

Crossmatch-Transfusion Ratio (CTR)

The Crossmatch to Transfusion Ratio (CTR) is an important national quality indicator that is used to gauge the appropriate use of services offered by the transfusion laboratory service. The CTR value is obtained as follows;

$$\text{CTR} = \frac{\text{Total number of cross-matched red cell units}}{\text{Actual red cell units transfused}}$$

High CTR implies that cross-matches were performed unnecessarily when a Group-Screen and Hold (GSH) would have sufficed. Excessive cross matching, in addition to being wasteful of resources has adverse consequences on management of blood inventory and blood quality as blood is unduly held in reserve, oftentimes moved between fridges and may remain out of optimum storage temperatures while blood is cross matched.

The national blood quality indicator requires that CTR should be below 2.0. We are pleased to provide a detailed breakdown of CTR between locations in UMMC. We also kindly request those individuals in charge of locations that exceed the national standard of 2.0 to improve their processes for ordering red cells.