



“...our aim was to determine the total hospital cost associated with RBC transfusion and to assess any dose-dependent relationship” Trentino et al (2014).

Reference:

Trentino, K.M., Farmer, S.L., Swain, S.G., Burrows, S.A., Hofmann, A., Ienco, R., Pavey, W., Daly, F.F., Van Niekerk, A., Webb, S.A., Towler, S., Leahy, M.F..Trentino, K.M., Farmer, S.L., Swain, S.G., Burrows, S.A., Hofmann, A., Ienco, R., Pavey, W., Daly, F.F., Van Niekerk, A., Webb, S.A., Towler, S. and Leahy, M.F. (2014) Increased hospital costs associated with red blood cell transfusion. Transfusion. December 8th. .

Study reviews hospital costs associated with red blood cell transfusion [@ivteam #ivteam](http://ctt.ec/doJ9b+)

Click To Tweet

Abstract:

BACKGROUND: Red blood cell (RBC) transfusion is independently associated in a dose-dependent manner with increased intensive care unit stay, total hospital length of stay, and hospital-acquired complications. Since little is known of the cost of these transfusion-associated adverse outcomes our aim was to determine the total hospital cost associated with RBC transfusion and to assess any dose-dependent relationship.

STUDY DESIGN AND METHODS: A retrospective cohort study of all multiday acute care inpatients discharged from a five hospital health service in Western Australia between July 2011 and June 2012 was conducted. Main outcome measures were incidence of RBC transfusion and mean inpatient hospital costs.

RESULTS: Of 89,996 multiday, acute care inpatient discharges, 4805 (5.3%) were transfused at least 1 unit of RBCs. After potential confounders were adjusted for, the mean inpatient cost was 1.83 times higher in the transfused group compared with the nontransfused group (95% confidence interval, 1.78-1.89; $p < 0.001$). The estimated total hospital-associated cost of RBC transfusion in this study was AUD \$77 million (US \$72 million), representing 7.8% of total hospital expenditure on acute care inpatients. There was a significant dose-dependent association between the number of RBC units transfused and increased costs after adjusting for confounders.

CONCLUSION: RBC transfusions were independently associated with significantly higher hospital costs. The financial implication to hospital budgets will assist in prioritizing areas to reduce the rate of RBC transfusions and in implementing patient blood management programs.

Thank you to our partners for supporting IVTEAM

