

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPS IMPLEMENTATION AT HARBOR-UCLA

DATE OF IMPLEMENTATION/ADOPTION: JANUARY 10, 2014

(Must have been fully implemented for a minimum of at least one year - on or before July 1, 2020)

CHECK HERE IF THIS PROJECT IS BEING SUBMITTED FOR THE COVID-19 IMPACT AWARD ONLY. (Projects must be implemented on or before December 31, 2020. **Note:** Projects implemented less than one year ago will not be eligible for any other PQA awards. In addition, once a project is submitted, you cannot submit the same project for awards consideration in subsequent years).

PROJECT STATUS: Ongoing One-time only

HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT? Yes No



EXECUTIVE SUMMARY: Describe the project in 15 lines or less using Arial 12 point font. State clearly and concisely what difference the project has made.

1 TeamSTEPS is an evidence-based set of teamwork tools designed to improve the way
 2 health care professionals communicate and work with each other. The goal is to
 3 improve patient outcomes and prevent accidental harm. More than 4,700 Harbor
 4 workforce members have attended TeamSTEPS training and the program has been
 5 implemented in all inpatient units and specialty areas. Each unit's teamwork culture
 6 was assessed at baseline and again after program implementation using a standardized
 7 survey instrument, and the program has shown substantial improvement in the
 8 workplace culture. TeamSTEPS has contributed to a decrease in patient adverse
 9 events as well. The tools taught in the program address common barriers to team
 10 performance, such as inconsistency in staff knowledge, lack of information sharing, lack
 11 of coordination and follow up, and ineffective communication among staff, patients, and
 12 patients' families. For example, the TeamSTEPS briefing tool is integrated into the
 13 daily operations on patient care units. The daily briefings help create a shared mental
 14 model for all staff, anticipate problems, and assign roles in advance. Briefing is just one
 15 of 15 tools utilized in TeamSTEPS to improve clinical teamwork.

BENEFITS TO THE COUNTY

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) = TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$ 200,000	\$ 0	\$ 0	\$ 200,000	<input checked="" type="checkbox"/>

ANNUAL = 12 MONTHS ONLY

SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS Department of Health Services/Harbor-UCLA Medical Center, 1000 West Carson Street Torrance CA 90505		TELEPHONE NUMBER
PROGRAM MANAGER'S NAME Clinton Coil, MD EMAIL ccoil@dhs.lacounty.gov		TELEPHONE NUMBER 424-306-7950
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE (PLEASE CALL (213) 893-0322 YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME) Keisha Belmaster 	DATE 6/21/2021	TELEPHONE NUMBER 424-306-6349 EMAIL kbelmaster@dhs.lacounty.gov
DEPARTMENT HEAD'S NAME AND SIGNATURE Christina Ghaly 	DATE 06/25/2021	TELEPHONE NUMBER 213-288-8050

****ELECTRONIC, WET, OR SCANNED SIGNATURES ARE ACCEPTABLE****

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPS IMPLEMENTATION AT HARBOR-UCLA

1st FACT SHEET – LIMITED UP TO 3 PAGES ONLY: Describe the **challenge(s), solution(s), and benefit(s)** of the project to the County. What quality and/or productivity-related outcome(s) has the project achieved? Provide measures of success and specify assessment time frame. Use Arial 12 point font.

CHALLENGE: Multiple published studies have shown that lack of communication and teamwork are the primary cause of preventable medical errors. Our experience in looking at serious medical accidents at Harbor showed that staff worked very hard and were competent at doing their own jobs, but often lost track of the current situation, what everyone else on the team was doing, and what needed to be done next.

For example, in one case, a critically injured trauma patient was rushed to the operating room for emergency surgery by both the Trauma Surgery and Orthopedic Surgery teams. Each team operated on a different part of the body to control serious bleeding, and intentionally left gauze sponges in two different surgical sites. While this was appropriate, and likely saved the patient's life, each team believed the other team was going to remove the gauze sponges. As a result, one of the sponges was accidentally left in the patient, requiring additional surgery for removal. Maintaining situational awareness and achieving a shared mental model in these kinds of complex and urgent situations is not easy, and simply wanting to communicate better is not enough.

SOLUTION: The TeamSTEPS program was developed by the Agency for Healthcare Quality (AHRQ), which is a division of the U.S. Department of Health and Human Services (DHHS). It stands for **Team Strategies and Tools to Enhance Performance and Patient Safety**. Based on work in the 1990s by the Department of Defense Health System, the program materials, such as slides, handouts, and videos are available for free to any health system in the United States.

The training materials are customizable, and each facility is responsible for independently creating their own implementation plan. At Harbor-UCLA Medical Center, we developed our own training system, customized slideshows, and shot some of our own videos using local Harbor staff to demonstrate TeamSTEPS skills. Our training classes taught specific skills for staff to use while providing patient care. These skills fall under four primary modules which are: Leadership, Communication, Situation Monitoring, and Mutual Support. Examples of tools are: group sessions such as briefings and huddles; communication tools such as SBAR (Situation, Background, Assessment, and Recommendation) and callout; tools that support assertiveness such as CUSS (I'm concerned, I'm uncomfortable, this is a safety issue, stop); and wellness tools such as debriefing.

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
“Leading with Excellence”

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPS IMPLEMENTATION AT HARBOR-UCLA

Use Arial 12-point font.

Many hospitals around the country have tried to implement TeamSTEPS by sending a few staff to teamwork training or by implementing all the tools at once in all areas. These approaches generally fail to reliably change staff behavior. Harbor’s TeamSTEPS implementation was unit-based and gradual over time. Each unit selected staff to undergo a two-day training to become a TeamSTEPS Coach. In this way, local experts were imbedded in the unit on each shift to support implementation and sustainment. Every workforce member in the unit was required to complete a 90-minute TeamSTEPS Part I class to learn seven of the TeamSTEPS tools prior to go-live for each unit. Approximately one year later, a follow up 60-minute TeamSTEPS Part II class adds eight more tools. The initiative is highly interdisciplinary with doctors, nurses, pharmacists, social workers, unit clerks, nurse attendants, and other staff are receiving the same training and the same tools. The first pilot units, the surgical and cardiothoracic intensive care units, were the first to implement in January 2014. Lessons were learned with each implementation and used to improve the next one. As of July 2020, the program is implemented in over 50 units at Harbor-UCLA Medical Center, including all inpatient, procedural, and specialty areas, as well as most clinics.

The cornerstone of the program is the unit briefing. This is a time for staff to come together at the beginning of the shift to establish who is on the team and their roles, anticipate problems, and address issues. During the briefing, critical updates (such as equipment problems or staffing shortages) are communicated to the staff, thus raising situational awareness. Staff then use this up-to-date information to make real-time decisions to improve coordination and ensure proper patient care with the available staff and resources on any given shift.

A nurse who has not learned the TeamSTEPS tools might be afraid to speak up if they see a doctor making a mistake. A nurse trained in TeamSTEPS will use CUSS to say, “I’m uncomfortable with the medication dose, are you sure it’s correct?” A doctor who has not learned the TeamSTEPS tools might assume it doesn’t matter if anyone else on the team knows the plan for the patient. A doctor trained in TeamSTEPS will call a team huddle to share his/her plan and get feedback from the rest of the team. All of this creates a safer environment which supports open communication.

BENEFITS: To evaluate the effectiveness of the intervention, Harbor conducted staff surveys on a rolling basis about six months prior to and about six months after implementation. The teamwork culture survey consists of 20 questions broken down into five areas: Team Structure, Leadership, Mutual Support, Situation Monitoring, and Communication. Approximately seven years of data has been gathered across units. Surveys used a five-point Likert scale to assess the survey data that we use as

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPS IMPLEMENTATION AT HARBOR-UCLA

a tool to gauge the teamwork environment in a unit and for improvement and sustainability of the program.

Most units showed substantial improvement in the local unit culture after implementation. For example, in the Adult Emergency Department, the percentage of doctors agreeing with the statement, "leaders take the time to meet with staff to develop a plan for patient" increased from 46% to 78%, and the percent agreeing with "staff use a standardized method to share information when handing off a patient" went from 72% to 94%, and "my unit has clearly articulated goals" went from 54% to 83%.

Staff in the Labor and Delivery and Neonatal Intensive Care Unit (NICU) agreed with the statement "Feedback between staff is delivered in a way that promotes positive interactions and future change" 56% of the time before implementation and 79% after. For the statement "staff verbally verify information that they receive from one another", there was an increase in agreement from 69% to 91%. Each of these is a key element of teamwork culture and a safe environment for care.

Not every unit showed improvement in every measure. These surveys were also used to identify difficulties to direct interventions, opportunities for improvement and to sustain progress. In addition, every unit is directly observed by staff from the Clinical Quality and Safety program at least once a month and rated as either green, yellow, or red in the effectiveness of the TeamSTEPS program. Units rated as yellow or red receive additional monitoring and interventions with more frequent observations until they return to a green status.

Qualitative data were collected from staff as well. For example, one nurse in the Eye Clinic reported: "Since TeamSTEPS was implemented, it helped with the flow and the organization of the clinic. Having the briefing in the morning allows the staff to know what to expect throughout the day. Communication has gotten better, and the staff can open up. TeamSTEPS is a great program that helped the clinic."

There is evidence that improvements in the teamwork environment are associated with more efficient and effective healthcare delivery. For example, in studies performed at the Johns Hopkins Medical Center in 2003 and 2006, teamwork improvements were associated with shorter patient length of stay in intensive care units, and reduction in postoperative infections. In a 2006 study at The Harvard Medical School, teamwork training was associated with a 50% reduction in serious adverse patient events and medical errors, and a 50% reduction in claims for medical malpractice. Data from our own experience at Harbor will be presented in the section on cost avoidance on page 6.

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPS IMPLEMENTATION AT HARBOR-UCLA

Linkage to the County Strategic Plan – 1 page only. Which County Strategic Plan goal(s) does this project address? Explain how. Use Arial 12-point font.

Goal I: Make Investments that Transform Lives (Strategy I.2 – Enhance our Delivery of Comprehensive Interventions).

Harbor-UCLA TeamSTEPS addresses this goal by improving the healthcare team and providing them with tools to better communicate and coordinate patient care. This will further allow patient care to be provided in a more efficient manner. In addition, having tools to improve communication for optimal team performance will increase the focus and awareness of staff regarding prevention initiatives.

Goal III: Realize Tomorrow's Government Today (Strategy III.1 – Continually Pursue Development of Our Workforce).

By pursuing the development of our workforce, we are creating a safer teamwork environment which can contribute to fewer malpractice claims. It also promotes better peer support and resilience among the staff knowing that the institution that they work for and the environment that they are coming into strongly supports teamwork.

Further, having specific tools and strategies that support better teamwork and improve communication directly impacts operational effectiveness. It contributes to improved throughput by involving all staff types in the care of a patient. For example, holding briefings which is being held for planning in the beginning of a shift or procedure will allow for relevant information to be conveyed to the team for the unit thus allowing the unit to operate more effectively and efficiently.

Moreover, engaging the patients and valuing the input of staff in the delivery of patient care will allow for a better response to the needs and expectations of both sides. The TeamSTEPS program emphasizes the need to have an interdependent relationship between all staff and the patients for better patient outcomes.

The overall vision of the County of Los Angeles in the 2016-2021 Strategic Plan is to be a *value driven culture, characterized by extraordinary employee commitment to enrich lives through effective and caring service, and empower people through knowledge and information.* This aligns with the core values of the TeamSTEPS program. Our mission is to promote multidisciplinary teamwork and effective communication through having shared mental models in order to ensure safe and quality patient care.

Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: TEAMSTEPSS IMPLEMENTATION AT HARBOR-UCLA

COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFITS TO THE COUNTY): If you are claiming cost benefits, include a calculation on this page. Please indicate whether these benefits apply in total or on a per unit basis, e.g., per capita, per transaction, per case, etc. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation. Use Arial 12-point font

Cost Avoidance: Costs that are eliminated or not incurred as a result of program outcomes. Please indicate whether these are costs to the County or to other entities.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes. Please indicate whether these were expenditures by the County or by other entities.

Revenue: Increases in existing revenue streams or new revenue sources to the County as a result of program outcomes.

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$ 200,000	\$ 0	\$ 0	\$ 200,000	<input checked="" type="checkbox"/>

ANNUAL = 12 MONTHS ONLY

This program is primarily intended as a service enhancement project. Measurable effects on the teamwork and safety culture of the units are discussed in the "Benefits" section on pages 3-4.

Additionally, there is evidence that this type of program can reduce serious adverse events and expenditures for managing and settling malpractice claims. Starting in 2010, the California Department of Public Health (CDPH) required hospitals to report all serious adverse events to their Patient Safety reporting system. During the four-year period from 2010 to 2013 prior to TeamSTEPSS implementation, Harbor reported an average of 7.5 serious adverse events per year. During the four-year period after TeamSTEPSS implementation in most units, from 2016 to 2019, there were an average of 3 serious adverse events per year, a reduction of approximately 4.5 events per year.

Some of these serious adverse events can lead to medical malpractice claims. If even ¼ of the events lead to a claim, preventing 4.5 events per year would represent one major claim per year. Given that a single claim can cost hundreds of thousands of dollars, we are estimating an annual benefit of \$200,000 in cost avoidance.