



Introduction

Many patients with unexplained pain wait for extended periods of time to make appointments at advanced general hospitals. Even after these patients are able to access medical attention, expensive CT or MRI scans may not be able to determine the cause. Additionally, doctors in general hospitals treat hundreds of patients per day, making it difficult for them to have an in-depth understanding of the patient as they must constantly switch from one to another. Therefore, the patient needs to spend more money searching for an answer because their primary doctor does not have the appropriate time or resources to fully understand their needs. However, with the help of Healcerion's SONON, clinicians are able to more quickly diagnose ailments, reducing time required for each patient and saving time and money for everyone involved.

Overview of SONON

The primary care market currently lacks viable ultrasound solutions, as traditional ultrasounds are too expensive and lack the portability needed to keep up with the demands of primary care. Though ultrasound is employed in several primary care applications, there is limited systematic education, which makes ultrasound difficult to use for many primary care practitioners.

SONON's wireless handheld ultrasounds are the ideal solution for the primary care market. A compact, user-friendly ultrasound device weighing less than one pound, SONON can be used in large clinics and small medical offices where space is limited. Each wireless device offers high quality ultrasound imaging, portability, ease of use, and mobile device connectivity through wi-fi. SONON can help prevent stroke and myocardial infarction through carotid artery examination and enables quick and safe treatment by displaying the position of muscles, nerves, and blood vessels during injections. Additionally, SONON delivers information efficiently and securely through DICOM/PACS compatibility. Overall, SONON fills the need for higher quality patient care and shorter treatment times, optimizing the patient experience and building trust between patient and practitioner.



Feature #1: High Quality Imaging

Problem: Due to the lack of affordable ultrasound imaging options at the primary care level, practitioners may not have enough information to recommend the appropriate form of secondary and tertiary care for patients.

Solution: SONON's high quality imaging technology is ideal for common primary care applications. Practitioners can use the high quality imaging to boost treatment efficiency, increasing the speed of diagnosis while simultaneously increasing diagnosis accuracy. Using the information obtained through viewing SONON's high quality ultrasound images on a desktop or mobile device, practitioners can confidently determine if secondary or tertiary care is necessary. Improving patient outcomes and satisfaction levels through using SONON builds trust between patient and practitioner as a result.

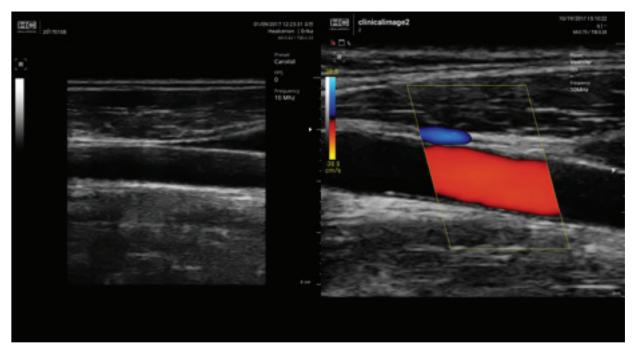


Image: Carotid Intima-Media Thickness (IMT) Image Taken through SONON 300L

Feature #2: Specially Designed for Primary Care Needs

Problem: Traditional ultrasound equipment can cost upwards of \$100,000, which is often impractical for the budgets of primary care practitioners. Additionally, these conventional systems are heavy and thus are usually limited to a single room that is set aside for the ultrasound. Additionally, traditional ultrasounds have a steep learning curve with training not always readily available.

Solution: Well-suited for primary care practitioners, SONON costs less than 1/10 the price of traditional ultrasound machines. Each system weighs about 10 ounces and measures $3 \times 9 \times 1.5$ inches, allowing it



to fit inside a pocket or the palm of one's hand. SONON is therefore easy to carry and can be used wherever the practitioner needs to go. In addition, the training and time barriers to learning are eliminated with SONON's video training guides which help users set up their SONON system in less than 15 minutes and master usage within one week for more than 20 essential applications.

Below is a comparison between a conventional ultrasound, Clarius' handheld ultrasound, and SONON.

Company A Conventional Ultrasound	Competitor B Handheld Ultrasound	Healcerion Handheld SONON 300C and 300L Ultrasounds
Width: 620mm (24.4 in) with caster; 500mm (19.7 in) keyboard Height: 1.15m to 1.72m	Width: 99mm (3.9 in) Height: 167mm (6.6 in) Length: 42mm (1.7 in)	Width: : 78mm (3.1 in) Height: 229mm (9.0 in) Length: 38mm (1.5 in)
(3.75 ft to 5.6 ft) Length: 790mm to 880mm (31.1 in 34.6 in) with caster Weight: 85kg (187.4 lbs)	Weight: 540g (1.2 lbs) with battery	Probe Weight: 268g (9.5 oz); 370g (13.1 oz) with battery

Feature #3: Mobile Compatibility

Problem: Conventional ultrasound equipment is difficult to move, confining mobility and occupying large amounts of space. This is a key reason why ultrasound capabilities are very limited for primary care applications, since space is a limited resource for many primary care practices.

Solution: SONON is a wireless system that uses wi-fi to connect with most iOS and Android smart devices. It easily syncs to smartphones and tablets using the SONON app, and the lightweight handheld probe provides maximum portability. SONON setup is as easy as downloading the app, following the getting started instructions, and scanning. Since the high quality images display directly on the smart device, there is no need to purchase any additional equipment or set aside a room solely for ultrasounds, making it perfect for practices with limited space as well as larger clinics. Images can also easily be uploaded from the smart device into the patient's file to view on a desktop.



Feature #4: DICOM/PACS Compatibility

Problem: Many medical devices do not offer compatibility with existing PACS and/or use their own cloud systems to store and transmit information and files. Because of this, it is difficult to manage patient records and observe mandatory retention periods for medical records. Furthermore, since the practice's existing worklist cannot be directly accessed through these devices, practitioners must alter their workflows to compensate.

Solution: All SONON devices support the DICOM format, which is compatible with existing PACS servers. Through its wi-fi connected system, SONON can easily connect to the PACS and Electronic Medical Records (EMR) servers, allowing practitioners to directly upload/transmit images taken by SONON. Additionally, because SONON easily connects to EMR, practitioners are not required to adjust workflows and the uploaded images are directly connected with the patient's existing information, providing security and easy image file management.

Conclusion

SONON is an innovative mobile ultrasound that is well-suited for the demands of primary care. Affordable high quality imaging ensures that practitioners can scan confidently and improve efficiency through quicker and more accurate diagnoses. Designed for the busy primary care practitioner, SONON is lightweight and easy to learn. Scanning does not require any additional equipment other than a tablet/smartphone and the SONON probe, and DICOM/PACS compatibility ensures that confidential patient information is kept secure. SONON's features create benefits for both patients and practitioners, creating better healthcare environment for all.

About Healcerion

Healcerion is a wireless handheld ultrasound company which strives to provide the highest standards of patient care to primary healthcare providers worldwide. Focusing on our core principles of Humanism, Innovation, Trust and Partnership, we work with our customers provide innovative mobile ultrasounds that can go wherever they go. To learn more, visit www.healcerion.com.