⚡ iRescU

Bridging Social Media & Saving Lives

Logistics and Implementation of a Two-Way Global
Cloud Based Life Saving Platform in the Real World

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Introduction:

~300,000 annual USA out-of-hospital cardiac arrests

<8% survive, this has not changed in 30 years

Less than 25% receive CPR

An AED used in <2%, yet in ~4/5 may have a reversible shockable rhythm

<5% of lay public are trained in CPR and AED use.

Lay AED location is complex, ad hoc and non uniform

Studies have shown bystanders are often uncomfortable to perform CPR, locate or use an AED, and often ineffective in cardiac emergencies.

This is the Real World...

what is cpr something to do with resuscitation?

i heard about cpr but i dont know what the acronym means or how to perform it. if i need it some day i won't be able to help.

Technorati Tags: acronym, cpr

MultiHazard on 07 Jan 2011 | AED & CPR | Comments (3)

3 Responses

Bridging Technology

mHealth 2010— What's an AED?

ECCU 2010— What's an App?

How do You Find That AED?

New York News
Doctors unable to find defibrillator at JFK
Thursday, January 06, 2011

Objective

To scientifically develop a CPR/AED multimedia two way support/management system optimizing the features available in smartphones and cloud based data management

Goal to be an easy access gratis tool for the lay person when training or faced with a life threatening cardiac emergency and to create sustainable infrastructure for global emergency call number identification, capture and access to AED locations and data capture on cardiac emergency events

Methodology

A multidisciplinary team was assembled bridging:

CPR educators, software developers, human factors expertise, emergency care providers and academics, epidemiologists, social media expertise, and sudden cardiac arrest survivors and activists.

Interdisciplinary technical review was completed of existing CPR and AED Apps to April 2011

This technical input applied to the development of this App and two way cabis platform.

The spectrum of ideal features which safely and comprehensively addressed the existing gaps in the chain of survival were determined and utilized to augment the prototype design of the iRescU App and cabis system.

Focus on technical scalability and sustainable infrastructure

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Results

There were no standards identified for requirements for usability or App interface design for CPR/AED

54 English language CPR and/or AED Apps found

The Apps came from nine countries

Three Apps would lead the end user to AED locations very distant from the cardiac event

Only 4/54 were updated to meet the October 2010 AHA CPR guidelines

Only one App had undergone accessible preliminarily study for operational validation

CPR/AED App purchase cost ranged from free to US $20

Results

CPR/AED cloud based system and App designed, for deployment to multiple mobile platforms on a global two way Cabis architecture, with a lay App front end integrating social media functioning as both a data terminal and a data resource

Simple high contrast screens, with global fluency identifying global emergency call numbers, clear text information (international language capability)

Adherence to AHA/ERC guidelines with no medical jargon

Logistically practical location of nearby AEDs.

Different usage modes which address:

CPR/AED support in an emergency setting and training mode

AED geolocation, & live feed update of crowd sourced AEDs

a platform for facilitating the upload of existing AED data bases

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Operational System — Telematicus
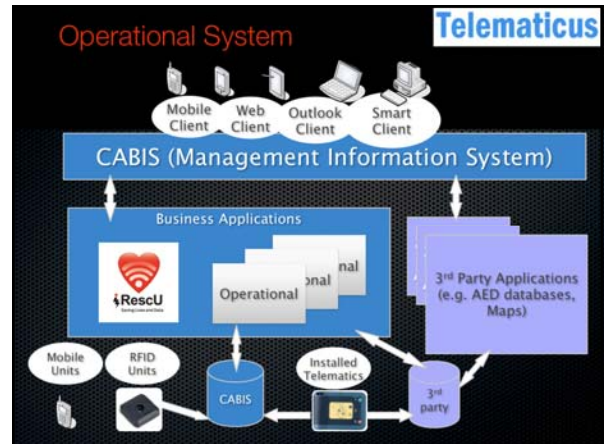
Cloud Based Global Data
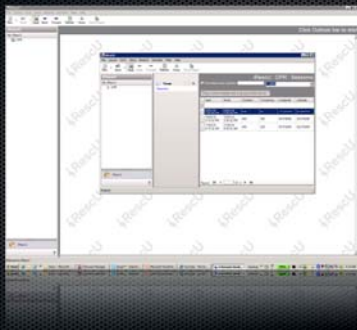
Harnessing the Power of Social Media:

iRescU Global AED geoLocation Challenge at mHealth 2011 – booth 528

Pilot iRescU November AED geoLocation Challenge at AHA 2011

Slide 1

The T-shirt that can Save a Life by Helping to Upload an AED geoLocation!

..and a REALLY Smart Baseball Cap!

Slide 2

Discussion

Validation of captured AEDs still need to be for location and accessibility

Complex business model to ensure free access to the public

Challenges in public health establishment adopting crowd sourcing technologies

Though public health solutions are customarily regional or local, the 'cloud' is global – thus existing point solutions are problematic when it comes to implementing App based AED projects

Slide 3

The Cloud is Global

Slide 4

Conclusions

In the absence of existing standards, CPR and AED Apps are being developed ad hoc with key issues such as globalization of emergency call numbers, the geospatial relevancy of the AED location information in Apps, as well as the inherent hazards

iRescU Cabis Cloud based and App system integrates an interdisciplinary approach, social media with crowd sourcing with App design with the expert team – to design a platform for to bridge saving lives and social media in a manner that is scalable addresses enhancing life saving opportunities, and minimizes potential risk.

Slide 5

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Any Questions?