BRIEFING

The Health Foundation Inspiring Improvement

March 2014

Reducing harm to patients

This briefing follows a March 2014 speech by the Secretary of State for Health at Virginia Mason Medical Center in Seattle. In his speech, Jeremy Hunt MP set out a new ambition to reduce avoidable harm to patients in the NHS.

In recent years, Virginia Mason has had considerable success in delivering safe care and financial sustainability. This briefing outlines the factors that have contributed to their success, and how a similar approach has been used in the UK. It aims to help those working to improve patient safety in the NHS. The key points are:

- As demonstrated by Virginia Mason in the US, and some inspiring examples in the UK, the ambition to reduce harm must be matched by the ingredients that help to deliver sustainable improvements in safety.
- These ingredients include a stable and dedicated leadership team, an explicit and agreed vision for improvement, a systematic approach to engaging staff and developing their skills, and a commitment to the incremental improvement of quality.
- On page 4 we set out five questions that organisations should ask themselves to help make the ambition to reduce avoidable harm a reality.

Introduction

On 26 March 2014, Jeremy Hunt MP, the Secretary of State for Health, made a speech at Virginia Mason Medical Center in Seattle. He announced a new ambition to reduce avoidable harm in the NHS by half over the next three years, saving up to 6,000 lives.[1] He also announced a range of initiatives to help achieve this goal. These included:

- inviting every NHS organisation to 'Sign up to Safety' and publicly set out their plans for reducing avoidable healthcare associated harms
- recruiting 5,000 safety champions as local change agents, identifying where there is unsafe care and developing solutions
- creating a new Safety Action for England (SAFE) team to provide intensive support where it is needed most
- developing new reliable measures of rates of avoidable death and severe harm in hospital, and assessing whether organisations are reporting the number of incidents that would be expected.

Plans for a patient safety website called 'How Safe is my Hospital' and a national safety network (also referred to as the Patient Safety Collaborative Programme) were also confirmed in the speech. The Health Foundation made a number of recommendations to NHS England on these initiatives in our briefing *Hard truths, essential actions*.[2]

The Health Foundation is an independent charity working to improve the quality of healthcare in the UK. We share the Secretary of State's ambition to reduce avoidable harm to patients, and welcome the prospect of individual organisations setting their own plans for achieving this. However, the experience of centres of

excellence such as Virginia Mason demonstrates the stable leadership and hard work necessary to achieve such ambitions, and the importance of locally led safety improvement work, defined and owned by staff, which constantly evolves to reflect local priorities and aspirations.

Making the case for safety

In his speech, Jeremy Hunt identified two ways of looking at the need to improve safety.[3] First, that the events at Mid Staffordshire NHS Foundation Trust should be used as a 'turning point' in the same way that Virginia Mason, and organisations in other safety critical industries, have used tragic events as the impetus for a profound change in culture. The soul-searching from across all parts of the UK health system suggests that out of the tragedy of Mid Staffordshire, a genuine culture shift may be possible.

The second perspective is the economic case for patient safety. The speech stated that as much as £1.3bn is spent by the NHS on litigation claims each year. It is estimated that the costs to the UK NHS of hospital-acquired infections are £1bn a year, with adverse drug events between £0.5bn and £1.9bn.[4] Given the current assessments of the funding gap in the NHS – estimated to be £30bn a year by 2021[5] – the financial benefit associated with safer care is bound to capture the attention of those who hold the purse strings.

To help those making changes in the NHS, this briefing describes Virginia Mason's approach to improving the safety and experience of their patients. It also describes the work of the North East Transformation System (NETS), which adopted the Virginia Mason methodology and applied it in the UK context. We hope leaders at all levels of the NHS find this briefing useful and it will help inform their approach to improving patient safety.

The Virginia Mason approach

Virginia Mason was established in 1920 as an 80-bed hospital, and has since grown into a network of primary and specialty care medical centres employing 5,500 staff. After experiencing a range of financial and clinical challenges in the late 1990s, it is now one of the most well-respected healthcare facilities in the world.

What have they done?

Virginia Mason's journey started in the early 2000s, when Chief Executive Gary Kaplan and his team decided that a new approach would be needed if they were to put patients first while achieving safe care and financial sustainability. They decided to create the Virginia Mason Production System (VMPS), based on the management approach pioneered by Toyota, using Lean methodology.[6] VMPS seeks to standardise processes where possible, streamlining 'low touch' aspects of care to reduce waste and free up staff time with patients. Some of the techniques they implemented include the following:

- *Stop-the-line*, which allows members of staff to stop any activity that could cause harm to patients, with the activity not restarted until the problem is resolved.
- *Kaizen*, which means continuous incremental improvement. This is illustrated by the Everyday Lean Idea[7] programme, which allows staff to quickly address small-scale problems in their work area.
- *Genchi genbutsu*, which means 'go and see for yourself'. Leaders go down to the 'shop floor', rather than being confined to their offices, to learn about what is happening and reduce the distance between management and those delivering care.

How have they done it?

Staff engagement is a key feature of VMPS, with each of the 5,500 staff trained in the fundamentals of the approach. There is also a 'formal suggestion programme' which each year results in 300-400 suggestions from staff about how to improve care.[8] Above all, the approach has been embedded through a sustained effort by Virginia Mason's most senior leaders to create a culture of learning in which tools can be applied successfully to drive continuous improvement.

> *'The Virginia Mason Production System is a set of tools, but it's also a way of life and of thinking. You have to keep in mind that Lean is a toolbox – it's a technical fix. But without transforming the way you think, you can't really make changes stick.'*[8]

Importantly, Virginia Mason's leaders provide continuity and stability. Unlike in the NHS, where a chief executive is in post for an average of 700 days,[9] Virginia Mason's top team has remained stable. Gary Kaplan has been in post since 2000.

What has been the result?

The results are compelling. Since VMPS was introduced in 2001:

- over 15,000 patient safety alerts have been reported, which are immediately investigated with the aim to resolve them as quickly as possible
- liability claims have reduced by almost half
- Virginia Mason has achieved positive financial margins each year through efficiency savings, after losing money in consecutive years beforehand
- it was named 'Top Hospital of the Decade' by Leapfrog,[10] and is now ranked in the top 1% of US hospitals for quality and efficiency.[11]

UK context: The North East Transformation System

The North East Transformation System (NETS) is a consortium of NHS organisations in the North East of England, hosted by Gateshead Health NHS Foundation Trust. It is designed to improve healthcare quality, safety and efficiency. In 2006, Virginia Mason agreed to teach their Lean methodology to members of NETS.

What have they done?

NETS then developed an approach consisting of three core elements, which is applied consistently across the range of organisations and projects in the region. The three elements are:

- *Vision* – a clear statement of values and aims, underpinning the ethos of the organisation, communicated to staff, patients and the public.
- *Compact* – a psychological contract between staff and with their employer, setting out behaviours and expectations.
- *Method* – a set of quality improvement methods and tools, mainly derived from Lean thinking, that empower staff to make changes to improve quality, safety and efficiency.[12]

Hundreds of NHS staff across the North East region have learnt from the experience of Virginia Mason to apply Lean-based improvement methodology to their own context. Some of the projects that have been undertaken include:

- 'The Northumbria Way' project at Northumbria Healthcare Foundation Trust, which developed a standardised way to deliver quality improvement across the organisation[13]
- identifying opportunities to maximise efficiency and standardisation across five wards at South Tyneside NHS Foundation Trust[14]
- using Lean approaches to designing space to improve patient and staff experience, funded as part of the Health Foundation's Shared Purpose improvement programme.[15]

How have they done it?

NETS has adapted the VMPS approach and promoted its principles by supporting a variety of projects across a region consisting of primary, community, mental health and acute providers. Based on interviews with a range of staff from across NETS, 'committed, stable leadership, attention to team-building across disciplines and leadership development at many levels' are seen as critical to the ongoing success of NETS.[16]

What has been the result?

The work being supported and promoted by NETS is continuing, and a full evaluation of its impact will be available later in 2014.[17] However, their focus on sharing and spreading the learning provides an insight into how change across entire regions can be approached. And this year alone (2014), nine projects from the North East were finalists in the Lean Healthcare Awards.[18]

Conclusion

The example set by Virginia Mason illustrates that a bold ambition, set by an organisation's leadership and communicated to all staff, has the potential to deliver tangible improvements in safety and the creation of a sustainable safety culture. Their experience, alongside the inspirational work that is already happening right across the UK, sets the example that others can follow. However, ambitions must be matched by the ingredients that help to make them a reality – a commitment to continuous improvement, stable and dedicated leadership, staff engagement, building organisation-wide skills in improvement with the measurement to support it, and having open discussions about safety with patients and staff.

We therefore suggest there are five questions that organisations should ask themselves to help reduce avoidable harm to patients and achieve improvements in safety:

1. Do you have an agreed and explicit approach to continuously improving care that everyone understands?
2. Do you have a systematic programme for building skills to enable staff to continually improve their services?
3. Are senior leaders present on the shop floor, engaging staff and facilitating improvement?
4. Do you have a system for measuring how safe you are, and the impact of any efforts to improve safety?
5. Do you have open discussions about safety with patients and staff?

To find out more:

- The Virginia Mason Institute provides resources to help organisations to apply Lean principles in healthcare – **www.virginiamasoninstitute.org**
- Find out more about the North East Transformation System – **www.nelean.nhs.uk**
- Visit **www.health.org.uk/safety** to find out about the Health Foundation's work on improving patient safety

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We are here to support people working in healthcare practice and policy to make lasting improvements to health services.

We carry out research and in-depth policy analysis, fund improvement programmes in the NHS, support and develop leaders and share evidence to encourage wider change.

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