Specialist Pharmacy Service

NHS

UKMI PDS
WHO 3rd Global Patient Safety Challenge

Nicola Wake
Medication Safety Lead

The first stop for professional medicines advice

www.sps.nhs.uk

- Introduction
- England's response to the WHO Challenge
  - Medication Safety Programme
  - Metrics
  - Repository
- Medication Safety Officers
- Medication Safety Network

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1. HEXHAM GENERAL HOSPITAL
   Corbridge Road, Hexham, NE46 1QJ
2. NORTH TYNESIDE GENERAL HOSPITAL
   Rake Lane, North Shields, NE29 8NH
3. WANSBECK GENERAL HOSPITAL
   Woodhorn Lane, Ashington, NE63 9JJ
4. THE NORTHUMBRIA
   Northumbria Way, Cramlington, NE23 6NZ
5. ALNWICK INFIRMARY
   South Road, Alnwick, NE66 2NS
6. BERWICK INFIRMARY
   Infirmary Square, Berwick-upon-Tweed, TD15 1LT
7. BLYTH COMMUNITY HOSPITAL
   Thoroton Street, Blyth, NE24 1DX
8. HALTWHISTLE WAR MEMORIAL HOSPITAL
   Westgate, Haltwhistle, NE49 9AJ
9. MORPETH NHS CENTRE
   The Mount, Morpeth, NE61 1JY
10. ROTHBURY COMMUNITY HOSPITAL
    Whitton Bank Road, Rothbury, NE65 7RW

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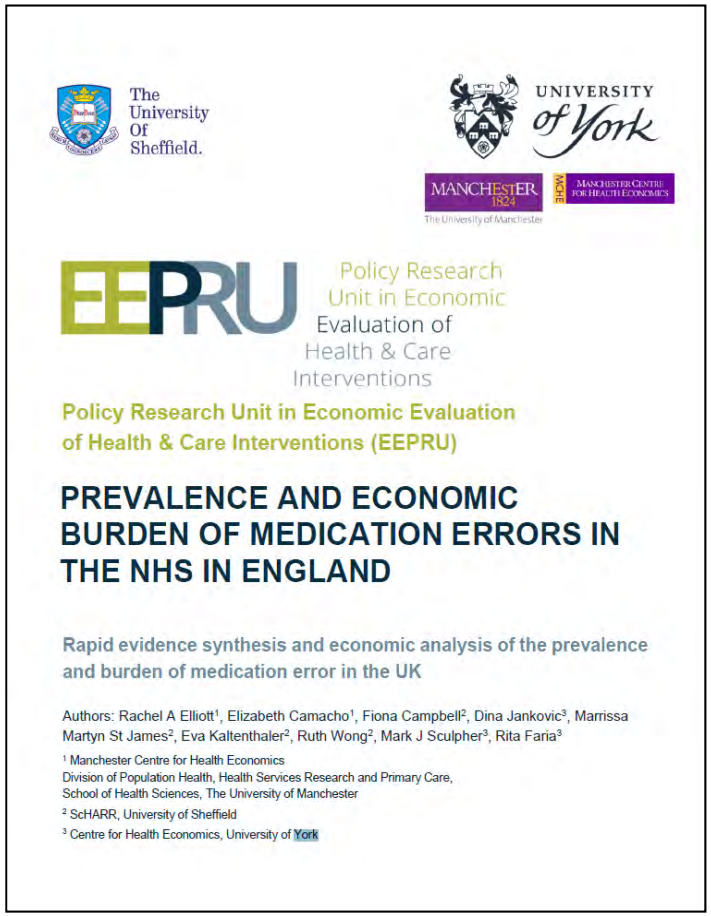
Medicines are an important part of NHS care and help many people to get well

We spend £17.4 billion a year on medicines (£1 in every £7 that the NHS spends) and they are a major part of the UK economy

However, the quality and safety of medicines use continues to be an issue:

- Use of multiple medicines is increasing – over 1 million people now take 8 or more medicines a day, many of whom are older people
- 30-50% medicines not taken as intended
- 5-8% of hospital admissions due to preventable adverse effects of medicines
- Medication error rates across all sectors are at unacceptable levels
- Wastage in primary care in the region of £300 million
- Prescribing variation is still significant across England
- Threat of antimicrobial resistance
- Patients report a lack of information relating to their medicines
- Variation in uptake of new medicines

England Response to WHO Challenge



The University Of Sheffield.

UNIVERSITY of York

MANCHESTER 1824 The University of Manchester

MCHE Manchester Centre for Health Economics

EEPRU Policy Research Unit in Economic Evaluation of Health & Care Interventions

Policy Research Unit in Economic Evaluation of Health & Care Interventions (EEPRU)

PREVALENCE AND ECONOMIC BURDEN OF MEDICATION ERRORS IN THE NHS IN ENGLAND

Rapid evidence synthesis and economic analysis of the prevalence and burden of medication error in the UK

Authors: Rachel A Elliott[1], Elizabeth Camacho[1], Fiona Campbell[2], Dina Jankovic[3], Marrissa Martyn St James[2], Eva Kaltenthaler[2], Ruth Wong[2], Mark J Sculpher[3], Rita Faria[3]

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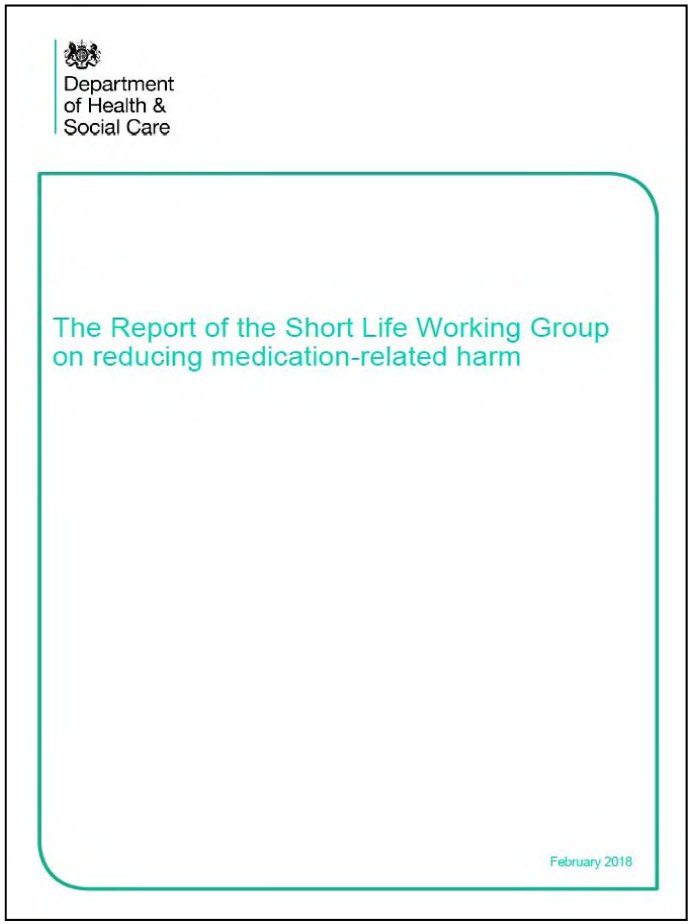
Division of Population Health, Health Services Research and Primary Care,
School of Health Sciences, The University of Manchester

[2] ScHARR, University of Sheffield

[3] Centre for Health Economics, University of York



Department of Health & Social Care

The Report of the Short Life Working Group on reducing medication-related harm

February 2018

The burden of medication errors

Medication errors can include prescribing, dispensing, administration and monitoring errors. Medication error can result in adverse drug reactions, drug-drug interactions, lack of efficacy, suboptimal patient adherence and poor quality of life and patient experience

An estimated 237 million medication errors occur in the NHS in England every year

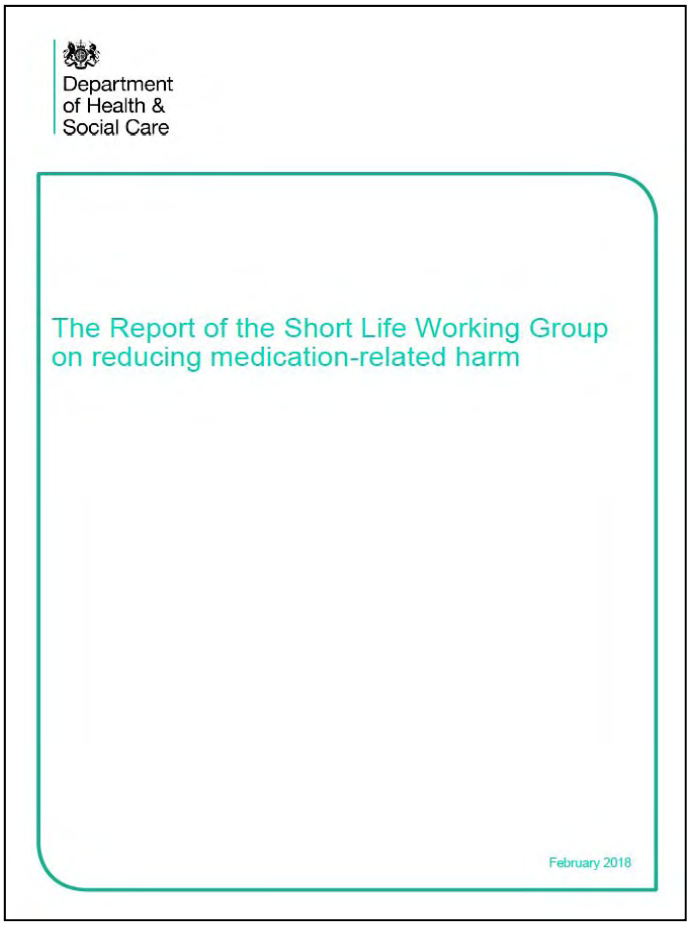
68.3 million errors (28% of total) cause moderate or serious harm

The estimated NHS costs of definitely avoidable ADRs are £98.5 million per year, consuming 181,626 bed-days, causing 712 deaths, and contributing to 1,708 deaths

EEPRU report - PREVALENCE AND ECONOMIC BURDEN OF MEDICATION ERRORS IN THE NHS IN ENGLAND November 2017*

Objectives of SLWG

- In the context of the WHO Global Patient Safety Challenge Medication Without Harm, advise on the overall strategy and programme required to drive improvement in medicines safety, drawing on work underway across NHS England, NHS Improvement, the Care Quality Commission (CQC), the Medicines and Healthcare products Regulatory Agency (MHRA) and in the NHS and academia.
- Identify those areas in which efforts need to be targeted in the short, medium and long-term.
- Provide clinical and academic expertise and advice on the current barriers and issues in medicines safety, and how these can be overcome.
- Advise on the best ways to measure medication errors and medication safety.



Medicines Safety Programme

Set up following the recommendations of the Short Life Working Group

1. Patients

- Improved shared decision making, including when to stop medication
- Improve information for patients and families, and access to inpatient medication information
- Encourage and support patients and families to raise any concerns about their medication

2. Medicines

- Increase awareness of 'look alike sound alike' drugs and develop solutions to prevent these being introduced
- Patient friendly packaging and labelling
- Ensure that labelling contributes to safer use of medicines

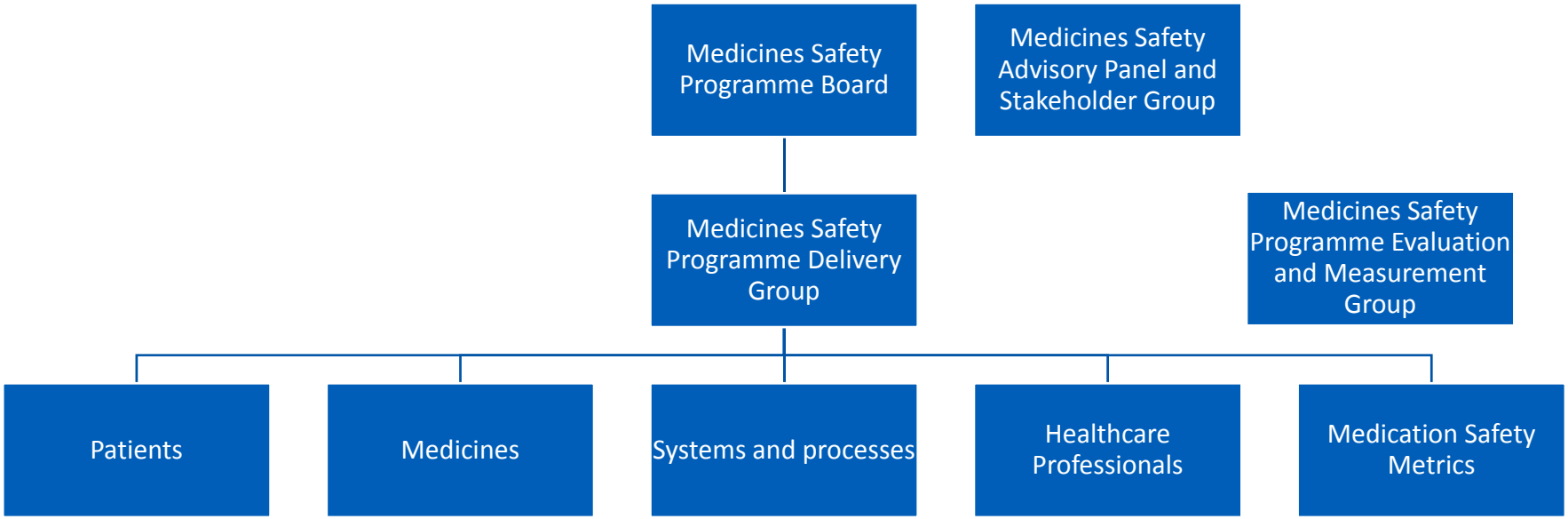
3. Healthcare professionals

- Improved shared care between health and care professionals
- Training in safe and effective medicines use is embedded in undergraduate training
- Reporting and learning from medication errors
- Repository of good practice to share learning
- New defences for pharmacists if they make accidental medication errors

4. Systems and practice

- The accelerated roll-out of hospital e-prescribing and medicines administration systems
- The roll-out of proven interventions in primary care such as PINCER
- The development of a prioritised and comprehensive suite of metrics
- New systems linking prescribing data in primary care to hospital admissions
- New research on medication error to be encouraged

DRAFT Governance Structure



Engagement Plan

A whole system approach….

- NHS England, NHS Improvement, NHS Digital, Health Education England
  - Regional offices engagement with STPs/ICSs, CCGs, and providers
- Nationally coordinated with Royal Colleges, professional bodies, academia, AHSNs, regulators

Building a consensus and supporting change

Clinical and patient engagement:

Initial engagement meetings with stakeholders

Partnerships with key professional organisations

National patient engagement

Regional engagement by the RMOCs and AHSNs

Involve stakeholders:

Joint working groups across the domains of the programme

Patient and public involvement

Identifying and celebrating best practice

Engaging with clinical thought leaders

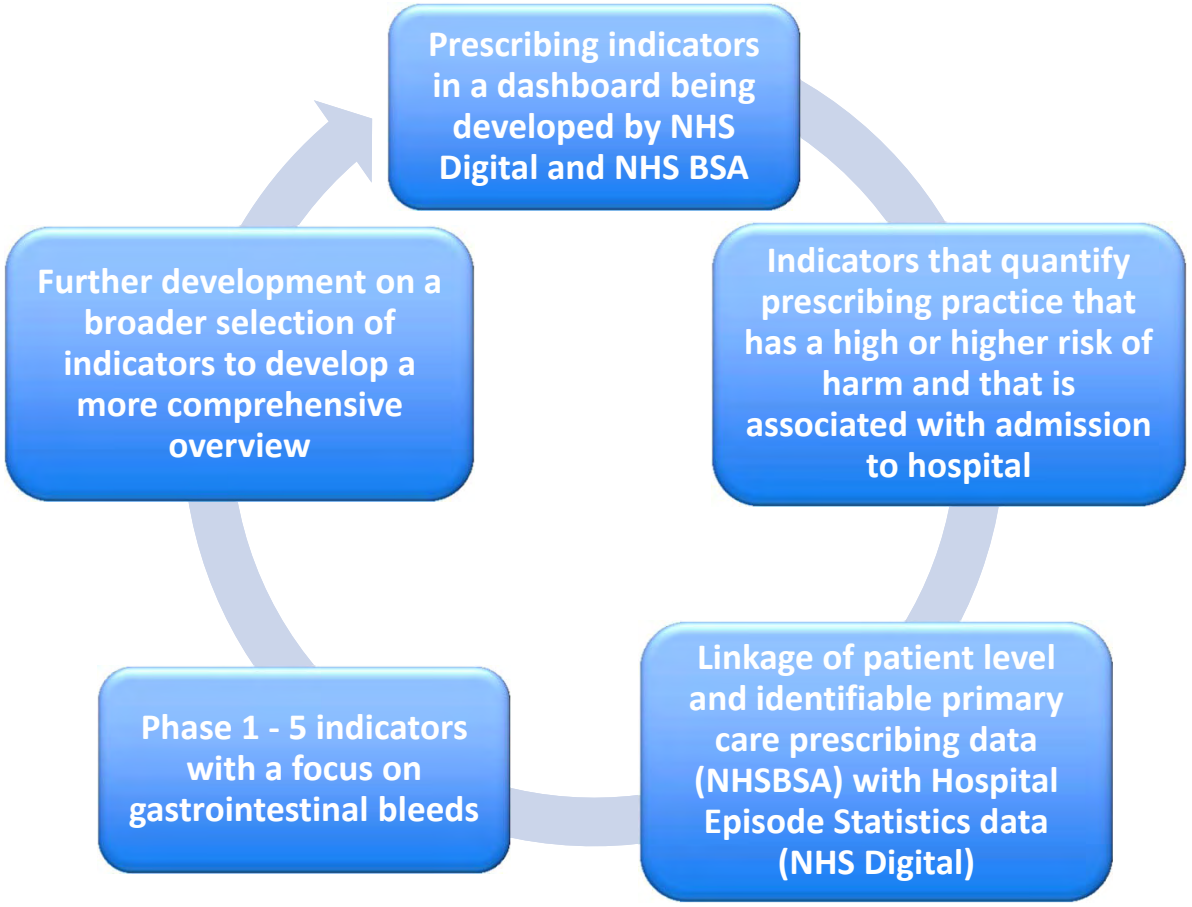
A clear voice and position:

Presentations at national conferences and events

Articles for stakeholder publications

Website and social media content

New Medication Safety Metrics



Phase 1 Metrics (published 10th May 2018)

Indicator 1	Patients 65yrs old or over taking a Non-Steroidal Anti-Inflammatory Drugs (NSAID) and NOT taking a gastro-protective medicine.	Hospital admissions for GI bleed
Indicator 2	Patients 18 years of age or over taking selected NSAID and taking either warfarin or a NOAC.	Hospital admissions for GI bleed
Indicator 3	Patients 18 years of age or over taking selected warfarin or NOAC with an anti-platelet medicine and NOT taking gastro protective medicine	Hospital admissions for GI bleed
Indicator 4	Patients 18 years of age or over taking aspirin and another anti-platelet medicine and NOT taking gastro protective medicine	Hospital admissions for GI bleed
Indicator 5	Patients 18 years of age or over taking a NSAID, an ACE inhibitor/ARB and a diuretic	Hospital admissions for AKI
Composite indicator	Medicines with a risk of GI Bleed – composite of Indicators 1-4	Hospital admissions for GI bleed

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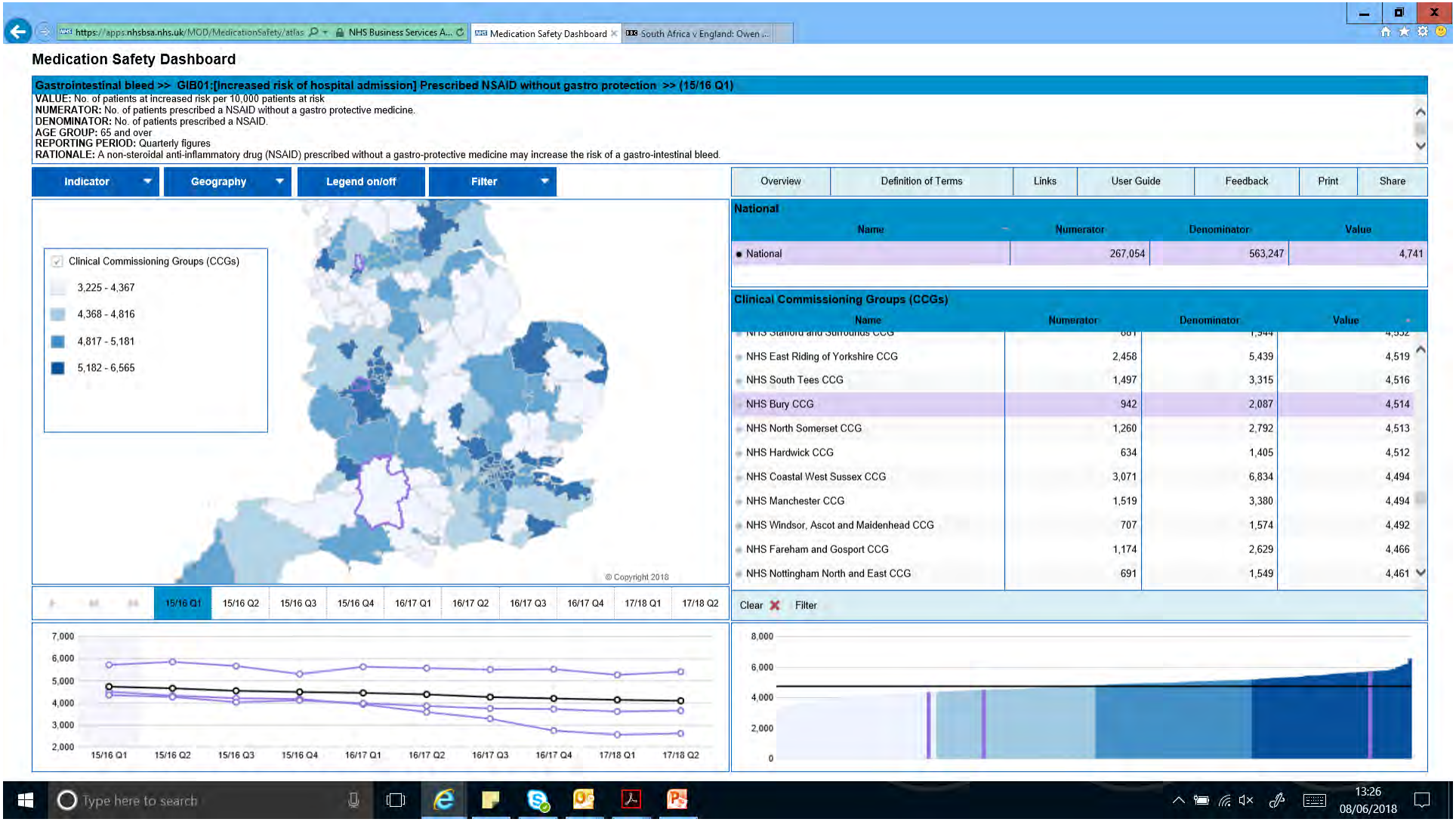

Potential Phase 2 Metrics

1. Falls
2. Electrolyte imbalance
3. Anticholinergic burden
4. Pain
5. Respiratory
6. Mental health
7. Secondary care

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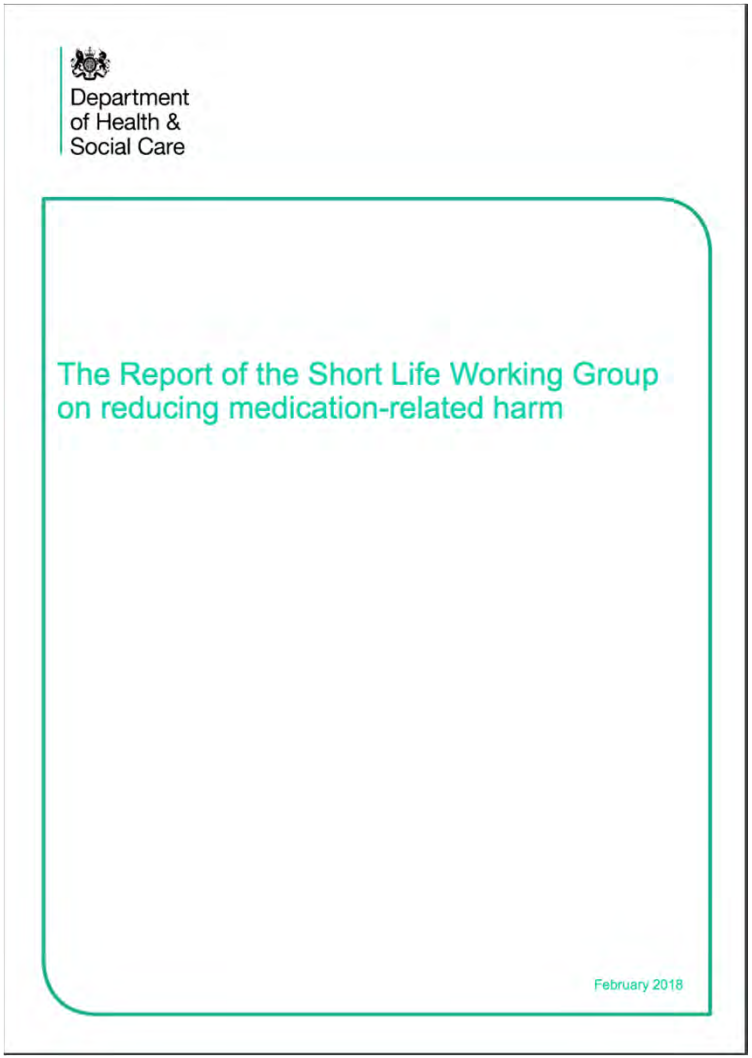

10. Good Practice Repository

The SLWG tasked the NHS Specialist Pharmacy Service to build an online repository, consisting of examples of good practice identified against WHO's domains and early action areas. Its purpose is to support the sharing of good practice across the NHS where that relates to the WHO Challenge. The repository is initially being built using examples gathered primarily via NHS England and NHS Improvement regional pharmacists.

An initial resource will be available later in 2018, and will provide examples of good practice which can be searched. The success of this resource will be assessed to inform future developments. Such developments may include online submission, assessment, and publication by practitioners. In addition, routes to enabling, spreading, and monitoring good practice through the Regional Medicines Optimisation Committees in England will be explored.

Key Priority

- Development of a repository of good practice to share learning.

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WHO Good Practice Repository

About the WHO Challenge

The World Health Organisation (WHO) Medication Without Harm Global Patient Safety Challenge is a major international initiative that aims to reduce the level of severe, avoidable harm related to medicines by 50% over the next 5 years. Learn more about the challenge below.

- **About the WHO Medication Without Harm Global Patient Safety Challenge**

Examples of good practice

Below you'll find examples of good practice categorised against each of the WHO's suggested work domains. If you need to know more, or if you're considering using the work in your own practice, then feel free to get in touch with SPS.

- **Medication Without Harm Good Practice Repository** (20)
  - Systems and practices of medication WHO domain (15)
  - Medicines WHO domain (12)
  - Health care professionals WHO domain (8)
  - Patients and the public WHO domain (5)

More about this repository

This repository of good practice is a pilot resource developed by SPS to support the NHS's Medicines Safety Programme. You can find out more below.

- **Why was the WHO Good Practice Repository created?**
- **Using the WHO Good Practice Repository**

Our process and next steps

In creating this pilot repository, we followed a process to identify and assess examples from practice. Below we've outlined our process and also our anticipated next steps for continuing to provide the resource beyond the pilot.

- **How were examples selected for the WHO Good Practice Repository?**
- **Getting in touch and next steps for the WHO Good Practice Repository**

https://www.sps.nhs.uk/home/services/

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How were examples selected for the WHO Good Practice Repository?

4th June 2018

The WHO Good Practice Repository provides examples of good practice from the NHS related to each of the four work domains of the WHO Medication Without Harm Global Patient Safety Challenge. You can learn more about the repository overall here. Or you can view all the repository good practice examples here.

The content for the repository was developed using examples of practice from the NHS that had been gathered initially by the NHS England and NHS Improvement Regional Pharmacists in each of the four NHS regions.

Over 100 initial examples of practice were gathered by the Regional Pharmacists. Subsequent to this initial stage, the SPS developed some light touch assessment criteria (which are provided below for reference) and applied those to the long-list. The SPS also liaised further with individual authors where necessary.

As a result, SPS identified 20 examples for this pilot good practice resource, with these having a spread across the WHO early priority areas and work domains, as well as across the 4 NHS regional geographies. In parallel to identifying the 20 examples, the SPS also developed a standardised presentation, format and structure for the entries as well as developing this website as appropriate.

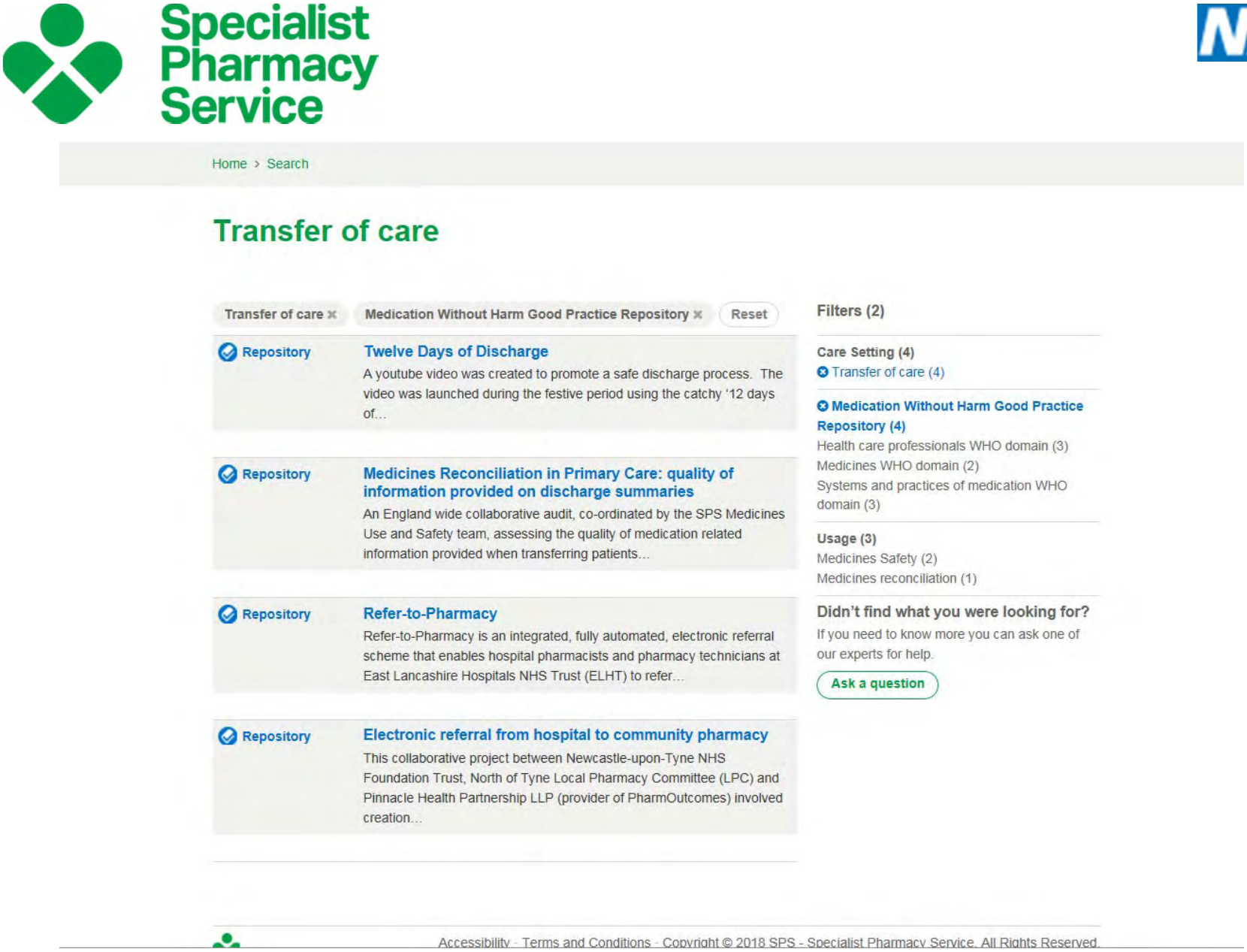
The 20 examples of good practice included in the pilot repository are thus deemed to be of high quality, and are presented in a standardised, searchable format to best enable engagement and subsequent spread and adoption. You can learn more about how to use the resource here.

- Related to each of the four work domains
- Examples of practice gathered initially by NHSE & NHSI Regional Pharmacists
- Light touch assessment criteria
- Twenty examples identified
- Spread across early priority areas, work domains, & NHS Regions
- Presented in a standardised, searchable format

Light touch assessment criteria

- Clear rationale
- Underpinning supporting evidence
- Relate to WHO domain or early priority area
- Demonstrate an increase in safety/reduction in error
- Reproducible to other settings and at scale

https://www.sps.nhs.uk/wp-content/uploads/2018/06/Working-Assessment-Criteria-for-WHO-Examples-Jan-18.pdf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Home › Search
Transfer of care
Transfer of care ✖
Medication Without Harm Good Practice Repository ✖
Reset
Repository
Twelve Days of Discharge
A youtube video was created to promote a safe discharge process. The video was launched during the festive period using the catchy '12 days of...
Repository
Medicines Reconciliation in Primary Care: quality of information provided on discharge summaries
An England wide collaborative audit, co-ordinated by the SPS Medicines Use and Safety team, assessing the quality of medication related information provided when transferring patients...
Repository
Refer-to-Pharmacy
Refer-to-Pharmacy is an integrated, fully automated, electronic referral scheme that enables hospital pharmacists and pharmacy technicians at East Lancashire Hospitals NHS Trust (ELHT) to refer...
Repository
Electronic referral from hospital to community pharmacy
This collaborative project between Newcastle-upon-Tyne NHS Foundation Trust, North of Tyne Local Pharmacy Committee (LPC) and Pinnacle Health Partnership LLP (provider of PharmOutcomes) involved creation...
Filters (2)
Care Setting (4)
Transfer of care (4)
Medication Without Harm Good Practice Repository (4)
Health care professionals WHO domain (3)
Medicines WHO domain (2)
Systems and practices of medication WHO domain (3)
Usage (3)
Medicines Safety (2)
Medicines reconciliation (1)
Didn't find what you were looking for?
If you need to know more you can ask one of our experts for help.
Ask a question
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WHO Good Practice Repository

Reducing the risk from medication errors with IV Magnesium Sulfate

Wessex AHSN working with trusts across Thames Valley and Wessex · 17th May 2018, updated 1st July 2018

Sarah Cavanagh
Acting Director, East Anglia Medicines Information Service, Specialist Pharmacy Service

Didn't find what you were looking for?
If you need to know more you can ask one of our experts for help.

Ask a question

Medicines WHO domain | Systems and practices of medication WHO domain

Summary

Summary of the example

Intraveneous magnesium sulfate has the potential to cause serious harm or death when used incorrectly. The currently available licensed products require complex calculations, dilution and administration often by staff working under pressure in emergency or urgent situations.

Wessex AHSN has collated work undertaken in Thames Valley and Wessex to standardise protocols for the use of IV magnesium in obstetrics and the availability of ready to use products to promote safer use. They give advice for other organisations considering making a similar change.

This work will become increasingly important as The Precept Project rolls out around the country. This will see more mothers exposed to Magnesium Sulfate as it is used to prevent cerebral palsy in pre-term labour.

Although this work focused on the management of eclampsia similar approaches should be adopted for the many other clinical indications where magnesium sulfate is used such as arrhythmias, asthma and hypomagnesaemia.

Learn more about the example

Aims and objectives of the work

The aims of this work were to standardise the prescribing and dosing of IV magnesium sulfate in obstetrics and to provide access to ready to use products across a geographical area.

Objectives included:

- Advising trusts to take a bulletin developed by the AHSN to local Drug and Therapeutics Committees and discuss the implications for obstetric departments including costs and training
- Procuring standardised products for the geography
- Locally agreeing protocols for ready to use products
- Raising awareness of the additional governance processes that are required with unlicensed products when used on a "special clinical need" basis

Methodology

In 2012 the South Central Region working group focusing on NPSA Alert 20 had identified magnesium sulfate as a high risk product. The group had gone on to make recommendations for many products that were adopted by local trusts but variation in the use of magnesium sulfate remained.

Although trusts were using the standard NICE recommended treatment for eclampsia, prescribing was not standardised and a mixture of conventions mmol, grams and % w/v were being used. Dilution from 50% w/v to 20% w/v occurred frequently in clinical areas often in emergency/urgent situations. Rather than being administered via a syringe driver, magnesium sulfate was being added to IV fluid bags. Pharmacists were often unaware of what was happening in clinical practice and were unable to discuss the use of alternative products.

The Chief Pharmacists from across Thames Valley and Wessex fully supported the change as a way of reducing harm to patients. The support of a project manager from the AHSN helped to drive the change.

Work successfully undertaken in one trust to introduce magnesium sulfate 20% w/v was shared and engagement of obstetric units was discussed. Support of the Wessex Maternity, Children and Young People Strategic Clinical Network was important.

The Procurement Specialist Pharmacist was able to advise on successful bulk purchasing of products from reliable sources which also influenced the cost of individual items.

Central production of bulletins, posters and quizzes to highlight the challenges of the calculations required avoided unnecessary duplication of effort. These are available for use by other organisations and are available on the Wessex AHSN website.

Key findings

The importance of engaging with end users in a way that is meaningful to their practice in order to facilitate a change.

The importance of including a procurement specialist pharmacist in working groups relating to injectable medicines.

A more expensive ready to use product can be introduced when the benefits to patients and reduced preparation time by nurses/midwives outweigh the additional cost.

All trusts within the Thames Valley and Wessex geography were able to change to ready to use magnesium sulfate products for obstetrics despite additional financial pressure and by using additional governance processes with the "special clinical need" exception under MHRA Guidance Note 14.

MSOs in organisations in Thames Valley and Wessex promoting the ready to use preparation were not aware of any reported medication incidents with it.

Documents

Further information on the work undertaken can be found in the link below which includes a video of a Labour Ward Manager discussing introducing the change from 50% to 20%w/v Magnesium Sulfate.

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Getting in touch and next steps for the WHO Good Practice Repository

5th June 2018

The WHO Good Practice Repository provides examples of good practice from the NHS related to each of the four work domains of the WHO Medication Without Harm Global Patient Safety Challenge. You can learn more about the repository overall here. Or you can view all the repository good practice examples here.

The repository is currently a pilot resource. In the coming months, we'll be pursuing further work to expand and improve the repository such that it becomes a key resource highlighting medicines safety initiatives from across the NHS. We'll be doing that in parallel with the developing NHS Medicines' Safety Programme.

If you'd like to know more, or if you're keen to get involved, contact Ben Rehman or Sarah Cavanagh.

- Set up as a pilot resource
- Twenty examples is not a large number!
- Has the potential to be huge
- Please use it – and get in touch if you have something to share

Medication Safety Officers

- Published 20th March 2014
- Instructed providers to take specific steps that will improve data report quality
- Establishment of national network to maximise learning and provide guidance on minimising harm
- Large healthcare provider organisations, along with healthcare commissioners, to identify named leaders in medication safety role
- Leaders will be supported by a national network for medication safety

MHRA

NHS England

Patient Safety Alert

Stage Three: Directive

Improving medication error incident reporting and learning

20 March 2014

Alert reference number: NHS/PSA/D/2014/005 Alert stage: Three - Directive

NHS England and MHRA are working together to simplify and increase reporting, improve data report quality, maximise learning and guide practice to minimise harm from medication errors by:

- sharing incident data between MHRA and NHS England reducing the need for duplicate data entry by frontline staff;
- providing new types of feedback from the National Reporting and Learning System (NRLS) and MHRA to improve learning at local level;
- clarifying medication safety roles and identifying key safety contacts to allow better communication between local and national levels; and,
- setting up a National Medication Safety Network as a new forum for discussing potential and recognised safety issues, identifying trends and actions to improve the safe use of medicines. The network will also work with new Patient Safety Improvement Collaboratives that will be set up during 2014.

The Yellow Card Scheme for reporting suspected adverse drug reactions to the MHRA will continue to operate as normal.

Actions (Target date for completion 19 September 2014)

All *large** healthcare providers including NHS Trusts, community pharmacy multiples, home healthcare companies and those in the independent sector should:

1. identify a board level director (medical or nursing supported by the chief pharmacist) or in community pharmacy and home health care, the superintendent pharmacist, to have the responsibility to oversee medication error incident reporting and learning;
2. identify a Medication Safety Officer (MSO) and email their contact details to the Central Alerting System (CAS) team. This person will be a member of a new National Medication Safety Network, support local medication error reporting and learning and act as the main contact for NHS England and MHRA; and,
3. identify an existing or new multi-professional group to regularly review medication error incident reports, improve reporting and learning and take local action to improve medication safety.

*Small** healthcare providers including general practices, dental practices, community pharmacies and those in the independent sector should:

4. continue to report medication error incidents to the NRLS using the e-form on the NRLS website, or other methods and take action to improve reporting and medication safety locally, supported by medication safety champions in local professional committees, networks, multi-professional groups and commissioners.

Healthcare commissioners including Area Teams, and Clinical Commissioning Groups are invited to:

5. identify a MSO and email their contact details to the CAS team. This person will be a member of the National Medication Safety network, support reporting and learning and take local actions to improve medication safety. The MSO can also use learning to influence policy, planning and commissioning as part of clinical governance in the commissioning organisation; and,
6. regularly review information from the NRLS and the MHRA to support improvements in reporting and learning and to take local action to improve medication safety. This should done by working with medication safety champions in local professional committees and networks, and with a new or existing multi-professional group.

Supporting information

*More detailed information to support the implementation of this guidance is available at: www.england.nhs.uk/patientsafety/PSA

Patient Safety | Domain 5
www.england.nhs.uk/patientsafety

Contact NHS England: patientsafety.enquiries@nhs.net
Contact MHRA: pharmacovigilanceservice@mhra.gsi.gov.uk

Medication Safety Officers – Roles and Responsibilities

- Being an active member of the National Medication Safety Network
- Improving reporting and learning of medication error incidents in the organisation
- Managing medication incident reporting in the organisation
- Receiving and responding to requests for more information about medication error incident reports from NHS England and the MHRA
- Working as a member of the medication safety committee – a multi-professional committee to support the safe use of medicines in the organisation
- Supporting the dissemination of medication safety communications from NHS England and the MHRA throughout the organisation

National Medication Safety Network

- Improve reporting and learning from medication incidents by educating and training MSOs in patient safety science
- Disseminate relevant research and information concerning new risks and best practice
- Provide an environment for sharing best practice and for highlighting nationally risks that are identified locally
- Provide a platform for disseminating knowledge and understanding of patient safety issues and for refining instructions such as National Patient Safety Alerts

National Medication Safety Network

- Monthly Global WebEx (hosted by NHSI)
- Kahootz Workspace (hosted by NHSI)
- Online discussion forum (hosted by MHRA)
- Joint Conference with Medical Device Safety Officers (hosted by NHSI & MHRA)
- @msonetwork

- David Gerrett, NHSI
- Mitul Jadeja, MHRA
- Nicola Wake, SPS

Local Networks

Dorset MSO Group	All	tbc
East Of England MSO Network	All	Quarterly
East Midlands Medicines Safety Pharmacist Group	Acute hospitals	Every 2 months
East Midlands Community Service and Mental Health Medicines Safety Group	Community services & mental health	Quarterly
Hampshire Medicines Safety Group	All	Every 2 months
London MSO Network	All	Quarterly
North East and North Cumbria	All (inc ambulance service & schools of pharmacy)	Every 2 months
North West England MSO Network	All	Quarterly
Nottinghamshire/Derbyshire MSO CCG	CCG	Quarterly
South West England MSO Network Acute Hospitals	Hospitals only	tbc
South West England MSO Network	All	Quarterly
South West Yorkshire Regional Medicines Safety Group	Commissioners and provider organisations	Every 2 months
West Midlands Medication Safety Group	All	Every 2 months
Wales	All	tbc

The Community Pharmacy Patient Safety Group

Monthly WebEx Topics

Observatory

- Recent regulator and statutory body activity
- Pharmacovigilance Risk Assessment Committee
- Direct HCP communications
- Manufacturer educational risk minimisation material
- Drug shortages and discontinuations
- UKMI product safety reports
- National guidance, publications and resources
- Overview of recently published papers

Monthly WebEx Topics

Safety Theory Series

- To err is human
- Just Culture
- What should be investigated?
- Safety myths
- Signal detection theory
- Quality improvement

Monthly WebEx Topics

Shared Learning

- Metaraminol administered instead of glycopyrrolate & neostigmine
- Inpatient lithium toxicity
- Paediatric paracetamol infusion – LASA concerns
- Valproate PREVENT programme – local implementation
- Fire hazards with paraffin containing products
- Amphotericin medication errors
- Safe prescribing – FY1/pharmacist buddy system
- Experiences in coroners courts
- Failure to escalate – taking responsibility for interventions/actions
- Communication across networks e.g. Life QI

Questions for you

In the context of the WHO Challenge:

- Do you know who your MSO is?
- Do you know what they do/what their priorities are?
- What resources can you/they access?
- How can MI pharmacists & technicians and MSOs work together to improve patient care & reduce harm?

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