FCC Allocates Spectrum for MBANs

Laird Technologies

According to the official press release from the FCC [1], "Wireless devices that operate on MBAN spectrum can be used to actively monitor a patient's health, including blood glucose and pressure monitoring, delivery of electrocardiogram readings, and even neonatal monitoring systems." Since patients are free of cables, the use of MBANs makes it easier to move patients from one part of the hospital to another for treatment. Further, from the FCC press release, "MBANs allow for ubiquitous and reliable monitoring, and give health care providers the chance to identify life-threatening problems or events before they occur."

In a May 24 news release, Mike Marsh, GE Healthcare's VP and CTO, said that a patient in a hospital's intensive care unit is attached to a dozen cables or more. The cables restrict a patient's mobility and comfort level and make it difficult for clinicians to treat him or move him to another department. Monitoring of vital signs occurs only when the cables are attached to the patient.

In contrast, with MBANs, "patients stay connected to their clinicians" at all times, allowing for the continuous monitoring of vital signs even while the patient is being moved from unit to unit. In addition, said Marsh, patients can be monitored before they reach a hospital and after they're sent home. In short, MBANs enable doctors to keep closer tabs on patients, increasing the odds that medical complications can be caught and treated before inflicting harm.

GE Healthcare and Philips Healthcare, which are developing MBAN technology, had petitioned the FCC to allow MBANs to share a piece of the spectrum traditionally used by the aerospace industry and government agencies for flight testing. Last year, the medical and aerospace industry submitted a joint proposal to the FCC detailing how MBAN devices could share that spectrum with safety-related aeronautical telemetry operations.

Now that the spectrum is allocated to MBANs, firms such as GE Healthcare and Philips Healthcare can proceed with their development of MBAN devices. Once the devices are finished, they will have to be approved by the FCC and the Food and Drug Administration (FDA) before they can be sold and used.

One answered question is who will pay for MBANs, especially those used outside hospitals. Insurance companies may not cover at-home monitoring, as reimbursement policy tends to favor face-to-face consultations.

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