# Mitigating Sepsis-Related Diagnostic Delays and Errors Through Improved Communication in the ICU

## Implementation Toolkit

**Society of Critical Care Medicine**
**Diagnostic Excellence Program**

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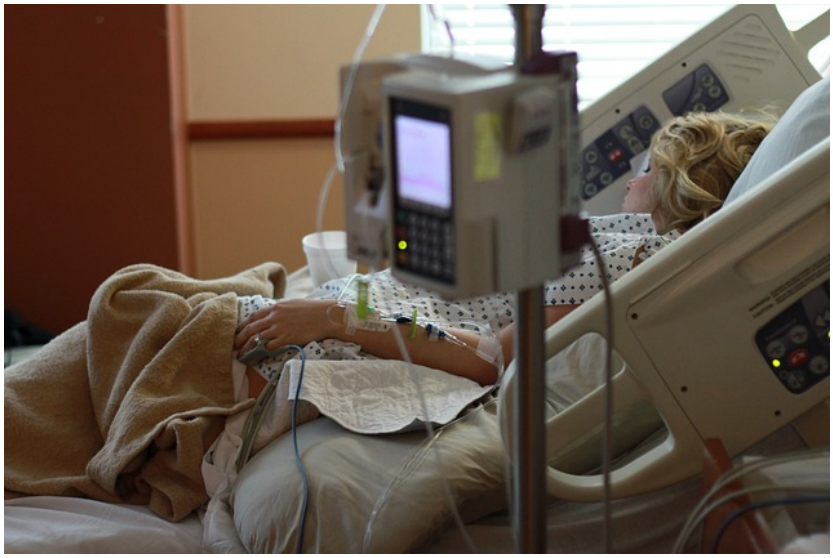
# Background

Diagnostic errors impact nearly 12 million Americans every year.[1]

Diagnostic procedures for recognizing sepsis are often delayed, leading to treatment delays.[2,3]



**All healthcare professionals involved in the care of critically ill and injured patients with sepsis must prioritize the mitigation of diagnostic delays and errors.**

This toolkit is designed to:

- Review factors that contribute to diagnostic delays and errors in the intensive care unit (ICU)
- Provide implementation strategies for mitigating diagnostic delays and errors in the ICU through improved communication

# Factors That Contribute to Diagnostic Delays and Errors in the ICU

Many factors contribute to diagnostic delays and errors in the ICU, including organizational factors, clinician factors, patient factors, and interactional factors such as[4]:

Coordination of diagnostic information across multiple institutions, departments, and specialties, especially via electronic health records

Communication of diagnostic information between clinicians during handoffs

Management of power differentials and team communication dynamics across provider roles

# Implementation Strategies

Safety practices for addressing diagnostic errors recommend that healthcare organizations implement standard processes for improving communication.[5]

Below is a list of resources and tools, from the above recommendations and from subject matter experts across the Society of Critical Care Medicine (SCCM), that might help you implement these processes in your ICU:

## Guides

Office of the National Coordinator for Health Information Technology
SAFER Guide to Clinician Communication
https://www.healthit.gov/sites/default/files/safer/guides/safer_clinician_communication.pdf

SAFER Guide to Test Results Reporting and Follow-Up
https://www.healthit.gov/sites/default/files/safer_test_results_reporting.pdf

Institute for Healthcare Improvement
Closing the Loop: A Guide to Safer Ambulatory Referrals in the EHR Era
https://www.ihi.org/resources/Pages/Publications/Closing-the-Loop-A-Guide-to-Safer-Ambulatory-Referrals.aspx

## Tools

Revised Safer Dx Instrument
(see Supplementary Materials)
https://www.degruyter.com/document/doi/10.1515/dx-2019-0012/html

Safer Dx Checklist
(see Supplementary Materials)
https://www.sciencedirect.com/science/article/pii/S1553725022001805

## Literature


- Davalos MC, Samuels K, Meyer AND. Finding diagnostic errors in children admitted to the PICU. *Pediatric Crit Care Med*. 2017 Mar;18(3):265-271.
- Huang C, et al. Bedside clinicians' perceptions on the contributing role of diagnostic errors in acutely ill patient presentation: a survey of academic and community practice. *J Patient Saf*. 2022 Mar 1;18(2):e454-e462.
- Soleimani J, et al. Feasibility and reliability testing of manual electronic health record reviews as a tool for timely identification of diagnostic error in patients at risk. *Appl Clin Inform*. 2020 May;11(3):474-482.


## Learning and Accreditation

SCCM webcast "Mitigating Diagnostic Delays and Errors"
https://www.sccm.org/Clinical-Resources/Sepsis-Definitions/SCCM-Diagnostic-Excellence-Program

Agency for Healthcare Research and Quality
TeamSTEPPS
https://www.ahrq.gov/teamstepps/index.html

American Association of Critical-Care Nurses
Clinical Scene Investigator (CSI) Academy
https://www.aacn.org/nursing-excellence/csi-academy?tab=Nurses Leading Innovation

# Learn More

SCCM Diagnostic Excellence Program
Using education and technology for accurate and rapid cycle sepsis diagnoses

support@sccm.org

sccm.org/diagnosticexcellence

# References


1. Society to Improve Diagnosis in Medicine. Frequently asked questions. Accessed February 22, 2023. https://www.improvediagnosis.org/facts
2. Husabø G, Nilsen RM, Flaaten H, et al. Early diagnosis of sepsis in emergency departments, time to treatment, and association with mortality: an observational study. *PLoS One*. 2020 Jan 22;15(1):e0227652.
3. Kuye I, Rhee C. Spotlight: overdiagnosis and delay: challenges in sepsis diagnosis. Agency for Healthcare Research and Quality. October 1, 2018. Accessed February 22, 2023. https://psnet.ahrq.gov/web-mm/spotlight-overdiagnosis-and-delay-challenges-sepsis-diagnosis
4. Barwise A, Leppin A, Dong Y, et al. What contributes to diagnostic error or delay? A qualitative exploration across diverse acute care settings in the United States. *J Patient Saf*. 2021 Jun 1;17(4):239-248.
5. Singh H, Mushtaq U, Marinez A, et al. Developing the Safer Dx Checklist of ten safety recommendations for health care organizations to address diagnostic errors. *Jt Comm J Qual Patient Saf*. 2022 Nov;48(11):581-590.


# Disclaimer