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Prescribing Journals – Table of Contents

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Research Articles

Click on the title link for the full abstract at PubMed or the journal website. Access to full text will require an NHS Athens login or subscription access in most cases.

Antidepressants

Antidepressant prescribing in England: patterns and costs

The primary care companion for CNS disorders

The number of prescriptions for antidepressants (ADs) in England and Wales has almost doubled in the past decade. The objective of this article is to describe the current prescribing rates of different antidepressants by general practice (GP) practice. Broadly, the findings are in keeping with National Institute for Health and Care Excellence guidance in that the bulk of prescriptions were for selective serotonin reuptake inhibitors.

Incidence of depression and first-line antidepressant therapy in people with obesity and depression in primary care

Obesity

The aim of this study was to describe the age- and gender-specific incidence of depression, the dose-response relationship between BMI and risk of depression (Cox proportional hazards), and antidepressant drug prescribing in adults with overweight or obesity.

Antimicrobials

Controlling antibiotic usage-a national analysis of general practitioner/family doctor practices links overall antibiotic levels to demography, geography, comorbidity factors with local discretionary prescribing choices

International journal of clinical practice

Moderating antibiotic prescribing requires an understanding of all drivers of local prescribing. The aim was to quantify how much is determined by external factors compared with discretionary clinical choices. This analysis provides benchmarks for both non-modifiable and modifiable factors against which practices could evaluate their opportunities to reduce antibiotic prescribing.

A real-world evaluation of a case-based reasoning algorithm to support antimicrobial prescribing decisions in acute care

Clinical infectious diseases
A locally developed Case-Based Reasoning (CBR) algorithm, designed to augment antimicrobial prescribing in secondary care was evaluated. Appropriateness of a prescription was defined as the spectrum of the prescription covering the known, or most-likely organism antimicrobial sensitivity profile. The CBR-driven decision support system provided appropriate recommendations within a narrower spectrum compared to current clinical practice.

Application of a simple point-of-care test to reduce UK healthcare costs and adverse events in outpatient acute respiratory infections

Journal of medical economics

Many patients are unnecessarily treated with antibiotics for respiratory infections. Antibiotic misuse leads to unnecessary adverse events, secondary infections, re-consultations, antimicrobial resistance and increased costs. Point-of-care diagnostic tests used to guide antibiotic prescriptions will avoid unnecessary adverse health effects and expenses.

'Always take your doctor's advice': does trust moderate the effect of information on inappropriate antibiotic prescribing expectations?

British journal of health psychology

Providing information about viral aetiology and the ineffectiveness and side effects of antibiotics reduces inappropriate antibiotic expectations.

The impact of a computerised decision support system on antibiotic usage in an English hospital

International journal of clinical pharmacy

The implementation of computerised decision support systems appears to influence the use of antibiotics by reducing their consumption.

Can Evidence-Based Decision Support Tools Transform Antibiotic Management? A Systematic Review and Meta-Analyses

The Journal of antimicrobial chemotherapy

To assess the effectiveness of clinical decision support systems (CDSSs) at reducing unnecessary and suboptimal antibiotic prescribing within different healthcare settings. A systematic review of published studies was undertaken with seven databases from database inception to November 2018. Decision support tools can be effective to improve antibiotic prescribing, although there is limited evidence available on use in primary care.
Antibiotic Use and Deprivation: An Analysis of Welsh Primary Care Antibiotic Prescribing Data by Socioeconomic Status

The Journal of antimicrobial chemotherapy

To examine the association between socioeconomic status (SES) and antibiotic prescribing, controlling for the presence of common chronic conditions and other potential confounders and variation amongst GP practices and clusters. Antibiotic prescribing in primary care is increased in areas of greater SES deprivation and this is not explained by differences in the presence of common chronic conditions or smoking status. Substantial unexplained variation in prescribing supports the need for ongoing antimicrobial stewardship initiatives.

Antimicrobial Resistance Needs to Be Combated at Primary Levels of Prevention by Nurses

Nursing Open

Editorial: Interventions at the primary level are needed long term to prevent the spread of AMR

C-reactive Protein-Guided Antibiotic Prescribing for COPD Exacerbations: A Qualitative Evaluation

The British journal of general practice

The PACE randomised controlled trial found that a C-reactive protein point-of-care test (CRP-POCT) management strategy for acute exacerbation of chronic obstructive pulmonary disease in primary care resulted in a 20% reduction in patient-reported antibiotic consumption over 4 weeks.

Self-Reported Antimicrobial Stewardship Practices in Primary Care Using the TARGET Antibiotics Self-Assessment Tool

Antibiotics

The self-assessment tool (SAT) is a 16-question self-report of antimicrobial stewardship practices in primary care, available in the TARGET (Treat Antibiotics Responsibly, Guidance Education and Tools) Antibiotics Toolkit. This study analysed responses to the SAT and compared them to previous SAT data (2014-2016).

The Safety of Delayed Versus Immediate Antibiotic Prescribing for Upper Respiratory Tract Infections

Clinical infectious diseases

This study aimed to evaluate the clinical safety of delayed antibiotic prescribing for upper respiratory tract infections (URTI), which is recommended in treatment guidelines for less severe cases. Waiting to treat URTI was associated with increased risk of hospital admission, although delayed antibiotic prescribing was used similarly between high and low-risk patients
Antibiotic Prescribing in UK Care Homes 2016-2017: Retrospective Cohort Study of Linked Data

BMC health services research

This study aimed to investigate the frequency, patterns and risk factors for antibiotic prescribing in a large chain of UK care homes.

How Did a Quality Premium Financial Incentive Influence Antibiotic Prescribing in Primary Care? Views of Clinical Commissioning Group and General Practice Professionals

Journal of antimicrobial chemotherapy

The Quality Premium (QP) was introduced for Clinical Commissioning Groups (CCGs) in England to optimize antibiotic prescribing, but it remains unclear how it was implemented. Semi-structured telephone interviews were conducted with 22 CCG and 19 general practice professionals. Interviews were analysed thematically. CG and practice professionals expressed positive views of the QP and associated prescribing targets and feedback. The QP helped influence change mainly by raising the priority of AMS and defining change targets rather than providing additional funding.

Theory-based Electronic Learning Intervention to Support Appropriate Antibiotic Prescribing by Nurse and Pharmacist Independent Prescribers: An Acceptability and Feasibility Experimental Study Using Mixed Methods

BMJ Open

To assess the acceptability and feasibility of using a theory-based electronic learning intervention designed to support appropriate antibiotic prescribing by nurse and pharmacist independent prescribers for patients presenting with common, acute, uncomplicated self-limiting respiratory tract infections.

Attention-Deficit Hyperactivity Disorder

Trends in attention-deficit and hyperactivity disorder (ADHD) medications among children and young adults in Ireland: a repeated cross-sectional study from 2005 to 2015

BMJ open

This study examined the prescribing patterns of attention-deficit hyperactivity disorder (ADHD) medications in Ireland between 2005 and 2015 in children, adolescents and young adults, and concomitant use of psychotropic medication.

Care Homes

Protocol for the Process Evaluation of a Cluster Randomised Controlled Trial to Determine the Effectiveness and Cost-Effectiveness of Independent Pharmacist Prescribing in Care Home: The CHIPPS Study

Trials
A cluster randomised controlled trial (RCT) is ongoing to evaluate the effectiveness of an independent prescribing pharmacist assuming responsibility for medicines management in care homes compared to usual care.

**Diabetes**

*Trends in Oral Anticoagulant Prescribing in Individuals With Type 2 Diabetes Mellitus: A Population-Based Study in the UK*

**BMJ Open**

The prescribing trends of oral anticoagulant (OAC) medications in individuals with type 2 diabetes mellitus (T2DM) were examined from 2001 to 2015, stratified by age, gender and therapeutic classifications. Prescribing of OACs in individuals with T2DM increased from 2001 to 2015. Since the introduction of DOACs, there has been a clear shift in prescribing towards these agents.

**Electronic Prescribing**

*Evaluation of the Prescribing Decision Support System Synonyms in a Primary Care Setting: A Mixed-Method Study*

**International journal of pharmacy practice**

Prescribing decision support systems (DSS) have been developed to assist prescribers. The Drug Synonyms function ('Synonyms') is a DSS inherent in the commercial electronic medical record system EMIS. Synonyms functionality has been further developed by the NHS Greater Glasgow and Clyde (GG&C) Central Prescribing Team to promote safe and cost-effective prescribing; however, it does not support the collection of usage data. As there is no knowledge on the uptake nor on the perceived effect of using Synonyms on prescribing, quantitative and qualitative analyses of Synonyms usage are required to ascertain the impact Synonyms has on primary care prescribers.

**Emergency Care**

*Impact of emergency hospital admissions on patterns of primary care prescribing: a retrospective cohort analysis of electronic records in England*

**The British journal of general practice**

To investigate whether an emergency hospital admission drives increases in polypharmacy and potentially inappropriate prescriptions. Perceptions that hospitalisation is a consistent factor driving rises in polypharmacy are unfounded. Increases in prescribing post-hospitalisation reflect appropriate clinical response to acute illness, whereas decreases are more likely in patients who are multimorbid, reflecting a focus on deprescribing and medicines optimisation in these individuals.
Gabapentinoid Prescribing

Trends in Gabapentinoid Prescribing, Co-Prescribing of Opioids and Benzodiazepines, and Associated Deaths in Scotland

British journal of anaesthesia

Gabapentinoid prescribing has increased dramatically since 2006, as have dangerous co-prescribing and death including drug related deaths (DRDs). Older people, women, and those living in deprived areas were particularly likely to receive prescriptions. Their contribution to DRDs may be more related to illegal use with diversion of prescribed medication.

Hospital Pharmacy

Automation of In-Hospital Pharmacy Dispensing: A Systematic Review

European Journal of Hospital Pharmacy

The current systematic review was undertaken to identify and summarise the published literature reporting on the clinical and economic value of in-hospital pharmacy services automated dispensing systems (ADSs) with a primary focus on systems supporting the dispensing of medicines. The published evidence suggests positive impacts of ADS and should encourage hospitals to invest in automation, with a global strategy to improve the reliability and the efficiency of the medication process. However, one of the key findings of the current SR is the need for further data from adequately powered studies reporting clinically relevant outcomes which would allow for robust, evidence-based recommendations on the return on investment of the technologies.

Insulin

Use and Validation of a Survey Tool to Measure the Perceived Effectiveness of Insulin-prescribing Safety Interventions in UK Hospitals

Diabetic medicine

To describe the use and validation of a survey tool to elicit the opinion of hospital pharmacists and medicines safety officers in the UK regarding the perceived effectiveness of strategies to improve insulin prescribing safety in hospitals.

Junior Doctors

Improving junior doctor medicine prescribing and patient safety: an intervention using personalised, structured, video-enhanced feedback and deliberate practice

British journal of clinical pharmacology
This research investigated the effectiveness of an intervention for improving the prescribing and patient safety behaviour among Foundation Year doctors. The intervention consisted of simulated clinical encounters with subsequent personalised, structured, video-enhanced feedback and deliberate practice, undertaken at the start of four-month sub-specialty rotations. The intervention is cost-effective with potential to reduce avoidable harm.

**Using a self-regulated learning-enhanced video feedback educational intervention to improve junior doctor prescribing**

**Medical teacher**

The effective application of self-regulated learning (SRL) approaches and feedback on complex tasks are associated with improved outcomes in practice-based clinical skills. This study aimed to investigate the effectiveness of an educational intervention using SRL-enhanced video feedback for improving the prescribing competency of junior doctors.

**Non-Medical Prescribing**

**Triggering language and maths anxiety in non-medical prescribing students**

**Journal of Prescribing Practice**

Maths anxiety is a debilitating fear of mathematics, which often stems from early learning experiences. Despite their ability to confidently perform complex numerical tasks, such as drug calculations, as an intrinsic part of their role, health professionals often disclose experiencing maths anxiety. Health professionals who have returned to education to study non-medical prescribing are required to undertake a numeracy exam, which can trigger symptoms of maths anxiety. This study explores the use of language in teaching and learning numeracy with non-medical prescribing students, and identifies that use of terminology more closely aligned with health professionals' language results in lower levels of anxiety than using school-like mathematical terminology. The findings of this study can be used to inform supportive teaching practices for health professional educational courses that have a numeracy component.

**Promoting safe prescribing practice and interprofessional working: a workshop follow-up evaluation**

**Journal of Prescribing Practice**

This paper presents findings from a follow-up evaluation of an interprofessional workshop for prescribing safety to assess the perceptions and attitudes toward working interprofessionally in non-medical prescribers and MPharm students.
The Rise of Non-Medical Prescribing and Medical Dominance

Research in social & administrative pharmacy

This article contributes to the continuing debate on the professional dominance of medicine given the rising number of professions allied to medicine that now have the legal authority to prescribe and could potentially threaten this dominance. The key questions addressed are whether non-medical prescribers represent a threat to the dominance of medicine and if they do not, what has mediated doctors' response to these newer prescribers such that they are able to retain dominance?

Non-Medical Prescribing Policies: A Global Scoping Review

Health Policy

This paper aimed to identify the scope of policies facilitating NMP worldwide and investigate the relationship of such policies with a country's physician to population ratio and economic status.

Nurse prescribing

Models of Prescribing, Scope of Practice and Medicines Prescribed, a Survey of Nurse Practitioners

Journal of advanced nursing

The aim of this study was to explore current Australian Nurse Practitioners (NPs) models of prescribing used and medicines prescribed within their scopes of practice. NPs appear to engage in several modes of prescribing as relevant to their context of practice with most NPs prescribing using all models of prescribing at different times. Findings also highlight the diversity of and breath of the medicines that NP prescribe and highlight the need for NPs to have broad capability in relation to the quality use of medicines, irrespective of specialty or location of practice.

A Comparison Between Independent Nurse Prescribing and Patient Group Directions in the Safety and Appropriateness of Medication Provision in United Kingdom Sexual Health Services: A Mixed Methods Study

International journal of nursing studies

Sexual health nurse prescribers and patient group direction users provided safe and therapeutically appropriate medication. Improvements in clinical documentation are recommended.

Oncology

"Some Sort of Fantasy Land": A Qualitative Investigation of Appropriate Prescribing in Cancer Care

Journal of evaluation in clinical practice

A qualitative empirical analysis of semi-structured interviews with 16 Australian oncologists and haematologists. It found that oncologists framed appropriate prescribing in terms of the following inter-
related, and at times opposed, values: civic mindedness, hope and compassion, realism, and virtue in motivation.

**Opioids**

**Spatial Heterogeneity and Socioeconomic Determinants of Opioid Prescribing in England Between 2015 and 2018**

**BMC Medicine**

A study on primary care opioid prescribing in England from 2015 to 2018, particularly the patterns of spatial variations at the community level and the socioeconomic and environmental factors that drive consumption.

**Palliative Care**

**Anticipatory Prescribing in Community End-Of-Life Care in the UK and Ireland During the COVID-19 Pandemic: Online Survey**

**BMJ supportive & palliative care**

Anticipatory prescribing (AP) of injectable medications in advance of clinical need is established practice in community end-of-life care. Changes to prescribing guidelines and practice have been reported during the COVID-19 pandemic. The challenges of the COVID-19 pandemic for UK community palliative care has stimulated rapid innovation in AP.

**Pharmacogenomic Testing**

**Understanding Pharmacogenomic Testing and Its Role in Medicine Prescribing**

**Nursing standard**

Pharmacogenomics is a branch of personalised medicine that is concerned with how differences in people’s genomes affect their response to medicines. Pharmacogenomic testing, which recently has become less expensive and increasingly available, can inform nurses’ prescribing decisions and improve patient outcomes. This article discusses personalised medicine and pharmacogenomics, including how pharmacogenomic testing can optimise medicine prescribing, and explains the role of nurses in the process.

**Safety**

**Understanding the utilisation of a novel interactive electronic medication safety dashboard in general practice: a mixed methods study**

**BMC Medical Informatics and Decision Making**

The Salford Medication safety dASHboard (SMASH) intervention provided general
practices in Salford (Greater Manchester, UK) with feedback on their safe prescribing and monitoring of medications through an online dashboard, and input from practice-based trained clinical pharmacists.

**Development of Prescribing Safety Indicators Related to Mental Health Disorders and Medications: Modified e-Delphi Study**

*British journal of clinical pharmacology*

To develop a set of prescribing safety indicators related to mental health disorders and medications, and to estimate the risk of harm associated with each indicator.

**Factors Associated With Workarounds in Barcode-Assisted Medication Administration in Hospitals**

*Journal of clinical nursing*

Nurses administering medication in hospitals using Barcode-assisted Medication Administration frequently perform workarounds, which may compromise medication safety. In particular, nurse workload and the patient-nurse ratio could be the focus for improvement measures as these are the most clearly modifiable factors identified in this study.

**Trends and Variation in Unsafe Prescribing of Methotrexate: A Cohort Study in English NHS Primary Care**

*The British journal of general practice*

Of 7349 practices in England, 1689 prescribed both 2.5 mg and 10 mg tablets to individual patients in 2017, breaching national guidance. Twenty-one deaths caused by methotrexate poisoning were reported from 1993-2017 in England and Wales.

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- **Journal of Prescribing Practice**
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Resources

**Nice Guidelines**
Evidence-based recommendations on a wide range of topics, from preventing and managing specific conditions to planning broader services and interventions to improve the health of communities.

**Clinical Knowledge Summaries** have prescribing information within them relating to specific conditions/diseases and the drugs administered/considered for treatment. The latest major updates can be found [here](#).

**Medicines and Prescribing**
Guidance, advice and support for delivering quality, safety and efficiency in the use of medicines. Includes information about [evidence summaries](#) designed to help commissioners and budget holders make the right decision about the introduction of new medicines, provides information into how the best available evidence is summarised for licensed, off-label and unlicensed medicines.

**British National Formulary**
Available in digital & print for health and social care professionals.

Latest updates: [BNF](#) [BNF for Children](#)

**BNF Publications mobile app**
All adult and child BNF content is available through a single mobile app. The app is free for:

- health and social care professionals who work for or are contracted by the NHS in England, Scotland and Wales.
- students who are studying on NHS-commissioned courses such as medicine or nursing.

**UKMI [UK medicines information] newsletter**

- [New Medicines Newsletter June 2020](#)
- [New Medicines Newsletter May 2020](#)
- [New Medicines Newsletter April 2020](#)

**MHRA**
The Medicines and Healthcare products Regulatory Agency regulates medicines, medical devices and blood components for transfusion in the UK. It is an executive agency, sponsored by the Department of Health and Social Care. See [Drug Safety Updates](#)
Mid Yorkshire Hospitals NHS Trust Staff Library and Knowledge Service

To keep up-to-date with healthcare developments see our monthly What’s New? bulletins (“Clinical” and “Health Services Management” editions) and weekly COVID-19 alerts on “Official guidance and emerging evidence”, “Guidance updates by medical/surgical specialty”, “General Guidance” and “Guidance for nursing, allied health and pharmacy”

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