

# First look at cloud-based medical records

A new cloud-based system for **COLLECTING AND STORING MEDICAL DATA** is being developed in South Korea.



Prof. Sang-Heon Lee, the leader of P-HIS Development Group, explains about the ultimate goal of P-HIS

**A cloud and blockchain-based** hospital information system for major tertiary hospitals is being developed in South Korea to bring a more personalized, tailored approach to healthcare.

The Korean government selected Korea University Medical Center as the main organizer of the Precision-HIS

development project.

The information system is being developed by Korea University Medical Center, along with Samsung SDS, a leader in digital health and cloud-based services, NAVER Business Platform (NBP), a national IT provider, and research-driven hospitals, including Ajou

University Medical Center, Samsung Medical Center, Severance Hospital, and Gacheon University Gil Medical Center. Its ultimate goal is to provide better care for patients. The system will enable big data analysis of patient outcomes and will also support the development of personalized medicine and artificial intelligence in health care.

**WE EXPECT TO SEE INCREASED REVENUE FOR THE HEALTHCARE INDUSTRY BY REDUCING COSTS**

“By using precision medicine, unnecessary medical procedures, cost and administrative waste can be reduced, providing more efficient and effective medical services,” says Sang-Heon Lee, the leader of the P-HIS Development Group, a professor at the Korea University College of Medicine. “We also expect to see increased revenue for the healthcare industry by reducing hospital costs.”

The move towards a cloud-based system came about when the South Korean government changed regulations to allow digital hospital records to be stored externally, rather than in onsite data centres. The change allowed for cloud storage of the data from more than 100 hospitals, medical centres and other facilities, representing tens of thousands of patients.

But to unlock the big data potential of this treasure trove of information, the data needs to be standardized, one of the most challenging aspects of setting up such a system.

“Each hospital uses its own terms and records, and some doctors also have their own traditional data they want to keep using, so this is one obstacle,” Lee says.

To overcome this, Korea University Medical Center is developing a standardized approach for record-keeping, including standard terms and formats. This is being trialled in three major hospitals in South Korea with a plan to roll it out across five hospitals by the end of 2019. And because this data is being collected prospectively, instead of retrospectively, it’s of much higher quality and value to researchers. It’s a move sure to be watched keenly.

P-HIS will be the best enterprise level cloud and blockchain-based hospital information system for major tertiary hospitals to achieve truly personalized medicine. ■



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