

Revising TeamSTEPPS: The Evolution of Patient Safety Teamwork Training

February 28, 2024

Haugstetter M, Hines S, Sousane Z, et al. Revising TeamSTEPPS: The Evolution of Patient Safety Teamwork Training. PSNet [internet]. 2024.

<https://psnet.ahrq.gov/perspective/revising-teamstepps-evolution-patient-safety-teamwork-training>

Safe, effective, and efficient patient care requires careful coordination and communication among healthcare professionals, across healthcare organizations, and with patients and family caregivers. Many [adverse events](#) can be attributed to failures of communication and teamwork.¹ Recognizing the need for communication and teamwork training in healthcare as a strategy to improve patient safety, in 2006, the Agency for Healthcare Research and Quality (AHRQ), in collaboration with the Department of Defense (DOD), released Team Strategies and Tools to Enhance Performance and Patient Safety ([TeamSTEPPS](#)). TeamSTEPPS is a framework for educating and training staff in these critical skill sets. In 2023, AHRQ launched [TeamSTEPPS 3.0](#), which builds on the foundations of the original TeamSTEPPS framework while incorporating additional virtual resources focusing on patient and family engagement. This Perspective explores the impact of TeamSTEPPS on patient safety and highlights key updates to TeamSTEPPS 3.0.

Impact of TeamSTEPPS on Patient Safety

TeamSTEPPS is an evidence-based set of teamwork tools aimed at optimizing patient outcomes by improving communication skills and teamwork among healthcare teams and with patients and family caregivers.² The landmark TeamSTEPPS curriculum provided a new national standard for patient safety teamwork training.³ Since its inception, TeamSTEPPS training has been widely implemented across a variety of healthcare settings, including hospitals, [primary care offices](#), and [long-term care facilities](#). TeamSTEPPS has been implemented internationally and was recognized by the World Innovation Summit in 2015 as a successful example of rapid innovation diffusion in healthcare.⁴

[Evidence of TeamSTEPPS in practice](#) reveals that it is a highly effective training program to improve patient safety, reduce clinical error rates, improve patient satisfaction, and emphasize a wider [culture of safety](#) within an organization. [Since its implementation in 2006](#), TeamSTEPPS has had a profound impact on patient safety and paved the way for further research on healthcare team dynamics and the impact on patient safety. A growing body of evidence shows the importance of TeamSTEPPS in improving

communication and teamwork in healthcare, reducing medical errors and adverse events, increasing patient satisfaction, and improving training for healthcare professionals.

[An integrative review](#) concluded that the implementation of TeamSTEPPS has led to changes in clinical practice, a reduction of preventable medical errors, and improved decision accuracy when caring for patients. TeamSTEPPS initiatives have been shown to positively impact healthcare staff perceptions of teamwork and communication within an organization. [One study reported](#) a 13% increase in positive staff perceptions of teamwork and a 20% increase in positive staff perceptions of communication one month after implementation.

Recently, the COVID-19 pandemic highlighted the importance of team training in dealing with unexpected scenarios and crises in healthcare. [One study](#), which conducted focus groups to evaluate the impact of team training on provider performance during the pandemic, found that TeamSTEPPS training promoted teamwork through a [shared mental model](#), provided clarity in roles within healthcare teams, and increased a sense of value, respect, and empathy among healthcare teams, particularly during times of crisis when dealing with the COVID-19 pandemic.

Revising TeamSTEPPS

In 2014, AHRQ released TeamSTEPPS 2.0, which included updates for measuring and quantifying the impact TeamSTEPPS has on an organization, and developing new TeamSTEPPS modules and versions. In 2023, AHRQ recognized the need to further amend TeamSTEPPS to adapt to the evolving healthcare landscape. AHRQ sought input from several sources to inform the updates, including a technical expert panel composed of subject matter experts in teamwork and team training, patients and families, frontline healthcare professionals, and [a public call for input](#).⁵

The revised TeamSTEPPS 3.0 curriculum reflects [five major areas of emphasis](#) compared with previous versions. The first is a patient focus. Research has shown that [patient and family engagement](#) is an important tool for improving patient safety and avoiding adverse events. The revised TeamSTEPPS curriculum provides strategies to involve patients and family caregivers in their care. It includes a [welcome guide specific to the patients and family caregiver](#) audience.

The second and third areas of emphasis are an integrated TeamSTEPPS platform and a modular course design. TeamSTEPPS 2.0 incorporated multiple versions of the TeamSTEPPS materials tailored to healthcare settings and situations, such as long-term care, primary care, and rapid response. TeamSTEPPS 3.0 integrates formerly segmented training content into a single resource that can be taught in sessions of varying length in both virtual and in-person settings to team members from a variety of care settings. This format makes the TeamSTEPPS materials more accessible on the website and enables adaptation of the curriculum by trainers across a variety of healthcare settings to best meet their needs.

The fourth area of emphasis is active learning strategies. Research has found that active learning methods (e.g., [simulations](#), discussions) are more effective for retaining information and supporting attitude and behavioral changes than passive learning methods (e.g., listening to lectures).⁶ The TeamSTEPPS 3.0 curriculum aims to provide a variety of teaching and learning options, including discussions, exercises, and

video-based simulations.

And finally, the fifth area of emphasis is emerging team challenges and opportunities that come with advances in technology and changes in the ways healthcare teams operate. Healthcare teams have moved from mainly in-person to increasingly virtual interactions. Healthcare team members from multiple care settings often collaborate across virtual platforms. This shift is reflected in the TeamSTEPPS 3.0 curriculum, which emphasizes communication and teamwork strategies in an increasingly virtual care environment. The core curriculum has shifted to a less hospital-centric approach than previous iterations of TeamSTEPPS to emphasize the importance of teams from multiple care settings working together to support patient care.

TeamSTEPPS 3.0 Website Updates and Curriculum Structure

With the launch of TeamSTEPPS 3.0, the revision team overhauled and redesigned the [TeamSTEPPS website](#) to support efficient use by trainers, healthcare professionals, and patients and family caregivers. A key update to the TeamSTEPPS 3.0 website content is the addition of new video-based training resources, including [videos](#) that highlight patient stories about their interactions with healthcare teams and how these interactions relate to specific TeamSTEPPS tools such as verbal and nonverbal communication, check backs, and positive teamwork. The website also includes new [simulation-based training modules](#), which can be used as tools to help healthcare teams apply TeamSTEPPS principles to their day-to-day work. A [TeamSTEPPS Pocket Guide](#) is available on the website, which serves as a quick reference for key TeamSTEPPS concepts and tools and has been updated and redesigned to align with the new TeamSTEPPS 3.0 curriculum.

Before beginning the TeamSTEPPS curriculum, the website recommends that individuals review the role-specific [welcome guides](#). The welcome guides are adapted to fit the needs of various TeamSTEPPS roles, including patients and caregivers, frontline providers, administrators, experienced trainers, new trainers, and trainers of preprofessional students. The core TeamSTEPPS materials on the website begin with an [Introduction](#), which includes an overview of key concepts and tools, an explanation of the value of the TeamSTEPPS curriculum, and guidance for instructors or trainers who teach the TeamSTEPPS curriculum. After the introduction, the curriculum has four modules: [communication](#), [team leadership](#), [situation monitoring](#), and [mutual support](#). Finally, the TeamSTEPPS curriculum closes with a comprehensive guide for successfully [implementing](#) TeamSTEPPS within an organization. While previous iterations of TeamSTEPPS featured multiple versions of the curriculum for multiple care settings, the newly redesigned website features a single integrated version of the curriculum for ease of navigation and implementation. However, the website does retain the TeamSTEPPS module specific to [diagnostic improvement](#), given its growing area of emphasis for patient safety.

Conclusion and Future Directions

The TeamSTEPPS 3.0 updates resulted from a growing recognition of the importance of patients and family caregivers as a central part of healthcare teams that are increasingly virtual and span multiple care settings. A [large body of research](#) provides evidence for TeamSTEPPS as an important tool in increasing patient safety and promoting effective communication and teamwork within healthcare organizations. The

2023 TeamSTEPPS 3.0 revisions represent AHRQ's ongoing dedication to adapt healthcare team training to the evolving needs of patients and healthcare professionals.

TeamSTEPPS has been widely implemented across a variety of healthcare settings. However, there is still room for more organizations to implement and leverage TeamSTEPPS training to foster a broader culture of safety. The rollout of TeamSTEPPS 3.0 is an opportunity for organizations that have already implemented TeamSTEPPS to revisit, reinforce, and expand training across their organization. For organizations that have not yet implemented TeamSTEPPS but are interested in bolstering their safety culture, the revised curriculum and website are a great place to start. A strong safety culture will lead to overall improvements in patient safety as well as allowing healthcare professionals to feel safer and less stressed when working within their teams. TeamSTEPPS provides organizations with tools and resources to effectively make care safer for patients while increasing healthcare provider satisfaction and decreasing stress.

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