

Enterprise-wide Training of Electronic Medical Records (EMR) Software



Healthcare

Client Overview

The client is a community-based healthcare system in the Southeastern U.S. that connects patients to a complete range of services through not-for-profit hospitals, outpatient and imaging facilities, and other regional services that reach beyond the immediate area. The system includes 10 hospitals and 31 ambulatory/outpatient centers.

Case Summary

In early 2006, the client began a massive 7-year, 3-phase initiative to implement Cerner Millennium to create a secure, digital record center where healthcare team members would have seamless, real-time access to all aspects of patient information.

The electronic medical record (EMR) is designed to transform traditional, paper-based medical records into a cutting-edge, electronic records system that provides the entire clinical team with a more complete picture of their patients' needs and more tools to continue delivering superior health care.

The transition to EMR required that approximately 14,000 personnel be trained in the use of the customized Cerner Millennium system. A wide range of staff, from physicians to nurses to support personnel, needed the skills to access information and document medical data in this new format. That need led the client to TBD Consulting, a performance improvement consulting firm that has previous experience with a similar implementation for another healthcare provider.

Key Performance and Business Impact

The comprehensive training solution created by TBD Consulting provided well-rounded training and self-help reference to ensure that current and new staff would be well prepared to integrate the EMR into daily tasks. Post-training assessments showed that the desired level of effective transfer of knowledge..

The client's training goals were 100% achieved:

- 1) Design and deliver training to everyone who would use the EMR before their facility's go-live (6-month training development cycle)
- 2) Include assessments in the training to ensure transfer of knowledge
- 3) Improve patient safety through greater accuracy
- 4) Provide training for implementation and for future employees and contractors
- 5) Shorten user time to efficiency
- 6) Provide online reference tools
- 7) Develop comprehensive, user-friendly, training solution that could be handed off from the training department to the education department

Training Solutions

The most important component of an EMR implementation is related to change management – the people side of integrating new processes and technology. TBD Consulting's up-front analysis resulted in a recommendation for blended learning to address the training and change management needs of the organization. TBD's staff of consultants and instructional designers took a systematic approach, building on the client's stable foundation of processes.

TBD recommended a training plan that would prepare the healthcare team to embrace the new EMR solution, foster successful change and performance improvement and create service delivery excellence. This would result in improved quality, enhanced service and reduced costs through the effective alignment of people, process and technology:

- **People** – How work will be carried out by individuals in roles within a department
- **Process** – How work should be done, including a clear vision of the future state, integrating the changes and improvements to workflows (i.e., “Practice to a Standard”)
- **Technology** – Proper and effective use of EMR technologies .

The core training consisted of 264 short, task-focused web-based (WBT) modules to familiarize the staff with the application. The modules are now housed in the corporate LMS as reference content and to enable future asynchronous learning. In addition, 17 instructor-led courses provided role-specific classes with day-in-the-life practice scenarios to guide the medical professionals as they learned to apply their new skills.

Training Design Process

TBD’s process improvement specialists began by documenting key processes and defining how healthcare team members would use the software to perform their jobs. These tasks were validated with subject matter experts and rated based on the difficulty, importance, frequency and completion time (DIFT) of each process. This information was crucial in building the web-based training and the supporting instructor-led materials.

With this foundation, TBD instructional designers built specific, measurable objectives for the skills required to perform the tasks and defined the delivery methods based on the nature of the objective and the DIFT. TBD also considered the audience – the roles of those in the audience and the number of people who would perform a specific task.

Using those objectives, TBD web developers created 264 web-based training modules to provide the majority of the technical training needed for the EMR implementation. These WBT modules now reside on the client’s learning management system. This offers new employees and staff the opportunity to learn asynchronously rather than attending an application training class. It also allows for modules to be reviewed as a “refresher” when necessary. This gives the client a great advantage of repurposing the training to save time and resources for the organization.

The blended-learning courses offered hands-on activities in a training environment that replicated the real-world circumstances (“Day in the Life”) the healthcare professionals would face on the job. This focus was crucial in keeping the courses short enough to allow all employees and contracted staff to complete training before each “go-live” date.

TBD’s materials for instructor-led training addressed the needs of those teaching the courses. Facilitator guides were formatted with step-by-step instructions and icons to lead the facilitator seamlessly through the materials. TBD training delivery specialists conducted train-the-trainer sessions to explain and demonstrate the use of the materials. The client’s facilitators had an opportunity to conduct a mock training class with TBD observing. TBD’s coaching triggered improvements in the delivery skills of the professional and non-professional trainers.

Consistent with the “paper-light” environment, participant materials were limited. TBD instructional designers created job aids targeted to the specific needs of each of the 80+ job roles. Healthcare personnel could easily carry these sheets and use them for reference until they were completely comfortable with the software. For tasks that are less frequently performed, brief step-by-step instruction cards were attached to medical equipment. These are just some of the tools that transferred learning from the classroom into the hospital.

Because of the high consequence of error in a healthcare environment, TBD knew that accountability had to be tied to the training. TBD consultants built a 3-level evaluation process.

1. The first level measured the learner's reaction to the training and helped the organization address any deficiencies in the delivery of the materials.
2. The second level measured mastery of the tasks and information through online tests tracked in the organization's learning management system.
3. The third level measured transfer of knowledge in the real world. Competency checklists facilitate management evaluation of on-the-job skills.

About TBD Consulting

TBD Consulting has an 18-year, proven track record for ensuring employee performance improvement which translates to EMR usage and patient care success.

Organizations interested in ensuring true ROI for an EMR implementation, please contact our corporate office at 602-263-1961.

TBD Consulting, Inc. *Solutions...Not Just Strategies!*