**Abstract:**

**Background:** Blood transfusionis a life saving but potentially hazardous procedure that routinely occurs in acute hospitals and in the community. It is an advance clinical practiceand healthcare workers require undergoing effective training and competency assessment to provide and maintain safe practice, also to prevent life threatening errors.

**Aim:** To identify whether local mandatory blood transfusion e-learning module is effective to underpin knowledge for competence in blood transfusion safe practice and to identify healthcare workers attitude towards e-learning for blood transfusion mandatory training.

**Method:**  An Analysis of Healthcare Service Provision was performed within five dialysis satellite units of a large NHS foundation Trust. Data were collected in three ways: A questionnaire, theory and practice assessment and observation of practice and an open-ended question simulating a qualitative study. Participants (n=72) were the target group of five practice areas who were informed and invited to take part in the audit by e-mail. It was not possible to triangulate data for statistical analysis, therefore descriptive statistic was used to analyse data.

**Result:** The response rate to the questionnaire was 53% (n= 38). Most Participants(63%: n= 24) reported lack of time and other clinical commitments to have negative effects in their compliance with mandatory e-learning. While 89% of participants reported feeling confident in using computer for learning, only 24 % preferred e-learning, compare to 34% who favoured face-to-face training. Seventy- one percent (n=27) of participants reported learning more in clinical practice. Majority of participants of assessment data (57%; n=39 out of 69) suggested simulation sessions (with the focus on blood transfusion reactions’ signs and symptoms and management) and face-to-face teaching to enhance their learning and knowledge retention. Identified complementary trainings were refresher sessions, discussions of policies and guidelines and SHOT annual report to maintain blood transfusion safety awareness and safe practice.

**Conclusion:** E-learning is an adaptable and multifaceted method that can be used to transfer theoretical knowledge for clinical skills. However to enhance application of knowledge gained to practice, particularly in advanced clinical practices such as blood transfusion, further and more engaging and hands on methods such as workshops, simulation sessions and interactive videos should be incorporated into e-learning to ensure deep learning, promotion of critical thinking and reflective practice, therefore change of behaviour towards maintaining safe practice.