Building Comprehensive Community Healthcare

Intel® Atom™ processor-based tablets let healthcare workers share medical and long-term care information in real time over the cloud

Challenges
- Strengthen information sharing and communication for professionals involved in home and nursing care
- Streamline documentation tasks such as data entry and preparing daily reports

Solution
- ASUS Fonepad® tablet with Intel® Atom™ processor and the Android* operating system
- Careful-kun*, a cloud-based solution for home and nursing care from SkillUpJapan Corporation

Business Value
- Better care provider cooperation based on real-time information sharing among doctors, nurses, and home healthcare workers for a comprehensive community care system
- Improved clinical decision-making at the point of care
- Less administrative burden for medical professionals and improved service for patients

Comprehensive Care for the Community

Headquartered in Tottori Prefecture, Japan, Kohoen Social Community Service (Kohoen) provides comprehensive nursing, child, and medical care as well as support for people with disabilities and other welfare services.

Established in 1986, Kohoen operates approximately 200 businesses at 115 offices in four areas in both Tottori Prefecture and Tokyo. Its basic philosophy is to provide facilities that are open, trusted, and loved by the community. Vice Chairman Akira Hiroe explains: "Our goal is to enable elderly people to live in peace in areas they are accustomed to."

Recognized for initiatives such as obtaining ISO 9001 certification and opening a home-care support center, Kohoen became the only social welfare corporation in Japan chosen as one of the 50 Omotenashi Customer Service Businesses by the Ministry of Economy, Trade and Industry in 2013.

With Japan’s population aging at a speed unheard of in other countries, the Japanese government is transitioning to a comprehensive community care system that provides integrated medical, nursing, and preventive care, plus livelihood support and housing. All these services are in preparation for 2025, when the Baby Boom generation turns 75 or older. The Ministry of Health, Labor,
and Welfare is focusing on promoting 24-hour regular and ongoing home visit long-term care and nursing care services as part of a comprehensive community care system.

To build a comprehensive public- and private-sector community care system, cooperation among doctors, nurses, care workers, and care managers is vital. Kohoen, a leader in nursing care and welfare services, is coordinating the Home Medical Care Cooperation Project.

Communication is the Challenge

When it comes to inter-professional cooperation among medical and nursing care providers, there are big challenges. Kiyoshi Kishi, head of the Nishimachi Kohoen facility and a doctor at Nishimachi Clinic, explains: “At the site of home medical care, communication between the clinic doctor and the visiting nurse tends to be scarce. For example, a nurse normally reports the patient’s condition to the doctor from a patient’s home and receives treatment instructions by telephone or fax. But it may be hard for a doctor who’s busy examining patients to find time to respond to telephone calls from nurses. As a result, nurses may hesitate to contact the doctor.”

Information sharing between medical and nursing care providers is another issue. Historically, medical and long-term care were independent of each other and had almost no information exchange. This could lead to duplicated efforts and diminished care for patients.

Another problem facing both home and nursing care is the time it takes to prepare documents and reports. Visiting nurses enter vital information such as the patient’s body temperature, pulse, and blood pressure into a computer at the medical facility based on handwritten notes. Facility care workers do the same, preparing daily reports by computer. Reporting has become a huge burden on both nurses and home care workers who need to visit several patients a day. “It becomes more and more difficult to share information on paper when a large number of visiting nurses and care workers operate on a 24-hour basis,” says Kishi. “We needed a system for effectively sharing information.”

Operability, Security, and Performance

To resolve these issues, Kohoen chose Careful-kun*, a cloud-based information-sharing solution from SkillUpJapan Corporation (SkillupJapan). The system reduces paper-based administrative tasks by letting workers enter long-term and nursing care details using a tablet.

Kenji Yoshida, director of the Business Strategy Office of SkillUpJapan, says,
“Since visiting nurses and care workers can check the user’s condition from anywhere, they can plan for the visit in advance, which reduces stress.”

− Masahiro Tsue, Coordinating Assistant Manager, Kohoen Social Community Service

“The system was developed to enable staff engaged in home medical care to share health and progress information in real time.”

To run Careful-kun for the Kohoen team, SkillUpJapan chose the ASUS Fonepad tablet with the Intel Atom processor, Android operating system, and a 7-inch LCD supporting 3G communication using a SIM card. The compact tablet fits easily into the user’s palm.

“The 7-inch tablet is easy to carry around,” explains Yoshida. “During the selection process, we had the care workers try both the 5- and 10-inch models, but the 7-inch model was easy to hold and had the high performance we needed. Another factor was that the security functions are Android-based, allowing them to be flexibly integrated compared with iOS*. The performance of the Intel Atom processor was another deciding factor. Since slow system operation would cause stress to doctors, nurses, and care workers using the tablet, we focused on performance.”

Sharing Information Any Time, Anywhere

For home patients, an administrator prepares the long-term care and nursing schedule using a computer at the Kohoen facility. With the tablets, a visiting nurse or care worker can now get their visit schedule, check the patient’s health, and get other vital information any time, from anywhere. Since care providers can easily share information, morning meetings are short.

At the patient’s home, the healthcare provider can easily input the patient’s vital information directly into the tablet and print it out for the patient using a mobile printer. Since the information goes into the cloud-based Home Medical Care Cooperation System in real time, other visiting nurses, care workers, and doctors can check the details and enter instructions whenever they need to.

Masahiro Tsue, coordinating assistant manager at Kohoen, says, “Since visiting nurses and care workers can check the user’s condition from anywhere, they can plan for the visit in advance, which reduces stress. Until now, they had to check their visit schedule and report items in the office before making visits and then record the information in a daily report after returning to the office. Since visiting nurses and care workers visit several homes a day, they end up spending a lot of time going to and from the office and doing paperwork. With a tablet, they can visit patients’ homes without returning to the office and spend a lot more time offering care services.”
Better Quality Service
Although doctors, nurses, and care workers are still getting used to operating the tablet, Kohoen is already seeing benefits.
“Even visiting nurses can receive instructions from doctors if they enter a message in the system,” Kishi said. “Doctors at the clinic have limited opportunities to directly examine patients at home, but nurses and care workers input key information into the system daily. For example, if a patient’s face is swollen, the nurse or care worker can take a picture using the tablet and send it to the doctor, who can see the patient’s condition from the clinic.”
Since nurses and care workers no longer need to return to the office after their shifts to prepare daily reports from handwritten documents, they have less overtime work. Being able to automatically prepare reports from information compiled in the tablet will further reduce the staff’s load.

Comprehensive Community Care
Looking forward, Kohoen intends to expand the tablets to other offices to keep pace with the expansion of its 24-hour regular and ongoing care services. “We would like to actively use it,” Hiroe says, “not only to keep improving the level of medical and long-term care, but to create a worker-friendly environment.”
The company expects to broaden the Home Medical Care Cooperation System to the whole community and establish a true comprehensive community care system.
“By expanding the triangle formed by clinic doctors, visiting nurses, and visiting care workers to other visiting nursing and long-term care businesses in the community, we will be able to form a larger triangle,” Hiroe says. “We expect to keep improving cooperation between home medical care and long-term care.”
Kohoen hopes the Home Medical Care Cooperation System using the tablet will continue to evolve as an information-sharing base for providing high-quality services to the community.

“We expect to keep improving cooperation between home medical care and long-term care.”
– Akira Hiroe, Vice President, Kohoen Social Community Service

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