

Deos: delivering faster and better mobile medical screening

The turnaround time of 14 days for women to receive breast cancer screening results has not changed since the day the national breast screening service opened in 1988.

Mobile medical screening involves the collection of digital images and their physical transportation to a centre where they can be processed and viewed.

Taunton-based Deos Consultancy and its partner WH Bence Coachworks, of Bristol, have developed a new mobile screening service based on digital communication that could speed up mobile screening for breast cancer and other diseases.

Viv Barrett, director of Deos, said, "We can get images back to the hospital in three minutes. It massively improves the turnaround of clinical information. It also improves the security of the information as it reduces the number of people processing it.

"It speeds up the results and frees up time for staff to do more screening. Patients can get their results quicker. If it is bad news, they get their treatment quicker.

"It also reduces that period of anxiety between a test and a result. You could have somebody sitting at the end of the line reporting the results live before the patient has left the van."

Viv, a radiographer, used to run Nuffield Health's nationwide mobile breast screening programme. In 2015 she set up Deos to work with WH Bence, a builder of specialist vehicles for health and emergency services, on developing mobile communications for breast screening services.

WH Bence Coachworks provides the trailer and added satellite technology so that results can be sent digitally to the receiving hospital.

Deos was initially based at the European Space Agency's Business Incubation Centre in Harwell, Oxfordshire, where it worked with the Satellite Applications Catapult on its satellite-based connectivity.

Four NHS customers have been using mobile communication systems developed by Deos and WH Bence for more than five years.

Deos and WH Bence have now, with the support of an Innovate UK grant, developed a safe, secure and reliable mobile screening service that sends images back to the hospital and can integrate with hospital communication and patient systems. It is based on cheap 3G and 4G technology, and satellite communications where necessary, and can be applied to any screening service.

Viv added, "It was obvious Innovate UK wanted us to be successful. They

helped us to keep fully focused, on target and on budget. I've learnt a huge amount about planning a large-scale project.

"We are now looking to roll out what we have developed to more screening services rather than just breast screening. We are looking at CT scanning units for lung cancer, retinal screening and possibly MRI scanning."