



A member of the
Global Resuscitation Alliance



GRA - Data Collection

Steady increase in survival: 50% improvement is possible.

BRIEF SUMMARY

The GRA ambition as stated in the 2016 Call to action is to increase survival by 50%. EMS systems and nations publish annual reports. We compare the development in King County EMS, Danish Cardiac Arrest Registry, Norwegian Cardiac Arrest Registry, Singapore Cardiac Arrest Annual Reports, Seoul cardiac arrest annual report and Korea annual report. Survival per million citizens show a positive trend with a median increase of 4 lives per million people per year. With this trend, the time to reach 50% increase has been calculated for the EMS systems.

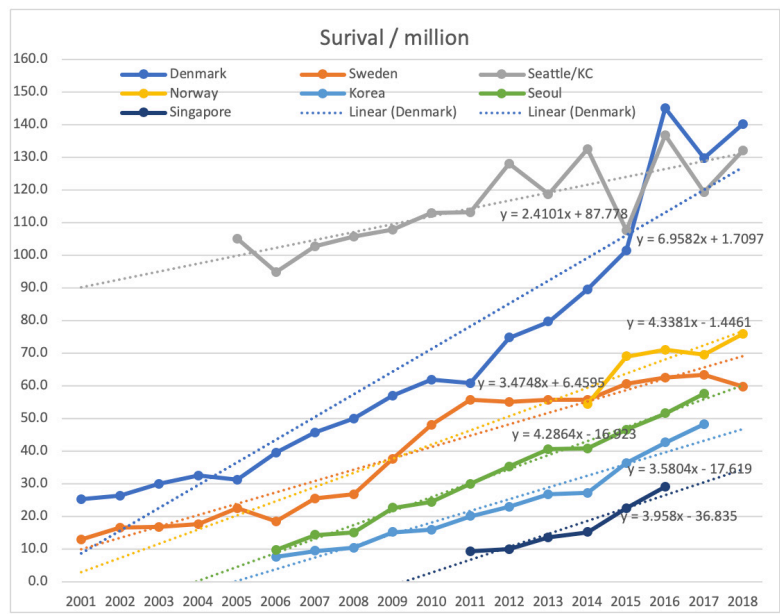
BACKGROUND

In June 2015, 36 international experts convened at Utstein Abbey outside Stavanger to discuss how to increase community cardiac arrest survival. The experts agreed that a survival increase of 50% is achievable by implementing best practice, described as ten programs and ten actions.

METHOD

Available annual cardiac arrest reports since 2001 were accessed for number of survivors following EMS treatment. For each year, we also identified the population served, either from the annual reports or from World Bank, UN or Eurostat. We included annual data from King County EMS, Norway, Denmark, Sweden, Singapore and Seoul/Korea. Trendlines for each EMS system is calculated.

RESULTS



The table below shows when 50% increase in survival from 2014 level will be reached if the trend continues.

System	Improvement (/m per year)	2014 level (/m)	50% increase (/m)	Diff (/m)	Year to reach 50% increase
King County	2,4	128	192	64	2041
Denmark	7,0	82	123	41	2020
Norway	4,3	54	81,6	27,2	2020
Sweden	3,5	59	89	30	2022
Seoul	4,3	42	63	21	2019
Korea	3,6	29	43,5	14,5	2018
Singapore	4,0	15	22,5	7,5	2016
Median	4,0	54,4	81,6	27	2020

DISCUSSION

Trend in 2014 was used as reference since these numbers would have been known in 2015 when A call to action was made. Systems seem to start around 10 survivors per million people. Trends in survival are positive and quite similar except for King County which were at a much higher level in 2014 and Denmark where the trend accelerated past 3 years. Those EMS systems who started at a low survival has already passed the 50% improvement. The data suggest that an increase in 4 lives per million people per year can be a realistic ambition for most EMS systems.

CONCLUSION

Reaching 50% increase in survival is possible, and some EMS systems are already passed this ambition.



A member of the
**Global
Resuscitation
Alliance**