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**Report of the Use of the Prescribing Safety  
Assessment in MPharm Students and  
Preregistration Pharmacists**

**Gail Fleming**

**Pharmacy Education Reform Team**

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## 1. Background

The Prescribing Safety Assessment<sup>1</sup> was piloted in 2011/12 as a means of formatively assessing the prescribing abilities of final year medical students in response to concerns about prescribing competences in junior doctors. This has been extended to all medical schools in 2014 with some using it summatively. Some Foundation Schools are also using the PSA to test Foundation doctors that have either not completed or passed the assessment at medical school.

The Pharmacy Education Reform programme is actively looking at how the proposed new GPhC learning outcomes for the initial training of pharmacists<sup>2</sup> could be achieved within a 5 year programme. This includes developing the underpinning knowledge and skills of undergraduates to prepare them to prescribe once they have the prerequisite experience.

To support this, the Education Reform team was keen to understand the current competencies and underpinning knowledge of MPharm students and preregistration pharmacists in relation to prescribing. The PSA may support this. A small scale trial was therefore planned to:-

- Look at the acceptability and usability of the PSA in pharmacy students and trainees
- Consider the logistics and practicalities of administering the PSA for pharmacy students and trainees
- Provide an early insight into how students and trainees perform in the PSA

## 2. Process

In Jan 2015 Health Education England and the PSA team discussed the possibility of testing the PSA in pharmacy. It was noted that NHS Education for Scotland has also had similar discussions and were planning to run a small scale pilot of the PSA for non medical prescribers in May 2015. It was agreed that there would be value in working collaboratively to share results and experiences. With regards to logistics, the PSA team strongly recommended that the PSA should be run at Universities that also had a medical school so that pharmacy students could ideally use the same facilities and there would be advice on hand locally from medical school colleagues who were familiar with running the assessment. Assessments would be run on prescheduled days that the PSA was already taking place – options were May 15<sup>th</sup>, June 3<sup>rd</sup> and July 27<sup>th</sup>. The assessment would be shortened to one hour as opposed to the normal 2 hour examination that medical students undertake. It would however still reflect the same domains that are assessed.

In March 2015 HEE wrote to the Pharmacy Schools Council seeking expressions of interest for Schools of Pharmacy to run a small scale test of the PSA with their students. Three Universities volunteered to participate, namely Bradford, Sunderland and Manchester. Manchester and Bradford ran the assessment on May 15<sup>th</sup> 2015 and Sunderland on June 3<sup>rd</sup>.

Each University invited current year 4 students and local preregistration pharmacists to take part. A list of volunteers to take the assessment was provided to the PSA team in advance who provided individual log in details for the assessment.

Students were able to feedback on their experience online immediately after the assessment and whilst still logged onto the PSA system. Universities were provided with a standard feedback form also used in medical schools which was to be returned to HEE.

### 3. Results

46 preregistration pharmacists and 43 MPharm students undertook the assessment. The breakdown by school is shown in Table 1,

Table 1: Breakdown of participants by School of Pharmacy

School of Pharmacy	No of preregistration pharmacists	No of MPharm students	Total
Bradford	1	11	12
Manchester	27	20	47
Sunderland	18	12	30
Total	46	43	

#### 3.1 Performance

##### MPharm students

The range of marks was 43 – 98%, mean 74.3%. There are 8 domains in the assessment. Overall students performed best in the calculations (mean 87%) and adverse drug reactions (mean 87%) questions and least well in therapeutic drug monitoring (52%) and data interpretation (54%).

##### Preregistration pharmacists

The range of marks was 71- 93%, mean 85.6%. Similar to the MPharm students, trainees performed best in the adverse drug reactions (mean 98%), calculations (95%) and providing information about medicines (95%) and least well in therapeutic drug monitoring (63%) and data interpretation (58%).

Based on standard setting for medical students, an indicative pass mark for the paper would be 76%.

#### 3.2 Feedback from students and trainees

Feedback from students and trainees was very positive in relation to the assessment. They were asked whether their course had prepared them for the assessment. Despite there being no requirement for newly registered pharmacists to demonstrate prescribing competencies, 76% of preregistration pharmacists and 57% of students felt their course had prepared them for the content of the questions in the assessment. A couple of preregistration pharmacists commented that the calculations questions were not difficult enough. Feedback on lay out, the online interface and clarity of questions was very positive. There were 2 preregistration pharmacists and 3 MPharm students who felt they did not have sufficient time to complete the assessment.

The only negative theme of comments related to using drop down menus in the assessment. Access to practice papers was available to all as this enables students to become familiar with how drop downs are used in the assessment. Not all students accessed these which may have been due to the

short notice period before the assessment. There were comments that practice papers were useful and it would be helpful to have access to more.

Examples of feedback are quoted below:-

*“It was a great chance and also I would love to do it again after pre-reg”*

*“I thought it was a great idea for pharmacists to do as the role of the pharmacist is becoming more clinical and it gives us a good chance to put that clinical knowledge to good use, Enjoyed it actually!”*

*“It was a good exercise , thanks for the opportunity for practice”*

### **3.3 Feedback from Universities**

Each School of Pharmacy had a nominated PSA lead that completed the feedback form. Feedback was that Schools felt well supported by the PSA team and that the information pack provided in advance was very helpful. There were a few glitches with IT and passwords. One particular challenge was setting up IT passwords for preregistration pharmacists at the University. One school had overcome this by using a generic password for all preregistration pharmacists on the day. It was also noted that it took longer to get everything set up on the day than originally anticipated. One School ran the test in the afternoon and its co-located Medical School had run it in the same venue in the morning. This meant that medical School colleagues were on hand and had been very supportive in ironing out any IT glitches.

## **4. Conclusion**

Overall students, trainees and Schools of Pharmacy participating in the pilot found it to be a positive experience and one that they would recommend. It is recognised that the sample size for this pilot is small and that there may be sample bias as those that participated self selected

## **5. Next Steps**

The 3 Schools of Pharmacy that participated would like to repeat the PSA but increase the cohort size so that all final year MPharm students and a larger cohort of preregistration pharmacists undertake the assessment in future. To support this, Schools would ideally like to be able to run multiple sittings and at an earlier point in the year when students are all on campus. There should also be more notice of dates to ensure that this can be planned into preregistration pharmacist timetables.

HEE would like to be able to open up the PSA to other interested Schools but in the first instance the focus will be increasing the sample size in those Schools that have already trialled the assessment.

It is hoped to take this forward in the academic year 2015/16 however the PSA is moving to a different supplier for operationalising its assessments and this may impact upon capacity to support the project in the next academic year. The PSA team has however indicated support in principle for extending this project to further increase our understanding of whether the PSA is suitable for use in the initial training of pharmacists.

## 6. References

1. [http://www.bps.ac.uk/details/aboutPage/884559/Prescribing\\_Skills\\_Assessment\\_-\\_FAQs.html?cat=bps12cb1c1816e](http://www.bps.ac.uk/details/aboutPage/884559/Prescribing_Skills_Assessment_-_FAQs.html?cat=bps12cb1c1816e)
2. <http://pharmacyregulation.org/about-us/who-we-are/gphc-council/council-meetings/12-september-2013>

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