

SHIINe: Safer Hospitals Integrated Information Network



Infection surveillance is regarded as the cornerstone of Infection Control programs. Knowledge of the normal rate of infections is essential if medical health providers such as hospitals are to accurately detect and measure any increases in reported infections and assess preventative actions.

Hospitals are required to undertake routine hospital-acquired or nosocomial infection surveillance as a component of their Infection Control programs. Infection surveillance can be very time consuming, and efficient data management is vital to the process. VICNISS and VPAC are collaboratively developing a new infection surveillance software application, called Safer Hospitals Integrated Information Network (SHIINe), to ensure scientific credibility, identify problems, ensure the use of standardised methodology, and to increase compliance and participation with Infection Control in hospitals.

<<< An Advanced Hospital Acquired Infection Surveillance System

SHIINe provides a standardised hospital infection surveillance system for Victorian Public Hospitals. Current data collection practices revolve around paper and fax systems. SHIINe provides hospitals with a software application to be used as a tool for their specific surveillance activities, and will also provide for an aggregation of the data at the VICNISS Coordinating Centre.

Clinical Application Development and Information Systems Integration for SHIINe

Working in collaboration with VICNISS, VPAC has designed and developed a pilot version of the SHIINe application. As part of the system design and application development process, VPAC is engaging end-users in design sessions and focus groups to test each key workflow component, from data collection to reporting, and gain feedback from infection control stakeholders as an iterative development strategy to gain user support and enhance the quality of the final software solution.

SHIINe is designed to retrieve data from existing hospital information systems and so largely eliminates the need for manual data input. To retrieve data from existing hospital systems, the software needs to be integrated into each hospital. This is a major undertaking as the integration needs to be tailored at each hospital to ensure correct data is retrieved. In collaboration with VICNISS, VPAC has integrated SHIINe with other health information systems in hospitals with technologies such as HL7 (a framework, and related standards, for the exchange, integration, sharing and retrieval of electronic health information) to minimise manual data entry. A data federation service is being used to gather data collected from participating hospitals to be used in reports and benchmark calculations.

Currently, SHIINe is being trialled at St Vincent's Hospital and Barwon Health Geelong. SHIINe aims to be deployed at 27 public hospitals in Victoria who participate in VICNISS's Infection Control program.

SHIINe will reduce the amount of time required to collect surveillance data and allow hospitals to focus more on effective infection prevention.

For further information on VPAC's role in the SHIINe project, or to learn more about VPAC's clinical application development and information systems integration services for the Health sector, please contact Alan Lo on +61 3 9348 1722 or alan@vpac.org.

For more information on the VICNISS Hospital Acquired Infection Surveillance system, please visit www.vicniss.org.au.

