

Design for an Alternate Wireless Medical Auscultation Device

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Stethoscope are the most widely used medical technology in the world, used in both developed and developing nations. A normal acoustic stethoscope can cost anywhere between \$40 and \$1,000 and for small hospitals, costs can add up. The goal of the project was to create a wireless stethoscope that can directly transmit audio data to another medium of the medical professionals choosing. The stethoscope was created using a 3D printer. The membrane is comprised of plastic disc measuring 40mm in diameter. The inclusion of wireless capability, such as FM transmitters, would not only be cheaper but also improve both availability and usability of the new stethoscope. With a total cost of only \$2.48, this could be taken further to mass produce 1000 for only \$2,480. Such a small stethoscope can be easily spread around the world, and even sent to developing countries. The use of such technology within the developing world, would improve access of global doctors to help provide analysis on the audio data.