Saving a Life After Discharge: CPR Training for Parents of High-Risk Children

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Abstract: Pediatric patients with chronic disease are at risk for cardiopulmonary arrest (CPA). Outcomes of CPA are improved if prompt quality cardiopulmonary resuscitation (CPR) is performed. This study examined the efficacy of the CPR Anytime™ Kit as a standardized method of CPR discharge training to families of high-risk children. The kit was provided to parents of 117 high-risk pediatric patients prior to hospital discharge. A telephone survey was used at 1, 3, and 6 months to assess retention of CPR knowledge and skills, parental comfort levels with CPR, and kit dissemination to family members. A second survey was used 1 year after implementation of program to assess nursing satisfaction. CPR comfort levels were reported as confident, knowledge and skills were reported as moderate on follow-up telephone surveys. A total of 82% of subjects reviewed the video at least once after discharge, and 79% of subjects shared the kit with at least two other family members or friends. A total of 72 of 74 nurses (97%) surveyed were either "satisfied" or "very satisfied" with the program. Provision of the CPR Anytime Kit™ to families of high-risk pediatric patients prior to discharge leads to sustained levels of CPR knowledge and confidence.

Keywords
cardiopulmonary arrest
cardiopulmonary resuscitation
CPR discharge teaching
pediatric
video-based self-instruction

Survival with good neurological outcomes after child or infant cardiopulmonary arrest is dependent on the initiation of prompt cardiopulmonary resuscitation (CPR; Atkins et al., 2009; Kitamura et al., 2010; Mogayzel et al., 1995). There are an estimated 16,000 episodes of pediatric cardiopulmonary arrest annually in the United States alone, and many of these events occur at home (Swor et al., 2003). Most occur without warning and are discovered or witnessed by parents or family members (Holmberg, Homberg, & Herlitz, 2000; Swor et al., 2003). However, only about 30–50% of infants and children in cardiac arrest receive CPR prior to Emergency Medical Services arrival, and only 5–10% of patients survive (Waalewijn, Tijssen, & Koster, 2001). Survival to discharge with a favorable neurological outcome is greatly improved if an immediate bystander performs CPR on the person in need and immediate CPR may have an even more beneficial impact on survival for children than adults (Atkins et al., 2009; Kitamura et al., 2010; Mogayzel et al., 1995; Swor et al., 2003). Leading explanations for parental CPR avoidance include fear of causing damage, fear of performing incorrectly, and time lapse from previous CPR training (Lynch et al., 2005; Moran & Stanley, 2011; Nichols et al., 1999; Platz, Scheatzle, Pepe, & Dearwater, 2000; Potts & Lynch, 2006; Savastano & Vanni, 2011). The American Heart Association (AHA) continues to encourage CPR training to parents and community members, with an emphasis on the importance of consistent practice and the idea that even some CPR is superior to no CPR at all (Berg et al., 2010; Celenza et al., 2002; Herlitz, Svensson, Holmberg, Angquist, & Young, 2005; Waalewijn et al., 2001).

Children discharged from the hospital with high-risk medical conditions are at risk for cardiopulmonary arrest, leading to high levels of anxiety and emotional distress for parents (Dracup, Moser, Taylor, & Guzy, 1997b; Moser, Dracup, & Doering, 1999). Although there is consensus that CPR training for parents of high-risk children at hospital discharge is necessary, proper execution of this training continues to pose challenges (Dracup, Doering, Moser, & Evangelista, 1998; Moser et al., 1999; Schlessel et al., 1995). Time constraints and variations in nursing skill, instruction methods, and healthcare professionals' confidence levels often limit the ability to provide standardized CPR instruction. Furthermore, CPR skills may begin to deteriorate within 1–6 months of training with current teaching methods (Dracup et al., 1998; Moser et al., 1999; Platz et al., 2000; Potts & Lynch, 2006). Because of these barriers, CPR discharge teaching is often inconsistent and the effects are short-lived.

The AHA CPR Anytime Kit™ is a novel method for CPR instruction. The self-learning kit contains a DVD that provides the viewer with information to recognize that the child is unresponsive, to call 911, and to learn the core steps of effective CPR. The kit also provides a manikin that enables the parent to practice CPR and watch the video simultaneously, which previous research suggests may lead to more effective adult learning in less time than traditional CPR courses, without the need for an instructor or classroom setting. (Lynch et al., 2005; Nichols et al., 1999). The primary aims of this study were to introduce the CPR Anytime Kit™ to parents of high-risk children being discharged

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from a quaternary care children's hospital and to assess the impact of the kit on parents' knowledge of the core skills of CPR, and their comfort levels in providing CPR in the event their child should suffer a cardiopulmonary arrest. Secondary aims were to assess the dissemination of the kit to other family members and friends and to evaluate nurses' satisfaction with the CPR discharge program.

Materials and Methods

This observational survey-based study was conducted in a quaternary, academic pediatric hospital between June 2008 and December 2009. Institutional Review Board approval was granted, and researchers obtained written informed consents from parents or legal guardians who received the kits and agreed to participate in the skills check and telephone survey. To participate, parents and legal guardians must live full time with their child and be literate in English or Spanish. Spanish consent and an interpreter were used when needed. Inclusion criteria included hospitalized children between the ages of 0 and 18 years and classified as high risk for cardiopulmonary arrest. High-risk criteria were defined for the purpose of this intervention and included premature birth (less than 37 weeks), neonates with documented episodes of apnea or bradycardia, solid organ transplant recipients, cardiac anomalies (cyanotic heart disease, congestive heart failure, cardiomyopathy, life-threatening arrhythmias, and any patient recovering from cardiac surgery), and patients who were oxygen, ventilator, or tracheostomy-dependent. Exclusion criteria consisted of families previously enrolled in the study, families of children with a "Do Not Resuscitate" order, and a planned discharge to a licensed care facility. Families were referred for the study by healthcare professionals who were involved with care of patients who met the high-risk definition. Healthcare providers were given periodic reminders about the study and the inclusion criteria. Education with the kit was provided to all family members involved in the patient's care.

The interactive kits, which were funded through an internal grant for this study, include a self-learning 22-min DVD, focusing on basic skills: recognizing an emergency (including recognition of agonal breaths), calling 911, and performing cycles of compressions and ventilations. The skills are taught in stages, using a "watch while practicing," video-based self-instruction approach. Upon completion of the DVD, subjects will have practiced 23 cycles of giving breaths and compressions for CPR. The kit includes an infant (up to 1-year-old) or child/adult manikin, which contains a functional airway and lungs that inflate with proper breathing technique (adequate seal, head tilt, and occlusion of the nose), confirmed by visible chest rise. To assess compressions and chest recoil, the chest contains a device installed to produce a clicking sound when compression pressure is correct, and clicks again when pressure has been released, simulating full recoil of the chest.

The three study facilitators included a resuscitation educator, the intensive care lead respiratory care therapist, and an acute care educator. All facilitators were AHA-certified Basic Life Support instructors and underwent comprehensive training on the use of the CPR Anytime Training Kit and the scoring of the CPR Skill Competency Checklist (Table 1). They received three periodic refresher courses over the 18 months of subject enrollment.

Study facilitators had the parent(s) or guardian(s) watch the DVD in the child's hospital room or a designated room on the pediatric ward. Study facilitators were instructed to set up the DVD, assess the participants' ability to follow the self-instructional video, obtain demographic information, and assess CPR performance using the CPR Skill Competency Checklist (Table 1).

The checklist allowed study facilitators to assess the adequacy of the initial assessment of the subject and performance of chest compressions and ventilations. Upon performing the initial assessment and demonstration of core skills of CPR, the parents were given a score of either satisfactory or unsatisfactory. No parent needed remediation after viewing the kit; all obtained a satisfactory score with demonstration. Facilitators encouraged families to review the kits often after discharge, and to share them with other family members and friends. The same parent was phoned by a research assistant at 1, 3, and 6 months after discharge to complete a follow-up telephone survey designed for the purposes of this study (Table 2). This survey assessed several outcomes: retention of CPR knowledge and skills, parental comfort levels to perform CPR, the frequency of video review and practicing of core skills since discharge, and the dissemination of the kit to other family members and friends.

Table 1. CPR Anytime™ Study: Facilitator Checklist

Name _____ Phone: _____ Facilitator: _____ Date_____ Email: _____

Best time to contact: _____

Socio demographic characteristics
Age: _____

Education: Years of school_____

Gender: Female Male

Relationship to child: Mother Father Other_____

Marital status: Married Single Partnered Divorced

Employment outside home: Yes No

Previous CPR training Yes No

Skills (PLACE A CHECK IN THE BOX ONLY IF THE SKILL WAS PERFORMED ADEQUATELY)

- ○ Assesses responsiveness
- ○ Call 911
- ○ Adequate ventilation
- ○ Proper hand placement for compression
- ○ Adequate compression depth

- ○ Unable to execute core skills of CPR
- ○ Did not do CPR in taught sequence
- ○ Attempted no action
- ○ Other_____
- ○ Refused to participate/withdrew

Skill	Performance Guideline
Assess responsiveness	Parent should be able to verbalize ways of showing unresponsiveness vs. asleep (not breathing normally, color change, unable to arouse)
Call 911	Parent should call or delegate someone to call 911
Adequate ventilation	Parent must provide adequate ventilations to cause the chest to rise at the required ratio per compression and verbalize chest rise determines effective ventilation
Proper hand placement	The examinee must demonstrate the proper hand position between nipple line
Adequate compression depth (confirm with clicking device)	Parent must provide chest compressions to 1 ½ to 2 inches depth with each compression(confirmation with click sound)
Overall, performance was adequate	Perfection is not necessary but overall understanding of the core concepts of effective CPR

As part of a quality improvement process, 125 nurses in the various hospital intensive care units and the acute care floors were randomly surveyed 1 year after hospital-wide implementation of the AHA CPR Anytime Program to evaluate their impressions of the program and to solicit suggestions for improvement. The survey was designed and implemented using a free, online survey vehicle (www.zoomerang.com). Nurses were e-mailed a request to complete the survey along with a link to the website. The survey was primarily quantitative but also allowed for comments. Responses were anonymous.

Parents' demographic characteristics were ascertained using a written survey. Multivariate linear regression was used to identify predictors of CPR knowledge and comfort levels. Potential predictor variables included age, years of education, employment status, and prior

Table 2. CPR Anytime™ Post Discharge Telephone Survey

Learner ID: _____ **Phone:** _____
Circle: Month 1 Month 3 Month 6
Date of discharge:
Reason for my child's hospitalization:

1. Do you feel this training has made you more comfortable with performing CPR on your child?

(1) Very unconfident
(2) Somewhat unconfident
(3) Neutral
(4) Somewhat confident
(5) Very confident

2. How much CPR knowledge do you remember from the video?

(1) None
(2) Very little
(3) A medium amount
(4) A lot

3. What would be the next step after you recognize your child is not responding?

Did they answer correctly? Yes No

4. How do you know if your breaths are working?

Did they answer correctly? Yes No

5. How often have you reviewed the DVD while at home?

(1) Never
(2) Once
(3) Twice
(4)Three times or more

6. Have you shared the CPR Anytime Kit with other family members or care givers?

(1) Never
(2) Once
(3) Twice
(4) Three times or more

CPR training. The same variables were used in multivariate logistic regression to identify predictors of nonresponse (i.e., attrition) to the telephone survey at 1, 3, and 6 months. For this analysis, parental education was dichotomized to beyond high school (more than 12 years of education) versus high school or less, and age was dichotomized to over 30 years versus 30 years and under. Participant survey responses were graded on a 5-point Likert scale for the question regarding CPR comfort level, and a 4-point Likert scale for the question investigating retained CPR knowledge. The questions used to assess actual CPR knowledge were scored as a "yes" or a "no" by the telephone interviewer, according to whether or not the respondent answered the question correctly. The nurses' survey was graded on a 5- and 6-point Likert scale, and free text comments were collected. All statistical calculations were performed using Stata 7.0 (College Station, TX).

Results

Parents of 117 high-risk patients were consented to participate and received the CPR Anytime Training Kit™ by study facilitators. Table 3 shows the subjects' demographic

Table 3. Demographic Characteristics of Primary Caregivers

Primary Caregiver Characteristic	Result
Age in years ± *SD*, range	33 ± 9 (17–57)
Years of education ± *SD*, range	14 ± 3 (3–26)
Female (95% confidence interval)	80% (73–88%)
Employed (95% confidence interval)	49% (39–58%)
Prior CPR training (95% confidence interval)	53% (43–62%)

Table 4. Responses to Telephone Survey

Survey Question	Month 1 ($n = 86$) Mean (95% confidence interval)	Month 3 ($n = 73$) Mean (95% confidence interval)	Month 6 ($n = 61$) Mean (95% confidence interval)
Comfort level with CPR (range, 1–5)	3.8 (3.5–4.0)	3.7 (3.4–3.9)	3.5 (3.2–3.9)
Reported CPR knowledge (range, 1–4)	3.4 (3.3–3.6)	3.1 (3–3.3)	3 (2.8–3.2)
Would call 911 for unresponsive child	73% (64–83%)	70% (59–81%)	80% (70–91%)
Knows to look for chest rise to assess whether breaths are working	91% (84–97%)	92% (85–98%)	98% (95–99%)
Reviewing CPR Anytime Kit at least once	69% (58–79%)	74% (62–84%)	82% (70–91%)
Sharing kit with at least one family member/friend	61% (49–71%)	68% (57–79%)	79% (66–88%)

characteristics. All subjects completed the requisite training using the CPR Anytime Kit and demonstrated proficiency with CPR. Follow-up data were available for 86 subjects at 1 month, 73 subjects at 3 months, and 61 subjects at 6 months. In multivariate analysis, no baseline variables were significantly ($p < .05$) associated with survey nonresponse with the exception of prior CPR knowledge. At 6 months (but not at 1 or 3 months), subjects with prior CPR knowledge were significantly more likely to respond to the survey (odds ratio for attrition = 0.36, $p = .016$).

Table 4 summarizes parents' responses to the survey questions. After receipt of the CPR Anytime Kit, subjects on average reported neutral to somewhat confident comfort levels for providing CPR and medium amounts of CPR knowledge. At 6 months, 67% of respondents reported being "somewhat" or "very confident" with CPR. At 6 months, 80% of respondents knew to call 911 as a first step for an unresponsive child, and 98% knew to watch for chest rise to assess for adequate ventilation during rescue breathing. Using multivariate linear regression, no statistically significant associations were found between subjects' age, education, or prior CPR knowledge, and the outcomes of perceived CPR comfort levels and knowledge at 1, 3, and 6 months with one exception. At 1 month, prior CPR knowledge led to an increase in subjects' ratings of their comfort level with CPR (regression coefficient = 0.67, $p = .02$).

Of those surveyed at 6 months, 82% of respondents had reviewed the CPR Anytime Training Kit™ at least once, and 79% of subjects shared the kit with at least one family member or friend. Five subjects reported performing CPR after discharge, and four of the five victims survived the resuscitation and remained neurologically intact.

At completion of the study, 125 intensive care unit nurses were surveyed and 91 responded (73%). Seventy-four of the 91 (81%) respondents reported using the AHA CPR Anytime Training Kit after hospital-wide implementation of the CPR discharge program. Of those subjects that did, 60 of 74 (81%) reported that prior to implementation of the CPR Anytime distribution program, CPR teaching often delayed discharge. Sixty-three of 74 respondents (85%) reported spending at least 20 min with CPR education prior to the program, compared to only 3 of 74 (4%) after the program was implemented ($p < .001$). Nurses were satisfied with the program, with 72 of 74 (97%) having reported being either "satisfied" or "very satisfied." The remaining two respondents were "neither satisfied nor dissatisfied."

Discussion

This study demonstrates that the CPR Anytime Program may be a reproducible and effective method for hospital discharge CPR education. The majority of parents who learned CPR via this method reported being either somewhat or very confident in performing CPR and on average reported medium amounts of CPR knowledge. The majority of parents were able to demonstrate an understanding of basic CPR concepts 6 months after discharge. The AHA

CPR Anytime Program offers an alternative to the logistical issues and resource management challenges found with traditional teaching methods. It is a flexible training program that hospitals can implement, and allows information provided to parents to be accurate and consistent. At the time of this study in 2011, this paper represents the first report of a hospital-based discharge program using this video-based self-instructional approach as standardized discharge CPR teaching for families of children with high-risk diagnoses.

Provision of the kit to families at discharge has a multiplier effect as evidenced by the fact that the majority of families disseminated the kit to other family members or friends. Testimonials reflected that parents showed the DVD to babysitters, grandparents, and friends, further strengthening the amount of laypersons trained in CPR. Such an effect would not occur with traditional models of CPR education. In this study, 82% of parents reviewed the training kit at least one more time after discharge, which may reflect a possible solution to the problem of attrition of CPR skills and knowledge. Parents commented that while the kits were being shared by others, the parents were viewing the DVD again, which could have further reinforced the retention of skills and further decreased anxiety over the prospect of performing CPR.

Some healthcare professionals may have concerns over the psychological effects of CPR training on parents of high-risk children during acute hospitalization when stress levels are already high. Although most physicians feel that CPR training is important, it may not be routinely recommended for parents at discharge (Schlessel et al., 1995). In light of these concerns, there was an element of physician resistance to this intervention in this institution, which subsequently affected recruitment. Various physicians felt that by teaching CPR to their patients' parents, they were instilling unnecessary parental anxiety regarding the child's condition, as well as taking time away from the standard discharge teaching. These concerns led to a brief interruption in study enrollment. However, prior investigations have suggested that parents are indeed able to learn CPR at discharge, despite high levels of anxiety (Dracup, Moser, Doering, & Guzy, 1997a; Dracup et al. 1997b, 1998; Moser et al., 1999; Schlessel et al., 1995), and that proper CPR education is a high priority for families. CPR training promotes a sense of control in the majority of parents, which should mitigate any concerns about CPR discharge teaching to parents with high stress or anxiety levels (Dracup, Moser, Guzy, Taylor, & Marsden, 1994; Higgins, Hardy, & Higashino, 1989; Schlessel et al., 1995; Louis, Carter, & Eisenberg, 1982). The written testimonials provided by parents in this study support the idea that in many cases, CPR education dramatically reduced anxiety levels. Recognition of these concepts, and of the idea that this method of CPR teaching has been reported to be more efficient than more traditional methods, has led to more widespread acceptance of this program among physicians in this institution. Basic CPR skill acquisition has been demonstrated to be equally as effective with video-based self-instruction as with traditional 4-hr classroom training, but in about one-eighth of the time (Blewer, Leary, & Decker, 2011; Kliegel et al., 2000; Lynch et al., 2005). Adult learners appear to learn more efficiently with a practice-while-watching format allowing for immediate visual and auditory feedback (Blewer et al., 2011; Lynch et al., 2005). Given that CPR knowledge usually deteriorates within 6 months after training without appropriate reinforcement, practicing and retraining is a critical element of the ability to provide effective CPR (Blewer et al., 2011; Kliegel et al., 2000; Moser et al., 1999; Potts & Lynch, 2006; Platz et al., 2000).

This program was implemented hospital-wide at the institution at which this study was held in January 2010. The kit is provided free of charge to parents of high-risk patients at admission when discharge planning begins. The kits are purchased at a negotiated contracted price through an AHA vendor, at a considerably lower price than the kits can be purchased from the vendors directly. The cost is then reabsorbed through the unit in which the kit was provided. As of July 2011, over 2,200 CPR Anytime Training Kits have been distributed to parents at the hospital, and families continue to give testimonials regarding the ease and convenience of this program. As evidenced by the survey administered to nurses, the program was met with a high degree of nursing satisfaction, in addition to increasing physician support. The nurses have reported knowing that the CPR Anytime program is a reliable, effective program that allows for decreased time teaching CPR and increased time to complete other nursing responsibilities at discharge.

Since the conclusion of this research, five participants reported performing CPR after hospital discharge. Four of the five victims survived complete resuscitation efforts after full cardiopulmonary arrests and are neurologically intact. All five participants reported feeling equipped to perform CPR because of training from the self-instructional program. Further investigation is warranted to assess whether these findings will translate into improved outcomes for out-of-hospital cardiopulmonary arrest.

This study did encounter a few limitations. First, researchers were unable to have a control population, as CPR education was not standardized at the institution. Because teaching methods were so variable and inconsistent, this study was conducted with a descriptive observational design, without a comparison group. Second, no baseline data for CPR comfort levels were obtained, so an increase in comfort levels from baseline was not quantifiable. However, the generally high levels of reported knowledge and comfort levels exceed those reported for laypersons in the literature (Moran & Stanley, 2011; Savastano & Vanni, 2011), and testimonials support the notion that the CPR Anytime Training Kit was directly responsible for continuing knowledge and comfort levels in many respondents. Third, the use of skilled personnel, who were responsible for introducing the program to families and going through the skills checklist, may limit the generalizability of our approach. However, all of the skills training came from the DVD, and the fact that all families were able to demonstrate competency without remediation illustrates that skilled facilitators, while important for our study, are unnecessary for general implementation of this program. Finally, the 1-, 3- and 6-month surveys were identical, so the same parents were asked the same questions at each interval. Therefore, the repeated nature of the phone calls likely solidified knowledge and/or served as a reminder to review the kit or disseminate to others. Furthermore, the number of families reached for the telephone survey decreased over time, and there was some evidence that subjects with prior CPR knowledge were more likely than those without prior CPR knowledge to respond to the survey at 6 months. Such biases are challenging to avoid in a study that examines longitudinal responses to an educational intervention such as this. Despite these limitations, the demonstration that CPR comfort levels and knowledge remained encouraging at 6 months in those that responded and that the kits were reviewed and disseminated over time suggests that our intervention has an element of sustainability that has not been demonstrated in prior studies.

Conclusion

The provision of the AHA CPR Anytime Training Kit may lead to an alternative, standardized, and sustainable method for hospitals to deliver CPR discharge training. Families reported that they continued to review the kit after discharge and often disseminated it to other family members and friends. The majority of families maintained CPR skills and reported being either somewhat or very confident in their level of comfort with performing CPR for at least 6 months after discharge, which other traditional methods may not provide. Nurses reported they are very pleased with program. Further investigation should be conducted to examine the impact of this CPR discharge teaching method on out-of-hospital survival outcomes and the potential financial impact relating to enhanced hospital discharge efficiency.

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Core CPHQ Examination Content Area

III. Performance Measurement and Improvement

Objectives

After reviewing this article, the participant will be able to:

- Examine the role of CPR education at discharge for parents of high-risk, hospitalized children.
- Describe the American Heart Association's CPR Anytime Kit™
- Assess the impact of provision of the CPR Anytime Kit to families of high-risk children prior to discharge from a large children's hospital.

Questions:

1. Factors likely preventing a lack of standardized CPR instruction in children's hospitals include all of the following except:

   A. Time constraints
   B. Uninterested parents
   C. Variation in instructor skills
   D. Physician resistance

2. For the study, parents were given the kit with these instructions except:

   A. To call 911 after initiating CPR
   B. To give breaths to see visible chest rise
   C. To share the kit with other family members and friends
   D. To perform 30 chest compressions to two breaths for five cycles

3. The potential variables that were analyzed to assess their impact on parental CPR comfort levels and knowledge included:

   A. Years of education, age, diagnosis of child, previous CPR training
   B. Age, employment status, prior CPR teaching, diagnosis of child
   C. Age, years of education, employment status, prior CPR training
   D. Age, outside coping mechanisms, employment status, previous CPR teaching

4. The follow-up telephone survey assessed:

   A. Retention of skills learned, comfort levels of performing CPR skills, frequency of reviewing and practicing skills, and sharing the kit with family and friends
   B. Retention of skills learned, comfort levels with skills, if the patient was re-admitted
   C. Comfort levels of performing skill, how many times the kit was shared with family and friends, length of time for EMS arrival
   D. Frequency of reviewing skills, if parents liked the kit, what others thought of the kit

5. Prior investigations have demonstrated that compared to traditional teaching self-instruction, adult learning focused video media can effectively teach CPR in:

   A. One-quarter of the time
   B. One-third of the time
   C. One-half of the time
   D. One-eighth of the time

6. Patients were included in the study if they met the criteria for "high-risk", which included the diagnoses of:

   A. Premature birth, pulmonary anomalies, febrile seizures, and perforated appendicitis
   B. Planned discharge to a long-term care facility, febrile seizures, premature birth, and pulmonary anomalies
   C. Premature birth, cardiac anomalies, solid organ transplant, and oxygen dependency
   D. Premature birth, cardiac anomalies, oxygen dependency, and perforated appendicitis

7. The CPR Anytime Kit™ advantages over more traditional discharge teaching methods include all of these except:

   A. It can be done in less than 25 min
   B. It can be disseminated to others
   C. It allows subjects to practice at least 23 rounds of CPR by completion
   D. Requires a certified BLS instructor to facilitate

8. Nursing staff supported the CPR Anytime Kit for all of these reasons except:

   A. Decreased teaching time
   B. Had minimal impact on workflow
   C. Is reliable, effective, and decreases delay in discharges
   D. Requires a physician's order to initiate

9. The majority of the parents who were included in the study that learned CPR with the CPR Anytime Kit™ reported that they felt:

   A. Not confident at all in performing CPR
   B. Somewhat confident in performing CPR
   C. Somewhat confident to very confident in performing CPR
   D. Not confident at all to somewhat confident in performing CPR

10. At 6 months, the percentage of parents who reviewed the kit at least one more time after discharge was closest to:

    A. 25%
    B. 50%
    C. 80%
    D. 100%