

Come one, come all... Learn More about the Ascent to the AHA Education Summit, and the 2017 Guidelines Update

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Disclosures

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ITMAT/CTSA CHIBE pilot grant (PI: Abella/Co-I: Blewer)

Objectives

Updates from the Resuscitation Education Science Summit

- Knowledge Translation
- Implementation
- Educational Innovation

Provide key updates from the 2017 Guidelines

- ABLS
- PBLS
- Dispatch CPR

AHA Education Summit



Survival from SCA is low possibly due to current resuscitation education strategies

Areas covered by the Education Summit

Deliberate Practice

Spaced Learning

Contextual Learning

Assessment

Feedback and Debriefing

Faculty Development

Knowledge translation and implementation

Educational Innovation

Background: Knowledge Translation and Implementation



Studies have documented resuscitation knowledge translation and implementation efforts have been poor

Background: Knowledge Translation and Implementation



How do we disseminate resuscitation knowledge/skills to the appropriate community stakeholders?

Passive Knowledge Translation



Notes
Posters
Email Reminders
Social Media Campaigns



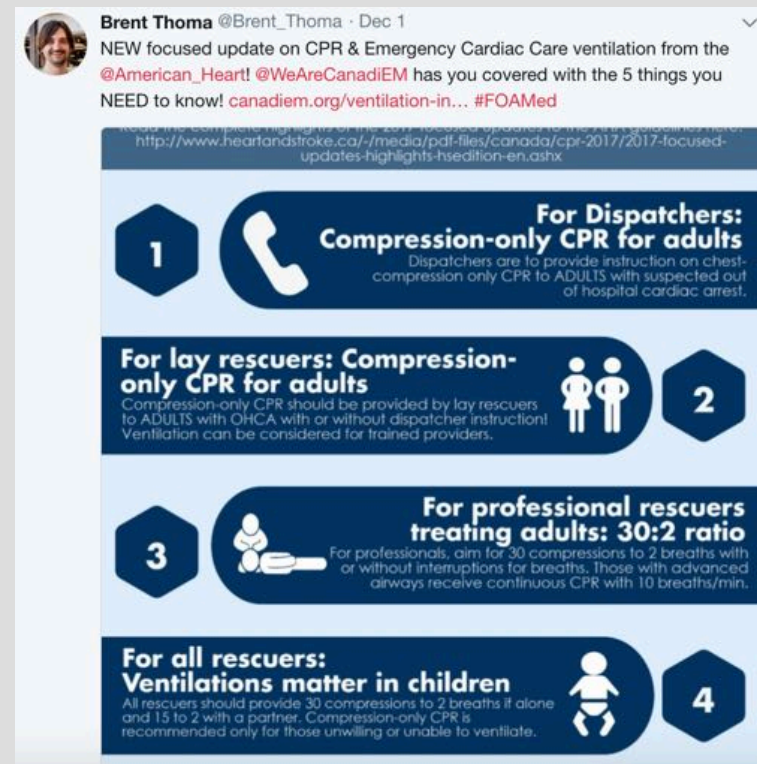
Passive Knowledge Translation: example



Combined with
active knowledge translation!

Website: <https://canadiem.org/ventilation-in-resuscitation/>

Passive Knowledge Translation: SoMe example



Change Theory & Design Thinking



Where you place
the feedback
device matters!

*Consider human factors, ergonomics and the physical space
when planning educational measures*






Performance Measurements & Quality Improvement

A Report Card: general checklist

Event number / date	No / Intermediate / Yes
Was the team leader clearly identified?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Was the scene orderly and quiet?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Was the defibrillator applied quickly?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Was CPR started promptly?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Were pauses in CPR delivery minimized?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Was CPR of subjectively high quality?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Were post shock pauses minimized?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Was an airway secured efficiently?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

Comments: Good team leader, good effort overall but compression to 2000mmHg needs to be improved. Intermediate quality.

B Report Card: CPR quality analysis

Event number / date	
Compression fraction	93% 
Mean compression rate	102 
Mean compression depth (mm)	49 
Compressions without timing	75% 
Mean ventilation rate	9 

Comments: Good team leader, good effort overall but compression to 2000mmHg needs to be improved. Intermediate quality.

Feedback, public reporting, benchmarking, and quality improvement programs strengthen systems of care

Performance Measurements: example

- *eSimulation cases*
- *Mobile Simulation Stations*
- *Refreshes CPR skills*
- *Modules to develop high-quality CPR*
- *Allows providers to maintain course completion cards indefinitely*
- *Data archived in learning management system*

http://cpr.heart.org/AHA/ECC/CPRAndECC/Training/RQI/UCM_476470_RQI.jsp



Incentives and Penalties



Consider if incentives/penalties can play a role in individual, team or performance metrics

Incentives and Penalties - example

Asymmetric Paternalism to Improve Health Behaviors

Loewenstein et al, JAMA 2007



Contents lists available at ScienceDirect

Healthcare

journal homepage: www.elsevier.com/locate/hjdsi



Physician attitudes toward participating in a financial incentive program for LDL reduction are associated with patient outcomes

Tianyu Liu^{a,1,2}, David A. Asch^{a,b,1,3}, Kevin G. Volpp^{a,b,1,3}, Jingsan Zhu^{a,1,2,3,4}, Wenli Wang^{a,1,2,3,4}, Andrea B. Troxel^{a,1,2,3}, Aderinola Adejare^{a,1,2,4}, Darra D. Finnerty^{a,1,4}, Karen Hoffer^{a,1,4}, Judy A. Shea^{a,*,1,2,3,4}

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Liu et al, Healthcare 2016

Programs where providers are paid financial incentives for achieving quality goals are being widely adopted

Incentives and Penalties - example

Can financial incentives increase enrollment among nurses enrolling for our pragmatic trial?



Psychological Marketing




**OLD BATTERIES IN SMOKE DETECTORS WON'T SAVE LIVES.
OLD CPR TRAINING WON'T EITHER.**

CPR IS BEST REFRESHED.

PRACTICE YOUR **CPR TRAINING TODAY.**

Psychological Marketing - example




THE POWER TO SAVE A LIFE IS IN YOUR HANDS.

When their heart stops,
push hard and fast on
the center of the chest.

**TAKE A MOMENT
TO REFRESH YOUR
CPR SKILLS TODAY.**


Psychological Marketing - example



Anthony's heart stopped
while exercising at the gym.

Immediately a bystander
started CPR.

AMANDA'S ACTIONS SAVED HIS LIFE.



TAKE A MOMENT TO REFRESH
YOUR **CPR** SKILLS TODAY.

Psychological Marketing - example

"I was lucky to have my cardiac arrest at work in front of many caring people, but I worry about all of the people who have arrest in their homes.

WHO WILL TRY TO SAVE THEM?"

BRENDA HALLIBURTON
Cardiac Arrest Survivor

YOU CAN BE THE DIFFERENCE.

BE PREPARED, REFRESH YOUR CPR SKILLS TODAY.

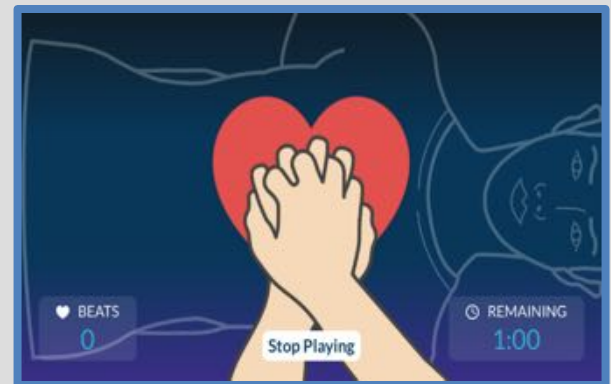


Background: Educational Innovation



Can we disseminate resuscitation knowledge/skills by utilizing innovative current technology and platforms?

Gamified Learning



Using applied game attributes to improve learning and skills/knowledge retention


Social Media

JAHA at ReSS 2017 

Follow @JAHIA_AHA and our team of Resuscitation Professionals as we live-tweet from the AHA/ASA Resuscitation Science Symposium (ReSS) 2017 in Anaheim, CA, Nov 11-13.


For more ReSS, use the official AHA meeting hashtags:


#AHA17
#ReSS17



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Used for knowledge dissemination, engagement and tracking of attitudes and perceptions

Social Media



Twitter Chats, Journal Clubs are becoming increasingly popular – could we use this to disseminate key skills?

Educational Innovation– other

Blogs, podcasts are becoming increasingly popular

Crowdsourcing

The screenshot shows the homepage of the MyHeartMap Challenge website. At the top, the University of Pennsylvania logo is on the left, and navigation links for 'About Us', 'Contact', 'Sponsors', and 'Media' are on the right. Below this is a red navigation bar with links for 'Home', 'The Contest', 'AED Education', 'About Us', 'In The News', 'Research', and 'Sponsors'. The main header features the 'MY HEART MAP CHALLENGE' logo on the left and the text 'Welcome to the MyHeartMap Challenge' and 'Improving AED awareness and access to save lives!' on the right. A small button says 'View the latest press release'. Below the header, a paragraph states: 'This project is a community improvement initiative and part of a research study being conducted at the University of Pennsylvania.' The main content area is divided into two columns. The left column has a red header 'The contest is over but its not too late to submit additional AEDs. Click Here!' and features a map with red heart markers and two smartphones displaying the app. Text below the map says 'HELP POTENTIALLY SAVE LIVES, YOU CAN STILL SUBMIT AEDs HERE! >>'. The right column has a red header 'Our Next Challenge...' and features a photo of a person in a suit holding a red heart-shaped AED device. Text below the photo says 'Design meets public health and you can be the hero! See the gallery of designs, vote, and/or submit one of your own! View the Penn Defibrillator Design Challenge'. At the bottom of the right column is a red button 'Clues from the contest!'. The footer of the left column contains a thank you message and contact information: 'While the contest ended, we still need your help! We will continue to accept submissions of AED devices to build a nationwide database. View our working map here. Stay tuned for more developments! Join our mailing list or email us at myheartmapchallenge@victa.upenn.edu'.

AHA 2017 Guidelines: BLS, PBLS, and CPR Quality

AHA FOCUSED UPDATE

2017 American Heart Association Focused Update on Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care

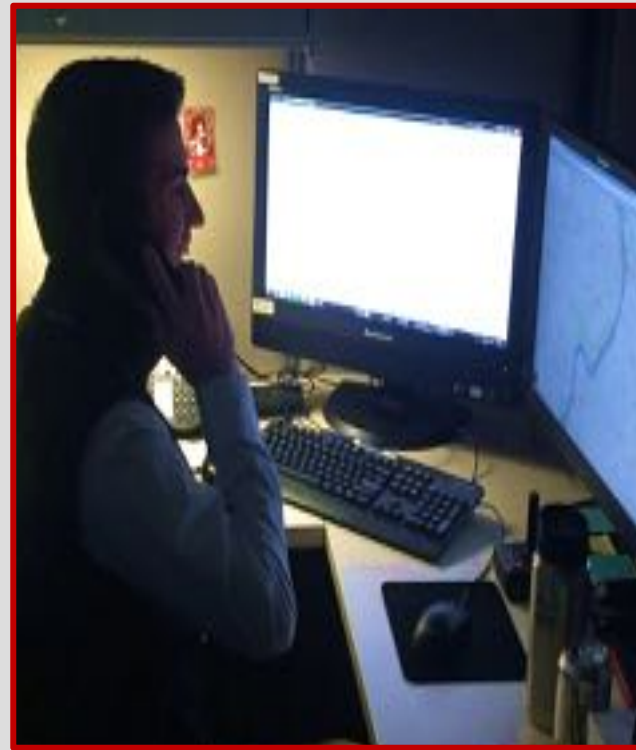
Monica E. Kleinman, Zachary D. Goldberger, Thomas Raa, Robert A. Swor, Bentley J. Bobrow, Erin E. Brennan, Mark Terry, Robin Hemphill, Raül J. Gazmuri, Mary Fran Hazinski, Andrew H. Travers

AHA FOCUSED UPDATE

2017 American Heart Association Focused Update on Pediatric Basic Life Support and Cardiopulmonary Resuscitation Quality: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care

Dianne L. Atkins, Allan R. de Caen, Stuart Berger, Ricardo A. Samson, Stephen M. Schexnayder, Benny L. Joyner, Blair L. Bigham, Dana E. Niles, Jonathan P. Cuff, Elizabeth A. Hunt, Peter A. Meaney

AHA 2017 Guidelines: Dispatch-Assisted CPR



Dispatchers should provide chest compression-only CPR instructions to callers for adults with suspected OHCA

AHA 2017 Guidelines: Adult Bystander CPR



Adults in OHCA: 1) untrained and trained lay rescuers should provide chest compression-only CPR 2) lay rescuers trained in “standard” CPR may provide ventilations + breathes

AHA 2017 Guidelines: Professional Rescuers



For professional rescuers treating adults: 30:2 ratio: Aim for 30 compressions to 2 breaths with or without interruptions for breaths. Those with advanced airways receive continuous CPR with 10 breaths/min.

AHA 2017 Guidelines: Pediatric BLS



Infant and Child (1y-puberty) in OHCA: chest compressions with rescue breaths should be provided

CPR & ECC 2017 Updates



Website:

<https://canadiem.org/ventilation-in-resuscitation/>

Interactive website:

<https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/>

Thank You!!!! Questions?



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