Location, Location, Location!

When Dispatch Knows Where the AEDs Are

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OHCA – Some Context

- AEDs improve survival from OHCA
- How to get them to pts faster?
- Public access defibrillation
- 88% of OHCAs occur at home
- Can we find AEDs, then link location to 9-1-1 system to speed public access?
How to Locate AEDs?

- Registration websites
- Google searches
- Firefighter block checks
- Hire people to find them
- Crowdsourcing
MyHeartMap Challenge

• Crowdsourcing project
• Contest to engage public in locating, photographing AEDs
• Used print/radio/social media, apps, website to advertise, collect data

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MyHeartMap Challenge

• From Jan 31-Mar 27, 2012, submitted photos, details re AED locations
• Incentives were money ($10K for finding the most), personal satisfaction
**Required Data Elements**

- Building’s full address
- Building type (e.g. school, etc.)
- Photo of AED, including surroundings
- Description of location within building
- Does device appear operational?
- Collected as GPS coordinates and shapefile
MyHeartMap Challenge

• 1429 AEDs located
• Results validated
• Since contest, more AEDs found and entered in database
• How to link locations to CAD?
How to Enter into CAD?

• Manually enter as premise histories

• Enter location by block so call taker can tell caller when AED is nearby

• Enter as shapefile so map of all AEDs is superimposed on city map
Are There Downsides to Project?

- Data set is incomplete
- Know where some AEDs are (were), but not all
  - Data based on one point in time. Unless constantly updated and validated, unreliable
- Once data in CAD, will have to be updated
- AED location known, but is access guaranteed?
Challenges

• How should 9-1-1 present information to caller?
  • i.e., “There may be an AED in the nearby X. If available, send someone not performing chest compressions to get it.”

• What if AED is not there?
• What if owner does not want it removed?
• What if person running for AED gets hit by car?
• Worthwhile, if first responders arrive in < 4 min.?
Conclusions

• Concept has great potential
• Database must be reliable, current
• There may be liability issues
• Long-term, alternative solutions may be preferable to reduce time to defibrillation