

TeleHealth NEWSLETTER



TAMILNADU CHAPTER
Telemedicine Society of India

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Telehealth Newsletter

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What is New?

This March 2022 issue of the Telehealth newsletter has an important contribution about the role of digital signatures for e-prescription from Mr. Anay Shukla and Ms. Saloni Kedia.

The current Telemedicine Practice Guidelines on e-prescriptions mentions that they can be dispensed in the form of a photo, scan, or digital copy via email or any messaging platform to the patient. A photo, scan or digital copy of a prescription, is technically only a copy of the prescription, and not the original prescription. If we apply the requirements of the IT Act to e-prescriptions, it should have digital signature to be valid and to ensure that they are not misused. The Information Technology Act (IT Act) of 2000 gave digital signatures the same legal recognition as handwritten ones. Therefore, as a practice, while offering teleconsultations and issuing e-prescriptions, it may be prudent to use a digital signature to authenticate the e-prescription.

Continuing our articles on Tele-ICU, this issue brings a nursing perspective of tele-ICU care from Saudi Arabia. The last piece is the integration of Ayushman Bharat Digital Mission with Hospital Management system of SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES (SKIMS). This is an important step in digitising the health care system in this large govt. hospital in Srinagar and hopes to improve overall care and bring efficiency.

We do require more contributions from members, do remember documenting your work helps in ensuring that there is a point of reference for others and also creates visibility about your work.

Do remember that on the 7th April, we will be celebrating the World Health Day. Do celebrate with a tele-health activity. The theme this year is 'Our Planet our Health'. The COVID pandemic has made us realise how interconnected we are. And the only way to ensure health access to all is through Tele-health.

Thank You

Dr. Sunil Shroff

Chief Editor

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Prescriptions and Digital Signatures



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Digital signatures have been legally recognised in India for more than two decades now. The Information Technology Act (IT Act) of 2000 gave digital signatures the same legal recognition as handwritten ones. In course of offering tele-consultation over the internet, registered medical practitioners (RMP) routinely issue prescriptions in digital format (hereinafter referred to as “e-prescriptions”).

Under Indian law, in order for a prescription to be valid, it must carry signature of the RMP. This requirement is easily met for physical prescriptions. However, in context of e-prescriptions, it is unclear whether scan or photo of physical prescription meets the threshold of a valid prescription, or whether an electronic signature is required to be affixed in an e-prescription, or whether a digital signature is required to be affixed in an e-prescription, in order to ensure that the e-prescription generated by the RMP is lawful and valid.

The IT Act provides that, if any law requires any information to be validated by affixing a signature of any person, then such requirement is deemed to have been satisfied if the information is authenticated by means of a digital signature affixed in the manner provided by the Central Government. Thus, because of the IT Act, e-prescriptions have the same legal recognition in India as physical prescription, provided they are affixed with a digital signature.

Under the IT Act, "digital signature" is a signature which is supported Digital Signature Certificate (DSC). A DSC is a secured digital key provided by certifying authority to validate and confirm the identity of the person who holds the certificate. A DSC includes information such as the user's name, pin code, country, email address, certificate issue date, and name of the certifying authority. The certifying authority provides three different classes of DSCs i.e. Class1, Class 2 and Class 3. The fundamental difference between the three classes is the level of validation of the subscriber (i.e. author) of the digital signature that has been undertaken by the certifying authority. Under Class 1 DSC, the authority does not undertake verification of the identity of the subscriber through video verification. Under Class 2 DSC, the authority requires the subscriber to prove his or her identity through video verification, but without remaining physically present before the authority. Under Class 3 DSC, the authority requires the subscriber to be physically present before it in order to ascertain the identity of the subscriber.

In most common use scenarios, including for the purpose of issuance of e-prescription, a Class 2 DSC should suffice.

It should be noted, however, that there is an apparent contradiction with respect to validity of e-prescription in the Telemedicine Practice Guidelines, 2020 (TPG). The TPG provides that e-prescriptions can be dispensed in the form of a photo, scan, or digital copy via email or any messaging platform to the patient. A photo, scan or digital copy of a prescription, is a copy of the prescription, and not the original prescription. Therefore, as a practice, while offering teleconsultations and issuing e-prescriptions, it may be prudent to adopt a Class 2 DSC to authenticate the e-prescription.

Tele-ICU and Tele-ICU Nursing

Mr. Ajo Jose RN

Head Nurse, Tele-ICU Riyadh, KSA

Tele-ICU is a diagnosis and treatment method that makes use of videoconferencing and internet technology to provide intensive care services to patients in a remote or a location where there is shortage of intensive care doctors. It makes it possible for patients and critical care specialists in the ICU to be face-to face within seconds with high risk patients to receive medical care easily and quickly.

Most tele-ICU programs have a command center that are staffed with highly trained intensive care doctors and critical care nurses who aid patients electronically either with the help of audio connections or videoconferencing. This allows healthcare professionals to get patient data in real-time and resolve issues as soon as they arise.

Intensivists are generally very experienced in diagnosing how critical a patient's condition is, which is helped greatly by access to vital information that is provided through the technology used in tele-ICU equipment. This helps dramatically reduce ICU complications. They are also extremely well-versed and experienced in different kinds of critical care areas that extend to pediatric critical care or pulmonary critical care.

Tele-ICU solutions can also reduce the cost of providing healthcare to those in acute need of care where there is no access to tertiary care due to lack of experienced intensivist. Providing this service also gives an additional revenue stream for the remote hospital. Overall tele-ICU care is a win-win for all be it the hospitals, doctors and patients. During the COVID pandemic tele-ICU saved millions of patients in all parts of the world and has grown exponentially.

What's is the role of a Nurses in Tele-ICU?

From my experience I can define Tele- ICU Nursing as a combination of informatics nursing and critical care nursing. Telehealth nursing is a method of delivering care remotely through the use of technology, including mobile devices, tablets, and computers. Sophisticated telehealth encompasses more than digital appointment reminders and confirmations—it is a way to offer real healthcare assistance and support from a distance. Let's look what are the Nursing Jobs can do from Tele-ICU Command center. Essentially a tele-ICU nurse can lessen the burden of a critical care doctor by performing certain task and constantly monitoring patients.

1. **Triage:** usually we consider all the ICU Patients are critical patients however there are some more critical than others. Triage of patients from most sick to less sick is defined by certain para-meters. Patients who are very sick require more close monitoring and more coordination with the doctors both at the command and remote center.
2. **Patient Family Education:** Basically all the Tele-ICU Nurses are well experienced nurses in critical care nursing. They have good knowledge about what happens in the ICU. Tele-ICU Nurses can conduct regular virtual conference with family members and explain about the procedures, medication being given, the ICU equipment and why they are used and the patient's conditions. This helps the Tele-ICU specialist to devote more time in decision making and look after more patients.
3. **Quality Monitoring:** tele-ICU is always connected with remote ICU Medical record (EMR). Most of the Tele-ICU in the world use advanced HIS system which will shows the documentation of multi-disciplinary team. Tele-ICU Nurses can be trained to perform regular audits on these documents. In the long term this helps with standardize care, evolve protocols and improve care. This would help with the documentation for accreditation requirements (Eg, NABH or JCI) for the hospital.
4. **Monitoring and Reporting of Key Performance Indicator (KPI):** ICU KPI is a well-defined performance measure that is used to observe, analyze, optimize and transform a health process. Tele-ICU Nurses can maintain statistical data of their remote ICU on daily basis, statistics includes total admissions, discharge, and average length of stay, occupancy rate, infection and mortality. All these reflect the performance of ICU and how Tele-ICU is effective. This again would help with the accreditation requirements (Eg, NABH or JCI) for the

hospital.

The above mentioned points are some of the daily routine jobs for a Tele-ICU Nurse however there are others many like updating live census, supply chain coordination between remote Projects and many others.

Tele nursing is growing along with telemedicine. Telehealth eases the impact of the nursing shortage because it provides easier access to professionals for patients.

SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES (SKIMS) Integrated with Ayushman Bharat Digital Mission

SKIMS in Srinagar integrated its Hospital Information System with Ayushman Bharat Digital Mission (ABDM). It is a major step towards digitized and integrated healthcare services and will benefit general public to draw benefit of healthcare facilities in a seamless digital manner.

On the occasion SKIMS also signed MOU with J&K Bank for starting online payment system which is seen as another big step towards digitization for better patient care.

Shri. Vivek Bhardwaj (IAS), Additional Chief Secretary, Health & Medical Education who was Chief Guest on the occasion lauded the SKIMS for its robust Health Information System and said the integration of SKIMS HIS with Ayushman Bharat Digital Mission will mark a new beginning and the SKIMS will become a role model for the entire country. He emphasized the digital revolution in various aspects of life is making huge strides to ease our lives.

Director SKIMS/ EOSG Prof. Parvaiz A Koul in his address said that integration of existing HIS at SKIMS with Ayushman Bharat Digital Mission as part of Digital India Program will undoubtedly make healthcare delivery services easy and more accessible. Professor Koul while dispelling the apprehensions about digital health records said it is absolutely safe and protects privacy of the patient and will enhance efficiency of the healthcare system. He congratulated IT team SKIMS for their services and developing sound Hospital Information System which he said is one of its kind in the country.

He further added that SKIMS will soon have fully cashless transaction system and thanked J&K Bank for their constant support. He said signing of MoU with the J&K bank on this platform is the final step towards it.

Mr. Syed Shafat Hussain Rufai, Zonal Head Kashmir Central, J&K Bank who was present on the occasion assured full support and said J&K Bank will facilitate SKIMS at every step for better patient care delivery.

Mr. Farooq Ahmad Wani, Superintendent Engineer IT & Electronic Communications SKIMS highlighted the role of IT systems in SKIMS and said the department has come a long way in making system robust and efficient through IT solutions. He acknowledged the role of IT professionals in SKIMS which he said are working at multiple levels and strengthening healthcare services at SKIMS.

Dean Medical Faculty Prof. Tariq A Gojwari, Mohd Yaseen Choudhary (IAS) Mission Director, National Health Mission J&K, Medical Superintendent SKIMS Dr. Farooq A Jan , Nodal officer Ayushman Bharat Dr. G.H Yattoo and Assistant Professor Ms. Samina Mufti also spoke on the occasion.



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Tripura tribal council inks deal with Apollo Hospitals for tele-medicine services

ADC executive member Kamal Kalai said, "This agreement will provide tele-medicine, tele-consultation and tele-emergency services; a tele-ICU facility administered by experts; and ambulatory services by Apollo specialists during health camps or outreach initiatives in far-flung areas. This is the first phase of our cooperation and understanding", Kalai said.

The Tripura Tribal Areas Autonomous District Council (TTAADC) has signed a memorandum of understanding (MoU) with Apollo Hospitals to set up tele-medicine services at the tribal council-run Kherengbar Hospital at Khumulwng, 25 km from Agartala Speaking to IndianExpress.com, Tripura ADC executive member Kamal Kalai on Friday said the MoU

was partially signed by Apollo Hospital authorities in February, when a team of the ADC visited Hyderabad. However, the TTAADC chief executive office, who was in Uttar Pradesh as the Returning Officer for the Assembly elections, returned recently and completed the MoU signing yesterday.

“This agreement will provide tele-medicine, tele-consultation and tele-emergency services; a tele-ICU facility administered by experts; and ambulatory services by Apollo specialists during health camps or outreach initiatives in far-flung areas. This is the first phase of our cooperation and understanding”, Kalai said.

Kalai also said doctors and nurses from Kherengbar Hospital will be trained in Hyderabad to learn to coordinate in virtual mode while offering treatment.

He also said Apollo is in discussion with ADC authorities to set up a unit of the hospital at a later stage in Khumulwng.

Since royal scion Pradyot Kishore Manikya Debbarma-led TIPRA Motha’s assumed power in the state’s tribal council last year, the ADC has been trying to develop its public healthcare infrastructure, including equipping Kherengbar Hospital and different healthcare installations with oxygen concentrators and other modern healthcare facilities.

“This MoU would give the ADC a special opportunity to acquire advanced medical services, especially in far-flung rural areas,” the ADC executive member said.

Tripura Chief Minister Biplab Kumar Deb inaugurated a 150 LPM oxygen plant at Khumulwng last year as part of the state government’s initiatives to build healthcare infrastructure amid the Covid-19 pandemic. The state government also announced Rs 30 crore to ensure quality public healthcare for the tribals living in the ADC areas.

One-third of Tripura’s 37 lakh population are from 18 tribal communities. Most of them live in the TTAADC, which is spread across 7,132.56 square km and covers nearly 68 per cent of the state’s geographical area. [Read More](#)

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