PHILIPS

Service-oriented Device Connectivity (SDC)

Philips SDC Technology Partnerships in Hospital Patient Monitoring (HPM)

Achieving seamless communication and interoperability among all medical devices. That's why Philips has unique collaborative agreements with industry-leading companies to create a Smart Healing Environment, and our SDC Alarm Management use case is the first step in this journey. These partnerships support our goal of creating an open ecosystem of medical devices that enhance – rather than compete with – one another.

Problem statement

Clinicians face significant challenges due to the lack of interoperability among medical devices such as patient monitors, ventilators, and infusion pumps. These devices have historically operated on their own communication platforms, making communication, data exchange, and alarm management a challenge. This has resulted in fragmented patient data, increased workload from manual data transfers, and inefficient data exchange. Consequently, clinicians spend less time on direct patient care and more on managing data, while the constant noise from alarms in patient rooms creates a disruptive environment, potentially leading to long-term health consequences.[1-4]

Joint solution

Philips is leading the effort to shape device interoperability standards by participating in global working groups that are defining SDC standards, forming SDC Collaboration Agreements with other companies and by making our own devices SDC compliant. These standards can radically change clinicians' experience by enabling them to use integrated medical devices. With SDC, bi-directional communication between devices offers a simplified way for clinicians to view – and act on – live-streaming, aggregated patient data. Initially, SDC will focus on improving the alarming experience for the patient and caregiver, taking the alarm to where the caregiver is rather than at the patient bedside to reduce noise in patient rooms, creating a quieter environment for both patients and healthcare providers.

Products and technologies involved

- **Ventilators, infusion pumps, and specialty devices that are SDC compliant.**
- **PIC iX: centralized, enterprise monitoring ecosystem, enabling patient data to flow seamlessly across high-, mid-, low- and specialty acuity settings by integrating data from both Philips and non-Philips devices.**
- **Philips IntelliVue patient monitoring: scalable monitoring system designed to support patient monitoring across multiple care settings.**

Clinical benefits

Integrated insights

By unlocking data silos from medical devices, clinicians can see holistic patient information clearly, all in one place, reducing complexity and enabling faster, more informed decisions. Philips integrates various types of patient data, including vital signs, waveforms, alarms, device data, and clinical documentation, to provide a comprehensive view of the patient's health status. SDC includes advanced alarm management by taking the alarm to where the caregiver is rather than at the patient bedside, reducing noise in patient rooms and creating a quieter environment for both patients and healthcare providers.

Mobile workflows

SDC aims to enhance mobile workflows due to its bidirectional communication capabilities. This allows clinicians to remotely manage alarms from multiple medical devices, streamlining workflows. As a result, clinicians can manage patient care more efficiently and effectively, creating a quieter and more conducive healing environment for patients.

Technical benefits

Leverage investments

Interoperability enables hospitals to maximize the value of existing investments in devices from various manufacturers. By ensuring communication between devices at the point of care, Philips helps hospitals leverage their current technology infrastructure.

Manage devices across vendors

Philips' open ecosystem approach allows hospitals to choose the devices they want from the vendors they want – all capable of working cohesively together through SDC.

Future facing

Philips solutions are built with future advancements in mind, follow regulatory requirements for Class II medical devices, and ensure hospitals can easily incorporate new SDC-compliant devices and features as they become available.

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