

## SmartMan Trained Produce Better Neurological Outcomes

*Extracted with permission from “Real-Time Feedback during Cardiopulmonary Resuscitation (CPR) Training and Testing Improves Survival in Out-of-Hospital Sudden Cardiac Arrest Patients” 2018, Sept 13, ROSOMED, A. Salvucci.*

The CARES network records the neurological condition of the patient on discharge from the hospital. Although the gross number of survivors across the whole of the network has increased in the period of 2011 to 2016, the percentage number of survivors going home in CPC Levels 1 and 2 has remained roughly the same. In 2011 and 2012 the CARES average number was 8.09% of survivors. In the period of 2013-2016 this increased to 8.45% of those discharged was in CPR 1 or 2.

Within the Area 2 cohort [trained on SmartMan], the baseline in 2011 was 6.22%. The average number of people released in CPR 1 or 2 in the cohort area during the training program rose to 13.6%.

The effect of changing to using SmartMan to improve the quality of compressions on the number of people released at discharge within Area 2 in CPC 1 & 2 was significant at  $p < .01$  (t-value -3.96278, p-value .008319)

The effect of the change to using SmartMan to improve the quality of compressions on the number of people released at discharge in CPC 1 & 2 when compared to the CARES national database was significant at  $p = 0.01$  (t-value 8.21761, p-value .000088)

Table 4 shows the difference in those being release in CPC 1 or 2.

The green bars show results for Area 2 [trained on SmartMan] and the gray bars show the results for the rest of the CARES network.

The first two bars show results for the CARES network and Area 2 during the benchmark years (2011-2013).

The second two bars show the difference between the CARES network and Area 2 during the years when SmartMan training was in place. (2013-2016)

**Table 4**

