

## SP-ICE

NHSBT have initiated a project to provide electronic reporting to their users.

NHSBT provides a reference service for a variety of specialist tests related to blood transfusion and histocompatibility and immunogenetics. The current method for reporting results of these tests back to the hospital is a hard copy report can take several days to arrive. The results of urgent tests will be provided by telephone but this has an associated risk of miscommunication and transcription errors which could affect patient care.

The advantage of the SP-ICE project is that reports will be available to hospital within one hour of authorisation at NHSBT. This reduces the risks associated with the current reporting system.

The SP-ICE system can also be used as a national antibody database.

If a patient has a clinically significant red cell antibody, red cells negative for the antigen must be provided in order to prevent haemolytic transfusion reactions from occurring. Following development of a new antibody the level of antibody in the patient's plasma reduces in titre and can reach undetectable levels. A national antibody database would allow hospital transfusion laboratories to identify those patients with antibodies that are no longer detectable, allowing the correct blood to be provided limiting the risk of a haemolytic transfusion reaction from occurring. It would also allow the confirmation of any known antibodies detected reducing the number of referrals required to NHSBT and limiting a risk in the delay of the provision of compatible blood products.

SP-ICE will be accessed via an N3 connection. Access will be password controlled and the hospital would nominate an individual who would be required to approve all applications for accounts to use the system. Additionally permission for the results of samples referred from this site to be accessed by other hospitals would require the approval of the trusts Caldicott Guardian or Senior Information risk manager.

It is possible to use the electronic reporting function without sharing results.

An assessment of the risk vs benefits of this system has been performed and it is accepted among hospital transfusion laboratories that the complete system would help to further reduce the risks associated with blood transfusion.

## Analysis of the risks and benefits of SP-ICE

| Function  | Risks  | Control measures   | Benefits   |
|---|--|--|--|
| Electronic reporting  | Relies on access to an N3 connection                             | Access password controlled   | Reduced turnaround time for results<br>Full audit trail of who has accessed a report<br>Ability to print out hard copies as required<br>Ability to search and display multiple reports for a single patient<br>Allows access to historical reports |
| Ability to access results of tests referred from other trusts | Other trusts are able to access results referred from this trust | Access password controlled.  | Reduced the number of referrals required to NHSBT (2011/2012 annual RCI fixed cost £xxxxxxx)   |
|   |  | All sites required to limit access only to approved healthcare professionals. All sites required to comply with data protection requirements and to gain consent from the trust Caldicott Guardian | Allow hospital transfusion laboratories to identify those patients with red cell antibodies that are no longer detectable, allowing the correct blood to be provided limiting the risk of a haemolytic transfusion reaction                        |
|   |  | All sites required to comply with data protection requirements and to gain consent from the trust Caldicott Guardian   | Allow healthcare professionals to access previous HLA tissue typing results  |
|   |  | Database only consists of patients referred for testing by NHSBT laboratories which accounts for less than 1% of all hospital patients   | Provides an easily accessible database of patients with transfusion history limiting the delay associated in providing these patients with products  |