

CERTIFICATION IN ONCOLOGY PHARMACY — COULD THE UNITED STATES PROCESS BE USED IN THE UNITED KINGDOM?

By Denise Blake, MSc, MRPharmS, Alastair McMurray, MSc, MRPharmS,
Geoff Saunders, BPharm, MRPharmS, Mary Maclean, BSc, MRPharmS, Helen Rogers, BSc, MRPharmS,
Neil Buckley, MSc, MRPharmS, Elaine Corbett, MSc, MRPharmS, and Sue Stent, BPharm, MRPharmS

In the United Kingdom there is no nationally recognised training scheme or mandatory qualification required for pharmacists working in oncology or haematology. In this article, the authors, who are all oncology pharmacists, describe how they volunteered to sit the oncology certification examination, set by the Board of Pharmaceutical Specialties (BPS) in the United States, to see how applicable the examination might be to UK practice

In the United States, hospital pharmacists wishing to practise in a particular clinical area usually need to complete a residency programme. The term "resident pharmacist" has completely different meanings in the US and in Britain. In the US pharmacy residents undergo a period of formal training in their chosen specialty at one of a number of hospitals accredited to run residency programmes. The residency typically lasts around one year and is usually completed after obtaining a PharmD.

Specialisation in various aspects of hospital pharmacy has occurred in the UK over the past 10 years or so, in a fairly unstructured manner. There are no training schemes comparable to the residency programmes. Many of the current specialist pharmacists have "grown" into the posts they currently hold, learning on the job and developing their expertise and there are an increasing number of pharmacy special interest groups.

ONCOLOGY SPECIALISATION

Oncology pharmacy is increasingly being recognised outside the pharmacy profession as a specialty. A number of recent national documents make references to oncology pharmacists being essential for the preparation of chemotherapy treatments and for the provision of advice on cancer medicines.^{1,2} What is the definition of an oncology pharmacist and who can legitimately describe themselves as one?

At present there is no nationally recognised training scheme or mandatory qualification required for pharmacists working in oncology or haematology. How do we assess that candidates applying for an increasing number of oncology pharmacy posts have had appropriate training? Is previous experience in a particular area sufficient, or is some form of formal training or

demonstration of competency required? Lack of specialisation and recognition of pharmacists in oncology is not confined to the UK; the issue was discussed at an international meeting of oncology pharmacists in 1996.³

Specialist certification or accreditation is a major effort, but one which must be tackled in the near future. How do we start to set up an accreditation process? Who is qualified to accredit those pharmacists who have been practising in the specialty for a number of years and wish to set up a formal accreditation scheme? Some specialist pharmacy groups have already made some inroads into tackling this difficult area. The Psychiatric Pharmacists Group has recently set up a College of Mental Health Pharmacists⁴ and an accreditation scheme is being developed.

We decided to set the ball rolling by sitting the oncology certification examination set by the Board of Pharmaceutical Specialties (BPS) in the US. Although the examination is aimed at US pharmacists there are a handful from outside the US or Canada who have passed the examination in previous years, namely three Australian pharmacists and one Spanish pharmacist. The Australian candidates have reported on their experience and found it to be a worthwhile exercise (personal communication).⁵

As a result of advertising the existence of

the examination in the British Oncology Pharmacy Association newsletter we put ourselves forward as guinea pigs, to see how applicable the examination might be to UK practice. We have a varying degree of previous oncology experience and postgraduate qualifications. Most of us work in cancer centres, one in Kent, two in London and three in the North West. One works in the pharmaceutical industry and another at a private hospital (Table 1).

BOARD OF PHARMACEUTICAL SPECIALTIES

The BPS was founded by the American Pharmaceutical Society in 1976 with the mission to improve public health through recognition and promotion of specialised training, knowledge and skills in pharmacy. There are five specialties currently recognised by the BPS: nuclear pharmacy, nutrition support pharmacy, pharmacotherapy, psychiatric pharmacy and oncology pharmacy.

Board certification is a voluntary process for those who are already registered pharmacists. It indicates a pharmacist has demonstrated an advanced level of education, experience, knowledge and skills in a particular practice area. It is considered a form of quality assurance that the practitioner possesses a defined set of knowledge and skills.

TABLE 1: DETAILS OF CANDIDATES VOLUNTEERING TO TAKE THE EXAMINATION

Candidate	No of years' oncology experience	Postgraduate qualification	Main area of current oncology practice
1	3	Diploma in clinical pharmacy	Adult solid tumours
2	4	Diploma in clinical pharmacy	Adult solid tumours
3	4.5	Diploma in clinical pharmacy, currently studying for M Med Sci in clinical oncology	Adult solid tumours
4	5	MSc clinical pharmacy	Adult solid tumours
5	12	MSc clinical oncology	Adult solid tumours
6	14	Diploma in pharmacy practice	Haematological oncology
7	15	MSc clinical pharmacy	Adult solid tumours
8	17	Diploma in clinical pharmacy, Member of the College of Pharmacy Practice	Adult solid tumours

Correspondence to Denise Blake, Cancer Services Directorate Pharmacist, UCL Hospital NHS Trust, Middlesex Hospital, Mortimer St, London W1N 8AA (e-mail denise.blake@uclb.org)

The most significant value of becoming board certified is said to be improved feelings of self-worth and competence. Other important factors include a competitive edge in obtaining jobs, enhanced respect from colleagues in other health care professions, job retention and enhanced job security. Although the US health care system as a whole does not yet fully appreciate the value of pharmacy specialty board certification, some institutions do recognise this and reward those who obtain certification with a salary increase.

The BPS certification processes are directed primarily toward pharmacists registered and practising in the US. It is however possible for pharmacists educated outside the US and who are not registered to practise there, to apply to the board for certification.

There are four basic eligibility requirements for board certification:

- 1 Entry-level pharmacy degree
- 1 Current active pharmacy registration or licence
- 1 Defined additional training and experience in the specialty
- 1 Passing the specialty certification examination

Oncology was recognised by the BPS as a separate specialty in 1996. The first oncology examination took place in October 1998 and resulted in 184 pharmacists becoming certified as oncology specialists.

Candidates for certification in oncology pharmacy are required to have completed three years of practice with substantial time in oncology pharmacy or completed an oncology specialty residency (not currently available in the UK) with at least one additional year of practice with substantial time in oncology pharmacy.

THE EXAMINATION PROCESS

The examination takes place annually, on the first Saturday of October at various sites within the US. Alternative sites (including international ones) can be arranged by prior agreement with BPS. The examination consists of two separate papers each with 100 multiple-choice questions to be answered over two and a half hours, both taken on the same day.

The questions in each examination are designed to sample the knowledge and skills required to perform the tasks in each of the major areas of responsibility of the specialty. Merely knowing "facts" about drug therapy and statistics is not enough to pass the examination. The examination also tests a candidate's ability to apply the facts to hypothetical scenarios using clinical judgement and relying on past patient care experiences.

Each of the major areas/domains of oncology pharmacy practice noted below are tested.

Domain 1 Collaborate with other health professionals in pursuing optimal drug therapy for patients with cancer. This requires

that the oncology pharmacist collects and interprets pertinent clinical data, and assumes personal responsibility for successful drug therapy outcomes (60 per cent of the examination).

Domain 2 Interpret, generate and/or disseminate knowledge in oncology as it applies to oncology pharmacy practice (20 per cent of the examination).

Domain 3 In collaboration with other professionals, patients and the public, recommend, design, implement, monitor, and modify systems and policies to optimise the use of drugs in patients with cancer (15 per cent of the examination).

Domain 4 Collaborate with other professionals and the public in addressing public health issues (eg, risk factors, prevention, screening, cancer survival) as they relate to oncology pharmacy practice (5 per cent of the examination).

PREPARING FOR THE EXAMINATION

BPS does not provide educational material in order to prepare for the examination but provides candidates with the content outline specific to each examination. They also suggest that preparation for the examination might include:

- 1 The study of journal articles, textbooks or other publications related to the content outline
- 1 Continuing education programmes and courses in specialised pharmacy practice
- 1 Study groups and examination preparation courses
- 1 Reviewing sample test questions printed in the candidates' guide

Both the American Society of Hospital Pharmacy (ASHP) and the American College of Clinical Pharmacy (ACCP) organise courses aimed at preparing candidates for the pharmacotherapy, nutrition support, oncology and psychiatric examinations on an annual basis.

THE UK EXPERIENCE

The Christie Hospital, Manchester, was suggested as an alternative test site by the candidates and this was accepted by the BPS. Because there were fewer than 10 candidates sitting the examination, a single proctor's (invigilator's) fee of \$400 was payable to the BPS. The fee for the examination itself was \$600 per candidate. BPS organised an invigilator for the examination and provided all the necessary information for candidates, examination papers etc.

All the candidates had to provide proof of registration to BPS before being accepted to sit the examination. In addition BPS required copies of the candidates' degree certificates. Those who had graduated from Manchester University did not need to submit their certificates because this was the only British school of pharmacy recognised automatically by BPS.

REVISING FOR THE EXAMINATION

The group used a number of different revision methods. One of the candidates attended the ASHP oncology pharmacy practice specialty certification examination review course held in Washington earlier in the year. The course consisted of morning lectures and afternoon breakout sessions and comprehensively covered all aspects of the examination. The course was intensive and a degree of information overload was felt.

The rest of the candidates used a variety of different revision methods. These included:

- 1 ASHP specialty review course workbook (A comprehensive set of notes produced by the various tutors who taught on the course. The workbook included a set of self-assessment questions for each chapter, which were of a style similar to those included in the examination. We would consider this book to be an essential component of preparation for the examination.)
- 1 Audiotapes of the review course complement the workbook (These were used by two of the candidates who did not attend the review course. Use of the tapes may enhance understanding of the notes in the workbook, particularly in pointing out some items that are not tested in the examination.)
- 1 Web-based continuing education courses (Many of these, although not aimed specifically at pharmacists, were extremely useful.)
- 1 American Society of Clinical Oncology and National Comprehensive Cancer Network guidelines

The ASHP course has since become available on-line. It consists of 19 modules, which may be taken individually or as a complete course. Each module includes an audio/slide presentation and handouts posted to the student registered on the course. This will enable individuals to work at their own pace and avoid having to travel to the US in order to attend the course. The course is available at www.ashp.org/public/meetings/index.html and costs \$375.

RELEVANCE OF THE EXAMINATION

The majority of questions in the examination were applicable to UK practice and non-US pharmacists need not feel disadvantaged. Both papers included a fair number of questions on statistics, pharmacology, therapeutics as well as pharmaceutical issues such as handling of cytotoxic products, strategies for cancer prevention, patient counselling and clinical trials. It was not an easy examination but was felt to be a fair test of an individual's knowledge and skills.

RESULTS

Overall 47 per cent (58 out of 124) of candidates achieved a pass. The pass mark was

139 and the scores ranged from 59 to 174 (29.5–87 per cent) for all candidates.

In comparison with US pharmacists, the UK candidates performed well with a range of 125 to 168 (62.5–84 per cent). Three of us were successful in passing the examination. For those who were successful the process does not end: recertification is required in seven years time, which will mean resitting a 100-item examination.

Regardless of the results of the examination we think that the whole process has been a positive experience. We have had the opportunity to sample what our American colleagues are experiencing as part of their continuing professional development. It has also made some of us return to a more formal learning process than we might have experienced at this stage in our careers. The revision process was a useful consolidation of knowledge acquired over several years of practice. It has probably also helped us provide better patient care.

THE FUTURE

The Royal Pharmaceutical Society has recently consulted members on a new regulatory framework to ensure professional competence and lifelong learning.⁶ A debate on competencies in specialist areas has been initiated by Jackson and Veitch.⁷ They propose that the profession has little choice but to adopt a more formal approach to professional standards through the development of core and specialist competency framework, linked to a robust system of continuing professional development, lifelong learning, reaccreditation and rigorous self-regulation. We support this principle.

The place of this examination within a defined training structure and an accreditation system for UK oncology pharmacists needs to be assessed and debated. The

relatively high cost involved in preparing for and taking the examination might deter candidates. The revision process is self-directed unless the US revision course is attended; this may deter less experienced pharmacists. There has also been mixed feelings among some of the members of BOPA about the relevance of the examination to UK practice. A show of hands at a recent BOPA meeting indicated that the majority of pharmacists present would consider taking the examination in the future based on comments from the eight "guinea pigs".

There are various as yet unanswered questions:

- 1 Is there a need for a similar system of certification in the UK?
- 1 Is this the first step in developing an accreditation process for oncology pharmacists in the UK?
- 1 Can the cost and effort of developing such a process be justified in view of the relatively small numbers of potential candidates compared with the US?
- 1 Will UK practitioners be willing to acknowledge an American administered qualification?
- 1 How will the specialist pharmacists of the future be trained?
- 1 Does the UK need to have a "residency" type training system?
- 1 Which organisation should undertake this task — BOPA or a larger umbrella organisation?

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Further information

Further information on BPS and the examination process is available from:
Board of Pharmaceutical Specialties
2215 Constitution Avenue, NW
Washington, DC 20037-2985, US
Tel +1 202 429 7591
Fax +1 202 783 2351
E-mail: bps@mail.aphanet.org
www.bpsweb.org
or
American College of Clinical Pharmacy
www.accp.com/board.html

REFERENCES

1. NHS Executive. Manual of Cancer Services Standards. Leeds: NHSE; 2001.
2. The NHS Cancer Plan. London: Department of Health; September 2000.
3. Broadfield L, Koeller J, Kreckel H, Bingham J, Carstens G. Specialization in oncology pharmacy — An international perspective. *J Oncol Pharm Practice* 1996;2:11–13.
4. Taylor D, Donoghue J. The College of Mental Health Pharmacists. *Pharm J* 2000;265:574.
5. Siderov J. BCOP: A new regimen for the oncology pharmacist. *Aust J Hosp Pharm* 1999;29:338–41.
6. Society starts consultation on new framework for professional regulation. *Pharm J* 2000;264:400.
7. Jackson C, Veitch B. Delivering professional competence — options for pharmacy. *Pharm J* 2000; 264:928–9.