HealthInvestor round table

Big data: How can data transform healthcare and what is the industry doing about it today?









GE Capital

Vernon Baxter
Managing editor,
HealthInvestor

Joel Haspel
Partner,
GE Healthcare Finnamore

James Kilmister
Development director,
Coldharbour Systems

Amelie Wulff
Healthcare finance leader
UK, GE Capital International

Manuela Müller-Gerndt
Senior sales director,
healthcare, HCL Technologies

HealthInvestor round table

Big data

How can data transform healthcare and what is the industry doing about it today?

Data is perhaps at once the greatest source of opportunity for healthcare systems, and the most regular cause of frustration and complexity. Due to its sheer size, its vast detail and its constantly evolving nature healthcare patient data contains the DNA of how a healthcare system actually works – as opposed to how it is designed to work – and the potential to realign services around smart analysis of this information is profound.

And yet the secure and smart sharing of data across the wide spectrum of organisations involved in delivering health and social care services across the UK is proving one of the most stubborn problems to solve. The collection of data happens in numerous instances using numerous systems, but a siloed approach to patient information – reinforced by concerns about the privacy and security of this data – is holding back progress.

So what can be done to transform this situation and make the most out of the information available to the system? To answer this question, and others, *HealthInvestor* magazine and GE Capital hosted a round table discussion to consider UK healthcare's approach to data.

Vernon Baxter: Good morning everyone – from much of the recent coverage, it seems clear that collecting a volume of healthcare data isn't a problem but the challenge is what do we do with it?

Augustine Amusu: In healthcare, we're used to collecting lots of data but generally this is due to the prevailing 'audit culture'. We look back at data for trends, but what you need to be able to do is utilise that data. How do you make sure you collect quality data in the first place rather than lots of noise? That's the area we've been working on.

Vernon Baxter: Paolo, do you recognise the point about audit culture?

Paolo Pieri: Often you collect all of this data and you have masses of it, but you don't actually understand the very basic fundamentals of how much that system costs or how it works. We could spend years trying to reanalyse data, but we feel it is actually better to put patients first and actually offer them choice and offer them a connected process in an integrated system. It's about having a fresh perspective on what's important in data.

Vernon Baxter: How has clinical data changed the way you run Roodlane, Gill?

Gill MacLeod: We're constantly looking at how we manage situations and changing that based on corrective data. As you say, the problem with historic data was that it was collected with no purpose in mind.

Vernon Baxter: Joel, is the problem that we're not sure what questions to ask when collecting data?

Joel Haspel: It is true. We have many, many stakeholders in any care environment. It is really about

understanding who the stakeholder is and then in essence pushing the right key piece of data at the right time in that situation. The key is to separate the signal from the noise.

Mike Bone: We're starting to see technologies that have been disparate in the past coming together. There is a much higher level of integration of medical devices now, being actually plugged into what were traditionally data systems. That makes far better use of our clinician's time going forward.

Manuela Müeller-Gerndt: Real time use of data is hugely significant – this is one of those trends that will not be limited to hospitals either. We all know that treatment in hospital is one of the most expensive settings, and we need to get the costs of the healthcare systems down, so the role of apps in the future where we could get some clinical feedback is massive.

Amelie Wulff: Just one point – earlier it sounded as if you think medical device companies are willing to integrate far more with other devices, and with other manufacturers. In all honesty my perception is that's really not the case. I think everyone is still very much protective of their data.

Mike Bone: I think it depends on the type of device. I mean imaging devices, for example, cardio ultrasound and those sort of things readily integrate. They come with a wireless connection already built in and therefore it's relatively easy to plug that in. Bedside medical devices are still in the Stone Age. From my perspective as a user of the technology, what I would like to see would be all of those medical devices having greatly improved connectivity as a first step. If you make the software intelligent your ability to sell more of your product will undoubtedly increase.

Augustine Amusu: I agree with Amelie. Each year there's a lot of noise about interoperability and every device manufacturer talks about integration, but in reality little has changed.

James Kilmister: It's always a dilemma that we always want to protect our own interests, but to gain market position you need to be flexible. There's an app which has come out just recently, it's not ours, and it plugs into an electric kettle and it will issue an alert if your electric kettle is not switched on within so many hours, because an old person who is living independently will turn on their kettle every four hours or so. It doesn't need massive infrastructure, it doesn't need massive investment and I think that's where the opportunity is. People often talk about business intelligence but what they mean is reporting. Business intelligence is actually taking data and using it to change your business and the commoditisation of technology will make that a lot easier.

Manuela Müeller-Gerndt: It is how you look at the data and how you look at IT. What can I do as a physician with data to improve my understanding? That previously was never a topic in the medical curriculum.

Mike Bone: All of a sudden they're now not only the source but they're the consumer as well. They've seen their data quality improve quite markedly. Because if you put rubbish in, you'll get rubbish out.

James Kilmister: When we're implementing systems, if you want the data quality to be good, try and get that data to bring some benefit to the person who has put it in. Because then they'll try and get it right.

David Stronach: You do have a major cultural issue with medical staff in the UK at the moment, because IT has a dreadful reputation. It's always been seen as 'doing your data'.

Mike Bone: We've now got six hospital consultants who are being paid one session a week to be part of the IT programme. From my perspective, my own expectations about what their requirements were, when compared with what they really are... I was a mile away. ▶

David Stronach
Chief executive,
Hospedia

Augustine Amusu
Head of IT programmes, HCA International

Paolo Pieri
Chief financial officer,
Circle Health

Gill MacLeod
Chief executive,
Roodlane Medical

Mike Bone
Interim director ICT, Great Ormond Street Hospital

> Actually talking to them, all of a sudden I have a very different vision of what the requirement is because the people who spend their time at the coalface treating children are now coming and spending an hour or two with me every week and talking about the things that work.

David Stronach: The best CMIOs that I've met I refer to as armchair CIOs. They're the people that will be sat at home with their iPhone asking 'why the hell can't I do what I do at home in the hospital?' They are the people that actually push you to think about what data is actually being used for.

Paolo Pieri: Data has been too long used as a stick against operators. Why does Jeremy Hunt phone up a hospital on a Monday morning? It's because he's got data in front of him that says it's performing badly. How many people were phoned up and told you did really well last week? That mentality of how data is used in terms of it being a facilitator across the system needs to change.

Vernon Baxter: So where does IT sit in terms of priorities for organisations?

Amelie Wulff: My observation is that, despite all the reports saying it's on the top of the list, we don't see it and I don't know what that means. There's a lot of talk about it, while money is still spent on other things.

Joel Haspel: I would take that a step further and I often say that IT doesn't get a seat at the table. We need to move it from the basement to the boardroom.

David Stronach: I do think there's a gap there and it is stopping the investment in IT. Since the election there has been a complete change of focus from quality of care to cost of care, and we're seeing that. So many chief financial officers that I talk to when they're presented with a case for IT investment will say, 'Okay where are the hard cash savings?'

Mike Bone: Too often we're focused on procuring the functionality rather than looking at what's going to enable change.

James Kilmister: The best customers we have, have chief information officers that, along with the chief financial officer and the chief executive, are the most important people round the table.

Joel Haspel: I'd like to ask a question to the group to build on this – how do you feel about risk reward value share type propositions?

Augustine Amusu: My nervousness would be around whether we can actually change what you are proposing. Can we really take hold of it within the organisation – because there is also a penalty for the change not happening and change is very difficult. I mean that's what I spend all my time doing, and it's incredibly difficult in the healthcare market.

Joel Haspel: I think you're 100% correct. I mean we're a very boots on the ground

organisation with clinicians on the team and we're very conservative in our savings estimates. But I would think that in a risk reward type basis the incentives should be there to make sustainable change.

Manuela Müeller-Gerndt: It's also the processes and the way of working. We have also had some experiences with those kinds of financial transformation models which are very new in the healthcare system compared to other industries. The trust came within the pilot phase by integrating the surgeons and the decision makers and they bought in. But it takes that first step of overcoming this.

Augustine Amusu: You mentioned the key word there – trust. You have to work very hard at the trust first before a true partnership develops and the model starts to work.

Joel Haspel: A lot of the work that we do, the change and the benefits come independent of technology. I start to think in terms of technology sustained change. Often the technology needs to then sustain and help monitor, alert and continue the training.

Vernon Baxter: So given these issues – how optimistic or pessimistic does the room feel about data's ability to transform healthcare?

Augustine Amusu: There is a great opportunity there, but we've got to be very clear on the quality of the data that we're collecting and when you have trust in your data set then you can do more powerful things with it. So there is a big opportunity, and a big space there.

Manuela Müeller-Gerndt: Digital transformation is coming. In the near future, we will see in Europe at least the first digital officers reporting to the board that have been hired a couple of months ago and I think with that also the perception of data and what is possible with digitalisation as it changes.

Mike Bone: For me it's probably one of the most exciting times in terms of what we're now being able to do with data in the 30 odd years I've been in healthcare. The possibilities are enormous. My big concern is that we're collecting the right data and not collecting data just for the sake of it.

Paolo Pieri: Personally I'm slightly pessimistic. I'm very excited by the innovation that exists, and what has been discussed by many people around this table. But I think unless the fundamentals change on what's happening in the day to day dynamics of the current UK healthcare system it will be dragged backwards.

Gill MacLeod: I see it as an inescapable necessity. We need to be more efficient. Joel made a very good point about the value of data – and that data needs to be available to the individual patients and in a way that is informative and useful to them in helping them make health decisions about their own well-being in the future.

Amelie Wulff: There's still a long way to go to follow up all that's in the public eye and it takes someone brave to take a lead on this one, whether it's the NHS, whether it's a private operator, or whether it's somewhere else across the globe.

James Kilmister: It's never been easier to pull IT together and we're seeing a commoditisation of systems, and cultural barriers are coming down. Even parts of the population that perhaps wouldn't have accepted IT five, even 10 years ago now will accept it. So I think there's lots of opportunity there, but without standards, without interoperability, it will struggle to progress. So it's a tricky one to crack.

David Stronach: Data needs to become invisible. So how it's collected needs to be accumulative to the working processes and practices and how it's shared just needs to be second

nature. I think how it's used becomes everything – we need to be showing people the right information and only the right information at the right time. We have to learn to declutter our lives effectively from information overload.

Joel Haspel: We face the same problems with data that we do within our healthcare system. We tend to treat the symptoms, to try and solve the specific problem rather than look at the entire system and while I think data holds a lot of promise until we're able to approach it more holistically across the whole system we will struggle. We need to look at data across the system and solve a lot of the challenges and we also need to figure out how to level the expectations of the user community and deliver technology that, at the same time, meets those expectations. ■

The above is an edited transcript and is not reported verbatim. The panel met in central London on 11 November 2015.

For information on GE Capital, please call Amelie Wulff on 07771 841 954 or email amelie.wulff@ge.com

THE FINAL WORD

The roundtable was an excellent opportunity to have nine key decision makers from the industry talk about the future and relevance of IT and data analytics in the healthcare industry. More engagement with clinicians, the relevance of IT experts at the decision-maker table, the need for medical device companies to enable interoperability, a shift from record keeping of data to enabling true business intelligence, and a clear vision of the value of data sets were just a few key takeaways from the debate.

All of the participants agreed that through the use of data one essentially tries to answer key questions such as how can patient outcomes be improved, how can it help reduce operating costs and increase productivity, how can it enable clinicians to spend more time with patients and less with secondary work, how can data travel with the patient across the entire value chain, or how can healthcare payers apply data to align pay to actual performance of the provider and outcomes for the patients. The debate concluded with a mutual view that while the attention 'big data' and data analytics receive verbally the path to meaningful action and adoption has yet to be done by most industry participants. ■

Joel Haspel
Partner, GE Healthcare Finnamore

Amelie Wulff
Healthcare finance leader, UK, GE Capital International

GE Capital

GE Capital

HealthInvestor round table

www.healthinvestor.co.uk