

## REVIEW

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### BUTTERFLY IQ+: OFFERING DAY-TO-DAY PORTABLE ULTRASOUND TECH



The **Butterfly IQ+** app with an ultrasound probe and cable is available from **Butterfly Network, Inc.**, in Guilford, Connecticut.

**Background.** It could be reasonably argued that ultrasonography has surpassed the speculum as the single most important tool in ObGyn. From its origins in 1949 with the pioneering work of George Ludwig using A-mode (amplitude-mode) ultrasound and the first publication of its use in pregnancy using B-mode (brightness-mode) ultrasound in *Lancet* in 1958 by Donald and colleagues, this technology has become so ingrained into ObGyn that it is often frustrating to practice comfortably without it. Thus, today, the biggest question facing most practitioners is not whether or not to have an ultrasound in their practice but which one to have.

Given the wide range of quality, functionality, and price within the ultrasound device space, choosing the right technology can feel as daunting as choosing the perfect restaurant in New York City. That said, when looking for entry-level ultrasound technology to address the day-to-day basic needs of your average ObGyn, the **Butterfly IQ+** may be an easy choice.

**Design/Functionality.** The **Butterfly IQ+** app does not come with a screen. Rather, the device is compatible with both iOS and Android systems and readily connects to a vast array of easily purchased devices, with either lightning or USB-C ports. In our office, we use an iPad mini. The probe is lightweight (309 g) and contains a rechargeable 2600 mAh lithium ion battery, so that its power source is independent of the device to which it is attached. The probe is a 2D array with 9000 micro-machined sensors. It allows for imaging using M-mode,

B-mode, Color Doppler, Power Doppler, and Pulsed Wave Doppler. (I don't know what the last two are or what they are used for, but they sound important.) It has a scan depth range of 1 cm to 30 cm. The downloadable **Butterfly IQ+** app that has the software that makes the probe functional has more tools, controls, and presets than anyone could ever need. But that's not all. The App has data encrypted HIPAA/HITECH-compliant Cloud-based connectivity that offers unlimited image storage, access to reports, and embedded CPT codes should billing capabilities be needed.

The true beauty of the **Butterfly IQ+** is that the image quality is awesome and it is really easy to use. The software is mostly intuitive and takes only a minimal effort to learn. The device holds its charge more than adequately for a day in the office and the recharging process is fast and easy. When it comes to the device's design and functionality—as a Capricorn—I am still looking for its flaws.

**Innovation.** The real innovations of the **Butterfly IQ+** are its “ultrasound-on-a-chip”™ technology and its incorporation of a rechargeable battery into the probe. This combination allows for crystal clear imaging in a cordless, portable device. While most other similar technologies waste their time, technology, space, and cost on the screen, the **Butterfly IQ+** punted on that challenge and put all their efforts into the probe and the software. It was a great choice.

**Summary.** In our office, the **Butterfly IQ+** has changed the way we practice. Our trusty fetal dopplers are mostly gone, having been replaced by the **Butterfly IQ+**. At almost every prenatal visit, patients can now see their baby rather than just hear the heartbeat (and they can hear it too if they want by using the M-mode functionality on the device). Patients love it, and so do the doctors. Instead of just hearing heart beats, fetal position and quick fluid checks are now routine, so we think our care is actually a little better than it was. The **Butterfly IQ+** is also great for confirming IUD locations after placement or when the strings are not visible. All-in-all, I love this product. Who doesn't love butterflies?!

**FOR MORE INFORMATION, VISIT**

<https://www.butterflynetwork.com>

*The views of the author are personal opinions and do not necessarily represent the views of OBG MANAGEMENT. Dr. Greenberg personally trials all the products he reviews. Dr. Greenberg has no conflicts of interest with this product or the company that produces it.*

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