

Quality Management in Pharmacy Pre-registration Training: Current Practice

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Abstract

Background: The Royal Pharmaceutical Society conducted a review of pharmacy education policy in its 'Making pharmacy education fit for the future' project. The future quality management of pharmacy pre-registration training was included within the scope of the review.

Aim: To identify and review practice examples of quality management in current pharmacy pre-registration training programmes, in England, Scotland and Wales.

Methods: Mixed methods including documentary analysis, a survey of pharmacy pre-registration stakeholders, and individual interviews.

Results: The questionnaire was sent to 27 organisations in total; responses were received from all 27. Twelve respondents (9 secondary care, 2 community pharmacy, 1 industry) reported having developed standards in addition to the RPSGB standards that their training programmes were required to meet. Quality management tools used by pharmacy pre-registration training providers included site visits and tutor and trainee questionnaires.

Conclusion: This paper describes some the tools of quality management that have been adopted and developed by providers of pharmacy pre-registration training. It has identified pockets of good practice, but there is a clear need for a national quality management system in pharmacy pre-registration training.

Keywords: *Medical training, pharmacy pre-registration training, quality assurance, quality control, quality management*

Introduction

The Royal Pharmaceutical Society of Great Britain conducted a review of pharmacy education policy in its 'Making pharmacy education fit for the future' project (RPSGB, 2004). The future quality management of pharmacy pre-registration training was included within the scope of the review and the work described in this paper was commissioned in 2008 as part of this work.

Current responsibility for the quality assurance of the pharmacy Pre-registration Scheme lies with the General Pharmaceutical Council (GPhC) which replaced the Royal Pharmaceutical Society of Great Britain (RPSGB) as the regulator for the pharmacy profession in 2010. The research described in this paper was carried out during 2008, however, the structure of the Scheme as described in this paper remains the same.

The pharmacy Pre-registration Scheme consists of a set of performance standards and an assessment, currently an examination. A 52 week training programme supports the Scheme. The trainee is required to collect evidence of achievement of performance standards such as records of

evidence (which the trainee completes), testimonials, and assessment record sheets from periods of formal observation. Each pre-registration trainee is assigned a tutor who is responsible for ensuring that the trainee receives the necessary training to develop the skills and behaviours represented by the performance standards, and ensuring that the training provision meets the GPhC requirements. The tutor has the final decision as to whether the trainee has achieved the required standard relating to performance standards.

The Scheme specifies some criteria for becoming a pre-registration tutor including: to have practised in the relevant sector for three or more years; to be a registered pharmacist and not currently under investigation by the GPhC. Tutors are required to sign a self-declaration that they meet the criteria but there is no requirement to attend training or demonstrate expertise in workplace assessment.

Approval of a site as a suitable training environment is currently granted by the GPhC (the RPSGB at the time of the research) on the basis of an application form completed by the pre-registration tutor or manager. Approval is granted for

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five years and is paper-based with site visits carried out only if problems with the quality of the training at the site arise and are made known to the regulator. Individual training programmes are accredited on the basis of information supplied on the application form. Elements of the training programme (e.g. off-site taught components) can be provided by individual training sites, NHS regional pharmacy education and training services, or larger organisations with multiple sites.

In Scotland, a review of the quality assurance of NHS pharmacy pre-registration training, along with the development of new pharmaceutical services (Scottish Executive Health Department, 2002) and a new community pharmacy contract led to a restructuring of the operation of the Pre-registration Scheme so that all pre-registration training is organised, administered, monitored and fully funded through NHS Education for Scotland (NES). The stated aim was “to ensure that every pre-registration pharmacist funded by the NHS receives high quality training opportunities, support and experience, regardless of practice setting” (NHS Circular PCA, 2006). The Pre-registration Pharmacist Scheme (PRPS) was implemented from August 2008 and offered the opportunity to study and learn from this model.

At the time of the study there was a general awareness that many organizations providing pre-registration training in England, including NHS and community pharmacy organisations had developed their pre-registration training programmes far beyond the current requirements. However there was no previous collection, documentation and sharing of these developments and this study aimed to identify and review practice examples of quality management in current pharmacy pre-registration training programmes, in England, Scotland and Wales.

Objectives

The objectives of the study were as follows:

1. Engage key pharmacy stakeholders with the project and secure their active support
2. Describe the key features of the national pharmacy pre-registration scheme in Scotland.
3. Obtain examples of quality management components from pharmacy pre-registration stakeholders in the U.K.

Methods

A list of stakeholders in pharmacy pre-registration training was compiled in consultation with RPSGB staff. The list included all those involved in co-ordinating regional NHS pharmacy pre-registration schemes, those responsible for pre-registration training in the multiples and some independent community pharmacies, representatives from academia and industry, the National Pharmacy Association (NPA) and the British Pharmaceutical Students' Association (BPSA). Contact details were obtained from the membership lists of the NHS Pharmacy Education and Development Committee (NHSPEDC), the RPSGB Pre-registration Liaison Group, and through the RPSGB Pre-registration Division. A personal e-mail was sent to each stakeholder to introduce the project and to ask for their support in collecting the data.

Stakeholders were invited to complete and return a questionnaire to capture examples of current quality management in the pre-registration year. The questionnaire was developed by the research team in consultation with the RPSGB Pre-registration Division. The questionnaire was initially posted to the stakeholders with a freepost envelope for return, but was then e-mailed to stakeholders if requested. Questionnaires were returned either via post or e-mail. Follow ups were conducted, where necessary, to ensure that all questionnaires were returned. Participants were asked to provide a copy of any surveys or other quality management paperwork they used. The primary aim of the questionnaire was to gather examples of quality management tools in use but questions were also posed to gather opinions on what worked well and not so well. The results are therefore a mixture of opinion and examples of tools in use.

An analysis of documents and information found on the NES website was undertaken to identify the key quality management elements of the Pre-registration Pharmacist Scheme in Scotland. The information found from the document analysis was supplemented through a face to face interview with a representative from NES.

The project was considered to be a service evaluation and therefore ethical approval was not required.

Results

Pharmacy Pre-registration Scheme survey

The questionnaire was sent to 27 organisations in total; responses were received from all 27. Fourteen questionnaires were completed by pharmacists with regional responsibilities for pre-registration training in secondary care, 11 pertained to community pharmacy pre-registration training, and 2 to training in industry.

All fourteen respondents from secondary care had a regional role within a regional pharmacy unit, but with differing organisational structures. Five respondents worked for a regional pharmacy unit within the NHS, four of the respondents were based in a NHS Deanery, three conducted their roles based in a hospital trust, and two from Schools of Pharmacy. Ten of the respondents from secondary care saw quality management as part of their role. Of the four that did not, one stated their remit as purely funding, two were responsible just for providing the off-site training and monitoring the outcomes of this training, whilst one stated that QA was not a remit, but something that they engage in voluntarily.

The respondents from community pharmacy and industry were all responsible for pre-registration training across their whole organisation. Of the eleven community pharmacy respondents, five were from large national multiples, four from smaller regional pharmacy organisations and two from independent pharmacy groups. Nine community respondents saw quality management as part of their role.

One respondent from industry provided an industrial pre-registration placement and partnered with a clinical provider (community pharmacy and hospital) to ensure a clinical training programme. Their remit was to select tutors within their organisation, and to facilitate the cross sector placement. They did not have a quality management remit. The other industry respondent stated that selection of tutors, tutor

training, facilitating cross sector experience and quality assurance were part of their role.

Standards for the Training Programme

Twelve respondents (9 secondary care, 2 community pharmacy, 1 industry) reported having developed standards in addition to the RPSGB standards that their training programmes were required to meet. These standards were generally to provide more sector specific guidance to training sites as to what is expected in the training programme.

In secondary care the standards were laid out in training agreements and contracts with the training site. The NHSPEDC has developed a self-evaluation tool which describes a set of national standards for pharmacy pre-registration training based on the Quality Assurance Framework for Healthcare Education developed by Skills for Health.

Quality Management Systems

A summary of the quality management tools used by pharmacy pre-registration training providers is provided in Table I. These include site visits and tutor and trainee questionnaires.

Table I: Summary of Site Visits and Surveys Undertaken by Pharmacy Respondents

		Secondary Care	Community Pharmacy
Quality Management Tool	Frequency of Visit	Number of Respondents (n=14)	Number of Respondents (n=11)
Site visit	No site visits	8	0
	When problems are identified	3	2
	Monthly	0	1
	Every 8 weeks	0	2
	At 26 weeks	0	1
	Twice a year	1	2
	Annually	1	2
	Once every three years	1	0
Site visit carried out but no frequency stated	0	1	
Quality Management Tool	Frequency of Administration	Number of Respondents (n=14)	Number of Respondents (n=11)
Tutor questionnaire	No tutor questionnaire	10	4
	After tutor training sessions	0	2
	Twice a year	1	0
	Annually	2	5
	Infrequently	1	0
Trainee questionnaire	No trainee questionnaire	2	0
	Three monthly	0	2
	After each training session and at end of year	5	3
	After each training session	0	2
	At 6 months and end of year	2	0
	Annually	3	3
	After cross sector placement and annually	1	0
	Every 2-3 years	0	1
Trainee questionnaire administered but no frequency stated	1	0	

Reflections on the Quality Management of the Pharmacy Pre-registration Scheme

Many of the respondents stated that in general their quality management systems worked well. Benefits were reported from trainee feedback mechanisms, annual review of the programme content and delivery methods, tutor support mechanisms and review of trainees’ evidence by personnel other than the tutor. Respondents stated that it was important to employ a number of different quality management tools to ensure that all aspects of the programme are delivered to the desired standards and that monitoring of the trainees and placements by an external provider (*i.e.* a regional pharmacy unit) was needed.

There were some areas where the respondents felt quality management was lacking, in particular the selection and performance management of tutors:

‘If I find that a tutor may not be up to scratch, there are no set standards that I can say they have to meet, therefore this has to be handled very diplomatically.’ (Secondary Care Respondent)

Some respondents stated a need to review the performance standards and assessment methods to ensure consistency amongst tutors:

‘The performance standards requirements are subjective to the individual tutor so between our five pre-registration trainees there has been a great variation of standards.’ (Secondary Care Respondent)

Some respondents stated that the reviews that were currently being undertaken by local and regional providers were not adequate as quality management mechanisms. They expressed a need for national site visits and external tutor review to allow comparisons nationally.

Finally, respondents felt that difficulties arose when poor performance of a tutor was identified as they lacked sanctions if things are not going well.

The Pharmacy Pre-registration Pharmacist Scheme in Scotland (PRPS)

The educational agreement between NES and the employing organisation lays out the each of their responsibilities. In terms of other criteria and documentation NES tried to make as little change to the existing RPSGB requirements as possible, since the scheme still needs to meet these requirements. NES expected standards to develop as they gained experience of managing the scheme.

NES produced a framework for the programme, published in a manual (NHS Education for Scotland, 2008) that complemented the information provided to tutors and trainees by the RPSGB. As well as providing background information on the PRPS, it also provides some guidance on how the performance standards can be achieved with suggested tasks, activities and a timetable. There is a core programme that every pre-registration trainee is required to complete that includes national and regional study days, first aid training, completion of some distance learning packs, cross sector experience, completion of a project and a full-length practice registration examination. The training programme is regularly reviewed by NES using the quality assurance tool developed by the NHSPEDC and described above.

NES is responsible for approval of all premises that train pre-registration trainees. Premises are inspected against criteria based on the RPSGB's registration form. NES tutors must participate in the NES tutor development programme, in addition to meeting the requirements set by the RPSGB. This includes recorded appraisal against RPSGB eligibility criteria, completion of the required training, and maintenance of a portfolio showing development and appraisal. Tutors are provided with on-going educational support to meet quality standards and approval.

The three main learning points highlighted by NES were:

1. Ensure that whoever is responsible for quality management also has control of the funding.
2. Engage all the stakeholders at the beginning of the process.
3. Consider regional implementation of a national scheme initially since the numbers of pre-registration trainees involved will make national implementation from the outset difficult to deal with.

Discussion

The majority of the pharmacy stakeholders participating in this project (from hospital pharmacy, multiple pharmacy groups and the pharmaceutical industry) have well developed quality management systems in place to monitor their pre-registration programmes, the training sites, the performance of the tutors and the trainees. The systems that have been put in place by stakeholders have some commonalities with the systems in the Foundation Programme in the WM Deanery (Mills, Blenkinsopp & Black, 2013), and with each other, and include site visits and surveys. There is, however, much variation in how these quality management systems are implemented in pharmacy. Although examples were found where independent pharmacies are working together to support pre-registration training little is known about quality in the independent sector and there are currently no mechanisms to assess it. There is a need for a national quality management system in pharmacy that applies to all sectors. There was support for such a system among stakeholders with the caveat that whatever national guidance is put in place for the pharmacy pre-registration scheme, there should remain enough flexibility for it to be implemented locally and in different sectors, and that the sharing of good practice should be encouraged. It is also important that those elements of existing quality management schemes that are currently working well are not lost since some regions have already spent much time and effort developing, piloting and implementing their schemes.

The changes in pharmacy regulation that took place in September 2010 offer an opportunity to introduce changes to the current quality management of the Pre-registration Scheme. The General Pharmaceutical Council is required to set standards for education and competencies for practice and quality assurance. Quality management systems will need to be developed alongside these. Clear lines of responsibility will need to be drawn to clarify which organisation will be responsible for developing the pre-registration training scheme and supporting its delivery. In the Scottish PRPS a model of national, regional and local delivery has been developed that encompasses both of the major sectors of pharmacy, with local delivery being at NHS trust or individual community pharmacy premises level. In the rest of

Great Britain, a cross sector regional model is not so easily identified. Even within secondary care the structure of the regional pharmacy units, and the involvement of the deaneries in pharmacy training varied considerably and traditionally, community pharmacy has not been included in the remit of the regional pharmacy units. Since this research was undertaken, a further example of how the quality management of pharmacy pre-registration training could be undertaken has been piloted. Within NHS South East Coast, the provision of pharmacy education has been integrated into Kent, Surrey and Sussex Postgraduate Deanery (KSS) and pharmacy has been included in the KSS quality management of NHS trust training placements of doctors, dentists and now pre-registration trainee pharmacists (Phillips, Fleming and Playdon, 2009; Fleming, 2012). This will provide useful learning if the quality management of pharmacy pre-registration training is included in the current deanery infrastructure as advocated by the Modernising Pharmacy Programmes Board (Smith & Darracott, 2011).

Pharmacy stakeholders have already recognised the need for some national standards to apply to the pre-registration training programme and the NHSPEDC has developed a set of standards based on Skills for Health. Many respondents from secondary care reported applying these standards. Other respondents, including those affiliated with the PRPS in Scotland, have incorporated standards for training sites and training programmes into the educational contracts that a regional provider might hold with local premises. In addition to clearly defined, nationally agreed standards for the pre-registration training programme, pharmacy stakeholders expressed the need for national guidance on a quality management system that is applicable to all sectors of pharmacy, and further guidance on the structure and content of the pre-registration programme. This guidance equates to the curriculum and the operational framework in the Foundation Programme for medical practitioners. The curriculum for the Foundation Programme (The Foundation Committee, 2007) sets out the educational framework for the whole programme including key topics for educational activities, guidance on assessments, the syllabus, the outcomes that the trainees are expected to achieve, and a description of the quality assurance process. The operational framework for the Foundation Programme (The U.K. Foundation Programme Office, 2007) sets out principles for foundation training including organisational arrangements, but allows the deaneries flexibility to accommodate local differences. Similar documents are required for the Pharmacy pre-Registration Scheme.

Surveys of trainees and tutors involved in the training programme, and site visits to training sites are seen as essential elements of a quality management system and many pharmacy pre-registration training providers have implemented these. The challenge will be in implementing a national system given the differences in organisational structure of the different sectors of pharmacy.

The area that appears to be most problematic in pharmacy pre-registration training is the selection and performance management of tutors/educational supervisors. This was also a key finding in our study of the medical Foundation Programme (Mills, Blenkinsopp & Black, 2013) and yet many of the respondents in both studies acknowledged that this one to one interaction between the trainer and the trainee is perhaps the most fundamental aspect of the training programme. One of the criticisms about the selection of

tutors in pharmacy pre-registration training was the lack of guidance on the standards expected of a tutor. The current criteria were felt to be vague and inappropriate. Some respondents reported applying their own local standards to the selection of tutors. Many respondents had tried to implement their own quality management measures through site visits, CPD support and the trainee questionnaire, but reported that a lack of clearly defined standards for tutors meant there was little leverage for addressing tutor performance issues. The GPhC will be introducing tutor standards as part of their remit as regulator of pharmacy education and training.

Many pharmacy stakeholders in both hospital and community pharmacy reported implementing tutor training to try to address problems in the variation in performance between tutors, including differing interpretations of the performance standards and the quality of evidence required, but the main barrier to making this training mandatory is the same as in the Foundation Programme: the role of the pre-registration tutor does not attract additional remuneration and is often seen as an 'add on,' on top of all the other roles that the pharmacist must undertake. Introducing onerous training and accreditation requirements without additional funding will risk a shortage of tutors. Nevertheless, the need for defined standards for pre-registration tutors and for more structured systems of performance management were the issues most frequently raised by the pharmacy stakeholders, in addition to the need for the tutor role to be encouraged and promoted as being aspirational and valued.

The challenge for the pharmacy profession will be implementing a structured system of performance management of tutors, particularly in community pharmacy where many tutors work in professional isolation. The systems for the performance management of tutors being developed by NES rely on the regional leads to visit tutors annually to review their portfolio and conduct an appraisal. The results of this appraisal will be fed back to NES to prioritise training for those tutors with most need. The advantage that NES has is that the numbers of tutors requiring accreditation is relatively small; there are only 160 pre-registration training places in the PRPS in Scotland compared to around 1,200 in England.

Strengths and Limitations of the Study

A strength of the study is the extremely high level of engagement and support from those involved in running pharmacy pre-registration programmes resulting in a 100% response to the questionnaire. The stakeholders were willing to share the details of their programmes and some volunteered information above and beyond that requested. This project has, for the first time brought together these examples to build a national picture of how the pre-registration training programme is quality managed.

The project aimed to engage pharmacy pre-registration training stakeholders and strived to contact as many of the key pharmacy organisations as possible. Completion of the questionnaire was evenly distributed across secondary care and community pharmacy. The community pharmacy stakeholders represented national multiple pharmacy organisations, regional groups and a small number of independents.

Conclusions

This paper has described some the tools of quality management that have been adopted and developed by providers of pharmacy pre-registration training. These include additional standards for training programmes, surveys and site visits. It has identified pockets of good practice, but there is a clear need for a national quality management system in pharmacy pre-registration training.

Acknowledgements

We are grateful to the West Midlands Deanery, the Postgraduate Medical Education and Training Board (now merged with the General Medical Council) and all the pharmacists who completed the questionnaire and attended the stakeholder event, for their support of this research.

This project was funded by the Royal Pharmaceutical Society of Great Britain (RPSGB).

References

- Fleming, G. (2012) Role of a deanery in managing the quality of pre-registration training. *Pharmaceutical Journal*, **289**, 499-500.
- Mills E., Blenkinsopp, A. & Black, P. (2013) Quality management in medical foundation training: Lessons for Pharmacy. *Pharmacy Education*, **13**(1), 75-81.
- NHS Circular PCA, (2006) (on-line). Available at: [http://www.sehd.scot.nhs.uk/pca/PCA2006\(P\)22.pdf](http://www.sehd.scot.nhs.uk/pca/PCA2006(P)22.pdf). Accessed 14th July, 2008.
- NHS Education for Scotland, (2008) NHS Pre-registration Pharmacist Scheme Manual 2008-9. Glasgow: NHS Education for Scotland, Pharmacy (on-line). Available at: <http://www.nes.scot.nhs.uk/pharmacy/prereg/documents/PRPSmanualwebversion.pdf>. Accessed 14th July, 2008.
- Phillips, B., Fleming, G. & Playdon, Z. (2009) A strategy for a preregistration quality management training programme. *Pharmaceutical Journal*, **283**, 307 – 309.
- Royal Pharmaceutical Society of Great Britain, (2004) Making Pharmacy Education Fit for the Future, Report of the Pharmacy Education R&D Reference Group.
- Scottish Executive Health Department, (2002) The Right Medicine: A Strategy for Pharmaceutical Care in Scotland. Edinburgh, Aston.
- Smith, A. & Darracott, R. (2011) Modernising Pharmacy Careers Programme. Review of pharmacist undergraduate education and pre-registration training and proposals for reform. Report to Medical Education England Board. London: Medical Education England.
- The Foundation Committee, (2007) The Foundation Programme. Curriculum (on-line). Available at: <http://www.foundationprogramme.nhs.uk/pages/home/key-documents>. Accessed 19th June, 2008.
- The UK Foundation Programme Office, (2007) Operational framework for foundation training (on-line). Available at: <http://www.foundationprogramme.nhs.uk/pages/home/key-documents>. Accessed 19th June, 2008.