

# Improving Diagnostic Safety in Medical Offices: A Resource List for Users of the AHRQ Diagnostic Safety Supplemental Item Set

## I. Purpose

This document provides a list of references to websites and other publicly available resources that medical offices can use to improve the extent to which their organizational culture supports the diagnostic process, accurate diagnoses, and communication around diagnoses. While this resource list is not exhaustive, it is designed to give initial guidance to medical offices seeking information about patient safety initiatives related to diagnostic safety.

## II. How To Use This Resource List

Resources are listed in alphabetical order, organized by the Surveys on Patient Safety Culture™ (SOPS®) composite measures assessed in the Agency for Healthcare Research and Quality (AHRQ) [Diagnostic Safety Supplemental Item Set](#) for the SOPS [Medical Office Survey](#), followed by general resources.

For easy access to the resources, keep the file open rather than printing it in hard copy because many of the website URLs are hyperlinked.

**Feedback.** Suggestions for resources you would like added to the list, questions about the survey, or requests for assistance can be addressed to: [SafetyCultureSurveys@westat.com](mailto:SafetyCultureSurveys@westat.com).

**NOTE:** The resources included in this document do not constitute an endorsement by the U.S. Department of Health and Human Services (HHS), the Agency for Healthcare Research and Quality (AHRQ), or any of their employees. HHS does not attest to the accuracy of information provided by linked sites.

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## IV. Resources by Composite Measure

The following resources are organized according to the relevant AHRQ SOPS Diagnostic Safety Supplemental Item Set composite measures they are designed to help improve.

### **Composite Measure 1. Time Availability**

#### **1. Improving Office Practice: Working Smarter, Not Harder**

<https://www.aafp.org/fpm/2006/1100/p28.html>

The overarching goal of practice redesign is to create a well-organized office system that fosters sound medical decision making, minimizes error, and creates an atmosphere that patients, staff, and physicians can enjoy. Office organization is often accomplished through relatively simple strategies that together form a powerful force for change. This featured article from the American Academy of Family Physicians provides 12 strategies that can improve efficiency and transform practices.

#### **2. Innovation and Best Practices in Health Care Scheduling**

<https://nam.edu/wp-content/uploads/2015/06/SchedulingBestPractices.pdf>

In this discussion paper, the authors describe the important forces shaping wait times throughout healthcare, the evolving use of techniques and tools from other industries to improve healthcare access, and the move toward a person-centered model of care. Through their personal experiences leading their respective healthcare organizations, they have tackled these complex issues and present the lessons they have learned along the way.

#### **3. Reduce Scheduling Complexity**

<http://www.ihl.org/resources/Pages/Changes/ReduceSchedulingComplexity.aspx>

Complex schedules, with many appointment types, times, and restrictions, can actually increase total delay in the system because each appointment type and time creates its own differential delay and queue. Reducing the complexity ultimately decreases system delays.

Most clinical practices use many appointment types and lengths in an effort to exert some control over the schedule. The belief is that limiting the number of a certain type of appointment scheduled on a daily basis or assigning patients to different times or types of appointments will improve access in the practice. Queuing theory, however, suggests that reducing the number of separate “lines” or “queues” for different services creates more flexibility in the system and reduces delays associated with distinct queues. Therefore, having many appointment types actually increases total delay in the system because each appointment type creates its own differential delay and queue.

#### 4. Strategies for Better Patient Flow and Cycle Time

<https://www.aafp.org/fpm/2002/0600/p45.html>

This featured article from the American Academy of Family Physicians provides strategies for better patient flow and cycle time. These proven techniques can increase revenue, reduce expenses, and improve satisfaction with one's practice.

#### 5. Using Peer Review for Self-Audits of Medical Record Documentation

<https://www.aafp.org/fpm/2000/0400/p28.html>

This featured article from the American Academy of Family Physicians provides information on using peer review in self-audits of medical record documentation. It describes how to get started, perform a self-audit review, and conduct post audit follow up, as well as challenges and benefits of the peer review process.

### **Composite Measure 2. Testing and Referrals**

#### 1. Closing the Loop

<https://www.ecri.org/hit/implementation-approaches-closing-the-loop>

Working directly with healthcare organizations, the Partnership for Health IT Patient Safety recently explored how to implement tactics to close the loop on diagnostic evaluations. Clinicians were able to use their existing technology and modify their practice to better track this key information.

#### 2. Closing the Loop: A Guide to Safer Ambulatory Referrals in the EHR Era

<http://www.ihl.org/resources/Pages/Publications/Closing-the-Loop-A-Guide-to-Safer-Ambulatory-Referrals.aspx>

The recommendations outlined in this publication are designed to help standardize the ways primary care practitioners activate referrals to specialists and then keep track of the information over time.

This publication describes a nine-step, closed-loop process in which all relevant patient information is communicated to the correct person through the appropriate channels and in a timely manner. As the process involves significant collaboration among all stakeholders, the publication includes both general recommendations and recommendations specific to each step in the process and each stakeholder group.

**3. Guide to Improving Patient Safety in Primary Care Settings by Engaging Patients and Families**  
<http://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/index.html>

AHRQ developed this guide as a resource to help primary care practices partner with patients and their families to improve patient safety. The guide is composed of materials and resources to help primary care practices implement patient and family engagement to improve patient safety.

**4. Improving Your Laboratory Testing Process: A Step-by-Step Guide for Rapid-Cycle Patient Safety and Quality Improvement**  
<https://www.ahrq.gov/hai/tools/ambulatory-care/lab-testing-toolkit.html>

The tools in this step-by-step guide can increase the reliability of the testing process in medical offices by helping providers examine how tests are managed. This guide describes how to assess an office testing process, assess patient experience and documentation, plan for improvement, implement change, and reassess to determine if the office has improved.

**5. Overview of Open Notes**  
<https://www.improvediagnosis.org/practice-improvement-tools/open-notes/>

Open Notes addresses multiple aspects of diagnostic error reduction, including scheduling a referral discussed in a note. It also addresses improving communication between a patient and physician, correcting inaccurate information in the medical record, asking about concerning lab results, and communicating a diagnosis to the patient.

**6. Overview of SureNet**  
<https://www.improvediagnosis.org/practice-improvement-tools/surenets/>

The SureNet program identifies test results or signs and symptoms that generally require follow up for which the patients do not appear to have had the needed follow up. It thus potentially prevents diagnostic errors by preventing patients from “falling through the cracks.” It is limited to diseases with a course of progression slow enough that one can take a few weeks to identify the cases and intervene.

**7. Patient and Family Advisory Council (PFAC) Guides**  
<https://www.improvediagnosis.org/pfac-guides/>

These guides are intended to serve as compendia of best and promising practices for use by PFACs and for leadership in the hospitals and health systems in which PFACs are embedded. Each guide provides foundational education about diagnostic errors and tangible ideas and suggestions for PFACs and their hospital or health system leadership to use as they address diagnostic quality and safety.

## **Composite Measure 3. Provider and Staff Communication Around Diagnosis**

### **1. Communicating Critical Test Results Toolkit**

<http://www.macoalition.org/Initiatives/CCTRToolkit.shtml>

The Massachusetts Coalition for the Prevention of Medical Errors, in cooperation with their Collaborative members, have developed sample tools such as forms, policies, and staff and patient education materials to support adoption of safety procedures.

### **2. Developing a Reporting Culture: Learning From Close Calls and Hazardous Conditions**

<https://psnet.ahrq.gov/resources/resource/32494>

This new sentinel event alert from The Joint Commission explores how organizations can change their culture to promote reporting. It highlights bright spots: organizations that use a Just Culture approach to investigating errors, celebrate employees who report safety hazards, and have leaders who prioritize reporting. The Joint Commission proposes actions for all organizations, including developing incident reporting systems, promoting leadership buy-in, engaging in system-wide communication, and implementing transparent accountability structures. An Annual Perspective reviewed the context of the no-blame movement and the recent shift toward a framework of a Just Culture.

### **3. Improving Diagnosis in Health Care**

<https://nap.edu/resource/21794/interactive/>

The National Academies of Sciences, Engineering, and Medicine (NAM) posted resources to facilitate communication between patients and clinicians, including videos, checklists, and additional report resources.

### **4. SBAR Technique for Communication: A Situational Briefing Model**

<http://www.ihl.org/resources/Pages/Tools/SBARTechniqueforCommunicationASituationalBriefingModel.aspx>

<http://www.ihl.org/resources/Pages/Tools/SBARTrainingScenariosandCompetencyAssessment.aspx> (both pages require free account setup and login)

The SBAR (Situation-Background-Assessment-Recommendation) technique provides a framework for communication between members of the healthcare team about a patient's condition. This downloadable tool from IHI contains two documents:

- “Guidelines for Communicating With Physicians Using the SBAR Process” explains how to carry out the SBAR technique.
- “SBAR Report to Physician About a Critical Situation” is a worksheet/script a provider can use to organize information when preparing to communicate with a physician about a critically ill patient.

The SBAR training scenarios reflect a range of clinical conditions and patient circumstances and are used in conjunction with other SBAR training materials to assess frontline staff competency in using the SBAR technique for communication.

## 5. TeamSTEPPS® — Team Strategies and Tools to Enhance Performance and Patient Safety

<https://www.ahrq.gov/teamstepps>

<https://www.ahrq.gov/teamstepps/officebasedcare/index.html> (Office-Based Care version)

TeamSTEPPS is a teamwork system designed for healthcare professionals that is:

- A powerful solution to improving patient safety within an organization.
- An evidence-based teamwork system to improve communication and teamwork skills among healthcare professionals.
- A source for ready-to-use materials and a training curriculum to successfully integrate teamwork principles into all areas of a healthcare system.
- Scientifically rooted in more than 20 years of research and lessons from the application of teamwork principles.
- Developed by the Department of Defense’s Patient Safety Program in collaboration with AHRQ.

The TeamSTEPPS curriculum is an easy-to-use comprehensive multimedia kit that contains:

- Fundamentals modules in text and presentation format.
- A pocket guide that corresponds with the essentials version of the course.
- Video vignettes to illustrate key concepts.
- Workshop materials on change management, coaching, and implementation.

## V. General Resources

### 1. Calibrate Dx: A Resource To Improve Diagnostic Decisions

<https://www.ahrq.gov/patient-safety/settings/multiple/calibrate-dx.html>

AHRQ developed Calibrate Dx to provide clinicians with guidance for evaluating diagnostic performance for the purposes of learning and improvement. Calibrate Dx is designed to be used by individual licensed clinicians, but it may also be of interest to healthcare organization leaders, quality and safety personnel, educators, and trainees. This tool provides practical recommendations for implementing calibration strategies that can be applied in operational settings.

### 2. Diagnostic Safety Toolkit

<https://www.childrenshospitals.org/content/quality/toolkit/diagnostic-safety-toolkit>

The diagnostic safety toolkit is designed to use anywhere in an organization and with any diagnosis. The toolkit includes a patient safety alert, case studies, a template for assessing internal communication gaps, a template for conducting diagnostic timeouts, and an additional resource list.

**3. Harnessing Improvement to Reduce Diagnostic Errors and Delays (Podcast)**

<http://www.ihi.org/resources/Pages/AudioandVideo/WIHIImprovingDiagnosisErrors.aspx>

In this podcast from IHI, four speakers discussed diagnostic error, including how to determine the extent of these errors in an organization and the best improvement approaches to bring about solutions.

**4. *Improving Diagnosis in Medicine* Change Package**

<https://www.improvediagnosis.org/improving-diagnosis-in-medicine-change-package/>

The *Improving Diagnosis in Medicine* change package is the result of a collaboration between the Health Research & Educational Trust (HRET) Hospital Improvement Innovation Network (HIIN) team and the Society to Improve Diagnosis in Medicine (SIDM), with contributions of patients and their families. This resource is a tool to help reduce patient safety incidents caused by actions during the diagnostic process.

**5. Kaiser Permanente Diagnostic Excellence Video Series**

[https://kpactionplans.org/dex/?kp\\_shortcut\\_referrer=kp.org/scal/dex](https://kpactionplans.org/dex/?kp_shortcut_referrer=kp.org/scal/dex)

The videos in this series are short and cover a wide range of diagnostic error topics, including promoting teamwork throughout the diagnostic process, documenting differential diagnoses, and understanding bias.

**6. Measure DX: A Resource To Identify, Analyze, and Learn From Diagnostic Safety Events**

<https://www.ahrq.gov/patient-safety/settings/multiple/measure-dx.html>

This evidence-based tool helps users identify diagnostic safety events and gain insights for improvement. It can be used by any healthcare organization interested in promoting diagnostic excellence and reducing harm from diagnostic safety events. Potential users include clinicians, quality and safety professionals, risk management professionals, health system leaders, and clinical managers.

**7. National Action Plan To Advance Patient Safety**

<https://www.ihi.org/Engage/Initiatives/National-Steering-Committee-Patient-Safety/Pages/National-Action-Plan-to-Advance-Patient-Safety.aspx> (requires free account setup and login)

The Institute for Healthcare Improvement's National Action Plan provides actionable and effective recommendations to advance patient safety by harnessing knowledge and insights from the National Steering Committee for Patient Safety (NSC). The site also includes a supplemental Self-Assessment Tool and Implementation Resource Guide and a Declaration to Advance Patient Safety issued by the NSC.



**8. Society to Improve Diagnosis in Medicine Resource Center**

<https://www.improvediagnosis.org/resources-for/>

The Society to Improve Diagnosis in Medicine features educational resources for trainees, practitioners, and educators on clinical reasoning, critical thinking, and system factors that underlie diagnostic error, as well as strategies to improve diagnostic performance.

**9. Toolkit for Engaging Patients To Improve Diagnostic Safety**

<https://www.ahrq.gov/patient-safety/settings/ambulatory/tools/diagnostic-safety/toolkit.html>

AHRQ developed this toolkit to promote enhanced communication and information sharing within the patient-provider encounter. This toolkit is designed to help patients, families, and health professionals work together as partners to improve diagnostic safety.

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