prevalent delivery models
- Recognize and describe the four most prominent payment models
- Describe the process of healthcare billing
- Explain the use of revenue cycle metrics
- Recognize the similarities and differences between how the five main hospital types handle revenue
- Understand hospital supply management
- Explain labor management and occupancy
- Explain nursing ratios, FTE staffing, and productivity ratios work in labor management
- Describe how licensed beds, staffed beds, and critical census are used to measure a hospital's maximum occupancy limit
- List how the daily census, occupancy rate, and patient dates are used to calculate occupancy
- Explain the importance of tracking utilization statistics

4 modules | 5 CLUs

**Co-Developer:** Health Catalyst



## Data Analysis

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Contributor:** Health Catalyst

**Course Description:** Use industry best practices to perform basic comparative and descriptive analysis, and leverage run charts and statistical process control charts to understand variation.

- Understand the impact of sample size on analysis
- Manage rates and frequencies within an analysis
- Choose appropriate chart type to use in data analysis
- Avoid statistical bias
- Recognize the common data distribution shapes
- Identify the common types of variation within a data distribution
- Recall the measures of central tendency and when to use them
- Identify process or system stability using a control chart
- Interpret boxplots and bubble charts
- Describe the difference between common cause and special cause variation
- Build run and control charts
- Utilize statistical rules to identify special cause variation on a run or control chart
- Interpret special cause variation using a run or control chart

3 modules | 4 CLUs

**Co-Developer:** Health Catalyst



## *Data Visualization*

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes

**Course Description:** Uncover how human beings consume visual information and recognize how to effectively design visualizations to take advantage of those tendencies.

- Comprehend how people consume visual data
- Describe key design principles informed by that comprehension
- Describe the components of an effective design process to create your visualizations

1 module | 2 CLUs

**Co-Developer:** Health Catalyst





## Process Improvement

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Learn common concepts, language, tools, and processes involved in improvement work.

- Define and differentiate common process improvement methods and methodologies
- Define common process improvement terminologies and concepts
- Consider those affected by change and understand how to involve them in the process
- Recognize the four layers of Governance
- Compare the components of the Three Systems and provide improvement effort examples for each component
- Define basic terminologies of the 7 Question Framework and compare it to other methodology
- Define the Healthcare Analytic Adoption Model, including the different levels of the model
- Recognize and differentiate between common measurement roadblocks in healthcare
- Recognize common symptoms of numerical illiteracy
- Identify common barriers to effecting change and understand why they are prevalent
- Recognize the need to continually monitor for sustained improvement
- Articulate the flaw in “punishing the outlier” issue
- Recognize the need to set appropriate baselines and benchmarks whenever possible
- Define and contrast outcome, process, and balance measures

2 modules | 3 CLUs

**Co-Developer:** Health Catalyst



## *Project Management*

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Contributor:** Health Catalyst

**Course Description:** Gain the foundational skills crucial for every role within healthcare regardless of the type or size of the project.

- Describe the role project management plays in the success of client projects
- Explain the role that creating a timeline plays in the success of a project
- Describe the process of creating a project timeline
- Explain the role that regular, quality project updates play in the success of a project
- Identify the elements of a quality project update
- Explain how to establish a regular cadence and method for providing project updates
- Explain the role that managing action items plays in the success of a project
- Recognize and document action items
- Describe the importance of documenting action items
- Hold people accountable for their assigned action items
- Explain the role that managing expectations plays in the success of a project
- Manage client and HC team expectations

2 modules | 1 CLU

**Co-Developer:** Health Catalyst







## Communication

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Develop the flexibility and adaptability in communication to ensure that information shared is information received. Recognize, consider, and adjust according to the audience and medium, increasing the effectiveness of written, oral, and consulting communication.

- Understand how the audience affects written communication
- Be able to determine if communication should be email or meeting
- Understand how to identify unnecessary language and information in written communication
- Recognize what constitutes a clear deadline
- Understand the role of questions in an oral presentation
- Articulate the value of using stories in your presentation
- Understand the role pace plays in effective oral communication
- Recognize the importance of concision in oral communication
- Understand the difference between audience and use case and their impacts on a demo
- Recognize when to respond to questions and when not to in a demo
- Understand your personal role in opening and maintaining dialogue throughout the consulting relationship
- Understand the characteristics of consulting questions

3 modules | 3 CLUs

**Co-Developer:** Health Catalyst



## Data Modeling

**Target Audience:** Data Analysts

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Effective data-governance solutions begin with a deep understanding of the data. The basic principles of data modeling are essential before diving into the tools Health Catalyst offers that assist in analysis and visualization.

- Differentiate between data types and how they are used
- Define primary key, surrogate key, and foreign key, and know what makes a good key
- Read and interpret an entity relationship diagram (ERD)
- Recognize different types of joins and know when to use each
- Define grain in the context of data modeling and identify in a given scenario or data set
- Know what indexes are and differentiate between non-clustered and clustered indexes
- Define table and view and know how each is used in SAMD
- Determine when you should use early vs. late binding
- Define data lake and data warehouse
- Differentiate between star schemas and third normal form schemas
- Know why we have SAM framework architecture (Health Catalyst's data model)
- Categorize a piece of data in a given scenario as an event, rule, population, pre-metric, metric, or summary metric

3 modules | 3 CLUs

**Co-Developer:** Health Catalyst



## Healthcare Data

**Target Audience:** Leaders

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Develop a basic understanding of the most common forms of data within healthcare, including terminologies, coding systems, groupers, and risk models. Effectively engage with available data and ultimately produce more meaningful insights for improvement.

- Recognize the basic structures of ICD, CPT, HCPCS, and NDC coding systems
- Utilize available resources to look up meanings of codes used in healthcare data
- Understand the purpose of SNOMED CT, LOINC, and RxMed
- Describe how clinical terminology is used in healthcare data
- Describe how DRGs are used
- Describe how a DRG payment model works
- Use DRGs to calculate a hospital's CMI
- Understand HCCs, DCCI, Elixhauser Comorbidity Index, LACE, and LACE+ Indices
- Describe how risk models are used to analyze mortality and readmission rates
- Recognize commonly used numerical prefixes
- Identify the medical terms for the location of procedures or conditions
- Describe positional, directional, and basic anatomy medical terms
- Recall terms for conditions of the body and surgical procedures
- Recognize common medical abbreviations

3 modules | 3 CLUs

**Co-Developer:** Health Catalyst



## Healthcare Operations

**Target Audience:** Leaders

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Understand the basics of the healthcare industry, including the current policy environment, the most common payment and delivery models, revenue cycle, supply chain, and labor management.

- Identify healthcare regulatory organizations
- Recognize the metrics government regulators require healthcare providers to report
- Comprehend how value-based care impacts healthcare and drives policy
- Explain the three most prevalent delivery models
- Recognize and describe the four most prominent payment models
- Describe the process of healthcare billing
- Explain the use of revenue cycle metrics
- Recognize similarities and differences in how five main hospital types handle revenue
- Understand hospital supply management
- Explain labor management and occupancy
- Explain how nursing ratios, FTE staffing, and productivity ratios work in labor management
- Describe how licensed beds, staffed beds, and critical census are used to measure a hospital's maximum occupancy limit
- List how the daily census, occupancy rate, and patient dates are used to calculate occupancy
- Explain the importance of tracking utilization statistics
- List the hospital areas where utilization is particularly important (ED and imaging)

4 modules | 5 CLUs

**Co-Developer:** Health Catalyst



## *Understand and Interpret Analysis*

**Target Audience:** Leaders

**Time to Complete:** 20–30 minutes for each module

**Course Description:** Work with competent analysts to get the correct data and analyze and interpret it in a way that generates meaningful insights.

- Understand the impact of sample size on analysis
- Recognize best practices around collecting historic data
- Identify appropriate chart types and their application
- Distinguish between outcome, process, and balance measures
- Understand statistical bias and its potential cause
- Recognize the various shapes of data distributions
- Determine appropriate measures of central tendency and spread
- Evaluate basic visualizations for key insights
- Describe linear relationships using the correlation coefficient,  $r$ , and the coefficient of determination,  $r^2$
- Interpret the results of a hypothesis test
- Recognize the importance of evaluating performance over time
- Understand the difference between common cause variation and assignable cause variation
- Interpret run charts and control charts to respond to signals rather than noise

3 modules | 5 CLUs

**Co-Developer:** Health Catalyst



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## *Data Visualization Basics*

**Target Audience:** Leaders

**Time to Complete:** 20–30 minutes

**Course Description:** Uncover how human beings consume visual information and recognize how to effectively design visualizations to take advantage of those tendencies.

- Comprehend how people consume visual data
- Understand key design principles

1 module | 2 CLUs

**Co-Developer:** Health Catalyst





## Process Improvement

**Target Audience:** Leaders

**Time to Complete:** 20–30 minutes for each module

**Contributor:** Health Catalyst

**Course Description:** Learn the foundational concepts, language, tools, and processes involved in improvement work.

- Define and differentiate common process improvement methods and methodologies
- Define common process improvement terminologies and concepts
- Recognize need to consider those affected by change and understand how to involve them
- Recognize the four layers of Governance
- Compare the components of the Three Systems and provide improvement effort examples
- Define basic terminologies of the 7 Question Framework and compares it to other methodologies
- Recognize the value and application of the 7 Question framework to all work
- Define the Healthcare Analytic Adoption Model, including the different levels of the model.
- Recognize and differentiate between common measurement roadblocks
- Identify common barriers to effecting change and understands why they are prevalent
- Avoid reacting to single data points by understanding the value of examining data over time
- Recognize the need to continually monitor for sustained improvement
- Articulate the flaw in “punishing the outlier” issue
- Recognize the need to set appropriate baselines and uses benchmarks
- Define and contrast outcome, process, and balance measures

2 modules | 3 CLUs

**Co-Developer:** Health Catalyst



## ABOUT AMPLIFIRE

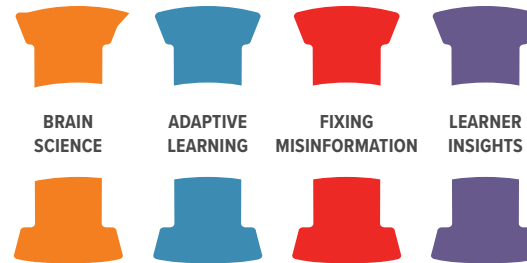
With more than 2.3 billion learner interactions to date, the Amplifire training platform helps hospitals thrive by improving their clinician's on-the-job performance. Patented algorithms detect and correct the knowledge gaps, doubts, and misconceptions that Amplifire has discovered in clinician's minds in every hospital setting.

Healthcare systems have adopted Amplifire as a core operating asset that transforms training from a rote activity, where managers only hope for results, into a strategic tool that delivers a workforce aligned with evidence-based, best practices. Simply put, it saves lives while lowering costs.



## FOUNDATIONS

amplifire



### A learning platform built on four pillars

**Brain Science:** The Amplifire platform uses 18 cognitive and emotional triggers that boost learning and long-term memory. Combining twenty years of research with 2.5 billion learner interactions to date, the platform creates a learning experience like no other that rapidly moves people to knowledge mastery.

**Adaptive Learning:** Amplifire is Socratic, asking questions first to assess learners' knowledge and confidence. With this unique dataset, algorithms then create a personal path to mastery for each individual. For example, it may take one learner 15 minutes to travel a particular learning path and reach mastery. Another learner might take 23 minutes to master the topic along a completely different path.

**Fixing Confidently Held Misinformation (CHM):** Amplifire finds and fixes CHM—information a person believes is correct but is actually wrong. CHM is the precursor to mistakes because misplaced confidence drives the wrong behavior. In hundreds of Amplifire deployments, CHM is always present at between 18% and 42% of workforce knowledge. Eliminating CHM fixes mistakes before they happen.

**Learner Insights:** Dashboards provide a view into each learner's journey. You can see where learners are struggling and which instructors or modalities are most effective. For the first time, you now have tangible evidence that individuals have learned.



## ALLIANCE MEMBERS

The Amplifire Healthcare Alliance is a group of major health systems, hospitals, physicians, and nurses working together to increase knowledge and drive better decision making in healthcare. We have aligned our efforts to reduce loss, improve performance, change behavior, and positively affect outcomes.

Alliance Members agree to use courseware to impact clinical outcomes, assess efficacy of the interventions, and share learner-level data (blinded and aggregated) to the benefit of all Members. Alliance Founding Members are given priority opportunities to co-develop content and participate in the revenue share from the sale of that courseware.





## ALLIANCE PARTNERS

The Amplifire Healthcare Alliance is also honored to work closely with the following Co-Development partners in the development and distribution of our courseware.

Special thanks to our Business Partners in helping drive better clinical outcomes:





## CLINICAL INNOVATION ADVISORY BOARD

We are guided in our efforts by our prestigious Clinical Innovation Advisory Board, led by Brent James, MD. This group works to ensure that we are asking the right questions, attacking the right problems, and honestly and correctly evaluating the efficacy of our efforts.



**Brent C. James, MD, MStat**

Clinical Professor at the Clinical Excellence Research Center, Stanford University School of Medicine. Chairman, Amplifire Innovation Advisory Board. [NY Times article](#)



**Maureen Bisognano**

National Academy of Medicine; President Emerita and Senior Fellow, Institute for Healthcare Improvement (IHI). [IHI Video](#)



**Terry Fairbanks, MD**

Professor of Emergency Medicine, Georgetown University Hospital; Vice President Quality and Safety, Medstar Health [Human Factors Video](#)



**Peter Pronovost**

Chief Clinical Transformation Officer at University Hospitals, Professor at the Johns Hopkins School of Medicine. [Wikipedia](#)



**Lucy A. Savitz**

Director, Center for Healthcare Research, Vice President, Kaiser Permanente Northwest. [Kaiser](#)



## LEARNING SCIENCE ADVISORY BOARD

We work with the top Human Learning Science labs in the United States to understand the neuro-mechanics of human learning so we can develop the most advanced evidence-based learning platform in the world.



Robert Bjork, PhD, is UCLA's former Chair of Psychology and past president of the Association of Psychological Science. He is a pioneer in the role of desirable difficulties and the counterintuitive nature of learning. His work, and that of his wife Elizabeth, is the basis for Malcolm Gladwell's *David and Goliath*. [Bjork Lab](#)



Dan Schacter, PhD, is Harvard's former Chair of Psychology. He has written eight books, including *The Seven Sins of Memory* and *Psychology* a university-level textbook, as well as 300 scientific articles. [Schacter Lab](#)



Chad Lane, PhD, is a professor at the University of Illinois interested in the foundational theories and practices of educational psychology, including the application of AI to learning and development. [At UoI](#)



Elizabeth Bjork, PhD, is the co-principal investigator of the Bjork Learning and Forgetting Laboratory. Her work has shown that forgetting is not the tendency of a limited system, but the consequence of an adaptive one. [Bjork Lab](#)



Rich Mayer, PhD, is UCSB's former Chair of the Department of Psychological & Brain Sciences. For fifteen years, Educational Psychology ranked him the "most productive educational psychologist in the world." [At UCSB](#)



Robert Birnbaum, MD, PhD, is the Director of Continuing Professional Development at Mass General Brigham and the founding Executive Director of the Massachusetts General Hospital Academy. [At MGH](#)



Kathleen McDermott, PhD, is a Professor of Psychology at Washington University who investigates human memory encoding and retrieval and how they interact. [Roediger Lab](#)



Roddy Roediger, PhD, is Washington University's former Chair of Psychology and Chair of the governing board of the Psychonomic Society. He is the co-author of *Make It Stick* and over 175 research papers. [Roediger Lab](#)

## SPOTCHECK **FREE** to Qualifying Healthcare Systems

The Safety and Quality SpotCheck was developed in conjunction with multiple health systems. It rapidly discovers knowledge issues around patient safety and prevention of hospital acquired conditions.

It reveals where clinicians are misinformed about the early recognition, management, and communication of conditions that can lead to avoidable harm.

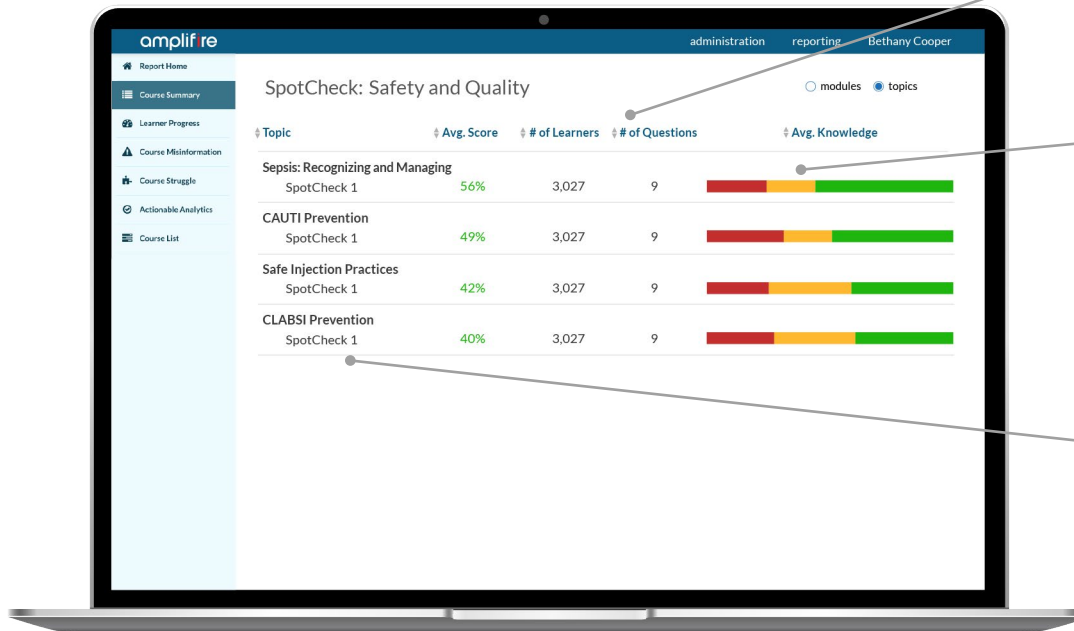
### Rapid and Informative:

- Takes 12 to 15 minutes
- Target Audience: Providers / Nurses / Support Staff

### Knowledge Areas Assessed:

- CAUTI and CLABSI Prevention
- Sepsis: Recognizing and Managing
- Safe Injection Practices

### SpotCheck Dashboard



Results can be sorted by topic, score, # of learners, # of questions, or knowledge for all learners

Average Knowledge shows the predicted levels of...

- Confidently held Misinformation
- Uncertainty
- Proficiency

Topics show the variety of competencies analyzed



## Value


- Personalized algorithm that eliminates knowledge gaps, uncertainty, and confidently held misinformation
- AI-based virtual coach that nudges, praises, and refreshes knowledge for each individual learner
- Scalability with over 2.5 billion interactions to date
- Engages clinicians through cognitive triggers based in psychology and gaming theory
- Clinical outcomes including: fewer errors, less training time, longer memory of best practices, \$millions in savings, and increased reimbursable billings.

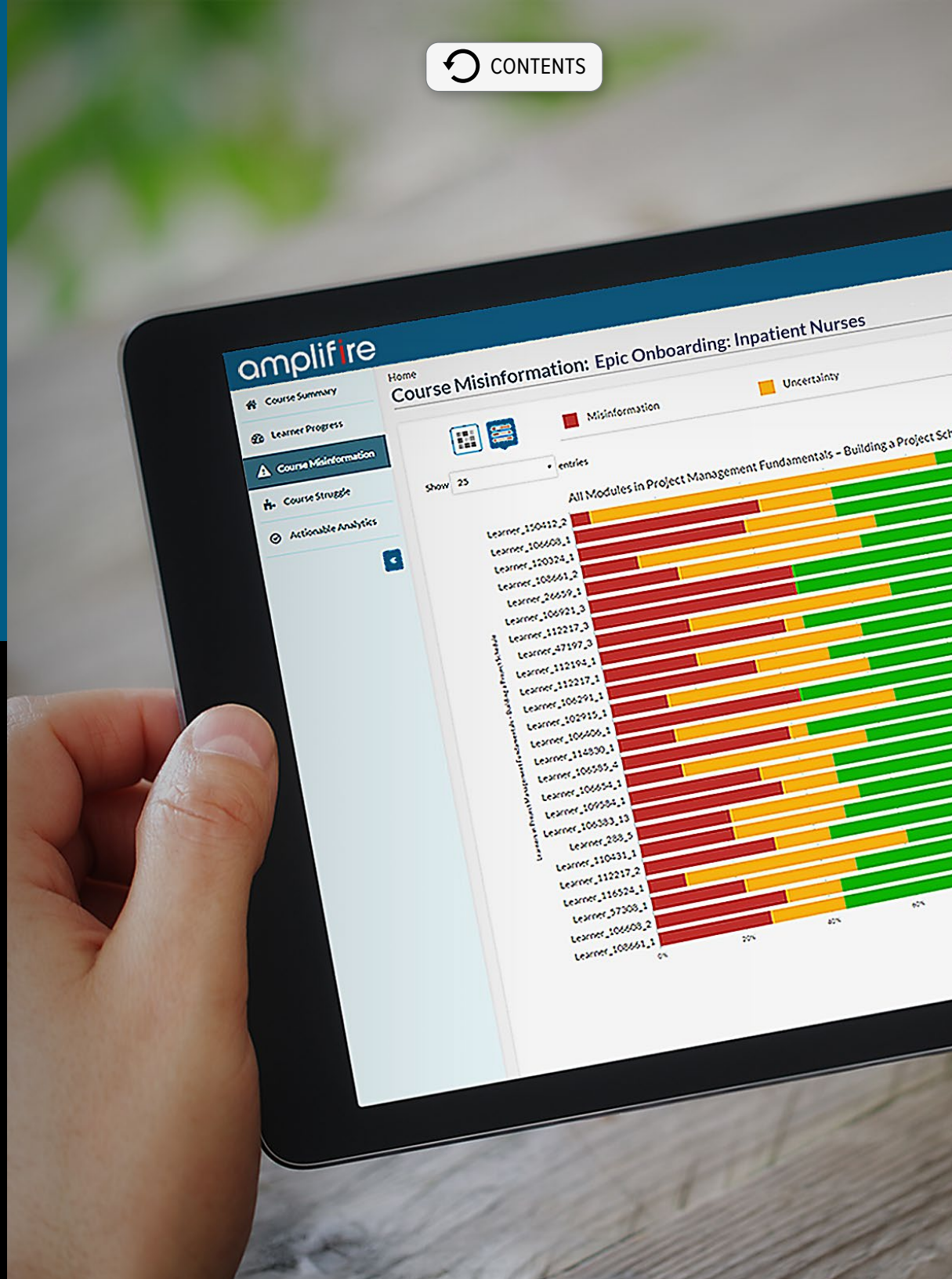
Please get in touch to demo Amplifire  
and see if it's right for your healthcare system:

720-799-1319

hello@amplifire.com

Learn more: [amplifire.com](https://amplifire.com)

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# amplifire

HEALTHCARE ALLIANCE

Better brains. Better performance.

