Key messages: Strategies for preventing Prescribing errors & learning from outcomes of The PRACtICe study [1]

The PRACtICe ('Prevalence and Causes of prescribing errors in general practice') study was a thorough investigation study into how often prescribing goes wrong and why.

A number of recommendations emerged from this study for reducing the prevalence of prescribing errors in general practice and these are outlined below:

- GP training on safe prescribing should be improved
- Continuing Professional Development should further address safe prescribing by increasing knowledge & use of technology
- Clinical governance should be promoted through audits & reporting of medication incidents/near misses to the National Reporting & Learning System (NRLS) via the online GP patient safety incident e-form[2]:https://report.nrls.nhs.uk/GP_eForm. NOTE: All medication incidents involving Controlled Drugs must be reported to NHS England via the CD Online Reporting Tool: https://www.cdreporting.co.uk/reporting_v3/
- GPs should be able to make the most of the safety features of their computer systems
- Finally, systems for repeat prescribing, medication monitoring, medication reviews & communication between hospitals and primary care should be reviewed

Conditions predisposing to errors at various steps of the prescribing process

Category	Condition
Prescriber	Therapeutic training. Drug knowledge and experience. Knowledge of the patient. Perception of risk. Physical and emotional health.
Patient	Patient characteristics. Complexity of the individual case.
Team	Poor communication. Nurses' quasiautonomous role.
Task	Repeat prescribing. Failure to review the patient.
Work environment	High workload. Time pressures. Stress. Distractions & interruptions.
Computer system	Incorrect selection from lists. Over-riding important drug interaction alerts. Unnecessary/inappropriate alerts ('Alert fatigue'). Need to maintain an accurate electronic health record. Excessively high expectations of the computer system.
Primary/secondary quality of correspondence care interface	Quality of correspondence across the interface. Ambiguous wording of discharge letters. Consistency of hospital recommendation with local guidelines. GP prescribing patterns & perceived balance of risk vs benefit.

Prescribing error	%	Monitoring error	%
Incomplete information on prescription	30	Monitoring not requested	69.1
Dose/strength error	17.8		
Timing error	10.5	Monitoring requested but not done	21.8
Frequency error	8.1		
Omission error due to failure to prescribe concomitant treatment	7.7		
Unnecessary drug	4.9	Monitoring results not available	9.1
Contraindication error	4.9		
Incorrect drug	4.0		
Duplication	3.6		
Interaction error	3.6		
Allergy error	1.2		
Inadequate documentation in medical records	1.2		
Quantity error	1.2		
Formulation error	0.8		
Generic/Brand name error	0.4		

Processes supporting the safe & effective use of medicines in practices

- Staff training & managing locum staff
- All Practice staff involved in identifying & reporting errors or near miss incidents
- Regular meetings & creating an open & 'Just' culture to encourage learning from errors[3]
- Recording & investigating significant events
- Changing practice in response to significant events
- Cascading Prescribing Information
- Workload planning & delegation
- Patient Decision Making

10 top tips for safe prescribing [4]

Having outlined the nature and causes of medication errors in general practice, here are 10 tips for safe prescribing:

1. Keep yourself up-to-date in your knowledge of therapeutics, especially for the conditions you see commonly
2. Before prescribing, make sure you have all the information you need about the patient, including co-morbidities and allergies
3. Before prescribing, make sure you have all the information you need about the drug(s) you are considering prescribing, including side effects and interactions
4. Sometimes the risks of prescribing outweigh the benefits and so before prescribing think: 'Do I need to prescribe this drug at all?
5. Check computerised alerts in case you have missed an important interaction or drug allergy
6. Always actively check prescriptions for errors before signing them
7. Involve patients in prescribing decisions and give them the information they need in order to take the medicine as prescribed, to recognise important side-effects and to know when to return for monitoring and/or review
8. Have systems in place for ensuring that patients receive essential laboratory test monitoring for the drugs they are taking, and that they are reviewed at appropriate intervals
9. Make sure that high levels of safety are built into your repeat prescribing system
10. Make sure you have safe and effective ways of communicating medicines information between primary and secondary care, and acting on medication changes suggested/initiated by secondary care clinicians

Strategies for preventing medication errors in General Practice

Personal prescriber strategies

- Read aloud printed prescriptions to help ensure patient understanding & allow the prescriber to check the accuracy of the prescription
- Review newly prescribed medicines within six weeks
- Add medicines to the repeat list only when patients are stable on them

Practice-wide strategies

- Report incidents or near misses using the ***online GP Patient Safety Incident e-form*** for shared learning & actions to be taken to prevent further incidents occurring[2]
- Adopt a formulary to *increase* familiarity with medicines prescribed
- Strongly discourage verbal/telephone requests for repeat prescriptions
- Highlight repeat prescriptions with queries so they receive more attention when considered for signing off by GPs & other prescribers
- Perform face-to-face medication reviews Schedule necessary blood tests for one week before medication reviews
- Appoint a prescribing lead for each practice to lead on protocol reviews & best prescribing practice.

Health Information Technology strategies

- Code allergies in electronic clinical records
- Update GP prescribing systems to include relevant Patient Safety 'protocols' or alerts identified locally
- Run searches on clinical records system to identify potential prescribing errors & patients requiring blood-test monitoring
- Use screen alerts & repeat prescribing dates to highlight need for monitoring

NHS Improvement – A 'Just Culture' guide (March 2018)

This guide encourages managers to treat staff involved in a patient safety incident in a consistent, constructive & fair way. The fair treatment of staff supports a culture of fairness, openness & learning in the NHS by making staff feel confident to speak up when things go wrong, rather than fearing blame. Supporting staff to be open about mistakes allows valuable lessons to be learnt so the same errors can be prevented from being repeated. In any organisations or teams where a blame culture is still prevalent, this guide will be a powerful tool in promoting cultural change.

Resources and references

1. Avery T, et al. Investigating the prevalence and causes of prescribing errors in general practice: The PRACtICe Study. May 2012 http://www.gmc-uk.org/
2. NHS Healthcare staff reporting of Patient Safety Incidents to the National Reporting & Learning System (NRLS) http://www.nrls.npsa.nhs.uk/report-a-patient-safety-incident/healthcare-staff-reporting/ & *"How to report medication safety incidents from a GP practice on the National Reporting & Learning System"*
3. NHS England 'Sign up for Safety' – Just Culture: https://www.england.nhs.uk/signuptosafety/faqs/
4. NPC 'Top Tips for GPs Strategies for safer prescribing' https://bibliosjd.files.wordpress.com/2010/12/prescription.pdf
5. NHS England – Patient Safety in General Practice:https://www.england.nhs.uk/patientsafety/general-practice/
6. Guidance on Prescribing in Primary Care http://www.derbyshiremedicinesmanagement.nhs.uk/assets/non_clinical_guidelines
7. UKMI 'Suggestions for Drug Monitoring in Adults in Primary Care' http://www.derbyshiremedicinesmanagement.nhs.uk/assets/Clinical_Guidelines/clinical_guidelines_front_page/UKMi_Drug_monitoring_document.pdf
8. Patient Information Resources Leaflets http://emc.medicines.org.uk/

Need Help?

Please contact a member of the CCG medicines management team. The team can provide support, training, audits and prescribing information to help

We have resources available to support you with

- Formulary Management
- Reviewing your repeat prescribing systems
- Helping you improve your medication reviews & medication monitoring