

# Reducing costs and improving quality in the NHS

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In every NHS organisation, the Finance team should be champions of quality improvement. Why? Because clinical processes represent more than 80 percent of the costs in a typical NHS setting. Actions that we can take to improve quality (reducing errors and unnecessary variation in clinical processes) are also some of the most powerful and sustainable ways to reduce costs.

Yet too often, we see cost and quality as competing goals or trade-offs. Finance leaders may regard themselves as protecting the bottom line against the poor cost control and excess expenditure of clinicians. Clinicians may regard themselves as defenders of quality, protecting patients and professional standards against the demands of the Finance team. Too often, non-clinical leaders use methods of financial scrutiny and cost reduction that appear heavy-handed and inappropriate to clinicians.

Looking at things from the point of view of the Finance team and from the point of view of or the clinician, the picture may appear very different. However, they just have different perspectives on the same problem: systems that are poorly designed. Many of the performance problems of healthcare organisations are the result of problems in the way that processes are organised and delivered across the healthcare system. Problems such as variation in clinical outcomes, excessive patient waiting times, high costs of care, even needless deaths in hospital can be tracked back to issues around healthcare processes and the flow of patients through the healthcare system. A focus on reducing variation and waste in healthcare processes is a key priority in improving healthcare performance, both cost and quality.

Over the past period, a variety of methods for process improvement from manufacturing and service operations have been switched to healthcare. These methods include *lean thinking*, which seeks to eliminate activities or process steps which do not add value to customers, the *theory of constraints*, which seeks to eliminate bottlenecks in processes and *six sigma*, which aims to reduce variation and create defect free services.

We find that these industrial approaches, based on many years of improvement knowledge in other sectors, can make a significant contribution to cost and quality improvement in healthcare. However, these techniques need to be translated for a clinical environment. This includes presenting the methods in a language that clinical and managerial leaders can relate to, providing specific clinical examples and case studies and creating clinical champions for the application of these techniques. As these process improvement methods become more commonplace in healthcare and their benefits are demonstrated, they are contribution to a new perspective amongst healthcare leaders about where the real problems are in the system and how to systematically improve care. In future, the skills connected to this new way of thinking will be an essential capability for every finance leader.

Healthcare leaders with this new perspective on performance work smarter, rather than harder. There are a number of high impact ways of doing this. The first aspect of working smarter is to address the bottlenecks that are a constant characteristic of traditional healthcare processes. We should actively seek out bottlenecks and address the factors that cause them. A bottleneck is the stage in a patient process under the most pressure. It creates queues, and slows down the whole process. For example, the bottleneck in a hospital setting might be specific diagnostic tests. Patients might be in hospital beds waiting for diagnostic tests and test results. Speeding up the rate of tests in these circumstances is likely to speed up the whole patient process.

The quest to improve healthcare performance requires us to systematically identify and then eradicate bottlenecks in patient processes across the whole healthcare system. Evidence suggests that by doing so, we can reduce organisational complexity, and eliminate 'hassle' factors for patients and staff. We need to significantly reduce bottlenecks to achieve the 18 week elective waiting target. Fewer bottlenecks also typically means lower costs.

The second aspect of working smarter is to understand patient flow and recognise the importance of addressing variation in patient flow. Flow means moving patients through the system in a timely and efficient manner so that every patient gets the right care from the right staff, with the right information at the right point in time. We can never remove all the variation from a patient process. *Natural* variation is an inevitable characteristic of any healthcare system. Sources of natural variation include differences in the symptoms and diseases that patients present with, the times of day that emergency patients arrive and socio-economic or demographic differences between patients. We need to take steps to understand and plan for natural variation.

By contrast, *artificial* variation is created by the way the system is managed. Sources of artificial variation include that way we schedule appointments and elective admissions, the working hours of staff, how staff study leave and staff vacations are planned and the availability of clinical equipment. Artificial variation has a much more significant impact on patient flow than natural variation. *Artificial* variation is usually driven by the personal preferences and priorities of staff, rather than actual demand for a service; for instance a surgeon wanting to operate on a Monday morning rather than a Friday afternoon. Artificial variation is the enemy of smooth patient flow through the system. It creates peaks and troughs in patient demand and in the capacity of the healthcare system to meet that demand. As a result, it is the number one cause of waits and delays in the system. *Artificial* variation cannot be managed like natural variation. Steps should be taken to eliminate artificial variation.

In order to eliminate *artificial variation*, steps should be taken to measure demand and capacity and match them continuously on a daily basis. Demand can be defined as the number of patients with the requirement for the service being referred to (or presenting themselves for) the service on an hourly, daily, monthly or annual basis. In order to understand demand, to minimise variation in the system and ensure smooth process flow, we need to know who these patients are and what their needs are. We need to match our capacity (people, buildings and equipment) to this demand. Yet many healthcare organisations do not actually measure demand. They measure activity (the work that their clinical teams actually carry out). Activity is a very poor basis for planning capacity. Planning on the basis of activity rather than patient demand increases the potential for *artificial* variability in the system. As a result, waits get longer and costs get higher.

The third aspect of working smarter is to segment patients according to their specific needs and preferences. Segmentation identifies patients with similar needs and/or preferences, and groups them together so that a specific pathway can be designed for them and specific resources can be allocated to them. An example is a strategy for people with long term conditions such as diabetes and asthma. Rather than having a “one size fits all” support strategy for people with long term conditions, we can group or segment patients by their level of risk. So a person with mild disease could be offered a disease specific education programme or expert patient programme to help with self care. A patient with more severe disease or multiple diseases might be offered one to one case management support in the community to avoid crisis and prevent hospital admission.

Segmentation also means designing the system to meet the needs of each group, so that variation is reduced and capacity matches demand at every stage in their journey. An example is the segmentation of patients who attend the emergency department. They can be grouped or streamed according to whether they have 'major' or 'minor' needs. A separate process flow is established for each stream of patients with dedicated clinical staff for each stream. In this way, artificial variation is avoided because staff are not being constantly moved between minor and major patient streams. In addition, the needs of all patients are met. By working out the detailed resources required by each patient group, the flow of patients through the whole system is improved and variation, queues and subsequent delays are avoided. Patients are safer, there is less waste in the system, satisfaction rates are higher and the potential for effective outcomes is enhanced.

The new performance perspective means new roles and skills for NHS Finance leaders. Traditionally, we view the Finance Director as the voice of financial constraint in the organisation. We value his or her ability to "balance the books" at the end of the year. Often the role needs to look backward; seeking the differences, discrepancies and exceptions to balance off, rather than thinking how to move things forward.

If we look at those organisations that are leading in cost and quality in the NHS and other healthcare systems, we see new ways of working emerging. We see Finance Directors who champion quality improvement across their organisations in partnerships with Nurse Directors and Medical Directors. We see Finance leaders who are skilled in methods for process improvement and who operate effectively at the interface between clinical processes and the management of resources. These leaders are able to frame efficiency and productivity issues in ways that connect with the priorities and values of clinical teams. Finally they are forward looking, working with other corporate leaders to create a different future for the organisation.

We do not predict that the traditional role of the Finance leader will disappear. Rather, that on its own, it will be insufficient to deliver the sustainable cost and quality improvements that NHS organisations require in the future. And it is not just the Finance function that needs to evolve. We all have to rethink attitudes towards costs and quality. Instead of systems to improve the quality and reduce the cost of care, we need to establish systems to improve the *value* of care. This requires new thinking about how to unify cost and quality goals and how to redefine improvement tools and approaches to achieve both quality and cost objectives. It also means new skills for clinical and managerial leaders. These range from capabilities in improving and measuring services through to driving the money that is released by process improvement through to the bottom line.

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