

Fifty percent survival of cardiac arrest in Switzerland: an utopian goal?

R. Mauri¹, C. Benvenuti², R. Burkart², M. Egloff³, R. Cianella⁴, A. Engeler¹

¹ Department of Anaesthesia and Intensive Care, Cardiocentro Ticino, Lugano, Switzerland • ² Ticino Cuore Foundation, Breganzona, Switzerland
³ University of Applied Sciences and Arts of Southern Switzerland, Manno, Switzerland • ⁴ Ticino Federation of Emergency Medical System, Breganzona, Switzerland

INTRODUCTION

In June 2006 we implemented in Southern Switzerland (2811 Km²/320.000 inhabitants) an Early Resuscitation and Defibrillation Program creating a network of "first responders" coordinated by the regional dispatch centre. This is the first program of this kind in Switzerland. We test the possibility of reaching a survival rate of 50% of witnessed VF/VT within the next years.

METHODS

We collected data according to the Utstein style and tested our hypothesis using a linear regression equation.

RESULTS

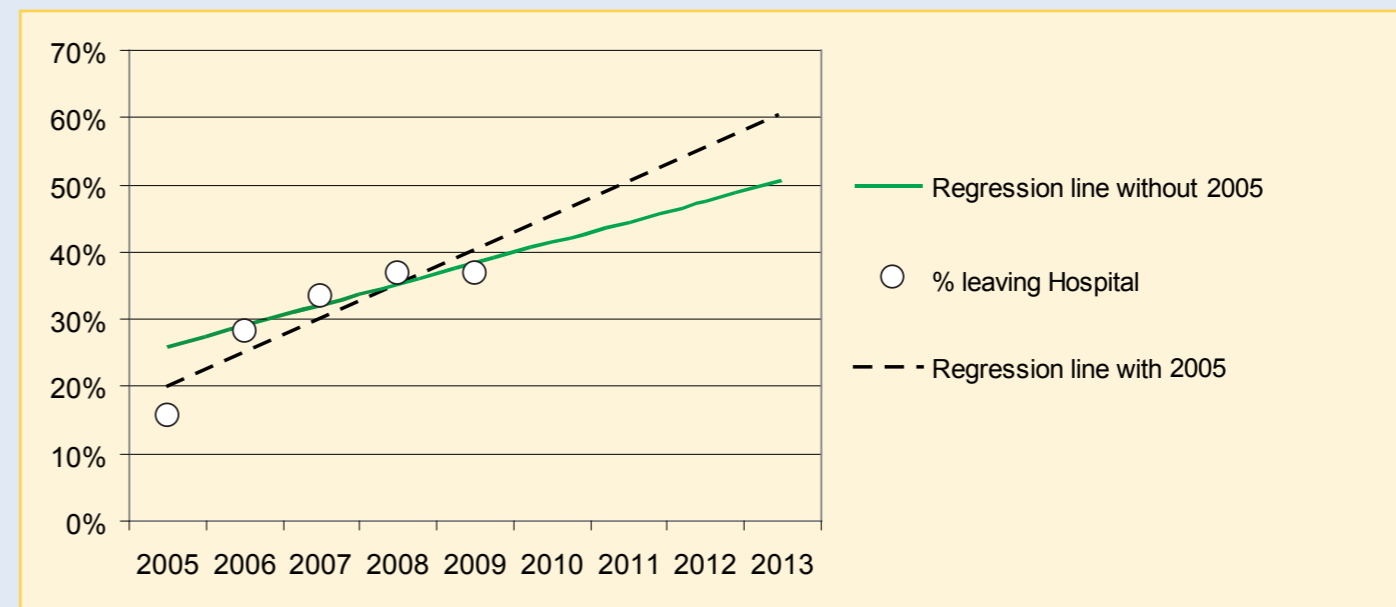
The predicted percentage of patients leaving Hospital increases by 5,1% per year.

Poster presenters declare that they have no potential conflicts of interest regarding current poster presentation

Table of results

Year	N Arrests	Considered for resuscitation	Cardiac	Witnessed	Bystander CPR	VF/VT	ROSC	Leaving Hospital
2005	349	239	159	110	38	45	26	7 (15.6%)
2006	326	227	171	105	39	46	29	13 (28.3%)
2007	350	224	157	88	25	30	21	10 (33.3%)
2008	298	212	161	97	38	38	27	14 (37%)
2009	342	256	189	119	61	57	36	21 (37%)

Graphic of regression



CONCLUSIONS

The data suggest that it would be statistically possible to attain our survival goal also considering the regression line with the smaller slope. To stabilise the trend for a better survival rate the number of bystander CPR must be improved. To reach this goal, a cultural change in our population is necessary and for this reason we have already implemented an educational program to teach the resuscitation manoeuvres to all teenagers in the last year of compulsory school (fourteen-year-olds).