

Smartphone FDA Approval Ignites Ultrasound Debate



The recent FDA approval of a "smartphone" ultrasound system has re-ignited industry debate into the long term future of ultrasound technology. InMedica has closely monitored the evolution of these products, and assesses their potential impact on the \$5.2 billion ultrasound industry.

"Mobile" ultrasound systems are not a new concept, with similar "pocket" ultrasound products previously released by GE Healthcare, Siemens Healthcare-Acuson and Signostics. The key difference of the new Mobisante's "smartphone" system is that it allows remote sharing of data and images direct from the device via standard cellular networks.

"The development of a cellular ultrasound device will certainly benefit healthcare providers in remote locations" commented Stephen Holloway, Market Analyst with InMedica. "The ability to transmit images via standard cellular networks opens up the possibility of teleradiology consulting in situations where specialists cannot be present at the scan".

Despite this, there remain many limitations to this approach. Most clinicians and radiologists would argue that scans performed by untrained healthcare workers remotely do not provide viable images for anything but very basic diagnoses. The limited features, screen size and image quality in such a small "smartphone" system are also not suitable for many standard and advanced scans. Currently, this restricts adoption by users in most hospitals and clinics, who compare such devices to more expensive systems. Despite this, second or third generation smartphone or tablet systems could yet have a place in the market. The key to success here is not competing with currently available systems, but providing low-cost, accessible ultrasound, specific to certain procedures at the point-of-care. The use of pre-defined consumer electronic platforms may provide such an opportunity to dramatically lower cost, and increase volume.

More importantly, this new system may also be the first step towards the future of ultrasound technology. The advance of teleradiology, imaging sharing and healthcare IT integration, and recent strong market penetration of new compact ultrasound solutions, provides a compelling argument that future ultrasound devices will need to be compact, mobile and flexible. They will also combine cellular, wireless or Bluetooth connectivity.

"The challenge for suppliers over the next decade is to bring all these features together into one adaptable platform" continues Holloway. "A small, tablet based system with cellular capabilities, comprehensive diagnostic features and excellent image quality - without a hefty price tag may be the next step. The manufacturer that succeeds in doing so, and can manage adaptability between specialist applications and features, will have the best chance across all healthcare sectors and applications".

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