

## Rapid Technology Adoption Through Empowerment

By Noelle Cherkezov

*Successful technology training for clinicians and staff relies on five key practices.*



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Imagine if your organization spent millions of dollars implementing a new software system, but the implementation team was given the vast majority of resources and training was underfunded and haphazard. Three years later, you discover that two-thirds of your clinicians aren't using the system and those who have adopted it are creating their own workflows and corrupting data almost beyond repair.

In 2005, end-user problems were the most common reason IT implementations failed and up to 76 percent of end users had a failing or substandard understanding of their new systems, according to AMR Research. If your organization expects different results during its next software implementation, different methodologies for technology adoption are needed.

Rapid adoption of health information technology can only be achieved by empowering clinicians, which means providing them with the tools to rapidly acquire knowledge, experience and confidence using a new system. Traditional methods such as train-the-trainer and classroom training have never been truly effective ways for end users to acquire and apply knowledge or gain confidence. But by empowering end users, each clinician takes control of his or her own learning experience and is able to quickly absorb all the necessary, job-specific information.

### The Building Blocks

There are five building blocks in empowered learning:

**Role and task-based learning:** Traditional training focuses on teaching users every function of a new software system. However, after many hours in a classroom, clinicians and staff are too overloaded to remember the critical information needed to perform their specific jobs.

In contrast, empowerment focuses on accomplishing individual tasks using new technology, such as scheduling an appointment or conducting a study. Training for the sake of training is replaced with targeted learning. When staff members receive only the information required to accomplish specific tasks, they immediately become more efficient in the system and more effective at taking care of patients.

**Small bursts of information:** There is a small window of time—less than one second—during which the brain recognizes information as new and becomes open and receptive. If this window of opportunity is missed, the brain will remain closed and unreceptive to new input. Even if the brain is receptive, the typical attention span of an adult is typically less than 10 minutes. Multiple hours of classroom training practically ensure the brain will be closed prior to the first break.

Empowering clinicians and staff is accomplished by presenting small bursts of information. Each time a staff member enters the education environment is a new opportunity for the brain to become receptive and the learner to be engaged. This way, he or she is not overloaded by the amount and duration of information presented, which leads to increased retention.

Another substantial benefit of presenting small bursts of information in the health care environment is increased efficiency. Clinicians are not taken away from patient care for hours or days to complete training. Instead, small portions of education can be completed throughout a workday or during periods of downtime. Providers spend more time caring for their patients and less time learning new technology.

**Adhering to adult learning theory:** Traditional training fails to meet another unique need of adult learners, which is to be self-directed. In the classroom, participants are taught the same information at the same pace. Learners on either side of this narrow structure either fall behind or become bored.

Empowerment puts clinicians and staff back in control. Instead of feeling dictated to, self-directed learning empowers them to decide not only when and where to receive knowledge, but its pace, duration and process. For example, if a nurse has a suite of online courses, he or she may decide to take them all at once at home or over the duration of a week with a group of co-workers. This automatically transforms learners into active, engaged participants. As a result, clinicians and staff will naturally accept the responsibility to learn the material on their own.

**Multigenerational platform:** Different generations have dramatically different learning styles. For example, older learners are usually more fearful of failing and will take time to gain confidence with a new system prior to attempting a test. Alternatively, younger learners are more likely to opt out of the training completely and go directly to the test, a practice known as fast-fail.

With the current health care workforce shortage, the industry cannot afford to marginalize younger generations. Empowerment requires accommodating different learning techniques by providing multiple learning pathways including watching demonstrations, practicing the task with and without prompts, and testing knowledge.

**Acquisition vs. application:** All too often, the gap between the acquisition of knowledge and its application is too wide to bridge. For example, traditional classroom training is usually conducted weeks or even months prior to a new software system implementation. Even worse, classroom training is sometimes completely non-participatory with the instructor demonstrating how to use the application.

The accumulation and application of knowledge cannot be left to chance—it must be strategic and purposeful. An effective way clinicians and staff can accumulate experience is in a “sandbox”—a test environment of the system for the purpose of exploration and learning. Learners are guided to perform specified role-based tasks in the sandbox without fear or real-world consequences such as ordering prescriptions or erasing medical records.

### **The Results: Stanford Hospital & Clinics**

Stanford (Calif.) Hospital & Clinics recently updated its radiology information system from a legacy system. To train its workforce, Stanford used online, role-based simulation modules, quick reference guides attached to every computer station, application and workflow coaches during go-live, and a six-month change leadership and communication strategy.

Stanford asked employees to rate their knowledge of the old legacy system and confidence in their ability to do their job using the system. Knowledge increased

from 45 percent to 95 percent after the new implementation and empowerment strategy, and confidence increased from 50 percent to 93 percent.

Health care information technology is designed to increase patient safety and satisfaction. However, none of these benefits can be realized if clinicians and staff cannot effectively and efficiently perform their daily tasks using the technology. Rapid technology adoption is not a one-time training event nor can it be achieved without planning. If software implementations are to succeed, leaders must give their clinicians and staff the proper tools and training to become empowered.

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*This article first appeared on April 23, 2008 in HHN Magazine online site.*

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