

We've always done it that way

Lean management, Six Sigma and other improvement tools are finding application in the laboratory environment, but does this mean that we need to improve our service? Annette Davis-Green believes that, in an increasingly challenging and complex environment, now is the time to act.

With the introduction of the knowledge and skills framework (KSF) in *Agenda for Change*, service improvement now forms part of everyone's job description. Those who work in the NHS try to do their best for the patient, but, with limited resources and increasing pressure to achieve targets, it is becoming increasingly difficult to sustain this impetus.

As a pathology service improvement manager, my job is to help pathology departments look at their processes and use service improvement tools to identify areas that can be improved. In pathology it can be difficult to see how tools and techniques developed in industry, for example, can be applied in the laboratory environment. Service improvement can use different techniques, but this article will concentrate on the concept of process redesign, without resorting to management-speak.

In general, quicker results do not necessarily alter a patient's prognosis, but patients want to know their results as soon as possible, and do not, for example, want to wait six weeks to hear that their gastric biopsy is normal. The NHS is about more than just doing the best for the patient clinically, as all patients' interests should be at the heart of the service.

If the same quality of clinical diagnostic care could be provided in a shorter space of time then money could be saved (or time released for re-investment) and the patient would enjoy a more timely service (reducing anxiety and worry). Of course, this would require all parts of the hospital system to operate in the same way.

Putting the patient at the heart of the service should be central to the key concepts of using technology effectively, ensuring

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process excellence and maximising staff skills. Workforce redesign is a huge topic in itself and several national drivers for service improvement – the Pathology Modernisation Programme, government cancer targets, the Pathology National Service Improvement Framework and the Carter review – are evident in pathology at the moment.

The sceptics will say that these are orchestrated to lead to the privatisation of pathology services, but, for the NHS pathology service to remain efficient and effective, we must take notice of these initiatives.

DATA-BASED EVIDENCE

When you were a new employee in a laboratory, did you look around and wonder why certain things were done in a particular way? Were you brave enough to ask why, and maybe even suggest an alternative? Were you told that "we've always done it that way"?

As scientists we are very receptive to new technology or a new scientific technique, but somehow it feels very different if the change is not about 'science'. Service improvement is not about change for change's sake, but about tuning into what could be improved, testing it and then changing if there is a clear advantage.

A key concept is to base any idea on data-

based evidence, as it is all too easy to jump to conclusions. In a world without data, opinion prevails. Another easy trap to fall into when a laboratory is struggling is to think that you need more staff. However, do not jump to conclusions about what will improve the situation. Adding more staff to an ineffective, inefficient laboratory is not going to help, and might even make the situation worse.

If you haven't studied how the service could be improved, how do you know that an additional member of staff will improve the situation? Using data allows you to make informed decisions based on fact, not guesswork, by measuring the things that are important, not just that which is 'easy' to measure.

AVOID APPORTIONING BLAME

In general, laboratory staff are selected for their technical, scientific and clinical skills, and not for their ability to analyse and redesign processes. We need to remember not to take service improvement as a personal criticism of our ability to do our job. Clinical, scientific and technical excellence is about the correct outcome; process is about the steps you take to get there. As processes in pathology generally cross several staff group boundaries, an inefficient, ineffective process cannot be the fault of a single individual or staff group, and the human inclination to apportion blame must be avoided.

It is often a fact that the process is not owned by a single individual, staff group or department, and this permits the continued

Table 1. Some common myths about service improvement.

- Service improvement is about reducing staff numbers
- It is just change for change's sake
- It is about making us work even harder
- Service improvement is about taking on more work
- It is just a way to meet your cash-releasing efficiency savings
- There must be a hidden agenda

existence of inefficient processes. This also supports the mistaken belief that the process is very efficient, as staff are not aware of the rest of the process.

INFLUENCE OF TECHNOLOGY

In haematology and biochemistry, for example, big changes have taken place over the years due to the introduction of sophisticated analysers that perform most of the routine work, and therefore processes have had to be overhauled. Generally, few people look at their processes until they are forced to as a result of the integration of new technology.

Having worked in histopathology for 17 years, I have seen that the standard processes

by which work flows through a department have remained largely unchanged. In technological terms, histopathology has stood still for many years and this has allowed poor processes to go unnoticed.

So, if the technology used in histopathology has not changed, surely there is no need to consider improving the processes? Every department I have worked in has undergone some form of 'merger' with another laboratory. For example, a small department in a small hospital joins a larger hospital department, or a laboratory from a specialist hospital joins a general hospital laboratory to form a large, complex laboratory, both handled with little consideration given to the resulting entity that is likely to need

different processes to be effective and efficient. This can lead to fragmentation of the service and convoluted processes that work against each other. Often the result is inefficiencies (and frustrated staff) in the department. The answer is to invest in designing the processes for the workload and demands of the new structure.

SERVICE IMPROVEMENT AND REDESIGN

In my current trust, senior management recognised the need for a substantive post to lead the service improvement cycle in pathology. The directorate covers 10 departments and employs over 500 staff, so there was considerable demand for a permanent service improvement lead to focus services around the needs of patients and users through the use of service improvement and redesign methodology.

I am currently working with the histopathology department in order to overhaul its processes, and I am providing service improvement and redesign expertise and project management to the department. It is envisaged that at the end of 12 months the department will have made sustainable improvements and have a clear action plan of further work to continue the improvement cycle. I will then move on to work with another department or on cross-directorate improvement projects (as yet to be determined).

Table 2. Common problems and possible solutions.

Problem	Solution
Clutter	Tidy, clean, organise
Lack of specimen tracking	Initiate system
Duplication of work	Remove duplicated process steps
Interruptions	Schedule effectively Dedicated receptionist/telephonist
Batching	Linearisation (push, not pull)
Storage	Discard non-essentials
Unnecessary movement	Utilise IT Schedule effectively
Communication	Standardise, schedule
IT	Dedicated IT personnel

WHAT IS A PROCESS?

In the context of pathology, a process comprises the steps taken (standard operating procedures in the laboratory) between a specimen being taken and a report being issued. A good process should have the minimum number of steps to ensure the quality of the outcome, with each flowing seamlessly to the next in as short a time as possible. Process quality is not the same as clinical/technical quality. It is also not just about being organised, as you can have a well-organised poor process.

PROACTIVE RATHER THAN REACTIVE

It is important to recognise and constantly assess the things that alter working practices and accept the need to stand back and review processes. What we have learned from our experiences is applicable to the past only. To be effective, however, we need to learn what is needed for today and for the future (ie proactive rather than reactive).

Have a look around your department and see what improvements could be made:

- reduce stress and fatigue for staff
- free up space for other uses
- enable staff time for training/development, CPD

- work smarter, not harder
- increase capacity
- make it easier to meet government targets.

Having decided that there is a reason to improve the processes, what should your aim be? As a broad statement you should be looking to deliver tangible, sustainable improvements in service, to the advantage of all staff and the users/patients. This could be by increasing capacity, reducing demand, eliminating the backlog, and releasing time for re-investment in other areas of the service. To do this we need to:

- understand the process as it is and look for possible improvements
- look at flow and variation in work through the department
- remove waste such as excess stock, unnecessary waiting of specimens between processes, and unnecessary movement of people/resources (move information not people)
- aim to tailor the demand on your service with your capacity to undertake the workload.

Service improvement is not necessarily about buying expensive equipment or employing more staff, it is making the most of what you have. The capacity of the service is equal to the least efficient component. Try to avoid batching specimens if at all possible, as the very nature of batching means that all

'All improvements involve change, but not all change is an improvement'

specimens other than the last one have had to wait. The greatest efficiencies are to be made by scheduling resources more efficiently.

An important point is to celebrate examples of good process practice that you find or create. Process redesign is difficult because processes are often not managed by a single person, staff group or department, so it is good to congratulate ourselves for designing excellent processes.

Historically, we have concentrated on the quality of clinical diagnostic provision. The quality of our clinical and technical expertise is of great importance, but we need to recognise that the processes by which we achieve these are often antiquated. Clinical excellence must be supported by process excellence in order to deliver the service required in the modern NHS. Remember, things are only going to get more challenging and complex, so now is the time to act! ■

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