Appendix

Blood Loss Calculation: Patient’s Blood Volume (PBV) = (k1 x Height\(^3\) (m)) + (k2 x Weight (kg)) + k3

k1 = 0.3669, k2 = 0.03219, and k3 = 0.6041 for men
k1 = 0.3561, k2 = 0.03308, and k3 = 0.1833 for women

Multiplying the PBV by the hematocrit (Hct) gives the red blood cell (RBC) volume. As such, a change in the RBC volume can be calculated from a change in the Hct level as follows:

Pre-op RBC volume loss = PBV x (Admit Hct – Day of surgery Hct)

Operative RBC volume loss = PBV x (Day of surgery Hct - PACU Hct)

Post-operative RBC volume loss = PBV x (PACU Hct – Hct POD#x)

If a patient requires a pre-op or intraoperative transfusion, the calculation will be adjusted as follows:

Pre-op RBC volume loss = [PBV x (Admit Hct – Day of surgery Hct)] + (No. of Units Transfused x 0.285) / (Admit Hct – Day of surgery Hct) / 2

Operative RBC volume loss = [PBV x (Day of surgery Hct – PACU Hct)] + (No. of Units Transfused x 0.285) / (Day of surgery Hct – Post-op Hct) / 2