Medical

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[Data Distribution Service (DDS)](#) securely shares patient and device data to build smarter clinical information systems. It connects devices in hospital rooms, integrates whole-hospital systems, and connects to the cloud and mobile technologies. The proliferation of smart medical devices creates new integration challenges for networks of devices. DDS provides a proven solution for the secure transfer of real-time data between medical devices and other information systems in a clinical environment.

Create a Case Study **WWW WWW...** (e.g., My NASA Project) →

Medical Devices and Clinical Systems

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The Medical Device "Plug-and Play" (MD PnP) [Interoperability](#) Program is using DDS in the reference implementation for their Integrated Clinical Environment (ICE) to enable the integration of devices and the sharing of real-time patient data between devices and other clinical information systems.

Source: [Harvard University: MD PnP](#)

Imaging Systems

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Imaging systems require massive data flows and fast [performance](#). DDS controls and optimizes network use to handle megabytes of load without losing data.

Source: [RTI: GE Healthcare's Industrial Internet of Things (IoT) Architecture](#)

Integrated Clinical Medical Decision Systems

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DDS ties together devices, services, and displays in real time.

Source: [RTI: DocBox](#)

Ambulance-based Telemedicine

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For disaster relief operations or emergency medical services (EMS), time is much more than a matter of money—it's a matter of life and death. An ambulance-to-hospital based telemedicine system is the best example of how mobile technology can help save lives, by providing real time patient information to the hospital via wireless communications, enabling remote diagnoses and primary care, and reducing rescue response time. Telemedicine, as defined by the American Telemedicine Association (ATA), is the use of medical information exchanged from one site to another via electronic communications, to improve a patient's clinical health status.

Telemedicine includes a growing variety of applications and services—from remote health monitoring to medical education. Among these applications, ambulance-based telemedicine uses the most up-to-date vehicle electronics and mobile communications technology, aimed at providing a significant time advantage, expediting critical treatment and improving patient outcomes.ability to care, the patient can be referred earlier to other hospitals or medical care centers to save time.

On the hospital side, emergency room physicians and nurses can receive and review the incoming data at a desktop PC or on a mobile device such as a tablet or smartphone, and make preliminary assessments before the arrival of the patient. The ER docs can also zoom-in to see the wounds, discuss the situation with the emergency medical technicians (EMTs), and instruct the EMTs to administer primary care or emergency medical services, such as giving injections or fracture treatment.

The emergency and trauma physicians can also triage cases remotely, and start to prepare a surgery team if needed, prior to the patient's arrival. If they decide the available medical resources of the hospital are insufficient for the situation, they can refer the case to an alternative medical care center, to save time. Ambulance telemedicine is aimed at sparing every minute that can possibly be used to save lives. Such pre-hospital systems are also vital for patients suffering from a stroke or cardiac diseases. Earlier assessment and treatment of strokes during critical moments can save lives and minimize aftereffects. Ambulance-based telemedicine is particularly valuable for residents living in remote areas, a long distance from hospitals and clinics, as well as for casualties in remote locations.

Source: Adlink: Ambulance Based Telemdicne

Medical Panel Computers and Monitors

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ADLINK offers medical computers with Intel® Core™ i7 processors, delivering high computing performance and outstanding graphics processing capabilities. We design our medical panel computers and monitors with optimum viewing capabilities and hygienic fully-sealed and easily cleanable housings. They can be used for patient vital sign monitoring, nursing care, clinical diagnosis, PACS (picture archiving and communication system), anesthesia monitoring and OR documentation. With additional safety design and expansion capabilities, our medical panel computers and monitors provide doctors and hospital staff with a reliable and flexible system with high usability and convenience for users.

Source: Adlink: Medical Panel Computers & Monitors

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Last update: **2021/07/14 15:53**