

British Pharmaceutical Students' Association

The imbalance between pre-registration training and undergraduate pharmacy student numbers

A BPSA discussion paper

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www.bpsa.co.uk

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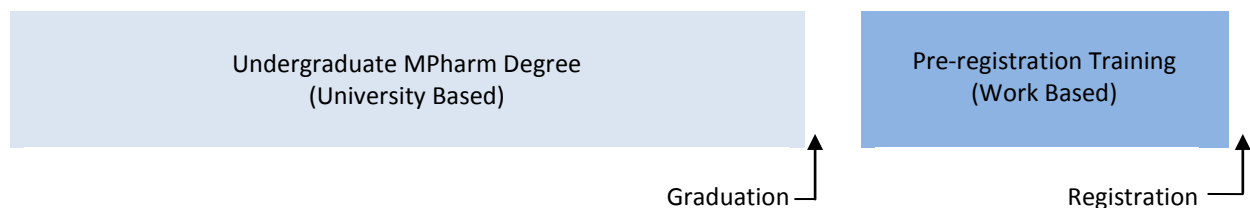
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Introduction

The vast majority of pharmacists in England undertake a four year Masters level undergraduate degree (MPharm, Master of Pharmacy) followed by one year of work based pre-registration training. This final year is separate to university education, during which trainees demonstrate their competence to the General Pharmaceutical Council (GPhC) in a work environment and undertake a final registration examination. The GPhC is the regulatory body responsible for pharmacy and sets the standards and examination¹ required to become a registered pharmacist.

Upon the completion of the four year university based MPharm programme, students are given responsibility for securing their own pre-registration training position. These predominately take place in community pharmacies, with some undertaking placements in hospitals. A limited number of split placements exist which allow trainees exposure to multiple sectors of practice, including industrial pharmacy.

Figure 1 - Overview of pharmacy education and training



Although universities may assist students in applying for places, there are currently no formal arrangements that guarantee placements after completion of an MPharm degree. At present there is free movement of pharmacy students across UK borders, meaning that those who complete their university training in England are able to apply for their one year work based placements in the devolved administrations, and vice versa.

In England these places are paid for in the managed sector by an MPET/NMET levy and in the community pharmacy sector through the pharmacy contractual framework. Despite national funding, the number of pre-registration practice placements in England is not commissioned or fixed by the regulator, the Department of Health or universities. Therefore the choice to offer placements relies on decisions made by employers.

In the decade since 1999 the number of schools of pharmacy in England has increased from 12 to 21. In contrast to other health care professional courses, any university in the country that meets the requirements set by the General Pharmaceutical Council can offer an MPharm course. As a result several new schools of pharmacy are due to take students in 2013.

¹ General Pharmaceutical Council (May 2011), *GPhC Standards for the initial education and training of pharmacists*, Available: <http://pharmacyregulation.org/education/education-standards> [27 Jun 2012].

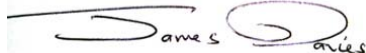
At the same time as new schools opening, intake in the existing schools has also increased. Across England, student numbers in 1999 rose from 4,200 to 9,800 in 2009². The number of students entering pharmacy programmes between 2004/05 and 2008/09 increased over 40% compared to a national increase in first year university students of about 15%³. This is in contrast to other courses for dentistry and medicine where restrictions control the number of students that universities can recruit⁴.

The BPSA is concerned that the number of undergraduate students entering schools of pharmacy is continuing to rapidly increase. As an organisation we are deeply concerned about the ability of these graduates to secure pre-registration places in the future. The current model is unsustainable. At present the demand for pre-registration places has broadly met the supply of pharmacy graduates. However, we are worried that this will not persist and many of our members will not be able to complete their training and register as pharmacists.

Key Point 1

The current balance between undergraduate student numbers and pre-registration training placements is unsustainable. As an organisation we are deeply concerned about the ability of these graduates to secure pre-registration places in the future

The BPSA Executive 2011-12 agreed to take action on this issue as a matter of urgency and will form a major piece of work for the Executive of 2012-13. The aim of this paper is to facilitate discussions with regards to managing student numbers.



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² Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].

³ Higher Education Statistics Agency, (2010) 'Students in Higher Education Institutions', *Statistical First Release 142, Table 2a*. [27 Jun 2012].

⁴ Recurrent grants and student number controls for 2012-13. HEFCE. www.hefce.ac.uk [27 Jun 2012].

Undergraduate Numbers

There have been several key drivers that have led to an increase in the number of students studying pharmacy at university and will continue to add pressure to the numbers entering this course.

Changes in University Funding

At present the undergraduate degree is predominately funded by the Higher Education Funding Council for England (HEFCE). Recently introduced changes in the funding of higher education in England appear to be contributing to the growth in pharmacy student population. As part of these changes, there is no limit for universities who admit students achieving at least 'AAB' at A-level (or equivalent)⁵. Students applying to pharmacy courses tend to be at this academic level and therefore significant financial pressure exists in universities to recruit students to this desirable course. The majority schools of pharmacy now accept at least 180 students into each year, a marked increase on previous years.

Student Fees and Desirability of Pharmacy

The changes created by policy have also had a direct impact of student fees for higher education. Beginning in 2012 students will be expected to contribute a fee of up to £9,000 for their university education and schools of pharmacy across England have indicated that they will be operating at the top of this bracket. The only exception is the University of Huddersfield, which will charge £7,950 to students starting in 2012. Currently pharmacy is perceived by school students to have positive employment prospects. Therefore, when considering a tuition debt of £36,000 and a maintenance debt of about £22,000⁶, students are driven towards those courses that are perceived to offer the best chances of paying this debt back. Pharmacy is perceived to be one such course.

Across the higher education sector applications to universities have dropped by 8.7%⁷, blamed on the increase in tuition fees. Yet applications for pharmacology, pharmacy and toxicology⁸ courses have increased by 1.5%, and some schools of pharmacy have reported a 35% increase in MPharm applications.

⁵ Higher Education: Students at the Heart of the System' Government White Paper, June 2011

⁶ Based on a maintenance loan outside London of £5,500 per annum. This increases to £30,700 in London (£7,675 pa).
http://www.direct.gov.uk/en/EducationAndLearning/UniversityAndHigherEducation/StudentFinance/Typesoffinance/DG_194804 [27 Jun 2012].

⁷ UCAS. Data reported for applications considered on time for 15 January deadline.
http://www.ucas.com/about_us/media_enquiries/media_releases/2012/20120130 [27 Jun 2012].

⁸ Pharmacy is group with Toxicology and pharmacology as a JACS3 subject line.

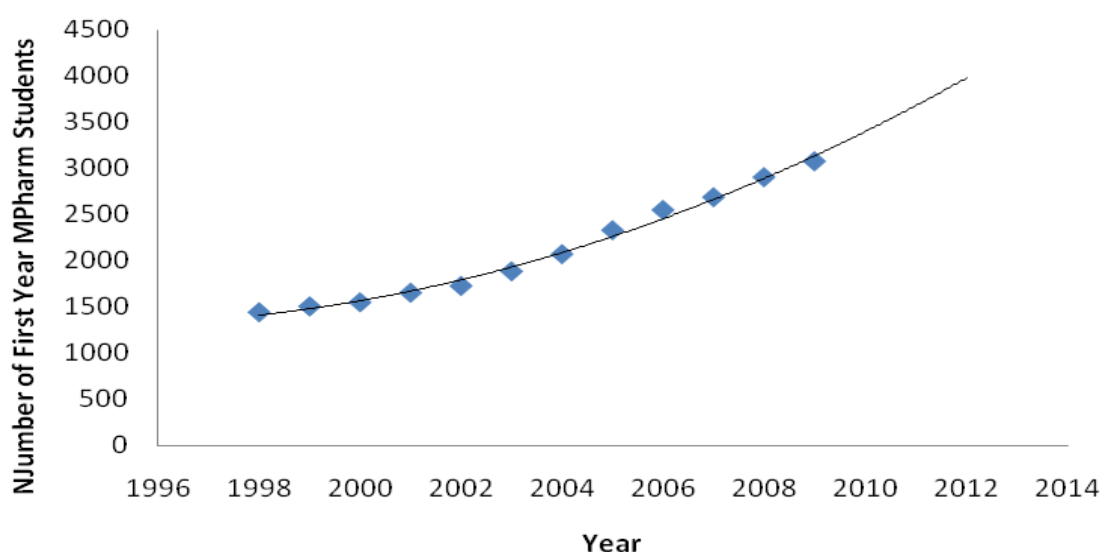
Relaxed Restrictions

Previously the RPSGB (the regulator of pharmacy prior to October 2010) restricted entry into schools of pharmacy, and controlled the number of universities that could offer the MPharm course. When challenged on these restrictions, there was no legal basis found, which resulted in an increase in schools of pharmacy.

The first of the new schools of pharmacy was founded at the University of East Anglia, Norwich, in 2003. This was followed by the establishment of new schools of pharmacy at Reading University, Kingston University, and Medway School of Pharmacy. The University of Hertfordshire recruited its first intake of 54 students in 2005. In 2006, both Wolverhampton and Keele universities accepted their first students onto the MPharm course. In 2008 Huddersfield established a new school of pharmacy. In 2011 the University of Birmingham began step one of accreditation and is due to take its first cohort in October 2013. Durham University and the University of Lincoln have also indicated that subject to approval they will recruit MPharm students in 2013.

The effect of this school of pharmacies opening has led to an increase in the number of students studying in schools of pharmacy.

Figure 2 – Increasing student numbers



Figures from 2009 onwards extrapolated. Includes new and re-sitting students. Does not include new schools of pharmacy due to open 2013. Source: PEDEC

International Students

Currently, around 14% of undergraduate students attending schools of pharmacy in England are overseas students (those who are not from Great Britain or the EU) and the majority complete the full four-year MPharm programme here⁹.

In addition three universities in England have established, or are establishing, 'two plus two' partnerships or branch campuses overseas, where students complete years 1 and 2 abroad before transferring to England to complete years 3 and 4.

The GPhC accredits these courses and graduates are eligible to undertake their pre-registration training in Britain. It is not clear how many overseas students continue after graduation to complete the pre-registration year and register with the GPhC, but as these programme expand, demand for pre-registration training places will undoubtedly increase.

Key Point 2

The number of students studying the MPharm degree has increased markedly over the last decade and all trends indicate that the number of pharmacy graduates in the system is increasing.

⁹ Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].

Issues

There are a number of other issues with the growth in student numbers that are of concern.

In some areas cohorts have reached unsustainable levels. For example one university will be in a position where up to 300 undergraduates will be in one year group. This brings into question the quality of the education and training that these students will receive. This number of students in one cohort will place enormous pressures on resources and staff.

There is currently a recognised shortage of pharmacists in the academic workforce¹⁰. As the number of schools of pharmacy, and number of students increase, these pressures will become more problematic.

This pressure will be compounded by the redesign of the core curriculum in pharmacy undergraduate training, which reflects the increasing needs of clinical practice development and a greater emphasis on practice-based multidisciplinary teaching methods. As such, there will be an additional need for practice-based clinical placements, supervisors, and teaching staff.

Key Point 3

There appears to be an insufficient number of academic staff to cope with the growth in undergraduate student numbers. Resources in universities are becoming stretched.

¹⁰ CFWI Workforce risks and opportunities: Pharmacy, July 2011, www.cfwi.org.uk [27 Jun 2012].

Pre-registration Training Places

Recruitment and Employment

Placements are advertised by employers based on their independent assessment of demand for trained staff or on the basis of a tradition of providing training as part of a recruitment and retention strategy. The pre-registration training year has been used by many employers as a recruitment tool. There had been a shortage of pharmacists for several years. However, this shortage has reduced so much that pharmacy was removed from the UK Border Agency 'shortage occupation' list in September 2011¹¹. This means that employers' need to offer pre-registration places has reduced.

The reduction in the number of pharmacy vacancies advertised, and the reduced number of locum positions available indicates that supply is starting to meet, or even exceed demand. For example, in NHS Trusts in England, vacancy rates for Band 6 junior pharmacist posts have decreased from 24.4% in 2009 to 15.7% in 2010 and to 11.25% in 2011¹². This is of concern to pharmacy students¹³.

While the management of pharmacy workforce numbers is a significant and important debate it is beyond the immediate scope of this paper, which is aimed at addressing the imbalance between student numbers and pre-registration places. It is recognised that employers are no longer struggling to recruit pharmacists. Therefore there is less incentive for these employers to provide pre-registration training placements.

Economic Restraints

The NHS is facing a period of sustained and significant financial constraint along with curbed finances across the public sector. Following the Comprehensive Spending Review, health spending is set to increase from £104 billion in 2010-11 to £114 billion in 2014/15, a total increase of 0.4 per cent in real terms, or an annual real terms increase over inflation of around 0.1 per cent. Since its inception, the NHS budget has grown by an average of over 4% each year in real terms. To address these challenges, the Department of Health (DH) is aiming to improve efficiency and productivity while maintaining quality of care and health outcomes through the Quality Innovation Productivity and Prevention (QIPP) agenda, setting a savings target of £20 billion by 2014, the so called 'Nicholson Challenge'.

¹¹ Skilled Shortage Sensible- Full review of the recommended shortage occupation lists for the UK and Scotland. Migration Advisory Committee (Home Office). September 2011 Sections 3.93, 3.94

¹² National NHS Pharmacy Staffing Establishment and Vacancy Survey 2011. <http://www.nhspecd.nhs.uk/surveys.htm>. [27 Jun 2012].

¹³ At BPSA Annual conference 2012 a motion was passed which stated *"This association believes that the BPSA should encourage the DoH to increase the number of hospital preregistration places available"*.

Inevitably, training budgets have been hit by this reduction in public spending. Although providers in the managed sector have managed to continue to secure funding for pre-registration places, the number offered has not increased to meet the demand of new graduates completing their MPharm programme. This is especially the case when evidence suggests that NHS pre-registration trainee pharmacists move to community pharmacy upon qualification¹⁴.

There were 5.2% fewer NHS hospital pre-registration training positions (n=660) advertised for the 2012 intake compared with 696 for the 2011 intake¹⁵. With one trust, Imperial College Healthcare NHS Trust, receiving 154 applications for its training places.

In the community sector, some would argue that providers will continue to offer training places due to the financial reward available from the community pharmacy contractual framework, which is currently valued at £18,440¹⁶. However, evidence from the major multiples suggests they invest additional resources in training and salary from within their business resources¹⁷. Without the incentive for recruitment it is unlikely that community employers will continue to significantly increase their placement numbers.

NHS Funding

Approximately £50million is invested by the Department of Health/NHS for the pre-registration training year¹⁸. This is based on the current grant paid to pharmacy contractors plus pre-registration salary and on-costs, and an estimate of training costs in the NHS and for current pre-registration trainees in each sector.

At present the community pharmacy contractual framework does not limit the number of pre-registration training placements that can be offered. The budget has had to increase to cope with the extra number of places that have been offered. This unlimited budget cannot continue to exist indefinitely. Department of Health funded pre-registration places have increase by 1000 over a ten year period. With curbed spending across the public sector this unbridled growth presents a significant risk to the Department of Health and inevitably cannot continue uncontrolled.

¹⁴ Willis, S. Seston, L. and Hassell, K. (2010) *A longitudinal cohort study of pharmacy careers: work, employment, and the early careers of cohort pharmacists*, London: Pharmacy Practice Research Trust

¹⁵ Middleton, H. (2011) Report on applications for NHS preregistration trainee pharmacist places in England and Wales for the 2012 intake (1st round recruitment) <http://www.nhspedc.nhs.uk/Docs/Prereg/National%20Recruitment%20Scheme%20report%20on%201st%20round%20of%20recruitment%20for%202012%20intake.pdf> [27 Jun 2012].

¹⁶ Drug Tariff. Part XIII. http://www.ppa.org.uk/edt/June_2012/mindex.htm

¹⁷ Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].

¹⁸ Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].

This has been recognised in Scotland, where a cap on pre-registration places has been imposed. The pre-registration scheme is administered by NHS Education for Scotland (NES) Pharmacy¹⁹ who impose a cap of 170 placements against approximately 250 pharmacy graduates per annum, leading to a net export of pharmacy graduates from Scotland into England²⁰.

In Northern Ireland a limit has been set on the amount of funding available to providers, and there is currently consultation under way about imposing a limit on overall number of funded places²¹, recognising that the current system is unsustainable.

Key Point 4

Department of Health funding for pre-registration training cannot continue to increase at the current rate. This has already been reflected in the actions taken by some of the devolved administrations.

Key Point 5

Current level of pre-registration training numbers is likely to remain the same or decrease. This is likely to create a severe problem for pharmacy graduates to complete their training.

¹⁹ NHS Education for Scotland. Pharmacy. <http://www.nes.scot.nhs.uk/education-and-training/by-discipline/pharmacy.aspx> [27 Jun 2012].

²⁰ Consultation on proposals for new arrangements for preregistration pharmacy training in Northern Ireland. http://www.dhsspsni.gov.uk/consultation_document-2.pdf [27 Jun 2012].

²¹ *ibid*

The Risk of Doing Nothing

The combination of these factors suggests that in the future there will be a trend towards decreased numbers of pre-registration places, against a backdrop of increased student numbers. The result will be an increase number of pharmacy graduates who are unable to complete their training to become registered pharmacists.

The vast majority of students enter onto an MPharm programme with an expectation of registering as pharmacists. Our main concern is that these students will not be able to complete their studies and become registered pharmacists due to the availability of placements. The MPharm programme is recognised as part of an academic continuum that aims to deliver a competent practitioner at the end of the five-year process. The new GPhC educational standards (2011)²² cover both the undergraduate degree and the pre-registration placement, acknowledging the natural progression of students from MPharm to pre-registration training and finally registration.

This expectation has been seen recently in the international student population when changes to visa regulations prevented many international students from commencing their pre-registration training year. This led to a huge backlash from international students who have come to the UK with an expectation to complete their training. Some branded their pharmacy degrees as 'worthless' without registration²³.

From a national perspective, the four-year investment in the education of pharmacy students who are then unable to complete their training to become a pharmacist appears to be a waste of national education resources. It seems ludicrous to invest in large numbers of pharmacy graduates who will be unable to become a meaningful part of the healthcare workforce as they are unable to complete their training.

Burdening students with £36,000 in tuition debt (and a further £22,000 in maintenance fees) when they have no prospect of entering the workforce for which they trained appears irresponsible. From an ethical point of view, we would argue that universities have a responsibility to assist their students in becoming registered pharmacists. To disown them after four years and not take responsibility for their eventual registration as pharmacists is something that we find deeply troubling.

The recognised continuation from MPharm to pre-registration training suggest that universities and employers need to build stronger links to develop the relationship between these two stages of training.

²² General Pharmaceutical Council (May 2011), *GPhC Standards for the initial education and training of pharmacists*, Available: <http://pharmacyregulation.org/education/education-standards> [27 Jun 2012].

²³ Bloodworth, J (2012) Pharmacy Degrees rendered 'worthless' by 'extremely difficult' visa situation. 7th June 2012. *Chemist and Druggist*. http://www.chemistanddruggist.co.uk/news-content/-/article_display_list/14075172/pharmacy-degrees-rendered-worthless-by-extremely-difficult-visa-situation [27 Jun 2012].

Towards a Solution

This is a multivariate problem, with many different causative agents. There are many different ways in which this problem can be addressed.

The Centre for Workforce Intelligence has highlighted this potential issues going forward²⁴.

“In order to support growth, the number of pre-registration trainee pharmacist placements needs to keep pace with the expansion of undergraduate places. In addition, SHAs need to work with employers to increase the amount of one year pre-registration trainee pharmacist clinical placements.” (CfWI, July 2011).

The BPSA has continued to highlight this issue in the pharmacy media²⁵ as have other interested groups. The Pharmacists Defence Association has brought these issues to their members’ attention through their 2012 conferences. During these events the chair of Council of University Heads of Pharmacy of Schools, John Smart, continually highlighted this issue²⁶. It has also been raised at the Modernising Pharmacy Careers Programme Board²⁷.

1. The BPSA has preferences over how numbers should be managed, but we do not believe it is our place to identify a single solution at this time.
2. The BPSA believes that a solution to this problem can only be sought through coordinated consensus between HEIs, Department of Health, Employers and students.
3. The BPSA would encourage all of the key stakeholders to discuss this imbalance in student numbers and pre-registration places as a matter of urgency.

²⁴ CFWI Workforce risks and opportunities: Pharmacy, July 2011, www.cfwi.org.uk

²⁵ News team (2012) MPharm places need managing without a blanket cap. *Pharmaceutical Journal*. 2012;288:698

²⁶ Pharmacy job market ‘sitting on a time bomb’, *Chemist and Druggist* http://www.chemistanddruggist.co.uk/news-content/-/article_display_list/13821430/pharmacy-job-market-sitting-on-a-time-bomb

²⁷ Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf

Summary of Key Points

1. The current balance between undergraduate student numbers and pre-registration training placements is unsustainable. As an organisation we are deeply concerned about the ability of these graduates to secure pre-registration places in the future.
2. The number of students studying the MPharm degree has increased markedly over the last decade and all trends indicate that the number of pharmacy graduates in the system is increasing.
3. There appears to be an insufficient number of academic staff to cope with the growth in undergraduate student numbers. Resources in universities are becoming stretched.
4. Department of Health funding for pre-registration training cannot continue to increase at the current rate. This has already been reflected in the actions taken by some of the devolved administrations.
5. Current level of pre-registration training numbers is likely to remain the same or decrease. This is likely to create a severe problem for pharmacy graduates to complete their training.

Summary of References

1. General Pharmaceutical Council (May 2011), GPhC Standards for the initial education and training of pharmacists, Available: <http://pharmacyregulation.org/education/education-standards> [27 Jun 2012].
2. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].
3. Higher Education Statistics Agency, (2010) 'Students in Higher Education Institutions', Statistical First Release 142, Table 2a. [27 Jun 2012].
4. Grants and student number controls for 2012-13. HEFCE. www.hefce.ac.uk [27 Jun 2012].
5. Higher Education: Students at the Heart of the System' Government White Paper, June 2011
6. Based on a maintenance loan outside London of £5,500 per annum. This increases to £30,700 in London (£7,675 pa). http://www.direct.gov.uk/en/EducationAndLearning/UniversityAndHigherEducation/StudentFinance/Typesoffinance/DG_194804 [27 Jun 2012].
7. UCAS. Data reported for applications considered on time for 15 January deadline. http://www.ucas.com/about_us/media_enquiries/media_releases/2012/20120130 [27 Jun 2012].
8. Pharmacy is group with Toxicology and pharmacology as a JACS3 subject line.
9. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].
10. CFWI Workforce risks and opportunities: Pharmacy, July 2011, [ww.cfw.org.uk](http://www.cfw.org.uk) [27 Jun 2012].
11. Skilled Shortage Sensible- Full review of the recommended shortage occupation lists for the UK and Scotland. Migration Advisory Committee (Home Office). September 2011 Sections 3.93, 3.94
12. National NHS Pharmacy Staffing Establishment and Vacancy Survey 2011. <http://www.nhspecd.nhs.uk/surveys.htm>. [27 Jun 2012].
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14. Willis, S. Seston, L. and Hassell, K. (2010) A longitudinal cohort study of pharmacy careers: work, employment, and the early careers of cohort pharmacists, London: Pharmacy Practice Research Trust
15. Middleton, H. (2011) Report on applications for NHS preregistration trainee pharmacist places in England and Wales for the 2012 intake (1st round recruitment) <http://www.nhspecd.nhs.uk/Docs/Prereg/National%20Recruitment%20Scheme%20Report%20on%201st%20round%20of%20recruitment%20for%202012%20intake.pdf> [27 Jun 2012].
16. Drug Tariff. Part XIII. http://www.ppa.org.uk/edt/June_2012/mindex.htm

17. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].
18. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf [27 Jun 2012].
19. NHS Education for Scotland. Pharmacy. <http://www.nes.scot.nhs.uk/education-and-training/by-discipline/pharmacy.aspx> [27 Jun 2012].
20. Consultation on proposals for new arrangements for preregistration pharmacy training in Northern Ireland. http://www.dhsspsni.gov.uk/consultation_document-2.pdf [27 Jun 2012].
21. *ibid*
22. General Pharmaceutical Council (May 2011), GPhC Standards for the initial education and training of pharmacists, Available: <http://pharmacyregulation.org/education/education-standards> [27 Jun 2012].
23. Bloodworth, J (2012) Pharmacy Degrees rendered 'worthless' by 'extremely difficult' visa situation. 7th June 2012. Chemist and Druggist. http://www.chemistanddruggist.co.uk/news-content/-/article_display_list/14075172/pharmacy-degrees-rendered-worthless-by-extremely-difficult-visa-situation [27 Jun 2012].
24. CFWI Workforce risks and opportunities: Pharmacy, July 2011, www.cfwi.org.uk
25. News team (2012) MPharm places need managing without a blanket cap. *Pharmaceutical Journal*. 2012;288:698
26. Pharmacy job market 'sitting on a time bomb', Chemist and Druggist http://www.chemistanddruggist.co.uk/news-content/-/article_display_list/13821430/pharmacy-job-market-sitting-on-a-time-bomb
27. Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. A discussion paper. http://www.mee.nhs.uk/pdf/MPC_Discussion_Paper.pdf

Using This Document

Authorship

This document was written by James Davies, BPSA HLM, Ryan Hamilton BPSA president 2011/2012 and Vikesh Kakad BPSA president 2012/13. It has been endorsed and accepted by the BPSA Executives of 2011/12 and 2012/13.

About the BPSA

Founded in 1942, the British Pharmaceutical Students' Association is in its 71st year and is the only organisation that solely represents pharmacy students and pre-registration trainee pharmacists across Britain. As the official student organisation of the Royal Pharmaceutical Society, the BPSA aims to promote the interests and welfare of pharmacy students. The BPSA regularly represents students' views in the wider pharmacy media, in consultation responses and in meetings with individual stakeholder organisations.

As well as represent pharmacy students, we aim to educate, support, and entertain our members. We organise a comprehensive range of events and services throughout the year, so there is something for everyone to get involved in.

We have an Executive which coordinates the running of all our events and services and they are supported by a network of BPSA National Representatives which are in every school of pharmacy.

Media Enquiries

Media enquiries can be made to the following members of the BPSA Executive:

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