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

1 billion prescriptions are issued every year in primary care.

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

215,000 errors

45,000 prescribing errors with 550 potentially fatal

40–100 dispensing errors

1/2 million inpatient prescriptions every year in the average acute hospital.

2500 preventable deaths across all acute hospitals are due to medicines.

50 million prescribing errors

400,000 dispensing errors

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.
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<th>National Faults</th>
<th>National Remedies</th>
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| 50 million prescribing errors each year in the community | - National prescribing competency test for medical graduates  
- NIHR Greater Manchester Primary Care Patient Safety Translational Research Centre including roll out of PINCER study findings to detect prescribing errors |
| 400,000 - 33 million dispensing errors each year in the community | - Medication Safety Officers network (including independent pharmacies and large companies) to improve local learning from errors  
- NIHR Greater Manchester Primary Care Patient Safety Translational Research Centre including use of Manchester Patient Safety Assessment Framework in community pharmacies |
| 45 000 prescribing errors in an average acute hospital each year | - National prescribing competency test for medical graduates  
- NIHR Imperial Patient Safety Translational Research Centre including assessment of electronic prescribing and administration systems and providing immediate feedback to doctors to reduce errors  
- Additional national funding to implement electronic prescribing systems  
- Medication Safety Thermometer to monitor and drive system improvements to reduce patient harms due to high risk medicines  
- Additional national funding to implement safer dispensing systems  
- Medication Safety Officers network to improve safer dispensing systems |
| 40-100 dispensing errors in an average acute hospital each year | - Medication Safety Thermometer to monitor and drive system improvements to reduce errors e.g. omitted doses  
- Medication Safety Officers network to improve local learning from errors  
- Additional national funding to implement safer administration technologies |
| 215 000 medicines administration errors in an average acute hospital each year | - Medication Safety Thermometer to monitor and drive system improvements to reduce errors e.g. Anticoagulation, Insulin, Opioids  
- Medication Safety Officers network to improve local learning from errors  
- Mortality reviews help identify and drive system improvements to reduce avoidable deaths |
| In English hospitals 70-140 000 patients suffer harm due to medicines and 2,500 patients die avoidably due to medicines each year | - Medication Safety Thermometer to monitor and drive system improvements to reduce patient harms due to high risk medicines e.g. Anticoagulation, Insulin, Opioids  
- Medication Safety Officers network to improve local learning from errors  
- Mortality reviews help identify and drive system improvements to reduce avoidable deaths |
| 600,000 of non elective hospital admissions each year are due to medicines | - Medication Safety Officers network to improve local learning from avoidable admissions due to medication errors  
- NIHR Imperial and Greater Manchester Primary Care Patient Safety Translational Research Centres including roll out of PINCER study findings to detect prescribing errors and development and of an Improving Prescribing in the Elderly medication review tool  
- QOF target to reduce unavoidable non elective hospital admissions |
Medication Safety in the NHS

- 1 billion prescriptions items per year\(^1\)
  - 50 million prescribing errors (5\%)\(^2\)
  - 400,000 - 33 million dispensing errors (0.04 – 3.32\%)\(^3\)
- 2.5 million doses of medicines administered in average acute hospital / yr
  - 215,000 errors (8.6\%)\(^4\)
- 0.5 million inpatient prescription items in average acute hospital / yr\(^5\)
  - 45,000 errors (8.9\%) with 550 potentially fatal\(^5\)
  - 40-100 dispensing errors (0.008 – 0.02\%)\(^3\)
- 97,000 (1.38\%) of patients admitted to hospital suffer harm due to medicines\(^6,8\)
- 2,500 preventable deaths in acute hospitals due to medicines\(^7\)
Medication Safety in the NHS

- Upto 600,000 (11%) of non elective hospital admissions are due to medicines\textsuperscript{8,9}
  - 5 classes of medicine account for most (NSAIDs, Antiplatelets, Anticoagulants, Diuretics, Antihypertensives)\textsuperscript{10,11}
- 20% people over 70 years old take five or more medicines\textsuperscript{12} and with ageing population and multiple chronic medical conditions these numbers will just keep increasing
- 97% of medication errors reported to NHS resulted in no or low harm\textsuperscript{13}