



Client

Loma Linda University Children's Hospital and Medical Center is a Seventh-day Adventist medical institution coeducational Health Sciences University located in Loma Linda, California, United States. The Children's Hospital includes an 84-bed Level IV Neonatal Intensive Care Unit (NICU).

Challenge

Protect Vulnerable Patients, Manage Excessive Environmental noises

Loma Linda University Children's Hospital (LLUCH) had been struggling with noise in their NICU for many years. With the advent of HCAHPS studies, it became apparent the noise problem had become a hospital wide problem. Unwanted noise proved difficult to accurately measure and nearly impossible to manage. Numerous methods were tried to curtail noise and improve customer satisfaction surveys with little sustained benefit.

Neonatologist and Infant Developmental Specialist, Raylene Phillips, MD, knew that research had documented the detrimental effects of noise on premature infants. Noise was being created by the hospital staff, parents and visitors, mechanical and medical equipment, maintenance, housekeeping, and numerous other sources. With no way to consistently and accurately monitor the noise, Dr. Phillips often had to resort to being the "Sound Cop" who personally reminded staff, parents and visitors to lower their voices or take their conversations away from the babies' bedsides.

Assessment

Remote Monitoring and Advisement System Needed

Sonicu performed a needs assessment to determine the best method for Loma Linda to address their noise problems. We found no noise monitoring system in place. Hospital personnel were using their own ears to determine who was and wasn't being loud. At times this approach proved confrontational. There was also no visual means of providing real-time unbiased feedback to those in a room regarding the noise level. The excessive noise in the facility was a serious problem that was having detrimental effects on the youngest and most vulnerable patients.

See reverse side for our solution >>





Solution

Monitoring, Measuring, and Managing

Sonicu provided over (60) wireless Sound Indicating Meters (SIMs) for installation in LUCH NICU. All SIM's were programmed to broadcast their data to Sonicu's cloud based server, SoniCloud, via a cellular gateway. The many benefits of this type of deployment enabled Sonicu to completely pre-program all devices before shipment and bypass the many hurdles often involved with having to be supported by the hospital network. Sound data is now available 24/7/365 via any web supported device. Summary reports are delivered weekly via email and keep Dr. Phillips and the NICU staff up to date on sound level trends for individual rooms and the unit as a whole. Monitoring noise levels has never been easier. With true actionable intelligence, Dr. Phillips is finally able to determine the effectiveness of interventions to reduce sound levels in the NICU.

Satisfaction

Peace of Mind

"Premature and sick babies are extremely vulnerable in the NICU and we must do all we can to protect them from adverse stimuli while they are in our care. Your weekly Cloud Reports are very useful in helping us monitor how we are doing in creating a quiet, healing environment for babies in the NICU. We noticed significant improvements almost from the moment we installed Sonicu. Parents appreciate the sound monitor light indicators because it is easy to see when the noise level is too loud. Even our staff is noticeably quieter. Sonicu has definitely been a positive culture change in our hospital. Thank you Sonicu for helping us to create a quiet healing environment in our NICU."

- Raylene Phillips, MD

The data proves it. Success with the system has been significant enough to merit additional installations in other areas of the hospital. Nurse stations and even hallways are all quietly and positively being changed for the better.

