



Contents lists available at ScienceDirect

Research in Social and Administrative Pharmacy

journal homepage: www.rsap.org

Piloting the United Kingdom 'Prescribing Safety Assessment' with pharmacist prescribers in Scotland

Fiona Reid ^a, Ailsa Power ^a, Derek Stewart ^{b,*}, Anne Watson ^a, Leon Zlotos ^a,
Derna Campbell ^c, Trudi McIntosh ^b, Simon Maxwell ^{d,*}

^a NHS Education for Scotland, 2 Central Quay, 89 Hydepark Street, Glasgow, G3 8BW, UK

^b School of Pharmacy and Life Sciences, Robert Gordon University, The Sir Ian Wood Building, Garthdee Road, Aberdeen, AB10 7GJ, UK

^c Strathclyde Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, 161 Cathedral Street, Glasgow, G4 0RE, UK

^d School of Clinical Sciences, College of Medicine and Veterinary Medicine, The University of Edinburgh, The Chancellor's Building, 49 Little France Crescent, Edinburgh, EH16 4SB, UK

ARTICLE INFO

Article history:

Received 4 August 2016

Received in revised form

4 November 2016

Accepted 16 December 2016

Keywords:

Prescribing

Pharmacists

Safety

Assessment

Medical students

Scotland

ABSTRACT

Background: Prescribing is a complex task requiring considerable knowledge and skills. The Prescribing Safety Assessment (PSA) was developed by the British Pharmacological Society and the United Kingdom (UK) Medical Schools Council. Between February and June 2014, over 7000 final year medical students undertook the PSA, with an overall pass rate of 94%. Independent prescribing for suitably trained pharmacists was introduced in the UK in 2006. To date there has been little focus on any objective measures of prescribing safety.

Objective: To determine the PSA performance of a pilot group of pharmacist prescribers in Scotland relative to medical students and to test the feasibility and acceptability of running the PSA.

Methods: A group of 59 pharmacist prescribers took part in ten events. The PSA consisted of 30 questions to be completed over 60 min. All questions had been used in the 2014 assessments for final year medical students. The PSA was undertaken online under invigilated conditions, mirroring the medical student assessment. One month later, participants were invited to complete an online evaluation questionnaire.

Results: The mean overall PSA scores (\pm SD) were $87.5\% \pm 8.7$ (range 52–98) compared to a 88.5% for medical students. Based on an Angoff passmark of 76.0%, 53 pharmacists (89.8%) passed compared to an overall pass rate in PSA 2014 of 94%. Pharmacists performed equivalently to medical students in all assessment areas, with a slightly lower performance in the prescribing, drug monitoring and data interpretation questions offset by better performance in prescription review and adverse drug reactions. Feedback was positive in relation to appropriateness, relevance and level of difficulty of the PSA although several commented that they were practicing in very specific clinical areas.

Conclusion: These pilot events have benchmarked the PSA performance of pharmacist prescribers with final year medical students, and feedback confirmed feasibility and acceptability.

© 2017 Elsevier Inc. All rights reserved.

1. Introduction

Prescribing is a complex and challenging task requiring considerable knowledge and skills, as evidenced by the ten

principles of good prescribing defined by the British Pharmacological Society (BPS, Box 1).

The demands on prescribers have multiplied in recent years due to many factors including more complicated medicines regimens, combined with increasing prescribing prevalence. Scottish prescribing data from 2014 highlighted that 20.8% of patients with two clinical conditions were prescribed four to nine medicines, and 10.1% prescribed ten or more medicines; in patients with six or more comorbidities, these values increased to 47.7% and 41.7% respectively.² These data highlight even more the need for highly knowledgeable and skilled prescribers to ensure that all ten of the

* Corresponding author.

E-mail addresses: Fiona.Reid@nes.scot.nhs.uk (F. Reid), ailsa.power@nes.scot.nhs.uk (A. Power), d.stewart@rgu.ac.uk (D. Stewart), Anne.Watson@nes.scot.nhs.uk (A. Watson), Leon.Zlotos@nes.scot.nhs.uk (L. Zlotos), derna.campbell@strath.ac.uk (D. Campbell), t.mcintosh@rgu.ac.uk (T. McIntosh), S.Maxwell@ed.ac.uk (S. Maxwell).

Box 1

Ten principles of good prescribing, British Pharmacological Society.¹

1. Be clear about the reasons for prescribing
2. Take into account the patient's medicines history before prescribing
3. Take into account other factors that might alter the benefits and risks of treatment
4. Take into account the patient's ideas, concerns and expectations
5. Select effective, safe and cost-effective medicines individualized for the patient
6. Adhere to national guidelines and local formularies where appropriate
7. Write unambiguous legal prescriptions using the correct documentation
8. Monitor the beneficial and adverse effects of medicines
9. Communicate and document prescribing decisions and the reasons for them
10. Prescribe within the limits of your knowledge, skills and competence.

BPS principles are met.

There is, however, a vast accumulation of evidence of widespread suboptimal prescribing leading to potential patient care and safety issues. In a systematic review of prescribing errors by junior doctors, Ross et al. found errors prevalent in 2–514 per 1000 items prescribed and 4–82% of patients or charts reviewed.³ In a later systematic review of all prescribing errors in hospital inpatients, Lewis et al. reported 52 (8–227) errors per 100 admissions and 24 (6–212) errors per 1000 patient days.⁴ A recent study of junior doctor prescribing in hospitals in Scotland identified an error rate

of 36% (1700/4710) of patient prescription charts and 7.5% (3364/44726) of items prescribed.⁵

Given these statistics, assessing competence in prescribing is crucial within a framework of clinical governance and promoting patient safety.⁶ Given the widespread evidence of suboptimal prescribing, The Prescribing Safety Assessment (PSA) was developed by the BPS and the United Kingdom (UK) Medical Schools Council.⁷ The PSA assesses prescribing skills based on the competencies identified by the UK General Medical Council and outlined in 'Outcomes for Graduates', which sets out the knowledge, skills and behaviors that new UK medical graduates must be able to show.⁸ These prescribing competencies are: writing new prescriptions; reviewing existing prescriptions; calculating drug doses; identifying and avoiding both adverse drug reactions and medication errors; and amending prescribing to suit individual patient circumstances.

The PSA is designed to allow final year UK medical students to demonstrate that they have the necessary knowledge, skills and judgment (in relation to the safe and effective use of medicines) to begin their work as junior prescribers in National Health Services (NHS) hospitals in the UK. It is an open book assessment taken under time limited restrictions, with candidates having access to the British National Formulary (BNF). The PSA is delivered online from a 'cloud-based' server and comprises eight sections containing question styles that cover different aspects of the clinical activity undertaken by prescribers (Fig. 1). Questions are set in any one of seven different clinical settings of medicine (med), surgery (surg), old people (eld), pediatrics (ped), psychiatry (psych), obstetrics and gynecology (O&G) and general practice (GP).

The PSA has been piloted in UK medical schools over several years but was implemented widely for the first time in 2014 (PSA 2014).⁹ Between February and June 2014, over seven thousand final year medical students undertook the PSA, with an overall pass rate of 94%. This process has been repeated again in 2015 and now also includes medical schools in Ireland and Malta. As the PSA has been introduced relatively recently, no studies to date have provided evidence of impact on prescribing safety in practice and the

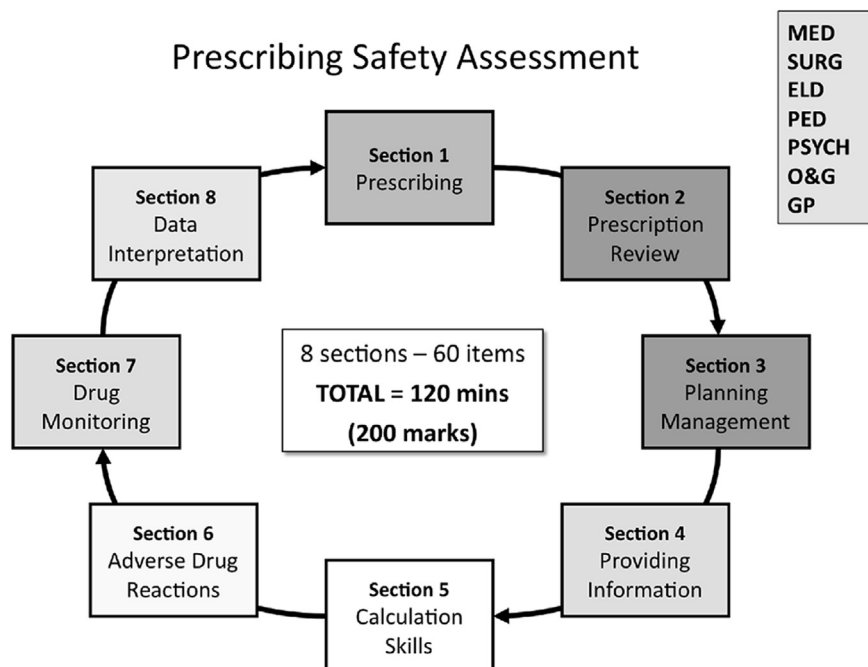


Fig. 1. The standard structure of the Prescribing Safety Assessment.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات