

Safety, Tracking and Surveillance... the name of the safety game



Dr Rhema Sundram

It was all about keeping everyone and everything safe, at a tertiary hospital that deals primarily with cardiac cases and emergencies, no less.

“So first things first, the safety of the clinical staff was paramount, as we could not afford to have anyone getting sick as we needed all hands

on deck,” says Occupational Health Doctor **Dr Rhema Sundram**.

“When it became clear that PPE was the way to go, there was quite a scramble for gloves, masks and gowns; and at one point we were creating our own items. I remember we stitched surgical gowns, sewed cloth masks and head covers for non-clinical staff and made face shields; and we kept the actual PPE for surgeries.

We quickly mandated that all our clinical staff be in full PPE, especially when dealing with emergencies. As COVID is a potential precursor to heart attacks, we are always on high alert when we deal with these patients, especially so in the early stages as test results took a longer time. Things became slightly more manageable when the RTK tests became available as results are now obtained much faster.

Nevertheless, even if the patient is COVID negative, we still maintain strict protocols to prevent the possibility of us infecting them instead. Today, even our admin staff don goggles and masks at all times.

Our strict surveillance system, which we developed in-house, has helped us to effectively track our staff and eventually our patients and everyone who comes into the hospital now. We call it IJNSurveillance, the brainchild of the IJNSurveillance Task Force, which I headed, comprising representatives from the Management Information Systems, Support Services, Quality Management and Human Capital & Organizational Development departments.

IJNSurveillance was born from the need to self-monitor our staff especially within the hospital grounds itself, something which MySejahtera did not allow us to do. Initially targeted for staff, we eventually extended it to contractors and vendors, and now to practically everyone who steps into IJN.



Pn Suriyani Azaman

Our MIS team, has done an amazing job of developing this tracking system and supporting IT platforms, which we are now effectively using to facilitate the hospital's mitigation of COVID-19, covering bases from A-Z in the entire management chain. I must commend one of the key players in this endeavour, **Suriyani Azaman**, the

Assistant Manager of the MIS Department's Applications Unit.”

Suriyani explains that with this system, entry into IJN is a three-step process of checking in with MySejahtera, filling up IJNSurveillance forms and checking temperature before entry. The thermal scanners also have facial recognition capability for extra security as it ties in with the staff database, also allowing for the monitoring of staff compliance.

“IJNSurveillance is basically a daily health declaration online. The information is clocked into our system and because of its wide connectivity and database covering all who enter IJN, it will identify the person as Fit / Not Fit / Close Contact / Probable Case. With this the process flow will continue accordingly. The app also has the vaccination details of each person,” she says.

Following IJNSurveillance, IJNTracker was launched for contact and movement tracking within hospital grounds. This means that entry into various sections of the hospital also requires QR Code scanning. Extended to patients, IJNTracker makes it easy to trace the movements of any person of interest, thereby facilitating contact tracing more efficiently.

Another two which eventually came on board were the IJNAccompany and IJNCaregiver apps, with the team now working on the IJNVisitor application.

IJN's MIS team also created its own vaccination tracking system - IJNCOVac - which is integrated into its whole staff management system, effectively creating a comprehensive network of linked and easily accessed staff data.

As these are all cloud-based applications, they can be accessed anywhere and on portable devices; the information is all interconnected, making it easy to send information to and alert the various HODs and PICs on any issues which arise, enabling them to take prompt action such as quarantining or isolating their staff.

Indeed, IJN's whole gamut of applications and data networks have simplified processes, eased management processes and strategies and provided a sense of security for all those working within IJN that they are as “safe” as safe can be from the virus.

It sounds simple on paper, but a lot of work and thought went into it. Suriyani and her team dedicatedly spent hours brainstorming and programming the systems that have received much commendation and appreciation from IJN staff.

Having used information technology and data applications for a long time now, the MIS unit plays a pivotal role in ensuring that all systems are up and running efficiently. They are in charge of server functionality, data storage, retrieval and restoration, programming implementation and any and every issue connected to IT in the hospital.

“The MIS team, comprising 28 staff is basically in charge of supporting the hospital's information systems and

applications. When COVID hit, everything had to migrate online, from data access to meetings, and of course the tracking applications.

“While many people had a “rest” from work because of the MOCs, we were working round the clock, creating methods and procedures, new programmes and applications and establishing different platforms for the various needs. We also had to apply for licensing and subscriptions such as Zoom, to manage communication and information dissemination.

“One positive thing that came out of this was the migration to cloud-based networks and opening up our own VPN so staff could access IJN data securely from anywhere, instead of physically come to IJN.” Suriyani says.

Suriyani says some of the biggest challenges was to digitise the forms as online automation systems and to meet the needs as quickly as possible. The team also had to think about the impacts and solutions and anticipate possible problems.

“The concepts all came from within the team, working in collaboration with the IJN COVID task force and we also referred to ideas borrowed from the internet and other hospitals. Our main goal was to devise a system that would integrate all our staff information, patient data, the vaccination and everything else necessary to create a seamless interconnected network and management system.

“I am glad that Team MIS has contributed to the successful mitigation of COVID-19 here at IJN, and we are working on more applications to streamline the work of the hospital and our doctors. One of this is the HIS EMR which will see us moving away from physical charts to accessing patient data via mobile devices. Stay tuned.”

