



Saving a Life after Discharge: CPR training for Parents of High Risk Children

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Presentation Overview

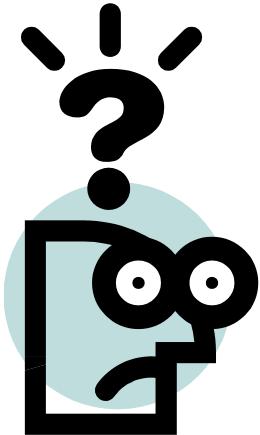


- **Study Overview**
**Implementation of the CPR
Anytime Kit™**
- **Stakeholder Buy In and
Program Implementation**
- **Points for Discussion**
- **Your Questions**

Background

- **only 5-30% of infants and children in cardiac arrest receive CPR prior to EMS arrival**
- **patient's chance of survival decreases by 7-10% for every minute CPR is not provided.**
 -(Cooper JA et al., Circulation, 2006.)
- **parents of high risk children are anxious about CPR discharge teaching but ability to learn CPR is equal if not greater** (Dracup K et al., Critical Care Medicine, 2000.)
- **video based self-instruction (VSI) can teach CPR effectively in less than 30 minutes.**
 - (Braslow et al., Resuscitation, 2000)

Issues Found with Traditional Discharge CPR Training



- **Information was at times not consistent**
- **Materials were sometimes outdated**
- **Sub-optimal teaching methods**
- **Parents overwhelmed at discharge with all the information given**
- **Discharges were delayed to RN's unavailability**

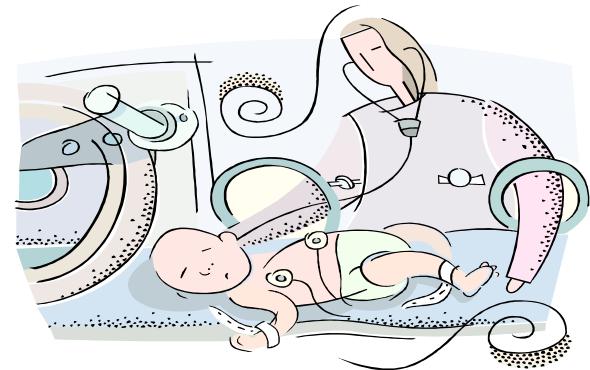
Study Aims

- To determine whether this standardized CPR training to families will generate and sustain high levels of CPR knowledge and confidence
- To determine if families will disseminate the information to others



Laerdals “CPR Anytime” Kit™ Released





Methods

- **IRB and informed consents obtained from parents of hospitalized high-risk pediatric children**
- **High- Risk defined as:**
 - **Post operative cardiac patients or cardiac anomalies**
 - **Solid organ transplants**
 - **Patients with oxygen dependence or tracheostomies**
 - **seizure disorders**
 - **neonates with documented frequent apnea and bradycardia episodes**

Methods

- The “CPR Anytime” kit™ was given to parents and asked to review kits prior to discharge



Methods

- Parents watched DVD and then went through steps of CPR
- Facilitators were responsible for assessing the subject's performance
- Facilitators encouraged families to review the DVD and to share the kit with others.



| | |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assess responsiveness | The examinee must have physical contact with the manikin and speak loudly enough to awaken a sleeping person |
| Call 911 | The examinee must pretend to call, or send someone to call 911 |
| Adequate ventilation | The examinee must provide adequate ventilations to cause the chest to rise |
| Proper hand placement | The examinee must demonstrate the proper hand position over the sternum |
| Adequate compression depth | The examinee must depress the chest approximately 1.5-2 in |
| Overall, performance was adequate | Perfection is not necessary; the key is to determine whether the learner's actions would adequately perfuse the patient such that the patient's chances of survival would be increased, relative to no action |

Appendix B: CPR Anytime Survey

Learner ID: _____

Phone: _____

Circle : Month 1 Month 3 Month 6 Month 12

Date of discharge:

Reason for child's hospitalization:

1. How comfortable would you feel performing CPR on your child?

- (1) Very uncomfortable
- (2) Somewhat uncomfortable
- (3) Neutral
- (4) Somewhat comfortable
- (5) Very comfortable

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

Results

- **Parents of 117 high- risk patients were entered into the study**
- **Followed up with telephone survey at 1 month, 3 months and 6 months**
- **74% of participants completed the telephone survey at 1 month, 62% at 3 months, and 52% at 6 months.**

RESULTS

- **Kits were disseminated by most families to at least 2 other family member or friends at 6 months**
- **Four participants reporting performing CPR after discharge and three of the four victims survived and are neurologically intact.**
- **All four participants felt equipped to perform CPR as a result of their training from the “CPR Anytime™” Kit.**

Conclusions



The provision of the CPR Anytime™ Kit to parents of high risk pediatric patients prior to hospital discharge

- **leads to sustained levels of CPR knowledge and decreases anxiety over the prospect of performing CPR**
- **Parents review the kits after discharge and disseminate them to other family members and friends, further strengthening the amount of laypersons trained in CPR.**

Stakeholder Buy In

- **August of 2009, Lucile Packard approved this the CPR Anytime Program as our standard way of teaching families of high risk children CPR at discharge at no charge to our families.**



Program Implementation

- **Sustainability a Priority**
- **World Point , Channing Bete and Laerdal were asked to provide an ongoing price per kit**
- **Laerdal provided lowest price at annual savings of \$9,000**
- **Supply distribution orders kits on a monthly basis**
- **As requested, kits are sent to unit (encourage at admission)**
- **Cost is reabsorbed through charges to unit as units see advantage over cost**

Year and half later...

- Over 2200 kits have been given to Packard families in the first year.



Nurses Surveyed

- Prior to implementation- 60% of nurses reported they spent 40-60 minutes teaching families CPR post implementation -less than 20 minutes
- Prior to implementation- 100% of RN's stated that more than 50% of discharges were delayed post implementation- less than 10%
- 100% of nurses answered they were *Very Satisfied* with the CPR Anytime Program

Nurse Testimonials



- *“Fantastic Program! Very well received and appreciated by our families... Easy to use and we get great return demos!”*
- *Big asset at discharge. User friendly. Parents love that the opportunity to take the kit home and practice with others!*
- *Parents are so much more comfortable with this way of training. We love these kits! I notice parents are so stressed and don't want to leave their baby. The kits are great as they watch it in hospital and we can provide feedback as needed. It frees nurses up to do other important duties!*

Testimonials



- *“I think this is a great tool to have in the home! I will share it with all of Scottie’s caregivers!”*
- *“I hope this program continues in this hospital. We sure found it to be a great resource. We likely would not have been CPR trained otherwise.”*
- *“Without this training video and practice doll, I would have not learned CPR. (A scary proposition with a newborn with nasal obstruction!) We now have confidence in what to do in case of our son choking. Becoming CPR trained has allowed us the piece of mind and education that we would not otherwise have, Thank you so much!”*
- *“I feel much more comfortable after watching that video. The kit made all the difference in the world. I show all my friends and anyone around my child, it should be in every household!”*

Resuscitation training...it's never too soon to start



Mom Interview

Points for Discussion

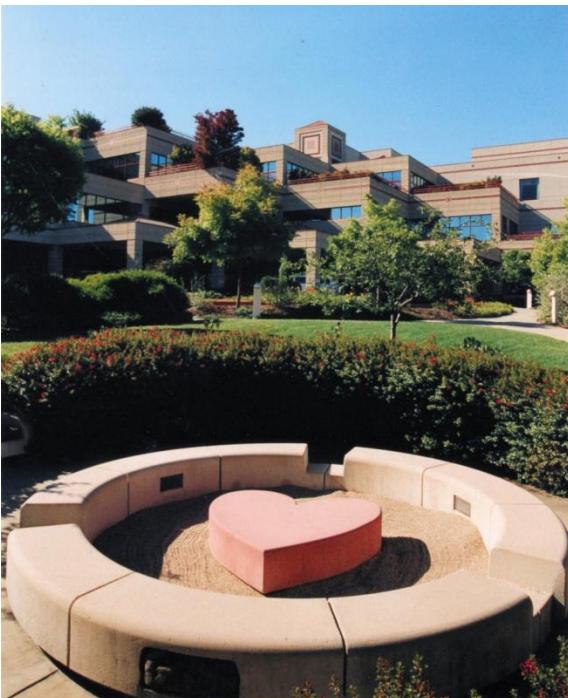


- Is this a reproducible method of training families CPR to families in all children's hospitals?
- Will the implementation of this program continue to decrease the amount of delayed discharges?
- Will the program be cost effective for hospitals due to the decreased amount of time nurses will spend CPR with this self-instructional method of teaching ?

Questions or Comments



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