Enhancing blood transfusion safety: a cluster-wide audit on blood transfusion procedures

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Introduction
Blood transfusion is one of the top ten clinical risk in HA and HKEC. The HKEC Blood Transfusion Committee (CBTC) periodically reviews and updates the blood transfusion procedures and reinforces the compliance of standard and practice on blood transfusion procedures. Doctors, nurses and supporting staff are trained and refresh every 36 months their knowledge in safe blood transfusion. Since 2005, CBTC conducts biannual audit to review procedures at bedside and blood banks so to ensure correct and safe blood transfusion.

Objectives
(1) re-examine blood transfusion procedures for flaw on system and human factors, (2) analysis the non-compliance and its impact to safeguard quality blood transfusion; and (3) recommend improvement measures

Methodology
The audit was conducted at six HKEC hospitals from 3 to 7 September 2012. It included reviewing doctor's prescription of blood transfusion, blood sampling and administration procedures, documentation review and consent for blood administration, blood collection, and blood bank procedures.

Result
118 blood samplings by doctors with 99.6% compliance were noted that was same as 2005, and “Explain reason for blood sampling” needs improvement. For administration of blood by nurses, 121 samples with 99.9% compliance but three patient notes with missing information. 66 collections of blood/ blood components by
supporting staff showed 98.7% compliance that was higher 2005 (95.0%). Two non-conformance but with immediate rectify on the blood product transport condition was observed. The observation of blood bank procedures – sample reception, reservation, pre-arrangement and collection of blood products showed 100% compliance. Conclusion & Recommendation: The audit demonstrated high compliance on different blood transfusion procedures. Nevertheless, HKEC would continue to ensure safe blood transfusion through reinforcing correct patient identification, enhance patient explanation for blood, and reinforce proper transport condition of blood, staff training, and maintaining accurate documentation, and regular audit.