



TeamSTEPPS Implementation Guide

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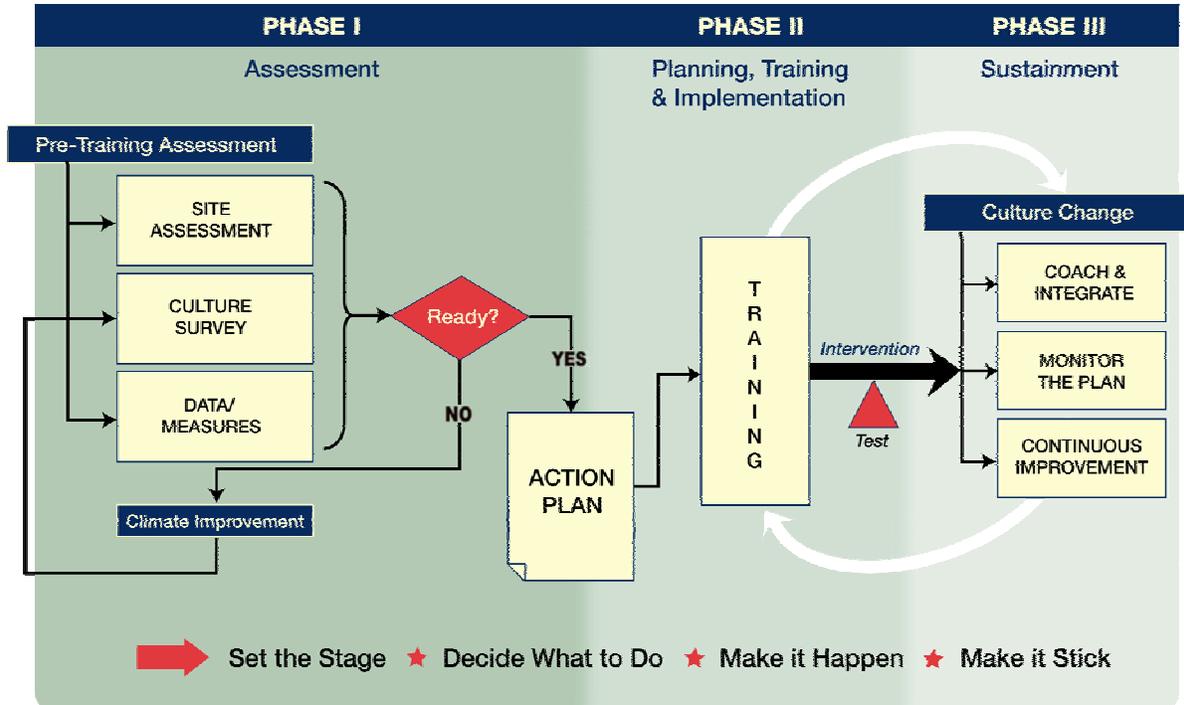


TeamSTEPPS Implementation Guide

Implementation Overview

A TeamSTEPPS Initiative occurs in three continuous phases: Phase I – Assessment; Phase II – Planning, Training, & Implementation; and Phase III – Sustainment. A healthcare organization or work unit can shift towards a culture of safety using team tools and strategies by progressing through each of the three phases and completing the key actions within each phase. The TeamSTEPPS Initiative provides guidelines, tools, and resources for completing each phase and for gathering data necessary for progression to the next phase. Keys to success at each phase include involvement of the right people, the use of information-driven decision making, and careful planning before acting. The following paragraphs provide an overview of each of the phases including goals and objectives, key actions, and recommended tools and resources.

Shift Towards A Culture of Safety





Phase I: Assessment

Goals & Objectives: The goal of Phase I is for an organization (or work unit) to determine if it is ready to undertake a TeamSTEPPS Initiative. An organization is ready if it has (a) a climate conducive to change and (b) objective information to support the need for a TeamSTEPPS Intervention. A climate conducive to change is characterized by leadership and key staff members who are committed to making a change and who are willing and able to dedicate the necessary time, resources, and personnel. Objective information supporting the need for a TeamSTEPPS Intervention could originate from a variety of sources including adverse event and near miss reports, reports of root cause analyses or failure modes and effects analyses, AHRQ Patient Safety Culture Survey, Patient and Staff Satisfaction Survey, Team Assessment Questionnaire, and site specific process and outcome measures. During Phase I, an initial *Change Team* (the group of individuals who will drive the TeamSTEPPS Initiative), is formed of leaders and key staff members. This Change Team then determines organizational readiness for a TeamSTEPPS Initiative by conducting a Site Assessment and reviewing available organizational data.

Key Actions: Multiple actions occur during Phase I to assess organizational readiness for a TeamSTEPPS Initiative. Teamwork experts from within or outside the organization may be consulted for assistance. The *Guide to Developing a TeamSTEPPS Action Plan*, particularly steps 1 through 3, provides additional guidance. Key actions for Phase I include:

1. Leaders and staff members comprising the initial Change Team collaborate to co-determine and communicate a vision for enhanced medical team performance. Available organizational data, (e.g., adverse event and near miss reports, AHRQ Patient Safety Culture Survey, Patient and Staff Satisfaction Survey, Team Assessment Questionnaire, and site specific process and outcome measures), are reviewed to identify opportunities for process improvement with team strategies and tools. Leaders and staff begin to cultivate ideas and collectively gain a shared focus of the opportunities for improvement within the organization. Questions to discuss include:
 - Why implement a TeamSTEPPS Initiative? Do we have any data to support the need?
 - Why now?
 - What process are we trying to fix? Who will be involved? Where will it occur?
 - What do we hope to achieve with a TeamSTEPPS Intervention?
 - How will we know that we were successful? What measures will we use?
 - How will we conduct medical team training – initial, newcomer's, and refresher? Who will do it?
 - What resources and personnel can we allocate to this effort? Is it feasible?
 - Can we achieve our goals in a timely fashion?
 - How will we spread and maintain the change throughout key areas of the organization?
2. The initial Change Team completes an internal site assessment to determine organizational readiness. They gather additional information to further answer the above questions by eliciting input from key personnel, and gathering relevant objective data.
3. Leaders may consult with TeamSTEPPS Master Trainers to discuss a team-driven culture of safety. The site assessment provides an opportunity for leaders to gain a first-hand understanding of a teamwork change initiative and secondarily to view their role in sponsoring, evaluating, enabling or modifying the behaviors necessary to shape and maintain the targeted behavior changes.



At the completion of Phase I, an organization decides that it **IS** or **IS NOT** ready for a TeamSTEPPS Initiative. If the Change Team determines that the organization **IS NOT** ready but believes that a TeamSTEPPS Initiative would likely benefit safety and quality of care, they should make efforts to move the organizational climate toward readiness and to collect objective data that would support the need for the initiative. If the Change Team determines that the organization **IS** ready for a TeamSTEPPS Initiative, they will document preliminary answers to the discussion questions listed above and then move onto Phase II.

Tools and Resources:

- *Guide to Developing a TeamSTEPPS Action Plan*
- *Sizing Up the Culture Exercise Sheet*
- Measurement tools: AHRQ Patient Safety Culture Survey (Hospital Survey on Patient Safety), Patient and Staff Satisfaction Survey, Team Assessment Questionnaire, Team Performance Observation Tool, and site specific process and outcome measures

Phase II: Planning (Action Plan), Training, and Implementation

Goals and Objectives: The goal of Phase II is for the Change Team to develop a detailed Action Plan for their entire TeamSTEPPS Initiative and then to follow that Plan to conduct medical team training and to implement the TeamSTEPPS Intervention.

Key Actions: Three key actions occur during Phase II – writing a TeamSTEPPS Action Plan, conducting medical team training, and implementing (and testing) the TeamSTEPPS Intervention.

1. Write an Action Plan using the *Guide to Developing a TeamSTEPPS Action Plan*.

The first step in Phase II is the development of a comprehensive TeamSTEPPS Action Plan. The Action Plan is a detailed report of exactly what an organization intends to do during their customized TeamSTEPPS Initiative. It documents the methodology for the entire initiative. It describes the Change Team; the challenge to be tackled; the TeamSTEPPS intervention and what the Change Team hopes it will achieve; the plans for medical team training; the plans for testing, implementing, and monitoring the intervention; and the plans for communicating and sustaining the change. A carefully developed Action Plan is critical to the success of a TeamSTEPPS Initiative. It establishes the strategy and focus for the entire effort and provides a “how-to guide” for each step of the Initiative. Time spent developing a detailed information-driven Action Plan will prevent countless wasted hours and setbacks throughout the entire improvement effort.

2. Conduct medical team training.

The TeamSTEPPS system includes three different medical team training curricula and a complete suite of multimedia course materials. The courses can be taught as is or modified and presented in parts based on the organization’s specific teamwork training needs and staffing/resource infrastructure. Course instructors from within the organization or from outside sources may be used. The Change Team’s training plan documented in their customized TeamSTEPPS Action Plan will determine which course(s) and teamwork skills will be taught, to which staff members, and by whom.

The Three TeamSTEPPS Curricula

Train-the-Trainer: 2.5 days of didactics and interactive workshops designed to create a cadre of teamwork instructors among the organization’s staff with the skills to train and coach other staff members. Also familiarizes participants with all TeamSTEPPS materials and methodologies and prepares them to facilitate a TeamSTEPPS Initiative.

TeamSTEPPS Fundamentals. 4 to 6 hours of interactive workshops intended for direct patient care providers. Introduces attendees to the tools and strategies for improving teamwork competencies including leadership, communication, mutual support, and situation monitoring.



TeamSTEPPS Essentials. A 1 to 2 hour condensed version of the Fundamentals Course, specifically designed for non-clinical support staff. Provides attendees with the basic tools to effectively communicate essential information.

3. Implement and test the TeamSTEPPS Intervention.

Using their TeamSTEPPS Action Plan as a guide, the Change Team implements and tests their TeamSTEPPS Intervention. TeamSTEPPS Intervention refers to the specific team strategies and tools and how they will be used to address the targeted problem, challenge, or identified opportunity. The “intervention” is therefore analogous to a “risk reduction strategy” or a “corrective action”.

Implementation of the intervention marks the formal launch of the TeamSTEPPS Initiative. It should be formally recognized by executive leadership and communicated as part of a continuous improvement and quality-based program. Success of the intervention, measured by improvements in medical team performance and clinical processes and outcomes, should be rewarded by leadership and showcased throughout the organization.

Tools and Resources:

- *Guide to Developing a TeamSTEPPS Action Plan*
- Measurement tools: Team Assessment Questionnaire, Team Performance Observation Tool, Learning Benchmarks, and site specific process and outcome measures
- TeamSTEPPS Training Techniques, Sample Course Evaluation

Phase III: Sustainment - Monitor, Coach, and Integrate

Goals and Objectives: The goal of Phase III is to sustain and spread improvements in teamwork behavior and in associated clinical processes and outcomes resulting from the TeamSTEPPS Initiative. Specific objectives are to integrate teamwork behaviors and tools into your daily practice, monitor the on-going effectiveness of your TeamSTEPPS Intervention, to identify opportunities for continued improvement, and to spread positive changes throughout the organization.

Key Actions: The TeamSTEPPS Action Plan written during Phase II provides the “how-to” guidelines for the key actions that occur during Phase III. Key actions include:

1. Teamwork Coaching.

Leaders, champions, and coaches continue to monitor and coach teamwork behavior among staff members.

2. Integration

The organization or work unit integrates into existing normal routines and processes key features of the TeamSTEPPS Initiative such as medical team training, teamwork behaviors and tools, and effectiveness measures.

3. Reinforcement and Rewards

Positive teamwork behaviors and improvements in processes and outcomes are reinforced and rewarded. Leaders, champions, and coaches provide on-going feedback. Successes are formally recognized and showcased throughout the organization.

4. Continuous Improvement

A method is established to continually measure the on-going effectiveness of the TeamSTEPPS Intervention and to identify opportunities for further patient safety and quality improvement.

5. Spread



A plan is developed to spread the positive changes to other workspaces demonstrating readiness for the TeamSTEPPS Initiative.

Tools and Resources:

- Measurement Tools: AHRQ Patient Safety Culture Survey, Patient and Staff Satisfaction Surveys, Team Assessment Questionnaire, Team Performance Observation Tool, and site specific process and outcome measures.
- *Guide to Developing a TeamSTEPPS Action Plan*
- Massoud MR et al. *A Framework for Spread: From Local Improvements to System-wide Change*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. (Available on www.IHI.org)
- *Running a Successful Campaign in Your Hospital, How-to Guide*, Institute for Healthcare Improvement 100,000 Lives Campaign; 2006, (Available on www.IHI.org)
- *Getting Started Kit: Sustainability and Spread, How-to Guide*, Institute for Healthcare Improvement 100,000 Lives Campaign; 2006, (Available on www.IHI.org)



Guide to Developing a TeamSTEPPS Action Plan

Purpose of the Guide

The purpose of the Guide is to provide healthcare organizations with an easy-to-use but comprehensive tool for developing an evidence-based TeamSTEPPS Action Plan. The intent is for the *Change Team* (the group of individuals who will drive the TeamSTEPPS Initiative), to write their Action Plan by working through each of the ten steps and then utilize it as a “how-to guide” for putting their TeamSTEPPS Initiative in place. The Guide is a recommended strategy, not a requirement. However, the ten steps do address JCAHO requirements so that facilities may also use the Guide to develop TeamSTEPPS Action Plans in response to sentinel events.

Introduction

The *TeamSTEPPS Action Plan* is a detailed written report of exactly what an organization intends to do during their TeamSTEPPS Initiative. It documents the methodology for the entire initiative. Box 1 lists the elements of a comprehensive TeamSTEPPS Action Plan.

Box 1. Elements of a Comprehensive TeamSTEPPS Action Plan

- Identification of the **Change Team**, the group of key leaders and staff members who will make the TeamSTEPPS Initiative happen.
- Identification of the specific **problem**, challenge or opportunity for improvements **that will be the target of the TeamSTEPPS Initiative**.
- Stated **aims** of the TeamSTEPPS Intervention. *
- Detailed description of the TeamSTEPPS Intervention - the team strategies and tools and how they will be used to correct the problem (or make improvements). Interventions are also known as risk reduction strategies, corrective actions, and improvement actions. *
- A **plan for testing the effectiveness** of the TeamSTEPPS Intervention including measures, methodologies, target outcome ranges, and pilot testing as appropriate *
- An **implementation plan** for the TeamSTEPPS Intervention including implementation date and identification of person(s) responsible for implementation and oversight *
- A **monitoring plan** for on-going assessment of the effectiveness of the TeamSTEPPS Intervention *
- A **communication plan** to generate support for the TeamSTEPPS Initiative, to keep major stakeholders informed of progress, and to maintain and spread positive changes.
- **Timelines** *

Note: The (*) denotes components of an Action Plan required by JCAHO when the Action Plan is generated in response to a sentinel event. (Reference: Joint Commission on Accreditation of Healthcare Organizations. *Root Cause Analysis in Health Care: Tools and Techniques*, 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources; 2003.)



A carefully developed Action Plan is critical to the success of a TeamSTEPPS Initiative. It establishes the strategy and focus for the entire effort and provides a “how-to guide” for each step of the Initiative. Time spent developing a detailed information-driven Action Plan will prevent countless wasted hours and setbacks throughout the improvement effort.

How to Use the Guide

The Guide is a tool for developing a comprehensive, evidence-based TeamSTEPPS Action Plan. It consists of a series of ten steps, (see Box 2) each presented with an objective, key actions for step completion, recommended tools and resources, tips for success, and a worksheet. Users should work their way through each of the ten steps in sequence, addressing the key actions and completing the worksheets. The worksheets are designed to assist users through each of the ten steps, and once completed, to function as the Change Team’s written TeamSTEPPS Action Plan.

The primary focus of the Ten-Step Guide is on TeamSTEPPS Initiatives that will be implemented within the Change Team’s own clinical workspace. However, the Guide may be modified for different applications, based on the needs of the user.

Box 2. Ten Steps to Developing a TeamSTEPPS Action Plan

1. Create a Change Team.
2. Define the problem, challenge, or opportunity for improvement.
3. Define the aim(s) of your TeamSTEPPS Intervention.
4. Design a TeamSTEPPS Intervention.
5. Develop a plan for testing the effectiveness of your TeamSTEPPS Intervention.
6. Develop an implementation plan - for medical team training and for the Intervention.
7. Develop a plan for Sustained Continuous Improvement.
8. Develop a Communication Plan.
9. Putting it all together - Write the TeamSTEPPS Action Plan.
10. Review your TeamSTEPPS Action Plan with key personnel, and modify according to input.

Key Principles and Definitions

Process Improvement. The Guide is based on the principle of improving patient safety and quality of care by improving healthcare processes. A *process* is a series of actions toward a desired endpoint. Examples of processes include (a) admitting a patient, (b) administering a medication, and (c) transferring a patient from one unit to another. The process improvement method includes the following steps:

- Identify a recurring problem or opportunity for improvement, that if addressed, could lead to better patient safety or quality of care. What is it specifically that you want to “fix” or improve?
- Flowchart or map the process during which the targeted problem or opportunity for improvement occurs – write down the process steps as they currently occur and identify who is doing what, when, and with what tools.)
- Study the process to identify weak points where things could go wrong and lead to a recurrence of the target problem or opportunity. These weak points are called *risk points*.



- Design and implement *interventions* aimed at eliminating or reducing the impact of the risk points. This in turn will prevent the targeted problem from recurring (or lead to your targeted improvements).
- *Test the intervention* to ensure that it did in fact eliminate or reduce the target problem (or result in your targeted improvement).
- If the test shows that the intervention was successful, *monitor* intervention effectiveness, *sustain* positive process changes, and identify opportunities for further improvement.

Medical Teamwork. The TeamSTEPPS Initiative focuses specifically on improving processes by designing and implementing interventions that enhance medical team performance. The primary goal of medical teamwork is to optimize the timely and effective use of information, skills, and resources by teams of healthcare providers for the purpose of enhancing the quality and safety of patient care. Specifically, medical teamwork aims to ensure that the RIGHT INFORMATION is provided to the RIGHT PERSON(S) at the RIGHT TIME resulting in the RIGHT ACTION(S). To meet that aim, medical teams require optimal:

- Team Structure: composition, size, distribution - *the right people with the right skills in the right place*
- Leadership: ability to coordinate, resource, and facilitate optimal team performance
- Awareness: clear understanding at all times of team goals, of task responsibilities, and of situational information critical to goal achievement, such as status of patient, of self, of team members, of operating environment, and of progress toward the goal – *having the right information at the right time*
- Team Skills: (a) Situation Monitoring: ability to continually gather and assess situational information to maintain awareness; (b) Mutual Support: ability to provide timely mutual support/back-up, both verbal and task-related, to team members; (c) Communication: ability to exchange information amongst team members - *gathering and communicating the right information at the right time to the right person(s) resulting in the right actions*

Team STEPPS Initiative versus TeamSTEPPS Intervention. When used in this Guide, TeamSTEPPS Initiative refers to the medical teamwork improvement effort in its entirety, from identifying the Change Team through the sustainment phase. TeamSTEPPS Intervention refers to the specific team strategies and tools and how they will be used to address the targeted problem, challenge, or opportunity for improvement.

The Ten Steps of Action Planning

Step 1. Create a Change Team

Objective: *To assemble a team of leaders and staff members with the authority, expertise, credibility, and motivation necessary to drive a successful TeamSTEPPS Initiative.*

Key Actions:

- Select a multidisciplinary Change Team.
- Ensure representation from three different leadership levels: Senior Leadership, Clinical/Technical Expertise, and Front-line Leadership (see Step 1 Worksheet).



- Ensure at least one member is very knowledgeable of team strategies, tools, and training techniques.
- Ensure at least one member has experience in process improvement including performance trending techniques. Relevant skills include data collection, analysis, and presentation.

Tools and Resources:

- Step 1 Worksheet - Creating A Change Team: Key Characteristics & Primary Roles of Essential Members

Tips for Success:

- The Change Team will focus on improving processes within its own clinical workspace. Choose members with relevant clinical expertise, workplace location, credibility, and direct involvement in the processes that will be affected by the TeamSTEPPS intervention.
- Ideally, all Change Team members will attend team training.
- Optimal Change Team size is five or six individuals.
- Involvement of both physicians and nurses from the clinical workspace is essential.

The Change Team then proceeds through Steps 2 to 10.

Step 2. Define the Problem or the Opportunity for Improvement

Objective: To specifically state the problem, challenge, or opportunity for improvement that will be targeted by your TeamSTEPPS intervention; and to identify the involved process. What is it specifically that you want to “fix” or improve?

Key Actions:

1. Identify a problem, challenge, or opportunity for improvement that you feel could be bettered with enhanced medical teamwork.. Strategies include:
 - Reviewing workspace performance and safety data such as incident reports, the AHRQ Patient Safety Culture Survey, the Team Assessment Questionnaire, the Team Performance Observation Tool, and site-specific process and outcomes measures.
 - Reviewing reports of root cause analyses and failure modes and effects analyses.
 - Asking front-line staff, “What are bad outcomes waiting to happen because of breakdowns in the transfer of critical information?” “What are the things that keep you up at night?”
2. Identify the process during which the problem, challenge, or opportunity occurs by stating what the process is, who is involved, and when and where it occurs.

Example 1 of a Problem Definition

1. Identify the problem: Suboptimal telephone communication of patient information between labor and delivery unit staff members.



2. Identify the clinical process:

What: Telephone communication of patient information

Who: Communication from staff L&D nurses to staff L&D physicians

When: During normal daily operations

Where: On the L&D unit

Example 2 of a Problem Definition

1. Identify the problem: Suboptimal communication between surgical team members

2. Identify the clinical process:

What: Communication of critical information about the patient and surgical procedure

Who: Surgeons, anesthesiologists, OR nurses, and scrub technicians in the General Surgery Service

When: Just prior to first incision

Where: In the operating room

Tools and Resources:

These tools may be used to identify problems and also to provide baseline data for measuring the effectiveness of a TeamSTEPPS Intervention.

- AHRQ Patient Safety Culture Survey
- Team Assessment Questionnaire
- Team Performance Observation Tool (requires an observer trained in medical teamwork)
- Staff and/or patient satisfaction surveys

Tips for Success:

- Change Teams may want to define three or four problems/opportunities and then select the highest priority for the TeamSTEPPS Intervention.
- Look for problems/opportunities that meet the following criteria:
 - The associated process occurs frequently.
 - Breakdowns in team performance could result in harm to patients.
 - Process change is feasible and likely within the short-term.
- Administer the AHRQ Patient Safety Culture Survey and/or the Team Assessment Questionnaire prior to conducting medical team training or implementing your TeamSTEPPS Intervention. The results will provide some of the baseline data needed for testing the effectiveness of the intervention.



Step 3. Define the Aim(s) of Your TeamSTEPPS Intervention

Objective: To succinctly state in measurable terms exactly what you hope to achieve with the TeamSTEPPS Intervention – what will be achieved, who will be involved, and when and where the change will occur.

Key Actions:

1. Develop one to three measurable aims for your TeamSTEPPS Intervention, and state in one or two sentences what you hope will be achieved, who will be involved, and when and where the improvements will occur. Aims can be based on the process of the TeamSTEPPS Intervention itself or on the outcomes of that intervention.
 - *Team process aims* focus on how well or often your staff carries out your TeamSTEPPS Intervention.
 - *Outcome aims* focus on changes that occur because your staff carries out the intervention. These aims can be directed at changes in team performance (*team outcome aims*) or in clinical results (*clinical outcome aims*).
 - It is ideal (but not necessary) to have a team process aim, a team outcome aim, and a clinical outcome aim. This becomes particularly important when testing the effectiveness of your TeamSTEPPS Intervention.

Example 1 of Process and Outcome Aims

The Problem: Suboptimal pre-op communication between surgical teams in General Surgery Service

Team Process Aims:

Increase the percentage of unit staff who has received training to at least 80% within 2 months of team training implementation.

Increase the rate of General Surgery cases with standardized pre-op briefings by 40% within 3 months of TeamSTEPPS Intervention implementation.

Team Outcome Aim: Increase the perception among General Surgery Service staff of good team behavior, as assessed by the Team Assessment Questionnaire, within 6 months of the TeamSTEPPS Intervention implementation.

Clinical Outcome Aim: Increase the percentage of surgical patients who receive prophylactic antibiotics appropriately time prior to incision from current 85% to 100% within 4 months of the TeamSTEPPS Intervention implementation.



Example 2 of Process and Outcome Aims

The Problem: Suboptimal telephone communication of patient information from staff labor and delivery (L&D) nurses to staff L&D physicians.

Team Process Aims:

1. Increase the percentage of L&D nurses and physicians who receive training on SBAR to at least 80% within one month of medical team training implementation.
2. Increase the use of SBAR by L&D nurses during telephone communications to L&D physicians by at least 60% within 2 months of TeamSTEPPS Intervention implementation.

Team Outcome Aim: Increase the perception among all L&D staff of good team behavior, as assessed by the Team Assessment Questionnaire, within 6 months of TeamSTEPPS Intervention implementation.

Clinical Outcome Aim: Increase L&D physicians' average rating of the quality of L&D nurses' telephone communication of patient information by at least 50% within 3 months of TeamSTEPPS Intervention implementation.

Tools and Resources:

- Step 3 Worksheet

Tips for Success:

- Develop aims that specifically address the target problem identified during step 2.
- Put time and thought into defining the problem and defining the aims of your TeamSTEPPS Intervention since they are the most important steps in Action Plan development. The target problem and stated aims drive the development of all remaining components of the Action Plan.

Step 4. Design a TeamSTEPPS Intervention

Objective: To design a TeamSTEPPS Intervention that will address your targeted problem or challenge, and achieve your stated aims.

Key Actions:

To design your TeamSTEPPS Intervention you will use process improvement techniques and systems-based strategies for human error reduction. The following key actions should be performed in the order they appear:

1. Flowchart or map the process during which the target problem/challenge/opportunity occurs - write down the process steps as they currently occur and identify who is doing what, when, with what tools.
2. Study the process to identify risk points where things could go wrong and lead to a recurrence of the target problem/challenge/opportunity.
3. Identify where in your process team strategies and tools might eliminate or mitigate the risk points and prevent the problem from recurring.
4. Determine which team tools and strategies, such as the brief, huddle, debrief, STEP, SBAR, and I PASS the BATON, would work best to eliminate the process risk points. Strategies include:
 - Brainstorming with Change Team members and other front-line staff;



- Eliciting input from teamwork experts;
 - Reviewing the evidence-base and searching for best practices.
5. Draft your TeamSTEPPS Intervention. State what team tools and strategies will be implemented; who will use them, when and where.
 6. Evaluate your TeamSTEPPS Intervention for potential benefits and negative effects:
 - Flow-chart the redesigned process as you imagine it would look with your TeamSTEPPS Intervention in place.
 - Identify potential failure points in the redesigned process. How will you reduce the probability and/or severity of these failures?
 - Identify potential benefits and negative effects of the redesigned process on units outside your workspace. How will you control potential negative effects?
 7. Evaluate your TeamSTEPPS Intervention using the TeamSTEPPS Intervention Checklist, and modify your intervention based on the results.
 8. Write a detailed description of your final TeamSTEPPS Intervention. State what team tools and strategies will be implemented; who will use them, when and where.

Tools and Resources:

- Step 4 Worksheet
- TeamSTEPPS Intervention Checklist
- Godfrey M, Nelson E, Batalden P, et al. *Clinical Microsystems Action Guide*. Hanover, NH: Trustees of Dartmouth College; 2004. (available at www.clinicalmicrosystems.org). --- for tools and techniques for clinical process mapping and flowcharting and for brainstorming
- Almeida SA and Almeida PA. *A Primer for Patient Safety: Evidence-based Requirements, Standards, and Recommendations for Program Development and Implementation, Third Edition*. (Prepared under Contract No. GBR-04-USUHS-2002-001) USUHS Publication. Bethesda, MD: DoD CERPS at USUHS. March 2006. --- for concise summaries of evidence-based patient safety program requirements, standards, and recommendations from the DoD, JCAHO, and leading government and private sector patient safety expert groups. (This information is available for DoD use only.)

Tips for Success:

- Stay focused on your target problem and your stated aims. While designing the intervention, keep asking, “How will it solve the problem? How will it achieve our aims?”
- Elicit input from the entire Change Team and from other key personnel such as leaders, clinicians, front-line staff, subject matter experts, and personnel most impacted by the improvement effort.
- Keep it simple. Ideally, address *one problem – one process – one team tool*. Your intervention will have a greater probability of success if you implement smaller changes, but do it very well.



Step 5. Develop a Plan for Testing the Effectiveness of Your TeamSTEPPS Intervention

Objective: To develop a method to determine if your TeamSTEPPS Intervention achieved your aims. Did it work?

Key Actions:

Ideally, you will test if your TeamSTEPPS Intervention achieved each one of the aims you generated during Step 3. If time and resources are limited, select only one aim for testing. Base your selection on the importance of the aim and on the feasibility of testing it. Testing does not need to be complicated. Basic performance improvement trending and tracking methods generally suffice. For each aim you select, create a testing method by performing the following key actions:

1. Identify who on your Change Team will be responsible for data collection, analysis, and presentation (generation of graphs and charts).
 2. Identify a measure and define target ranges for that measure.
 - The measure should answer whether you achieved your aim.
 3. Create a study design:
 - The most common study design for clinical process improvement is a simple *pre- and post-intervention study*. With this design, you (1) gather your data *before* implementation of your TeamSTEPPS Intervention, then (2) implement the intervention, then (3) gather the same data again at pre-determined time intervals *after* implementation of the intervention, and finally (4) compare the results from your pre-intervention data to those of your post-intervention data. The data you collect before implementation of your intervention is known as your *baseline data* or *control group data*.
 4. Select “test subjects” or data source.
 - For measures that assess team process or team outcomes, your “test subjects” generally are your staff members whom you want to use the team tools – for example, the nurses who will use SBAR for telephone communication of patient information to staff physicians. For measures that assess clinical outcomes, common data sources are patient health records or existing healthcare quality improvement databases.
 5. Identify a comparison or “control” group.
 - The control group is a group of individuals, similar in characteristics to the intervention group, who do not receive the intervention. To demonstrate the effect of your intervention you must apply your measures to both a control group and to an intervention group and then compare the results. Differences between the groups show the effect of your intervention.
- (Note: For the pre- and post-intervention study design described above, the pre-implementation data serve as the control).
6. Determine methods for data collection.
 - Determine who will collect the data, when, where, and how.
 7. Determine methods for data analysis and interpretation.
 - You may start by doing simple counts of your target events or clinical outcomes and displaying these counts on a line graph by day, week, or month. Examples of counts include (a) number of times staff nurses use SBAR for telephone communication of



patient information to staff physicians, (b) number of cases during which the surgical team uses the pre-op brief, and (c) number of surgical cases administered prophylactic antibiotics appropriately timed prior to incision. However, to show true change over the test period, you will need to consider “denominator data” or the number of times the event *could have* occurred. Rates (reported as percentages) are simple data calculations that account for denominator data. Rates are calculated by dividing the number of events that did occur by the total number of opportunities for the event to occur. To assess the effectiveness of your intervention using a rate: (1) calculate the rate at baseline *before* conducting your medical team training or implementing your intervention; then (2) calculate the same rate again after implementing your intervention; and then (3) compare the pre- and post-intervention rates to determine any changes due to your intervention.

Examples of Process and Outcome Measures Using Rates

Team Process Measures			
$\frac{\text{Number of cases during which surgical team performed team brief}}{\text{Total number of surgical cases performed by the surgical team}}$	= Rate of Team Briefing Adherence	$\frac{\text{Number of times staff labor and delivery (L&D) nurses used SBAR for telephone communication of patient information to staff L&D physicians}}{\text{Total number of times staff L&D nurses communicated patient information by telephone to staff L&D physicians}}$	= Rate of Nurse Telephone SBAR Usage

Clinical Outcome Measures			
$\frac{\text{Number of surgical patients administered appropriately-timed prophylactic antibiotics prior to incision}}{\text{Total number of surgical patients who should have received appropriately-timed prophylactic antibiotics prior to incision}}$	= Rate of Appropriate Pre-Surgery Prophylactic Antibiotic Administration	$\frac{\text{Number of patients admitted to labor & delivery who incurred an adverse event or near miss}}{\text{Total number of patients admitted to labor & delivery}}$	= Rate of Labor & Delivery Adverse & Near-Miss Events
		$\frac{\text{Number of liveborn fullterm neonates with birth trauma (injury)}}{\text{Total number liveborn fullterm neonates}}$	= Rate of Neonatal Birth Trauma

Statistics Tip: Choose measures that will likely result in at least 30 events (or cases) in your numerator within the timeframe of your study.



- Another simple data calculation is *time-to-event-occurrence*, or the elapsed time from a defined starting point to the occurrence of a specific event. This measure is particularly useful for clinical processes that should occur within a limited period of time. Examples include (a) the duration of time between patient arrival at an emergency room and evaluation by a physician, and (b) the duration of time between the arrival of a pre-term pregnancy on the labor deck and the communication of this information to the responsible pediatrics staff.
- Survey scores are a third easy-to-use group of measurements. To assess the effectiveness of your intervention using a survey score: (1) administer the survey at baseline, before conducting your medical team training or implementing your intervention; then (2) administer the same survey again after implementation of your intervention, preferably to the same people; then (3) calculate the scores for the pre- and post-intervention surveys; and finally (4) compare the scores from the two groups. You may use already developed surveys such as the AHRQ Patient Safety Culture Survey, the Team Assessment Questionnaire, or existing patient or staff satisfaction surveys. Or, you may develop simple surveys of your own.

Examples of Process and Outcome Measures Using Survey Scores

Team Process Measure	Team Outcome Measure	Clinical Outcome Measure
The frequency of use of SBAR by L&D nurses for telephone communication of patient information to L&D physicians	L&D clinical staff's perception of medical team behavior – as measured with the <i>Team Assessment Questionnaire</i>	L&D physicians' perception of the quality of telephone communication of patient information by L&D nurses – as assessed using a 5-point <i>Likert scale</i>

- For each of these surveys, your goal would be to find an increase in the scores after implementation of your TeamSTEPPS Intervention.
 - To learn about Likert scales, see http://en.wikipedia.org/wiki/Likert_scale.
- Determine data presentation method.
 - Determine how you will visually display your results to show that you achieved your aim(s).
 - Simple line graphs, run charts, and bar graphs are usually very effective. Control charts provide more information, but require more skill to generate.
 - Determine resources required (time, equipment, personnel, expertise).
 - Determine timelines for the test
 - For baseline data: When will you collect it, analyze it, and display it?
 - For post-implementation data: When will you collect it, analyze it, and display it?

Tools and Resources:

- Step 5 Worksheet
- Team Performance Measurement Tools: AHRQ Patient Safety Culture Survey, Team Assessment Questionnaire, Team Performance Observation Tool (requires an observer trained in medical teamwork)
- Joint Commission on Accreditation of Healthcare Organizations. *Tools for Performance Measurement in Health Care: A Quick Reference Guide*. Oakbrook Terrace, IL: Joint Commission Resources; 2002.



- Godfrey M., Nelson E., Batalden P. et al. *Clinical Microsystems Action Guide*. Hanover, NH: Trustees of Dartmouth College; 2004. (available at www.clinicalmicrosystems.org)
- Institute for Healthcare Improvement website. (www.IHI.org) (free tools and tutorials).

Tips for Success:

- Keep it simple. Select one solid measure for each aim.
- Ideally you will have one team process measure, one team outcome measure, and one clinical outcome measure. The team process measure will assess whether your staff actually carried out your TeamSTEPPS Intervention. For example, how often did your staff nurses use SBAR for telephone communication of patient information to staff physicians? The team process measure becomes particularly important if your outcome measures show no improvement with your intervention. Failure to show improvement in team performance or in clinical outcomes may be due to the staff's failure to implement the intervention and NOT to the ineffectiveness of the intervention itself.
- If you will use any patient data, ensure your plan adheres to all patient rights and privacy laws and regulations. Check with your governing Institutional Review Board, Committee for the Protection of Human Subjects, or other resident subject matter expert if you are unsure.
- Use existing data sources whenever possible. Determine what data your facility or workspace already collects that you may be able to use.

Step 6. *Develop an Implementation Plan*

Objective: Part A: To develop a plan for training your staff in the medical teamwork knowledge and skills required to successfully implement your TeamSTEPPS Intervention.

Part B: To develop a plan for putting your TeamSTEPPS Intervention into place.

Part A: **Develop a Plan for Medical Team Training**

Prior to implementing your TeamSTEPPS Intervention, you will need to provide medical team training to staff members and other personnel who will be involved in the intervention. It is not necessary to train all staff on all teamwork concepts and tools. Identify what your staff needs to know in order to make your TeamSTEPPS Intervention successful, and then select the TeamSTEPPS training materials and techniques that best meet your specific training requirements. Complete the following key actions to develop Part A of your implementation plan:

Key Actions:

1. Identify your trainee audience(s) and their training requirements.
 - Determine who (staff members within a targeted unit/department) needs to be trained on what medical teamwork knowledge/skills and by when.
2. Identify the instructors for each audience.
3. Develop a training plan for each audience, including:
 - Who will attend the training sessions
 - What team knowledge, skills you will train
 - When the training sessions will occur and for how long



- Where the sessions will occur
 - How you will train (method of presentation, tools, supplies)
 - Logistics such as schedules, equipment, impact of training on other operations, additional resources required, notifying trainees and other key stakeholders
4. Determine if any of your audiences will require refresher training. If so, repeat the above actions for refresher training.
 5. Create your training timelines.
 - Include time for developing your materials and managing logistics.
 - Include initial, newcomers', and refresher training, if needed.

Part B: Develop an Implementation Plan for the TeamSTEPPS Intervention

Key Actions:

Part B of the implementation plan addresses how you will put your TeamSTEPPS Intervention into place. Complete the following key actions:

1. Identify person(s) responsible for implementation.
2. Determine how you will implement TeamSTEPPS Intervention in order to achieve your aims.
 - Who will use what team strategies and tools, when, and where?
 - Will they need additional resources to implement the intervention?
3. Develop an implementation timeline.

Tools and Resources (for Part A and Part B):

- Step 6 Worksheet
- TeamSTEPPS Training Techniques

Tips for Success:

- Consider pilot testing both your medical team training and your intervention implementation plans with a small group prior to implementing the programs on a larger scale.
- Consider establishment of a TeamSTEPPS Learning Action Network for follow-up and information sharing. This would involve scheduled conference calls with sites that have implemented an Initiative. Calls are best held either bi-monthly or quarterly.

Step 7. Develop a Plan for Sustained Continuous Improvement

Objective: To develop a plan for continuous process improvement with your TeamSTEPPS Intervention, including plans for on-going assessment of the effectiveness of the intervention, for sustainment of positive changes, and for identification of opportunities for further improvements.

Key Actions:

1. Develop a plan for monitoring over time the effectiveness of your TeamSTEPPS Intervention.



- The purpose of the monitoring plan is two-fold – to determine if your intervention continues to achieve your aims and to identify opportunities for further process improvement.
 - Designing a monitoring plan is similar to designing a testing plan (Step 5). The monitoring plan is often just a simplified version of the testing plan – with fewer and less frequent measurements. For your monitoring plan, determine:
 - measures & target outcomes
 - test subjects and/or data source (e.g., existing QI database)
 - methods for data collection
 - methods for data analysis and interpretation
 - resources required (money, time, equipment, personnel, expertise)
 - person(s) responsible for implementation and oversight
2. Determine how data from your monitoring plan will be used to continually improve processes and performance.
 3. Develop a plan for sustaining and spreading positive changes.
 - Consider a recognition and rewards program.
 - Develop a plan for timely continuous feedback on performance and for sharing lessons learned.
 - Determine how you will monitor teamwork behavior and provide on-going teamwork coaching.
 - Consider how you will spread positive changes to other workspaces or to other processes within your workspace.

Tools and Resources:

- Step 7 Worksheet
- Massoud MR et al. *A Framework for Spread: From Local Improvements to System-wide Change*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. (Available on www.IHI.org)
- *Running a Successful Campaign in Your Hospital, How-to Guide*, Institute for Healthcare Improvement 100,000 Lives Campaign; 2006, (Available on www.IHI.org)
- *Getting Started Kit: Sustainability and Spread, How-to Guide*, Institute for Healthcare Improvement 100,000 Lives Campaign; 2006, (Available on www.IHI.org)

Tips for Success:

- Integrate your TeamSTEPPS Intervention into existing processes for long-term sustainment. Make it part of your workspace's normal daily routines. Examples of integration include (a) incorporating team principles into staff meetings, QI committees, Grand Rounds; and (b) integrating monitoring measures into existing workspace databases and systems.
- Publicize your successes. Examples include visibly displaying large wall charts in your workspace showing positive performance trends; writing articles in local publications and medical journals; giving presentations on your results at staff meetings and professional medical meetings.
- Develop standardized procedures for integrating newly acquired staff.



Step 8. Develop a Communication Plan

Objective: To create a communication plan targeting major stakeholders that will generate initial and on-going support for the TeamSTEPPS Initiative and promote the maintenance and spread of positive changes.

Key Actions:

1. Identify your stakeholders.
 - Whose support will be important for achieving the aims of your intervention and for maintaining positive changes?
 - Consider organization leaders, front-line leaders, staff directly involved in the intervention, patients, support staff, and other units impacted by the intervention.
2. For each of your identified stakeholder groups, develop a communication plan including:
 - Goals for communication with this group. What do you want to achieve?
 - Who will get the information
 - What information you will communicate
 - When and how often you will communicate
 - How you will communicate (e.g., reports, presentations, e-mails)
3. Identify a person on the Change Team who will be responsible for implementation and oversight of the communication plan.

Tools and Resources:

- Step 8 Worksheet

Tips for Success:

- Stay focused on your goals for communication with each stakeholder group. Keep asking, “What do I hope to accomplish for the Initiative (e.g. buy-in, resources, participation) by communicating with this group?” The goals will drive the development of your communication plan.

Step 9. Putting it All Together: Write the TeamSTEPPS Action Plan

Objective: To generate a written Action Plan, based on Steps 1 through 8 that will function as your “How-To Guide” for every component of your TeamSTEPPS Initiative.

Key Actions:

If you completed each of the worksheets for Steps 1 through 8, you have already written your TeamSTEPPS Action Plan. Ensure that your final Action Plan includes all of the following elements:

1. Identification of the Change Team
2. Identification of the problem, challenge, or opportunity for improvement that will be the focus of the TeamSTEPPS Initiative



3. Stated aims of the TeamSTEPPS Intervention
4. Detailed description of the TeamSTEPPS Intervention
5. A plan for testing the effectiveness of the TeamSTEPPS Intervention
6. An implementation plan for both medical team training and for the TeamSTEPPS Intervention
7. A monitoring plan for on-going assessment of the effectiveness of the TeamSTEPPS Intervention
8. A communication plan to generate support for the TeamSTEPPS Initiative, to keep major stakeholders informed of progress, and to maintain and spread positive changes.
9. Timelines
10. Resources required

Tools and Resources:

- **Step 1 through 8 Worksheets (You have already created your customized TeamSTEPPS Action Plan by completing step 1 through 8 worksheets!)**
- Kotter J and Rathgeber H. *Our Iceberg is Melting. Changing and Succeeding Under Any Conditions*, Kotter & Rathgeber; 2006.

Tips for Success:

- Save your original step worksheets. They may contain information and ideas you might want later.

Step 10. Review your TeamSTEPPS Action Plan with Key Personnel

Objective: To generate support and elicit ideas from major stakeholders, and to identify barriers to program implementation.

Key Actions:

1. Identify stakeholders who could contribute significantly to the Action Plan. Consider organization leaders, front-line leaders, persons directly involved in the intervention, and personnel with special expertise such as facility data analysts.
2. Ask key stakeholders to review your Action Plan and to provide input. Specifically request that they identify any potential problem areas and offer solutions.
3. Modify your Action Plan based on their input, if needed.

Tools and Resources:

- N/A

Tips for Success:

- You may want to ask some stakeholders to review only certain sections of the Action Plan.



Action Planning Worksheets

Action Planning Worksheets for each step are contained in the following pages.



TeamSTEPPS Action Planning Worksheet – Step 1

Step 1. Create a Change Team

Objective: To assemble a team of leaders and staff members with the authority, expertise, credibility, and motivation necessary to drive a successful TeamSTEPPS Initiative.

Essential Change Team Members

Change Team Member	Name (Staff Position)	Key Characteristics	Primary Role(s)
Senior Leader “Executive Sponsor”		<ul style="list-style-type: none"> Enough “clout” in the organization to implement new approaches to care Authority to allocate time and resources necessary to achieve team’s aim(s) Authority over all areas that will be affected by the change 	<ul style="list-style-type: none"> Sponsors and visibly supports the Change Team Creates the vision of the new system for the organization as a whole Leads the spread of specific changes throughout the organization or system May choose to become a member of the Change Team
Clinical or Technical Expert “The Champion”	Physician(s): Nurse(s):	<ul style="list-style-type: none"> Expert knowledge of the relevant clinical subject matter Understands the processes of care within workspace where changes will occur Good working relationship with colleagues and front-line leaders Interest in driving/leading change <p>Essential to have at least one Physician Champion and one Nurse Champion.</p>	<ul style="list-style-type: none"> Responsible for being members of the instructor cadre Responsible for coaching and role-modeling the team behaviors and skills Responsible for keeping the executive sponsor updated
Front-Line Leader		<ul style="list-style-type: none"> Understands details of the organization (unit/department) Understands effects of making changes in the institution. Able to work effectively with the physician/nurse champions 	<ul style="list-style-type: none"> Is the critical driving force on the team Assures that changes are tested / measured Provides oversight for data collection



Other Change Team Members

Name (Staff Position)	Primary Role(s)

<p>Identify team member(s) with medical teams expertise:</p>
<p>Identify team member(s) with process improvement experience, including performance trending techniques:</p>
<p><u>NOTES:</u></p>



TeamSTEPPS Action Planning Worksheet – Step 2

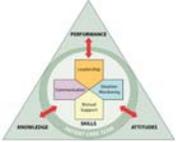
Step 2. Define the Problem, Challenge, or Opportunity for Improvement

Objective: To specifically state the problem, challenge, or opportunity for improvement that will be targeted by the TeamSTEPPS Intervention, and identify the involved process. *What specifically do you want to “fix” or improve? Note: When the word “problem” is used, it broadly refers to any challenges you choose to tackle or opportunities for improvement that would most likely be positively impacted by a TeamSTEPPS Initiative

Briefly state the problem, challenge, or opportunity for improvement that will be improved through medical teamwork. What is it that you will fix or improve?

What is the evidence to support your problem selection?

- Adverse event due to a breakdown in team skills (e.g., communications, situation monitoring, mutual support/back-up)
- Near miss(es) due to breakdowns in team skills
- Staff members are concerned that we could have an adverse event due to breakdowns in team skills.
- Other data, evidence or supporting information: _____
- Do you have any data?
 - Workspace performance data: _____
 - Incident reports
 - Results from the AHRQ Patient Safety Culture Survey
 - Results from the Team Assessment Questionnaire,
 - Results from the Team Performance Observation Tool
 - Other: _____



Identify the clinical process during which the target problem occurs:

What is the clinical process or communication process during which the problem occurs?

Who is involved in the “problem” process? (List by staff positions not individuals’ names. Could also include patients.)

When does the “problem” occur? (e.g., day shift, night shift, shift changes, certain days or clinical circumstances)

Where does it occur? (e.g., clinical setting or site)

NOTES:



TeamSTEPPS Action Planning Worksheet – Step 3

Step 3. Define the Aims of Your TeamSTEPPS Intervention

Objective: To succinctly state in measurable terms exactly what you hope to achieve with your TeamSTEPPS Intervention – what will be achieved, who will be involved, and when and where the change will occur.

State at least one team process aim:

A team process aim states your goal for how well your staff will carry out your TeamSTEPPS Intervention as you designed it. Examples include (a) a goal for how often your staff will use the intervention team tool (e.g., brief, SBAR, I PASS the BATON) or (b) a goal for how many staff members will receive medical team training.

What do we want to achieve? (e.g., number of staff who receive team training; increase in rate of use of a specific teamwork tool)

Who will be involved in the change? These are the persons who are involved in the “what you want to achieve” listed above - such as the staff members who receive medical team training or who use the teamwork tools (List by staff position or title, not individuals' names.)

When will the improvement occur? Within what timeframe?

State at least one team outcome aim.

A team outcome aim is directed at the changes that occur in team performance as a *result of* your staff carrying out your intervention. It states your goal for improvements in your staff's team performance.

What do we want to achieve? (e.g., increase staff perception of good team behavior; increased observed effective team communication among staff)

Who will be involved in the change? Whose team behavior will change? (List by staff position or title, not individuals' names.)



When will the improvement occur? Within what timeframe?

State at least one clinical outcome aim.

The clinical outcome aim is your goal for improvements in clinical results due to improved team performance.

What do we want to achieve? (e.g., increased patient satisfaction; improved performance on a relevant healthcare quality measure [e.g., increased rate of appropriate prophylactic use of beta-blockers to prevent intra-operative myocardial ischemia]; decreased rates of adverse events or near misses)

Who will be involved in the change? Whose behavior will change and/or which patient populations will be affected?

When will the improvement occur? Within what timeframe?

NOTES:



TeamSTEPPS Action Planning Worksheet – Step 4

Step 4. Design a TeamSTEPPS Intervention

Objective: To design a TeamSTEPPS Intervention that will address your target problem and achieve your stated aims.

Identify opportunities for process improvement using team strategies/tools:

1. In the space below, flowchart or map the process – where the target problem or opportunity for improvement occurs - write down the process steps as they currently occur and identify who is doing what, when, with what tools. Use extra sheets of paper if needed.
2. Then mark with an “X” the risk points in the process where things could go wrong and lead to a recurrence of your target problem.
3. Finally, identify with arrows where in the process team strategies and tools might eliminate or mitigate the risk points and prevent the problem from recurring.



TeamSTEPPS

Review the evidence-base and search for best practices.

Have other groups successfully used specific team tools to reduce similar process risk points? Are there any relevant patient safety requirements, expert recommendations, or best practices? If so, list below and cite source or reference.

Draft your TeamSTEPPS Intervention. State what team strategies and tools (e.g., brief, debrief, STEP, SBAR, I PASS the BATON) will be used, who will use them, when and where.



Evaluate your intervention for potential benefits and negative effects.

1. In the space below, flow-chart or map your redesigned process as it would look with your intervention in place. Study the flowchart and then:
2. Mark potential failure points in the redesigned processes. How will you reduce their probability or severity?
3. Identify system-wide potential benefits and negative effects. How will you control potential negative effects?
4. Evaluate your intervention using the **TeamSTEPPS Intervention Checklist**.
5. If necessary, go back and modify your intervention based on your evaluation.



TeamSTEPPS Intervention Checklist

- Targets a specific defined problem and clinical process
- Consistent with patient safety requirements
 - DoD
 - Service
 - Accreditation
- Consistent with current mission and system operating procedures
- Benefits outweigh risks
- Evidence-based
- Measurable
 - Desired result can be measured with objective quantifiable data
 - Data is accessible, complete, and accurate
 - Effectiveness can be monitored over time for continuous improvements
- Feasible
 - Costs
 - Staffing
 - Equipment and other resources
- Acceptable
 - Staff
 - Leadership
 - Patients
- Patient-focused
- Can be integrated into current operations
- Sustainable
- Includes a training plan
 - Initial/Newcomers'/Refresher
 - Turnover
 - Emergency procedures (rapid identification of and recovery from errors and process failures)

TeamSTEPPS



- Incorporates redundancy and back-up systems to minimize risk of patient harm in event of error or process failure
- Addresses human factors

For Example:

- Simplifies procedures and protocols
- Standardizes equipment, procedures, protocols
- Minimizes reliance on memory
- Clarifies responsibilities and details task descriptions
- Ensures most qualified person performs each task
- Improves communication and information transfer between staff and between patients and staff
- Avoids excessive workloads
- Reduces handoffs



TeamSTEPPS Action Planning Worksheet – Step 5

Step 5. Develop a Plan for Testing the Effectiveness of your TeamSTEPPS Intervention

Objective: To develop a method to determine if your TeamSTEPPS Intervention achieved your aims. Did it work?

Complete the following table for each one of your aims.
State Aim:
Individual (staff position) on Change Team responsible for data collection, analysis, and presentation:
Measures and target ranges for that measure: Measure must answer if you achieved your aim.
Study design: <input type="checkbox"/> Pre- and post-intervention study <input type="checkbox"/> Other design. <u>Describe:</u>



“Test subjects” or data source and control group:

- Pre- and post-intervention study – baseline (pre-intervention) data from the study group serves as the control
- Other control group. Describe:

Data collection methods:

For both baseline and pre-intervention data, identify who will collect the data, when, where, and how.

Baseline (pre-intervention data):

Post-intervention data:

Methods for data analysis and interpretation:

What calculations will you perform with your data to determine if you achieved your aims? Examples include event counts, rates (percentages), survey scores, and time-to-event occurrences.

Data presentation methods (e.g., line graphs, run charts, bar graphs, control charts):



TeamSTEPPS Action Plan Worksheet – Step 6

Step 6. Develop an Implementation Plan

Objective: Part A: To develop a plan for training your staff in the medical teamwork knowledge and skills required to successfully implement your TeamSTEPPS Intervention.

Part B: To develop a plan for putting your TeamSTEPPS Intervention into place.

PART A: MEDICAL TEAM TRAINING PLAN – INITIAL TRAINING

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

* List trainees by group. Complete a trainee roster on a separate sheet of paper.



PART A: MEDICAL TEAM TRAINING PLAN – INITIAL TRAINING (continued)

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

* List trainees by group. Complete a trainee roster on a separate sheet of paper.



PART A: MEDICAL TEAM TRAINING PLAN – NEWCOMERS’ TRAINING

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

* List trainee by group. Complete a trainee roster on a separate sheet of paper.



PART A: MEDICAL TEAM TRAINING PLAN – NEWCOMERS’ TRAINING (continued)

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

* List trainee by group. Complete a trainee roster on a separate sheet of paper.

TeamSTEPPS



PART A: MEDICAL TEAM TRAINING PLAN (continued)

Timeline for Initial Training:

- Ensure that all baseline data are collected *prior to* implementing medical team training.

Timeline for Newcomers' Training:

Timeline for Refresher Training:

NOTES:



PART A: MEDICAL TEAM TRAINING PLAN – REFRESHER TRAINING

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

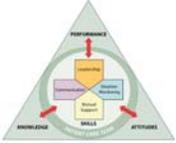
* List trainee by group. Complete a trainee roster on a separate sheet of paper.



PART A: MEDICAL TEAM TRAINING PLAN – REFRESHER TRAINING (continued)

Trainee Group (Audience)*	Trainer	Training Site	Date & Times	Training Content (Knowledge & Skills)	Training Methods & Tools

* List trainee by group. Complete a trainee roster on a separate sheet of paper.



PART A: MEDICAL TEAM TRAINING PLAN (continued)

Timeline for Initial Training:

- Ensure that all baseline data are collected *prior to* implementing medical team training.

Timeline for Newcomers' Training:

Timeline for Refresher Training:

NOTES:



PART B: IMPLEMENTATION PLAN FOR TeamSTEPPS INTERVENTION

Baseline Data:

- Check that all baseline data are collected *prior to* implementing your TeamSTEPPS Intervention.

Identify person(s) responsible for implementation:

Describe the intervention implementation plan:



PART B: IMPLEMENTATION PLAN FOR TeamSTEPPS INTERVENTION (continued)

How will you assess if the TeamSTEPPS Intervention has been correctly implemented among your staff members?

Timeline for implementation of your TeamSTEPPS Intervention:

- Check that all baseline data are collected *prior* to implementing your intervention.

NOTES:



TeamSTEPPS Action Planning Worksheet – Step 7

Step 7. Develop a Plan for Sustained Continuous Improvement

Objective: To develop a plan for continuous process improvement with your TeamSTEPPS Intervention, including plans for on-going assessment of the effectiveness of the intervention, for sustainment of positive changes, and for identification of opportunities for further improvements.

Monitoring Plan

The monitoring plan will measure over time if the intervention continues to be effective. The plan can be a continuation of your testing plan, although you may want to simplify it by reducing the frequency of measurements. Describe your monitoring plan:

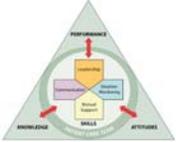
Measures and target ranges:

Data source:

Data collection methods:

Methods for data analysis and presentation:

Person(s) (staff position) responsible:



TeamSTEPPS

Plan for sustaining and spreading positive changes:

Consider: (a) recognition and rewards program; (b) continuous feedback on performance and sharing of lessons learned; (c) continued teamwork coaching and refresher training; (d) integration into existing processes; (e) publicizing successes; (f) integration of newly acquired staff

Resources required (money, time, equipment, personnel, expertise):

NOTES:



TeamSTEPPS Action Planning Worksheet – Step 8

Step 8. Develop a Communication Plan

Objective: To create a communication plan targeting major stakeholders that will generate initial and on-going support for the TeamSTEPPS Initiative and promote the maintenance and spread of positive changes.

Person(s) (by staff position) responsible for implementation and oversight of communication plan:

Stakeholder ("Who")	Communication Goal(s)	Information to Communicate ("What")	Timing of Communications ("When")	Communication Methods ("How")



TeamSTEPPS

Stakeholder ("Who")	Communication Goal(s)	Information to Communicate ("What")	Timing of Communications ("When")	Communication Methods ("How")

TeamSTEPPS



Stakeholder ("Who")	Communication Goal(s)	Information to Communicate ("What")	Timing of Communications ("When")	Communication Methods ("How")

NOTES:



The Quick Reference Guide to TeamSTEPPS Action Planning

Step 1: Create a Change Team

Objective: To create a team of leaders and staff members with the authority, expertise, credibility, and motivation necessary to drive a successful TeamSTEPPS Initiative.

- Ensure key leadership representation: senior leadership, front-line leadership
- Identify an Executive Sponsor
- Ensure key expertise representation: clinical/technical, medical teamwork, process improvement and trending techniques

Step 2: Define the Problem, Challenge or Opportunity for Improvement

Objective: To specifically state the problem, challenge, or opportunity for improvement that will be targeted by your TeamSTEPPS intervention; and to identify the involved process. ..

- Identify a problem, challenge, or opportunity that you feel could be improved with enhanced medical teamwork.
- Identify the process during which the target problem, challenge or opportunity occurs by stating what the process is, who is involved, and when and where it occurs.

Step 3: Define the Aim(s) of your TeamSTEPPS Intervention

Objective: To succinctly state in measurable terms exactly what you hope to achieve with the TeamSTEPPS Intervention.

- For each aim, state in one sentence in measurable terms what you hope will be achieved, who will be involved (whose behavior will change), and when and where the change will occur.
- Ideally, define a team process aim, a team outcome aim, and a clinical outcome aim.

Step 4: Design a TeamSTEPPS Intervention

Objective: To design a TeamSTEPPS Intervention that will address your target problem, challenge or opportunity and achieve your stated aims.

- Flowchart or map the process during which the problem, challenge or opportunity occurs - write the process steps as they currently occur identifying who is doing what, when, with what tools.
- Study the process to identify risk points where things could go wrong and lead to a recurrence of the target problem.
- Identify team strategies and tools (e.g., brief, huddle, debrief, STEP, SBAR, and I PASS the BATON) that would eliminate the risk points and prevent the problem from recurring.
- Review the evidence-base, brainstorm, and elicit input from key personnel to design your TeamSTEPPS Intervention - state what team tools and strategies will be implemented and who will use them, when and where.



- Flowchart the redesigned process as it would look with the intervention in place to identify potential benefits and negative effects.
- Evaluate your intervention using the TeamSTEPPS Intervention Checklist, and then modify it if needed.

Step 5: Develop a Plan for Testing the Effectiveness of Your TeamSTEPPS Intervention

Objective: To develop a method to determine if your TeamSTEPPS Intervention achieved your aims. Did it work?

For each aim, create a testing plan including:

- Change Team member responsible for data collection, analysis, and presentation
- A measure and target ranges for the measure.
- Study design (usually pre- and post-intervention study)
- Sample (study group) or data source with comparison group
- Methods for data collection, analysis, interpretation, and presentation.
- Timelines for baseline and for post-intervention data collection and analysis
- Resources required

Step 6: Develop an Implementation Plan

Objective: Part A: To develop a plan for training your staff in the medical teamwork knowledge, attitude, and skills necessary to successfully implement your TeamSTEPPS Intervention.

Part B: To develop a plan for putting your TeamSTEPPS Intervention into place.

Part A: Develop a Plan for Medical Team Training

- Identify your Instructors, trainee audience(s) and their specific training requirements. Determine who needs to be trained on what team knowledge/skills and by when in order to achieve your aims.
- Develop a training plan for each trainee audience including who will attend, what will be taught, when and where sessions will occur, and how training will be conducted (e.g., method of presentation, tools, supplies).
- Use TeamSTEPPS training materials that will best meet your audiences' training needs.

Part B: Develop an Implementation Plan for the TeamSTEPPS Intervention

- Ensure you have collected all baseline data before implementing the intervention.
- Identify the person(s) responsible for implementation.
- Determine how you will implement your intervention in order to achieve your aims. Identify who will use what team strategies and tools, when and where.
- Create an implementation timeline.



Step 7: Develop a Plan for Sustained Continuous Improvement

Objective: To develop a plan for continuous process improvement with your TeamSTEPPS Intervention, including plans for on-going assessment of the effectiveness of the intervention, for sustainment of positive changes, and for identification of opportunities for further improvements.

- Develop a monitoring plan for on-going assessment of intervention effectiveness including measures and target ranges; data source; methods for data collection, analysis, and use for continuous improvement; and person(s) responsible.
- Develop a plan for sustaining and spreading positive changes including rewards, feedback, integration, on-going teamwork coaching, and sharing lessons learned.

Step 8: Develop a Communication Plan

Objective: To create a communication plan targeting major stakeholders that will generate initial and on-going support for your TeamSTEPPS Initiative and promote the maintenance and spread of positive changes.

- Identify persons or groups whose support will be important for achieving your intervention aims and for maintaining positive changes. Consider organization and front-line leaders, staff directly involved in the intervention, patients, and other units impacted by the intervention.
- Develop a communication plan for each identified group including your goals for communication, who will get the information, what information you will communicate, when and how you will communicate it (e.g., reports, presentations, e-mails).
- Identify Change Team member(s) responsible for implementation and oversight.

Step 9: Putting it All Together: Write the TeamSTEPPS Action Plan

Objective: To generate a written Action Plan, based on steps 1 through 8, which will function as your “How-To-Guide” for every component of your TeamSTEPPS Initiative.

If you completed each of the worksheets for steps 1 through 8, you have already written your TeamSTEPPS Action Plan. Ensure that your final Action Plan includes all of the following:

- Identification of the Change Team
- Identification of the problem, challenge, or opportunity that will be targeted by the TeamSTEPPS Initiative
- Stated aims of your TeamSTEPPS Intervention
- Detailed description of your intervention
- A plan for testing the effectiveness of your intervention
- An implementation plan for both medical team training and for your intervention
- A monitoring plan for on-going assessment of the effectiveness of your intervention
- A communication plan to generate support for the TeamSTEPPS Initiative and to promote maintenance and spread of positive changes



- Timelines
- Resources required

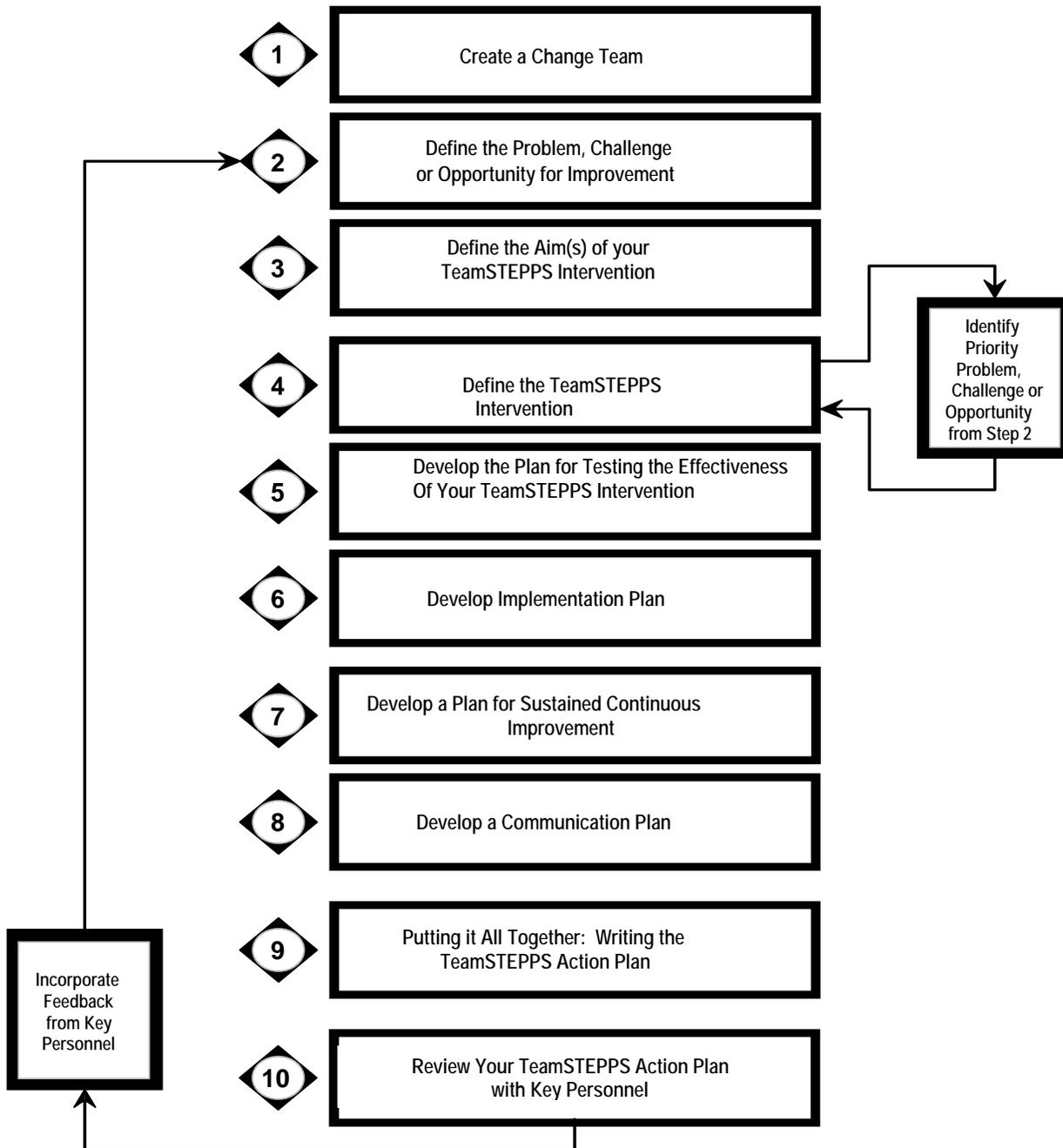
Step 10: Review your TeamSTEPPS Action Plan with Key Personnel

Objective: To generate support and elicit ideas from major stakeholders and to identify barriers to program implementation.

- Ask key stakeholders to review your Action Plan and to provide input. Request that they identify any potential problem areas and offer solutions.
- Modify your Action Plan based on their input, as appropriate.



TeamSTEPPS Action Planning At-A-Glance





Checklist for JCAHO Requirements for Action Plans

Root Causes:

- Summary of each root cause identified during the root cause analysis

Risk Reduction Strategies (Corrective Actions):

- A detailed (step-by-step) risk reduction strategy for each root cause
- An explanation for each root cause determined to NOT warrant risk reduction intervention

Person(s) Responsible for Implementation

For each risk reduction strategy:

- Identification by title of person(s) responsible for each step of the risk reduction strategy

Dates of Implementation & Completion

For each risk reduction strategy:

- Anticipated date of completion for each step of the risk reduction strategy
- Actual date of completion for any steps already completed

Plan for Measuring Effectiveness

For each risk reduction strategy, a specific plan to measure the effectiveness including:

- An objective, quantifiable indicator (measure)
- Description of sampling method including:
 - Identification of population from which sample will be taken
 - Sample size
 - Method for sample collection or recruitment
 - If random, definition of "random"
- Explanation of study design (e.g., direct observation, pre-test/post-test, audit tool)
- Description of data collection methods
- For each indicator, a target range for desired performance

Source:

Joint Commission on the Accreditation of Healthcare Organizations. *Tool to Assist Organizations in the Completion of the Framework for Conducting a Root Cause Analysis*. Available at Joint Commission International Center for Patient Safety website (www.jcipatientsafety.org)



TeamSTEPPS Intervention Checklist

- Targets a specific defined problem/challenge/opportunity and process
- Consistent with patient safety requirements
 - DoD
 - Service
 - Accreditation
- Consistent with current mission and system operating procedures
- Benefits outweigh risks
- Evidence-based
- Measurable
 - Desired result can be measured with objective quantifiable data.
 - Data is accessible, complete, and accurate.
 - Effectiveness can be monitored over time for continuous improvements.
- Feasible
 - Costs
 - Staffing
 - Equipment and other resources
- Acceptable
 - Staff
 - Leadership
 - Patients
- Patient-focused
- Can be integrated into current operations
- Sustainable
- Includes a training plan
 - Initial
 - Refresher
 - Turnover
 - Emergency procedures (rapid identification of and recovery from errors and process failures)
- Incorporates redundancy and back-up systems to minimize risk of patient harm in event of error or process failure
- Addresses human factors
 - For Example:*
 - Simplifies procedures and protocols
 - Standardizes equipment, procedures, protocols
 - Minimizes reliance on memory
 - Clarifies responsibilities and details task descriptions
 - Ensures most qualified person performs each task
 - Improves communications and information transfer between staff and between patients and staff
 - Avoids excessive workloads
 - Reduces handoffs