

# Incidence of Post Intensive Care Syndrome (PICS) in Cardiac Surgery

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## OBJECTIVES

Post Intensive Care Syndrome (PICS) has been widely documented in the critical care literature, affecting approximately 30-80% of intensive care unit (ICU) survivors. There are limited data examining the incidence of PICS in the postoperative cardiac surgery patient. We decided to investigate the incidence of PICS in our adult cardiac surgery population.

## METHODS

This was prospectively collected data on 117 consecutive adult cardiac surgery patients. Operations performed included coronary artery bypass grafting, valve replacement/repair, aortic surgery, including concomitant procedures.

We provided The Healthy Aging Brain Care Monitor Self Report version (HABC-M SR) 2 to all of our adult cardiac surgery patients (n=117) at the routine 4 week post-operative visit. Excluded patients were those that expired prior to the 4 week visit or were still in a hospital or rehabilitation setting. The HABC-M SR is a validated self-administered tool containing 3 parts and 27 questions. Briefly, the cognitive section contains six questions involving memory, orientation, and judgment. The functional section has eleven questions related to activities of daily living. The psychological section has ten questions related to depression, psychosis, and anxiety. Patients were asked how many days they experienced symptoms over the past two weeks. Scoring was defined as 0 = Not at all (0-1 day), 1 = Several Days (2-6 days), 2 = More than half the days (7-11 days), 3 = Almost daily (12-14 days). The maximum possible score would be 80, which correlates with a completely dependent adult from a behavioral, cognitive and physical perspective.

The HABC-M SR has not established criteria for correlating weak and strong positive scoring. For the purposes of this evaluation, we defined a score of 0 as no evidence of PICS, a score of 1-9 as a weak positive, and a score greater than 10 as a strong positive.

## RESULTS

We evaluated 117 patients post cardiac surgery and found a 73% incidence of PICS with a maximum score of 39. We found 54% of patients weakly positive, and 19% strongly positive. Behavioral symptoms were reported most frequently (66%) followed by functional debilitation (44%). The cognitive category was the least frequently affected domain (26%).

Figure 1 | Cardiac Surgery Post Intensive Care Syndrome

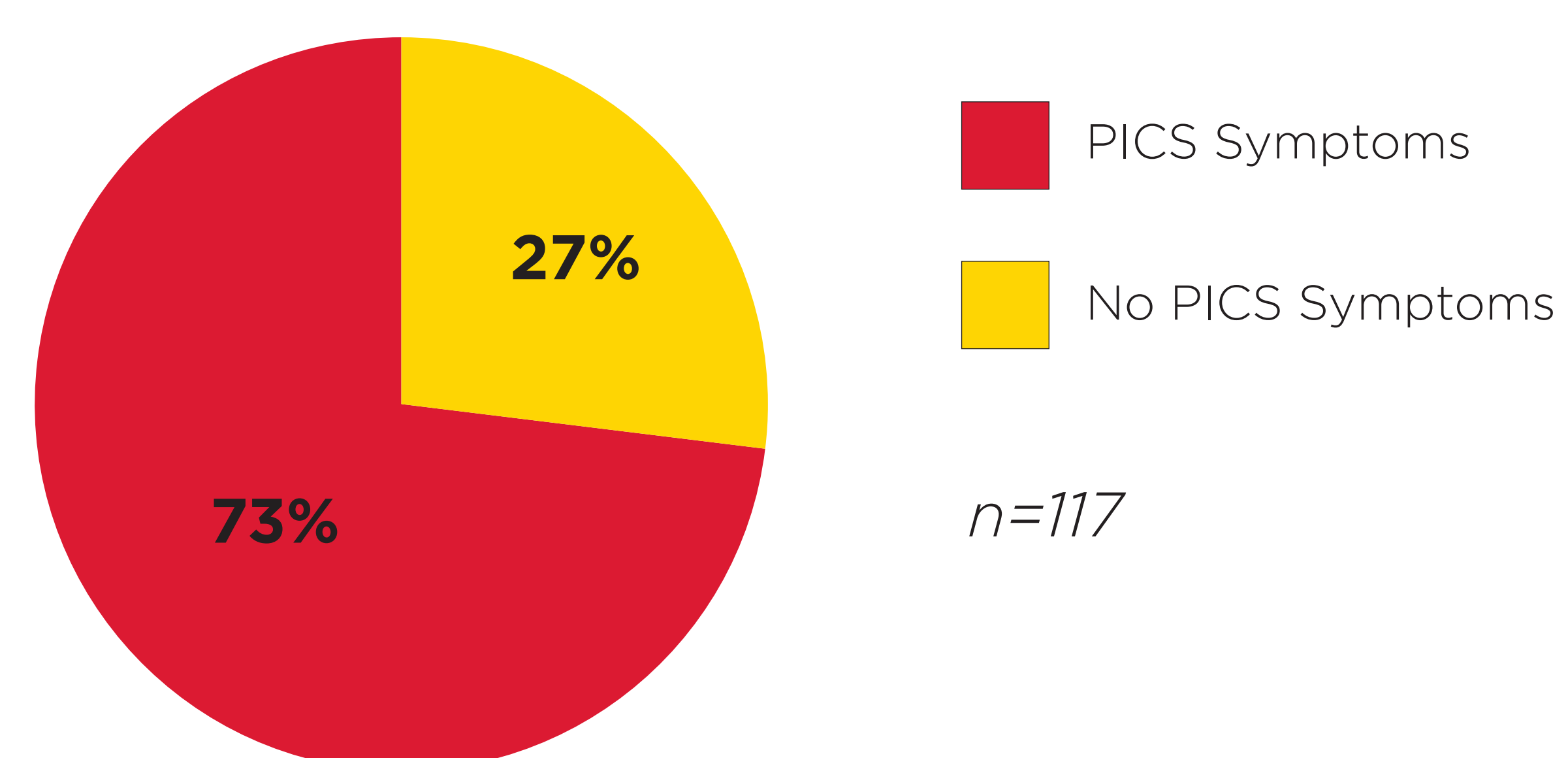
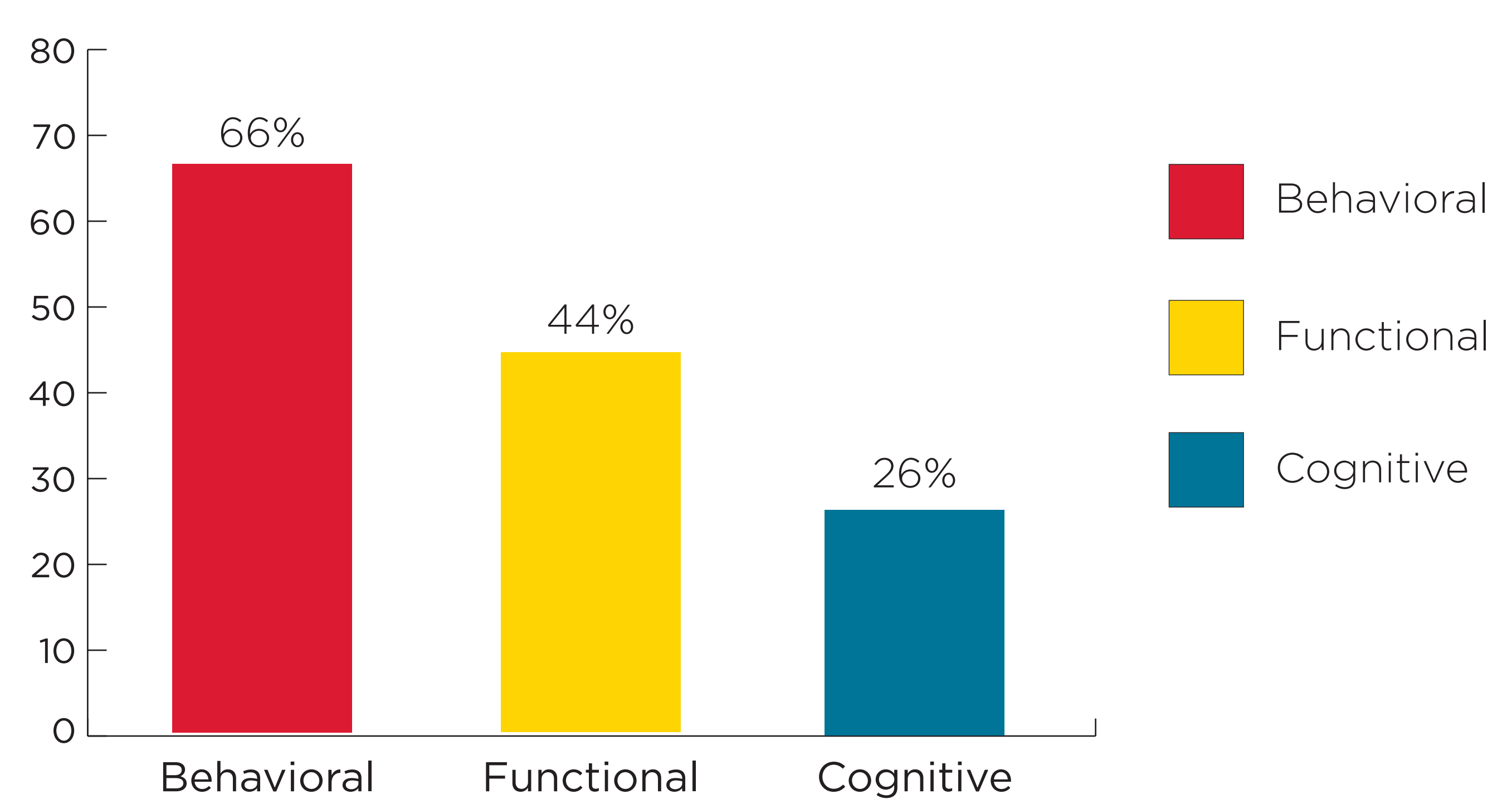


Figure 2 | Healthy Aging Brain Care Monitor-Self Report (HABCM-SR)



## CONCLUSIONS

Our study demonstrates a significant incidence of post-intensive care syndrome cardiac surgery patients. Further research is needed to confirm this finding, delineate the specific domains most commonly affected, and potentially modifiable risk factors to target for prevention.

### References:

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