





Michigan - Several Activities

Improving the Chain of Survival in the Washtenaw-Livingston County, Michigan

BRIEF BACKGROUND

In the Washtenaw-Livingston Medical Control Authority region, cardiac arrest survival to hospital discharge with good neurological outcomes is at 8%, below the national average of 10%. Rapid treatment is critical to improve survival from OHCA and is directly affected by a bystander's abilities to immediately diagnose cardiac arrest, call 911 and provide early CPR and/or AED. In fall 2018, the Michigan Medicine Departments of Emergency Medicine and Learning Health Sciences collaborated with SaveMiHeart and local EMS agencies to establish an OHCA learning community to increase survival rates in Washtenaw and Livingston counties.

STEPS TAKEN

A learning health system (LHS) approach was used to help accelerate the shared identification of priority areas for investigation and facilitate more rapid implementation of innovative interventions. During the first meeting, approximately 65 stakeholders in the chain of survival identified four critical goals to improve time-to-first-treatment:

- Increase bystander response
- Expand OHCA public awareness
- Reduce time-to-treatment and improve data collection for key process measures
- Advance post-cardiac arrest systems of care

At the follow-up meeting, stakeholders discussed forming work groups for the learning community based around the following themes:

- Community education and public awareness
- Culturally specific outreach and response
- AED & PulsePoint
- Dispatch protocols
- System coordination and handoffs

The most recent meeting welcomed 24 participants to continue the important work of increasing OHCA survival rates. Learning community workgroups shared their chain of survival related work and provided updates on LHS for OHCA progress regarding AED accessibility, community education and outreach, and dispatch optimization

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CHALLENGES

It is difficult to optimize the timing of bystander intervention and the therapies they can provide for a variety of reasons. This initiative hopes to significantly increase the number of out-of-hospital cardiac arrest patients that survive to lead normal lives.

RESULTS

The University of Michigan was recently awarded funding from the AHA Strategically Focused Research Network for a new project — the Michigan Resuscitation Innovation and Science Enterprise (M-RISE). M-RISE includes three projects (basic science, clinical project and population science), as well as a postdoctoral training program.

OUTLOOK

The LHS for OHCA Learning Community project plays a key role in the population science project. It will utilize the learning health system approach and engage the expertise of the LHS for OHCA Learning Community to develop recommendations for optimizing timely implementation of proven therapies, and determining the feasibility of bystanders and first responders delivering new therapies developed in the basic and clinical projects with minimal or no training.

CONTACT

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