

Safety Events Matter

Myth busting common misconceptions
about learning from patient safety events

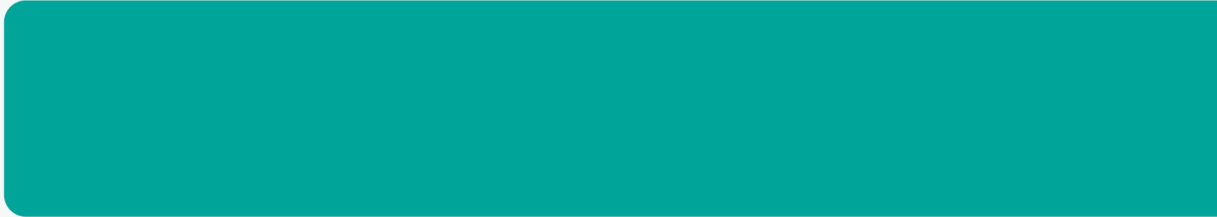
Agenda

- Introductions
- NHS England Patient Safety & HSSIB Overview
- Incident Recording
- Incident Response & analysis
- Recommendation Generation
- Implementation & monitoring


Incident recording



- There is no point recording patient safety events, nothing happens as a result
- You will never collect all PS incidents, or get all the details 'correct', so there is no value?
- The number of reports tells you how safe you are. Benchmarking is informative...
- Lists of incident types are the way to go.....
- Patient safety incident reports are misleading because incidents are not linear – but most incident reports are written as though they are.



*There is no point recording
patient safety events, nothing
happens as a result*





No point recording events, nothing happens

False

- Reporting on its own will not prevent incidents from recurring, but reporting provides the opportunity to respond to what may otherwise go unnoticed.
- Reporting allows us to respond to and learn from singular unusual events or multiple similar events.
- Recording events supports learning not only locally but wider, such as at regional or national level.
- Reporting events before they result in harm provides an opportunity to intervene on risks that if left unaddressed may result in greater harm.
- Reporting supports the work of other safety partners, such as professional colleges, national agencies or research projects.

Event

‘..... I noted that the nasal component of the Airvo was attached to his nose but the tubing was on the floor. Therefore the patient had not been receiving oxygen therapy’

Response

*Emergency Response Simulation: - Conduct emergency response simulations facilitated by Practice Educators
monitoring and managing deteriorating pts...improving teamwork....Proactive Palliative Care Discussions/ Ceilings of Care Decision-Making ..Technology - Increase number of Mindray monitoring devices...Ensure staff are proficient in using....HFO: gather evidence on the effectiveness of continuous monitoring ..- Share these learning in staff Huddle*





Use of oxygen cylinders where patients do not have access to medical gas pipeline systems

Date of issue: 09 January 2023 Reference no: NatPSA/2023

This alert is for action by: acute trusts with an emergency department and ambulance trusts

This is a safety critical and complex National Patient Safety Alert. Implementation should be co-ordinated by an executive lead (or equivalent role in organisations without executive boards) and supported by respiratory medicine, emergency medicine, nursing, pharmacy and estates.

Explanation of identified safety issue:

During periods of extreme pressure, often exacerbated by a surge in respiratory conditions, demand on supplies of oxygen cylinders, especially the smaller sizes, increases in the NHS due to the need to provide essential oxygen treatment in areas without access to medical gas pipeline systems.

This surge in demand increases the known risks associated with the use of oxygen gas cylinders, and introduces new risks, across three main areas:

- patient safety
- fire safety
- physical safety

A search of incidents reported to the of the National Reporting and Learning System (NRLS) and Learn from Patient Safety Events (LFPSE) service in the last 12 months identified 120 patient safety incidents, including those with these

Actions required

Actions to be completed as soon as possible not later than 20 January 2023.

1. The chair of acute trust medical gas committee working with key clinical/non-clinical colleagues including the local ambulance trust, should review the NHS England 'Safe use of oxygen cylinders' practice guidance¹ and ensure a risk assessment is undertaken in all areas where patients are acutely cared for (either temporarily or permanently) without routine access to medical gas pipeline systems. NOTE A

- Risk assessment should pay particular attention to:
 - avoiding unnecessary use of cylinders and excessive flow rates by ensuring oxygen treatment is optimised to recommended saturation ranges.²
 - ensuring safe use of oxygen cylinders by staff including;
 - safe activation of oxygen flow

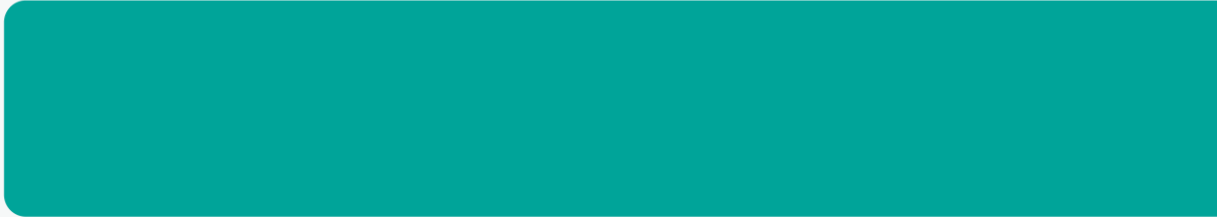
These case studies show the direct action taken in response to patient safety events recorded by organisations, staff and the public, and how their actions support the NHS to protect patients from harm.

Latest case studies


- [Risk of airway obstruction from green anaesthetic swabs](#)
- [Retained surgical instrumentation and complex procedures involving multiple teams and equipment](#)
- [Risks of ingestion of alcohol-based hand sanitiser](#)
- [ePrescribing systems and insulin combinations](#)
- [Surgical skin preparation solution entering the eye during surgery](#)
- [Retention of Mydriastert insert post ophthalmic surgery](#)
- [Bone cement implantation syndrome](#)
- [Hip cement – different expiry dates for separate components in the same pack](#)
- [Overdose of oral vitamin D related to frequency and duration of treatment](#)
- [Monitoring patients taking nitrofurantoin for potential lung disease](#)
- [Use of trimethoprim in women of child-bearing age](#)
- [Risk of dose error when using intraosseous lidocaine in children](#)
- [Risk of harm from spinal administration of anaesthetic agent containing preservative](#)
- [COVID-19 swab snapped in tracheostomy](#)

<https://www.england.nhs.uk/patient-safety/patient-safety-insight/patient-safety-alerts/>

[NHS England » How we acted on patient safety issues you recorded](#)



You will never collect all PS incidents, or get all the details 'correct', so there is no value?

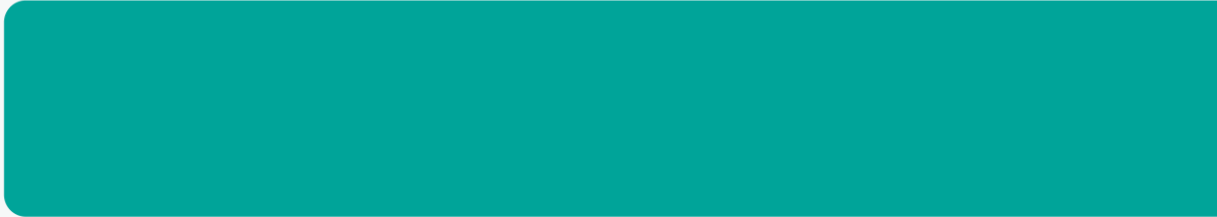





Incident recording is a waste of time as you will never collect all PS incidents, or get all the details ‘correct’

False

- We accept that incident data is imperfect and as such should not use it for purposes it is unfit for.
- It is possible to use incident reporting to support learning whilst accepting there will be gaps in information for a variety of reasons.
- It is a means of supporting patient safety, but not the only means.
- First hand reporting will offer a single view on an event but this still has value, and a reporting system can enable the voice and individual perspective of the staff or patient to be heard.
- Often there is no *perfect* version of an event and when using incident data, it is possible to reflect that by providing guidance on what incident data can and should be used for.



*The number of reports tells you
how safe you are.
Benchmarking is
informative ...*





The number of reports tells you how safe you are. Benchmarking is informative...

False

- Incident reporting volume is subject to many different influences.
- Increased patient throughput, population type, increased scrutiny of specific issues, increased awareness of reporting, size and type of organisation and current national/regional/local influences can all affect reporting volume and style.
- Number comparisons with other organisations for benchmarking purpose is therefore unhelpful; all that is really being measured are the number of reports not how safe an organisation is.
- Without knowledge of the influences that have led to reporting and the host of other complex factors it is impossible to extrapolate meaningful comparisons from how many incidents are reported.
- Organisations may find value in benchmarking their own reporting behaviours over time, being curious about changes in reporting patterns.

NHS England » NRLS official statistics publications: guidance notes

Data principles (learn-from-patient-safety-events.nhs.uk)

NHS England » Organisation patient safety incident reports: commentary data to March 2022

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The principles

What do LFPSE data tell us?

1. They reflect the safety recording culture in an organisation.
2. They show the most frequent types of recorded patient safety events at national, regional and local levels.
3. They show patient safety events broken down as:
 1. Patient safety incidents
 2. Outcomes of concern where a patient safety incident may have contributed to the outcome but that is not yet clear.
 3. Risks to patient safety (where no incident has occurred yet)
 4. Examples of good care which users felt could be learnt from to amplify excellence
4. They show which types of patient safety incidents are recorded as most harmful, at national, regional and local levels.
5. They help us to understand how patient safety incidents happen.
6. They show how incident recording patterns change over time by degree of harm, by topic and by care setting or organisation.

Overview of NRLS data collection and interpretation

The NRLS collects data on patient safety incidents in England and Wales. This commentary covers data reported by English organisations; data relating to Wales is available [on the Welsh Government website](#).

Most data is submitted to the NRLS from an NHS organisation's local risk management system. A small number of reports are submitted using online 'eForms' by individuals and organisations that do not have local risk management systems. More information is available in our [accompanying guidance notes](#).

Many factors affect how NRLS data and statistics are interpreted. Detailed information is available in our [accompanying guidance notes](#) and [data quality statement](#); but as a summary:

different kinds of review, at users. different events, and if they

patient safety incidents or similar organisation. history and characteristics



Lists of incident types are the way to go.....

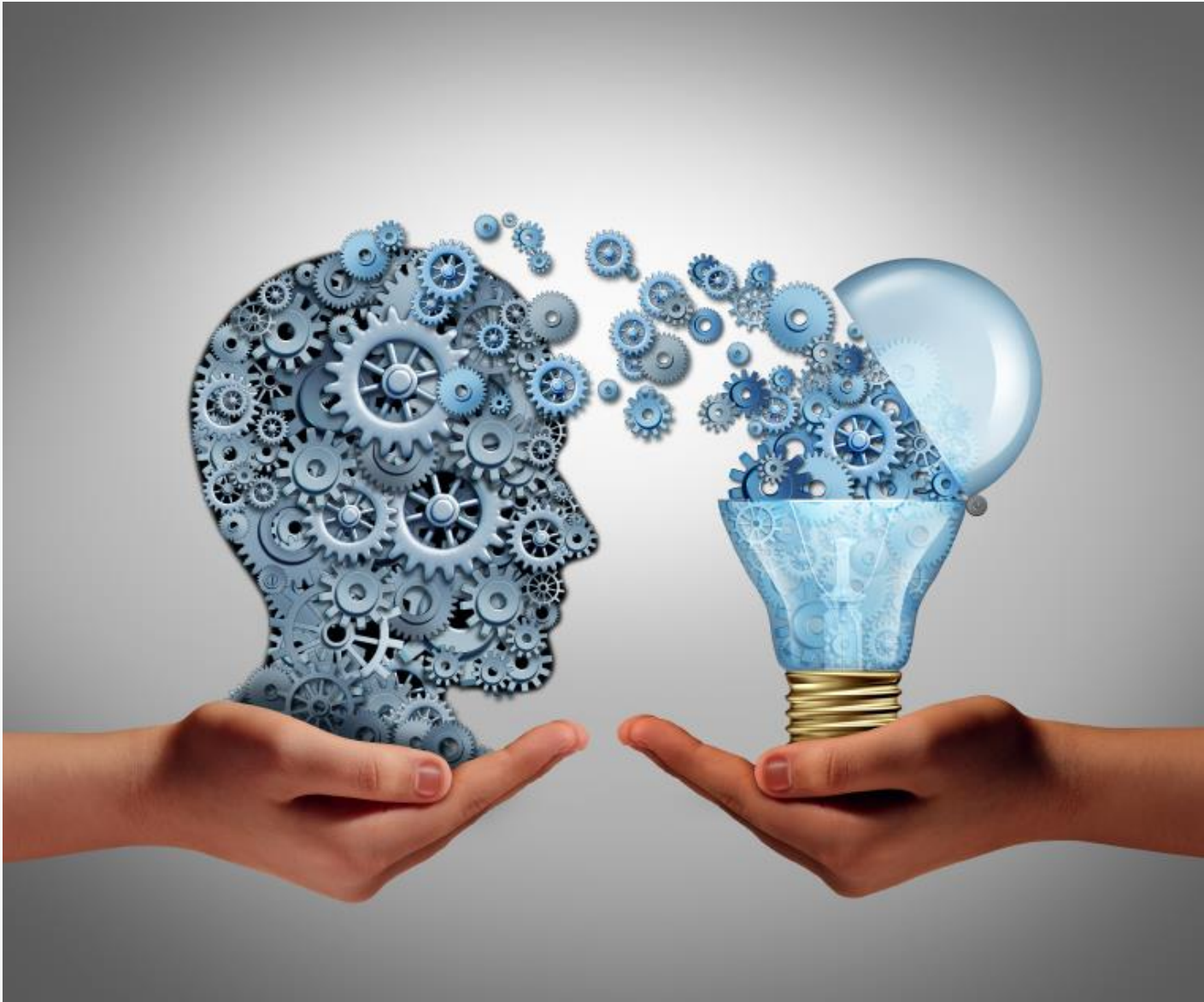


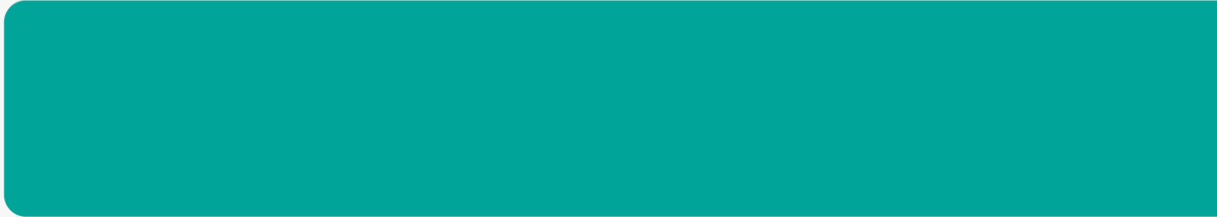


Lists of incident types are the way to go.....


False

- It is rarely possible to apply a single incident type to what is often a complex set of contributing factors resulting in harm (or potential for harm).
- Assigning incident types requires them to be universally understood and clearly defined to enable data collection in a way that supports robust analysis.
- There are a small number of incident types that may meet this requirement, but the complexity of healthcare means there is often a combination of different types of events resulting in harm.
- Incident types may be best understood by exploring ***what is*** reported as opposed to being too prescriptive on ***what should*** be reported
- Adopting Machine Learning technology can support this





Patient safety incident reports are misleading because incidents are not linear – but most incident reports are written as though they are.



Patient safety incident reports are misleading because incidents are not linear – but most incident reports are written as though they are

False

- Building some flexibility into reporting systems is key
- Incident reporting offers the opportunity for problem identification and learning
- In responding and learning, the systemic influences surrounding an incident can be explored
- It is possible that looking at groups of similar incidents can identify different contributing factors, experiences and variables influencing how and why incidents occur and the extent to which they may cause harm.
- In reporting from their perspective reporters often inadvertently offer suggestions on how the system might improve to better support them to work more safely.
- Reporting of lower harm events can provide helpful insight on how barriers have prevented more serious consequences i.e.: ‘the good catch’



Introducing the Learn from Patient Safety Events service



LFPSE



3:26 / 3:27



YouTube



[NHS England » Learn from patient safety events \(LFPSE\) service](#)

Incident response & analysis



- Human error is the cause of safety events
- If staff followed policy then healthcare would be safe
- Every safety event should be investigated
- The main purpose of an investigation is to find the 'truth' i.e. what happened and why
- Investigations are always done by trained people with time and resources to complete their work



Human error is the cause of safety events





Human error is the cause of safety events

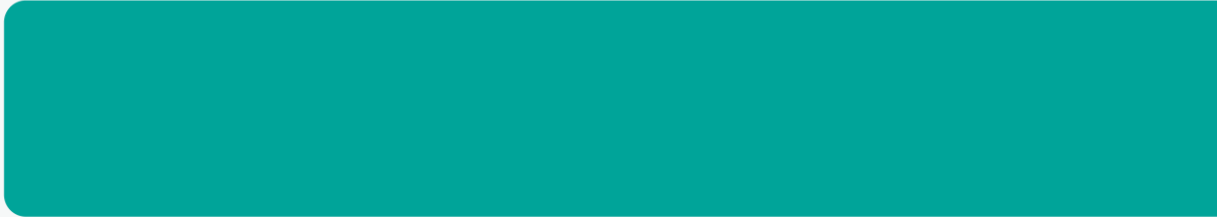
False

- We must accept that in a complex system some error may still occur.
- Humans aren't perfect and we should expect that they will make errors.
- Just because a person was the last to interact with a patient it doesn't mean that their action/inaction was the cause of the safety event.
- Factors can exist earlier in care pathways or may emerge without warning that can impact on safety events occurring.
- We need to design systems and processes to make it as easy as possible for people to provide safe care and reduce the chances of error occurring to 'as low as reasonably practicable'.





'Human error': The Handicap of
Human Factors, Safety and Justice
– Humanistic Systems

Noise: A Flaw in Human Judgment
by Daniel Kahneman



Taking someone involved in a safety event away from clinical practice will make care safer





Taking someone involved in a safety event away from clinical practice will make care safer

Maybe

- Removing staff from duty may reduce the risk posed by these individuals where their conduct falls below what may be reasonably expected.
- This can also provide confidence to patients, families, carers and regulators that something has been done to address an issue.
- But, think about the substitution test; even if we take A off duty is it likely B could make a similar error?
- Unless we address the systems and processes in place to make it easy and safe for staff to do their job we may only be removing the person 'unlucky' enough to have been involved in that event.
- We may also induce further safety risks, for example if we remove a person from duty this means we may now be a staff member down on future shifts.



*If staff followed policy then
healthcare would be safe*






If staff followed policy then healthcare would be safe

Maybe

- Policies and procedures are designed to help make sure that we can provide safe care to patients.
- Policies and processes may be written by people less familiar with the day-to-day work and may not account for the context staff find themselves in when delivering care.
- The volume of policies and processes in most organisations is too great for any individual to have memorized and aides may not be available to help them.
- An investigation can highlight a gap between policy (work as prescribed) and actual work (work as done). This can help to provide information on where policy might need to be updated to reflect the everyday work.
- Using methods such as hierarchical task analysis can be useful for highlighting important gaps that require system redesign rather than asking staff to simply follow policy.



Work as imagined and work as done
– Patient Safety Now
(suzettewoodward.org)

“Perhaps the most common problem, particularly for national policy that’s been rolled out, is a tendency to forget that different areas have different starting points, and that context matters. Your policy may work very well in the average place, but most places are not average.”

Nigel Edwards • Chief Executive • Nuffield Trust



*Interviews are there to catch
you out*

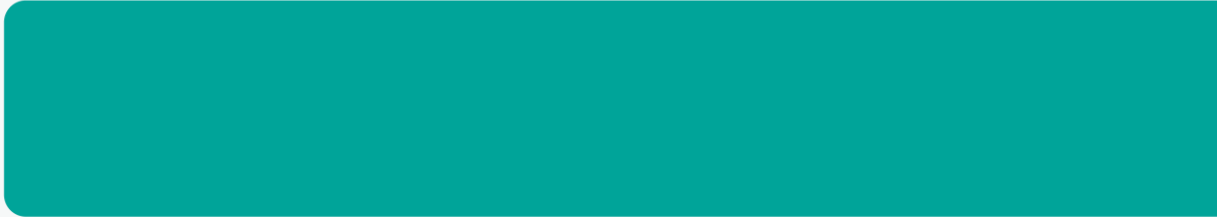





Interviews are there to catch you out

False

- Safety investigation interviews are conducted to support organizational learning and improvement.
- Interviews are not interrogations and should focus on understanding what happened and how it happened.
- This can provide a greater insight into everyday work than a written statement alone.
- The fallibility of memory is recognized and so insight collected through the interview will be triangulated with data captured via other means such as observations to create a rich picture of everyday work to inform learning.



*People should be sacked or
subject to disciplinary action if
they are involved in an incident*





People should be sacked or subject to disciplinary action if they are involved in an incident

False

- Safety investigations are focused on system learning and improvement.
- Safety investigations recognize that most staff come to work to do a good job.
- Concerns about an individual's practise are dealt with through other routes outside of the safety investigation.
- However, if a safety investigation does identify concerns about an individual's fitness to practise, this will be referred via the correct routes for separate consideration – in rare cases this may eventually lead to disciplinary action



A safety investigation should focus on reviewing what staff should have done





A safety investigation should focus on reviewing what staff should have done

False

- Understanding what ‘should have’ happened can support answering questions from patients, families and carers who may want to know what 'should' have happened and how this was different from the experience they had.
- But the investigation shouldn't stop there. A safety investigation should aim to understand ‘why’ things happened and ‘how’ improvements can be made to patient safety.
- We should focus on what actually happened to avoid falling into the trap of ‘what would have happened if...’ (counterfactual thinking).
- What ‘should’ have happened may not have been possible within the context that care was being provided at the time and we need to understand that to improve safety.



Every safety event should be investigated





Every safety event should be investigated

False

- Patient's families, and carers will usually want to have questions answered and know how safety is going to be improved, but that does not mean an investigation is required in each case.
- Organisations have finite resources dedicated to learning and improvement and these need to be used in a proportionate way to maximise the potential for improvement. This may utilise other methods of learning response, such as after-action reviews, MDT reviews, or swarm huddles.
- A broad systems-based approach will uncover many system factors that spread across a number of incident types and outcomes.
- Some incidents, particularly traumatic incidents that cause significant harm may hinder the learning process. This may include reluctance from patients, families, and carers to re-experience the trauma of events via an investigation process.



*The main purpose of an investigation is to find the ‘truth’
i.e. what happened and why*






The main purpose of an investigation is to find the ‘truth’ i.e. what happened and why

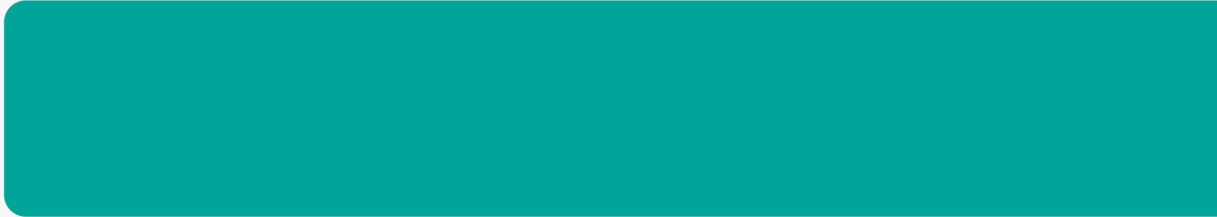
False

- There is no one ‘truth’.
- Those involved in a safety event will have different perspectives that are all ‘true’.
- In a safety investigation (as opposed to a criminal investigation) the purpose is to learn and improve – not to pursue a single ‘truth’, which may lead to disagreements between different accounts of the same event.
- This should be reflected and considered in the investigation and when making suggestions for improvements.




[B1465-3.-Guide-to-responding-proportionately-to-patient-safety-incidents-v1.1.pdf \(england.nhs.uk\)](#)

[B1465-2.-Engaging-and-involving...-v1-FINAL.pdf \(england.nhs.uk\)](#)



Investigations are always done by trained people with time and resources to complete their work





Investigations are always done by trained people with time and resources to complete their work

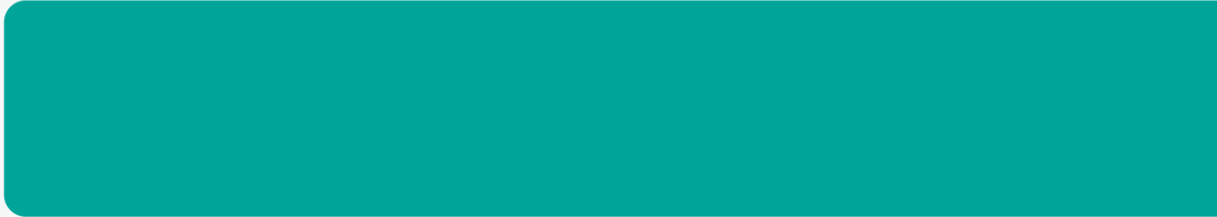
False

- Organisations have different resources available to them.
- In some organisations, investigations are carried out by clinical professionals in addition to their daily work. They are often not given significant extra time to complete investigations in addition to their usual working hours. They may not have received limited time and training to help support their work.
- Responding to a safety event requires time, skills and competencies in systems-based analysis.
- The NHS England Patient Safety Strategy and PSIRF have defined training and competency standards for those leading learning responses. This needs time to further embed and develop in England.


Recommendation generation



- Those making recommendations shouldn't work with those they are making the recommendation to until its finalised
- Personal reflections, reminders, posters and leaflets are an effective response
- Staff need training or retraining to remind them how to operate safely
- The problem is, people just don't implement recommendations. If they just did what the recommendation tells them to, the problems would not repeat.
- Making good recommendations is easy



*Those making
recommendations shouldn't
work with those they are
making the recommendation to
until its finalised*





Those making recommendations can't engage with those they are making the recommendation to until its finalised

False

- To stand any chance of succeeding, recommendations need to change the system and we need to understand the system we are looking to change.
- Change management theory tells us we need to engage those charged with and affected by that change to convince them of the need to change and to engage their support.
- Without buy-in from those who have to do the work, change is unlikely to occur.
- Even where change is mandated there can be inertia and lack of discretionary effort if the people doing the work do not believe it is correct and a priority.



*Personal reflections, reminders,
posters and leaflets are an
effective response*



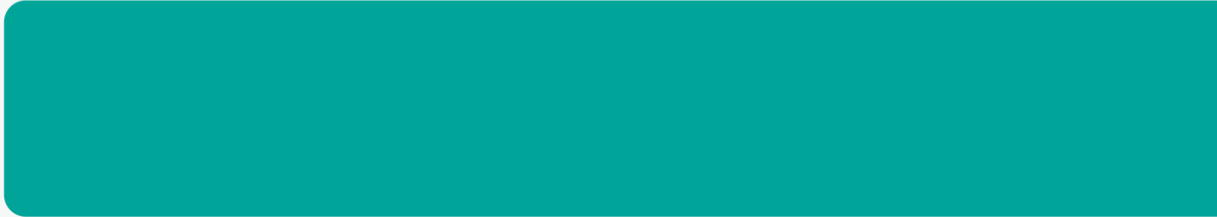
Personal reflections, reminders, posters and leaflets are an effective response

False


- If posters and signs are needed to remind someone of the right way to do their job, we have sub-optimal design of the work system.
- Even where the work system is designed as optimally as possible, visual signs and reminders are relatively ineffective interventions and certainly not a barrier to incidents occurring.
- People become very habituated to their environment and will soon find that signage becomes part of the background 'noise' that they filter out.
- Reliance on personal reflection to mitigate risks results from a perpetuation of the 'perfection' myth and the 'punishment' myth.
- The perfection myth is the false belief that if we try hard enough, nothing will ever go wrong.
- The punishment myth is the false belief that if we punish people enough after an incident, or scare them enough with the threat of punishment, they will not make mistakes.
- Neither work. They ignore the reality of work systems and focus on the individual. They lead to mitigations focused on individuals rather than the system meaning even if the person involved in the incident never does the same thing again, it is quite likely another person on another shift or in a different part of the organisation will.

'If it needs a sign its bad design'





*Staff need training or retraining
to remind them how to operate
safely*



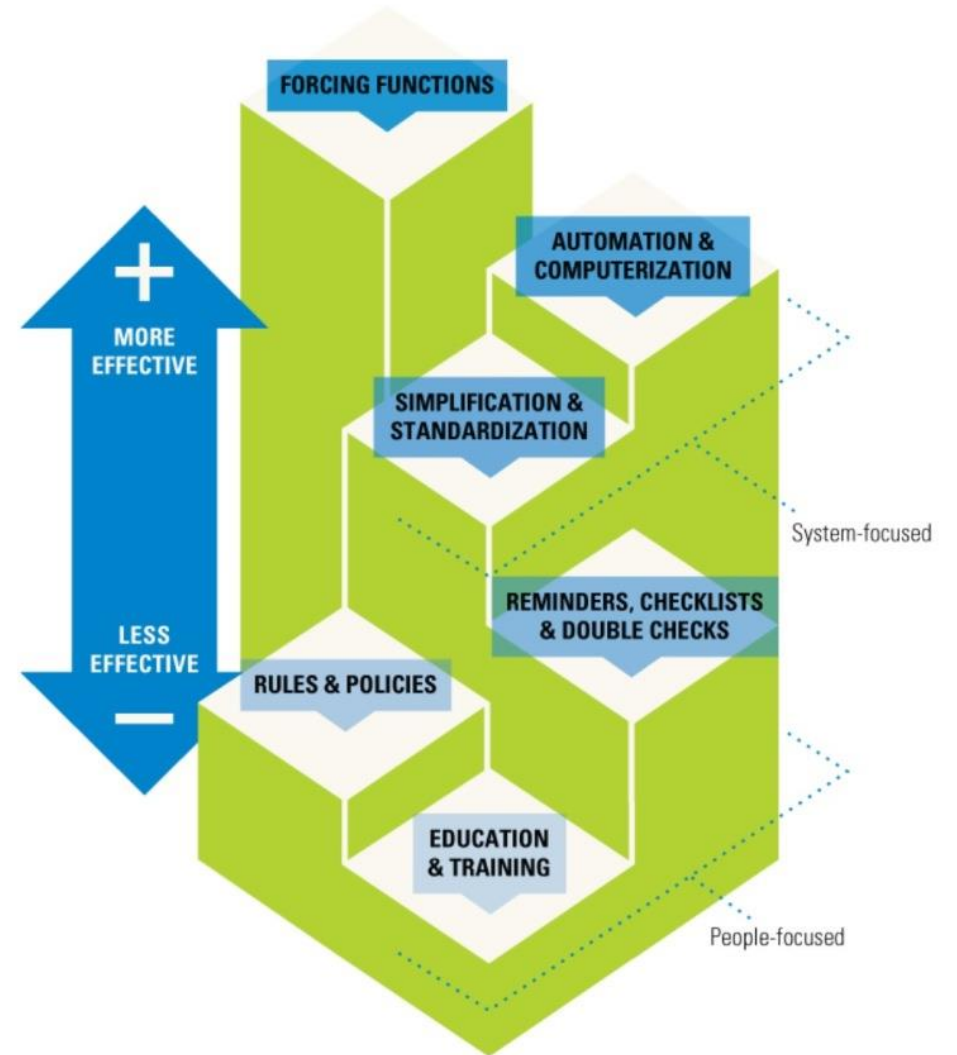
Staff need training or retraining to remind them how to operate safely

False

- A properly educated and trained workforce is probably more critical in healthcare than almost any other industry.
- Where a key factor in an incident was the fact that someone did not have the appropriate training to do the job they were being asked to do, then training should be considered as a mitigation for future risks.
- However, training is a very weak intervention in that it has a relatively small impact on the prevention of incidents in comparison to other interventions.
- Ideally, we should be looking to elimination, substitution, standardisation and simplification before we turn to reminders, training or checklists.

The hierarchy of interventions

The Hierarchy of Intervention Effectiveness





*There must be
recommendations or a
response*





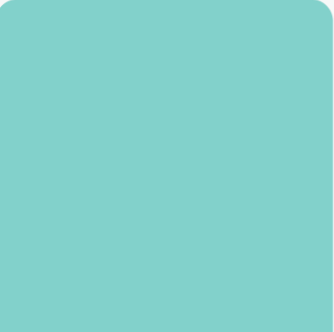
There must be recommendations or a response


False

- In a resource-constrained system, decisions must always be taken about where to prioritise the use of resources.
- It is quite possible that a learning response will identify areas of weakness in a system that are not particularly amenable to improvement at that point.
- It may be that intervention could take place, but the cost/benefit analysis shows the intervention to be prohibitive, or any intervention could have wider impacts that render it unjustified.
- It is ok for a learning response to say 'we have not identified any reasonable actions or recommendations that will meaningfully reduce this risk at an acceptable cost' or similar.



There can't be a response or recommendations until we have completed the investigation

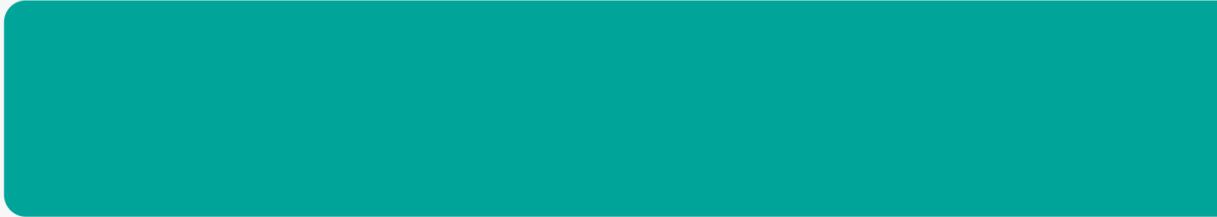




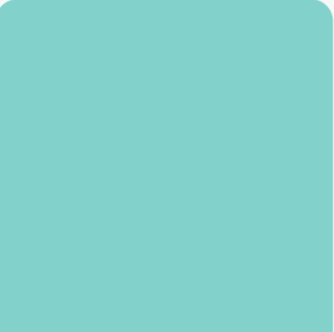
There can't be a response or recommendations until we have completed the investigation

False

- It is a long-standing principle that immediate action to reduce or remove particular risks should be undertaken regardless of the status of any investigation.
- The first priority should be to make safe any immediate dangers to people.
- The response to any incident should be guided by the circumstances of that incident rather than a rigid adherence to protocol.
- There will be situations where it is better to do nothing rather than jump to conclusions but doing nothing is an active decision as much as doing something.



Once a recommendation is made we must assume it is correct and implement it

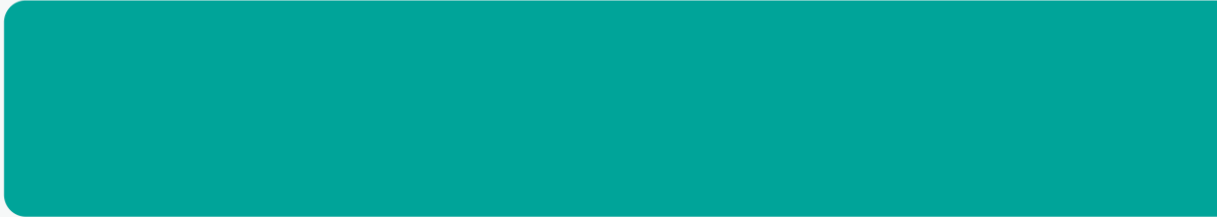





Once a recommendation is made we must assume it is correct and implement it


False

- Recommendations from safety investigations, be those local investigations, independent investigations or even national-level investigations and inquiries, are not infallible.
- They could be based on inaccurate information, inadequate analysis or erroneous assumptions.
- They may simply be too hard to implement.
- The recipients of investigations should always be engaged in their creation but if not, and even where they are, they are free to say they will not accept the recommendation.
- When rejecting a recommendation, it is good practice to explain why.



The problem is, people just don't implement recommendations. If they just did what the recommendation tells them to, the problems would not repeat.





The problem is, people just don't implement recommendations. If they just did what the recommendation tells them to, the problems would not repeat.

False

- Sometimes innovation can have a transformative effect on healthcare, but more often, change is incremental and improvement is hard won.
- Healthcare is the most complex industry in the world and delivering improvement is a constant task.
- For most patient safety incidents, there is no one single thing that will remove the risk without having wider impacts on the work system.
- Where the rare 'silver bullet' exists it should of course implemented, but more often, numerous incremental changes and adaptations are needed, with careful coordinated implementation which, of course, require significant resources to manage.

“NHSE should reconsider its approach to poorly performing trusts, with particular reference to leadership.”

“Change in practice arising from an SI investigation must be seen within 6 months after the incident occurred.

“Scrutiny of deaths should be robust enough to pick up instances of untoward death being passed off as expected.”

“Communication between clinicians, particularly when care is handed over from one team or unit to another, must be clear, include all relevant facts and use unambiguous terms.”

“Each organisation needs to be assured that incidents and all near-misses are being reported in line with their incident reporting and investigation policies.”

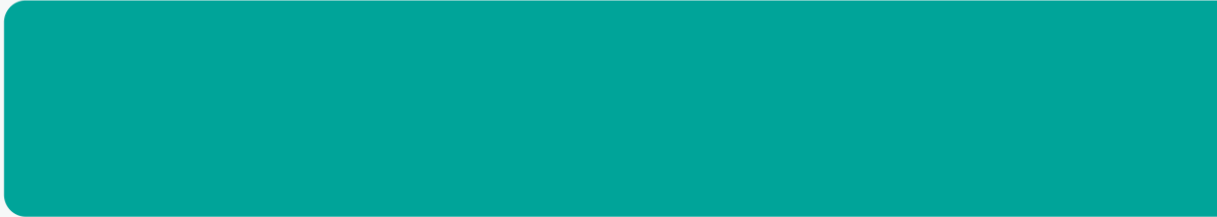
“Information should be conveyed to patients in a way that is clear and meaningful. The opportunity to speak to, or hear from, others who have undergone the same intervention should be considered.”

“All organisations should be clear on their duties under the Data Protection Act (DPA) and Access to Health Records Act.”


“We recommend that, when things go wrong, boards should apologise at the earliest stage of investigation and not hold back from doing so for fear of the consequences in relation to their liability.”

“We recommend that information about the means to escalate a complaint to an independent body is communicated more effectively in both the NHS and the independent sector.”

“We recommend that the importance of putting quality first is re-emphasised and local arrangements reviewed to identify any need for personal or organisational development, including amongst clinical leadership in commissioning organisations.”



*Making good recommendations
is easy*





Making good recommendations is easy

False

- This exact incident will not happen again
- Recommendations need to reduce the risk of similar incidents occurring in the future
- They need to be based on reasonable hypotheses about what might be effective in changing the system to reduce risk
- They need to avoid the temptation to solutionise without leaving the recipient with the need to reinvestigate all over again
- They need to be **CREATED SMART**

CREATED SMART

Cost/benefit – The cost of implementing should be justified by the benefits;

Reasoned - Logical flow from the findings and the system factors linked.

Effective – Should reduce the risk of harm based on published evidence or safety science and error theory.

Accidental impacts – Risk of unintended consequences should be assessed and mitigations noted

Together - Recommendations should be developed with whoever the recommendation is targeted at and experts in the area

Equalities - the equalities impact should be assessed to reduce inequalities and not adversely affect protected groups

Duplicative - do not duplicate existing recommendations without strong justification, eg previous recommendations not yet implemented and risk persists. Consider why previous recommendations were not implemented. Reference existing work in the main body of the report.

Specified – be clear in terms of who they are directed at and what the recommendation requires.

Measurable – Recommendations should enable measurement of whether they have been achieved;

Achievable – for the organisation/team expected to deliver them. If new financial resources are required instead of a shift in existing resources from other priorities, it should be directed at a funding organisation

Realistic – understand the context into which they will be introduced; political, policy and service considerations and the level of priority the recipient is likely to give them. There is a distinction between something an organisation *could* do (achievable) and something it is *likely* to do (realistic)

Timebound – set a definable end-point within a reasonable period, perhaps not a set completion date but recommendations should not simply be 'ongoing'. Defining a reasonable timeline for a recommendation should involve discussion with the target of the recommendation (see 'Together')

Implementation & monitoring



- Just do an audit
- Providing clear policies makes change happen
- Monitoring the process is sufficient
- Simply adopt “Best Practice”: We know it works; we just need to get on and do it
- It’s important to be sure of the solution before implementing change in practice



Just do an audit?



Just do an audit?

Maybe – it depends:

- ✓ Undertaking regular audit combined with targeted QI activity and a human factors lense can allow performance to be tracked against an audit standard over time and importantly, to understand which changes made have led to improvement. This is important so that teams know what changes to adopt, adapt or abandon, and what changes to spread to other wards/ departments etc.
- ✓ Audit data over time can inform a quality management system; acting as an early warning system identifying signs of deterioration in performance against the standard going forwards.
- ✓ Determining which audits to undertake regularly in this way post improvement would form part of the quality planning cycle.

HOWEVER...

- Audits undertaken without combining with QI and human factors techniques can result in implementation of change ideas that are unlikely to improve the system performance, due to a lack of understanding of the complexities contributing to the current level of performance.
- There's a risk that if audit data is presented as RAG rating (red amber green) or worse – two-point comparisons that teams cannot be confident (1) there is improvement and (2) what actions led to improvement, and post improvement any deterioration within the processes will not be identified early leading to inadequate quality control.
- Determining which audits to undertake regularly post improvement is challenging due to competing priorities and staff capacity.

*“In this first guide we exposed the limitations of the prevalent approaches to looking at data in the NHS: **two-point comparisons** and **traffic light or RAG reports**.”*

We introduced you to a better way to analyse data – statistical process control (SPC) – and with examples demonstrated how SPC charts can shape the conversations between people working in the NHS and the actions they take as a result.”



[Making Data Count – Getting started](#)

[Making Data Count – Strengthening your decisions](#)



*Providing clear policies makes
change happen*





Providing clear policies makes change happen

Partially true.

- Policies describe WHAT is expected.
- Provision of the policy itself will prompt a proportion of teams into action; teams for who the policy closely aligns to current priorities, have improvement capability and capacity, have staff members and leadership that are motivated and empowered in the policy area. These teams will potentially use the policy to inform their change efforts and drive improvement.
- It is therefore important that post publication of a policy responsible organizations ensure they have a way to monitor whether ***work as prescribed*** by the policy matches ***work as done*** on the ground.

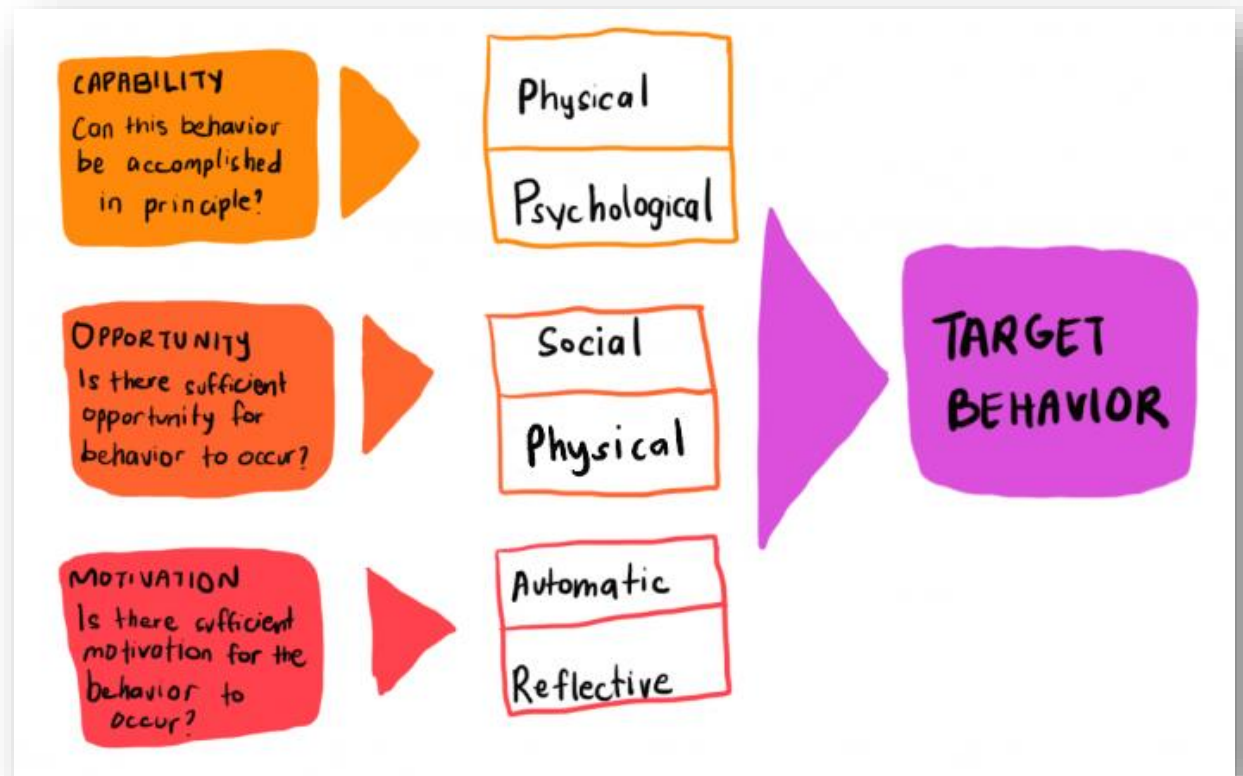
And if not, what targeted support might be needed?

High risk methotrexate prescribing in England is an example of where national policy did drive changes in practice, but not everywhere, creating inequality of risk.

Monitoring was possible using prescribing data. By 2021, 23% of ICSs in England were responsible for 76% of prescribing of methotrexate 10 mg tablets. Teams in these geographies required targeted support to make change happen:

[National quality improvement intervention to reduce high risk oral methotrexate prescribing](https://doi.org/10.1136/bmjog-2022-001942)

James Innes, Tony Jamieson, Ruth Dales, Robert Lloyd (2022)
<https://doi.org/10.1136/bmjog-2022-001942>



The COM-B model for behavior change cites capability (C), opportunity (O), and motivation (M) as three key factors capable of changing behavior (B).

Capability refers to an individual's psychological and physical ability to participate in an activity.

Opportunity refers to external factors that make a behavior possible. Lastly,

Motivation refers to the conscious and unconscious cognitive processes that direct and inspire behavior.

Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, 6(1). <https://doi.org/10.1186/1748-5908-6-42>



*Monitoring the process is
sufficient*



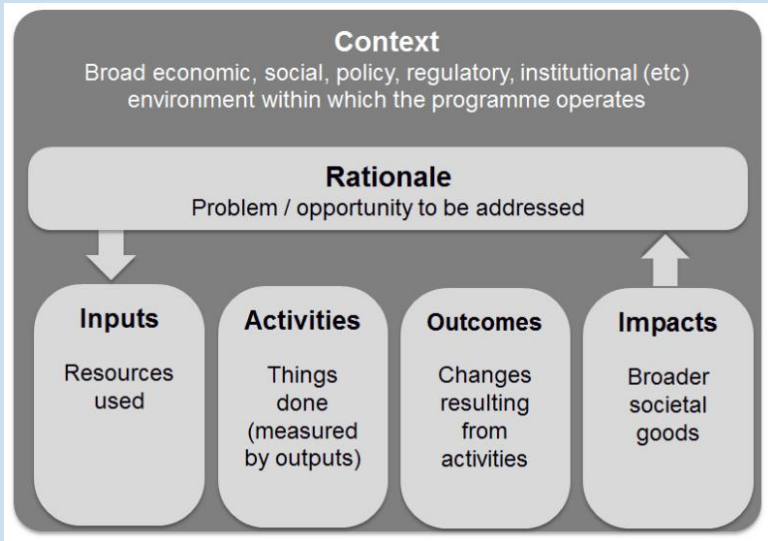


Monitoring the process is sufficient

False.

- During implementation, process measures are important: They demonstrate that the recommended actions are being implemented and if not can prompt review of the implementation plan/ recommendations.
- It is important to monitor the intended outcome of any changes implemented and impact going forwards.
- To only monitor processes going forwards makes the presumptions that
 1. the theory of change is valid i.e will lead to intended outcomes
 2. the process will not be impacted by other factors/ changes in context going forwards.
- NB Whilst the assumed outcome should be monitored, this is not always possible where outcome measures are not available or cannot be collected. The ability to measure what matters should be considered at the outset.

Logic Models



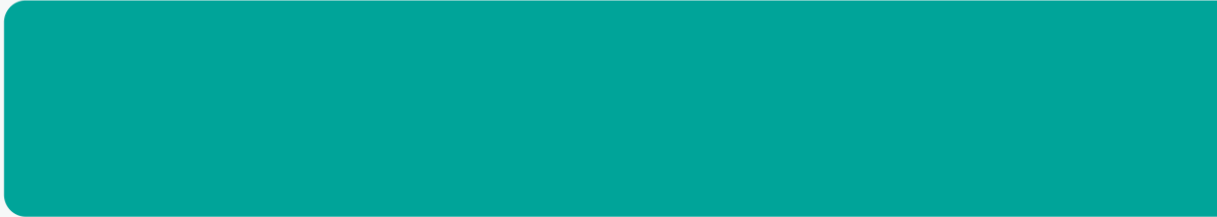
Brief Guide to Logic Models

Monitoring the expected outcomes as well as the process allows you to understand if the changes result in the outcomes that matter.


Real world example from the National Patient Safety Team

Medicines Safety Improvement -National Logic Model
Reducing harm from opioids in chronic non-cancer pain 2024/25

Inputs		Outputs		Outcomes	Impacts
Input	By who	Activities	Participants	2022-2024/25	2022-2024/25
Structured approach to understand the problem and to improve: Whole System Approach framework PLUS the 5-stage patient pathway	NHSE Pt Safety Team in collaboration with systems and PSCs	Implement the Whole System Approach framework to identify, test measure and spread changes across the 5-stage pt pathway	ICCs including commissioning organisations service users, communities, VCFSE organisations, providers with and without NHS badges, With commissioned support from PSCs	The approach at local level to understand the problem and to make improvement includes the whole system: Co-design with lived experience, people and communities, VCFSE organisations, clinical and non-clinical voice, providers with and without NHS badges, Increase in availability, accessibility and awareness of biopsychosocial offers including supported self-management. Increased uptake of biopsychosocial offers including supported self-management Reduce commissioned community MSK waiting times. Co-ordinated activity in primary, secondary and community care aligned to the 5-stage pathway for reducing harm from opioids Service user and staff experience of changes collated Nationally: 50,000 fewer people prescribed oral or transdermal opioids (of any dose) for 4 or more consecutive months vs Baseline Nationally: 15,000 fewer people prescribed >120mg OME/day vs Baseline Baseline period = 12 months Jan 2021-December 2021	Save 800 lives: <i>For every 62 people with chronic non-cancer pain who can be supported to manage their pain with alternatives to long-term opioid analgesia, 1 life can be saved.</i> Halve the risk of opioids related deaths for 15,000 people People with chronic non-cancer pain reporting better quality of life, more economically active and less disability as a result of improved care The structured approach supports movement towards a Learning Health System at local level to support continuous improvement and sustainability. ICCs and ICSS gain experience using a systems approach to improving care across a whole pathway.
PSC commission	NHSE Pt Safety Team				
National Publications	NICE CGs , NHSE Frameworks (Personalised care DFM , MSK improvement)	Inform understanding of the problem, planning and Improvement as part of the Whole System Approach Framework (In combination with local mapping, and local voices)			
Quantification of harm, harm statements	NHSE Pt Safety Team				
Prescribing data	NHSBSA, NHSE Pt Safety Team				
Learning between ICSS	NHSE Pt Safety Team	Contribute to and benefit from shared learning			



*Simply adopt “Best Practice”:
We know it works; we just need
to get on and do it.*





Simply adopt “Best Practice: We know it works; we just need to get on and do it

False.

- Its important to agree three things before implementing changes in practice:
 1. What we are trying to accomplish
 2. How we will know if a change has led to improvement
 3. What changes we could make that we believe will lead to improvement (i.e. ***potential*** solutions)
- A plan can then be made to implement a potential solution and test if it achieves the intended outcomes.
- This is important because context is everything – no two settings have the same skill mix, staffing levels, patient mix, access to tools or equipment. Even the same setting at different times of the day month or year will differ.

A definition of context

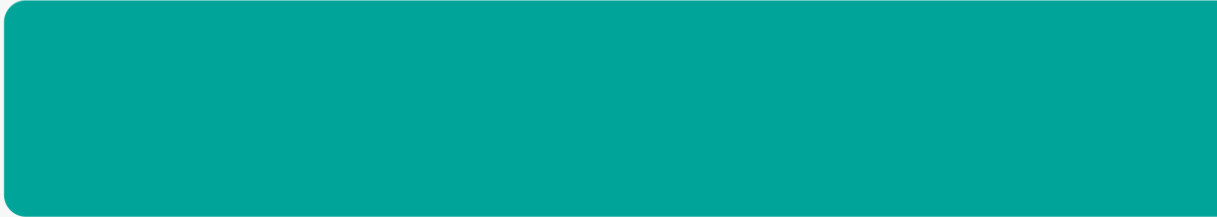
The 'why' and 'when' of change concerns itself both with influence from the outer context (such as the prevailing economic, social, political environment) and influences internal to the focal organisation under study (for example, its resources, capabilities, structure, culture and politics).

Pettigrew AM, Ferlie E, McKee L. Shaping strategic change: making change in large organizations: the case of the National Health Service. London: Sage, 1992




1. [Coles et al \(2020\) The influence of contextual factors on healthcare quality improvement: a realist review](#)
2. [Fulop et al \(2015\) Context for successful quality improvement](#)
3. [Bate et al \(2014\) Perspectives on context](#)
4. [Kaplan et al \(2010\); The influence of context on quality improvement success in health care: a systematic review of literature](#)
5. [Ovretveit \(2010\) Understanding the conditions for improvement: research to discover which context influences affect improvement success](#)

“Creating a context for improvement: learning from a national medicines safety initiative”
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It's important to be sure of the solution before implementing change in practice





It's important to be sure of the solution before implementing change in practice.

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Thank You

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 www.england.nhs.uk/patient-safety