

Japan holds AI-based nursing record support system demo

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AI analyzes and texts the contents of nurses' utterances to support nursing recording work



Social Welfare Organization Saiseikai Branch Tochigi Prefecture Saiseikai Utsunomiya Hospital in Utsunomiya City and Nippon Electric Co., Ltd. (NEC) in Minato-ku, Tokyo, analyzes the content of speech by utilizing AI as an initiative to reduce the workload of nurses and create a safe and secure medical environment. In February a demonstration of a nursing record support system that supports nursing record work by converting it into text was conducted.

In order to prevent the spread of infectious diseases in the medical field, to reduce the burden on nurses and to reduce the chances of contact between people and people and medical equipment, and provide medical care while avoiding crowding and close contact, there is a need for a mechanism to maintain the system.

Saiseikai Utsunomiya Hospital and NEC have demonstrated a nursing record support system that uses AI to analyze and convert utterances into texts and efficiently record records anywhere. This time, through a demonstration experiment targeting 32 ward nurses and specialized/certified nurses, we analyzed and converted the content of the nurse's speech regarding nursing records into text using a dedicated smartphone equipped with AI, and supported the nursing record work. We evaluated and verified the convenience and safety of the nurse.

Since this system is equipped with a voice recognition engine that supports medical technical terms, it is possible to convert the utterances of nurses into text with high accuracy. Furthermore, since the textual data based on the utterance content can be extracted according to the format of the nursing record, the nurse can easily check and organize the nursing record at the nurse station based on the extracted information.

This enables nurses to efficiently record information such as care and treatment progress for patients anywhere through utterances, reducing the time-consuming nursing recording work and improving the quality of patients. One can focus on high nursing. In addition, reducing the chance of contact with the input device can reduce the risk of infection.

The demonstration experiment has confirmed that the input time for nursing record work, which was previously manually inputted by all nurses, can be reduced by approximately 50%.

Based on the results of this demonstration, Saiseikai Utsunomiya Hospital is considering the introduction of a hearing device that can be worn on the ear like an earphone to cancel out noise other than spoken voice and transmit the spoken content clearly and is hospitalized.