



A member of the
Global Resuscitation Alliance



Leading EMS Systems – Data Collection

Impressive Increases in Survival

The graph shows survival from out-of-hospital cardiac arrest in Seattle, Denmark, and Seoul, leading EMS systems in their respective world regions, for the periods from 2006 through to 2014-16. The three systems are all founding members of the Global Resuscitation Alliance (GRA) and focus on adopting best EMS practice for improving survival.

Their results are impressive, showing almost doubling of survival in Seoul and tripling of survival in Denmark over ten years. The dotted lines indicate a further 50% increase of these survival numbers by 2020 by continuing the trends.

Several studies indicate that the average survival from cardiac arrest among EMS systems in high-income countries may be at a similar level as in Seoul, i.e. around 50 per million population (/m). Assuming these EMS systems adapt the GRA ten best practice steps, survival could increase 50%, i.e. to around 75/m in 2020. This is the goal set by the GRA, and would amount to 35,000 additional survivors per year.

In low- and middle-income countries, where 82% of the global population live, the situation is dramatically different. Very few witnesses of a cardiac arrest are trained to recognize and respond to such an emergency, the dispatch systems are not well established, and the ambulances (if at all available) typically arrive too late and with poorly-trained and poorly-equipped personnel. As a result, current survival may be as low as 1/m. By modest implementation of best practice, an increase in survival from 1 to 6/m by 2020 should be achievable, saving another 35,000 lives per year.

