

**Are you interested in improving  
outcomes and in saving significant  
time and money for your  
organization?**

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# Helping improve BLS competency.



## Success Stories for HeartCode™ BLS Courseware

Improved BLS Training while saving time and money.

Featuring the Experiences of:

1. Kettering Medical Center (Dayton, Ohio)
2. Boston Medical Center (Boston, Massachusetts)
3. Mercy Medical Center (Dubuque, Iowa)

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# Overview of Results

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Name	Structure	Size	HeartCode Use	Key Results	Go to
Kettering Medical Center	Multiple Facilities	4,000 FTEs	HeartCode BLS with Manikins	Cut costs, improved outcomes	page 5
Boston Medical Center	Single Facility	6,500 FTEs	HeartCode BLS with Instructors	Cost savings, increased compliance efficiency	page 7
Mercy Medical Center	Multiple Facilities	1,350 FTEs	HeartCode BLS with Manikins	Easier tracking and scheduling, saved training time	page 9

Research shows that the quality of CPR has a direct effect on patient outcomes in occurrences of cardiac arrest; however, many caregivers do not consistently perform CPR within the guidelines established by the American Heart Association (AHA). HeartCode™ BLS (Basic Life Support) and HeartCode™ ACLS (Advanced Cardiovascular Life Support) are official, self-directed, comprehensive e-learning programs from the AHA that have been designed to address these critical issues. Certification on these courses is required at least every two years, with some hospitals requiring annual ACLS certification for appropriate staff members.

## Testimonials

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**“We have nearly doubled our resuscitation rate subsequent to the introduction of HeartCode BLS for our staff’s training. Going from 14%, which was already higher than the AHA benchmark of 12%, to 27% is a wonderful achievement for our staff and even more so for patients!”**

— Dianne Ditmer, PhD, RN, DABFN, SANE, FACFE; Kettering Medical Center (Dayton, Ohio)

...

**“HeartCode is truly a lifesaver for our department!”**

— Meg Grande, MS, RNC; Boston Medical Center (Boston, Massachusetts)

...

**“Our vice president of Patient Care Services did a thumbs up/thumbs down survey when she met with each of her departments at staff meetings earlier this year. Overwhelmingly, the staff gave the program a thumbs up.”**

— Mary Kay Egan, RN, BSN, House-wide Instructor; Mercy Medical Center (Dubuque, Iowa)

...

**“I love doing it this way! I feel like I am more prepared should I need to use my skills.”**

— BLS Trainee; Kettering Medical Center (Dayton, Ohio)

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**“This is wonderful. I love the hands-on experience and how the computer lets you know how you are doing through the whole procedure.”**

— BLS Trainee; Kettering Medical Center (Dayton, Ohio)

# Detailed Results

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Name	Key Results
Kettering Medical Center	<ul style="list-style-type: none"><li>• Saved nearly \$600,000, which was almost 88%, on annual BLS Training Costs when it transitioned to HeartCode BLS from traditional instructor-led BLS training</li><li>• Received high marks from BLS Trainees, who overwhelmingly scored HeartCode BLS as a success in meeting their training needs</li><li>• Nearly doubled resuscitation rates (from 14% to 27!) after transitioning to HeartCode BLS</li></ul>
Boston Medical Center	<ul style="list-style-type: none"><li>• Saved significantly, \$32,000, over two years, using HeartCode BLS on the HealthStream Learning Center, both in terms of training costs and paying staff for time spent training</li><li>• Gained scheduling flexibility for meeting the certification needs of staff with varying schedules and availability</li><li>• Received very positive evaluations from staff on the new BLS skills recertification system</li><li>• Eliminated the manual registration and tracking process, saving the education department staff's time</li><li>• Eliminated the unnecessary expense of half-empty classrooms being taught by expensive instructors</li><li>• Identified staff with low levels of computer skills proficiency who could benefit from additional training</li></ul>
Mercy Medical Center	<ul style="list-style-type: none"><li>• Saved considerable amounts of time, cutting training time in half for BLS certification where live training averaged 2.5 hours per person; HeartCode took approximately 1.25 hours per person.</li><li>• Received positive evaluations from trainees for the HeartCode BLS training experience</li><li>• Gained an easier system for tracking certifications and assigning training, gaining efficiencies in terms of administration time and scheduling, as well as tracking for accreditation purposes</li><li>• Reduced its cost for BLS training to approximately half what was spent previously on instructor hours</li></ul>

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[www.healthstream.com/acls](http://www.healthstream.com/acls)



# Kettering Medical Center

**Kettering Medical Center standardized its BLS Training with HeartCode, saved significantly in training costs, and nearly doubled its resuscitation rate.**

Submitted by Dianne Ditmer, PhD, RN, DABFN, SANE, FACFE; Kettering Medical Center (Dayton, Ohio)

Structure	Size	HeartCode Use	Key Results
Multiple Facilities	4,000 FTEs	HeartCode BLS with Manikins	Cut costs, improved outcomes

## IMPACT

- Saved nearly \$600,000, which was nearly 88%, on its annual BLS Training Costs when it transitioned to HeartCode BLS from traditional instructor-led BLS training
- Received high marks from BLS Trainees, who overwhelmingly scored HeartCode BLS as a success in meeting their training needs
- Nearly doubled its resuscitation rates (from 14% to 27!) after transitioning to HeartCode BLS

## SITUATION

Kettering Medical Center, part of the Kettering Health Network, consists of three hospitals—Kettering Memorial Hospital, Sycamore Hospital, and Kettering Behavioral Health Medicine Center. Kettering Medical Center is a Magnet-designated institution, which demonstrates the organization's commitment to and achievement of healthcare excellence, and it received the rare Premier Q Award, an important benchmark for recognizing top clinical excellence in the healthcare industry. It has also been ranked among the Best in Ohio for Joint Surgery by HealthGrades four years in a row, and Best in the Dayton area for Stroke Care and Treatment of Atrial Fibrillation. In addition,

Kettering Medical Center received the prestigious J.D. Power and Associates Distinguished Hospital Award for Service Excellence.

As with any medical facility, Kettering is facing ongoing financial pressures from escalating costs, reimbursement issues and inflation. We have examined every part of our organization for efficiencies and savings, so that we can be certain that every dollar we spend is put to the best possible use in terms of patient outcomes. When we examined our existing BLS training and certification solution, which involved traditional instructor-led training, the first thing that we noticed was its high cost. Our per-person training costs for Registered Nurses, Licensed Practical Nurses, and nursing assistants was \$354.38, \$322.00, and \$244.86, respectively. This totaled \$679,133.92 on an annual outlay basis.

## APPROACH

We made the decision to move to HeartCode BLS provided via the HealthStream Learning Center. One factor in our decision was definitely cost; our initial estimates left no doubt that we would see quite significant advantages from this change. Another was to give our staff training that conformed to AHA standards, with the goal of achieving improved patient outcomes and greater healthcare excellence.

# Kettering Medical Center

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## RESULTS

A prominent benefit that has accompanied this change is a marked increase in our resuscitation rates. Under the previous BLS training we were regularly achieving 14%, which was already above the AHA benchmark rate of 12%. Now we have nearly doubled our resuscitation rate to 27%.

Also, unlike our previous solution, HeartCode costs a flat rate per person, regardless of trainees' positions or credentials. This fee was a fraction of the instructional cost we had incurred under our previous instructor-led training. Specifically, our savings for BLS training for RNs, LPNs, and nursing assistants was 88%, 87%, and 83%, respectively. That meant we had nearly \$600,000 that we could use in other ways to affect patient outcomes and the quality of care that we provide. Not only were the savings impressive, but trainees rated the experience very highly. Of them, 84.2% rated HeartCode a 5 out of 5 possible points in terms of their educational needs having been met.

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**“We have nearly doubled our resuscitation rate subsequent to the introduction of HeartCode BLS for our staff’s training. Going from 14%, which was already higher than the AHA benchmark of 12%, to 27% is a wonderful achievement for our staff and even more so for patients!”**

— Dianne Ditmer, PhD, RN, DABFN, SANE, FACFE; Kettering Medical Center (Dayton, Ohio)

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# Boston Medical Center

## Boston Medical Center used HeartCode to reformat BLS process to increase compliance and satisfaction, as well as decrease costs.

By Meg Grande, MS, RNC; Boston Medical Center (Boston, Massachusetts)

Structure	Size	HeartCode Use	Key Results
Single Facility	6,500 FTEs	HeartCode BLS with Instructors	Huge savings, increased compliance efficiency

### IMPACT

- Saved significantly, \$32,000 over two years, using HeartCode BLS on the HealthStream Learning Center, both in terms of training costs and paying for staff during time spent training
- Gained scheduling flexibility for meeting the certification needs of staff with varying schedules and availability
- Received very positive evaluations from staff on the new BLS skills recertification system
- Eliminated the manual registration and tracking process, saving the education department staff's time
- Eliminated the unnecessary expense of half-empty classrooms being taught by expensive instructors
- Identified staff with low levels of computer skills proficiency who could benefit from additional training

### SITUATION

Certification on the American Heart Association's Basic Life Support (BLS) is a requirement for all RNs at Boston Medical Center (BMC). Prior to the implementation of HeartCode BLS, BMC's nursing education department did recertification for approximately 1,300 nurses every two years. To meet this need, we offered 66 classes over the 2 year period, with 4 instructors for every class, and registration by telephone. We tracked expiration dates in HealthStream. Staff did have the option to attend outside American Heart Association courses and get reimbursed. Not only did we struggle to staff classes, but often attendees would register, the class would fill, we would turn away other staff, and then we had many no-shows. At times we were paying BLS instructors to teach half-empty classes, and we also paid RNs their hourly wage for the 3-hour class. Another issue was the need for diverse class times to accommodate staff who work per-diem, part time, and off-shifts. We started looking at online options and were excited when we heard HealthStream had a HeartCode course. We were using HealthStream for many other educational needs and reviewed pricing for using HeartCode to meet our certification needs.

### APPROACH

We decided to adopt the cognitive component of HeartCode, delivered via HealthStream. The American Heart Association was already our standard for CPR, and their having developed this program made this choice a natural one. The HeartCode skills portion was not implemented, however, due to space issues. To implement HeartCode BLS, we ran a report both to see how many people were delinquent and to estimate our future need to recertify people. We divided the staff into 2 groups, based on expiration date, which created a December group and a May group. We now offer three 12-hour skills days twice a year. Staff takes the online course during work prior to coming to class. If they can't get that done, they must make arrangements to do it after work hours. Staff then comes to the training class for an hour to demonstrate their skills.

# Boston Medical Center

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Once staff opens the course they have 30 days to complete the hands-on skills component, and we are charged, even if they do not finish the skills portion of the course. Anticipating issues, we are very specific on notifications to staff that they should open the course only if they are able to attend a skills session. Otherwise, they need to go elsewhere for CPR recertification. Staff can sign up for skills or just drop in—we set up stations, and the process takes less than an hour. Not only have we saved money but the staff evaluation of the new system has been overwhelmingly positive. We implemented this quickly over the past year as we already had a process in place (an assignment made for BLS to staff); it was really an easy process.

## RESULTS

The savings from this project were huge. We had a \$32,000 savings over 2 years, but more importantly the staff and trainers love the new system. Our compliance has improved as we only need to review it twice a year instead of monthly. Staff does not need to be paid, nor do they have to come in for an extra four hours, leaving their floors short staffed. Staff actually also are learning more as they can spend more time concentrating on retaining the skills, not worrying about the test. It has been great for our staff with time constraints, as they can do the online portion when it is convenient and stop by the skills center before, during, or after their shift. The staff also appreciates the ability to complete the test at their own pace and the opportunity to review areas they may have difficulty understanding. We also found that those with below average computer skills have difficulty with the online portion and spend too much time doing it. This is a hidden benefit enabling us to identify staff who would benefit from improved computer capabilities. The education department is putting the saved time to good use on other projects.

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**“HeartCode is truly a lifesaver for our department!”**

— Meg Grande, MS, RNC; Boston Medical Center (Boston, Massachusetts)

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# Mercy Medical Center

**Mercy Medical Center implemented HeartCode BLS, resulting in saved training time and costs, more efficient use of training resources, and positive staff evaluations.**

By Mary Kay Egan, RN, BSN, House-wide Instructor; Mercy Medical Center (Dubuque, Iowa)

Structure	Size	HeartCode Use	Key Results
Multiple Facilities	1,350 FTEs	HeartCode BLS with Manikins	Easier tracking and scheduling, saved training time

## IMPACT

- Saved considerable amounts of time, cutting training time in half for BLS certification. Where live training averaged 2.5 hours per person; HeartCode took approximately an hour and fifteen minutes
- Received positive evaluations from trainees for the HeartCode BLS training experience
- Gained an easier system for tracking certifications and assigning training, gaining efficiencies in terms of administration time and scheduling, as well as tracking for accreditation purposes
- Reduced its cost for BLS training, to approximately half what was spent previously on coach hours

## SITUATION

Mercy Medical Center consists of two facilities, Mercy Medical Center Dubuque and Mercy Medical Center Dyersville, a small critical access hospital 25 miles west of Dubuque. We have been a Magnet-designated hospital for four years, testifying to our commitment to be a leader in providing healthcare excellence. Of our 1,350 staff members, 800 need BLS certification renewal on a biannual basis. Prior to adopting HeartCode BLS, we had the typical problems that are associated with live BLS classes: significant no-shows for scheduled sessions, regardless of reminders; room reservations that had to be made for every class; never enough classes or instructors to meet training needs, especially last minute; and lots of background work was always required—Schedules, CTC requirements, reminders, supplies, etc.

## APPROACH

We transitioned to HeartCode BLS Training and chose to kick off the change by creating some excitement. The implementation was key to the success of the program, and that meant building up interest, setting a positive tone, and showing as many staff as possible how user-friendly the system would be. Several rounds of e-mail reminders were sent reminding staff of our open house, with prizes and refreshments. Not only did we have information in employee newsletters, but we also sponsored a contest to name the adult and infant manikins. As a result, we had a huge turnout for the new program's launch.

Despite a space issue until this program got a permanent home, we developed a plan of action to meet our certification needs. For Year 1, we started certifying people primarily by departments, with those due first assigned first. During the first six months, we had coaching sessions available almost every day. After then we felt safe in cutting coaching sessions down to only a half day per week. We started the current year assigning people month by month. In addition, anybody due later in the year wanting to certify early was invited. By mid-year we added the assignments for everybody who was due before the end of the year. Next year we plan to create an automatic repeating assignment and put a stop date on the old BLS assignment.

# Mercy Medical Center

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Some people just couldn't make the computer happy with their performance. Our decision was that if the person would have passed a live class, he/she would receive an Instructor Pass with HeartCode. Fortunately, the new software released last year was even more user-friendly, and we have fewer and fewer people who have trouble passing.

## RESULTS

By January 1, 2009, we have had more than 755 HeartCode BLS completions, and already the time savings are impressive. Now, most students average 45 minutes for Part 1 and need no more than 30 minutes for Part 2. This should decrease even further as people recertify on the system. The time commitment for administration is significantly lower; there are no more schedules to anguish over, no more searching for replacement instructors, and minimal necessity of reminding people either to instruct or attend. As further savings, our instructor hours paid have dropped to about half of what they were previously. Participant evaluations of Part 1 tallied via HealthStream are very positive. Verbal surveys of participants about Part 2 also show that people generally find it to be a very good experience. While a few miss the old means of instruction, most agree they learn more with HeartCode. In terms of performance, we have found that some first timers need a little extra coaching to learn techniques, but most have zipped right through it. In our Peri-Op area, once a few people completed the process, these staff who were "veterans" helped other staff very successfully—they were able to certify 102 people in less than a month. Many actually have done much better than ever before. Our vice president of Patient Care Services did a thumbs up/thumbs down survey when she met with each of her departments at staff meetings earlier this year. Overwhelmingly, the staff gave the program a thumbs up, with the only exception being the first department certified during some initial problems, when our coaches were still in the midst of a learning curve.

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**“Our vice president of Patient Care Services did a thumbs up/thumbs down survey when she met with each of her departments at staff meetings earlier this year. Overwhelmingly, the staff gave the program a thumbs up.”**

— Mary Kay Egan, RN, BSN, House-wide Instructor; Mercy Medical Center (Dubuque, Iowa)

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