



Three steps to
drive integrated
care, faster



Start your
transformation
journey with the
end in mind

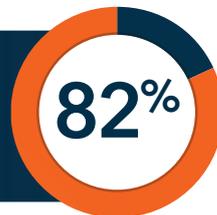


Start your transformation journey with the end in mind

The future of the NHS is always hotly debated, but no more so than now. How to deliver better quality of care more of the time, to an ageing population, without pushing the gaping budget chasm still wider, are the questions to which government and NHS providers all desperately seek the answer.

While different opinions about how to tackle this issue are aired in the corridors of government and hospitals alike, you can take ownership of delivering more patient value – and consequently more financial value – today.

A massive 82% of NHS practitioners report that they are looking to make changes in preparation for value-based healthcare.¹



Begin driving value today: the power lies with you

Based on SAS primary research undertaken within healthcare organisations up and down the UK we know that preparing for integrated care is very high on most agendas. What we also know from experience in our work with healthcare providers around the globe is that it is very possible to gain the insights clinicians, managers and Boards need in order to drive value through integration.

You can find robust answers to important strategic and operational questions such as:

- How can we design more efficient care pathways for medical conditions?
- How can we make more effective use of our most costly resources?
- How can we deliver more personally meaningful outcomes for patients?

In fact, the answers that concern the fundamentals of how organisations can deliver against a value agenda, can be gained rapidly and with risk already mitigated.

All you have to do is start with your end goal in mind and ask your first question.

Here are three steps to help you to begin to drive more value, today.

1. Fully exploit your existing knowledge

The right insights are locked in your data, you just need to access them

Any commercial organisation under financial threat must find inventive ways to do more with less – and one important strategy is to ‘sweat’ existing assets. In the case of the NHS this could mean exploiting its extraordinarily rich pools of administrative, operational, patient-centred, research and financial data.

Sweating this data asset means extracting its latent intelligence to inform both operational and strategic activities. For example, using this data to deliver more patient value could involve analysing clinical data, patient records and quality/outcomes measures to better support evidence-based decision-making.

Recording the outcomes of those decisions will create a new data set that clinicians and managers can use to:

- Learn which treatment pathways are most effective for patients
- Reduce with a view to eliminate any that ‘cost more than they are worth’
- Pinpoint and grow the most promising care/service integrations

Specifically, patient value will be improved because analysing a very broad set of data allows clinicians to dive deeper into a range of clinical approaches – and their outcomes – from many different angles to support their own personal experience.

ACCELERATOR POINT: Exploit your data

You might not think it, but your data is an incredibly valuable asset with a financial value attached. It’s vital that you transform data into insights that will instigate new actions and processes that will deliver greater value.

SAS empowers everyone from clinicians to managers to explore and analyse past results and scenarios in order to answer today’s healthcare questions. What’s important is that you don’t get too hung up on the completeness of your data. There are many ways to model past results and outcomes so that you can predict a huge range of things in the future. Examples could include demand and resource utilisation, patient outcomes by different clinical interventions, and return on clinical investment.

Being rigorous in your analysis delivers most value. So look at challenges from multiple directions. What makes SAS stand apart, in particular, is that it provides a number of intuitive tools that allow non data scientists to interrogate data, discover the best possible solutions to challenges and to make much more precise decisions based on real evidence. Answers can be arrived at in minutes, not days, allowing decision-makers to make rapid changes that save budget and time, driving up value instead.

¹ “Value-based Healthcare: the ‘Fix It’ Strategy for the UK? The NHS Speaks Out” (Online Research of 200 NHS Personnel), SAS, 2016.

2. Change the way you think about decision-making

Always underpin clinical experience with data-driven insights & collaboration

Recent research by the NHS Confederation asked healthcare practitioners what changes they believe would add most value to the decision-making process. The results showed that respondents placed much heavier importance on cultural, environmental and behavioural changes as the best way to deliver more value from clinical decision-making.

They noted things like giving clinicians quiet spaces in which to make decisions and making sure that clinicians and those in the finance department work together more often to ensure value comes to the fore; creating a value-first culture. The research also highlighted that more than 50 per cent of participants spend little or no time monitoring and evaluating a decision. Data was noted as a requirement, but played merely a supporting role.

By changing the way that you think about decision-making – from treatment-centred to patient-centred – you will begin to deliver more patient value.

We believe that by putting data front and centre it is possible to eliminate the ‘politics’ from decisions around integrated care. Decisions will be founded on deep insights with less subjectivity and far greater objectivity. Outcomes could be monitored throughout the care lifecycle with suitable ‘tracking’ cohorts used to assess the validity of decision-making. This would help to address the issue of lack of decision-making follow-up. Scaled up these insights could be used to inform new care pathways – potentially at a population level.

ACCELERATOR POINT: Not enough data to make valuable decisions? Think again.

There’s plenty of anecdotal evidence to suggest that highly qualified clinicians spend thousands of hours across the NHS poring over data, manually considering patients’ needs on a case-by-case basis.

Clearly, analytic capabilities could automate this process, saving vast amounts of time and allowing highly valued team members to spend more time making decisions and evaluating outcomes and consequences, rather than pulling information together themselves.

In addition, SAS enriches that decision-making by allowing clinicians and CCIOs to add in new types of information directly from patients. These include sources such as telephone conversations with follow-up teams, medical test results undertaken by community-based care professionals and social media sentiments from patient groups, among others. It is precisely this that will transform decision-making from being based on the nuanced knowledge and experience of individual clinicians to being grounded on a base of objective evidence.

² “Decisions of Value”, Academy of Medical Royal Colleges and NHS Confederation, 2014 (www.nhsconfed.org/~media/Confederation/Files/Publications/Documents/Decisions%20of%20Value_Final%20report%20and%20findings.pdf).

3. Get started with easy wins

Grow your data-driven strategy in stages for maximum results

At the beginning of your journey to making data-driven value decisions about how to integrate care, it's vital that you start small. Why? Because clinical teams and administrators must both begin with a clear assessment of what has happened including:

- Why are things the way they are?
- What kinds of clinical decisions have been made?
- What health, operational, financial and quality outcomes have they delivered?

Building out deeper analyses from this foundation of understanding is then a more meaningful, grounded activity – predicting future potential value based on what we know about the past. This approach is more methodical than beginning with large-scale, abstract analyses. True decision-making transformation, especially when it's about how to adopt a new concept such as integrated care, requires a simple view of the past and present in order to successfully move forward.

With this in mind, we urge you to consider a single solution with the built-in ability to scale in terms of both the volume of data being included and the complexity of the analyses being undertaken.

Starting out with easy-to-use tools that help clinicians to explore data and to visualise current situations and future outcomes is an excellent way to share basic insights and to interact at a high level with your data. It's ideal for getting all integrated care decision-makers on a common ground of understanding.

From there, expand the knowledge base to look at more progressive measures of value, such as episodes of care, and new patient-centred outcomes such as time-to-return-to-work.

ACCELERATOR POINT: Not enough data to make valuable decisions? Think again.

You might believe that if you are moving heavily into value-based decision-making, driven by data insights you will need to budget for costly new data scientists to code, execute and report on each analytic project. You won't have to – depending on the type of analytic solution you deploy and the kind of vendor with whom you partner.

In the case of SAS, for example, we provide services such as SAS Results that are designed to help our customers get answers to their questions quickly and therefore more cost-effectively than they might otherwise. By working with our expert data scientists – at your location – we can perform analytics activities for you to help you achieve the kind of quick wins that help you create a positive feedback loop.



One for the CIO

Ultimately, we're aiming to move with the times and be able to deliver healthcare based on the value to the patient, not simply pay-per-volume.

As we've discussed, SAS believes this is best done when value-generating decisions around integrated care provision can be made for every patient - with positive outcomes for patients, the administration and the finances of the NHS.

We also know that this requires ongoing collaboration - bringing healthcare silos together. We also understand that with the very difficult financial challenges being faced by the NHS, and a somewhat chequered history of rolling out IT projects, electronic healthcare records being a prime example, the prospect of requiring new hardware and time from IT departments to deploy an analytic solution could be problematic.

Our recommendations are these:

1. Embrace the big data era: consider Hadoop

By implementing the large-scale data processing and commodity-based storage and compute resources of Hadoop with the power of SAS analytics, the NHS will be able to maximise its big data assets. How? All the invaluable information contained within channels from discharge notes to emails to patients' social media sentiment can be stored easily and used to enrich insights.

2. Look to the cloud to drive decision-making value

Why? Because you can rely on its innate cost-efficiencies to allow you to deploy analytics affordably, and quickly. This is something that SAS has achieved for healthcare organisations around the world - and a most notable example is our work for Dignity Healthcare in the US.



SAS & Dignity Healthcare

This project created a cloud-based, big data platform powered by a library of clinical, social and behavioural analytics. Those analytics were selected to help doctors, nurses and other healthcare providers better understand each patient and tailor care to improve health while reducing costs. Initially, the two organisations used the platform to reduce readmission rates, establish best practices for addressing certain specific medical conditions, manage pharmacy costs and outcomes, and create tools to improve each patient's experience. And most importantly, it will be available to doctors across 39 hospitals, allowing them to collaborate, share insights and work on care pathways and best practices in an ongoing way.

Specifically, Dignity will use its cloud-based analytic platform to undertake care planning for individuals and populations, including predictive modelling and disease management.

They will also use it to interrogate costs, and to assess the measurement and transparency of performance data to drive best practices on outcomes and value.

3. Make sure your cloud-based analytic platform is naturally integrated with your data management solution

The best analytics outcomes - the most robust and value generating - happen when your cloud analytics tools are powered by your big data management systems. What you don't want is a situation where data extraction has to go through a formal request system, causing delays and undermining the efficacy of the results. You must also consider compliance requirements around the use of patient data. A solution where access rights can be built in and data anonymisation can be quickly deployed is ideal. Cloud systems have gone through many phases of development and are now just as secure as on-premise systems, reducing risk for healthcare organisations that must be particularly thorough in their security considerations.



In conclusion

If ensuring that every decision delivered optimal financial value and patient value, the NHS would have arrived at integrated care delivery many moons ago. But, with the advent of advanced analytic capabilities from SAS it is now proving far easier than ever. In fact, we have created bespoke, out-of-the-box solutions for healthcare organisations that help you analyse episodes of care, the cornerstone of delivering integrated care.

Whatever technological capability you select, wherever you source your data and however you deploy your data-driven decision-making process, it's vital that you begin the journey with an outcomes mindset. Understand your goals and ambitions and plot an analytic-driven pathway to achieve the results. And don't forget that SAS is highly experienced in the field of healthcare transformation and has already been working on-site in the NHS with organisations such as Royal Brompton and Harefield NHS Foundation Trust and NHS England. The results are very powerful and transformational.

About SAS

SAS is the global leader in business analytics. We help health organisations to turn data and information into intervention and prevention. We use these approaches of insight and prediction to tackle health issues.

With over 40 years' experience in health and social care across Europe and the USA, SAS enables you to make better evidence-based decisions, and communicate this insight across partners and ultimately to the patient. This approach means we can help you achieve three important goals:

1. Transform your efforts in Integrated Care
2. Tackle patient safety and address the issues of the Keogh report
3. Drive research, clinical and operational improvement

Please contact us to discuss how we can support your organisation.

Call **Amy Murray** on **+353 8 724 32788** for more information on how your NHS organisation can benefit, or visit sas.com/uk/healthcare to read our case studies on new models of care.



For more information about how we are driving value in healthcare or to learn more about our advanced data analytic capabilities call:

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Read our case studies on new models of care: sas.com/uk/healthcare

