Patient Remote Monitoring Services "Every Patient Connected, Every Patient Safe"

Aster RV Hospital Bangalore

Dr. Chinnadurai R Lead Consultant, Critical Care Medicine

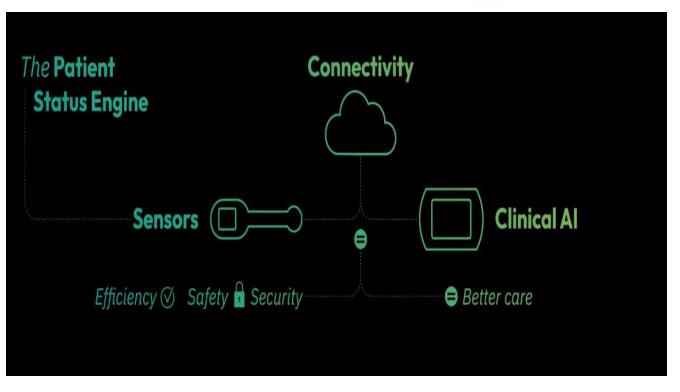




PATIENT REMOTE MONITORING SERVICES- ISANSYS SOLUTION



Patient Remote Monitoring Services -Isansys solution – PSE (Patient Status Engine) is a advanced Tele-Monitoring wireless patient monitoring platform, based on clinical wearable sensors which Generates continuous real-time, patient data and clinically actionable Early Warning Scores (EWS)



- PSE devices are placed on the patients and data is related through WiFi network which is accessible to the staff & the physician through an app.
- It enables patients on acute and chronic pathways to be monitored from home or in any healthcare setting including high dependency and general wards. It offers rapid creation of virtual wards and integrates the patients vital sign data seamlessly into the electronic medical record system

OBJECTIVE



To be the first choice of patients & healthcare providers by offering

comprehensive care by deploying remote monitoring system with objective of

"Every Patient Connected, Every Patient Safe"

Also with Strategy "To integrate digital transformation, technology &

Innovation as core pillars to deliver enhanced patient centric services & enable

wider access"

Project Plan & Progress





FDA / CE Certified Clinical Platform Isansys for Tele-Monitoring selected after Rigorous Evaluation

- Patient Remote Monitoring device Isansys solution PSE (Patient Status Engine) delivers advanced wireless patient monitoring platform, based on clinical wearable sensors
- Generates continuous real-time, patient data and clinically actionable Early Warning Scores (EWS)

 It has healthcare industry standard connectors hence can be integrated with multiple Electronic medical record systems for data documentation







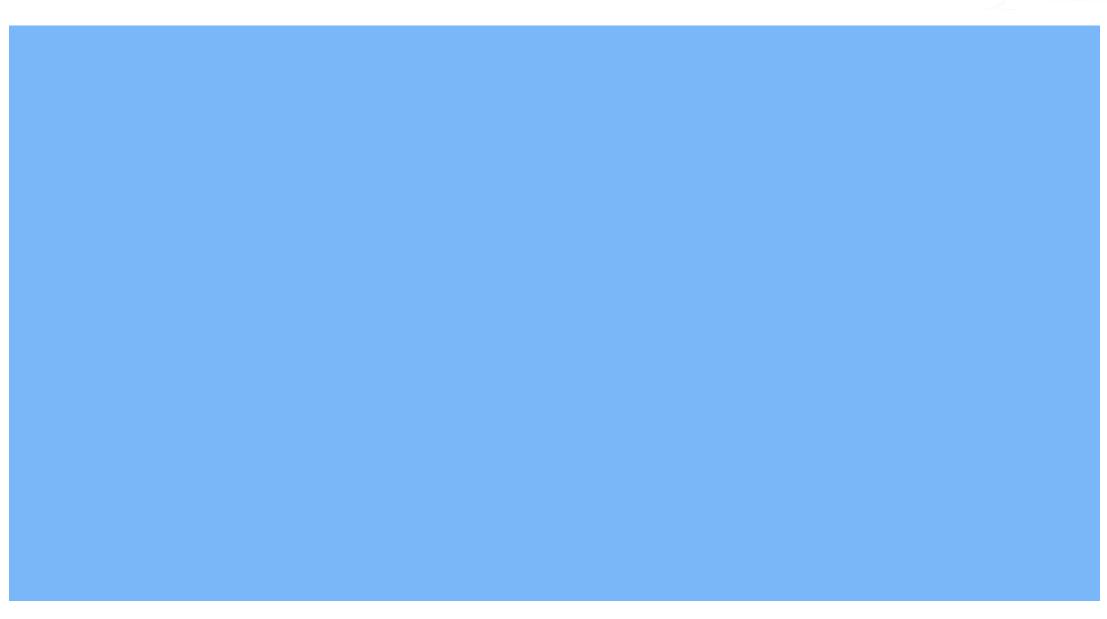






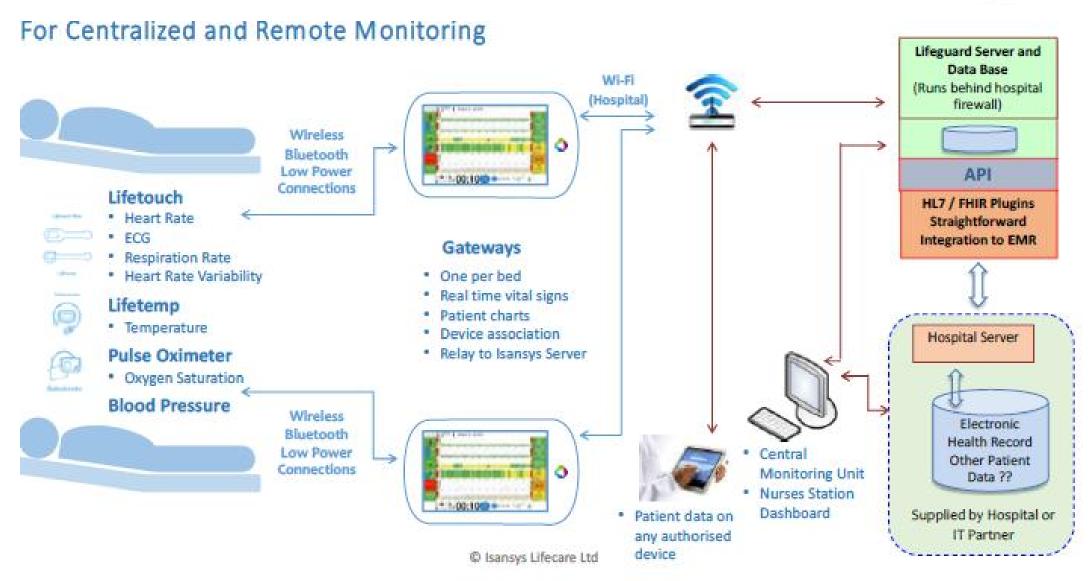
VIDEO - ISANSYS PATIENT REMOTE MONITORING





ISANSYS PATIENT REMOTE MONITORING SYSTEM – INPATIENTS





ISANSYS PATIENT REMOTE MONITORING SYSTEM -HOME MONITORING

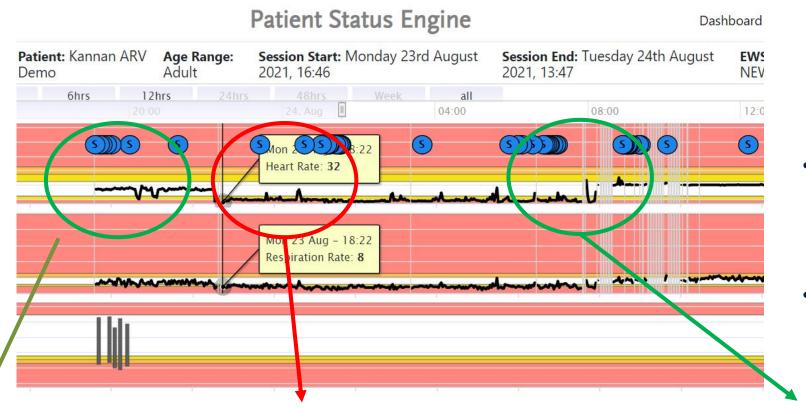


Hospital at Home / Telemedicine

Same technology - only the connectivity changes Lifeguard Server and Enabling seamless transition between care locations Data Base (Runs behind hospital firewall) Cellular 3G/4G API HL7 / FHIR Plugins Straightforward Lifetouch Integration to EMR Bluetooth Heart Rate - ECG - Respiration Rate · Heart Rate Variability Hospital Server Lifetemp Temperature Patient data on any authorised **Pulse Oximeter** device Gateway - Oxygen Saturation Electronic Health Record **Blood Pressure** Central Other Patient Monitoring Unit Data ?? Nurses Station Dashboard C Isansys Lifecare Ltd

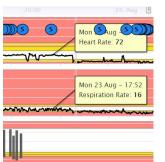
Life Saving Outcomes - Patient 1-Bradycardia with 3:1 Block





- Patient monitored and discharged with Isansys PSE after stabilising bradycardia condition
- Emergency identified remotely with HR dropping to 32 and RR to 5
- Patient called back to hospital & pacemaker placed

Normal HR at Home



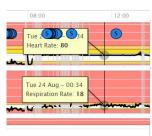
Sudden Drop in HR that was tracked in real-time & Patient called to ER



ER ECG matched with that of Isansys PSE

Emergency Pacemaker Placed on Patient





Life Saving Outcomes – Patient 2-Happy Hypoxia At Home





sravan kumar

Chart from Wednesday, July 21st 2021, 18:32:49 to Wednesday, July 21st 2021, 23:56:37



Patient situation started deteriorating from about 9.30PM and SPO2 dropped consistently till 81%.

Nurse administered chest physip stabilised the patient by 11.15PM and moved him back to oxygen concentrator at home itself. An ER visit situation was successfully avoided

Nurse immediately alerted the Doctor. Patient was advised to shift from oxygen concentrator to emergency oxygen with face mask. A nurse was immediately asked to reach patient's home

- Covid patient was in hospital for more than 2 months
- Went through ECMO
- Patient was monitored in ward using Isansys PSE solution and that gave confidence to discharge the patient

Patient was monitored at home and critical situations were taken care of till full stabilisation

OUTCOMES & BENEFITS



- Multiple patients were successfully monitored in ICU, Wards, In-Transit as well as Home
- Tangible clinical outcomes observed during multiple PoCs & benefits can be scaled for more patients
- wireless system more convenient compared to wired as it assists in mobility
- Patients are ready to opt and afford for monitoring services as it helps to reduces hospital stay & hospital acquired infection with reduced overall expense
- Monitoring patients from various other hospitals outside Aster RV hospital & partner nursing homes with technical & clinical support to manage critical patients
- Early Warning Scores in PES alert healthcare professionals, enabling timely interventions which enhances the care and safety of patients.
- relieves pressure on staff, frees up hospital beds for those who need them the most,
- Addresses severe staff shortages, COVID-19 burnout, and increases patient safety.
- Automates patient observations, virtually eliminates technical and other false alarms, & enables paperless wards setup within hours.

FUTURE PLAN BASED ON OUTCOME & BENEFITS



- Setting a 'Command Centre' for monitoring patients across hospitals, on an "Asset lite model"
- Setting up Global Central Monitoring Team;
 - Intensivists & Critical Care Nurses
 - IT Infrastructure setup
 - Policy and process for identification, transfer/management of patient
- Upscale the successful piloted model across Aster DM hospitals by the TeleHealth Team
- Based on benefits and outcome, planning to develop New AI models alerts and analysis
- Extend to ME/UK/USA patients by appointing certified Intensivist
- Exploring possibility of making the command center a neutral entity to enable monitoring of patients from other hospitals/nursing homes



THANK YOU