

Hemo-Vigilance and Donor Safety Bio-Vigilance System - BRAMS II

Detection, gathering, and analysis of information regarding unexpected events of blood transfusion and transplantation of cells, tissues, and organs

Most industrialized nations have put into place a comprehensive national level bio-vigilance system. And, they report having a reduced rate of safety incidences. The United States, the prominent industrialized nation, on the other hand, does not have a nation level bio-vigilance system. In light of the current national security environment, there is a critical need to analyze in real-time incidences of disease or safety issues to determine key performance metrics, trends, and if they are random events or if they are a possible outbreak or terrorist action.

Provide bio-vigilance capabilities to the nation

The Department of Health and Human Services (DHHS) has been strategizing on this concept and would like to pilot a bio-vigilance system for the U.S. focused on hemo-vigilance and donor safety issues. KBSI has been tasked with designing and developing this system by leveraging the web-based data capture, reporting, and analysis framework of the Blood Reserve Availability Assessment, Tracking, and Management System (BRAMS) developed in an earlier effort.

With the success of BRAMS, a web interface was developed for collecting blood inventory data from DoD facilities. It implemented data integrity and access control mechanisms to ensure that the data entered was valid, clean, and not duplicated by other data sources. BRAMS also utilized data mining and knowledge based analysis to develop proactive problem identification and resolution capabilities as related to blood inventory and

supply chain analysis and management. The bio-vigilance effort is an extension of BRAMS to provide capabilities to the nation, both military and civilian.

Improve the safety of human organs, tissues, cells, and ancillary products

The bio-vigilance effort will establish a comprehensive system to collect, analyze, and report on the outcomes of collection of blood components and derivatives, cells, tissues and organs. The system will also provide an early warning detection for adverse events and support the continuous improvement of donor and recipient safety in the U.S. and, as such, will form a critical component of the nation's medical safety and security infrastructure.



