

Researchers use a portable ultrasound device for spotting cancer

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The machine called Butterfly IQ is a pocket-sized ultrasound device that works by shooting sound waves into the body and capturing the echoes.



A team of researchers from Butterfly Network, a U.S. based start-up, have developed a novel smartphone-based portable ultrasound machine that can help detect cancer easily at home.

The machine called Butterfly IQ is a pocket-sized ultrasound device that works by shooting sound waves into the body and capturing the echoes. This machine uses 9,000 tiny drums etched onto a semiconductor chip.

The device was tested by John Martin, chief medical officer at Butterfly Network earlier this year, who had been having an uncomfortable feeling of thickness in his throat. He used the device, which was connected to his smartphone, to obtain black and grey images.

Eventually Martin discovered a cancerous mass in his own throat using this device. He found a three centimetre mass that was diagnosed as squamous-cell cancer, a form of skin cancer that develops in the cells of the outer layer of the skin.

The company now plans to combine the instrument with artificial-intelligence software that could help a novice position the probe, collect the right images, and interpret them.

By 2018, its software will let users automatically calculate how much blood a heart is pumping, or detect problems like aortic aneurisms.

The Butterfly IQ is the first solid-state ultrasound machine to reach the market in the US. The company plans to go on sale this year for \$1,999-far less than any other model on the market.