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What is the IoMT and how will that impact medical care in the Philippines November 2022

As technology advances, more and more industries are taking advantage of the convenience and opportunities technology offers. The medical field is perhaps a forefront industry in the adoption of technology to improve medical services as we know. But with the rise of open RAN, how might we see the Internet of Medical Things (IoMT) support what [Deloitte](#), a leader in Health Solution analyses, refers to as the 4Ps of medicine – predictive, preventive, personalized, and participatory medicine?

The IoMT is defined by [Alex DelVecchio](#) as “the collection of medical devices and applications that connect to healthcare IT systems through online computer networks.” They are connected via Wi-Fi to allow machine-to-machine communications via cloud platforms. The IoMT has the possibility to bring together the digital and physical worlds to improve medical care.

This month AORA spoke to renowned [Filipino Doctors Alvin Marcelo and Miguel Aljibe](#) from the Philippine General Hospital in Manila. “*The Philippine General Hospital is a hospital for the poor. We try to create technologies that are affordable but effective,*” remarked Dr. Marcelo during a recent interview. The [UPM SiLab](#) works in medical device research with several sub-groups researching wearables, diagnostic devices, electronic scoping and more. “*As an open-source advocate, I was excited to learn about open RAN from Toni Torres, I joined the introductory webinar and have been prodding the IDG Team since on how we can use this technology in our ICU or intensive case situations. Our patients are connected to many wires that transmit data. If we can use wireless instead to create a personal network around the bed of the patient this will free up the body but still allow us to collect data in a secure way and send to electronic medical files,*” Dr. Marcelo.

In the Philippines, and elsewhere, the [COVID-19 pandemic](#) saw the swift rise and adoption of robotics in the medical field. Medical devices can assist staff with working more effectively, efficiently, and productively while improving access to and speed of diagnosis to deliver more targeted precision treatments and improved patient monitoring. As it currently stands, interoperability is arguable one of the biggest challenges for the medtech industry, with numerous medical devices operating different software. “*One of our sub-group labs is working to create interoperability between our current devices so we can share data from one device to another and ultimately to a medical repository,*” Dr. Aljibe. **This is where open RAN can play a part.**

The industry is already seeing a shift as product manufacturers are responding to emerging needs and trends by developing devices with internet connectivity capabilities. As wearable devices become more common, it is only a matter of time before they become the norm. “I

think there are huge possibilities [in the medtech industry], especially if the technology is open. This will allow it to be more accessible to more people. Yes, we will have to deal with security issues and encryption over open technology, but I think openness democratizes access and more access would increase possibilities for researchers and academics,” Dr. Marcelo.

Moving forward, USAID is keen to foster partnerships across industries to support the adoption of open RAN whilst bringing innovation and excellence to other industries. *“Ultimately, the medical industry here in the Philippines are looking for ways we can improve our patient care services and processes. What is challenging for us right now is reaching the right people. We are medical doctors, not engineers. The work being done by USAID and the AORA group is essential. We are excited to be apart, to join any trainings, and collaborate as opportunities arise,” Dr. Marcelo.*

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