



Prevention

TELEMEDICINE TO EXPEDITE MEDICAL CONTACT FOLLOWING SYMPTOM ONSET

Poster Contributions

Hall C

Sunday, March 30, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Prevention: Gender, Race/Ethnicity, and Preventive Interventions

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Background: No definitive solution has been forthcoming for the often dangerously long interval between cardiac symptom onset and seeking medical care (patient "decision time") in the pre-hospital setting. Implementation of telemedicine technology and characterization of its utilizers are examined for its efficacy in reducing this possibly life-threatening time lag.

Methods: Time-to-contact measurements during 1/1990-8/2013 (primary goal) were retrieved from the medical files of all members of a telemedical facility. Data on age, gender, medical history and main complaint throughout 2012 were analyzed (secondary goal).

Results: Of a total 928,913 calls, 445,878 (48%) were made ≤ 60 minutes from symptom onset. Importantly, 24% of all calls (220,837/928,913) were made in < 15 minutes. Throughout 2012, more males contacted in ≤ 60 minutes compared with females (11,480/24,327 [47%]), $P < 0.03$. Members < 60 years of age (2,889/5,717 [51%]) called significantly earlier than those > 60 years (19,386/40,839 [47%]), $P < 0.001$. Patients with a history of resuscitation and/or myocardial infarction contacted significantly more rapidly than those with other cardiac diseases. Over one-half of the patients with cardiac complaints contacted the call center ≤ 60 minutes from symptom onset, as did those who suffered physical trauma, but not patients with gastrointestinal symptoms or pain elsewhere. Time-to-contact following neurological signs and symptoms varied considerably, with convulsions and seizures being associated with the shortest intervals.

Conclusions: A telemedicine system with rapid accessibility and prompt triage is an additional promising strategy for shortening the interval between symptom onset and call for medical assistance.