Addressing the challenges of enhanced care

Release J technical data sheet

Philips IntelliSpace Critical Care and Anesthesia (ICCA) is a clinical informatics and patient care solution that simplifies clinician workflow, improves financial outcomes, and helps enhance patient care.

ICCA addresses current needs in high acuity care. This version adds important features for:
- deploying the solution across a campus or even a hospital group
- enhancing the user experience significantly
- simplifying and enhancing data analysis and reporting, including advanced self-service visualizations
- simplifying the calculation of goal-based nutrient intake for neonatal patients.

ICCA continues to provide relevant and actionable information when and where you need it, and interoperability to support patient documentation and clinical decision support throughout the continuum of care, including interoperability with your hospital information system or EMR and patient care devices.

IntelliSpace Critical Care and Anesthesia is a clinical documentation and decision support solution that includes:
- Flowsheet
- Calculations engine
- Clinical advisories
- Device interfacing
- Interoperability
- Anesthetic record
- Notes and forms
- Radiology orders
- Microbiology and pathology results
- Dietary and nursing orders
- Order management
- Infusion management
- Adverse Drug Events (ADE) – through interfacing with third-party knowledge vendors
- Trend upload from Philips monitors
- Self-service clinical intelligence
Clinical documentation
ICCA is a document-based, clinically-rich solution that integrates views of patient data, orders, and continuing clinical care with clinical decision support across the enterprise. This integrated view of continuous patient care complements the core enterprise healthcare layer, leveraging data from throughout the hospital to provide clinicians with patient-specific data, enhancing knowledge at the point of care.

Flowsheet
Use the flowsheet to document and review time-dependent data and make ongoing patient care decisions. The flowsheet aggregates vital signs, bedside device data, lab results, intake and output data, observations, nursing assessments, and procedures in a configurable view, specialized for each care unit. Flowsheets can also be used as code sheets, specialty care sheets for respiratory therapy and dialysis, and nursing assessment records.

Calculations engine and clinical advisories
The ICCA calculation engine supports the design and computation of physiological, duration, statistical, and drug calculations. The engine also generates clinical advisories that provide surveillance of a patient’s status through the execution of configurable rules. Uses of advisories to focus on different clinical objectives include adherence to hospital-specific care initiatives, such as ventilator-associated pneumonia. Advisories can process data entered into the patient’s chart and provide onscreen notification of changes to the patient’s condition. Clinical acknowledgement of the advisory is standard.

Adverse drug event identification
ICCA’s Medical Reference module displays adverse drugs, allergy contraindications, or inappropriate drug therapies when a drug order is entered. These potential adverse events are defined and identified by a third-party medical reference vendor.

Device interfacing
ICCA interfaces to most Philips or third-party vendor medical device. Philips device gateways can export vital sign parameters necessary for anesthesia and critical care charting. For implementations using other bedside devices, Philips provides the IntelliBridge System, a plug-and-play bedside device concentrator. All device interfacing supports hospital-configurable intervals for automatic charting.

Interoperability
ICCA supports interfacing with hospital image and clinical data repository systems for inclusion in the hospital EMR implementation. ICCA is compliant with HL7 standards for interoperability with existing hospital systems including ADT, Labs, Document Export/Import, Orders and Order Results, and Patient Data Export/Import. Local laboratory interoperability is enhanced with the addition of ASTM and LIS2 protocol support.
Anesthetic record
The ICCA anesthetic record includes a user interface specific to the demands and speed of the operating room environment. Focused on anesthesia workflow and documentation, the user interface is based on a departmentally configured set of case templates that lead the anesthesia caregiver through the process of retrospective documentation. This process includes transfer of the record between preoperative and operating room environments and customizable workflows transitioning care to post-surgical caregivers.

Radiology orders
ICCA allows users to accept and process radiology orders from within the system. The solution supports the Radiology Order type to improve clinician workflow.

Microbiology and pathology results
With ICCA, users can accept and store pathology and microbiology data sent from a HIS to improve clinician workflow. The Data Import interface has been enhanced to accept microbiology data and store microbiology results as interventions in the system.

Microbiology data properties include isolate organisms, specimen source, specimen site type of susceptibility, list of drugs tested for susceptibility, susceptibility interpretation, susceptibility result value, result status, collection date and time, ordering provider, and accession number, value, and unit of measure.

Pathology data properties include, but are not limited to, observation date and time, procedure name, impression, and ordering provider.

Dietary and nursing orders
ICCA supports the Nursing Order and Dietary Order types so users may accept and process nursing and dietary orders sent from HIS to improve clinician workflow.

Notes and forms
The Notes and Forms feature replaces paper-based hospital forms completed for patient care and assessment. Notes and Forms are hospital-customizable to meet a hospital’s departmental, clinical, and medical records requirements for patient care documentation. Common uses of Notes and Forms include patient demographics, admission assessments, discharge summaries, progress notes, consult notes, preoperative evaluations, nursing preoperative evaluations, and diagnostic reports. The dynamic pre-anesthesia evaluation form aids efficiency by presenting only those questions required for specific patient demographics and clinical situation.

Order management
The Order Management functionality provides Physician Order Entry for multiple order categories, integrated order administration documentation via the administration record, a worklist or flowsheet, and interfacing capabilities to the hospital CPOE system. Order reminders are enabled for overdue administrations and for orders requiring attention, such as verification, approval, or scheduling. Order Sets speed the prescription process by standardizing care and reducing the time needed to create the associated orders. In the NICU, Fixed Volume Dosing for drip orders automatically adjusts the concentration when you adjust the infused drug rate, so the infused volume rate remains constant.

Infusion management
Infusion Management links infusion pumps to the patient chart using drug or solution and documents volume, rate, and state information. Both manual charting and auto-charting of rate, dose, and volume are supported for continuous infusions and for bolus doses.

Trend upload
Trend Upload easily transfers up to eight hours of stored vital signs and numerical data from the bedside monitor to Philips Intellivue Information Center IX (PIC IX), and transfers it to ICCA. This interoperability supports a comprehensive patient record throughout the continuum of care, including the ability to retrieve patient data captured during transport.

Self-service clinical intelligence
Self-service clinical intelligence tools make it easy for clinicians to query the patient data charted in ICCA and perform data analysis, visualization, and reporting.

About IntelliSpace Critical Care and Anesthesia
Healthcare organizations across the world are making considerable investments to increase the efficiency and effectiveness of clinical work and maintain financial integrity. But with ever-rising healthcare costs, staff shortages, and a need for compliance with evolving national care standards, leveraging clinical informatics has become a key component to drive improvements in quality of care.

Interoperable with most EMRs with HL7 capabilities, ICCA delivers advanced clinical decision support with structured documentation and analysis, supporting the continuum of care across anesthesiology, critical care, intermediate care, and medical-surgical care specialties.
Operating systems and SQL compatibility
The following list shows the supported versions of the software required for the ICCA environment:

- SQL Server 2016
- Windows Server 2012 R2, with Remote Desktop Services
- Visual Studio 2017
- .NET 4.7.1

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