Closer to home : Connectathon test aligns patient data between home and hospital care devices

Connecting home care devices with hospital systems helps to close a critical loop in patient care.

At the recent Integrating the Healthcare Enterprise (IHE) European Connectathon 2010 in Bordeaux, seven companies tested systems for exchanging data between hospital device gateways using a protocol that covers data intended for use both in home and hospital-based devices.

Sharing this data improves capabilities for remote patient monitoring among an increasingly aging population, which has become a priority for health authorities across Europe and is being strongly encouraged by the European Commission.

The testing at Connectathon was made possible by a landmark international agreement between IHE and the Continua Alliance to jointly support the IHE Device Enterprise Communication (DEC) Profile as an interface for sharing data between the gateways to which devices are connected.

These data hubs are used both in hospitals as well as in home-based configurations so that by sharing an interoperable interface the patient data from both types of devices can be fed into a single patient care management system, such as a health record system.

"This is a significant step that changes the landscape for the developers of devices and the hubs, as well as developers of applications managing the data coming from these different sources," said Charles Parisot with GE Healthcare.

“Testing at Connectathon is a very positive sign that the first products using the protocols are now being developed and could appear later this year,” he said, adding that companies testing to assure conformity to the new protocol include the leaders in patient monitoring, such as Draeger, Royal Philips Electronics and GE Healthcare.

Home-based devices that support in-home hospitalization can reduce care costs and increase patient comfort, he said.

Even more, these bedside devices also encourage patients and their family members to become directly involved in managing a patient's return to health.

Home-based devices are not the only missing link in following patient care, said Parisot.

The flow of the patient data coming from the patient care devices widely used in hospital care from intensive care units to surgery has not been well standardized either, he said.

"Aligning data protocols from devices used in different care settings at different times in the patient's treatment can be expected to greatly facilitate the combined use of these devices," he said.

“Companies need to pay attention to this," said Parisot, adding that to this point vendors of electronic health records (EHRs) and makers of patient care devices have yet to connect the dots.

He said that avoiding separate protocols for feeding data into EHR systems creates advantages for both class of devices.

On one hand, hospitals should be able to place clinical-level monitors in the home to support at home care for patients who today are hospitalized, he said.

At the same time, he said, “Home-based devices have much less value if the data they capture on the patient does not flow into the healthcare system in a form that the IT systems supporting clinicians can recognize and use.”

“This development is important not only for device makers, but even more for EHR systems that need to become increasingly device data aware and more easily integrate the data," he said, in order to avoid the

current situation where data from these bedside devices is often not captured nor used by caregivers, and instead is printed out, filed and possibly lost or difficult to access.

For more information:

ftp://ftp.ihe.net/International/Europe/Smart%20Personal%20Health%20Systems%20and%20IHE/SMART%20PHS.Interoperability-Procurement-V3.ppt