

# SPECIAL REPORT

## TECHNOLOGY

# ADOPT TEAM TACTICS

Smarter systems and workforce skills development can help multidisciplinary teams deliver better cancer care. By Jennifer Trueland

According to this summer's report from the independent cancer taskforce, the multidisciplinary team (MDT) model has "revolutionised our approach to cancer treatment in the last 15 years".

The taskforce, however, goes on to warn that the teams – although regarded as the gold standard for treatment – are not operating as efficiently as they could.

Perhaps this is not surprising. Although National Institute for Health and Care Excellence guidance stresses that all cancer patients should be treated by an MDT, getting it right tends to involve getting a number of senior people, often based in different locations across a region, in the same room at the same time. Logistically, and in terms of people costs and transport budgets, this is a challenge.

And as cancer care changes, not least because the number of people living with cancer is expected to increase as more people survive, the MDT and the way it works will only face more challenges.

The benefits of the MDT – a team of specialists who work together to plan the treatment for an individual patient – are well recognised. Patients managed by an MDT are more likely to receive accurate diagnosis, be offered a choice of treatments, receive better coordination and continuity of care through all stages of the cancer, and be treated in line with locally agreed policies and national guidelines.

Getting the MDT right, therefore, is good for patients and for outcomes.

So what are the challenges and barriers to making the improvements called for in the independent cancer taskforce report?

One is that cancer networks can stretch over large distances and cover huge populations. For example, Yorkshire and the

Humber, the fifth largest region in England, has a population of over 5 million living in around 15,000 sq km – some of this area being particularly rural. Travel distances to the internationally renowned cancer centre at St James's University Hospital in Leeds mean that attending an MDT meeting can take up as much as a full day of a clinician's time. Multiply that by the number of specialists who are part of the team, including radiologists, specialist nurses, oncologists, allied health professionals and others, and you are talking about a large (and expensive) human resource. Plus, while clinicians are offsite, they are not available to see the patients back on home turf.

### Increasing efficiencies

Leeds Teaching Hospitals Trust has recently transformed the way it runs MDT meetings. Installation of modern video conferencing facilities means that clinicians from six district general hospitals across the patch can now play an active role in the MDT without leaving their place of work.

This, says lead cancer clinician Geoff Hall, means that the patient benefits from the collaboration of people involved in his or her

**'Clinicians from six district general hospitals can now play an active role in the MDT without leaving their place of work'**



care, while the clinician saves valuable time previously lost to travel. "It's making a huge difference," he says. "Everybody recognised the inefficiency of having to travel for meetings, but we knew that face to face interaction was very important. Now we can have that valuable face to face without the travel time."

Technology might seem the obvious answer but take up has been slow, with some clinicians and other decision makers reluctant to adopt this approach.

The early days of video with its dial up links via ISDN could result in poor quality and frustration. Although the technology has now moved on, getting that message across can be difficult, especially to those scarred by encounters with older systems. Ironically, people now use platforms such as Skype and FaceTime in their home lives but leave these behind when they go to work.

Technology and distances to travel are not the only challenges facing MDTs.

Developing the workforce is a hugely important element in making sure that patients and the NHS alike can benefit from

In association with



**TERRY ESPINER**  
**ON WHY VIDEO**  
**SHOULD BE**  
**COMMONPLACE**



## CASE STUDY OVERLEAF ►



**Esprit de corps: patients managed by an MDT are more likely to get better coordinated care**

### **‘Many MDTs are under increasing pressure to deliver specialist care in a complex environment’**

an MDT process that works smoothly and efficiently.

According to Juliet Bouverie, director of services and influencing at the charity Macmillan Cancer Support, while MDTs often deliver high quality of care for cancer patients, staff must be supported and equipped to do so.

In the recent report from the cancer taskforce, she called for support from the government and NHS to fully fund and implement the recommendations around workforce.

“As more and more people are diagnosed with cancer, and many are living longer with the disease, cancer is becoming a far more complex illness,” she says. “This means

many MDTs are now under increasing pressure to deliver specialist care in a complex environment.

“We need to ensure we are taking a strategic approach to the cancer workforce. This includes breaking down barriers in how care is provided, and ensuring that the workforce has the right skills, training and behaviours... to deliver high quality and compassionate care – whether in a team or individually.”

When the independent cancer taskforce published its report in July, chair Harpal Kumar said it was time for action.

Three previous cancer strategies had done a great job of setting England on the path to a world class cancer service, he said, but it was still, however, “a long way away from where we should be”.

“Our expectation is that the government will make the investments required to implement this strategy with commitment and speed,” he said at the time.

Clearly, ensuring that each MDT works as efficiently as possible would be an important step on the way. ●

“As the NHS moves towards digitisation, the emphasis must be on using technology to address clinical and business issues. Innovation in digital technology moves quickly, and nowhere more so than in the area of standards based video and collaboration.

As I have met with NHS trusts, I have seen and heard about so many innovative uses of technology that are making an enormous difference to patient care. Rightly so because if we technology companies are not helping trusts to improve patient care, then why not? Is the NHS a laggard with technology adoption? I think not. And no, I have not forgotten that technology is just a piece of the jigsaw: people, process and culture are equally important – in fact more so.

Yet there is one area about which I rarely hear anything good said. And that is the adoption of video and collaboration technologies into multidisciplinary team (MDT) meetings. The reality is that the NHS is littered with failed video projects which have tarnished the reputation of the technology. And yet I, and many of my colleagues in Cisco, have access to affordable, simple to use video technologies as if by right. To the extent that, quite frankly, life without video would now be unthinkable.

### **‘You are in control, not the technology’**

Today things have changed. If you can dial a telephone number or click the button of a mouse, you are in business. It really is that simple, regardless of whether you are taking part in the conference from a fully equipped video room, a desk based system or indeed from your laptop, tablet or smartphone. You’re in control, not the technology. Sounds interesting?

In 2014, Cisco was asked by Leeds Teaching Hospitals Trust to assist in setting up a live MDT meeting between clinicians in Leeds and their counterparts at the King Hussein Cancer Center in Jordan via the internet (see case study, overleaf).

The meeting was to take place in front of members of the Jordanian royal family. No pressure then.

And guess what? It worked.

So if it worked between Leeds and Jordan, what could be done for MDT services across Leeds and its partner organisations?

Don’t we all have a duty of care to see solutions such as this rolled out nationally? I certainly believe so.

*Terry Espiner is client director of UK healthcare, Cisco Systems Ltd.*  
[www.cisco.com](http://www.cisco.com)

## TECHNOLOGY: CASE STUDY

# ‘WHY NOT HERE?’

How a video meeting link up between Jordan and an NHS England trust triggered a new approach to multidisciplinary collaboration in Yorkshire

It was the realisation that they could use modern technology to run a successful multidisciplinary team (MDT) meeting between Leeds and Jordan that was the real light bulb moment for Geoff Hall.

The lead cancer clinician for Leeds Teaching Hospitals Trust and his colleagues, asked a perfectly reasonable question: if they could link up with Jordan, why could they not link up local hospitals across Yorkshire?

But a year ago, the technology at the trust's cancer centre – a tertiary referral unit providing and coordinating care for cancer patients across the Yorkshire and Humber region – simply was not up to the job.

This meant that clinicians from across the network had to travel many miles to take part in MDT meetings to discuss and decide on care and treatment of their patients. This put strain on staff, workforce planning, and transport budgets.

“Leeds Cancer Centre was a new build in 2008 with technology to match,” says Dr Hall. “We were relying on telephone lines and ISDN and all that means in terms of dropped calls, jumpy video and a very poor quality experience overall. It really had to change.”

A little over a year ago, the cancer team, based at St James's University Hospital in Leeds, approached trust deputy director of informatics Eileen Jessop to ask for help. She could see the case for change. “People were having to spend a lot of time travelling to other locations,” she says. “The equipment was unreliable. The video didn't work. Clinicians were working long days – from 8am to 7pm and maybe having to deal with 80 cases – it wasn't going well.”

Ms Jessop and Dr Hall worked up a business case and persuaded their managers

that it was a good idea to transform the area, to make it fit for the MDT in the 21st century.

At that point, another factor came into play. The trust had a partnership with the King Hussein Cancer Center in Jordan and wanted to see if it could run an MDT meeting between the two countries. The partnership came about, explains Dr Hall, because the Middle Eastern facility wanted to work with one of the world's top cancer units. It turned to the UK partly because of practical reasons – the time difference is less than with the US, for example – but also because Leeds is a major cancer centre with an international reputation.

It was in everyone's interests to make the collaboration work, but the lack of decent technology was potentially a major barrier.

So Ms Jessop approached technology company Cisco, with whom the trust already had a relationship, to see if they could lend the equipment necessary for this international MDT meeting.

“Within a month and a half we had the MDT equipment in that room and ran a live MDT meeting. Then, of course, people were asking why could we make this work for

**‘We were relying on telephone lines and ISDN and all that entails in terms of dropped calls and jumpy video’**



Jordan and not for Airedale, for example,” she says.

The same point struck Dr Hall, who also saw the potential for transforming the way that cancer services worked across Yorkshire and the Humber. “We realised how far technology had come, and what it could do to support the whole process,” he says.

“We wanted to look at the art of the possible. We were hugely impressed by what was possible in the way of video conferencing: it really brought a new reality to face to face contact.” The next stage involved drawing up a business case, explains Ms Jessop. Clearly, the case was a persuasive one and the investment was found to upgrade the trust's technology.

“We put a tender out and awarded it to





**Face to face: modern video conferencing in MDT meetings saves clinicians valuable time**

## 'We were used to running international four-way Skype calls, yet we couldn't do a video conference with Bradford'

tiles and cameras that cover the room. "Wherever you go, the cameras will follow you and you can still be heard.

"And it's being actively maintained – if something goes wrong then there's one number to call and it gets fixed."

The way the new system actually works is that a list of patients to be reviewed by the MDT is drawn up in collaboration with partner organisations ahead of the calls. All members of the team also have access to notes, images and results. In terms of saving clinician time, it is a real winner, she says. "This takes the place of someone having to get into a car and drive to another part of the region."

The collaborating organisations need simple video technology at their end – essentially a camera and a microphone, and the team works with them to make sure they have the right equipment and are comfortable with the process.

Ms Jessop says that the system makes the region feel much smaller. "We could have conversations as far east as Hull and west as Calderdale," she says.

"We want to do a benefits review, but the feedback so far has been really positive. People have been looking for something like this for so long. It's made a huge difference."

### Sense of optimism

Dr Hall is a big believer in using technology to support the patient to have the best possible experience – rather than trying to shoehorn patients' needs into what existing equipment and working practices dictate.

That translates well to the current initiative, in as much as it makes it possible for patients to be treated nearer to home, while their care is organised at a regional level with all the specialist expertise this involves. "If you think about it, for so many things, you need to move the data, not the patient," he says.

"I had a sense of optimism about this. I'm a technophile and was confident that the technology would help us work in new

ways." He believes that colleagues came on board partly because they were using technology in their own lives, and knew how much it had advanced. Translating that to a work situation did not seem too much of a stretch. "We're used to running four-way Skype calls with people around the world, yet we couldn't do a video conference with Bradford," he recalls.

The new system took three months to install, he says – and he is very happy with the results.

"Now we have an MDT [meeting] where we can have contact with any one of six district general hospitals," he says. "We can share images from radiology, test results, and everything else we need to plan care for patients."

These "hard" clinical documents and images, though important, are not the only advantage of the new system. The real beauty of it, according to Dr Hall, is that you can get a sense of what people are thinking in a way that would not be possible with a telephone conference, for example.

"Facial expressions are important," he says. "You can be discussing or proposing something and you see the specialist nurse is shaking her head – she knows that particular patient has dementia, for example, and lives on their own, and simply won't be able to cope with that treatment. That's incredibly valuable."

He hopes that, in the future, the technology might be used to bring in a third party (at the moment the meetings are between Leeds and one other partner at a time). This brings the exciting possibility of involving the GP or potentially even the patient.

And Dr Hall sees other possibilities too. "Cancer is not unique in the need to bring multiple disciplines together," he says.

"In a hospital the size of this [one], the ability to video conference face to face is valuable, but that's not unique to cancer. Technology like this is transforming the way we deliver healthcare." ●

Cisco, through Block Solutions, our network provider. It involves infrastructure that allows the trust to grow the teleconferencing facilities across the organisation."

Essentially, the upgrade has involved installing state of the art communications equipment, giving comprehensive video and microphone coverage. This means that whatever happens in a room can be seen and heard by partner organisations, almost as if they were there. It is a far cry from the dropped calls and jerky video of the past.

Three rooms have been set up and they work remarkably successfully, Ms Jessop says. "People can walk around the room and be seen and heard very easily, and the quality is good. In fact, it's fantastic," she says. The system involves microphones in the ceiling