



Mie University Hospital

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<http://www.hosp.mie-u.ac.jp/english>
 Established May 1972
 Number of beds: 685 (including paid beds)



[Point of application]

- Combined use of barcode and RFID
- In cooperation with electronic health records

Device: Asreader ASR-020D/030D
 Install date: Jan. 2017

This case study was based on the information available on June 2017

A first in Japan! The work of nurses was dramatically improved due to the introduction of the UHF band RFID!



Deputy Hospital Director - in charge of medical services
 Chief of Nursing
Ms. Eto



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 Deputy Director
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Previously, Mie University Hospital used big and heavy PDAs, as well as jacket-type PDAs in which an iPod touch could be mounted. They replaced them by two types of AsReader®: RFID and barcode. Their accuracy of barcode reading went up, and by introducing RFID tags into wristbands and labels the comparison time was drastically reduced, improving efficiency.



Problems

- Three-point check was already possible for injections and blood transfusions through PDAs, but the check was still impossible for specimens.
- The iPod touch® could compare specimens, but the reading accuracy was very low. As a result, there were instances where specimens were not properly compared, and they got mixed up.
- The number of PDAs was limited, so they had to be traded off often during rounds. Furthermore, because they were big and heavy, damage etc. to the liquid crystal panels was also very troubling.

Background

- In the 2015 report of the Ministry of Internal Affairs and Communication called "Investigation on the Effects of Radio Waves on Medical Equipment etc", the pocket RFID reader was found to not interfere with the ICD in the slightest, and was sought after to be used actively in medical settings.

Solution (regarding the three-point check in cooperation with the electronic health records)

- AsReader® significantly improved the accuracy of barcode reading.
- By using RFID AsReader® and RFID tags, the shift from barcode-like 1-to-1 comparisons to 1-to-many comparisons was made possible, which reduced time on especially the sample comparisons.

Results

- Regarding comparisons, they used to be full of errors but now run smoothly, and they anticipate shorter comparison times in addition to less incidents.
- Because many nurses are young and from the smartphone generation, they were able to start using the new system smoothly. They were also able to effectively use its iOS® functions, such as attaching photos of bedsores etc. to the electronic health records of patients.

What is AsReader®?

A portable terminal that you can use smart device-functions on by merely mounting an iPhone®/iPod touch® to it.



Staff opinion

It's easy to use, and reading barcodes has become much faster. We used to have to read the wristbands of patients during the IV exchange at night etc., which would often wake them up. Now that we're reading RFID, we can perform the comparison from above the blankets, which is much better. When you have several vials, we used to have to scan each vial one by one. Now that we changed to RFID, we can all check them in one go. It has become so much faster!

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<https://AsReader.com>