Big Blue™ SOLUTIONS

MEDIA RELEASE

February 2019

SDVoE 1

BIG BLUE SOLUTIONS - EMPOWERING CLINICIANS TO MAKE BETTER DECISIONS IN THE OR

As we have seen in the media over the years, the medical profession has often been criticised for failing to acknowledge surgical errors. In extreme cases, there even appears to be a desire to "cover up" – which is understandable in a culture with a chain of command and where professional shame must be avoided at all costs, or where challenging the surgeon might be considered unacceptably audacious.

Stark comparisons have often been made between healthcare and aviation, where all accidents are considered avoidable and investigations are thorough and routine, not to place blame, but to learn and ensure the same thing does not happen again. But it was not always like this – it took many fatal accidents to change the aviation culture of "Pilot is King". Of course, this comparison is not perfect because pilots had a vested interest in making aviation safer – they and their crew were also up in the air, much more than their passengers, in fact, but it does make you question whether we shouldn't be doing things differently down here on the ground, too.

Healthcare providers are now being urged to change tack and similarly learn by mistakes rather than ignoring them – the problem is that there is little data being collected to recreate events, spot trends and debrief with recorded evidence. Big Blue Solutions believes that connecting operating theatres to create a constant feedback loop for research and development will dramatically improve patient care and, as an AVoIP and data creation and collection design partner, is currently working with hospitals and medtech providers to roll out the technology that will make this possible.

Acknowledge, Share, Learn

One of the most effective ways to improve surgery is to collect hard data from the operating theatres to develop new techniques that improve patient care. If that data can be gathered then accessed instantly during procedures, clinical teams will not only be able to make better-informed decisions there and then, but will also be able to reflect on events post-surgery to inform how future procedures are carried out. Data can also be collated to look for wider trends and correlations by, for example, evaluating the performance of surgical equipment. This represents a huge move away from the current norm, encouraging surgeons to learn from what happens, even errors, and use it to move surgery forward.

Let's take it to the next step. What if operating theatres could not only talk to each other on one hospital site, but across sites and rooms; if the conversation could be opened up and the data gathered shared not only within a single hospital but with any number of hospitals. Imagine the possibilities for shared learning and dramatically improved patient care.

AVoIP is set to make this happen.

More…/2

Communication Without Limitation

Audio visual (AV) over IP, or AVoIP, is a radical, disruptive development that is increasingly replacing traditional AV communications. It is also inexorably linked with Industry 4.0 and the Internet of Things. In essence, it is the streaming of audio and video content over an existing Ethernet/IP network with associated data transfer. This completely changes the way media and data are transmitted and shared, shifting the AV platform to a network and thus breaking the barriers imposed by physical limitations, such as building layouts or distance.

With AVoIP, any source can be shown on any display, not limited to a building, country or continent. In hospitals, this means easier distribution of AV around the site, improved storing of information, better connectivity and the use of standard IT switchers (10 gig). Being able to deliver content from its source to a display that can be anything from an Internet livestream to a conference room to a local PC in an operating theatre, makes data more accessible than ever before – it literally is at your fingertips.

Integrated Data Services

What AVoIP and data collection and distribution deliver goes even further, far beyond the sensory data of AV. System and machine health and usage, metrics from sensors… all this information can be collected, distributed and stored on the same ICT infrastructure and, of course, the Internet, paving the way for accessibility to vital information.

Step away from the technical jargon, and what integrated AVoIP and Big Data delivers is a system whereby every surgeon, at any point in their career, can learn from the experience of every other surgeon, informing the way they operate, even while procedures are underway. It is the ultimate pooling of expertise, which will help to avoid the many needless deaths caused every year by medical error, reported to be one of the largest causes of death in richer countries – a recent student at Johns Hopkins University* concluded that in the USA alone, preventable medical errors cause 250,000 deaths every year, the equivalent of nearly 10 jumbo jets crashing each week.

The SDVoE

The SDVoE promotes AVoIP by bringing leading companies in the space together around a standardised hardware and software platform. Big Blue Solutions is an SDVoE design partner, joining a select group of international consultants and designers who can provide guidance to integrators, installers and end users in leveraging the SDVoE standard for high performance AV network deployments.

For more information on the SDVoE Alliance, visit https://sdvoe.org/

* BMJ 2016;353:i2139

ends

Further Information: Colin Dobbyne
                                +44 (0) 7966 402359
                                colin.dobbyne@bigblue.solutions