I am writing to you as a concerned registered professional nurse who has been made aware by the American Hospital Association and its professional engineering society, the American Society for Healthcare Engineering, that the Federal Communications Commission (FCC) is considering rules that would allow unlicensed TV White Space devices to operate on the same frequencies as those used in the Wireless Medical Telemetry Service (WMTS) that currently protect patients in our nation’s hospitals, health systems and in other health settings. Wireless medical telemetry devices include heart, blood pressure, respiratory and fetal monitors that operate in a protected spectrum that was created by the FCC in 2000. This protected spectrum is now at risk because of the growing appetite for available wireless spectrum fueled by technology giants.

As a health care professional, I have personally welcomed the growth of wireless medical telemetry. It has provided a sustained level of comfort to the most complex and fragile patients whose very lives depend upon the constant monitoring and critical data they provide. Wireless telemetry has repeatedly served as advanced warning systems for life threatening conditions and a fail-safe system for busy providers who are dealing with multiple patient scenarios in critical and often chaotic settings. Its use has also become the standard of care expected in today's health care world.

Under proposed rules, telemetry that was protected from interference through the WMTS would now be opened to broadband wireless access across the internet. What this means is that wireless telemetry that is monitoring one or more critical heart patients could be impacted by radio interference from an external source. In lay terms, this means disruption of the signal such as a missed heartbeat, the lack of a respiration or a flat brain wave. Unfortunately, this very scenario became real when a Dallas TV station testing a digital television transmitter knocked out of operation low-powered heart monitors at Baylor University Medical Center. This disruption was remedied and no patients were harmed but it is a poignant example of what could happen on a much larger scale if unlicensed devices are permitted to operate on the same frequencies as the WMTS.

Nurses serve on the front lines of ensuring patient safety. I am concerned that sharing previously protected spectrum with unlicensed devices operating on the same frequencies as the WMTS would endanger the very patients I am committed to protect. I ask the FCC to put patient safety first and reject any proposals that do not ensure interference free patient monitoring. Maria Esmaya