

True Outcome Determination After In-Hospital Cardiac Arrest

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Background and Objectives:

A commonly reported measure for a successful resuscitation from in-hospital cardiac arrest is survival to discharge. But what does that really tell us? In the continuation of a previous study looking at whether hospital bed size impacted survival, we wanted to look even further to identify the true condition of those patients at discharge who survived, and their discharge destinations after in-hospital cardiac arrest.

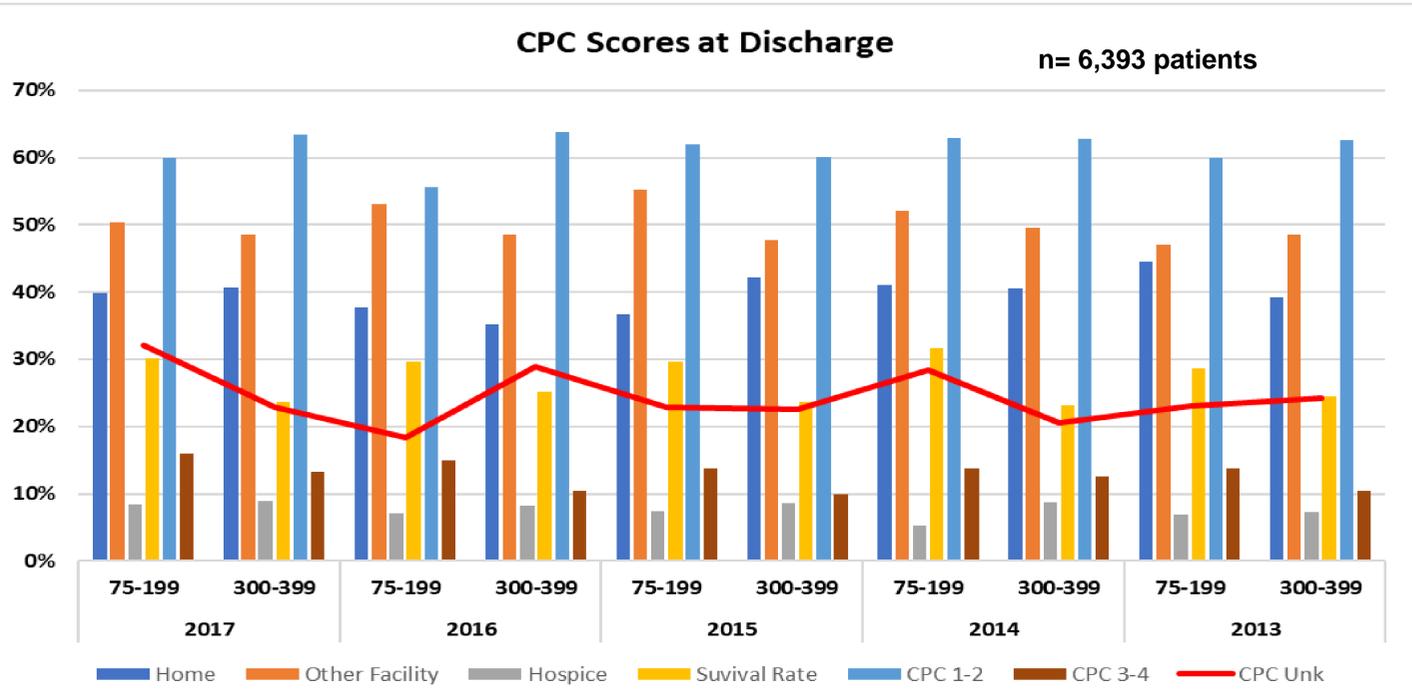
Methods:

By using data for the years 2013-2017 from Get With The Guidelines® (GWTG) for 75-199 & 300-399 bed hospitals in the AHA Midwest Affiliate, we compared survival to discharge destination & cerebral performance category, (CPC score), for patients who survived with and without shockable rhythms. All patients were included in a risk adjusted formula.

"This work represents the authors independent analysis. It is not an analysis of the national GWTG dataset and does not represent findings from the AHA GWTG National Program"

DISCLOSURE INFORMATION:
The following relationships exist related to this presentation:
K. Thomas, none; G. Myers, none, A. Miller, none.

Year	Bed Size	Survival Rate	Home	Other Healthcare Facility	Hospice	CPC 1-2	CPC 3-4	CPC Unk
2017	75-199	30.1%	39.9%	50.4%	8.4%	60.0%	15.9%	32.0%
	300-399	23.6%	40.7%	48.5%	8.9%	63.4%	13.3%	22.9%
2016	75-199	29.7%	37.7%	53.0%	7.1%	55.6%	15.0%	18.3%
	300-399	25.1%	35.1%	8.6%	8.3%	63.7%	10.4%	28.9%
2015	75-199	29.7%	36.7%	55.3%	7.4%	62.0%	13.8%	22.9%
	300-399	23.6%	42.2%	47.7%	8.5%	60.1%	9.9%	22.5%
2014	75-199	31.7%	41.0%	52.0%	5.3%	63.0%	13.7%	28.4%
	300-399	23.1%	40.6%	49.9%	8.7%	62.8%	12.6%	20.5%
2013	75-199	28.6%	44.5%	47.0%	6.9%	59.9%	13.7%	23.0%
	300-399	24.5%	39.2%	48.5%	7.3%	62.6%	10.5%	24.2%
Medians	75-199	28.6	39.9	49.9	7.1	60	13.8	23%
	300-399	25.1	40.6	48.5	8.5	62.8	10.5	



Results:

Although survival rates in the 75-199 bed hospitals were always higher, CPC scores were almost always lower for the 300-399 bed facilities indicating a better neurological outcome. Discharge destinations varied but in almost every case, the majority were sent to other healthcare facilities, (extended care, skilled nursing, rehab). A large percentage were discharged home however, verifying again that many patients survived with normal to nearly normal neurologic status. We also discovered that nearly 1 in 4 patients had no CPC score documented at discharge.

Conclusions:

After analyzing hospitals with 75-199 & 300-399 beds, the data showed higher rates of survival to discharge in the smaller hospitals however, neurologic outcomes were better at larger facilities. This led us to conclude that survival rate alone may not be the most appropriate measure of a successful resuscitation. CPC score at discharge is another key component that should be included. Discharge destination can also be considered as an indicator of the patient's condition. Additionally, hospitals should evaluate their process for documenting neurologic status at discharge and whether there are omissions in the medical record or an abstracting oversight in Get With the Guidelines-Resuscitation by not including a CPC score.