The Agency for Healthcare Research and Quality (AHRQ) offers practical, research-based tools and resources to help a variety of health care organizations, providers, and others make care safer in all health care settings. These tools help staff in hospitals, emergency departments, long-term care facilities, and ambulatory settings to prevent avoidable complications of care. They also address priority areas that have been identified as part of the U.S. Department of Health and Human Services Partnership for Patients and value-based purchasing programs. The tools and resources in this flier are organized alphabetically for clinicians by health care site, for use with patients, and as general patient safety research and data resources.

All tools can be found on the AHRQ Web site at www.ahrq.gov/tools/index.html

**Tools for Health Care Organizations**

**Multiple Settings**

**Consumer Assessment of Healthcare Providers and Systems (CAHPS®)** is a suite of surveys originally developed by AHRQ and designed to measure patients’ experiences of their care, including communication with doctors and nurses, responsiveness of staff, and other indicators of safe, high-quality care. The surveys are developed from the patient’s perspective on what’s important to measure. They are used by

Federal agencies and other organizations for value-based purchasing programs, public reporting, accreditation, quality improvement, and health services research. The surveys are available for different settings and health plans. Some CAHPS surveys can be customized with supplemental item sets, including, for example, patient-centered medical homes; health literacy; interpreter services; health information technology; and children with chronic conditions.

Web: cahps.ahrq.gov/surveys-guidance/index.html

**Surveys include:**

**Settings:**

- Clinician and group practices
  Web: ahrq.gov/cahps/surveys-guidance/cg
- Home health care
  Web: ahrq.gov/cahps/surveys-guidance/home
- Hospices (hospice facility, hospital, home)
  Web: ahrq.gov/cahps/surveys-guidance/hospice
- Hospitals
  Web: ahrq.gov/cahps/surveys-guidance/hospital
- Hospital outpatient and ambulatory surgery centers
  Web: ahrq.gov/cahps/surveys-guidance/oas
- In-center hemodialysis facilities
  Web: ahrq.gov/cahps/surveys-guidance/ich
- Nursing homes (long-stay, short-stay, family member surveys)
  Web: ahrq.gov/cahps/surveys-guidance/nh
- Health Plans: Commercial, Medicaid, Medicare
  Web: ahrq.gov/cahps/surveys-guidance/hp

Check out AHRQ’s New Patient Safety YouTube Channel

youtube.com/ahrqpatsafety

AHRQ Patient Safety Tools and Resources
Experience of Care and Health Outcomes (ECHO®— for behavioral health)
Web: ahrq.gov/cahps/surveys-guidance/echo

Specialized Surveys:
- Cancer care—inpatient and outpatient treatment for drug therapy, radiation therapy, and surgical therapy
  Web: ahrq.gov/cahps/surveys-guidance/cancer
- Home and community-based services programs
  Web: ahrq.gov/cahps/surveys-guidance/hcbs

Comprehensive Unit-Based Safety Program (CUSP) Toolkit includes customizable training tools that build the capacity to address safety issues by combining clinical best practices, the science of safety, and attention to safety culture. Created for clinicians by clinicians, the toolkit includes training tools to make care safer by improving the foundation of how clinical team members work together. Each module includes teaching tools and resources to support change at the unit level and includes facilitator notes that take you step-by-step through the module, presentation slides, tools, and videos.

Web: www.ahrq.gov/cusptoolkit/

Settings and problems addressed include:
- Ambulatory surgery centers
  Web: ahrq.gov/haiambsurgery
- Central line-associated bloodstream infections (CLABSI)
  Web: ahrq.gov/CLABSTools
- Catheter-associated urinary tract infections (CAUTI)—hospitals
  Web: ahrq.gov/CAUTITools
- CAUTI—long-term care facilities
  Web: ahrq.gov/cautilltools
- Mechanically ventilated patients
  Web: ahrq.gov/haimvp
- Perinatal safety
  Web: ahrq.gov/perinatalssafety

Surveys on Patient Safety Culture™ (SOPS™) is a suite of staff-administered surveys that help health care organizations assess how their staff perceive various aspects of safety culture in the following settings:

Web: ahrq.gov/patientsafetysurvey
- Hospitals
  Web: ahrq.gov/hospsurvey
- Medical offices
  Web: ahrq.gov/medicalofficesurvey
- Nursing homes
  Web: ahrq.gov/nursinghsurvey
- Community pharmacies
  Web: ahrq.gov/sops-compharmacy
- Ambulatory surgery centers
  Web: ahrq.gov/sops-asc

Team Strategies and Tools to Enhance Performance and Patient Safety 2.0 (TeamSTEPPS®) is a core curriculum initially developed for use in hospitals and adapted to other settings. It is a customizable “train the trainer” program plus specialized tools to reduce risks to patient safety by training clinicians in teamwork and communication skills. Materials include a leader’s guide for trainers, a pocket guide of important concepts for trainees (also available as an app through the Apple App Store and Google Play Store), and a multimedia guide featuring training videos to illustrate various concepts. Online modules also are available. Additional modules address:

Web: ahrq.gov/teamstepps
- Long-term care
  Web: ahrq.gov/teamstepps/longtermcare
- Office-based care
  Web: ahrq.gov/teamstepps/officebasedcare
- Patients with limited English proficiency
  Web: ahrq.gov/teamsteppslep
- Rapid response systems guide
  Web: ahrq.gov/teamstepps/rrs
Hospitals

Carbapenem-Resistant Enterobacteriaceae (CRE) Control and Prevention Toolkit provides a framework for outlining steps needed to design and implement CRE control and prevention of infection transmission, including what staff is responsible for each task and time frame for completing the tasks.

Web: ahrq.gov/cretoolbox

Communication and Optimal Resolution (CANDOR) Toolkit enables health care organizations to implement an AHRQ-developed process. Like similar programs in place in other organizations, CANDOR gives hospitals and health systems the tools to respond immediately when a patient is harmed and to promote candid, empathetic communication and timely resolution for patients and caregivers. Based on expert input and lessons learned from the Agency’s $23 million Patient Safety and Medical Liability grant initiative launched in 2009, the CANDOR toolkit was tested and applied in 14 hospitals across three U.S. health systems.

Each of the toolkit’s eight modules contains PowerPoint slides with facilitator notes. Some modules also contain tools, resources, or videos.

Web: ahrq.gov/candor

Guide for Developing a Community-Based Patient Safety Advisory Council provides approaches for hospitals and other health care organizations to use to develop a community-based advisory council that can drive change for patient safety through education, collaboration, and consumer engagement.

Web: ahrq.gov/qual/advisorycouncil

Guide to Patient and Family Engagement in Hospital Quality and Safety helps hospitals work as partners with patients and families to improve quality and safety. Includes an implementation handbook and tools for patients, families, and clinicians.

Web: ahrq.gov/hospital/engagingfamilies

Health Care Facility Design Safety Risk Assessment Toolkit helps health care design teams proactively identify and mitigate built environment conditions that may impact patient and work safety in the hospital and other health care environments. The toolkit addresses approaches to design that target six areas of safety: infections, falls, medication errors, security, injuries of behavioral health, and patient handling.

Web: ahrq.gov/hospitalsafetyassess-toolkit

Hospital Guide to Reducing Medicaid Readmissions provides evidence-based strategies to reduce readmissions among the adult Medicaid population.

Web: ahrq.gov/reducemедicaidreadmis

Making Informed Consent an Informed Choice: Training Modules for Health Care Leaders and Professionals provides tools to hospital leaders and health professionals to improve informed consent policy and practice.

Web: ahrq.gov/informedchoice

Medications at Transitions and Clinical Handoffs (MATCH) Toolkit features strategies from the field that can help hospitals improve medication reconciliation processes for patients as they move through the health care system.

Web: ahrq.gov/qual/match

Multi-Center Medication Reconciliation Quality Improvement Study (MARQUIS) Toolkit includes a set of medication reconciliation tools to reduce medication errors that frequently occur during care transitions when patients enter and leave the hospital.

Web: ahrq.gov/marquis
Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care focuses on overcoming the challenges associated with developing, implementing, and sustaining a fall prevention program. Includes an implementation guide to help put prevention strategies into practice.

Web: ahrq.gov/preventingfalls

Fall Prevention in Hospitals Training Program supports the training of hospital staff on how to implement AHRQ’s Preventing Falls in Hospitals Toolkit. It consists of a five-module, in-person training curriculum and a series of companion Webinars on specific topics related to fall prevention. An Implementation Guide provides additional suggestions for how to use the training program and the toolkit.

Web: ahrq.gov/fallprevtraining

Preventing Hospital-Associated Venous Thromboembolism: A Guide for Effective Quality Improvement outlines the latest evidence on how to lead a quality improvement effort to prevent hospital-acquired venous thromboembolism.

Web: ahrq.gov/vtguide

Preventing Pressure Ulcers in Hospitals is a toolkit that assists hospital staff in implementing effective pressure ulcer prevention practices through an interdisciplinary approach to care.

Web: ahrq.gov/pressureulcertoolkit

Pressure Injury Prevention in Hospitals Training Program supports the training of hospital staff on how to implement AHRQ’s Preventing Pressure Ulcers in Hospitals Toolkit. It consists of a five-module, in-person training curriculum and a series of companion Webinars on specific topics related to pressure injury prevention. An Implementation Guide provides additional suggestions for how to use the training program and the toolkit.

Web: ahrq.gov/pressureinjuryprevtraining

Project BOOST (Better Outcomes by Optimizing Safe Transitions) provides hospitals a comprehensive set of interventions to improve the care transition process after discharge in order to reduce readmissions.

Web: ahrq.gov/boost

REDUCE MRSA (Methicillin-Resistant Staphylococcus aureus) Enhanced Protocol explains that universal decolonization is the most effective intervention to reduce MRSA infections. This tool provides instructions for implementing decolonization in adult intensive care units.

Web: ahrq.gov/universal_icu_decolonization

Re-Engineered Discharge (RED) Toolkit is a research-based tool to assist hospitals, including those that serve diverse populations, in improving their hospital discharge process and reducing avoidable readmissions. An English/Spanish guide to help staff ensure that patients understand their discharge instructions is also available.

Web: ahrq.gov/redtoolkit

Toolkit for Hospitals: Improving Performance on the AHRQ Quality Indicators™ helps hospitals understand AHRQ’s Quality Indicators and how to use them to identify areas of concern in need of further investigation, and monitor progress over time. See Quality Indicators entry under the section, Additional Patient Safety Resources: Research, Data, and Measurement.

Web: ahrq.gov/hospitalqitoolkit/

Toolkit for Reduction of Clostridium difficile Infections Through Antimicrobial Stewardship assists hospital staff and leadership in developing an effective antimicrobial stewardship program that targets inappropriate use of antibiotics, which has the potential to reduce C. difficile.

Web: ahrq.gov/cdifftoolkit
Transitioning Newborns from NICU to Home: A Resource Toolkit provides customizable resources to help hospitals and families safely transition newborns out of the neonatal intensive care unit to home using a Health Coach Program.

Web: ahrq.gov/nicutools

Falls Management Program: A Quality Improvement Initiative for Nursing Facilities is an interdisciplinary quality improvement initiative to assist nursing facilities in providing individualized, person-centered care and improving their fall care processes and outcomes through educational and quality improvement tools.

Web: ahrq.gov/fallsmgmtltc

Hospital Emergency Departments

Emergency Severity Index (ESI): A Triage Tool for Emergency Department Care, Version 4 is a five-level emergency department triage algorithm. The ESI tool, which includes an implementation manual and DVD, helps hospital emergency department staff rapidly identify patients in need of immediate attention, better identify patients who could safely and more efficiently be seen in a fast-track or urgent care center rather than the main emergency department, and more accurately determine thresholds for diversion of ambulance patients from the emergency department.

Web: ahrq.gov/esihandbookdvd2012

Improving Patient Safety in Long-Term Care Facilities is a training curriculum for front-line personnel in nursing home and other long-term care facilities to help them detect and communicate changes in a resident’s condition and prevent and manage falls. Includes an Instructor Guide and separate student workbooks.

Web: ahrq.gov/psafetyltcmodules

Nursing Home Antimicrobial Stewardship Modules are field-tested, evidence-based modules that can help nursing homes develop antibiotic stewardship programs to help them use and prescribe antibiotics appropriately. Appropriate antibiotics use can reduce antimicrobial resistance and help retain the effectiveness of treatments for infection, which are a common threat to resident safety.

Web: ahrq.gov/nh-aspguide

Long-Term Care Facilities

CAHPS® Nursing Home Survey (see description under Multiple Settings section)

CUSP Toolkit to Reduce CAUTI and other HAIs In Long-Term Care Facilities (see description under Multiple Settings section)

Safety Program for Nursing Homes: On-Time Pressure Ulcer Prevention is a team training curriculum to help nursing homes with electronic medical records reduce the occurrence of pressure ulcers.

Web: ahrq.gov/ontimeltc
TeamSTEPPS® Long-Term Care Version (see listing under Multiple Settings)

Toolkit to Educate and Engage Residents and Family Members helps nursing homes encourage an open and respectful dialogue between nurses and prescribing clinicians and residents and family members and helps residents and family members participate in their care.

Web: ahrq.gov/nh/residentengagementtoolkit

Ambulatory Care Settings

Ambulatory Surgery Center (ASC) Survey on Patient Safety Culture (see description under Multiple Settings section)

CAHPS® Clinician & Group Survey (see description under Multiple Settings section)

The Community-Acquired Pneumonia (CAP) Patient Safety Clinical Decision Support Implementation Toolkit is a resource to help clinicians and clinical informaticians in primary care and other ambulatory settings implement and adopt the CAP clinical decision support (CDS) alert for the management of community-acquired pneumonia.


Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families is an ongoing project that currently offers four interventions and four case studies designed to improve patient safety by meaningfully engaging patients and families in their care. The full guide is in development.

Web: ahrq.gov/pfeprimarycare

Health Literacy Universal Precautions Toolkit, 2nd Edition, can help primary care practices reduce the complexity of health care, increase patient understanding of health information, and enhance support for patients of all literacy levels. It includes tools to improve spoken and written communication, tools to improve self-management and empowerment, and others.

Web: ahrq.gov/health-literacy-toolkit


Web: ahrq.gov/labtesting-toolkit

Medical Office Survey of Patient Safety Culture (see description under Multiple Settings section)

Safety Program for End-Stage Renal Disease Facilities Toolkit helps end-stage renal disease clinics prevent healthcare-associated infections in dialysis patients by following clinical practices, creating a culture of safety, using checklists and other audit tools, and engaging with patients and their families. The toolkit includes four instructional modules that a facilitator can use to teach dialysis center team members specific ways to create a culture of safety.

Web: ahrq.gov/esrdinfections

TeamSTEPPS® for Office-Based Care (see description under Multiple Settings section)

The Toolkit to Engage High-Risk Patients in Safe Transitions Across Ambulatory Settings is designed to help staff actively engage patients and their care partners to prevent errors during transitions of care.


Tools to Engage Patients

Be More Involved in Your Health Care: Tips for Patients, a brochure that gives patients tips to use before, during, and after a medical appointment to get the best possible care.

Web: ahrq.gov/tipsforpatients

Blood Thinner Pills: Your Guide to Using Them Safely explains, in both English and Spanish, what patients can expect while taking blood thinner medication.

Web: ahrq.gov/btpills/
Getting Ready for Your Ambulatory Surgery. This 2-page patient brochure helps patients and their families prepare for ambulatory surgeries and other procedures performed in outpatient settings.

Web: ahrq.gov/getting-ready-ambnsurgery

My Questions for This Visit are 50-sheet notepads designed for use in physician offices to help patients identify the top three questions they want to remember to ask during medical visits.

Web: ahrq.gov/questioncard

Questions Are the Answer materials are designed to improve communication between patients and clinicians to help make health care safer. Notepads, an online Question Builder, and a DVD with a 7-minute video (designed to be played in waiting rooms) of patients and clinicians discussing the importance of asking questions are also available.

Web: ahrq.gov/questions

■ Conozca las preguntas (Know the Questions), a Spanish-language companion site to Questions Are the Answer, encourages Hispanics to go to the doctor and ask questions to achieve better health outcomes. The Web site features tips on how to talk with doctors and questions to ask when receiving medical care.

Web: ahrq.gov/preguntas/

Staying Active and Healthy With Blood Thinners is a 10-minute video that features easy-to-understand explanations, in English and Spanish, of how blood thinners work and why it is important to take them correctly. It also introduces BEST, an easy way to remember how to fit blood thinner medication into daily life.

Web: ahrq.gov/bloodthinners

Taking Care of Myself: A Guide for When I Leave the Hospital is an easy-to-read guide to help nurses or discharge advocates work with patients to track medication schedules, upcoming medical appointments, and important phone numbers after they leave the hospital.

Web: ahrq.gov/goinghomeguide/

The Toolkit to Engage High-Risk Patients in Safe Transitions Across Ambulatory Settings is designed to help staff actively engage patients and their care partners to prevent errors during transitions of care.


Your Guide to Preventing and Treating Blood Clots discusses ways to prevent, treat, and recognize symptoms of blood clots. It also describes medications used to prevent blood clots and their side effects.

Web: ahrq.gov/bloodclots

Your Medicine: Be Smart. Be Safe answers common questions about getting and taking medicines; includes a handy form to help patients keep track of their medicines.

Web: ahrq.gov/yourmedicine

Additional Patient Safety Resources: Research, Data, Measurement

Advances in Patient Safety and Medical Liability highlights results from a number of AHRQ-funded planning and demonstration grants aimed at improving patient safety and malpractice outcomes, as well as the environment in which those outcomes occur. Some of the topics include the role of patients and families in supporting improved care and patient safety; the impact of institutional silence when patient harm occurs; and the implementation of disclosure, apology, and offer programs.

Web: ahrq.gov/medicalliabilityadvances

Common Formats are specifications used to collect patient safety event information in a standard way, using common language, definitions, technical requirements for electronic implementation, and reporting. The Common Formats can be used to collect data on all types of adverse events, near misses, and unsafe conditions in hospitals, nursing homes, and more. Common Formats are currently available for hospitals, nursing homes, and community pharmacies.

Web: pso.ahrq.gov/common/scope
Comparative Databases for Safety and Quality

- **CAHPS Database** gathers survey results from Health Plan Survey users across the country and then reports aggregated data in an Online Reporting System that all survey users can use to identify strengths and weaknesses in their own performance.
  
  Web: [ahrq.gov/cahps/cahps-database/](http://ahrq.gov/cahps/cahps-database/)

- **CAHPS Clinician & Group Survey (CG-CAHPS) Database** has been accepting survey data since 2010. It was developed in response to the growing demand for comparative results for the various versions of the Clinician & Group Survey.
  
  Web: [ahrq.gov/cahps/surveys-guidance/cg](http://ahrq.gov/cahps/surveys-guidance/cg)

- **Hospital Survey on Patient Safety Culture (HSOPS) Comparative Database** is a central repository for survey data from hospitals that have administered the AHRQ Patient Safety Culture Survey instrument and can be used by hospitals to compare their results to those of other hospitals.
  
  Web: [ahrq.gov/HSOPSdatabase](http://ahrq.gov/HSOPSdatabase)

Health Care Comes Home: The Human Factors is an AHRQ-funded report from the National Research Council that offers recommendations for system improvements to address the most prevalent and serious threats to safety and quality of care provided in the home environment.

Web: [ahrq.gov/homecarehumanfactors](http://ahrq.gov/homecarehumanfactors)

Healthcare Simulation Dictionary takes the first step toward standardizing the use of simulation terminology with inclusion of more than 100 health care simulation terms and definitions. Health care simulation professionals can use the dictionary in areas such as education, assessment, research, and systems integration.

Web: [ahrq.gov/health-care-simulation-dictionary](http://ahrq.gov/health-care-simulation-dictionary)

Hospital-Acquired Conditions National Scorecard provides interim and final data on hospital-acquired conditions (HACs) from national efforts to make health care safer. Results show a 21 percent decline in HACs from 2010 to 2015.

Web: [ahrq.gov/HACscorecard](http://ahrq.gov/HACscorecard)

Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices presents the latest evidence on 41 proven patient safety strategies, 10 of which are supported by enough evidence that an expert panel says they should be adopted by health systems to reduce patient harm. The report updates Evidence-based Practice Center Report (#43), the first systematic assessment of patient safety practices.

Web: [https://psnet.ahrq.gov/resources/resource/25758](https://psnet.ahrq.gov/resources/resource/25758)

National Healthcare Quality and Disparities Report, a Congressionally mandated annual report that presents trends and disparities in the effectiveness, safety, timeliness, patient-centeredness, and efficiency of care based on more than 250 measures of care.

Web: [ahrq.gov/QDR](http://ahrq.gov/QDR)

- Patient Safety Chartbook, a companion report, presents data in easy-to-understand graphic format.
  
  Web: [ahrq.gov/ptsafetychartbook](http://ahrq.gov/ptsafetychartbook)

Patient Safety in Ambulatory Settings Technical Brief explores fundamental questions about patient safety practices in ambulatory care and identifies promising safety initiatives that have not been broadly implemented or studied. The brief finds that significant gaps exist in ambulatory safety research, notably a lack of studies in patient engagement and timely and accurate diagnosis.

Web: [ahrq.gov/ambulatorysafetybrief](http://ahrq.gov/ambulatorysafetybrief)
**Patient Safety Network (AHRQ PSNET)** is a national Web-based resource that features the latest news and essential resources on patient safety, including weekly literature updates, news, tools, and meetings; patient safety primers; and annotated links to important research and other information on patient safety. It also includes case reports and safety perspectives from Web M&M (Morbidity and Mortality Rounds on the Web), a peer-reviewed online journal and forum on patient safety and health care quality.

Web: psnet.ahrq.gov

**Quality Indicators**

Web: qualityindicators.ahrq.gov

Settings and problems addressed by the Quality Indicators™ include:

- **Inpatient Quality Indicators** reflect quality of care inside hospitals, including inpatient mortality for medical conditions and surgical procedures.
  Web: qualityindicators.ahrq.gov/Modules/iqi_resources.aspx

- **Patient Safety Indicators** reflect quality of care inside hospitals to focus on potentially avoidable complications and healthcare-associated events.
  Web: qualityindicators.ahrq.gov/Modules/psi_resources.aspx

- **Prevention Quality Indicators** identify hospital admissions that evidence suggests may have been avoided through access to high-quality outpatient care.
  Web: qualityindicators.ahrq.gov/Modules/pqi_resources.aspx

- **Pediatric Quality Indicators** use indicators from the other three modules with adaptations for use among children and neonates to reflect quality of care inside hospitals and identify potentially avoidable hospitalizations.
  Web: qualityindicators.ahrq.gov/Modules/pdi_resources.aspx

**Resident Duty Hours: Enhancing Sleep, Supervision, and Safety**, an AHRQ-funded report from the Institute of Medicine, recommends changes to resident work hours and training programs to enhance patient safety.

Web: ahrq.gov/residentdutyhours

**Resident Safety Practices in Nursing Home Settings** is a technical brief that describes the state of the science around nursing home safety in order to establish a research agenda for moving the field forward.

Web: ahrq.gov/ressafetypracticesltc