



OPPORTUNITY

To link patient data to individuals, not beds—eliminating interruptions and reducing mismatch risks.

INNOVATION

At Prince of Wales Hospital, patient data and vital signs are continuously and accurately tracked, no matter where the patient is moved.

SOLUTION

InterSystems IRIS for Health integrates the flow of patient data in near real-time.

IMPACT

Integrated Clinical Observations reduces manual data entry, freeing staff to focus on patient care, and enabling close, timely, and accurate patient monitoring.

SESLHD's Integrated Clinical Observations Revolutionize Patient Vital Data Monitoring

[South Eastern Sydney Local Health District](#) (SESLHD) found the opportunity to enhance patient safety by seamlessly streamlining and integrating vital sign data from advanced clinical devices directly into the hospital's Electronic Medical Record (EMR) system, ensuring accurate and timely data. At Prince of Wales Hospital, a major redevelopment required relocating operating suites. Other available device integration solutions were found to use bed-matching systems that often lead to data mismatches and delays, posing risks to patient care. The SESLHD team created a patient-centric solution that would ensure accurate and timely data entry, reducing the likelihood of errors and improving patient outcomes.

Seamless Integration from Patient Devices Directly to the EMR with InterSystems IRIS

Based on **InterSystems IRIS® for Health**, SESLHD's patient monitoring system enhances both patient safety and time efficiency by eliminating the need for bed matching. This ensures that vital sign data remains up-to-date, regardless of the patient's location. The hospital uses advanced monitoring devices, such as the Draeger system for continuous cardiac monitoring and the Welch Allyn CSM machines for periodic observations, which capture ECG data and other vital signs and transmit them directly to the EMR.

“Between the Flags” Graphical Representation — A key feature is a visual format that provides real-time alerts when a patient's condition deteriorates. The tool indicates the severity of a patient's condition with colored zones, especially useful for student and less experienced nurses. The system's ability to detect and quickly alert providers to patient deterioration has improved patient outcomes and safety.





“...this solution enables direct communication from the CSM machines and allows the clinician to transmit the patient’s vital signs, enter additional information manually, then save and transmit it from the device directly to the EMR, which they can check and confirm to ensure it arrived.”

The South Eastern Sydney Local Health District Digital Health Team

Strong Adoption and Positive Feedback from Healthcare Staff—Flexibility and ease of use contributed to a high adoption rate and positive feedback. The Hospital’s multidisciplinary team, including nurses, medical staff, and emergency responders, iterated to refine the system’s procedures and operation. Currently, 40% of CSM machines and 20% of Draeger monitors are in the system, with the Hospital expecting these rates to increase further as Integrated Clinical Observations expand.

Seamless and Reliable EMR Integration with Clinician Supervision—The system’s EMR integration is supervised, ensuring that data is sent only when a clinician confirms its accuracy. This deliberate approach maintains the EMR integrity and ensures that healthcare providers can trust the information they receive. The initiative has also reduced manual data entry and allowed Hospital staff to focus on patient care.

Versatility in a Variety of Clinical Settings—Advanced monitoring devices, such as the Draeger and Welch Allyn systems, have profoundly changed SESLHD’s practices. They capture a wide range of vital signs, from ECG data to blood pressure, and transmit them directly to the EMR. The system’s ability to accept both continuous and intermittent monitoring makes it a versatile tool that can be used across different clinical settings, from operating suites to general wards. This comprehensive approach has improved outcomes and reduced the risk of adverse events.

Better Patient Safety and Provider Focus Lead to Better Decisions

The Integrated Clinical Observations initiative has increased patient safety. By eliminating the risk of data mismatches, the system ensures that vital sign data is accurate and up-to-date, leading to better-informed clinical decisions and faster interventions. The “Between the Flags” representation, with colored zones to indicate the severity of a patient’s condition, further enhances care with early detection of patient deterioration. The initiative has significantly reduced manual data entry and allowed nurses to focus more on direct patient care. Time spent on data entry has decreased from an average of 14 minutes per patient to just seconds, thanks to direct digital connection from devices to the EMR.

About the Winner: South Eastern Sydney Local Health District

South Eastern Sydney Local Health District (SESLHD) is part of the New South Wales Government public health system and a leading Australian healthcare provider dedicated to delivering exceptional patient care through innovative solutions. With a focus on digital health, SESLHD’s team of experts is committed to enhancing patient safety and efficiency. Their groundbreaking initiatives are transforming the way healthcare is delivered, ensuring that every patient receives the best possible care.

About the InterSystems Impact Awards, Selected by an MIT Panel

Each year select client organizations are recognized at the InterSystems READY conference for projects driving positive change. Nominations are evaluated by independent judges from MIT on three criteria:

- **Makes a significant difference**
- **Breaks new ground**
- **Sets an example**

To learn more about the InterSystems Impact Awards visit

<https://www.intersystems.com/intersystems-impact-awards/>.