Measurement and Monitoring of Safety Framework e-guide
Better Questions Safer Care

Applying the Measurement and Monitoring of Safety Framework to support safety improvement in healthcare.
Using this e-guide

What it’s for
This e-guide will help you understand and use the Measurement and Monitoring of Safety Framework (MMSF).

It is based on the experiences of a range of organisations who have used the MMSF in their settings – from mental health, acute medicine through to ambulance services. It does not replace existing Health Foundation publications on the measurement and monitoring of safety but is designed to complement them.

The e-guide summarises learning captured through implementation of the MMSF in different contexts. It also includes reflections of managerial and frontline staff on using the MMSF. The aim is to identify learning from teams testing the MMSF and the challenges and benefits this presented.

Navigating
To use this document with all its interactive features you will need to view it through ADOBE ACROBAT READER: https://get.adobe.com/uk/reader/otherversions/

You can print this document or read it on screen. You can read the e-guide in chronological order or access information to suit your requirements. Each page includes relevant links to other parts of the e-guide as well as extra resources, such as short films and external links.

There are four main sections:

The MMSF →

Considering the MMSF →

Using the MMSF →

Ensuring learning and reflection →

This e-guide has been produced in partnership by OPM and wdid. OPM and wdid provide learning capture, learning event and resource development expertise as the technical provider for the Health Foundation’s Safety Measurement and Monitoring Programme.
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Considering the MMSF

Using the MMSF

Ensuring learning and reflection
Foreword

The MMSF e-guide is intended for health and care organisations to help improve how patient safety is measured and monitored.

The e-guide builds on the 2013 research report, The measurement and monitoring of safety, by Charles Vincent, Susan Burnett and Jane Carthey. The research has since influenced frontline practice and national policy, both in the UK and internationally.

The Health Foundation commissioned the research to try and answer the question: how safe is patient care? The answer to the question had remained elusive, despite our health and care systems being awash with data. There are many reasons which might help to explain this, but it matters more to patients and staff to have a practical way forward to improve how patient safety is measured and monitored.

The research report does just that, proposing a new approach that includes five fundamental questions that teams and organisations should ask.

This e-guide shares the learning and experience of a group of improvement organisations and frontline teams who have co-produced it. They have tested this new approach as part of a Health Foundation programme. The e-guide also provides a 'one-stop shop' for the many practical resources that have been produced since the original research was published.

This e-guide has been tested and co-produced with the following organisations:

- Advancing Quality Alliance
- Bradford District Care NHS Foundation Trust
- Bradford Teaching Hospitals NHS Foundation Trust
- Haelo
- Healthcare Improvement Scotland
- Merseycare NHS Foundation Trust
- NHS Borders
- NHS Tayside
- North West Ambulance Service
- Yorkshire and the Humber Improvement Academy
There is no single way to adopt this new approach, but the experiences of the teams suggest it’s about at least these three things:

1. Sensing problems not just seeking assurance: Start with an honest assessment of where you are, what safety information you hold and where the gaps exist.

2. Looking in not just looking out: Listen to what your staff and patients say is important for understanding safety, not simply what is required by external bodies.

3. Doing less not just doing more: Resist the temptation to introduce a new set of measures before you’ve assessed whether the current ones are adding value.

The journey to improve patient safety never ends. Changing patient expectations and advances in clinical science mean safe care remains a ‘moving target’. But a rounded and more ‘real world’ understanding of safety in your organisation is the cornerstone for making improvements in the future.

This programme is supported by the Health Foundation, an independent charity committed to bringing about better health and health care for people in the UK.
The Measurement and Monitoring of Safety Framework

This section contains an overview of MMSF, insights from the work that has been done to test the MMSF in practice and some practical steps to take in getting started. It should be viewed in conjunction with the original 2013 measurement and monitoring of safety report.

How safe is the care we deliver?
This is a difficult question. Difficult because of the complex nature of care systems, because our understanding of safety and the systems to measure and monitor it continue to evolve.

To help answer the question, the MMSF prompts you to consider:
1. Has the care we deliver been safe in the past?
2. Are our systems and processes reliable?
3. Is our care safe today?
4. Will our care be safe in the future?
5. Are we responding and improving?

To know how safe your care is, you need to consider all five of these questions in relation to your safety measurement and monitoring activities, processes and systems.

The MMSF – key points

Changing your safety focus
Those who use the MMSF often find that their measurement and monitoring systems have a much greater emphasis on past harm. Regulators and others who scrutinise and assure our care often require this data.

Broadening your view of harm
What you measure and monitor is driven by your understanding of what constitutes harm. A narrow view results in narrow measurement and monitoring.

Having a shared understanding of safety
Variation in understanding further compounds this. Ask ten staff in your organisation or team for a definition of harm. Is the answer consistent?

Move away from managing risk to managing safety
The MMSF helps view safety in a more holistic fashion. From a frontline perspective this means a shift in the role of frontline staff – empowering them to take a proactive role in the development of systems for measuring safety.
Using the MMSF as a lens to view your existing safety work

The MMSF helps you to reposition your current safety and quality work, whether you have a balanced focus in monitoring safety, or you concentrate on one or two domains.

Taking a systemic approach to safety puts an end to safety initiatives being monitored and acted on in isolation. It removes organisational silos and promotes a culture of collective responsibility for safety.

Expanding our view of harm – a new typology: general harm, failure to provide appropriate treatment, delayed or inadequate diagnosis, psychological harm and feeling unsafe.

Vincent, Carthey and Burnett
The Measurement and Monitoring of Safety Framework

The framework for measuring and monitoring safety – and useful prompts for using it in practice

Integration and learning prompts
- Use the analysis of incidents as a starting point to reveal the wider issues in the system.
- Place more emphasis on learning, feedback and action than simply on data collection.
- Integrate and tailor information to make it meaningful from the ward to the board.

Past harm prompts
- Identify the different types of harm that can exist in your setting.
- Use a range of safety measures, while understanding their strengths and limitations.
- Ensure the measures are valid, reliable and specific.

Reliability prompts
- Specify the level of reliability you would expect in areas of standardised practice.
- Use local and national audits and initiatives to monitor reliability.
- Understand what contributes to poor reliability.

Sensitivity prompts
- Select an appropriate mix of formal and informal safety monitoring mechanisms.
- Use this information to take timely action to avert safety issues.
- Reflect on whether current structures and committees enable timely action to be taken.

Anticipation and preparedness prompts
- Don’t wait for things to go wrong before trying to improve safety.
- Explore new opportunities to develop systematic ways to anticipate future risks.
- Use a variety of tools and techniques to build an understanding of the factors that give rise to safety issues.

Access a copy of these prompts in the form of a poster →
The Measurement and Monitoring of Safety Framework

What is the MMSF?

The MMSF is:

- A tool to help us move from thinking about the absence of harm to the presence of safety.
- A lens to understand safety.
- A quality framework as much as a safety framework.
- About the monitoring of safety as much as measurement.
- Adaptable.
- An aid towards a holistic view of safety.

The MMSF is not:

- A performance management tool.
- Something that can be implemented straight away.
- Just about identifying measures.
- Something that tells you why things go wrong.
- A one-off exercise.
- The solution to all your safety issues.

The wider dimensions of safety depicted within the five domains has stretched people’s outlook on patient safety in a very positive way.

Regional Improvement Body

The MMSF is good at breaking down a massive area (safety) into manageable chunks and can be easily applied. (It) will help structure thinking.

Focus Group Contributor

What is the safety measurement and monitoring framework – a film by the UKIA
# The Measurement and Monitoring of Safety Framework

## Typical first steps

There is no single right way to begin working with the MMSF, but the following steps may guide your planning.

<table>
<thead>
<tr>
<th>Step 1:</th>
<th>Step 2:</th>
<th>Step 3:</th>
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<tbody>
<tr>
<td>Familiarise yourself with the key concepts. Take time to understand the individual domains, the framework as a whole and the research underpinning it.</td>
<td>Explore the framework with colleagues. Discuss the meaning, implications and benefits of the MMSF with colleagues and key stakeholders.</td>
<td>Develop your approach. Set out the process inputs that will help you achieve your desired outcomes as part of a Theory of Change.</td>
</tr>
<tr>
<td><em>Read the original report.</em></td>
<td><em>Use the maturity matrix</em> to self-assess your current position.</td>
<td>Read how the test sites applied the MMSF and the different ways it has been used. Involve the patient perspective from the beginning.</td>
</tr>
<tr>
<td><em>Read the practical guide.</em></td>
<td>Use the mapping exercises to identify your current safety measures and activities and the key stakeholders to want to influence.</td>
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<tr>
<td><em>Read the sections in this e-guide.</em></td>
<td><em>Watch the introductory videos in this e-guide.</em></td>
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<th>Step 4:</th>
<th>Step 5:</th>
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<tbody>
<tr>
<td>Implement the MMSF.</td>
<td>Share, learn and improve. Any improvement work is a cycle not a one off exercise.</td>
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<tr>
<td><em>Plan and timetable</em> your activities to implement the MMSF.</td>
<td><em>Develop a process to capture learning.</em></td>
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<tr>
<td>Assess whether you are ready based on what teams and organisations told us would have been useful to have in place from the beginning.</td>
<td><em>Develop networks.</em></td>
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<td><em>Communicate what you are learning.</em></td>
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**The measurement and monitoring of safety framework Getting started**
The Measurement and Monitoring of Safety Framework

MMSF Maturity Matrix

This Matrix helps organisations assess the maturity of their safety measurement and monitoring systems. We have also found organisations find the Matrix provides an invaluable ‘way in’ to understanding the framework.

Exploring MMSF Maturity in this way is designed to help healthcare organisations:

• Visualise the five domains of the MMSF in greater detail.
• Facilitate a process of self reflection and assessment that helps identify potential gaps between their current systems and systems that are described as mature.
• Use it as a tool to structure initial conversations with staff when exploring the use of the framework.
• To broaden horizons around the possibilities of safety, measurement and monitoring systems.

The Matrix also provides guidance on holding a group-based workshop.

The Maturity Matrix has been developed with the organisations who contributed to the testing of the MMSF. While it has not currently been formally evaluated, test sites and regional improvement bodies found it useful to provide a deeper perspective, structure gap analysis, conducting before and after assessments and to structure conversations around the concepts within the MMSF, using tangible examples of progress.
Using a framework: what does it mean to you?

Frameworks are designed to guide thinking. They do this by providing you with theories and ideas from original research. Frameworks like this don’t tell you how to apply theory or provide answers to specific problems.

To get the best out of a framework such as the MMSF, the user needs to ask: “What does this mean to me?”

This contextualising takes time and effort, which can sometimes seem counter-cultural in busy working environments, especially where people are used to fast-paced decision-making. Nevertheless, professionals who have taken time to explore and use the MMSF have found it very beneficial.

Once contextualised, the framework can give you a structure on which to align your own safety strategy. These safety theories and ideas, often missing in everyday practice, will help you move your thinking and practice forwards.

A common question people ask when faced with a conceptual framework, such as the MMSF, is where to start? The very nature of a conceptual framework is that this is not defined. It is up to the user to define. Don’t be tempted to shoehorn someone else’s approach to fit your context. The place to start will become clear from your time spent understanding the MMSF and the resulting exploratory conversations that will inevitably be part of that. This e-guide is intended to help you do this.
Ten guiding principles for safety measurement and monitoring:

The MMSF authors describe the intended purpose of the MMSF in these ten guiding principles for safety measurement and monitoring:

1. A single measure of safety is a fantasy.
2. Safety monitoring is critical and does not receive sufficient recognition.
3. A mixed model of leading and lagging safety measures is necessary.
4. Integration and learning: invest in technology and expertise in data analysis.
5. Safety information cannot be seen in isolation from wider quality and financial measures.
6. A blend of externally required metrics and local development is necessary.
7. Clarity of purpose is needed when developing safety measures.
8. Empowering and devolving responsibility for the development and monitoring of safety metrics is essential.
9. Collaboration between regulators and the regulated is critical.
10. Beware of perverse incentives when developing safety measures.

Read about early learning from the evaluation of the practical testing of the MMSF (P36) →
The Measurement and Monitoring of Safety Framework

Past Harm – has our care been safe in the past?

Definition
The measurement of multiple types of harm, over time, to help assess whether care has been safe in the past and is becoming safer.

Core principles
The MMSF challenges us to broaden our view of what constitutes harm, to challenge the sometimes narrow view of existing reported data and widen the methods of monitoring and measurement.

The majority of existing measurement and monitoring activity is likely to be focused on past harm. The MMSF prompts users to ensure that actions generated from incidents of past harm are tracked to find out if the desired outcome is achieved. Over time, users can develop a portfolio of measures and systems that provide a picture of safety vulnerabilities based on previous events.

The MMSF encourages organisations to record the root causes of past harm incidents thematically and share them beyond traditional team, department and organisational boundaries. This activity is strengthened using the core principles of the Integration and Learning domain. Organisations should build capacity and capability in order to respond to past harm, and to build provision for constant, high frequency monitoring and review. This process becomes increasingly fine tuned as appreciation of the breadth of harm builds.

This process of continuous organisational improvement means organisations will improve beyond the statutory requirements and the requirements of regulators.
The Measurement and Monitoring of Safety Framework
Past Harm – has our care been safe in the past? Continued

Why this domain is important
There will always be a need to measure past harm. It is vital for provider organisations, patients, commissioners and regulators. But despite the perceived focus on past harm measurement and monitoring in most safety systems, there is a temptation to gloss over this domain. Don't.

Organisations are encouraged to develop systems that include mortality statistics, systematic record review, selective case note review, reporting systems and other existing data sources.

Much of the existing past harm measurement and monitoring activity is driven by the reporting requirements of commissioners and regulators. This type of data may be of limited use to those providing care. Frontline teams often collect past harm data and never see it again.

What test sites tell us
Test sites have found systematically examining the Past Harm domain can be fruitful. For example, one site found that re-examining and improving the format of past harm data dispelled myths around the differences in rates of harm between weekends and weekdays.

Test sites have found that a new focus on past harm data collection can bring fresh insights.
• Providing a tangible introduction to the MMSF for staff with relatable concepts.
• Using it as a basis to improve existing measures.
• Exploring whether there is a need for further measures, or to focus on developing capacity to act on existing data.
• Revisiting the concept in light a wider definition of safety – in the context of the whole of MMSF.
• How focusing on other domains of the MMSF can make existing past harm work more effective.
• High numbers sometimes indicate that reporting has improved rather than that safety has declined.
The Measurement and Monitoring of Safety Framework

Past Harm – has our care been safe in the past? Continued

Generating new insights from existing data
In many organisations, an emphasis on measurement and monitoring can lead people to think there is little more to do when it comes to assessing past harm. We have found the opposite. It is not always about collecting further data. By systematically reviewing existing measurement and monitoring, test sites improved their understanding and increased their intelligence1. Re-examining existing data can throw up surprises.

Quality improvement knowledge, specifically around the display of data and variation is key; interrogation of the data, and a system’s capability to produce the raw data, are equally important.

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1 ‘Intelligence’ – A term used to describe a mix of qualitative and quantitative sources of information. It offers a much richer mix of information than traditional quantitative sources of performance data.
A good place to start
Past Harm can make the MMSF accessible for those who don’t have a background in safety systems thinking. Due to the existing emphasis on past harm, staff are often more comfortable with initial discussions. From there, it is easier to discuss strengths and weaknesses of existing past harm systems, before moving the conversation towards the other domains and more anticipatory safety thinking.

Don’t be afraid to start small
If you don’t have a good grasp of past harm, areas such as complaints and incident reporting systems can be a rich source.

Don’t just focus on the bad
You can learn a lot from looking at what works. One test site, in a mental health setting, found that while there was a lot of emphasis on incidents with patients, a better direction of inquiry might be to learn from professionals who experience no incidents. This is called positive deviance.

Responding appropriately
Developing the understanding, and the systems, to respond appropriately is crucial to improving safety monitoring. Test sites found that knowledge of the principles of variation and the display of data over time are vital.

Unlock the potential of past harm data
Other domains, such as Sensitivity to Operations and Integration and Learning can help unlock the potential of past harm measurement and monitoring.
The Measurement and Monitoring of Safety Framework

Reliability – are our systems and processes reliable?

**Definition**
Gauging the probability that a task, process, intervention or pathway will be carried out/ followed as specified.

**Core principles**
The notion of reliability originates from industry. It is very transferrable to healthcare processes. For example, you can measure how reliable your systems are to ensure all test results are reported within a given time. There are many other similar processes where reliability underpins the safe delivery of care and which can be measured.

When applied to care decisions, translating reliability into health and social care is more complicated as these decisions are not always black and white. There will be some occasions when following guidance is not appropriate. Some guidance may also lack the necessary detail to be of use in a given context. However this should not stop you looking at the reliability of a care process.

For many standardised interventions and processes, for example medicines reconciliation or theatre checklists, reliability is an important safety principle. Many have specifications (descriptions of the desired process and process elements), standards or protocols that describe how something should be carried out. These are sometimes grouped, as with care bundles, to increase their effectiveness.

For high-volume processes and interventions, including many clinical procedures, nursing tasks or information handovers, organisations should develop specifications that go beyond high-level policy. These specifications should be developed objectively and with patient involvement where possible. Organisations should strive for a high level of awareness of the specifications and agree on what the desired legal\(^2\) or normal operating space for these processes is understanding what environment would allow these specifications to be achieved reliably.

\(^2\) “Legal” – a term used by Amalberti et al (2006) to describe the expected safe space of working as defined by laws and professional standards. See page 26 of the original The Measurement and Monitoring of Safety paper for a summary.
Feedback needs to be timely and tailored to specific audiences. Organisations should develop assurance processes such as clinical audits for this purpose. Such processes should be designed to promote enquiry and investigation rather than sanctions.

Reliability measurement and monitoring is not the sole preserve of management. It should be owned by the professional groups themselves. They have the knowledge to improve.

**Why this domain is important**
Are we working as intended or is there variation? Measuring and monitoring reliability helps us understand this. This foundation of reliable processes enables clinicians to treat patients under highly pressurised circumstances. As Atul Gawande suggests in his Reith Lecture, the *Century of the System*, ‘standardised, reliable processes are what make daring possible’.

**What test sites told us**

**Ensure a broad view of processes**
Reliability assessment can be difficult for workforces and processes that rely on other parts of the system for data. For example, the ambulance service involved in the testing found that getting access to frontline staff was difficult, so they were initially limited to using retrospective paperwork audits. To build a more complete picture, they needed electronic reporting for crews and feedback from hospitals.

**Capability of assurance systems**
To understand reliability, you must evaluate existing assurance systems, their ability to identify issues and the extent to which processes and systems rely on individuals. Reliability measurement depends on the accuracy of the process/task description, the extent of the inclusion of non-clinical key process steps and the limits of existing assurance systems.

**It can be hard to get started**
The Reliability domain can be difficult to get started with – especially where very little process specification exists. Areas with high levels of specification, such as secure mental health settings, will find the process easier. The potential benefits and accessibility of reliability data is increased when considered alongside the other domains. A detailed assessment can be difficult to get started with – especially where very little process specification exists. Areas with high levels of specification, such as secure mental health settings, will find the process easier. The potential benefits and accessibility of reliability data is increased when considered alongside the other domains. Domains such as Sensitivity to Operations and Integration and Learning provide a platform to make sense of reliability data alongside other sources and perspectives – creating a more nuanced picture of safety.

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It is hard to know if your systems of reliability assurance are reliable.

Test Site

Chapter 7: Are our clinical systems and processes reliable? Reliability of clinical systems, processes and behaviour

The Measurement and Monitoring of Safety Framework
Investing in systems
Investment in systems was important for many of the test sites. In some cases investment was targeted at improved collection of information, particularly with mobile staff who work autonomously and are not easily observed. In other cases, investment was made to ensure the robust assessment of reliability, particularly in services that rely on data from others.

Choosing which processes to measure
Consider expanding the scope beyond processes with heavily mandated standards, for example drug administration. Think about non-clinical as well as clinical processes. For example handovers and patient discharge process. Use the anticipated areas of harm (see Anticipation and Preparedness domain) to identify processes where reliability needs to be monitored.

Understanding the limitations
Limitations can be reduced with investment over time, but not eradicated. For example, too much focus on reliability can drive a very task-focused view of care delivery. Focusing on a specific task (or a component part of a task) may divert attention from the outcome of the whole process. As a result clinicians can find themselves responsible for delivering highly specified processes, but then judged on the output.

Human Factors
Test sites, particularly those with a frontline focus, have found understanding Human Factors helps to unpack Reliability. Knowledge of Human Factors can trigger a greater level of self-awareness and helps to move conversations away from individual blame towards an understanding of how interconnected systems influence safety.

Process descriptions are important
Descriptions should make processes tangible. So, the language we use is important. A specification should be written in language that is accessible to those carrying out the work. It needs to provide enough detail to avoid ambiguity but also avoid unnecessary detail. This can require a mix of evidence, best practice information, dialogue with professional groups and small cycles of testing such as Plan, Do, Study, Act (PDSA).

Just knowing what good looks like does not mean you can assess reliability against it.
Test site
The feedback loop from other domains validates Reliability.
Regional Improvement Body
The Measurement and Monitoring of Safety Framework

Reliability – are our systems and processes reliable? *Continued*

Collective responsibility
Creating or reviewing process specifications can help promote collective responsibility. Test sites found that the resulting measurement and monitoring de-personalises variations in approach between individual professionals. It helps move away from myth, legend and opinion to a more objective discussion.

Reliability and quality improvement
The measurement of reliability is very closely connected to understanding variation, a key area of quality improvement theory. Understanding variation (or consistency) of process reliability is the first step. This helps organisations to decide if the varying reliability is desirable.
The Measurement and Monitoring of Safety Framework

Sensitivity to Operations – is care safe today?

Definition
This domain concentrates on the day to day, hour by hour and even minute by minute management of safety.

Core principles
Is care safe right now? The Sensitivity to Operations domain focuses on bringing together a mix of intelligence to help clinicians, managers and leaders assess and act upon safety in real time.

This intelligence combines traditional data sources such as data from other public agencies – for example the police. It usually includes workload, patient mix, staffing, patient flow, infrastructure and information about the wider environment, from outside the team or organisation. It could also include softer signals, for example in a ward setting this could include the demeanor of managers, buzzers going off or quiet, the physical state of a ward and the ‘chatter’ of staff.

Bringing these data sources together requires a systematic approach. Departments and organisations should consider formal and informal methods such as safety walkabouts, safety specific operational meetings, briefings, de-briefings and safety huddles, as well as more real time feedback from patients and staff.

Investment in data dashboards can make the task of monitoring these sources easier. Dashboards should be sensitive enough to help professionals pick up, differentiate and act upon even minor disturbances. These systems should be linked to the information derived from work on the Past Harm and Reliability domains.

The aim is to provide a feedback loop of early and preemptive actions resulting from sensitivity to operations measurement and monitoring. This feedback should be clear and audience-specific.

Sometimes you don’t know what you are feeding off until it happens.
Test site
The Measurement and Monitoring of Safety Framework

Sensitivity to Operations – is care safe today? Continued

Why this domain is important
Teams say this domain began their process of thinking differently about safety. It can be a good way of beginning to explore the whole MMSF and also to introduce vital organisational safety skills, such as listening and reflection.

The methods and principles within the domain, for example safety huddles, can also be a useful platform to bring together past harm and reliability data.

What test sites told us

Safety huddles can help
Safety huddles can help achieve greater sensitivity to operations. They have also created efficiency gains such as reduced handover times.

A safety huddle is a way of presenting a wide range of knowledge, usually in a frontline setting, so that teams can make sense of it and take action. A typical structure used in the testing revolves around creating a short (under ten minutes), at least daily, team discussion around three key prompts:

- Were we safe yesterday?
- Are we safe today?
- Will we be safe over the next 24 hours?

The domain that makes you think differently.
Regional Improvement Body

(Safety huddles) Staff have a voice – they feel listened to.
Test Site

The MMSF →
Considering the MMSF →
Using the MMSF →
Ensuring learning and reflection →
Using these questions, the team can hold a review of past harms using knowledge of incidents and using metrics. For example one team looked at: the number of patients with a new pressure ulcer, an infected cannula, falls, trips, slips, patients without case notes, staffing numbers and weather.

The team then looks at current system status. In a medical ward team, for instance, this might include the environment, staffing and patients at risk. The huddle process builds over the week with inquiry into certain possible harm areas. Huddles should be multi-professional and can include clinical professionals, housekeepers, ward clerks, estates – all staff should contribute without hierarchical barriers.

Safety huddles can be applied at different levels using varying forms of intelligence. At an organisational level, investment in data quality and flow reports provides the whole organisation a more real time view, allowing more informed decisions.

It is important to note that safety huddles are a means to an end: to create a forum for better communication of sensitivity to operations. Some teams have taken alternative approaches to this end, such as adapting existing situational aggression assessment tools in a forensic mental health setting.

It relies on trust
Success in this domain, and the safety huddle methodology commonly found within it, relies on trust. Teams, managers and leaders need to be able to talk honestly about all of the influences on their ability to deliver safe, harm-free care today.

“Safety huddles) are the glue that pulls ward safety improvement together.
Regional Improvement Body

A short film on safety huddles
(Source: Yorkshire and the Humber Improvement Academy)
Keep an open mind

Many of the test sites made surprising discoveries. For example, in an acute medical ward setting, the cleaner had key intelligence that helped create a more rounded sensitivity to operations. In a forensic mental health setting, small changes in staff behaviours in the run up to and during changeover of staff at the end of shifts were found to increase patient anxiety and the likelihood of patient incidents.

Taking a broader view does not always result in more data. In some cases, though, it makes teams more aware of what data they use and don’t use, which can sometimes create opportunities to reduce the volume of data.

Implicit or explicit approaches

Whatever the methods, this activity can be done implicitly, as teams may find they are already doing some of this in some capacity. It doesn’t have to be called ‘increasing sensitivity to operations’ for it to work. Busy teams don’t always have the time to learn the terminology.

Visual display and triggers

Test sites found visual display boards were useful. Display boards can make intelligence easier to interpret. They can also be used to structure safety meetings or huddles. They can show intelligence sources over time, for example, in the form of a run chart, and data such as ward ‘temperature measures’. With an understanding of variation, some teams developed trigger points.
Anticipation and Preparedness – will care be safe in the future?

Definition
This domain focuses on the identification of possible sources of future harm and working to become more resilient to them.

Core principles
Preventing harm is a major element of the MMSF. This requires a rounded conversation on future harm scenarios.

True anticipation and preparedness requires a new kind of dialogue – one that creates conversation taking into account all domains of the MMSF, and therefore more representative understanding of possible harm scenarios. These scenarios can then be used to create counter strategies.

Possible scenarios should be considered even where there has been no previous recorded incident of harm, for example, could we miss a vital test result? They should be used to promote discussion, simulation, action and rehearsal in order to negate potential sources of harm.

Organisations should use formal and informal methods as they develop systems to anticipate incidents. Organisations should also reflect systematically on incidents, using factors that could signal more serious problems ahead.

4 Scenarios refer to the complex web of activities, oversights, contextual factors and processes failures that come together to form an incident of harm.
Other harm identification techniques that can strengthen anticipatory capability include screening, safety cases, safety culture assessment and the analysis of basic workforce data – such as sickness and absence trends. The strategies created in response to harm scenarios should be tested using processes such as collaborative cross checking (a formal process of providing feedback on the viability of strategies).

Why this domain is important
In many cases, commonly used methods of anticipating harm, such as risk assessments, have become box-ticking exercises, which dulls their effectiveness. They are often narrow in focus and have limited input from wider staff groups. They often produce actions which are not carried out. The links between actions and the desired outcome (reduction in harm) can be tenuous.
The Measurement and Monitoring of Safety Framework

Anticipation and Preparedness – will care be safe in the future? Continued

What test sites told us

Look beyond the department or organisation
Organisations outside of health and social care may have valuable intelligence. For example, during MMSF testing it was found that taxi drivers hold valuable anticipatory information sources for ambulance trusts. Sources of intelligence such as the performance of other services or weather forecasting could hold the key to greater anticipation and preparedness. A number of the Regional Improvement Bodies involved in testing the MMSF have begun conversations with their respective police forces.

Variation
Quality improvement knowledge can help you to understand signals from anticipatory data, for example, trends in sickness and absence data. Methods such as run charts and statistical process control (SPC) charts can provide structure and prompts to differentiate between normal and special-cause variation. This reduces the risk of reacting inappropriately and creating damage. Care must be taken to ensure staff appreciate how processes are interconnected.
The challenge
Some of those involved in testing said this domain is the hardest of all to understand and make a reality. For example, Regional Improvement Bodies have had to work carefully to make the concepts accessible. In one case, working with an ambulance service meant starting with conversations about scenario planning for major incidents, and then de-escalating the scenarios to reflect more routine/frequent frontline processes.

Anticipation and preparedness is a constant cycle
Building this capability should be a constant cycle of development, driven by reflection and the development of systems to enable it. Developing more anticipatory safety capability should be a strategic goal for departments, organisations and systems; one that builds towards an organisations newly expanded understanding of safety.
Integration and Learning – are we responding and improving?

Definition
The development of systems to promote a cycle of learning and sharing from safety incidents, multiple sources of safety intelligence and insights developed through the other domains.

Core concepts
Integration and learning can be seen as the glue that holds a rounded safety picture together.

To make sense of the volume and variety of safety intelligence, a team or organisation needs to build systems of integration and learning. This means collecting, theming and weighting safety intelligence that includes – and goes beyond – incident report data. It also means asking the question: “are we learning and improving – and do we have the information to show this?”. Including sources from beyond traditional departmental and organisational boundaries increases the richness of the picture. Sources may include time series data, automated dashboards, learning events, newsletters and presentation of intelligence to suit specific audiences.

The theming of safety learning should be shared outside departmental boundaries, to promote collective understanding. Information should be tailored for specific audiences. The needs and potential responses of those audiences should be considered in advance.

A strategy should be developed for the integration, weighting and interpreting of safety measurement intelligence. This could be based on dashboards containing predominantly time series data to understand variation. Reflection, learning and responses should be carefully retained so they add to the organisation’s knowledge.

“...The aim is to create a clear, unfiltered view of organisational safety.
Vincent et al 2013

The MMSF

Considering the MMSF

Using the MMSF

Ensuring learning and reflection
Organisations should consider and build upon their capability for learning. To enable the analysis of different types of intelligence, including incident reports and other qualitative and quantitative sources, the drawing out and theming of lessons and, where necessary, the initiation of improvement programmes.

The rate of learning is as important as the rate of safety reporting. Information should be pulled in and shared ideally via an automated system. The system should give timely, recipient specific feedback. IT developments can contribute to this; they can help ensure the measurement, monitoring, feedback and learning cycle is not only integrated but institutionalised.

**Why this domain is important**
This domain isn’t just about sending out a copy of the MMSF to brief staff. It’s about creating systems to ensure organisational integration and learning. It can be challenging as it is more conceptual than other domains and requires work across departmental and sometimes system boundaries.

The resource and infrastructure for data/intelligence collection is often driven by the monitoring demands of external influences, such as regulators. This can impact on an organisation’s capability to analyse, learn from and act on that data. Without Integration and Learning, the approach advocated in the MMSF can’t be applied.

**What test sites told us**

It’s the central theme of the MMSF
Integration and Learning is the heart of the MMSF. It’s what makes it a holistic, joined-up framework, rather than just a set of individual principles. The Integration and Learning domain helps you triangulate your activities in the other domains.

It’s an ongoing process
Proper reflection and learning is a continuous loop. Decision-making and investment to build capability should reflect an ongoing commitment. This cycle takes many of the characteristics of Deming’s Plan, Do, Study, Act (PDSA) cycle.
Share work on other domains
Sharing what you've learned from the MMSF is an important part of Integration and Learning. For example, share how others have contextualised the MMSF or individual domains in their settings.

Help people consider data differently
One of the purposes of this domain is to help people understand the wider system that data feeds into and how it helps staff in other parts of their organisation.

It helps to recognise that some information may be seen by some as bad news. Organisations should plan to help those staff absorb, reflect and act on such information. This kind of information can also be balanced by sharing successes, positive developments and good safety practice.

Leadership and coordination
Leadership has to play a role in demonstrating a more rounded view of harm, working towards a more anticipatory and balanced system of safety and at its most basic, ensuring actions are carried out. Strategic investment in the systems for integration and the capability for learning can only be made by those at the top.

Some test sites considered the role of coordination of integration and learning activity, in particular at frontline level, as important and one that should be planned for. This is someone who can take an overall view of how the various development activities come together, against all of the domain prompts, to contribute to a more rounded view of safety.
Integration and Learning – are we responding and improving? Continued

**Time is a common theme**
It takes time to digest, reflect upon and plan how best to use the MMSF. It also takes time to influence frontline staff. This time needs to be built in strategically.

**Ways to share learning**
While measuring and monitoring infrastructure development is a core element of creating greater integration and learning, those involved in testing found a range of other methods helpful, including:

- Seminars and events.
- Informal learning events such as curry evenings.
- Electronic learning community platforms such as Yammer.
- Social media.

**Methods of learning**
Learning and reflection are skills. Those involved in the testing found it useful to invest time in learning methods and tools, especially the techniques of Appreciative Inquiry change management approach and learning logs which were used to capture learning and structure learning dialogue.
Considering the MMSF

Learning from the evaluation of the practical testing of the MMSF
Why executives should consider the MMSF
Why commissioners should consider the MMSF
What the MMSF means for the public
Benefits of using the framework
Case studies

Key considerations

Why consider the MMSF now?
Mapping of existing work
Why frontline staff should consider the MMSF

The MMSF
Using the MMSF
Ensuring learning and reflection
Learning from the evaluation of practical testing of the Measurement and Monitoring of Safety Framework

Eleanor Chatburn and Prof. Charles Vincent, University of Oxford

Alongside the testing of the MMSF that has resulted in this e-guide, further testing activities have been evaluated by members of the original MMSF research team at the University of Oxford.

Summary of the main findings:
• The most substantial impact of working with the MMSF was the broadening of participants’ perspective towards a more holistic view of safety. The MMSF changed the language people used and encouraged them to stop and reflect.
• Engagement with the MMSF promoted ‘light bulb moments’, where participants shifted from a ‘rear view mirror’ approach to a more proactive mindset of enquiry.
• Successful sites used the MMSF as a conceptual framework and stimulus to new approaches to old problems. These sites also attempted to use the MMSF to structure ambitious organisational-level changes in their usage of safety information.
• We observed that some sites neglected the monitoring work and usage of softer measures, and/or did not attempt to work with all the MMSF domains.
• Successful sites took time to achieve a thorough understanding of the Framework and its core ideas and purpose. They used innovative approaches to engage staff and service users, and continually emphasised the importance of treating the MMSF as a whole.

The original report introduced and contextualised the MMSF and drew links between the measurement and monitoring of safety in healthcare and other safety critical sectors.
Summary of our reflections on this learning and practical tips:

- It is essential to work with the entire original MMSF report to develop a full understanding of the purpose of the MMSF and context to this work, before embarking on any practical work.
- New sites may benefit by bringing in MMSF experts early on to introduce the concepts and intended purpose of MMSF.
- Viewing the MMSF through different lenses, such as a patient story, is a very effective means of promoting understanding.
- Undertaking a gap analysis exercise to map current measurement approaches against the MMSF domains is a useful initial exercise, which can be repeated at later time-points.
- Changing mindsets and entrenched safety practices across an organisation will take time and dedicated support. Sites will benefit from gaining support from senior managers and their board at an early stage.
Considering the MMSF

Key considerations

How to use the MMSF
There are many different ways to use the MMSF. It may take some time to consider your approach. This is a natural process that reflects the nuances of the MMSF. A number of different approaches are detailed in section three: Using the MMSF.

Adapt your thinking
Let your thinking be guided by the structure of the MMSF and the questions it raises. Don’t be tempted to alter the framework to suit your own thinking or current activity.

Identify gaps
As you position and consider the MMSF, you should begin to identify gaps in your organisation’s measurement and monitoring, and in current thinking.

It takes time
It can take up to six months in some cases. Changing thinking is not just a case of signing off a few actions. In a period where we are so desperate for quick fixes and tools, this process can feel uncomfortable and go against the culture. It helps not to over-promise and make too much of the MMSF in this key reframing period.

Quality Improvement / Human Factors capability
They’re not prerequisites, but these capabilities will certainly make things easier.

Upfront investment
Introducing the MMSF can require some financial investment, particularly at frontline level. For example, to release staff for briefings, development and learning activities. A key part of using the MMSF or activities around its domains at this level is to reflect on current practices. Staff will need the time and space to do so.

“It’s about helping us to think differently, not simply justifying the way we think.”
Regional Improvement Body
Why consider the MMSF now?

Dialogue around patient safety is a live issue within any care institution. Priorities and perceptions are continually influenced by:

- National context – high profile inquiries, national policy shifts, changes in expectations from regulators.
- Local context – recent safety incidents, impact on patients, staff concerns, regulatory safety ratings, legal\(^6\) costs, strategic priorities.

Considering current priorities within your organisation is a good place to start when thinking about the MMSF. Identifying how the MMSF can help you meet these wider system priorities is an important step.

See following page for mapping of existing work.

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A key element of this programme is the drive to look across a range of other programmes and policy areas to which the MMSF might be relevant – this ‘cross programme approach’ has been successful in engaging our safety teams, adverse event teams etc.

Regional Improvement Body

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\(^6\) Legal – A term used by Amalberti et al (2006) to describe the expected safe space of working as defined by laws and professional standards. See page 26 of the original The Measurement and Monitoring of Safety Framework for a summary.
Considering the MMSF
Mapping of existing work

Example of mapping current measurement and monitoring activity around the MMSF in a mental health setting
(Source: Merseycare NHS Foundation Trust)

Has patient care been safe in the past?
- Complaints (number and themes)
- Incidents of violence
- Incidents of aggression
- Claims
- Staff feedback
- Patient feedback
- Patient Tracker
- Sickness & Absence rates

Are our clinical systems and processes reliable?
- Compliance with security checks
- Consistency of staff approaches
- Post-incident debrief
- Compliance with safe staffing levels
- Compliance with increased observation policy
- Utilization of ward atmosphere assessment
- Compliance with environmental audits
- Compliance with security audits
- Use of risk assessments
- Handovers
- Supervision
- Reflective practice
- Compliance with infection control audits
- Number of incidents

Are we responding and improving?
- Oxford Model events
- 72 Hour reviews
- Thematic review of incidents
- Staff meetings
- Reflective Practice
- Supervision
- Capacity & capability of staff accessing and understanding improvement data
- Staff surveys (safety culture)
- Staff feedback
- Patient feedback
- Dashboard of information

Will care be safe in the future?
- Soft intelligence reports
- Patient feedback
- Staff feedback
- Safety training rates
- Sickness absence rates
- Percentage of completed appraisals
- Number of incidents
- Ward atmosphere ratings
- Staffing levels (per shift)
- LOG Meetings
- Planned admissions
- Risk Assessments
- MDT Meetings

Is care safe today?
- Observation levels
- Handovers
- Daily briefings
- Staffing levels
- Ward atmosphere assessment
- Staff skill mix
- Compliance with risk assessments
- Percentage of short notice sickness absence
- Timeliness of meal/rest breaks (staff)
- Soft intelligence reports
Why frontline staff should consider the MMSF

Our test sites tell us that frontline staff are under increasing pressure, and the last thing staff want is ‘yet another’ initiative. Where work has become more task-orientated, it is all about getting to the end of the shift. There is precious little time for planning and reflection. That is why this is not about an initiative or a project. It is about expanding thinking around harm and reflecting on collective practice – on a permanent basis.

Most frontline staff have very little to do with measuring and monitoring safety. They feed data into systems. Feedback often comes much later or not at all.

The five key questions, and their respective domains, have led teams to reflect on their own behaviours and processes involving frontline staff.

• ‘Has our care been safe in the past?’ (Past Harm)
• ‘Are our systems and processes reliable?’ (Reliability)
• ‘Is our care safe today?’ (Sensitivity to Operations)
• ‘Will our care be safe in the future?’ (Anticipation and Preparedness)
• ‘Are we responding and improving?’ (Integration and Learning)

Teams begin to take ownership of their own measurement, reviewing their own data. This is empowering: it gives staff confidence to have conversations about safety in ways that have not happened before.

For some staff, it has been the first time they have seen measurements relating to safety of their ward.

Test Site

Testing has shown the MMSF gives front line teams the confidence and recognition that they can improve safety.

Regional Improvement Body

The attitude now adopted has moved from one of acceptance that incidents will occur to one of disappointment that one has occurred.

Regional Improvement Body

For some staff, it has been the first time they have seen measurements relating to safety of their ward.

Test Site

Testing has shown the MMSF gives front line teams the confidence and recognition that they can improve safety.

Regional Improvement Body

The attitude now adopted has moved from one of acceptance that incidents will occur to one of disappointment that one has occurred.

Regional Improvement Body
### Why executives should consider the MMSF

**Expectations around safety and quality of care are increasing**
Safety incidents are no longer seen as an occupational hazard. When harm is caused there are profound patient, financial, legal and political consequences, as demonstrated by the Francis Inquiry into the failings of the Mid Staffordshire Foundation Trust (2013).

At the same time, the requirements of patients and the systems of health and social care are getting more complex. It is increasingly difficult for any individual or group of individuals to maintain effective oversight across organisations. It is often said that executives feel overburdened with information. This problem is particularly nuanced in relation to safety.

> ‘When harm occurs, there are profound patient, financial, legal and political consequences.’

The limitations of many existing safety systems are well-documented. To avoid harm and its consequences, organisations need to move towards a holistic and proactive system of safety that provides clarity, for staff at all levels, around five key questions.

- ‘Has our care been safe in the past?’ (Past Harm)
- ‘Are our systems and processes reliable?’ (Reliability)
- ‘Is our care safe today?’ (Sensitivity to Operations)
- ‘Will our care be safe in the future?’ (Anticipation and Preparedness)
- ‘Are we responding and improving?’ (Integration and Learning)

The framework helps move from aiming for the absence of harm, to the presence of safety.

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**The MMSF**

**Considering the MMSF**

**Using the MMSF**

**Ensuring learning and reflection**
Considering the MMSF

Why executives should consider the MMSF continued

Understanding the strengths and challenges of the five domains that underpin these questions will help organisations build a more rounded view of safety.

The MMSF moves organisations from assurance to enquiry and from managing risk to building safety. Frontline staff are empowered to take a much more proactive role. This has the potential to build a more sustainable approach to safety improvement, rather than something that is ‘top down’. Instead of just feeding data into the machine, they will find value in measurement and monitoring activities through sharing their experience of what can make a difference – bridging the gap between all organisational levels.

The MMSF moves from assurance to enquiry and from managing risk to building safety.

Test site

Read more about wider considerations for boards on patient safety ➔
Commissioners play an important role in helping organisations use the MMSF.

Incidents of harm damage our systems: they erode public confidence and they have a financial cost. The MMSF enables commissioners to create holistic frameworks of safety with their providers.

Commissioner and regulatory requirements drive a large part of the reporting infrastructure and activity within provider organisations. Measurement to feed these requirements often takes precedence over internal safety measurement and monitoring activity.

Capacity is often stretched to the limit in processing this existing reporting, which focuses predominantly on activity, financial implications and past harm.

Health and social care systems are increasingly interconnected. As the architects of the system, commissioners can benefit from promoting a common language and a shared model of safety. Some of our test sites found that commissioning incentives such as CQUIN (Commissioning for Quality and Innovation) framework\(^7\) were useful in sustaining innovations around the MMSF.

\(^7\) Commissioning for Quality and Innovation – an English commissioning incentive programme designed to support quality improvements and new, improved patterns of care.

(Our aim is) to become the safest health and social care in the country by 2020.
Commissioning Participant
What the MMSF means for the public

Using concepts promoted by the MMSF can help to reassure people who use health services. One test site reported that displaying safety monitoring information in a ward had made patients feel safer. Patients and carers involved in the initial exploration of the MMSF commented that the relationships and communication between people/carers and staff are vital for feeling safe.

Using the five core domain questions, can also enable safety discussions between patients and staff. Sites reported that the MMSF has changed the conversations that wards have with patients about safety.

Performance data on primary and secondary care services is being made available to patients. MyNHS, for example, provides commissioners, professionals and members of the public access to data on local services. Patient safety is a key metric in that data, which allows people to compare organisations.

You may also want to consider how patients can be involved in implementing the MMSF. Other examples include PRASE, a programme funded by the Health Foundation, based in Bradford Teaching Hospitals University Trust which used feedback provided by inpatients.
Considering the MMSF

Benefits of using the framework

Test sites and regional improvement bodies identified benefits throughout the process. This page contains links to test site case studies. You can also find out more about test sites and case studies on the following pages.

Thinking differently moves conversations and planning away from a focus on past harm and risk – at all levels from frontline to executives. Read about how NHS Tayside and Haelo have done this.

Increasing awareness enables proactive identification of sources of future harm. Read about how Bradford District Care Trust has done this.

Safe zone for conversations de-personalises the issues and enables more objective discussions. Provides a framework to structure discussions that staff feel more willing to join. Read about how Bradford Teaching Hospitals Foundation Trust has done this.

Consistency in conversations provides a common structure and language to guide conversations, planning and action at all levels, and across organisations. Brings together a consistent view of what constitutes comprehensive safety thinking. Read about how Yorkshire Humber Improvement Agency and Haelo have done this.

Aligning and pulling together safety initiatives reduces risk of initiatives being carried out in isolation. Planning current and future safety initiatives around the MMSF also helps to identify gaps in safety improvement activities. Read about how NHS Borders has done this.
Breaking down silos between the other dimensions of quality widens our view of safety measurement and monitoring to include other forms of intelligence, not just past harm information, bringing together the sometimes separate dimensions of efficiency and person centeredness. Read about how NHS Borders has done this.

Reducing safety incidents
MMSF has contributed to a reduction in instances of harm. Read about how Bradford District Care Trust has done this.

Efficiency gains
Although not the purpose of the framework, efficiency gains were identified. Read about how Bradford District Care Trust has done this.
Considering the MMSF

Case studies

National perspective: testing the MMSF in Scotland
Healthcare Improvement Scotland concentrated on supporting the testing activities of NHS Borders and NHS Tayside, working to understand that learning from a regional and national perspective and apply it to related national initiatives.

Framing patient safety in a mental health service
Within a general adult psychiatry ward, NHS Tayside used the MMSF to identify gaps in measuring and monitoring and develop a set of measures to help answer the question: How safe is our care?

Ward to board
NHS Borders used the MMSF to change thinking on emerging safety issues. This was done daily, weekly and monthly at ward, department and board level.

Frailty pathway
NHS Borders also tested the MMSF as a way of examining the journey of frail, elderly patients. They used a variety of methods to understand their current measurement, identify gaps, create improvement plans and agree operational definitions of frailty.
Considering the MMSF
Case studies continued

Reflections on supporting the use of the MMSF
Yorkshire and the Humber Improvement Academy, part of Yorkshire and
the Humber Academic Health Science Network, focused on supporting
frontline teams explore the MMSF in both Bradford Teaching Hospitals NHS
Foundation Trust and Bradford District Care Trust.

Acute medical ward
Bradford Teaching Hospital NHS Foundation Trust tested the MMSF in
a general internal medicine and a cardiology ward. The work centered on
creating a better safety culture. Practical applications included detailed
discussions with ward staff, off-site educational time-outs, safety huddles and
structured patient safety meetings.

Inpatient mental health ward
Bradford District Care Trust tested the MMSF in an inpatient mental health
ward with the aim of using the MMSF to review physical health needs.
They spent time reframing the meaning of the MMSF and concentrated on
exploring two key questions with staff: How do you know the care we deliver
is safe? and how safe do you think we are?
Considering the MMSF
Case studies continued

Reflections on supporting the use of the MMSF
The Advancing Quality Alliance (AQuA) supported testing of the MMSF within the North West Ambulance Service and Mersey Care NHS Foundation Trust. Working alongside their Lived Experience partner, AQuA helped test sites to reframe, plan and engage their workforce, ensure a patient perspective and reflect on their approach.

From reactive to proactive safety in a high security forensic setting
Mersey Care NHS Foundation Trust tested the framework in their acute inpatient setting. After building initial awareness, they concentrated on reducing violence and aggression by building a greater anticipatory view of safety.

Creating safety conversations
The North West Ambulance Service took a flexible approach to applying the MMSF allowing new insights to guide them. Beginning with conversations with their staff in their emergency operations centre, they also explored approaches to safety with ambulance personnel. They integrated and shared learning through links with other transport providers.

Supporting board members in understanding the MMSF
Haelo organised large-scale engagement events to help board members of regional provider and commissioning organisations understand the MMSF and begin to create capability within their own organisations.
Considering the MMSF

Case studies continued

Supporting COPD self management
NHS West Cheshire Clinical Commissioning Group, worked alongside the Countess of Chester Hospital to trigger pathway wide improvements to create a new COPD support network.

New incident reporting systems for cancer pathways
Three NHS Foundation Trusts (Wrightington, Wigan and Leigh, the Christie, and the University Hospital of South Manchester) worked together to reduce incidents in their lung cancer pathways. After using the MMSF to structure exploration of the pathways, including case note reviews, a new incident reporting system was introduced.

Creating and driving a health economy wide safety improvement plan
A team from Salford, including senior representatives from NHS Salford Clinical Commissioning Group, Salford Royal Hospital NHS Foundation Trust and social care providers used the MMSF to reflect upon current measurement and monitoring, and to develop plans for potential improvement.
The MMSF is a framework to guide thinking. It can be applied in all kinds of settings, from ambulance services to secure mental health units, in board rooms, on wards and at regional and national level.

Context is frequently described as a set of factors or attributes that can affect improvement efforts, for example, an organisation’s leadership, clarity of purpose, trust, climate or orientation to learning. Often consideration is required to differentiate between those influencing contextual factors that can be meaningfully influenced, and those that cannot.

The characteristics of your organisation will influence your Theory of Change. Some organisations deploy new methods in very different ways to others. For example, inpatient mental health and ambulance services can have more autocratic structures than other types of provider.

In addition to these implementation based contextual questions, perhaps of more importance to work out what the MMSF means to you, in your specific context. For example, “what does harm mean and look like for us?” As a theoretical framework, this is a vital step in making use of the MMSF.

One popular move in communicating the MMSF is that some test sites positioned the Integration and Learning domain to the centre of the MMSF diagram. To ensure its role and central importance is clear.

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8 Source: Perspectives on context
Using the MMSF
Interpreting the framework within your context continued

While you do need to take some care to ensure the language and questions suit the setting, it is important not get hung up about it. Using the domain prompt questions can be helpful. For example: Sensitivity to Operations doesn’t mean much to many people, but asking ‘Is care safe today?’ immediately connects with people. Experience tells us that over time, the framework holds true. You may change how you explain the framework to different teams. But don’t be tempted to change it to fit your thinking.

The following tips came out of the testing:
• Keep it small and simple at the beginning – this allows small tests of change to explore what the MMSF might mean to you.
• Make it relevant to the team or organisation you are working with.
• Emphasise the terms past, present and future when describing the five domains.
• Focus on the patient to help position the MMSF with different audiences.
• Consider introducing the MMSF through each domain’s core question, rather than the domain title.
• Don’t limit the conversation to patient safety. Keep the conversation open.

It is not about changing the MMSF to suit your thinking and practice, but using it to challenge your thinking and practice.
Regional Improvement Body

The Measurement and Monitoring of Safety Framework
How the MMSF has been used

There are many ways to use the MMSF. When developing a Theory of Change (TOC), test sites noted four important lessons:
1. Take time to understand the MMSF before jumping to a conclusion.
2. Be prepared to be flexible with your TOC as it may change.
3. Being clear on the desired outcome helps focus.
4. Starting small allows you to create understanding through practice.

Should you use it implicitly or explicitly?
This is a key question. There is a tendency, particularly in the NHS, to make an explicit initiative out of a new approach or idea. This is resource-intensive and can mean that the MMSF is seen as just another initiative. Alternatively, the framework can be used implicitly to challenge and improve a team, department or organisation; it doesn’t have to be introduced as a new programme.
### Example Theory of Change (TOC) in the form of a driver diagram
(Source: Yorkshire and the Humber Improvement Academy)

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
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</thead>
<tbody>
<tr>
<td>QI training &amp; Human Factors training</td>
<td>Curry Evenings</td>
<td>Skills Knowledge</td>
<td>Analysis support but with understanding of other working area Definition of role</td>
</tr>
<tr>
<td>Experience of Casenote Review</td>
<td>Training</td>
<td></td>
<td>Definitions of different types of measures</td>
</tr>
<tr>
<td>Project Team Support</td>
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<tr>
<td>Audit of Weekend Service</td>
<td>Learning events</td>
<td>Raised awareness of Safety</td>
<td>Mid Term</td>
</tr>
<tr>
<td>Implement Patient STs</td>
<td>Implement Patient STs</td>
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<tr>
<td>Map Pathways</td>
<td>Secondment</td>
<td>Safer Services</td>
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<td>Communications Strategy</td>
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<td>Analysing Surveys</td>
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<td>Analytical Support</td>
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The Measurement and Monitoring of Safety Framework
Using the MMSF

A summary of the ways test sites aimed to use the MMSF (TOCs)

**Safety outcomes:**

- Problem solving a specific known source of harm
- Reduce incidents of harm at the front line through small scale testing
- Reduce incidents of harm at team level using the framework as a whole
- Reduce incidents of harm at the front line through large scale testing
- Reducing incidents of harm by concentrating on one domain
- Reduce incidents of harm across a pathway
- Bottom up programme to reduce incidents of harm
- Top down programme to reduce incidents of harm

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The Measurement and Monitoring of Safety Framework
## Building blocks for better safety:

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<th>Building blocks</th>
<th>Detail</th>
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</thead>
<tbody>
<tr>
<td><strong>Influencing and structuring board and executive measurement and monitoring activity</strong></td>
<td>Influence and structure of safety strategy</td>
</tr>
<tr>
<td><strong>Stimulate organisations to look at safety differently at regional health and social care level</strong></td>
<td>Assessing existing care assurance frameworks against the MMSF</td>
</tr>
<tr>
<td><strong>Influence and positioning of national level safety and quality initiatives</strong></td>
<td></td>
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<tr>
<td><strong>Improve safety culture at the front line</strong></td>
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<tr>
<td><strong>Standardising reporting templates for clinical governance meetings</strong></td>
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**The MMSF →**  
**Considering the MMSF →**  
**Using the MMSF →**  
**Ensuring learning and reflection →**
Using the MMSF

Using the MMSF at national and regional levels

Are you asking the right questions?
The MMSF can help regional and national organisations form an expanded, more consistent view of safety across their areas. The MMSF helps those in commissioning, regulatory and provider roles to develop a common language. It provides a framework for reflection, for gap analysis, for taking a different view of longstanding problems and for creating new solutions.

Positioning and mapping existing programmes
The MMSF can be seen as a framework for making sense of the initiatives, data and monitoring activity we already have, particularly at national or regional level. In testing, national and regional improvement bodies found that measuring their existing activity against the MMSF helped make sense of sometimes fragmented conversations, programmes and initiatives.

Stimulating and supporting regional and national thinking
Test sites found the support of their regional/national improvement bodies was invaluable during testing. Not just with regard to technical support, but also in terms of bringing together regional participants and stimulating a network of contributors. Providers also commented that national and regional organisations could take the role of critical friend, challenging their use of the MMSF.

In order to deliver the assurances asked of them by their regulatory improvement bodies, NHS organisations tend to structure themselves in a way that reflects how the questions were asked.
Regional Improvement Body

We continue to organise our national policy and programmes through the lens of the MMSF.
Regional Improvement Body
Using the MMSF
Using the MMSF at national and regional levels *continued*

**Standardise the sharing of real time safety concerns**
The MMSF can provide both a prompt and a structure for making sense of real time safety concerns, across systems and within individual providers. The MMSF helps expand our view to include qualitative as well as quantitative intelligence.

**Strengthening the links between safety and the other dimensions of quality**
The broader understanding of safety prompted by the MMSF, encourages us to focus thinking about safety around other dimensions of quality such as effectiveness, efficiency, timeliness, person-centered care and equality. So that safety is no longer seen as separate.

**Creating a learning loop**
The MMSF’s emphasis on creating capability and capacity to learn is important regionally and nationally. For example, it is just as important for regional and national bodies to consider: ‘How are we responding and improving with regard to safety?’ as it is for providers.
Using the MMSF

Using the MMSF at executive level

While executive teams will need to support other parts of an organisation to use the MMSF, they can also use it to influence their own planning and working.

Influencing clinical governance and assurance processes
The MMSF has been used to help map and structure a new care assurance process for midwifery and nursing staff. It has also been used to create a new template for clinical governance meetings.

Integrating the MMSF principles into other programmes and functions
The MMSF does not have to be a programme in itself. One emerging approach is to use the principles described in the MMSF to shape existing work. For example, one test site used the framework to influence the investment and deployment across a frailty pathway. The MMSF has also been used to structure and unify language in patient safety subcommittee meetings.

Aligning and positioning against priorities
The MMSF has been shown to be useful in aligning priorities. It has been used to structure planning to ensure that safety, governance, quality and experience metrics (managed by different functions) are aligned.

Business as usual
Using the MMSF in this way will help to normalise it. It has the potential to create a common language and consensus as to what constitutes a holistic and proactive view of safety.

Example ward to board data dashboard
(Source: NHS Borders)

Why executives should consider the MMSF (P42) →
Reflections on the different approaches to the MMSF (P68) →

NHS Borders Case Study →
NWAS Case Study →

The MMSF →
Considering the MMSF →
Using the MMSF →
Ensuring learning and reflection →
Using the MMSF

Using the MMSF with frontline teams

Front line teams have found that exploring the concepts within the MMSF has challenged their understanding of safety.

Let the frontline lead
While a frontline approach can be resource-intensive, some test sites saw it as an opportunity to grow their approach more organically, and proceed further than an executive level only approach. Frontline teams can use the MMSF to focus on the issues that are most important to them.

Solving frontline problems
As well as raising awareness, the MMSF can be used to structure problem-solving around specific operational problems. For example, reducing violence and aggression in a mental health ward setting.

Ensure links between domains
Identifying links between domains helps to raise staff awareness that the MMSF is an interconnected framework. This can help to structure thinking around how to apply it. For example, using Past Harm as an introduction to the MMSF, helps identify links with greater Sensitivity to Operations, which links to greater Anticipation and Preparedness.

Create a safety culture
The MMSF has been used with a view to increasing safety culture in a ward-based environment. This involved before and after safety culture assessments and investment to create space for a safety dialogue with frontline staff.

Identify the most appropriate staff
Be mindful of which teams will be best placed to take the work forward. Teams already facing significant change in leadership can, understandably, take longer to engage with the MMSF. For example, the recruitment process, and the time it takes for new staff to understand the MMSF, caused delays. It can sometimes take in excess of four months to fill a ward leadership post. On the other hand, a new manager may provide a good starting point, bringing fresh ideas and enthusiasm to the process.

Frontline staff have historically not been particularly involved in measurement.
Programme Technical Provider
Using the MMSF

Using the MMSF with frontline teams continued

Clinical leadership
Clinical champions who have the time to develop and then offer guidance and expertise to others are valuable assets. For some test sites this meant clinical leaders dedicating three days a week to the MMSF, for more than a year. Clinical champions need to be well connected with the wider system as well as the area of focus. Consider how much influence the person asking the questions has and the impact this has on the resulting discussions. The person delivering the messages and asking the questions within a team will need to be credible with significant subject knowledge; someone who works within the team and has the team’s professional respect.

Consider how to introduce it to frontline teams
Given the pressured environment they work in, just handing the MMSF to frontline staff has limited benefits. Work around this with conversations about the key concepts. Use the key questions, or the past, present, future descriptions to break the MMSF down. In addition, regular meetings inject pace and impetus. Some test sites held weekly meetings about introducing the MMSF.
Identify creative methods to engage
In testing the MMSF, organisations have had to be creative to engage frontline teams, using methods such as infographics and even informal evening events to bring staff to out-of-hours briefings.

Think about financial investment and resourcing
Teams need support and the time to understand, consider and use the MMSF.

Specialist support and input
Given the broad nature of the MMSF, specialist support can be required in areas such as patient involvement, lived experience, project management and analytics. This support brings more benefits if the individuals are familiar with the system.
These elements are focused on adopting the MMSF. They are all things the test sites said were (or would have been) very useful to have in place at the start.

If you're interested in using the MMSF in a less overt fashion, see page 68.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Factor</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Human Factors (capability and capacity)</td>
<td>An understanding of Human Factors has helped create greater self awareness in teams who have been trained in it. It helps teams understand how systems, at micro, macro and meso level, influence safety.</td>
</tr>
<tr>
<td>2</td>
<td>Improvement capability and capacity</td>
<td>In many cases using the MMSF is greatly helped by using clear project cycles (such as Plan, Do, Study, Act) and an understanding of the role of measurement to support improvement.</td>
</tr>
<tr>
<td>3</td>
<td>Protected frontline staff time from all staff groups</td>
<td>Frontline work typically leaves little or no time for teams to reflect and develop. Committed investment in time is needed to break this cycle. This investment needs to be balanced across staff groups to ensure multiple perspectives in the approach to the framework.</td>
</tr>
<tr>
<td>4</td>
<td>Clinical champions</td>
<td>Clinical champions, with time to develop deep knowledge of MMSF can really help - but their involvement must be consistent and long-term.</td>
</tr>
<tr>
<td>5</td>
<td>Patient safety advocates</td>
<td>Looking at the MMSF from the perspective of patients can help focus discussions and turn it into a reality.</td>
</tr>
<tr>
<td>6</td>
<td>Availability of IT and systems infrastructure teams</td>
<td>Developing more sensitive and anticipatory systems will involve IT, measurement and systems developments. Having this involvement from the start will speed up developments.</td>
</tr>
</tbody>
</table>
## Using the MMSF with frontline teams: are you ready? Continued

<table>
<thead>
<tr>
<th>Factor</th>
<th>Detail</th>
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<tbody>
<tr>
<td>7</td>
<td>Minimise data collection burden on frontline teams</td>
</tr>
<tr>
<td>8</td>
<td>Receptive context</td>
</tr>
<tr>
<td>9</td>
<td>Senior leadership buy-in</td>
</tr>
<tr>
<td>10</td>
<td>Stable management structure</td>
</tr>
<tr>
<td>11</td>
<td>Allow time to understand and reframe</td>
</tr>
</tbody>
</table>
General reflections

Understand the MMSF first
It is difficult to create a clear Theory of Change without having a clear understanding of the MMSF. Remember, the MMSF is not a prescriptive set of rules; it is a theoretical framework that is designed to help guide your thinking.

Summarise your approach as a theory of change model
Those involved in the testing used a range of methods to summarise their Theory of Change, from driver diagrams to outcome models. They found that the Theory of Change adapted over time, reflecting their experience of the MMSF in use.

Understand the context you are working in
The temptation with any new concept is to use it at frontline level. That's where the care is given and where harm can happen. Test sites found that, while generating benefits, this microsystems approach was difficult and slow due to lack of time, lack of space for reflection and other issues such as competing priorities.

When faced with this context and limited project resource, using the MMSF to influence at a macrosystems level may be more effective. An organisation may be able to create a more holistic view of safety, without large-scale frontline engagement.

Don't get hung up on immediate actions
Many health and social care organisations are action-orientated in their approach to safety. They look to implement changes quickly. The MMSF takes time to understand and position for your context. This is vital to building new systems for monitoring safety.

Organisational capability may steer your approach
Regardless of the initial planning, practical considerations may delay your approach to some of the domains. For example, some test sites encountered capacity delays in building internal systems. Other examples of delays include lack of staff capacity to facilitate conversations around Sensitivity to Operations. While undoubtedly influencing your approach, factors like this should not stop you using the MMSF.
Reflections specific to the MMSF

Use themes to introduce the MMSF
Using the themes of past, present and future harm, particularly during planning and early discussions, can help to structure thinking and focus discussions.

Capture successes as well as gaps
A typical first step in using the MMSF is to identify gaps in current systems. Try to balance this by also identifying strengths.

The Integration and Learning domain prompts apply to all others
Some teams chose to think of this as the central domain. The Integration and Learning prompts and the central question—‘are we responding and improving?’—are vital for every domain, past, present or future focused.

Develop your approach beyond your organisational boundaries
Think outside your staff group, team organisation and even the sector. For example a front line clinical team involved in testing identified non-care giving staff, for example, domestic staff, and other organisations which were instrumental in developing their approach.

MMSF provides a structure for reflection
Reflecting on current practice and systems is an important part of improving quality and safety. Some test sites found the MMSF more useful in structuring this reflection than other safety initiatives and surveys.

Everything is connected
Progress through use of the MMSF is not linear. Activities in one domain are often linked to, and may impact on or duplicate information in other domains. For example, work on measurement systems within the Past Harm domain, often enables greater sensitivity to operations. In the same way, improvements in communication resulting from work with the domain of Sensitivity to Operations can contribute towards greater reliability.
Using the MMSF

Mapping your measurement and monitoring activities

Mapping your current safety measures and activities helps you visualise your current safety activity and can rapidly change how people think by enabling discussions and removing any blame associated with issues of safety and harm. It can also be a good test of your Theory of Change. You may need to expand its scope to incorporate the principles of the five domains.

• Start by thinking about current activity only.
• As confidence builds, expand to aspirational activity.
• Don’t just map measures, for example incident rates and audit compliance rates. You should map monitoring activity as well, for example forums where data is discussed/acted upon and reporting formats.
• Ensure a wide scope in your mapping – consider where papers are used, monitoring forums (meetings), sources of information and other qualitative monitors and processes.
• Discuss insights identified in your measurement and monitoring activities – and who they are aimed at.
• Identify measurement and monitoring activity which may cut across multiple domains.
• Use improvement science which can aid deeper understanding.
• Don’t be surprised if your mapping activity highlights a bias towards past harm. Most of our systems and services currently have a bias towards past harm and this is important learning. Use it as an entry point in developing other domains.
• At this early stage, mapping may raise more questions than answers. It’s important to be aware of this and to be comfortable with it. It is also not always easy to rationalise measures quickly, especially those linked to regulatory requirements.
• Explore any differences in perspectives from different staff around the same measure/monitoring activity. It could be that different staff, for example an executive and an operational manager, view the same measure/monitoring activity as belonging to different domains.

One of the challenges of using the MMSF at pathway level is deciphering who the data is actually for.

Regional Improvement Body
Using the MMSF

Mapping your measurement and monitoring activities continued

One test site found it useful to map a patient story against the MMSF. For example, what the problem areas identified in each domain felt like for the patient and/or carer. This helped focus safety discussions around the patient. It can be a helpful frame for frontline staff first exploring the MMSF and in starting early thinking about communication of MMSF to patients.

Example of mapping a patient’s perspective against the MMSF
(Source: NHS Borders)

A framework for the measurement and monitoring of safety

Dehydrated – “we knew that ... why didn’t the nurses?”
Carer was exhausted.
Diary reflects timeframe 2012 - 2014

Communication: use of specialist language: saying one thing to family then saying something different to Pros.
Role of Carers (different standards) when attending to individuals in their own home.
He needed to be admitted to hospital by ambulance but advised: “none currently available”.
“My daughter”

Patient was frightened and no one had thought to explain to him what was happening during the procedure. “Just take time to explain what is going to happen”

Source: Vincent C, Burnett S, Carthey J. The measurement and monitoring of safety. The Health Foundation, 2013
Using the MMSF

Mapping your stakeholders

Stakeholder engagement is always important in any initiative and this is particularly the case with the MMSF. It refers to the process of planning for and engaging those individuals or groups who influence or are influenced by your work.

It takes time
Starting engagement early ensures executives are in an informed position for more strategic considerations provoked by the MMSF.

Early planning
Stakeholders are likely to have busy diaries. Planning the who, what and how of stakeholder engagement now will save time later.

Managing expectations
In the early stages of engagement, stakeholder expectations need to be carefully managed.

Looking beyond the organisation
Both the Sensitivity to Operations and Anticipation and Preparedness domains emphasise the need to locate and identify broader sources of intelligence. Experience shows that this intelligence often comes from beyond traditional team, department or organisational boundaries.

Stakeholders often hold the key
To achieve integration and learning you might be reliant on data from other organisations. Or you may find sources of anticipatory intelligence can come from individuals with a unique view of the patient, but who reside outside traditional health and social care structures.

Underpinning all the work is the stakeholder engagement and communication plan
Test Site
Mapping your stakeholders continued

Example stakeholder map (considering the MMSF from a national perspective)
(Source: Healthcare Improvement Scotland)
Using the MMSF
Planning and timelines

Consider the best time and likely timescales for introducing the MMSF.

Planning and timing
Your Theory of Change will have a huge bearing on your approach. More implicit approaches, designed to influence and structure existing safety planning, require less initial coordination than an approach that involves training large numbers of frontline staff.

Timeline
Even though the testing of the MMSF was supported by The Health Foundation, the timelines for the approach to the MMSF were quite long. Those who contributed to this e-guide found reframing, planning and creating a Theory of Change took between two and six months. The majority found it was more than four months before any explicit action was taken.

We completely underestimated how much time it would take us to understand, apply and engage our brains and behaviours around what the MMSF can offer.

Regional Improvement Body

<table>
<thead>
<tr>
<th>Understanding &amp; reframing</th>
<th>Active exploration &amp; continued reframing</th>
<th>Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>2–6 months</td>
<td>1–2 years</td>
<td>2 years</td>
</tr>
</tbody>
</table>
Using the MMSF
Planning and timelines continued

Capacity
Timing the MMSF around the availability of key staff groups is important. Frontline teams might be short on numbers or already involved in other resource-intensive initiatives. Avoid implementing at times when services are most stretched, or during wider organisational changes such as ward closures.

Maintain a holistic view of the MMSF
Don’t delay your plan for the Anticipation and Preparedness and Integration and Learning domains. Plan to explore them earlier – you can consider them whilst working through domains such as Past Harm.

Avoid dependency on individuals
Focusing development and engagement around individuals can present a risk to developing approaches. You could spend a lot of time developing an individual to become a clinical champion, only for them to move on to another role; plan for these eventualities through documenting and capturing learning, or allowing for shared responsibility.

Earlier and deeper understanding of the MMSF makes it quicker overall.
Regional Improvement Body

Example wall display featuring MMSF based work on safer medications
(Source: Healthcare Improvement Scotland)
Using the MMSF

Involving people

Expanding our view of harm
A core element of the MMSF is the move away from thinking about harm as meaning only physical clinical harm. It views harm from a patient's perspective so that psychological harm and feeling unsafe are included in a new broader understanding of harm.

Initial focus groups that explored the MMSF with people/carers found the following things made them feel unsafe:

**Staff**
- Inexperienced.
- Unprofessional behavior.
- Poor supervision.
- Staff busy or under pressure.

**Care Provision**
- ‘Out of hours’ (lack of access, lower staff levels).
- Transitions between organisations/departments.
- Delays in admissions.

**Relationships and communication**
- Being ignored or lack of attention.
- Not being listened to.
- Lack of continuity of care givers.
- Having to repeat information to staff/staff not having read notes.
- Lack of understanding of individual care needs and goals.
- Lack of care for self or others.
- Not being informed.
- Lack of time to discuss care.
- Poor communication with carers/family.
- Staff attitudes – negative, uncaring, lack of attention to detail, arrogant, uncommunicative.
- Loss of confidence in care.

**Care environment**
- Cluttered, untidy and unclean.
- Old or broken equipment.
- Lack of privacy and security.
- Lack of comfort.
- Infection rates and falls.

Source: Sarah Garratt 2013

The measurement and monitoring of safety framework
Involving people
Using the MMSF
Involving people continued

Using a person-centred approach to structure thinking
Using the patient as a frame can help with discussions. For example, an early board meeting might include a patient story structured around the MMSF. Later, team discussions can be structured around the perspective of a patient, or ‘someone I care about.’

Involving patients in the planning
Patients with long-term experience of services you deliver can help structure your approach. Their perceptions of safety may be different to operational perspectives. What matters to them is not always what an organisation would define as a safety issue. Involving patients means you don’t make assumptions about their perception of safety.

Mapping patient experiences against the MMSF
This can be the tipping point that leads to real progress. For example, using the MMSF to consider a patient’s perspective on a frailty pathway identified early opportunities for action in areas such as communication difficulties, duplication and the impact of large amounts of paperwork.

Patient experience is key
Patients can tell you about safety issues in their care, from their first point of contact a service. They will know about the gaps between services, the reliability of care on different shifts and whether care feels safe today. In mental health settings, for example, patients were hugely influential in developing greater sensitivity to operations and anticipation. They see a unit in a different, and equally valuable way.

Making safety information visible to patients
Patients value safety data. For example, patient representatives have commented that displays give them confidence in services. The MMSF can help structure displays, using simplified prompts such as:
• Have we been safe in the past?
• Are we safe today?
• Will we be safe in the future?

A mix of approaches
There are a number of approaches in involving patients in safety and quality improvement. Some of the techniques used during testing are included in the links on this page.
A network can be defined as ‘a cooperative structure where interconnected groups or individuals coalesce around a shared purpose on the basis of trust and reciprocity’. While distinct but complementary to hierarchies, networks have proven to play an important role for those testing the MMSF.

**Communities of practice**
Test sites have developed community of practice spaces, accessible to a range of health professionals, allowing learning from testing to be shared across sites. For example, one Regional Improvement Body successfully created a community of practice across the test sites it was supporting to test the MMSF. They found it was important to have support from a knowledge and information skills specialist and to have at least one prominent enthusiast within each test site.

**Organic growth of networks**
Formal networking activities, such as communities of practice and evening events, have allowed networks around the MMSF to grow organically. Not just along traditional lines, but also facilitating conversation between health organisations and the police, fire services, Network Rail and air traffic control.

**Structuring peer to peer working**
When networking face-to-face, those involved in the testing found semi-structured methods of inquiry useful. For example, using an Appreciative Inquiry approach to facilitate large groups and to bring together different perspectives.

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* Source: *Effective Networks for Leadership*
Platforms and technology
All those involved in the testing of MMSF used digital platforms to aid their networks. This included using Twitter for networking and online collaboration and discussion platforms such as Yammer. Organisations with established expertise in these methods hosted visits so that others can find out more about their use.

The MMSF as an enabler for safety networks
There are advantages in using the core themes and language of the MMSF to structure collaborative safety-focused networks. The common language allows structured safety discussion across different departments and organisations.
The MMSF is not a short-term project
Expectations need to be carefully managed at all levels to avoid pressure for results. The MMSF is predominantly a challenge to safety thinking. Understanding changes in practice will take time as individuals and organisations reflect on and contextualise the challenges the MMSF provoke.

Develop your approach with a long-term view
Your approach, or Theory of Change, should be developed with sustainability in mind. Is it likely that an intensive programme can be sustained long-term? Or should you use the MMSF in a less resource-intensive way?

Overlap with existing incentive structures
Many chosen approaches require some form of investment in resource. In order to maintain this long-term, some of those involved looked at existing incentive structures to secure funding – such as the CQUIN (Commissioning for Quality and Innovation) framework10.

Timing the implementation
Avoid implementing changes during wider organisational changes to reduce the burden on staff. If there is an influx of new staff, for example, it may be better to implement the framework once they have become established in their roles. Alternatively it may be that new staff are seen as an opportunity as they are likely to be more receptive to new concepts and less tied to the status quo.

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10 Commissioning for Quality and Innovation – an English commissioning incentive programme designed to support quality improvements and new, improved patterns of care.

We feel that identifying a champion at executive/board level as well as within operational teams will be essential to support and sustaining the MMSF.

Regional Improvement Body
Using the MMSF
Sustaining continued

Senior champions
Executive and board level champions are important. As well as enabling change, they demonstrate the new safety perspectives the MMSF brings by using it to structure their enquiry into safety-related matters.

Linking with education programmes
The process of new staff joining teams is both an opportunity and also a risk in progressing the adoption of the new thinking within the MMSF. For example, to ensure continuity, one of the Regional Improvement Bodies involved in the testing has integrated the MMSF into the curricular for undergraduate training. It is seen as an excellent basis to foster an extensive approach to patient safety at the very start of professional careers.

Infrastructure and integration
Systems developed from the MMSF can help make it more sustainable. Infrastructure investments such as information dashboards as part of the Anticipation and Learning and Sensitivity to Operations domains can help to embed the MMSF’s concepts into institutional working practices.

Implementation can also be achieved implicitly through strategic planning rather than through MMSF as an explicit safety programme. The introduction of key enablers of the MMSF, such as Human Factors thinking, can be integrated into the education, policy and systems used following incidents or other reviews.

It is seen as an excellent basis to foster an extensive approach to patient safety at the very start of professional careers.
Regional Improvement Body
Using the MMSF

Communications

Planning
Planning how to communicate the MMSF core principles internally is critical. Communications planning should be part of your approach, developed in parallel with your Theory of Change, rather than carried out in isolation.

Developing bespoke communications for different audiences takes time. But it makes it easier to engage staff later. It’s important to use the whole range of available materials. For example, the practical guide is useful for time-challenged frontline staff. However, if anyone wishes to explore the MMSF to achieve a real depth of understanding, then it is recommended they read the original report.

It takes time for staff to understand the MMSF. If your chosen approach is to roll out the MMSF through use of an explicit programme, frequent communications activity can help maintain emphasis and interest.

When planning communications activities, the use of existing communications channels, such as meeting structures, planned events or newsletters, is useful.

"(On reflection) I would consider having a much stronger communications strategy for this work."
Test Site Programme Lead
Learning events
Those involved in testing the MMSF used learning events, at local, organisational, regional and national level. The events were used to enable networks, provide safe learning opportunities and to promote the MMSF. In many cases, external safety experts helped those new to the MMSF to understand the concepts.

Use of media
Given the high staff numbers and disparate locations of staff, the use of a range of media channels was important. Test sites and Regional Improvement Bodies involved in the testing used media channels such as websites, webexs, film, e-newsletter platforms such as Mailchimp and social media to reach out to large audiences. These techniques were also used as vehicles to train others in supporting concepts such measurement, in addition to the core concepts.

Social media
Test sites also utilised mainstream social media platforms such as Twitter and Storify for communicating bite-sized snippets of learning and generating interest with particular audiences.

We recognise the importance of customised communications messages for each team to optimise value in different areas.
Regional Improvement Body
Ensuring reflection and learning

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Ensuring reflection and learning

Capturing learning

Test sites recorded their reflections through a process of learning capture. Having mechanisms for this process in place will help you make the most out of the MMSF.

Using a well-proven theoretical framework to structure and capture learning, test site staff were able to document their testing learning through large scale learning events, face to face and telephone interviews, learning logs and quarterly programme reporting. This learning has been distilled, to provide resources and reflection (such as this e-guide) to help others in using the MMSF.

This same process can help you ensure you capture learning about your exploration of the MMSF. The following are useful prompts, derived from reflections on this testing, to consider when structuring your process of learning capture.
Ensuring reflection and learning
Capturing learning continued

Evaluation vs learning capture
Learning capture helps to document process learning; it does not provide evaluation of tested approaches. Making sure participants were aware of this made the learning capture more effective.

Start-up timeline
The process of understanding and reframing the concepts within the MMSF is as important as your practical application. Ensure you have processes of learning capture in place at the very start of your exploration of the MMSF, as well as the practical application.

Real-time learning capture is difficult for frontline staff
Frontline staff observed it was difficult to make time for learning capture in busy frontline working environments. The need to capture learning can sometimes seem at odds with the need to progress use of the MMSF.

Most effective learning capture was within dedicated, externally hosted events
Test sites reported difficulty reflecting on their approaches and capturing learning within their own busy settings. Opportunities to reflect on learning off-site (such as within learning events) were highly valued: they created space for reflection outside of pressured frontline operational environments.

It takes time to build relationships
True learning capture relies on the ability to collect honest reflection: what has worked well, less well and what could be improved. It can take time to develop relationships and build the necessary trust for staff to be able to share these reflections.

Make time to revisit early assumptions
As your understanding of the MMSF develops, it can be useful to revisit decisions made earlier in the process. This aids learning capture and helps you to understand where the MMSF might be best used within your organisation.

We find that shared learning events work very well for all stakeholders as it brings us together in a non-threatening and supportive way.
Test Site Programme Lead
Where to get help

The Health Foundation
The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK. Their website contains a rich source of the latest thinking around improving healthcare services. To contact the Heath Foundation email info@health.org.uk. Their lead on the MMSF is John Illingworth.

UK Improvement Alliance (UKIA)
The UKIA is a network of organisations focused on improving the quality in health and care. Their website, How Safe Is Our Care? contains additional resources for the MMSF, and other quality and safety initiatives. To contact the UKIA with regard to the MMSF email Richard Taunt at Richard@ukimprovement.co.uk

Regional improvement bodies
Four regional improvement bodies provided support for testing the MMSF. You can contact any or all of them. The learning they generated enabled the development of this e-guide.

Advancing Quality Alliance (AQuA). To contact AQuA in regard to the MMSF email Kayleigh Price at Kayleigh.Price@srf.nhs.uk

Healthcare Improvement Scotland. To contact Healthcare Improvement Scotland with regard to the MMSF, contact Jo Thomson at jothomson@nhs.net

Yorkshire and Humber Improvement Academy
To contact the Yorkshire and Humber Improvement Academy with regard to the MMSF contact Deborah Clark at deborah.clark@yahhsn.nhs.uk

Haelo. To contact Haelo with regard to the MMSF email info.haelo@nhs.net. Their lead for the MMSF is Penny Martin.

Safety and improvement specialists
An objective, independent voice can help you understand and contextualise the MMSF.

Peers
Exploring the MMSF with peers, through an internal or external network can stimulate thinking and action.
The UK Improvement Alliance is a network of organisations dedicated to improving health and care. We aim for high quality health and care for the population of the UK through better improvement of services and interventions. The production of this document has been funded by The Health Foundation and is the result of a collaboration between four UKIA members: AQuA, Haelo, The Yorkshire and Humber Improvement Academy and Healthcare Improvement Scotland.

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