The NHS Bermuda Triangle
(and how to escape it)

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“We trained hard . . . but it seemed that every time we were beginning to form up into teams we would be reorganized. I was to learn later in life that we tend to meet any new situation by reorganizing; and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization.”

Attributed to Titus Petronius, AD 27–66

We’ve been applying Lean Thinking in healthcare for the past five years. Over that time we have discovered two things:

First, the good news. Lean works in healthcare. In experiments where lean thinking has been applied properly, the results – in terms of patient care, costs and quality – have been extraordinary.

Now for the bad news. Our second lesson is that lean will never take root in the NHS as it stands: it is management that needs to change NOT lean. It’s not because the ideas are wrong or the principles don’t apply, but because lean contradicts with the way the NHS is currently managed: when NHS managers come across lean they are often enthusiastic about its potential but they cannot and do not create the conditions for its benefits to be maintained.

Lean works!

When we say lean works in healthcare we really mean it. We’ve spent the last seven years doing very little else but applying lean approaches in NHS hospitals and other health care settings. Along the way, we’ve learned a lot. We've learned how – and we have demonstrated that it is possible to – achieve the following: –

• Reduce average length of stay for medical patients by 60% (with knock-on positive consequences on costs, demand for beds, quality, safe discharges and resources etc).
• Reduce the proportion of beds taken up by medically fit patients waiting for discharge from 25–30% of all beds to around 2% – with far-reaching consequences for availability of beds and waiting list reductions.

• Eliminate the number of the number of patients placed on inappropriate wards because of bed shortages in the ward that is right for their treatment (so called ‘medical outliers’)

• Effectively eliminate waiting times for elective surgery – so that waiting times are determined by patients’ choice rather than imposed upon them by NHS capacity constraints. Doubling the number of elective surgery patients receiving treatment, using exactly the same resources.¹

• Meeting admissions and elective surgery targets 100% of the time.

But we’ve also been dismayed to discover something else. Few if any of these gains have proved sustainable. It’s as though the NHS has an allergic reaction to actually achieving what it’s been saying it wants to achieve all these years.

We’ve struggled to understand why this should happen. Surely, if something really works, if it ticks all the boxes of improved patient care, saved money, better use of resources and improved staff morale, managers would be seizing on it as a huge opportunity? You might think so. But now we realise lean doesn’t ‘fit’ a set of beliefs and behaviours that have come to define how the NHS is managed. The root cause of the problem is a misconceived model of management.

**The Bermuda Triangle**

The job of management should be to make policy: to set the organisation’s goals and objectives and to issue directives designed to achieve these goals and objectives. To make sure these directives are implemented they need to be accompanied by a series of targets and key performance indicators (KPIs) designed to motivate managers’ implementation efforts and to measure progress towards the goal. In the NHS, however, it is the Government of the day who determine policy and this is interpreted by the Health Departments of the UK, who also issue the targets and KPIs. These are then passed down to NHS Commissioning Organisations who will commission healthcare locally with NHS and other providers. This process does not take into account whether the current NHS has the capacity to deliver the policy. Worse still, changes in Government or policy often create additional directives, KPIs, etc. without taking away or deselecting others.

¹ *Making Hospitals Work, How to Improve Patient Care While Saving Everyone’s Time and Hospitals’ Resources*, Marc Baker and Ian Taylor, Lean Enterprise Academy
In this current NHS management model, if the policy fails to get implemented or the desired results are not achieved, the failure must be caused by one of the following three reasons:

• The policy was wrong and needs reformulating.
• The targets were wrong and need resetting.
• The reporting lines were in some way obscured or distorted, in which case we need a reorganisation to clarify roles and responsibilities.

It all sounds very sensible and rational. There is just one thing missing: it has no connection with reality – how the work of the NHS actually gets done at the front line. Instead, it creates a sort of parallel universe that mirrors and reflects this reality but somehow never really touches it. That's a problem, because if ‘how the work gets done’ fails to change, nothing of any significance ever changes.

Our current directive-driven, compliance-oriented, target-obsessed approach to management has a number of telltale hallmarks. A belief that everything follows from the policy – the content of the directive. If this is true, it matters crucially whether the policy is ‘good’ or ‘bad’. So endless effort is invested in getting the policy right. Of course, it's vital to get policies right ... but only if they are going to be implemented. In the current situation, because policies are not grounded in a deep understanding of how the work of the NHS actually gets done, it doesn't really matter whether they are right or wrong because they won't get implemented anyway. In this context, a focus on a better policy – a magic ingredient of policy insight that will break the logjam – is part of the problem, not part of the solution.

If policy decisions are so important, they need to be researched and documented thoroughly. As a result, management decision-making resolves into researching and writing long, carefully worded reports, along with countless meetings to prepare, write and discuss these reports. The underlying assumption is that the report will become a directive, and that once it is a directive there is a machine ready, waiting and willing to implement it. But this machine does not exist. It hasn’t been built. Staff in the NHS are far too busy – overwhelmed even – by their day jobs. In this way, report writing and ‘decision making’ begins to form a parallel universe, endlessly discussing the problems of the NHS but ultimately doing very little to effectively tackle them. The net result: lots of time and money spent researching, writing and discussing reports ... that then sit on a shelf somewhere. A management hierarchy with its eyes and ears focused upwards to directives and compliance targets coming from on high, rather than downwards to the front line.

In successful businesses, managers focus their time and attention on operational realities – on how to help staff solve problems and improve day-to-day operational performance. This is the ‘machine’ that implements
management decisions: focused, dedicated operational skill and understanding. In the NHS however, management has effectively turned its back on the front line. At every level of management, from inside front line services to commissioning bodies and local hospitals, managers’ attention is focused upwards to the next level. This leaves front line staff coping with the day–to–day pressures of broken systems alone and without support. If you wanted to create a working environment designed to demoralise staff, you couldn’t do much better than this.

A belief – or pretence – that meeting targets is the same as improving performance. There are three ways to meet a target. The first way is to fundamentally change the system (how the work gets done) so the system is now designed to deliver the target. This is a painstaking, detailed operational challenge – the one thing that rarely happens in our current set up. The second way is to distort the way the current system works so that the target is met … at the expense of something else. The third way is to game or manipulate the data in the target setting system.

Most compliance in the NHS revolves around the second two. That’s because the compliance targets are part of the parallel universe of ‘policy’ with little connection to how the work actually gets done. In fact, despite being awash with ‘metrics’, most NHS managers have very little hard, usable data on the actual operational performance of the areas they are supposed to be managing. For example, there is hardly any real time data to tell us how the hospital, or a department, or ward, is performing right now. Most of the data is backward looking – reporting. It’s a bit like archaeology. Metrics for the purposes of compliance and upward–reporting are rarely the same as the metrics you need to understand and improve operational performance.

Managers own careers depend on their ability to ‘deliver results’ … but these ‘results’ relate to parallel universe compliance targets, not underlying operational performance. Managers are therefore positively incentivised to continue doing things that fail to improve the performance of the system.

In this way, even with the best of intentions, the hardest work, the more generous resourcing and the most frenzied rounds of reforms, reorganisations and improvement initiatives, ‘nothing ever really changes’.

This is what we call the NHS Bermuda triangle. Its three sides are: –

• Too many directives from on high which are not connected to operational realities.
• Managers and management looking upwards to comply with these directives (rather than at the operational realities of the front line).
• Targets, incentives and metrics focused on upwards compliance and reporting rather than real operational improvement.
Once a policy or initiative enters this Bermuda triangle, no matter how good it is, its chances of implementation are slim. This, in turn, exacerbates the problem. If the policy didn’t work or failed to get implemented, managers reason, “we need to ‘work harder’, to intensify our efforts”. This is precisely what has happened. Policy after policy, directive after directive, target after target, reorganisation after reorganisation, improvement initiative after improvement initiative have followed with intensifying frequency. Yet each new initiative simply disappears into the Bermuda triangle. The only real result is overload: managers overloaded with compliance to directives, and a worn out, worn down workforce that is at once demoralised and cynical.

Now, the trouble with saying things like this – that the ‘NHS is suffering from endemic project overload’ – is that anyone who has ever worked in the NHS knows this is true. So their natural reaction is “Yes. I could have told you that. Tell me something new!” The astonishing thing is that nobody (nobody that we know of, anyway) has ever taken the next obvious step: to measure this overload. So that’s what we did. In one of the NHS hospitals we were working in, we were flabbergasted at how stressed-out and frantic its managers were. So we asked a simple question: “what is it, exactly, that you are working so hard on?” “Projects!” was their reply. So we asked the next obvious questions: “What are these projects? How many of them are there?” Nobody knew (perhaps they were too busy to find out). So we dug around. Figure 1 shows what we found.

<table>
<thead>
<tr>
<th>Target Focus</th>
<th>No. Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Improvement</td>
<td>300</td>
</tr>
<tr>
<td>4 hour Performance</td>
<td>132</td>
</tr>
<tr>
<td>Improvement</td>
<td></td>
</tr>
<tr>
<td>Safety &amp; Quality</td>
<td>44</td>
</tr>
<tr>
<td>18 Week Access</td>
<td>39</td>
</tr>
<tr>
<td>TOTAL</td>
<td>515</td>
</tr>
</tbody>
</table>
Breakdown of projects in one NHS hospital

At that particular time, the hospital was running 515 separate projects – five hundred and fifteen! Some divisional managers had responsibility for over 50 projects. Think about it. If they worked a 50 hour week, they could devote an average of one hour to each project each week, which is a sure fire recipe for making sure that nothing ever gets done. And, remember, that was on top of their day job! Even more astonishing, when we asked managers how many projects they were responsible for, none of them knew. (Well, they all knew. Their simple answer was “too many!”).

Now think about it a little more. Every project uses up resources. To run a project you need a project office (often run by external consultants), project meetings, divisional reviews, executive reviews, project plans, progress reports, updates and so on. Now multiply all the work that’s required to make sure one project really happens by 515. Think about how much time that eats up. No wonder managers in this hospital were worked off their feet! This is the Bermuda Triangle at work, sucking up huge amounts of time, money, energy and commitment and shoving it into a black hole, from which it will never reappear.

Even more worrying was the fact that no-one – repeat, no-one – had any overview of how many projects were on the go. (When we showed these numbers to the CEO and Performance Director they both nearly fell off their chairs.) Worse, without this overview, there was no way to prioritise – to say this project is more important than that – or to see how they fitted together to improve the running of the hospital. As a result, strange things were happening. For example, when we reviewed the project load of one Clinical Divisional Director we discovered that he was working on one project to reduce the number of senior clinical sessions used by the department (cost cutting) and on another project to increase the number of clinical sessions (improve front door operational performance)!

Having got the bit between our teeth, we pursued this line of enquiry a little further. We discovered the same project spaghetti in another large NHS hospital, along with what seemed to be a huge number of KPIs (key performance indicators). So we dug a little deeper. Figure 2 shows what we found. The hospital concerned had adopted a ‘balanced scorecard’, along with 11 strategic objectives. These 11 strategic objectives had been handed down to the next level of management, who had dutifully analysed each objective to identify its core goals. In this way, 11 strategic objectives multiplied into 87 goals for staff to achieve.
Multiplying goals and measures from an NHS hospital

Then managers created measures to assess progress towards these goals. Each goal generated, on average, three specific metrics. So without fully realising what they were doing the executive team had managed to create 252 performance measures for staff to work to. Then, when they passed these 252 performance measures to the next level of command, they somehow mushroomed even further to 350! We then looked a little closer at how managers were spending their stressful working days. For the most part, they were spending their time attending meetings to report on these measures, to discuss the reasons for failing to achieve their targets and establishing plans for ‘performance improvement’. In this way, once again, all their energy, commitment and intelligence was being sucked into ‘feeding the beast’ – the Bermuda Triangle – and none of them had any time or energy to focus on where the hospital’s real work was being done: the front line.

This is why it doesn’t matter what policies are set for the NHS (whether good or bad): they will never get implemented anyway. They will simply get lost in the Bermuda Triangle, while the real challenge of how to transform the work of treating patients remains unaddressed.

So what is to be done? The Bermuda Triangle needs to be replaced by a management system that truly supports and enables the front line in its attempts to improve patient care and the costs of providing this care. The question is how? We believe there is a way forward, but to see it we need to understand what has been learned from attempts to improve the front line.

Scorecard – Descriptive Stats

Categories = 4
Strategic Objectives = 11
Specific Goals = 87
Measures = 252

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Despatches from the front

To see the connection between the Bermuda Triangle and what’s been learned about lean at the front line, we have to dig a little deeper into how and why we discovered the opportunity for those extraordinary care and efficiency improvements.

If you want to boil it down to one, single thing it’s this: we looked at how patients flowed through the healthcare system – a complete end-to-end process. Instead of looking at each separate part and asking ‘how can we make this part work better?’ we looked at how the parts fit (or fail to fit) together. But we didn’t just do this as an abstract exercise. Bringing the learnings of lean from other industries we tackled this task by asking some upfront and absolutely basic questions. These are the six key questions we developed and what we learned from them.

1. What you mean by 'value'

In lean, value is always defined by the ultimate end customer – the consumer or in our case the patient. This sounds obvious but often people just assume they know what value looks like and end up getting confused as a result. What does ‘value’ mean to an NHS manager for example? Reducing costs? Or improving the patient experience? If you introduce muddle at this earliest of stages, it will follow you through, and multiply, right the way to the end.

What we discovered was that healthcare staff hardly ever really look at value from the patient’s perspective. When we said we wanted to map the patients’ journey through the hospital for example, we were told ‘Oh yes, we do that. It’s called the patient pathway’. But when we looked closer at the patient pathway we discovered it wasn’t the patient’s journey, it was the sum of clinical expert opinion of what should happen to the patient and not the patient experience.

For example, patient pathways ignore the time the patient has to wait on an A&E trolley because during that time, no hospital staff is actually doing anything of value to the patient. In fact, this is precisely the point: during that time nothing is actually being done to the patient. No value is being added. And when we mapped the entire journey through the hospital we discovered that over 85% of the typical medical patient’s length of stay is spent waiting – waiting for somebody in the hospital to do something; waiting for diagnostics, treatment, therapies, drugs, discharge etc (see below).

Nobody had seen this before because nobody had really asked the right question and followed it through. This 85% waiting time is the real cause of excessive lengths of stay. It’s here that patients’ contract hospital acquired
infections. It's here where money pours out of the system. And out of this discovery pops a huge implication. If we can reduce or eliminate that 85% waiting time, we can free up the resources the NHS needs to do its job properly and improve patient care and safety at the same time.

2. Focus on what really matters to deliver this value

The second question we asked was, 'Where are the biggest points of leverage, the small number of important changes that will deliver the greatest benefit? Within these points of leverage, where are the biggest opportunities?' Part of the discipline of focusing on what really matters is prioritisation: stopping spending time and effort on things that are less important.

Again, this sounds obvious but in reality it’s often quite hard to do, because we are surrounded by multiple pressing problems, conflicting demands, trade-offs between the urgent and the important and so on. So when we asked ‘where do hospitals’ biggest problems reside?’ we came up with a long list of answers including poor financial performance, hospital acquired infections, an uphill struggle to reach targets, and excessively long patient length of stays, and so on.

The trouble with lists like this is that they tend to engender initiative overload, as organisations set up projects, teams and initiatives to tackle each one separately. But in reality, we can only do a few things really well so we have to prioritise: to focus on just one or two things that are really going to deliver the goods, and this requires further analysis: defining what the real problem is, asking if different problems are connected and so on.

When we did this, we discovered that ‘door to door’ length of stay (especially for medical patients) sits right at the heart of the problem. Costs associated with extended medical lengths of stay are a massive drain on NHS finances. (For example, it forces hospitals to open up unfunded beds requiring un-budgeted use of bank and agency staff. The longer a patient remains in hospital the greater their chances of acquiring an infection (which is both unsafe and extends length of stay even further). Extended medical lengths of stays also trigger the ‘outlying’ of medical patients onto surgical wards. This in turn prevents the admission of revenue generating elective patients leading to a lack of available beds for emergency patients.

In fact, the closer we looked the more length of stay shone out as the problem to tackle, because all the other problems faced by hospitals are created, or exacerbated, by it. Crack this, and you are a long way towards cracking everything else.
This is a vitally important insight when it comes to the Bermuda Triangle, because one of the hallmarks of the Bermuda Triangle is initiative and project overload. Trying to do everything is a sure fire way of wasting lots of time and money and working extremely hard to achieve nothing. We have to find the leverage points, to focus on what really matters, and get them sorted first.

3. Understand how the work actually gets done

Having identified length of stay as the one thing to focus on, we went on a fact-finding mission. This was our next shock. Nobody – nobody – in the hospital knew what the facts about length of stay were, because they hadn’t looked; they hadn’t asked the question.

When we asked the question many people thought they knew the answer. They took out organisation charts, process diagrams, plans, directives and so on. But none of these had any bearing on the reality of what actually happened on the front line. They were part of the Bermuda Triangle, a parallel universe where people talk about what goes on in hospitals without ever really connecting with the reality.

So we took the simple expedient of following actual patients in their journeys through the hospital, capturing everything that happened to them, and how long it took. Figure 1 shows what we discovered in one hospital. It looks like a load of hieroglyphics but it’s actually very simple. There are only two things to worry about: boxes, where work actually gets done and value is added and triangles, where the patient is waiting for work to get done. This is how we discovered that 85% of the time, the patient is just sitting (or lying) waiting to be treated. Every triangle represents NHS resources been poured down the drain.
**Current State Map**

This type of map can be used to visualise all types of healthcare processes from complex mental health processes to collaborative cancer services, from recruitment to decision-making. Without it, nothing – repeat, nothing – can really be done to change or improve work processes … and therefore operational efficiency … and therefore the financial numbers.

This picture actually shows how the NHS works for every single patient, and is the reality of how the NHS actually works. It not only demonstrates, immediately and visually, where the real problems lie. It also begins to pinpoint what needs to be done to improve things in contrast to current management practices. These start from other places: an organisation chart, somebody’s idea or perception of what is happening, a belief about what should be happening (perhaps because somebody once issued a directive saying that’s how it should be working), a spreadsheet. If it starts from one of these other places, it will never connect. And ultimately, after a lot of fuss and bother, it will simply ‘bounce off’ leaving everything pretty much as it was in the beginning – except morale. After another obvious failure, morale sags one step further. This has been the fate of almost every NHS improvement initiative we have come across.

4. **Understand demand**

The current state map (as we call it) tells us what’s actually happening on the ground, but it doesn’t tell us what the pressures are. It doesn’t give us a detailed insight into the scale or nature of overall demand. Without this deep, detailed understanding of demand, it’s impossible to plan, allocate resources … and get the job done! Instead, you are constantly presented with surprises. Surprises lead to firefighting. Firefighting creates a sense of chaos where nobody can see the wood for the trees. And soon any possibility of an orderly, planned, disciplined approach to improvement is lost. So we took extra care to really understand demand as it is actually experienced by NHS staff.

Once again we discovered to our surprise and dismay that nobody really knew what the demands on their time, materials or resources were. Of course, many people thought they knew but every time there was one simple question we asked them that they couldn’t answer: ‘how quickly, on average, do staff need to treat every patient to avoid queues forming?’ If, for example, there are ten attendances to A&E in an hour, then it has to treat one patient every six minutes. If you cannot achieve this, you create queues. If there is
just one member of staff in A&E, they've got six minutes per patient. If there 
are four members of staff, they have twenty four minutes per patient.

It’s an astonishingly simple question, but almost everything the hospital 
needs to do pops out of the answer. It drives resource allocation for a start. 
It also asks fundamental questions about these resources such as ‘what 
resourcing is actually necessary; how long do we need to treat each patient?’.
That, in turn, shifts the spotlight to those triangles. If there is an 
unnecessary delay in treating a patient, that pushes up the average 
treatment time, throwing everything else into a spin. So understanding this 
underlying operational heart beat – how many patients we have to treat every 
time period (such as an hour) – is key to everything else.

Of course, discovering this underlying heart beat (in lean jargon it's called 
takt time) is more complex than described here. Average rates of demand 
vary according to time of day, day of the week, month of the year, and so on. 
There is always some random variability around these averages. Within the 
average, some individual cases are complex and take longer and even 
though they are balanced out by others which are simpler and faster we need 
processes to cope with both simplicity and complexity. And so on. 
Nevertheless, in our work in NHS hospitals we have proved that it is possible 
to measure all these variables and to expose the hidden order and stability 
behind the apparent chaos. Which means it is possible to plan, and organise 
processes appropriately, including processes to cope with variability. We 
have found many managers that are so entrenched in this apparent chaos 
that they simply refuse to acknowledge there can be any predictability.

At another level of detail, every department, ward or process has its own 
‘sub heart beat’. There is the global demand rate – how many patients will 
we need to treat today – and within this, pathology, radiology, pharmacy, etc 
will have their own sub-heart beats. This generates a two fold improvement 
agenda. First, each supporting function needs to work out its own demand 
rate. Second, they all have to be put together so that they synchronise to the 
global demand rate. This is a significant challenge in its own right (one that 
requires good relationship building and excellent communications as much 
as technical knowhow).

Once again, we need to see the problem to be able to manage it. We did this 
by creating a ‘birds eye’ view of how each separate department needs to 
connect to the patient, in order to meet patient demand on time.
This ‘fishbone’ diagram is important for two reasons. First, it represents simple fact-based logic that nobody can argue with. These are the core operational requirements of each support service. There can be no excuse for failing to organise how we work to meet the demands on this fishbone. They are what the patient needs. Second, they create a clear agenda for improvement for everyone. They help people focus on what matters. As we’ve seen, if everybody delivers their service at the right pace (and at the right time, so all the connections work together) then the patient will get the right treatment steps at the right time – and lengths of stays will be reduced by 50% or more.

By the way, there’s one more thing we discovered about the nature of demand in hospitals. It’s also very simple – and crucial. But nobody had seen it because they weren’t looking at how the work actually gets done (the triangles) or the ‘heart beat’ of the system. It’s this. For patients, there is not only demand for treatment. There is another type of demand too: demand to get out!

Currently discharge is driven more by firefighting than anything else. When there is pressure at the front end, there are frantic efforts to discharge patients (some perhaps too soon). Then, when the pressure subsides, everybody breathes a sigh of relief and for example beds begin to fill up again.

In fact, hospitals need to realise that ‘demand to get out’ is a separate demand requiring its own separate, specially focused processes which are carrying on, day in and day out, regardless what’s happening at the front end of the hospital. Because this doesn’t happen, at any one time between 25% – 30% of all beds in NHS hospitals are filled with patients who are medically fit enough for a safe discharge or transfer to their next planned destination. If the NHS was able to fix just this one problem, many of its
capacity constraints would disappear in a puff of smoke. It would reduce or eliminate the problems caused by the ‘outlying’ of patients. It would free up beds for revenue earning elective surgery. It would reduce queues and waiting times, and hospital acquired infections. And, if the process is designed properly, it can work continually and methodically, helping to create stability and order throughout the entire system.

5. Make performance visible

Sometimes managers make the assumption that front line operations work, or should work, like a clockwork machine: simply wind it up, walk away, and let it run. In fact the opposite is true. Unexpected things happen. Things break down. People don’t turn up when expected. And so on. If there is no system for monitoring how things are actually working in real time – so that problems are identified as and when they happen – then they’ll slowly (or not so slowly!) descend into chaos. And once chaos sets in, firefighting also sets in. In a firefighting world there is no ‘normal’ (except for chaos), therefore no benchmarks to compare with, no baseline to monitor variations from – no ability to measure and learn. It not only leaves people exhausted, it also means the organisation is left without a stable platform for improvement.

There is only one way to create operational stability and that’s to make things visible. This visibility lies at the heart of disciplined work processes. It starts with a plan – a visual ‘plan for every patient’ that all staff can see easily, that’s drawn up when the patient enters the system and features every step required for treatment on a timeline, until the planned exit from the system. This provides the benchmark. It’s what should be happening. As people work on the plan, they need to check and make adjustments against the plan to make sure the right things are happening at the right times. Any deviation needs to be captured and made visible – again, for everyone to see so that they know there is a problem. Once the problem (the deviation from the plan) has been spotted it’s up to staff and managers concerned to a) work out why the problem occurred so that actions can be taken so that it never happens again. And b) fix the problem.

Highly visible management systems, where actions are continually exposed against delivery plans, are ineffective unless the manager is available to make management decisions to get things back on track. But these signals cannot be available if they only appear in the parallel universe of the Bermuda triangle. They are what keeps everything on track. (That doesn’t mean things don’t go off the rails any more. Of course they do. All the time. But that’s the point. We can see when this is happening and can do something about it before it’s too late. And, after a while, we can begin to see patterns about when and why things go off the rails – patterns that we can then investigate and address. Without it ‘improvement’ is just an empty
word.) In fact many staff call it ‘change for change sake’, definitely not an improvement.

6. Redesign the work, including the connections between different pieces of work

When, and only when, all the above steps have been taken, it becomes possible to redesign the actual work people to do; to eliminate the triangles and coordinate activities better.

We cannot stress this enough. Without the first five steps under your belt, with the best will in the world, anything you do is headed for the Bermuda Triangle. Because it is not based on and designed to address underlying realities, it ends up as if it were fiction – ‘bouncing off’ the reality with little or no lasting effect.

If you jump straight to Step 6 – and it has happened on countless occasions including many projects going by the name of ‘lean’ – then one of the following things is bound to happen:

- You will end up improving the wrong thing (defining value)
- Its impact will be limited or isolated (focus on what matters)
- It simply won’t work at all (because the proposed solutions have little or no connection to the operational realities on the ground, or because they cannot cope with the realities of demand)
- The improvements won’t be sustained (make performance visible).

In fact, once the first five steps have been completed, the actual task of the work redesign is relatively simple. There are many possible improvement opportunities: by creating work cells where members of the team are ‘co-located’ (thereby reducing travelling distances and coordination problems); changing the order in which things happen; identifying steps that aren’t really necessary and which can be eliminated; combining activities that naturally fit together; simplifying them so that anything extraneous is avoided, and so on.

Whilst there are plenty of tools available: what matters is the principle of eliminating triangles by making sure the right things happen at the right time, deploying the right materials, information and skills when they are needed, in such a way that every step connects in a timely way to the next step. In other words, this requires deep and detailed understanding of what happens today, including what goes wrong, and (perhaps even more important) a thorough investigation as to why they go wrong.

The only way to make the changes ‘stick’ is to see and redesign the entire process end–to–end – eg. from the minute the patient presents to final
discharge – and to see how all the parts fit together either well (as in the fishbone diagram) or badly (today’s current state where a whole series of departments and activities are working to their own targets often pretty much in splendid isolation).

Future State Map

**Escaping the Bermuda Triangle**

We can now see the problem. It’s possible to redesign the work of the NHS to achieve breakthrough high quality patient care, efficiency and productivity. However, nothing about the way the NHS is currently managed creates an environment conducive to doing what’s necessary to achieve these results. In fact, the ways managers currently manage – by rushing around from meeting to meeting away from the front line, by not measuring and understanding how the work actually gets done, by making plans and setting priorities which connect to ‘orders from above’ rather than day-to-day realities – mean that every minute of every day staff are actually being pulled away from doing what they really need to do by managers claiming to be 100% focused on ‘improvement’.

The way the NHS is managed is the problem.

An initial look at the Bermuda Triangle shows what needs to happen. The avalanche of directives from the very top has to stop. The more directives there are, the harder managers have to work (in the parallel universe). Policy makers need to deselect and prioritise just a handful of initiatives that focus on the key levers of performance improvement. Before they issue any such directives they need understand how it is going to be implemented. In other
words, they need to understand how the work gets done today and how to improve it, operationally, on a sustainable day-to-day basis.

In turn, managers need to turn around to face and support the front line, rather than turning their backs on the front line and always looking up. Their job is to help front line staff improve day-to-day operational performance. Without this they are not really managing. They are only going through the motions of managing. Finally, metrics and targets need to focus on operational realities not top down compliance reporting.

If we could achieve these changes, we would be opening up a win win situation whereby:–
The costs of the management process itself would be massively reduced, while making it much more productive, and It would become possible for managers to focus on their ‘real job’ of delivering ever better patient care ever more efficiently and effectively so that managers can become a genuine support for front line staff rather than being divorced from them.

So here is our working hypothesis? How to make these changes so that we can escape the Bermuda Triangle? Answer: By applying the same set of principles: –

• Identify value. Currently health care commissioners and managers are working to one agenda (of cost cutting) while front line staff are working to another (patient care, given available resources). This dichotomy can and has to stop. By eliminating the waste creating triangles in the core operations of the service, the resources we need to provide improved health care can be found from within it. It is health care commissioners’ and other provider managers’ jobs to help front line staff make these changes and free these resources. This is how they add value.

• Focus on what really matters to deliver this value. The job of the policy makers is to support staff in addressing what matters – making operational improvements in the ways we have just described. This is what matters for management. Therefore, it’s also the job of management to dismantle the Bermuda Triangle and free up management time to support front line staff helping staff do their jobs better. It is not good management to say ‘you need to cut costs by £15bn, go find the savings’. It is good practice to say ‘we need to cut costs by £15bn; and here’s how we could do it’. Without this ‘here’s how’ managers are not managing. They are posturing.

• Understand what is. For managers to be able to achieve this turnaround they need to see the realities of their own management practices. We need to map what NHS managers do, minute by minute,
hour by hour to reveal the realities of how the NHS is actually managed, just as we mapped the patient journey to reveal the reality of how health care is actually delivered today ... we can see just how much time and effort is wasted on fruitless, unproductive activities.

The challenges of the front line and of management may look very different. But that’s just superficial appearances. Our examination of just one current initiative (QIPP) suggests that the same basic problems exist. They both boil down to common challenges of gathering and using information, making plans, doing tasks, coordinating activities, measuring progress, identifying problems, finding solutions, and so on. Whether it’s a staff member treating a patient, or a manager trying to manage, the challenge is basically the same so the improvement process is also basically the same.
Deployment of the QIPP Initiative

• Understand demand  The QIPP initiative is just one of dozens – perhaps hundreds of targets – currently being pursued by the NHS. By analysing just how much time and effort is needed to achieve all these initiatives’ goals it’s easy to see why NHS managers feel overloaded. They are being asked to do far too much – most of it of it little relevance to the real job of helping staff improving front line processes. Meanwhile, what is the ‘real’ demand, for assistance from front line staff?
So What's to be Done

Once again, we need to see the problem to be able to manage it. Again by creating a ‘birds eye’ view of how each separate management level or function needs to connect in order to meet demand, on time.

On this occasion the fishbone is rotated through 90 degrees and represents management processes. Like the Horizontal fishbone (the ‘x’ axis) at the frontline, this vertical fishbone (the ‘y’ axis) illustrates how all management functions can flow to meet demand for their services when pulled by their customer, the frontline service. On this occasion, however, there are two demands:

Demand from the front line for assistance to fix broken processes and make improvements and demand from on high to implement policies, programs or projects. Here each rib on this vertical fishbone knows, intimately, its demand and is designed to deliver at the speed at which it needs to respond in order of priority.
This re-alignment both ensures that management are not positioned with their backs to the front line and that policies, programs or projects are deployed in a timely manner to the desired destination.

The point where the ‘x’ & the ‘y’ axes connect is a hub. This hub also acts rather like limited slip differential on a car. The purpose of a limited slip differential on a car is to limit the velocity difference between a pair of driven wheels thereby transmitting useful power to the wheel that most needs it at the time (prioritising) to keep the car on its desired course. The hub acts in a very similar way, it constantly checks and prioritises where management effort is required right now, either on the ‘x’ axis or on the ‘y’. When conditions become more stable it acts as a pacemaker leveling the management effort between both axis, as opposed to batching effort in one direction and then the next.

Within the hub the plans for every patient are complimented by the plans for every policy, program or project (each with their problem solving opportunities for any variance to plan). They are visible to everyone, what might be called glass wall management. This meeting point is crucial as it is a clear articulation of the core job of management which is to make sure ‘today’s work’ gets done AND also the development of better ways to meet tomorrow’s demand.

In the same way as the ‘x’ axis (front line) ‘fishbone’, this vertical management ‘fishbone’ diagram is equally important for two reasons. Again it represents a simple fact–based logic that nobody can argue with. Again they are the core operational requirements of each management level or function. Again there can be no excuse for failing to organise how we work to meet the demands on this fishbone. They are what the customer needs. Secondly, they create a clear agenda for improvement for everyone. They help people focus on what matters.

In this model it is the policy makers’ responsibility to dramatically funnel and reduce the number of directives to the ‘vital few’ before they are released, incrementally, to the ‘management’ fishbone. It is then the commissioner’s responsibility to partner with, and financially incentivise, organisations to re-design their services both on the ‘x’ and ‘y’ axis to align capacity to meet demand and to eliminate the wastes.
Our Proposal

We believe that the answer lies with the commissioning bodies. In the acute sector, for example, do the commissioners know that currently they are paying for 85% wasted time per patient? Exemplar lean organisations employ the Supplier Association approach. This is how they transfer knowledge and capability in lean thinking to their supplier organisations. We believe that instead of simply demanding cost savings along with improved quality performance NHS commissioning bodies must take the lead in adopting the above approach, with its six key steps, if the Bermuda Triangle is to be dismantled. Government also has a key role by giving commissioners authority to follow this new management model and, most importantly, dramatically reducing the number of directives to the vital few which will lead to the real improvement that everyone wants.

The new approach must involve commissioner organisations supporting providers to deliver the improvements that will transform healthcare. Commissioners will need to develop new skills to understand how the work is carried out and how to redesign the work to realise improvement in quality, cost, activity, safety and morale. Using these skills they can then support providers in implementing the new ways of working.

In so doing we believe that managers at all levels would be encouraged, financially, to turn around to face and support the front line, rather than turning their backs on the front line and always looking up. Management’s job would be to help front line staff improve day-to-day operational performance. They would really be managing instead of only going through the motions of managing.

We have learnt that lean works from the patient’s perspective but that lean will never take root in the NHS as it stands due to the Bermuda Triangle, the parallel universe. By commissioning bodies adopting this Supplier Association approach we believe that it would represent, a win for the providers, a win for the commissioners, a win for the DoH and most import a win for patients.