

## Is Team Training Effective at Healthcare Sites?

### Executive Summary:

- Can healthcare team training help groups reach the Triple Aim of healthcare
- Dr. Eduardo Salas along with three other authors demonstrate that it can
- Team training no matter what the design helps providers deliver better care at lower costs
- There are a number of resources online that are useful in team training

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In the June 2016 issue of the *Journal of Applied Psychology* the authors Eduardo Salas, Lauren Benishek, Megan Gregory and Ashley Hughes in an article titled “Saving Lives: A Meta-Analysis of Team Training in Healthcare” set out to answer the question as to whether team training is effective in healthcare, whether it leads to reduced mortality and improved health outcomes.

Their research stated that a preventable medical error occurs in one in every three hospital admissions and results in 98,000 deaths per year, a figure corroborated in *To Err is Human*. Teamwork errors through failure in communications accounts for 68.3% of these errors. Thus, effective team training is necessary to reduce errors in hospitals and ambulatory sites.

The authors used a meta-analysis research method to determine whether there are effective training methods in the healthcare setting that can have a significant impact on medical errors, which would in turn improve outcomes and reduce costs by eliminating the costs associated with the errors. A meta-analysis is a broad research of existing literature to answer the research questions posed by the research team or authors.

The research team posed three questions to answer:

1. Is team training in healthcare effective?
2. Under what conditions is healthcare team training effective?
3. How does healthcare team training influence bottom-line organizational outcomes and patient outcomes?

The team limited its meta-analysis to healthcare teams even though there is a great deal of research available about the effectiveness of team training in other industries and service organizations. The team believes that healthcare teams differ significantly from teams in other areas in as much that there can be much greater team fluidity in healthcare. That is, team membership is not always static, especially at sites such as hospitals and outpatient surgical centers. There are more handoffs at these sites.

Although there is greater fluidity in team membership at healthcare sites, roles are well defined. For instance, a medical assistant’s role at a primary care site is well defined even though different MA’s may be working with one physician. These roles are further defined and limited by state licensure. As the research team stated in their article, “these features make healthcare team training a unique form of training that is likely to be developed and implemented differently than training in more traditional teams...”

The team assessed their research of articles using Kirkpatrick's model of training effectiveness, a widely used framework to evaluate team training. It consists of four areas of evaluation:

1. Trainee reactions
2. Learning
3. Transfer
4. Results

*Reaction* is the extent to which the trainee finds the instruction useful or the extent to which he enjoys it. *Learning* is defined as a relatively permanent change in knowledge, skills and abilities. The authors note that team training is not a hard skill, as learning to draw blood. Rather, it is a soft knowledge skill. Some researchers question whether it is possible to measure the acquisition of these soft team skills effectively. The team of authors effectively argue that it can.

*Transfer* is the use of trained knowledge, skills and abilities at the work site. That is, can team training be effectively applied in the work setting? *Results* are the impacts of the training on patient health, the reduction of medical errors, the improved satisfaction of patients and a lowering of costs in providing care.

In order to assure that the changes in these four areas were 'real' the team only used literature that had both pre-assessments and post-assessments to see if there were statistically significant changes in the four areas.

Using this assessment rubric the team was able to answer the three questions that it posited. First, team training in healthcare is effective. Healthcare team training closely matches training in other industries and service organizations.

Secondly, training is effective, surprisingly, regardless of training design and implementation, trainee characteristics and characteristics of the work environment. The use of multiple learning strategies versus a single training strategy does not matter. Simulations of a work environment are not necessary. Training can occur in a standard classroom.

Training is effective for all staff members regardless of certification. Training of all clinical personnel as well as administrative staff is effective. Team training also is effective across all care settings.

Lastly, the team's meta-analysis shows that within the Kirkpatrick rubric team training is effective in producing the organizational goals of better care at lower costs with higher patient satisfaction. In the rubric trainee reactions are not nearly as important as learning and transfer in producing results. It is important that trainers use both pre-training assessments and post-training assessments to measure whether their learning of skills, knowledge and abilities were learned and whether these were transferred to the work site. Effectiveness of training should always be assessed in order that training programs can be consistently improved.

In my September 2017 newsletter "Team Meetings" I described the elements of good team training as well as provided a link to the American Medical Association's team training module as part of *Stepsforward* series of learning modules. You can find this newsletter online [here](#). With these training instructions as a beginning healthcare providers can learn to work more

effectively as teams and thus produce better care at a lower cost with higher satisfaction of both patients and providers.

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