

# Wireless Healthcare

## A Picture Of Health.

When the personal computer was first launched few people in the healthcare sector believed it would ever play more than a peripheral role in imaging and archiving. Twenty years ago applications that are now classified as PACS (Picture Archiving and Communications Systems) were hosted on mainframes or a minicomputers.

Over time, as the power of the personal computer increased, clinicians began using them to access stored images and carry out elementary processing of x-ray images and MRI scans.

Photographic film manufacturers recognised the arrival of networked PCs and digital camera technology as a significant threat to their core business. They responded by developing their own digital camera technology and purchasing small PACS vendors. Now, as they wrestle with the challenge of replacing film with digital content in the consumer market and integrating PACS divisions with their healthcare business, a new threat has emerged: small vendors marketing low cost wireless PACS products and services.

While the performance of the current generation of picture phones and PDAs is limited a number of clinicians are experimenting with these devices, using them to either access existing PACS data or to build completely new medical imaging applications. Some of these ad hoc trials employ off the shelf picture phone technology and require only minimal participation on the part of IT departments and vendors while others employ purpose built wireless imaging products.

In this report we examine the wireless PACS market, discuss the impact of a new generation of handset and PDA technology on this market and look at existing and potential applications of wireless imaging within the healthcare sector.

### At a Glance

Consumer picture phones are being used in wireless medical imaging applications.

Independent of their IT departments, clinicians can buy handsets and set up simple wireless PACS services.

The next generation of mobile devices will support a wide range of PACS applications.

Health providers are already using wireless based medical imaging products, such as capsule endoscopes.

Wireless imaging represents a significant threat to the PACS operations of photographic film vendors.

There may be some overlap of consumer and healthcare markets for picture phone technology.

Inside the full report: -

An overview of wireless based PACS applications including case studies.

Profiles and analysis of Kodak, Agfa, Fuji, Given Imaging and Pedagog.