



National Insights on Medication Safety & Non Medical Prescribing Dr Ahmed Ameer

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Learning Outcomes

- Definitions of medication error terminologies
 - Nature of medication errors
 - Incidence & frequency of medication errors
 - Severity of harm associated with medication errors
 - Causes of medication errors
 - Reporting of medication errors
- 



*Medication errors are any **patient safety incidents** (PSIs) where there has been an error in the process of **prescribing, preparing, dispensing, administering, monitoring** or providing advice on medicines. These PSIs can be divided into two categories; errors of commission or errors of omission.*

(NHS England, Patient Safety Alert March 2014)

ERROR

Unintentional
Preventable



Prescribing



Dispensing



Administration



Monitoring



Advice

NHS

>£750 million/year costs:

Litigation
Hospitalisation
Resources



Human

Healthcare Professionals
Patients
Consumers

CONCEPT

Medication safety in the NHS

At the heart of
future NHS
challenges



20%

of people over 70 years old take five or more medicines. With an ageing population and multiple chronic medical conditions these numbers will just keep increasing



600,000

non-elective hospital admissions
are due to medicines



70% of these are preventable

5 classes of medicine
account for most admissions

NSAIDs

Antiplatelets

Anticoagulants

Diuretics

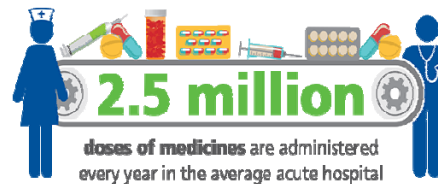
Antihypertensives



prescriptions are issued every year
in primary care

50 million prescribing errors

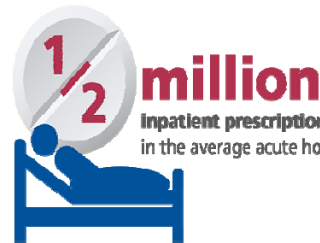
400,000
33 million dispensing errors



2.5 million

doses of medicines are administered
every year in the average acute hospital

215,000 errors



1 million

inpatient prescriptions every year
in the average acute hospital

45,000 prescribing errors
with 550 potentially fatal

40-100 dispensing errors



2500 preventable deaths across all acute hospitals
are due to medicines



97,000

patients admitted to all acute hospitals
suffer from harm due to medicines

97% of medication errors reported to the NHS result in no or low patient harm



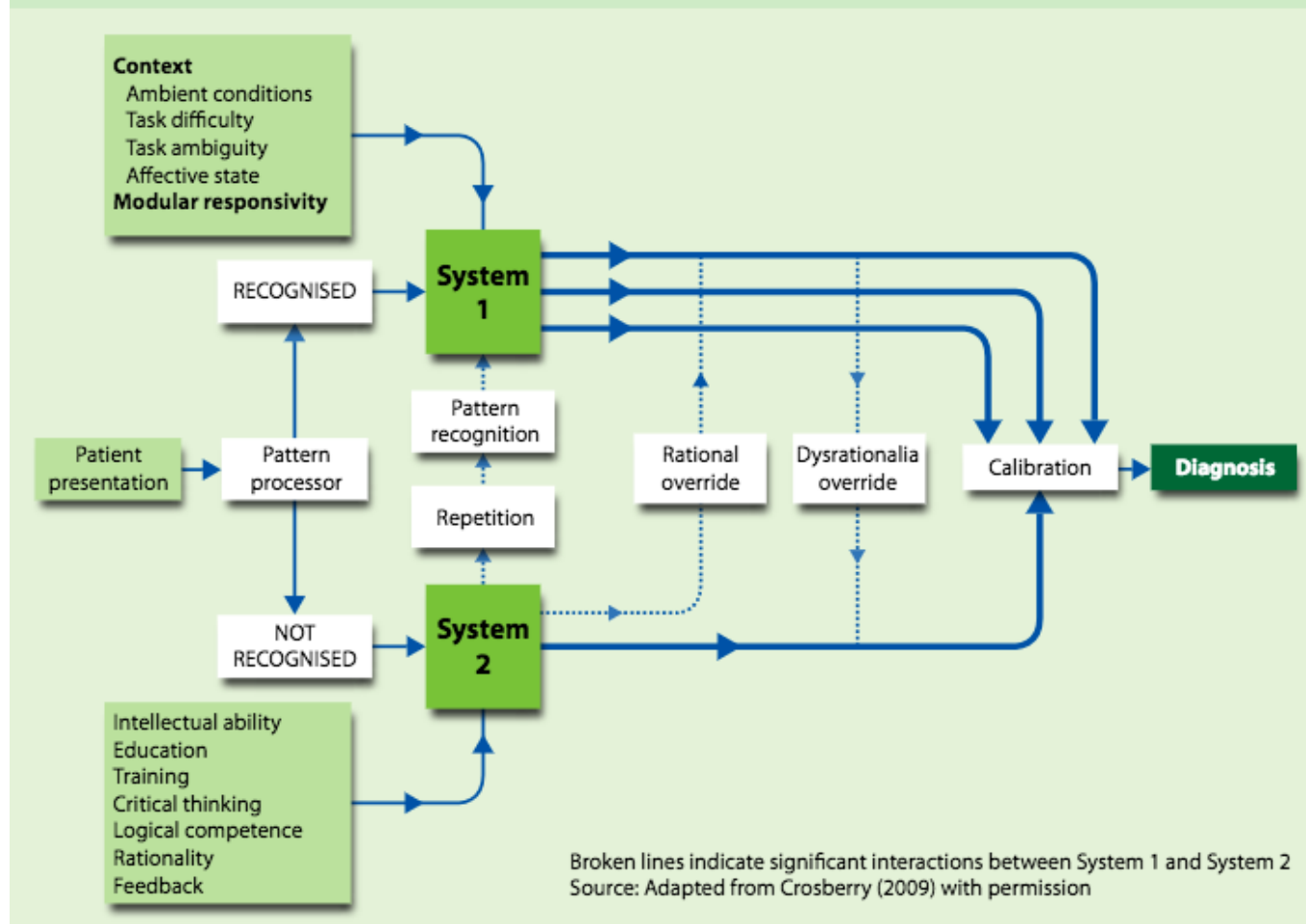
Prescribing Error

“A clinically meaningful prescribing error occurs when, as a result of a prescribing **decision** or prescription writing **process**, there is an **unintentional** significant (1) **reduction** in the probability of treatment being **timely and effective** or (2) increase in the **risk of harm** when compared with generally accepted practice.” Dean, Barber & Schachter. Qual Health Care. 2000 Dec; 9(4): 232–237.

Any examples of an error/near miss you made in practice?

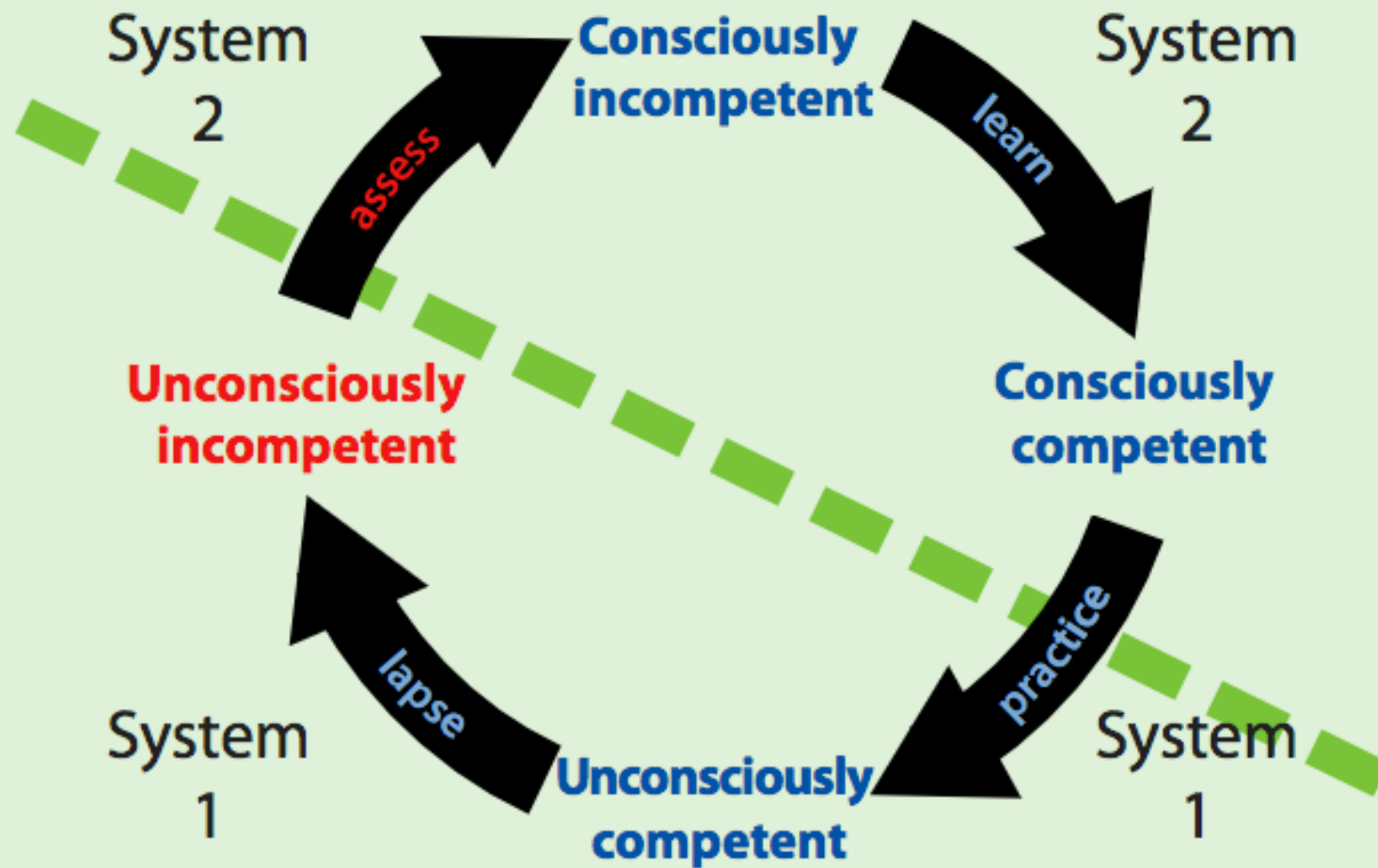
How did you deal with it? How did it effect your practice?

Figure 2. Schematic model for diagnostic decision making



Reprinted from Croskerry P. *Context is everything or how could I have been that stupid?* Healthc Q. 2009; 12:e171-6.

Figure 3. Four stage conscious competence model of learning



A Competency Framework for all Prescribers

Publication date: July 2016

Review date: July 2020



NICE has accredited the process used by the Royal Pharmaceutical Society to produce its professional guidance and standards. Accreditation is valid for 5 years from 17 February 2017.


For full details on NICE accreditation visit: www.nice.org.uk/accreditation



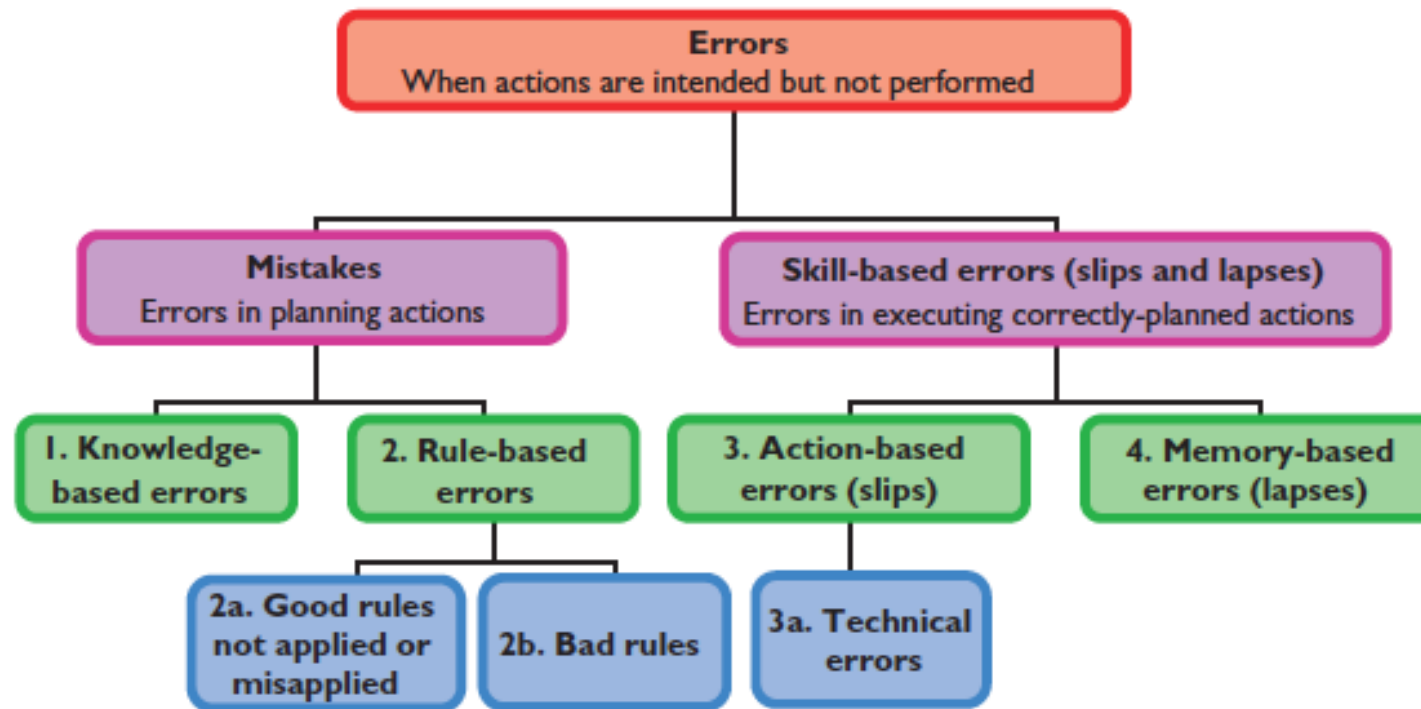


PRESCRIBING GOVERNANCE (COMPETENCIES 7-10)

7: PRESCRIBE SAFELY

- 7.1** Prescribes within own scope of practice and recognises the limits of own knowledge and skill.
 - 7.2** Knows about common types and causes of medication errors and how to prevent, avoid and detect them.
 - 7.3** Identifies the potential risks associated with prescribing via remote media (telephone, email or through a third party) and takes steps to minimise them.
 - 7.4** Minimises risks to patients by using or developing processes that support safe prescribing particularly in areas of high risk (e.g. transfer of information about medicines, prescribing of repeat medicines).
 - 7.5** Keeps up to date with emerging safety concerns related to prescribing.
 - 7.6** Reports prescribing errors, near misses and critical incidents, and reviews practice to prevent recurrence.
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Psychological Approach to Medication Error Classification:



Violations are **not** errors:

Intended action

1. Routine Violations:
regular short cuts

2. Reasoned Violations:
Deliberate deviations
from protocol

3. Reckless Violations:
Deliberate deviation
from protocol & ignoring
potential harm

4. Malicious Violations:
Out there to harm

What can go wrong when prescribing?

- ☐ Adverse drug reaction (when used as intended)
- ☐ Contra-indication to the use of the medicine in relation to drugs or conditions
- ☐ Mismatching between patient and medicine
- ☐ Omitted medicine / ingredient
- ☐ Patient allergic to treatment
- ☐ Wrong / omitted patient information leaflet
- ☐ Wrong / omitted verbal patient directions
- ☐ Wrong / unclear dose or strength
- ☐ Wrong drug / medicine
- ☐ Wrong formulation
- ☐ Wrong frequency
- ☐ Wrong quantity
- ☐ Wrong route




Causes of Medication Errors

- Communication Failures: poor handwriting, oral communication only, missing or misplaced zeroes, use of abbreviations, ambiguous or incomplete prescriptions
- Similar drug names or presentation (look alike sound alike)
- repeat prescribing and dispensing without monitoring
- Complex diseases or treatment plans
- Patients with chronic conditions
- Workplace problems: Stress, team, design, workload and satisfaction
- Level of staffing
- Level of experience
- Complex or poorly designed technology, devices or procedures
- Calculation errors
- Lack of information to prescribers, dispensers or patients
- Lack of patient's understanding of their therapy
- Frequent patient transition of care



Lessons from reported Patient Safety Incidents

- So far, PSIs indicate NMPs are not associated with serious harm, congratulations
 - Clearly there are processes supporting NMPs that lead to errors and need addressing
 - worrying issue of prescribing/administering POMs without authority
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Need of National Medication Safety Network

- Increase of patient safety incident reporting to the National Reporting and Learning System (NRLS)
- Change of organisational structure. Transfer of patient safety function from National Patient Safety Agency to NHS England (commissioning body) in 2011

- Change of adverse drug reaction (ADR) definition to include medication error (EU Directive 2010/84/EU1)
- Low reporting from non-acute NHS providers
- Report quality Vs. National Learning



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)

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| <p>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;</p> <p>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,</p> <p>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.</p> | <p>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.</p> <p>Healthcare commissioners including Area Teams, and Clinical Commissioning Groups are invited to:</p> <p>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</p> | <p>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,</p> <p>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 be done by working with medication safety champions in local professional committees and networks, and with a new or existing multi-professional group.</p> <p>Supporting information</p> <p>*More detailed information to support the implementation of this guidance is available at:
www.england.nhs.uk/patient-safety/PSA</p> |
|--|--|--|

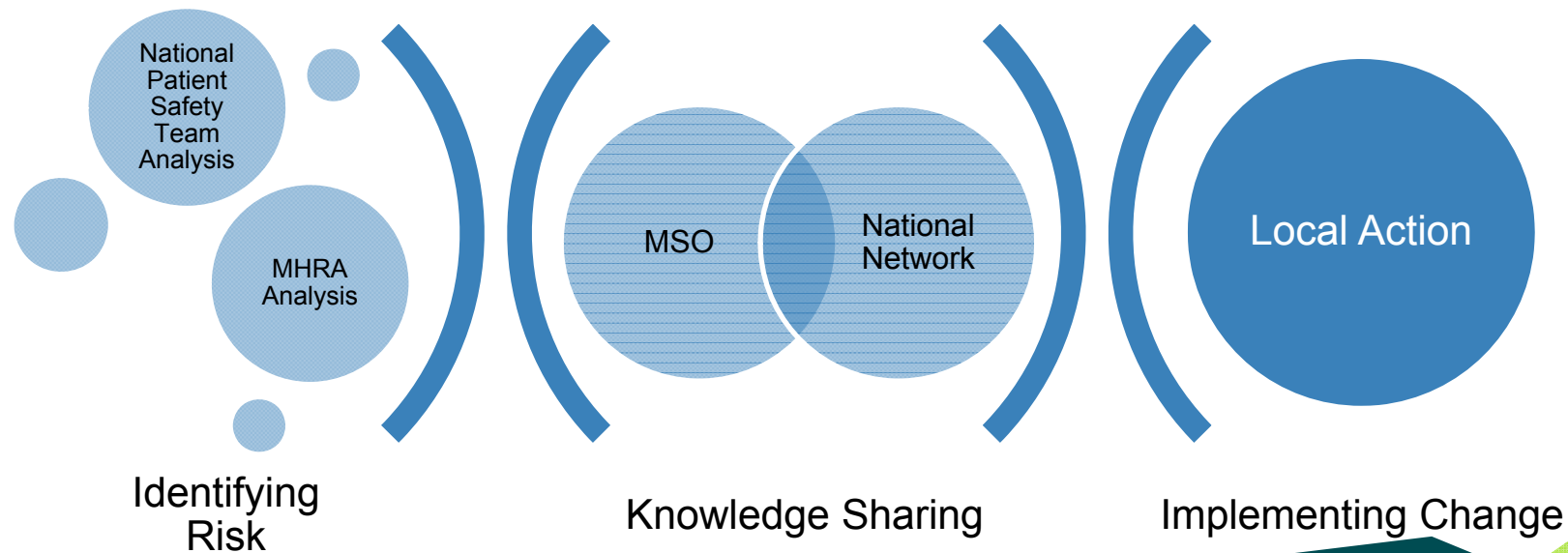
Patient Safety | Domain 5
www.england.nhs.uk/patient-safety

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

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Vision of National Medication Safety Network




How can NMP be involved?

- ☐ Sign up to alerts from the Central Alerting System (CAS) or your local clinical governance email notifications
- ☐ Get in touch with your MSO
- ☐ Be vigilant to alerts from ePrescribing systems
- ☐ Take part in medication safety projects and quality improvement programs
- ☐ Know your competencies
- ☐ Know your weaknesses for error
- ☐ If you don't know ask
- ☐ Try and focus on what is relevant to your practice for your patients
- ☐ Reflect on practice and learn from mishaps
- ☐ Report incidents to encourage learning
- ☐ Look out for the World Health Organization Medication Safety Challenge




Patient Safety Tools

- ☐ High risk drug audits
 - ☐ Steroid card
 - ☐ Lithium card
 - ☐ NOAC/DOAC
 - ☐ Anticoagulant Yellow Book
 - ☐ Insulin Passport
 - ☐ Medicine Passport
 - ☐ Hospital Admission Notifications
 - ☐ Discharge Letters
 - ☐ Updated Summary Care Record
 - ☐ Blood monitoring requirements & results interpretations
 - ☐ VTE assessments & therapeutic Vs prophylactic doses
 - ☐ Medication Safety thermometer
 - ☐ Therapeutic area dashboards
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Conclusion

- ☐ Medication errors are serious and diverse
 - ☐ Must have prevention strategies to ensure medication errors are minimised
 - ☐ Find ways to reflect and assess competency
 - ☐ Get in touch with your medication safety lead
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Thanks!
Any questions?