

Top Down?

OR



Bottom Up?

Strategies for Improving Medication Safety

Dr David Cousins
Safe Medication Practice Consultant - England

Publications On Errors and Safer Anticoagulant Use

Issue 41: Preventing errors relating to commonly used anticoagulants | Joint Commission



Sentinel Event Alert

Issue 41, September 24, 2008

Preventing errors relating to commonly used anticoagulants

Reprinted from AUSTRALIAN FAMILY PHYSICIAN Vol. 37, No. 10, October 2008 817



Warfarin review

Safety advisory

16 February 2015



ANTICOAGULANT SAFETY INITIATIVE 2007-2008

SUMMARY OF RECOMMENDATIONS TO MINIMIZE RISK OF HARM WITH UNFRACTIONATED HEPARIN

Pa Patient Saf Advis 2015 Jun;12(2):54-61.

Oral Anticoagulants: A Review of Common Errors and Risk Reduction Strategies



ORIGINAL ARTICLE

Medication errors involving anticoagulants: Data from the Danish patient safety database

Jakob Nørgaard Henriksen¹, Lars Peter Nielsen¹, Annemarie Hellebek² & Birgitte Klindt Poulsen¹

¹Department of Clinical Pharmacology, Aarhus University Hospital, Aarhus, Denmark

²Unit for Quality and Patient Safety, Capital Region of Denmark, Copenhagen, Denmark

September 24, 2008



Patient safety alert

18



Alert

28 March 2007

Actions that can make anticoagulant therapy safer

Anticoagulants are one of the classes of medicines most frequently identified as causing preventable harm and admission to hospital.^{1,2} Managing the risks associated with anticoagulants can reduce the chance of patients being harmed in the future.

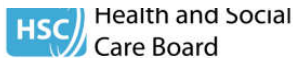
This patient safety alert has been developed in collaboration with the British Society for Haematology (BSH) and a broad range of other clinical organisations and individual clinicians, patients and patient groups.

Action for the NHS and the independent sector

The National Patient Safety Agency (NPSA) is recommending that NHS and independent sector organisations in England and Wales take the following steps:

- 1 Ensure all staff caring for patients on anticoagulant therapy have the necessary work competences. Any gaps in competence must be addressed through training to ensure that all staff may undertake their duties safely.

Guidance on the Safe Use of Warfarin in Primary Care



Northern Ireland

Published: February 12, 2019

RESEARCH ARTICLE

Quality of INR control and switching to non-Vitamin K oral anticoagulants between women and men with atrial fibrillation treated with Vitamin K Antagonists in Spain. A population-based, real-world study

Anibal García-Sempere¹, Isabel Hurtado, Daniel Bejarano-Quiñones¹, Clara Rodríguez-Bernal, Yared Santa-Ana, Salvador Peiró, Gabriel Sanfeliu-Gimeno

Health Services Research Unit, Foundation for Biomedical Research of Valencia—FISABIO, Valencia, Spain



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FEATURED ARTICLES

QuarterWatch™ (2016 Annual Report) Part II: Oral Anticoagulants—The Nation's Top Risk of Acute Injury from Drugs

July 27, 2017



Article

Occurrence of Antithrombotic Related Adverse Events in Hospitalized Patients: Incidence and Clinical Context between 2008 and 2016

Marco J. Moesker^{1,*}, Bernadette C.E.M. Schutijser¹, Janke F. de Groot², Maaïke Langelaan³, Peter Spreuwenberg², Menno V. Huisman⁴, Martine C. de Bruijne¹ and Cordula Wagner^{1,2}

Received: 13 May 2019; Accepted: 6 June 2019; Published: 12 June 2019



Safety Alert
Direct Oral Anticoagulants (DOACs)



www.safeuseofmedicines.co.nz



Medication Alert

Heparin (Unfractionated)

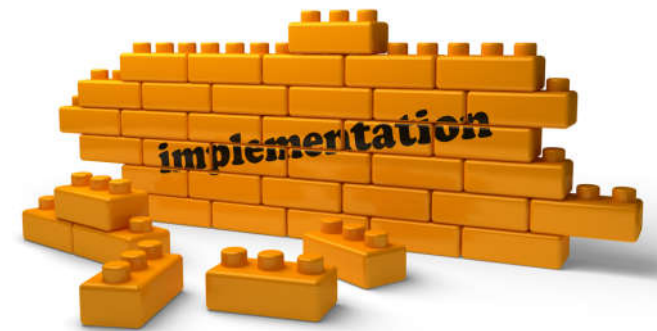
Alert 12 September 2011

Types of Safer Medication Practice Alerts

BEWARE!



**National
Guidance**





Anticoagulant medication errors in hospitals and primary care: a cross-sectional study

Albert R Dreijer ✉, Jeroen Diepstraten, Vera E Bukkems, Peter G M Mol, Frank W G Leebeek, Marieke J H A Kruip, Patricia M L A van den Bemt

International Journal for Quality in Health Care, Volume 31, Issue 5, June 2019, Pages 346–352, <https://doi.org/10.1093/intqhc/mzy177>

Publication of the national guideline on integrated antithrombotic care had no effect on the proportion of anticoagulant medication error reports. Human factors were the leading cause of medication errors before and after publication of the guideline.

<https://www.ncbi.nlm.nih.gov/pubmed/30165484>

Poor Implementation

‘Monitoring and evaluation of national patient safety actions for example patient safety alerts and design and procurement of new equipment, is limited and where implemented is inconsistent, making it difficult to track progress and plan for continual learning for improvement.’

‘Recommendations identified in previous publications on improving medicines safety, dating back over a decade, appear to be challenging to implement and remain outstanding.’

<https://www.hsib.org.uk/investigations-cases/inadvertent-administration-oral-liquid-medicine-vein/>

The Role of The Healthcare Regulator 1



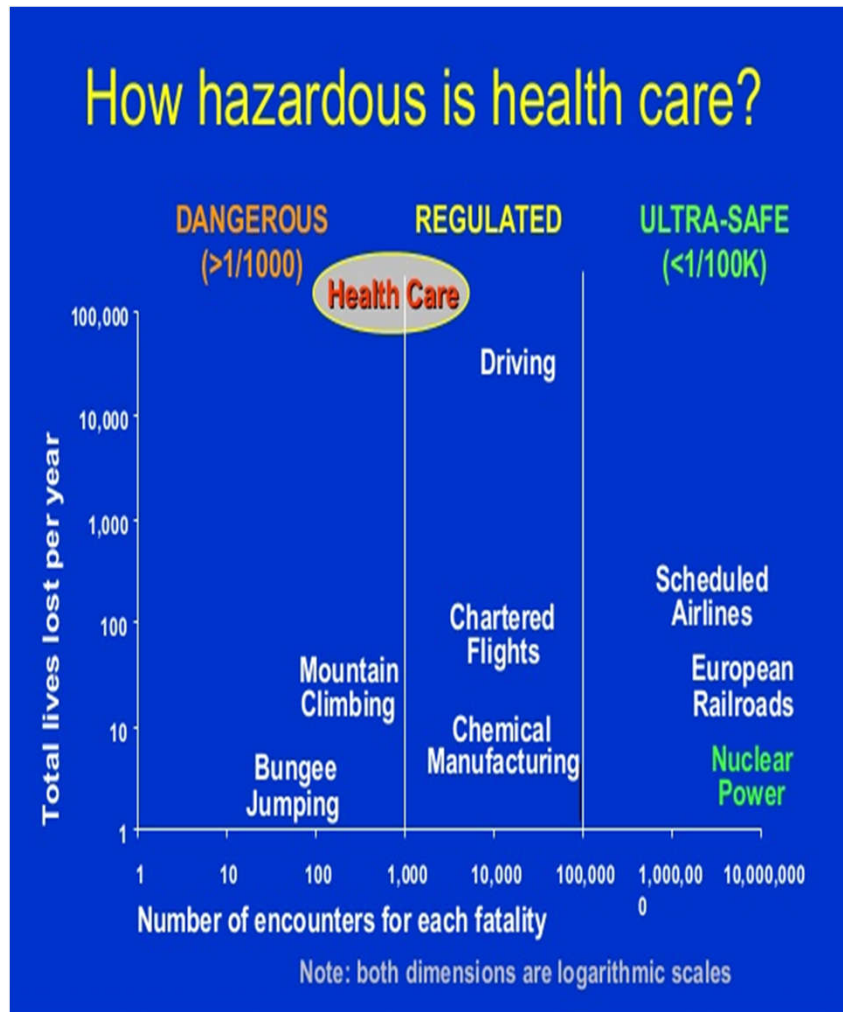
‘The other safety critical industries speak of their work as “high risk” and this informs everything they do.

Safety alerts are implemented effectively and consistently; an understanding of team dynamics, situational awareness, and human factors and ergonomics are central to how they work.

Safety protocols are followed without question. Staff are expected to raise any concerns about safety and do so as a matter of course. There is no hesitation in stopping operational processes if safety is thought to be in any way compromised’.

Safety training is never regarded as optional. They stressed to us that errors were inevitable and that everything they do is planned with this in mind.’

The Role Of The Health Regulator 2



- 'Health care, which in statistical terms is higher risk than any of the industries we consulted, in contrast took the view that safety was the norm and things only went wrong exceptionally. Staff are not expected to make errors. This leads to a search for quick fixes and technical solutions.'
- Raising concerns challenges the cultural norms of the workplace and the dichotomy between the safety reality and the safety culture may be the reason why this has proved such an intractable problem.
- The contradiction between culture and reality also leads to defensive behaviour when things do inevitably go wrong. Defensiveness weakens our ability to understand why safety problems have occurred and too often leads to individuals being blamed for real or perceived errors.
- Fundamentally, the safety culture of the NHS has to radically transform if we are to reduce the toll of Never Events and the much greater number of other safety events. Cultural change is not easy.'

The Role of Patient Safety Alerts



The NHS Patient Safety Strategy

Safer culture, safer systems, safer patients

July 2019

<https://improvement.nhs.uk/resources/patient-safety-strategy/>

Alerts have a specific role in patient safety. This is grounded in an understanding of safety theory; harm cannot be prevented simply by striving to avoid error (the 'perfection myth'), and so a traditional style of alert that requires staff to read about past error and endeavour to avoid repeating it is ineffective.

Alerts are inappropriate to address 'wicked problems', long standing challenges that the NHS and other health systems have worked for many years to address will have complex causes that a brief alert cannot address.

However, where an **issue is new or under-recognised** and can be addressed through relatively simple and widely applicable actions, **and alert can prompt and support local systems to take action.**

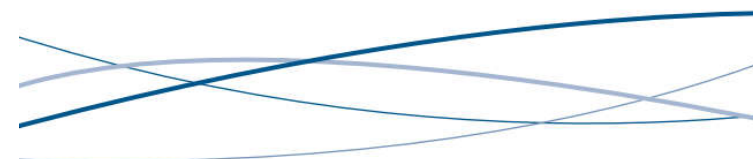
Template for New Warning Alert

- Identify a clinical leader to bring together people with relevant knowledge, and responsibility.
- Develop and agree local action plan to manage risks.
- Communicate the key messages in this alert to relevant clinical staff, clinical education/training staff, and patients and carers
- 6 – 8 Warning Alerts A Year – For all patient safety topics including medicines related risks

The IHI Influence On The NHS Patient Safety Strategy



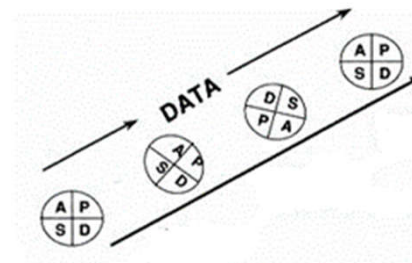
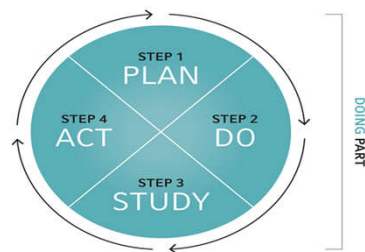
**A promise to learn
– a commitment to act**



**Improving the Safety of Patients
in England**

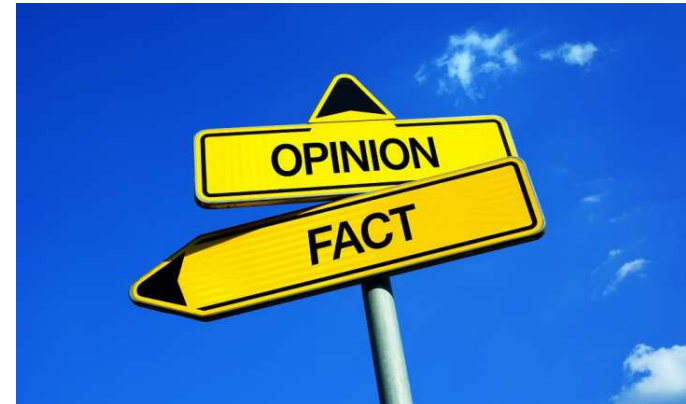
What Are Quality/Safety Improvement Collaboratives?

- Quality improvement methodology that “brings together groups of practitioners from different healthcare organisations to work in a structured way to improve one aspect of the quality of their service. It involves a series of meetings to learn about best practice in the area chosen, about quality methods and change ideas, and to share their experiences of making changes in their local settings”.
- It involves five essential features: there is a specified topic; clinical experts and experts in quality improvement provide ideas and support for improvement; multi-professional teams from multiple sites participate; there is a model for improvement (setting targets, collecting data and testing changes); and the collaborative process involves a series of structured activities.
- Components of collaborative model Selecting a topic for improvement Developing a consensus on standards of care Producing a “change package” (not what to do but how to do it) Establishing an organisational structure to support buy- in and shared responsibility with key stakeholders Enrolling participants Key learning sessions with intervening action periods.



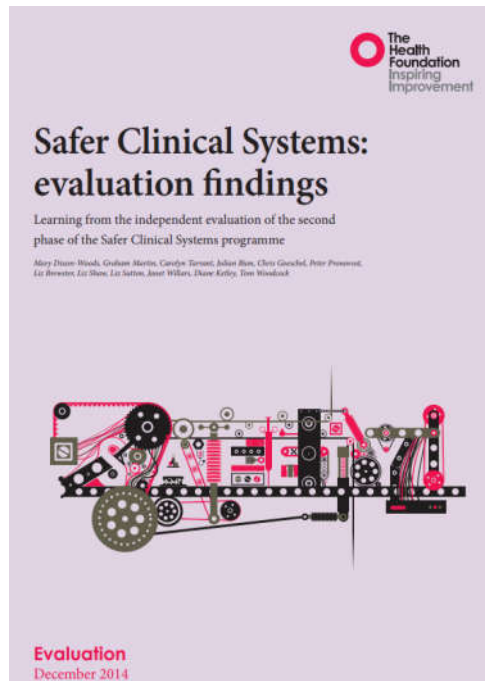
A systematic review of published evidence for the impact of quality improvement collaboratives came to the following conclusions:

- ‘The evidence underlying quality improvement collaboratives is positive but limited and the effects cannot be predicted with great certainty.
- Considering that quality improvement collaboratives seem to play a key part in current strategies focused on accelerating improvement, but may have only modest effects on outcomes at best.
- Further knowledge of the basic components effectiveness, cost effectiveness, and success factors is crucial to determine the value of quality improvement collaboratives.’



Schouten Loes M T Evidence for the impact of quality improvement collaboratives: systematic review BMJ 2008
<https://www.bmj.com/content/336/7659/1491>

Evaluating The IHI Safer Practice Initiative In The UK



‘Designing and implementing interventions to address these problems proved very challenging. Teams struggled to choose the right interventions – and right number of interventions – and many of the hazards and risks were too ‘big and hairy’ to be tractable to quality improvement methods based on plan-do-study-act (PDSA) cycles’.

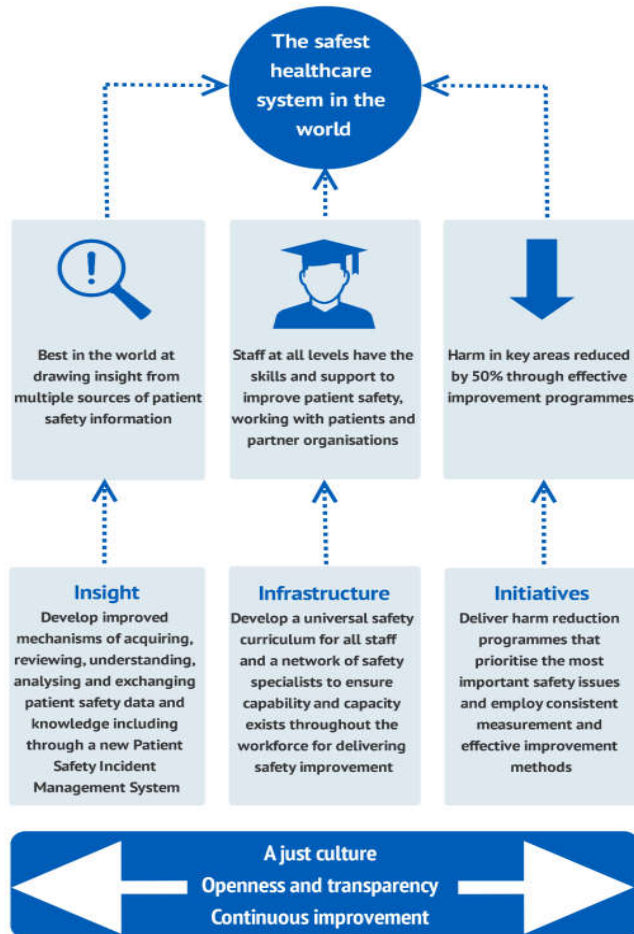
The effort required to collect data – whether relying on routine data or generating new data was often underestimated.

Of 19 safety measures reported:

- ten demonstrated no change*
- four showed evidence of improvement*
- four showed evidence of possible improvement (more data would be needed to confirm)*
- one showed evidence of possible deterioration.*

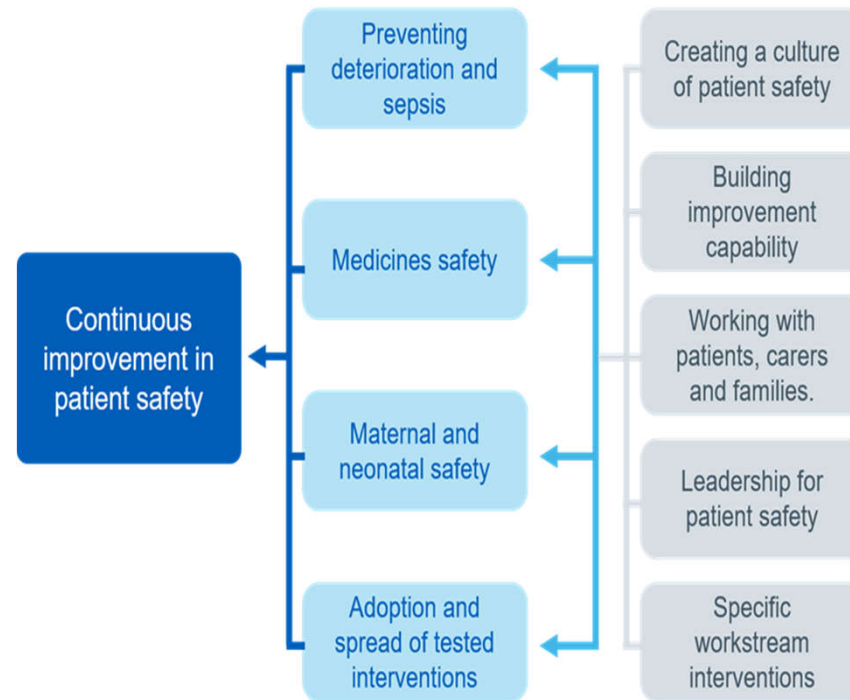
It remains unclear whether using local measurement in the way it was deployed in the programme is realistic or sustainable, though the principle should not be abandoned until there has been further exploration of ways to support it

Summary Of NHS Patient Safety Strategy 2019



National Improvement Programme

Via P/S Collaboratives



Medicines Topics in the National Patient Safety Improvement Programme 2019

Project	Success measures
Develop an exemplar to illustrate best practice in transition of patients on anticoagulants from hospital to care home	% anticoagulant monitoring delivered within a specified time % complete records arriving with patient % appropriate prescribing
Improve drug administration safety in care homes through regular medication review	Reduction in wasted medicines Medicines delivered on time Fewer omitted medicines
Commission shared decision-making (SDM) training for clinical pharmacists moving into PCNs, to work with patients with atrial fibrillation (AF) on anticoagulants	Number of pharmacists trained in SDM % of patients in PCN within safe range % AF patients with stroke risk assessed on anticoagulants or antiplatelet therapy Use of patient 'self-efficacy/engagement' measure
SDM/self-management support for clinical pharmacists starting with people on opioids	Number of pharmacists trained in SDM Reduction in opioid prescribing (120 mg morphine equivalent) in patients with chronic, non cancer-related pain Evidence of good pain control
Enabling structured medicines reviews across an advanced STP/ICS starting with population at risk due to polypharmacy	% structured reviews of at-risk population – resulting in change/no change Problematic polypharmacy in people with frailty Number of medicines taken by each patient

NB: No Medicines related topics included in the 2014 – 2019 plan

SDM – Shared Decision Making - when health professionals and patients work together .

PCN – Primary Care Networks.

STP stands for sustainability and transformation partnerships where local NHS organisations and councils drew up shared proposals to improve health and care in the areas they serve.

ICS – Integrated Health Systems - closer collaboration between healthcare providers.

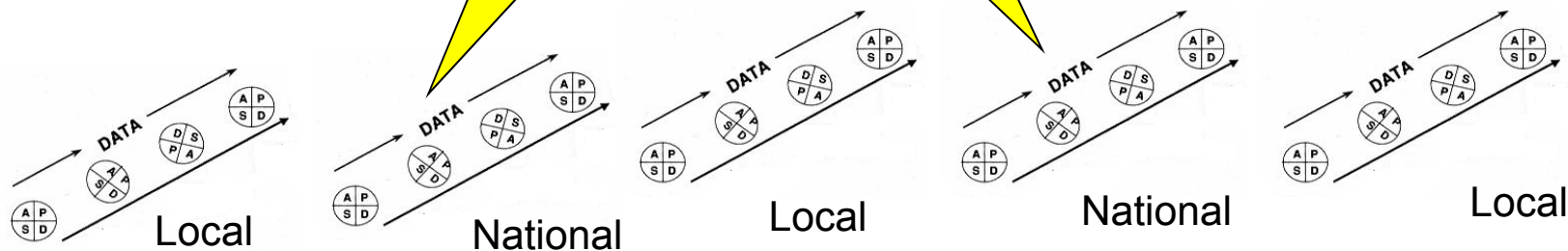
The Top Down – Bottom Up Approach To Patient Safety

National Patient Safety Reporting System

Identifying national risks, actions and implementation support for all types of risks

Improve patient safety culture, training and leadership

Health Care Regulator
Improved standards and inspection of patient safety



**Local Health Care Organisations – Identifying Local Risks and Actions -
Implementing and Evaluating National and Local Initiatives**

Implications for



1. Will the role of 'safety centres be reduced by 'safety collaboratives' ?
2. Better define the role of Medication Safer Practice' Centres?
3. What types of Patient Safety Alerts should be used by centres?
 - Warning
 - + Guidance
 - + Implementation support
4. For all types of risks?
 - Major large long standing risks?
 - Only for new and unknown risks?
5. Should implementation of Alert guidance be evaluated? Using what methods and by whom?
6. Should the effectiveness of Alert guidance be evaluated? Using what methods and by whom?
7. How should Medication Safer Practice Centres utilise patient safety collaborative methods and/or organisations?
8. Should the IMSN comment on the appropriateness of Patient Safety Collaboratives as the only method to address all major long standing risks?