

Changing Behaviour:

Supporting healthcare professionals to
improve quality



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Introduction

The Yorkshire & Humber Health Innovation & Education Cluster (HIEC) is committed to 'turning best practice into common practice'. We are using education and training to support professionals to change behaviour and ways of working to encourage the spread of new practices. We are working in an evidence based way to improve the quality of service, patient experience and outcomes.

In order to improve practice and implement change, health professionals need information and support. Through our work to date we have applied a range of educational, psychological and innovative approaches, with the aim of achieving changes in behaviour over the longer term.

This briefing summarises our key learning which we hope will help you in your own work to change the practices and behaviours of yourself and your team to improve quality. We also provide examples of where we are working with colleagues across Yorkshire and Humber to change behaviour including the approaches and how they have been applied. As you will see there is no 'one size fits all' approach. It is important to be flexible and carefully choose the best way to change behaviour in your situation.

Research undertaken by the HIEC Patient Safety and Maternal and Infant Health and Care project teams has informed the content of this briefing and more detail can be found in the boxed areas within this briefing, this is not however an exhaustive list of all our work relating to changing behaviours.

Why is understanding how to change behaviour so important?

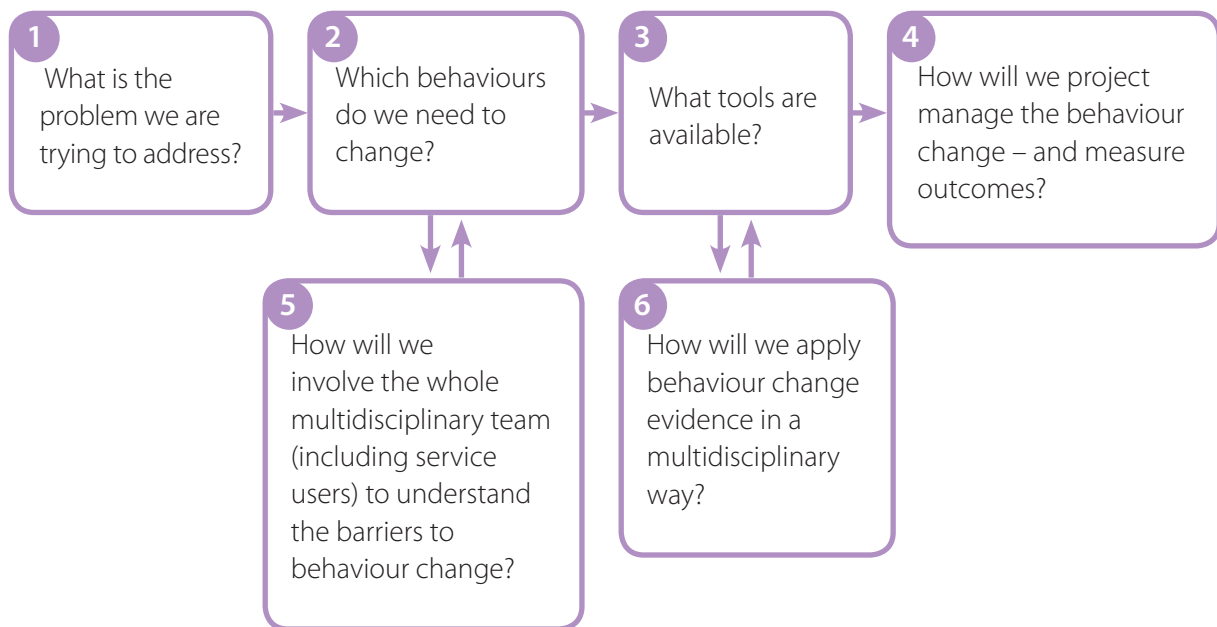
There is a wealth of evidence and guidelines that describes how changes in practice can improve patient outcomes and experience. However, it is increasingly recognised that although the development of evidence and guidelines is certainly necessary, it is not sufficient, on its own, to effect the desired changes in practice (Renfrew et al., 2006). It is important both to understand the complexity of the behaviour changes required, and also to know how to work with multi-professional teams to support change.

Some interventions require multiple behaviour changes by the same or different groups of staff. Understanding the complexity of these behaviours and the barriers to change is vital if we want to speed up the implementation of evidence based guidelines / practices.

Our learning

This is not meant to be a comprehensive step by step guide to behaviour change, but provides key considerations which may be helpful when changing behaviours in your organisation. As with all our work we are clear that the tools and systems we apply are not necessarily new but it is the way they are applied; collaboratively, with a strong evidence base for action etc. that leads to more successful outcomes.

Fig 1: Key considerations in applying a behaviour change approach



1. What is the problem we are trying to address?

The first step is to be very clear about the problem you are trying to address, this sounds obvious and simple, but we have found that it is not!

Evidence is an important factor here; if the issue is not acknowledged as significant by those individuals involved, they are less likely to offer the effort required to identify and embed the solutions. In all the examples we refer to throughout this briefing (Patient Safety alerts, Training and Action for Patient Safety (TAPS) and Getting it right from the start) the problem / issue to be addressed has been jointly identified by the teams who will be identifying and making the changes.

2. Which behaviour(s) do we need to change?

Having got a clear idea of what you would like to achieve, the next step is to think carefully about the behaviours that need to be changed (Michie et al., 2005), this is often overlooked in the change process. Often there is evidence of a problem and recommended actions, but there isn't any guidance to support staff to actually change their behaviour. Depending on the behaviour that is to be changed, there are a range of different ways to achieve this.

To ensure that the right behaviours are changed in the right way, it is important to identify the main problem behaviour(s) that is (are) connected to the problem. For example, we are working with a team in York Teaching Hospitals NHS Foundation Trust to reduce the risk of feeding through misplaced nasogastric (NG) tubes. In this case it has taken significant work to understand what the problem behaviours are: is the problem related to placing the tube, checking the position of the tube or of maintaining position? Understanding where the 'problem' resides is vital, otherwise your intervention is unlikely to change the right behaviours or change them in the right way.

3. What tools are available and which should I use?

It is important to think about the best way to change behaviour, this will be different in different situations. It is important to recognise that what works in one situation may not work in another. There are a number of approaches or techniques from innovation science, that are evidence based and are designed to support changes. From the many resources available we select those resources that will support our work and the issue we are addressing. For example:

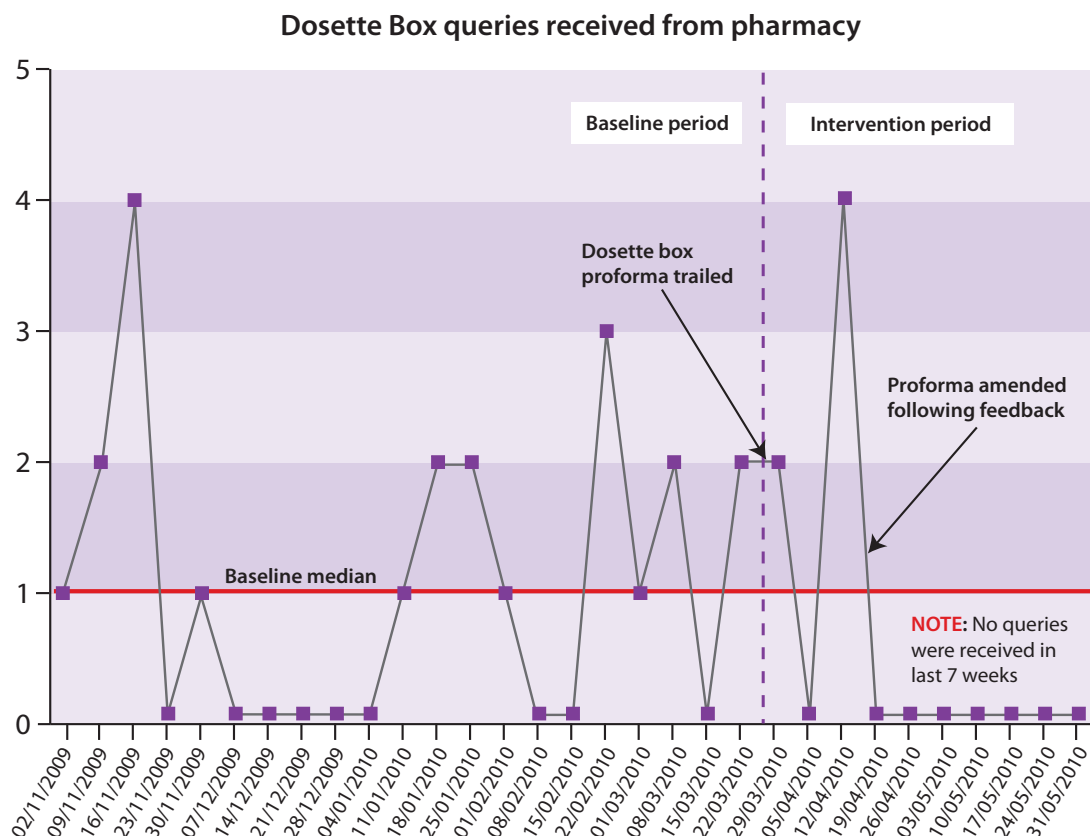
- For the NPSA work on nasogastric tubes, we have used a theoretical framework of behaviour change (Michie et al., 2005) to design a questionnaire (Determinants of Patient Safety Questionnaire: DOPS-Q) to identify staff barriers to behaviour change (in this case the barriers are asked in relation to the method of checking the position of a nasogastric tube, but the questionnaire has been designed in such a way that it can be applied to a range of patient safety contexts). This DOPS-Q is also a tool that can be used to guide the design of an intervention to address prominent barriers using appropriate strategies (Michie et al., 2008). Future work aims to develop a toolkit for health care organisations which can be used by staff themselves to identify barriers to behaviour change and design appropriate interventions to overcome the obstacles faced.
- The Maternal and Infant Health and Care Evidence into Practice Consultation took this approach further by consulting with over 400 professionals on the evidence-based key strategies for successful implementation (Haines & Donald, 1998); asking them to assess them in terms of the impact and feasibility of their implementation in everyday practice. These were then analysed and through this extensive engagement we could ensure that the final recommendations reflected a critical balance between the scientific confidence in the findings and a realistic and practical appreciation of 'what works' in practice. We are now working with colleagues within the 18 neonatal units and 24 Maternity units in Yorkshire and Humber to implement the findings. This education and training implementation programme (Getting it right from the start) involves supporting teams to identify the interventions most appropriate to them and then supporting them to implement these.
- The Training and Action for Patient Safety (TAPS) programme uses a number of tools that we have identified to be effective to the multi-disciplinary teams for them to then make a decision on which are the right tools for them. These include:
 - Root Cause Analysis (5 Whys)
 - Gap Analysis
 - Process Mapping

- Ishikawa (Fishbone)
- Gathering Information
- Pareto Analysis
- Brainstorming
- Affinity diagram
- Nominal group technique and multi- voting
- Tree diagram

4. Project managing the behaviour change

Once you understand what your problem is, it is important to plan and manage your project; This includes thinking carefully about the scope of your project (it must be realistic), the design of your project and plan to deliver it (for example, how will you fit it around the work of the team), and how you will evaluate the effect of your project (for example, defining what 'success' will look like).

The use of baseline figures and the run charts within the TAPS programme are very useful in showing improvements in service performance. For each of the measures selected the teams aim to collect ten data points prior to the start of their intervention to establish a baseline. Simple statistical tests were applied to subsequent points to show improvement. Run charts were annotated with details of the practical changes that the team had introduced: thus telling the story of the change and its effect on outcome and practice.



5. What are the barriers and how do we overcome them?

The evidence suggests that barriers at the individual, team, organisational and national level can make the implementation of evidence based practice very difficult. In broad terms, there is evidence that different barriers will require different approaches to overcome them, depending on where the barriers lie (Robertson & Jochelson., 2006). This is why it is important to think carefully about what the barriers to implementation are as well as identifying the issue and the solution.

Through examining the barriers and strategies to implement evidence-based change and through implementing the findings across our themes, we have found that the most effective way to overcome these barriers is to design programmes of work in collaboration with local clinical staff and where appropriate with service users. If this is not possible the service user should always be considered at the core of any change programme.

Through engaging local staff in identifying the solutions to their own challenges, and designing change programmes based on their own local need, there is a greater likelihood that the staff will feel that they own the solution and that it is relevant. This means the change is more likely to continue over the longer term.

6. Applying behaviour change evidence in a multi-disciplinary way

In addition to engaging local staff and clinicians, working with multi-disciplinary teams ensures that the team understand and own the problem. Our experience is that we have been able to move further and faster in the right direction by working with multi-disciplinary teams and facilitating this process.

Whilst there is no 'magic bullet' we have carefully considered how to support health professionals to address barriers to change at different levels. We have used different approaches in different ways to try and achieve significant and sustained changes in behaviour. Working with the staff or team who will either be affected by the change or will have to directly change their behaviour is important. Below is an example from a team working through the TAPS programme, who were trying to identify the root causes of Urinary Tract Infections.

The key thing about TAPS for us was that it got the whole team to look at root causes. The manager and I had done this before but, by having all the staff thinking laterally about the root causes there was greater ownership meaning staff were more engaged and therefore the solutions worked far better.

We have been surprised as none of us expected that the issue would be 'over-attention', we assumed that it would be that patients were not cleaning properly, but it was quite the opposite - they were cleaning too much, causing irritation and infection. One key indicator for this was feedback from a member of the housekeeping staff who noticed that soap and wipes needed to be replenished more frequently in one of the bathrooms, this reinforces the importance of involving all staff in identifying root causes.

Julie Brown, Proprietor, Sunnyside Nursing Home, Leeds and TAPS participant.

Key learning and advice

- Evidence alone is not enough to change behaviour.
- There is no 'magic bullet', changing behaviour takes time and effort.
- Professionals must own the problem and the process for developing and implementing the solution.
- Building networks and communications is essential, everyone involved must support and understand why the change is happening.
- Invest time and effort in developing a learning and sharing relationship, it is important to work with clinical teams and units.
- Work closely with the individual teams or unit to identify the 'problem' to be addressed and the program of work.
- Spend time to consider the 'problem' and identify and agree the behaviours that need to be changed e.g. undertake audits to clarify the problem, work together to define the problem.
- Identify or develop interactive resources system changes, new methods of working that support professionals in 'how' to change behaviour.
- Synthesise the evidence and range of solutions and provide a 'pick and mix' menu to enable professionals to select resources that will be most relevant for them to change behaviour in their own context.

Responding to problems identified from elsewhere (such as a government body) – A behaviour change approach to patient safety alerts

Experts in behaviour change have teamed up with patient safety specialists to work on an exciting project which aims to help NHS organisations implement patient safety alerts. We are using evidence-based methods to identify and address barriers to implementation using a psychological framework of behaviour change. Working with staff in their clinical environment provides a rare and detailed insight into the practicalities of applying evidence based research in a hospital setting. As the project has evolved, we have attempted to produce both useful tools and accurate reflections of our experiences. We hope that these outputs will help those interested in improving patient safety practices in their own hospital / health service to apply these methods in practice.

Top down guidance often fails to deliver the required behaviour change and consequently many organisations fail to adhere to patient safety alert guidelines. We argue that behaviour

change is difficult to achieve because the causes of behaviour are complex and change is often contested and resisted by the target audience (Leistikow et al, 2007). As such, there needs to be consideration of a range of technical, psychological and socio-cultural factors when designing an implementation package.

There is increasing recognition that theories of behaviour and behaviour change should be used to inform the design of interventions to change behaviour (NICE, 2007, Michie et al., 2008). For example, interventions that make extensive use of theory tend to have larger effects on behaviour than interventions that make less extensive use or no use of theory (Webb et al., 2010; Taylor et al., 2011). In this project we are building on on-going work which uses a theoretical framework of behaviour change (Michie et al., 2005) to support the implementation of evidence based patient safety practices by:

- Identifying the specific behaviours that are in need of change.
- Identifying the root of the problem by assessing the barriers staff face.
- Tackling specific barriers using appropriate behaviour change methods.
- Working with staff to design and implement interventions.
- Continually monitoring process/outcome measures.
- Sharing learning between Trusts to ensure best practice becomes common practice.

Problems / challenges identified by a team – Training and Action for Patient Safety (TAPS)

Training and Action for Patient Safety (TAPS) is a new training programme to improve safety in the NHS, developed in Yorkshire and Humber by experts in the fields of patient safety and improvement science. The TAPS programme takes place over a period of 20 weeks, and includes an on-line patient safety module and three workshops. Multi-disciplinary teams are supported to identify their own patient safety problem, to develop a solution, and to measure the impact of any intervention on practice and patient outcomes.

More than 50 multi-professional teams have participated in TAPS programmes since 2010. The TAPS approach to changing behaviour and practice emphasises multi-disciplinary working to identify problems and solutions and then implement them using the tools listed in section three of this briefing.

Problems / challenges identified across a region – Maternal and Infant Health and Care Evidence into Practice consultation.

In 2010/2011 our Maternal and Infant Health and Care theme consulted with over 400 colleagues across Yorkshire and Humber to identify strategies, barriers and examples of best practice to enable implementation of evidence-based practice. Two priority topic areas were addressed; care during admission in labour, and promoting attachment and breastfeeding in neonatal units. The consultation took the following form:

Identification of evidence-based key strategies for successful implementation comprised three developmental phases, and was based on previous work (Kelly et al 2004., Dyson et al., 2006).

The purpose of Phase 1 was to produce a list of evidence-based recommendations which would be considered good enough, in terms of scientific plausibility, to have some likelihood of success.

This provided the scientific basis for the consultation process with practitioners and service user representatives (Phase 2) in which, for each topic area, an electronic questionnaire was widely circulated to practitioners, commissioners, managers and user representatives across the region. Respondents were asked to appraise the evidence-based recommendations identified in Phase 1 in terms of the impact and feasibility of their implementation in everyday practice. The findings from this questionnaire stage then informed two workshops, one for each topic, in which participants were asked to identify effective ways of introducing recommended changes, based on their experience and expertise.

The third and final phase involved analysis and synthesis of findings from Phases 1 and 2, and the production of this report.

Throughout the evidence-gathering stages, both qualitative and quantitative approaches were used (Weightman, 2004). In Phase 2, drawing on the experience of a 'diagonal slice' (Renfrew et al., 2008) of practitioners, strategic and operational managers, and user representatives was vital to ensure the final recommendations reflected a critical balance between the scientific confidence in the findings and a realistic and practical appreciation of 'what works' in practice.

Useful References and Resources

Yorkshire and Humber HIEC

For more information on the projects mentioned in this briefing visit :

www.yhhiec.org.uk/themes/maternal-infant-health-care/

- Getting it Right From the Start
- Evidence into practice consultation and report

www.yhhiec.org.uk/themes/patient-safety/

- Training and Action for Patient Safety (TAPS) programme and pilot evaluation
- A behaviour change approach to patient safety

Other

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