Chapter 1 The Importance of Training



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Abstract Understanding how to use training best practices can improve training outcomes and increase efficiency. It is important to meet the development needs of the health care workforce who take care of patients by providing effective and succinct training. The goal of this chapter is to introduce the importance of evidence-based practices for learning professionals. Evidence-based principles will be discussed throughout the book to help guide the management and delivery of high-quality training programs.

 $\textbf{Keywords} \ \ \textbf{ADDIE} \cdot \textbf{Evidence-based training} \cdot \textbf{Best practices} \cdot \textbf{Performance} \cdot \textbf{Intervention}$

Learning Outcomes

- 1. Explain the importance of evidence-based training for organizational success
- 2. Discuss the difference between education and training
- 3. Describe the rationale for aligning training with the organizational mission and vision

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The Importance of Using Evidence-Based Training Methods

Shanice was tasked with creating the training for an upcoming health information technology implementation. She was part of the nursing informatics team and was very familiar with how the new technology would work, how it interfaced with other technology used in the hospital, and the decisions made when the technology was developed. However, Shanice did not have any guidance for how to create evidence-based training to prepare staff for the upcoming implementation. Based on past training experiences in the organization, and faced with a minimal training budget, Shanice created a 68-page presentation that went into great detail about every aspect of how the new technology would work once implemented. This document was printed and distributed to each nursing unit, where it sat on a table in the break room. Those nurses brave enough to look at the document quickly put it down after scanning just a few pages of information. As the implementation date drew closer, organizational leaders believed that all of the staff were getting the training they needed to effectively use the new health information technology system.

When the electronic health record (EHR) system was finally implemented, nursing leaders noted an immediate rise in late medication administrations, missed medications, medication errors, missed orders, treatments that were not delivered, and increased nursing dissatisfaction. Over the next few weeks overtime increased, hospital-acquired patient infections were on the rise, physicians expressed frustration with the EHR, nurses were taking more sick days, and some of the senior nurses turned in their resignations. Change can create turbulence within an organization, but how could an evidence-based approach to EHR training help to alleviate the negative impact of this change?

Introduction to Evidence-Based Training

Training is expensive. Care providers are removed from the work schedule and paid to attend class while a replacement care provider is paid to care for patients. Additionally, poor training can result in increased health care errors, decreased efficiency, patient dissatisfaction, and staff frustration. The purpose of this book is to provide a source of evidence-based best practices that informaticists and learning professionals can reference to develop and implement effective health information technology (HIT) training that best meets the needs of the learners who support patient care. Currently, there are minimal resources to guide evidence-based training for the informatics nurses and other health care staff tasked with developing and delivering HIT training. An understanding of training best practices, learning theories, and knowledge of the evidence that is used to guide training best practices can improve patient outcomes, decrease health care errors, and improve staff satisfaction. The goal of this book is to provide the knowledge needed to support a more confident and effective approach to delivering and managing training.

Learning professionals are able to produce consistent and high-quality training by consistently using evidence-based training methods. One of the most common training best practices is the ADDIE Model, which provides a robust framework for determining training needs, identifying interventions, and evaluating outcomes [1]. ADDIE stands for Analyze, Design, Develop, Implement and Evaluate, and each of the steps of the ADDIE model highlights the purpose of a training program. Every training program starts with a gap in knowledge or skills, referred to as a performance problem because without the proper knowledge and skills, staff cannot perform as expected with new technology. The ADDIE model assists training professionals to address performance problems by evaluating training from three different perspectives; the organizational perspective, team perspective, and individual employee perspective. The ADDIE Model will be covered in more detail in later chapters along with other frameworks used for structuring efficient and effective training content.

An additional important theme for learning professionals to consider is when and how to use training best practices, and knowing what to do and what to avoid when it comes to delivering effective training. Many times, this knowledge comes from experience gained through trial and error. Throughout this book, the authors will share their experience and wisdom by providing real-life examples that help illustrate the importance of evidence-based practice. Just as patient care delivery is based on evidence and best-practices, learning professionals can utilize established guidelines and evidence developed by other learning professionals to guide efficient and effective training programs.

To begin with, there are some general guiding principles that should be considered as essential when it comes to developing training. The first item is educating health care leaders, and reinforcing the importance of creating evidence-based training developed by using established frameworks and learning theories. Training must be structured in a way that best meets the needs of the learners. When a formal needs assessment is not conducted and established models are not used to fully understand performance issues, training will be less effective and may possibly focus on the wrong problem. An example of this is when learning professionals attempt to devise a *one size fits all* strategy to address a performance issue.

Although at first glance a one-size fits all training plan might appear to save money and resources, this strategy rarely works well and often causes learning professionals to lose credibility in the eyes of the learners and organization. Requiring learners to sit through a class to acquire information about a topic that they already know, or having them learn something that they will never use is a waste of time and resources. Following the correct steps of the ADDIE Model is essential to developing the right training for the right employee at the right time.

Training Is Not Always the Solution

It is important to use evidence and best practices when developing and delivering training, however, training is not always the correct solution to a performance problem. A thorough needs analysis can identify if the problem is technology related,

workflow related, or associated with a behavioral issue. An example of a scenario when training was not the right solution is the following request. Leaders asked that a group of nurses undergo retraining on how to use an EHR communication process correctly. The identified problem was that messages created by the nurses were not being saved to the patient's chart. In this case, leaders decided that the nurses were doing something wrong and the initial solution was to require the nurses to go back through training. Training is often the first solution proposed by leaders when a critical problem arises. After analysis, the real issue in this case was identified as a system problem that randomly caused some messages to not be saved. Without a needs assessment, unnecessary time and resources would have been devoted to an issue that had nothing to do with training. In addition, unnecessary training can be viewed as a punitive action with a decrease in staff morale [2].

There are times when an informal training solution may be the best method to meet the needs of the learners. After performing a needs assessment, and following the steps of the ADDIE Model, it may be determined that creating a job aide, or tip sheet is the best solution for demonstrating a recent change in the EHR system. An informal style of training may be the best solution for smaller changes, especially if the learners are already familiar with the system. Understanding the audience and selecting the correct type of training is essential to providing effective training.

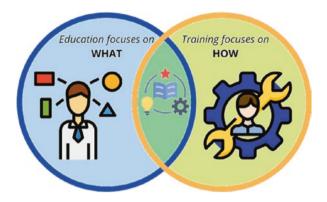
The previous examples have illustrated the importance of following evidence-based practices when it comes to providing training solutions. Awareness of the performance issue and knowledge of the learning audience is key to establishing a robust training program. When first implementing evidence-based training, it may take some time for the entire team of learning professionals to incorporate these evidence-based training practices so that they become part of a standard procedure for the entire training group. Once training best practices are in place, the next challenge will be to establish a routine for partnering with health care leaders and stakeholders to implement evidence-based change.

Reinforcing the role of the training team as a formal partner in providing organizational solutions will help solidify the partnership and build commitment among leaders. In subsequent chapters, information about creating a culture where training is a regular part of ongoing efforts to implement successful changes within the organization will be presented. As evidence-based training practices are incorporated into an organization and training outcomes improve, the use of evidence-based training practices will build credibility for the training team.

Education Versus Training

Many people use the terms *education* and *training* interchangeably. How these terms are defined and understood impacts the entire process of designing, developing, and delivering training. The purpose of training is to develop skills in order to perform a task. The goal of education is to obtain knowledge [3]. To further highlight the difference between education and training, would a bakery be more

Fig. 1.1 Education vs. training



successful if the baker has undergone education about pastries, or has obtained hands-on training to make pastries? In reality, education and training can be intertwined, or the process of training can lead to education when more knowledge is desired (see Fig. 1.1). Conversely, education can include training so that both knowledge and skills are developed, this is often seen in simulation labs for nurses and nursing students [4].

Understanding the difference between training and education is important because it drives the approach used to design and deliver new skills or knowledge. When an educational approach is employed, the focus of the activity will be on providing information and knowledge to learners. The educational outcome is for the learner to leave the course with new knowledge. In nursing, examples of education could include a class on the function of the liver, new care approaches for diabetic patients, or information about how to assess for suicide risk in a patient. These courses do not include a hands-on component and a large portion of didactic courses in colleges and universities are examples of education rather than training.

On the other hand, the focus of training is to exit the course with the ability to perform a new skill or task. The training approach includes opportunities for hands-on practice so that learners can perform in a real-world environment after training is completed. Examples of training classes for nurses include simulation with manikins, performing a new wound care technique on a simulator, learning to tie patient restraints in a lab, or developing the skill to use health information technology (HIT). However, HIT training without interspersed education that presents the purpose for each process will result in a skills-only approach that will not fully meet the needs of the learning audience, or attain the quality outcomes needed in healthcare.

Because training is primarily skills focused, the training audience may be grouped by those who will use the same skills and processes in their daily work. This means that unit secretaries might attend one HIT class focused on the activities found in their daily work, nursing leaders may attend a class focused on different information and processes that align with their roles, and patient care nurses on a specific unit may receive training that includes only what is essential to know to perform their daily work.

Regardless of the educational approach, adult learners value understanding why the information or skills they are learning are important, and to interpret what is learned into the greater context of their role [5]. Education or knowledge that is delivered without context will not be useful for a nurse or other healthcare provider, and training that does not include the context, the purpose, and the importance of each step in a process will not provide reliable adherence to the new processes. Further information about learning theories and brain science will be presented in Chap. 5.

Aligning Training with Mission and Vision

In the nursing profession, the most current evidence and best practices are used to guide the care provided to patients. This information is available to nurses and healthcare workers through written policies, guidelines embedded in the electronic health record, and scholarly databases that can be accessed with the click of the mouse. In light of all of the focus on using evidence-based resources available to nurses and other caregivers for the best provision of healthcare, are we using the most current best practices and evidence to guide the development and delivery of health information technology training?

In subsequent chapters, evidence and best-practices from the training industry will be presented to provide the foundations for HIT training programs that support each organizational mission and vision by producing training that is not only more efficient, but also more effective at generating learning outcomes that can help healthcare providers to utilize technology in a more effective manner. When health care providers are adequately trained to use HIT, patient privacy is supported, and patient care is safer and of a higher quality [6, 7]. HIT has been widely used in healthcare for nearly a decade, yet studies continue to highlight the impact of poor training on patient outcomes, nursing satisfaction, healthcare quality and safety, patient satisfaction, and the validity of reportable healthcare data [8–12].

When a training program is developed, it is important to align the program with the organizational mission and vision. Aligning training with the mission ensures that leaders in the organization are supportive of the training program. In addition, if training is aligned with the mission, the organizational mission can be embedded into the training content so that learners can clearly see how the changes being presented in training align with the mission and help support or grow this mission. This alignment with strategy is important so that learners can clearly see that a change, which may feel threatening to the staff, is intended to help the organization continue to more forward according to their mission.

Aligning training with the mission and vision also requires alignment and involvement of organizational leaders. It is no secret that the implementation of health information technology can often trigger resistance and frustration among healthcare staff. Involvement of leaders can help to provide endorsement of the training at the highest levels, and positive messages in support of the training often provide benefits that can help guide acceptance of the change.

Why Is Training Important?

As changes take place in the work environment and technology advances, there will always be a need for employees to understand and align with these changes through development of their knowledge and skills. Training professionals and their teams provide a valuable service in helping employees develop their skill sets so they can adapt to changes and be more efficient in performing their jobs. When employees feel confident about doing their job because they possess the proper knowledge and skills, they become more productive and add greater value to the organization. Another benefit of training is that employees who are confident deliver better results and improved outcomes for the organization.

Nurses and other clinical staff benefit from training every day as they take care of their patients. They rely on training to show them the correct process for taking care of patients and documenting in the EHR. Training is essential in helping to prevent errors and reduce adverse incidents that affect patient care. Without the proper training, clinical staff can put their patients at risk as well as put themselves at risk. When nurses and other clinical staff possess the proper training and know where to find training resources as they need them, they become better equipped to handle change and take care of their patients. Increased skills as delivered through effective training give staff the knowledge and ability to do their jobs, reducing stress, burnout, and increasing employee satisfaction. Additionally, when a patient receives confident care from a well-trained healthcare provider, patients feel that they are receiving good care which often helps with recovery.

Summary

Today's health information technology is complex, and EHR training is essential for providing safe patient care. Nurses and other clinical staff use the EHR and other technology every day to document care, and technology cannot be separated from clinical care. It is critical that staff receive the most effective training on how to use health information technology based on their role. The EHR contains the information needed to provide safe patient care. Information within the EHR is considered the facility's legal record of the treatment course provided to patients, and the patient's response to treatment. It therefore becomes critical that the data entered in the EHR record is accurate and complete. Learning professionals play an important part in training and preparing clinical staff to use the medical record and other health information technology safely and effectively. Insufficient training can lead to missing information, medical errors, and produce unreliable data that can place the organization and patient in jeopardy.

Training is a key element in employee satisfaction and engagement. When employees feel that the organization that they are working for is investing in them, they become more motivated and engaged. Training helps with instilling confidence

and building proficiency. It also promotes continuous improvement and learning opportunities that can provide career development and growth over time. All these elements help to enhance the employee experience and create loyalty and retention.

Discussion Questions and Answers

1. Learning professionals are able to produce consistent and high-quality training by using evidence-based training methods. Which model/method was discussed in Chap. 1? Why it is important?

One of the most common training best practices is the ADDIE Model, which provides a robust framework for determining training needs, identifying interventions, and evaluating outcomes. The ADDIE model assists training professionals to address performance problems by evaluating training from three different perspectives; the organizational perspective, team perspective, and individual employee perspective.

- 2. Why is it important to use evidence-based practices when developing training? It is important to use evidence-based practices because they provide a framework to use for conducting a needs analysis to determine the root cause of a problem. In some cases, training may be the recommended solution and in other cases a non-training intervention may be required.
- 3. What is the difference between training and education?

When an educational approach is employed, the focus of the activity will be on providing information and knowledge to learners. The educational outcome is for the learner to leave the course with new knowledge. On the other hand, the focus of training is to exit the course with the ability to perform a new skill or task. The training approach includes opportunities for hands-on practice so that learners can perform in a real-world environment after training is completed.

4. Why is it important to align a training program with the organizational mission and vision?

Aligning training with the mission ensures that leaders in the organization are supportive of the training program. In addition, if training is aligned with the mission, the organizational mission can be embedded into the training content so that learners can clearly see how the changes being presented in training align with the mission and support or grow this mission.

References

- Nair SR (2017) Using the Addie model to create effective training interventions. Retrieved October 10, 2021 from https://www.linkedin.com/pulse/using-addie-model-create-effective-training-sajan-nair
- Wright D. The ultimate guide to competency assessment in health care. Creative Health Care Management; 2005.
- Katsikas S. Health care management and information systems security: awareness, training or education? Int J Med Inform. 2000;60(2):129–35. https://doi.org/10.1016/ s1386-5056(00)00112-x.

- Vecchione A. Practical education: a nursing simulation lab offers efficient, cost-effective training. NJBIZ. 2019;32(6):9–11.
- Knowles MS, Holton EF III, Swanson RA. The adult learner: the definitive classic in adult education and human resources development. 6th ed. Elsevier Butterworth Heinemann; 2005.
- 6. Kisekka V, Giboney JS. The effectiveness of health care information technologies: evaluation of trust, security beliefs, and privacy as determinants of health care outcomes. J Med Internet Res. 2018;20(4):e107. https://doi.org/10.2196/jmir.9014.
- Strawn JA. Maintaining registered nurses' currency in informatics. Las Vegas: University of Nevada: 2017.
- Colicchio TK, Cimino JJ, Fiol GD, Del Fiol G. Unintended consequences of Nationwide electronic health record adoption: challenges and opportunities in the post-meaningful use era. J Med Internet Res. 2019;21:6), N.PAG-N.PAG, https://doi.org/10.2196/13313.
- McBride S, Tietze M, Robichaux C, Stokes L, Weber E. Identifying and addressing ethical issues with use of electronic health records. Online J Issues Nurs. 2018;23(1):6–6. https://doi. org/10.3912/OJIN.Vol23No01Man05.
- Meyerhoefer CD, Sherer SA, Deily ME, Chou S-Y, Guo X, Chen J, Sheinberg M, Levick D. Provider and patient satisfaction with the integration of ambulatory and hospital EHR systems. J Am Med Inform Assoc. 2018;25(8):1054–63. https://doi.org/10.1093/jamia/ocy048.
- Olivares Bøgeskov B, Grimshaw-Aagaard SLS. Essential task or meaningless burden? Nurses' perceptions of the value of documentation. Nordic J Nurs Res. 2019;39(1):9–19. https://doi. org/10.1177/2057158518773906.
- 12. Schoenbaum A, & Carroll W (2020) Nursing informatics key role in defining clinical workflow, increasing efficiency and improving quality. HIMSS Resource Center: Informatics. Retrieved October 10, 2021 from https://www.himss.org/resources/nursing-informatics-key-role-defining-clinical-workflow-increasing-efficiency-and

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