Developing and validating a competency framework for advanced pharmacy practice

By Naomi Meadows, David Webb, Duncan McRobbie, Sotiris Antoniou, Ian Bates and Graham Davies

Abstract

Aim

To develop and validate an advanced practice competency framework.

Design

Literature review and expert panel discussions.

Subjects and setting

Consensus panel membership drawn from across the NHS. Framework mapped against the practice of leading-edge practitioners drawn from primary care and national clinical pharmacy groups.

Results

From a literature review 34 competencies were identified and grouped into 6 competency domains. Consensus development panels validated the descriptor terms used to define competency at "foundation", "excellence", or "mastery" level practice. 28 (of the 35 surveyed) practitioners mapped their practice using the framework. The majority indicated that their practice was at "mastery" for the "expert practice" and "building relationships" clusters, although a broader level of activity was reported for the other four clusters.

Conclusions

This study has developed an evidence-based advanced practice competency framework, grounded in the multi-disciplinary literature and validated by expert opinion. This provides a map of the key generic skills, knowledge and attributes required by individuals practising at this higher level. The competencies and descriptors developed by this research could be used as a template for the development of consultant pharmacists.

The report in 2001 by Ian Kennedy, relating to paediatric cardiac surgery in the Bristol area, highlighted important issues about quality of care.[1] A fundamental principle identified within the report makes explicit what patients would consider to be implicit in the care they receive; that is: "A patient is entitled to be cared for and by health care professionals with relevant and up-to-date skills and expertise."

The report emphasised the need for regulation aimed at maintaining the competence of health care professionals, the importance of periodic performance appraisal (coupled to continuing professional development) and the introduction of revalidation. This is a significant endorsement of the principles of clinical governance and its components of accountability, clinical risk management, remedy of poor performance and CPD.[2] In addition, the expectations of an increasingly well-informed and sceptical public makes clear the need for a strategy that will develop practitioners who are "fit for purpose".

Given the increasingly complex and diverse nature of pharmacists' roles,[3] the requirements of clinical governance and the impact of "Agenda for change",[4] it is important to recognise formally that there are different levels of practice. These must capture both the specialisation that occurs in clinical pharmacy (for example, cancer, mental health, critical care and others) and expertise in the other disciplines of the profession (for example, medicines information, technical services and primary care). Ideally, the different levels of practice should not be sector dependent but dictated by patient need so that practitioners working in primary care, secondary care and, potentially, community pharmacy could be included. This approach needs to be agreed and adopted nationally to be credible and to facilitate the development of the workforce.

In a recent paper, our group proposed four levels of practice, each with a recognised title: a registered pharmacist (MRPharmS); a general pharmacist practitioner (GPP); an advanced pharmacist practitioner (APP); and a consultant pharmacist (CP).[5] These tiers are consistent with the progression described for health care scientists and can be mapped meaningfully against the profiles published for pharmacists under "Agenda for change"[6] (see Figure 1). For this to occur, two key criteria will need to be satisfied: delivery of a nationally agreed strategy for practitioner development and use of a recognised approach to assess the competency of the individual.

A strategy to develop practitioners from registered pharmacist to GPP has been proposed elsewhere.[7] This may fulfil the requirements for specialisation as proposed by EU legislation. Completion of such a programme would allow access to an advanced practice training programme, either in clinical practice or in another pharmacy discipline. This advanced training might typically occupy between three to five years, to achieve APP status, and should provide a breadth of experience in the chosen area. The progress of a practitioner, in his or her specialty, should be mapped using an advanced competency framework, which should distinguish between general level (on entry into the discipline), advanced and consultant practice.

The majority of competency frameworks produced for pharmacists to date apply to particular areas of practice, for example primary care[8] and medicines information.[9] In addition, all require further interpretation before they can be used to evaluate the performance of an individual and, although these frameworks are useful when setting standards of practice for pharmacists working within these areas, they were not developed with a view to standardisation of requirements across pharmaceutical disciplines. What the profession has lacked is an over-arching, generic framework that enables differentiation between levels of practice, thereby describing the attributes of advanced and, potentially, consultant practitioners, in a consistent manner across all specialties.

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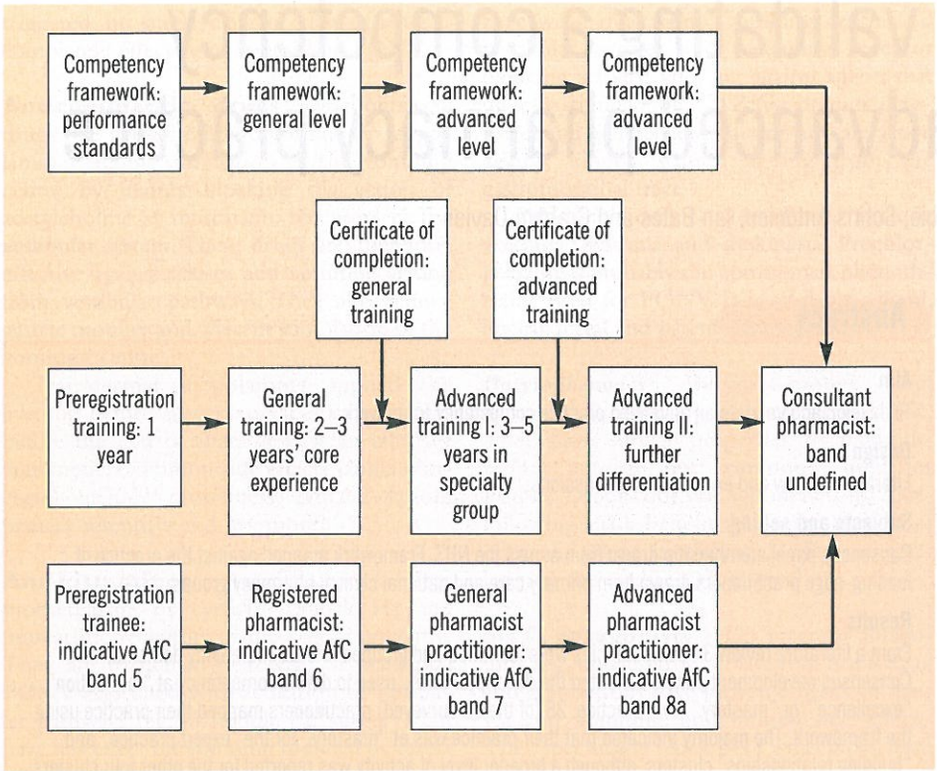

Figure 1: Proposed practitioner development strategy

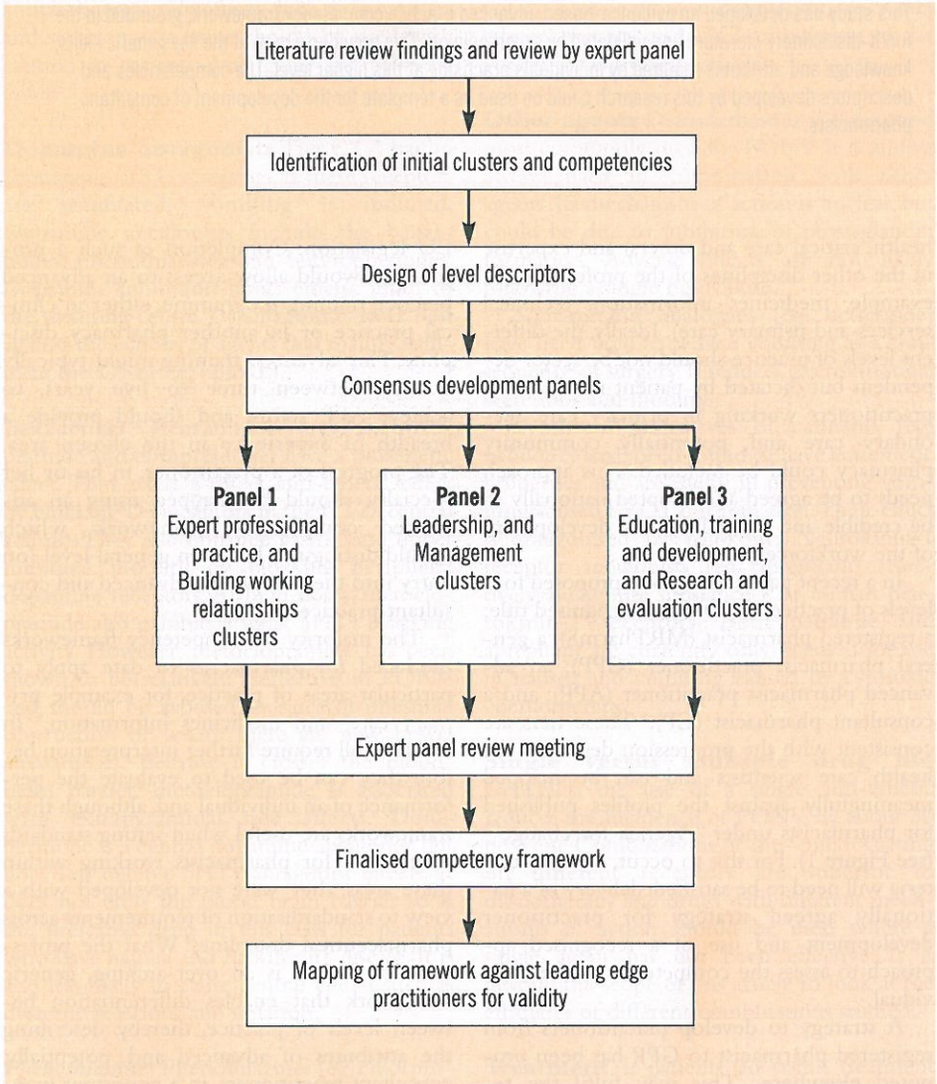

Figure 2: Flow diagram of method

The purpose of this research was to develop and validate such a generic advanced practice competency framework. The objectives were to identify the key competencies of advanced practice, to structure the framework to allow different levels of attainment to be recognised and then to provide initial validation of the competency framework, using a sample of leading-edge practitioners.

Methods

This project followed the method described by Whiddett and Hollyforde for the development of a competency framework.[10] A flow diagram of the process is shown in Figure 2. The protocol was scrutinised and approved by a recognised research and ethics mechanism.

Literature review A literature review of NHS policy, professional body strategy and research documents, relating to the advanced level practice of pharmacists, other health care professionals and NHS managers, was undertaken. In addition, documents describing the limitations of the use of competencies were identified. This review was undertaken in order to determine the competency clusters and competencies necessary for an advanced health care practitioner to demonstrate effective performance. The databases Medline and the Cumulative Index to Nursing & Allied Health (CINAHL) were searched using the search terms "competence", "competency", "framework", "consultant", "advanced practice" and "healthcare professional". Internet websites for the Department of Health, UK and international organisations for pharmacists were also searched for relevant strategic and policy documents.

A panel of pharmacists with expertise in practice, research, education and training, and management formed an expert panel. The expert panel used the literature findings to establish the competency clusters, the individual competencies associated with each cluster, and a progression scale. This formed the basic structure of the competency framework.

Consensus development panels To establish content validity the competency framework was reviewed by three consensus development panels. These comprised pharmacists with expertise in the areas relating to the competency clusters under review and selected to represent the breadth of the profession. Each consensus development panel meeting was facilitated by a researcher using a pre-agreed schedule. The panel meetings aimed to achieve consensus on the competencies in each cluster and to agree the terms used to differentiate between levels of performance. Changes to the descriptors were made by consensus and group members were asked to identify any words or phrases used in the framework that would need to be defined in a glossary. The revised framework was then circulated to consensus panel members inviting them to

Table 1. Description of expert and consultant practice

Profession	Term	Explanation of term
General professional	Expert	An expert usually knows what to do based on mature and practised understanding. An expert no longer relies on rules or guidelines but has an intuitive grasp of situations based on deep tacit understanding
Nurses, midwives and health visitors	Consultant	Consultant nurses, midwives and health visitors are expected to be competent to initiate and lead significant practice, education and service development
Professions allied to medicine	Consultant	Consultants will be experts in their clinical field. They will bring clinical leadership and strategic direction to their particular area of expertise, by expanding and developing improved outcomes for patients
Health care scientist	Consultant	Experts who wish to concentrate on the practice of their profession rather than administration or management

Table 2: Competency clusters describing advanced health care practice

Competency cluster	Related competencies
Building working relationships	Communication, teamwork and consultation
Expert professional practice	Expert skills and knowledge, patient care responsibilities, reasoning and judgement, professional autonomy
Leadership	Strategic context, clinical governance, vision, innovation, service development, motivational
Education, training and development	Role model, mentorship, delivering education and training, continuing professional development, links practice and education, educational policy
Research and evaluation	Critical evaluation, identification of gaps in the evidence, development and evaluation of research protocols, generation of evidence, research evidence into practice, supervision of others, research partnerships
Management	Implementation of national priorities, resource utilisation, setting standards of practice, managing risk, managing performance, project management, managing change, strategic planning, working across boundaries

Table 3: Percentage of competencies rated at foundation, excellence or mastery

Cluster	Foundation	Excellence	Mastery	Not rated
Building working relationships	12.5	11	69	7.5
Expert professional practice	6	20.5	73	0.5
Leadership	9	34	52	5
Education, training and development	19	46	28	7
Research and evaluation	25.5	34	29.5	11
Management	15	30.5	50.5	4

comment on any descriptors that they thought required further refinement or explanation.

Expert panel review The expert panel met to review the findings from each consensus panel and to determine the glossary definitions. Each revised competency cluster was reviewed in order to ensure consistency in terminology, to agree definitions and to review the framework as a whole to ensure that it met the quality standards described by Whiddett and Hollyforde.[8]

Mapping exercise The final framework was sent to the chairmen of six national clinical pharmacy groups (see Panel 1) as well as a senior primary care pharmacist.

Each individual contacted was asked to identify and then nominate five leading-edge practitioners within their discipline to complete the framework. These practitioners were sent a copy of the framework and asked to map their current level of practice using the descriptors provided. To encourage realistic self-assessment, practitioners were asked to list the sources of evidence that would support their judgement.

Results

Literature search The literature search identified 24 NHS policy documents, eight strategy documents published by health care professional bodies, 11 research articles and seven other relevant articles by non-health care organisations. The literature sources were used to identify the terminology used to describe advanced practice. Although the literature review did not identify terminology used to describe the roles and functions of advanced level pharmacists (practising either in the UK or overseas), it did reveal a wide variety of terms used to describe advanced level practice in other professions (Table 1).

A further analysis of the literature identified 34 competencies that could be grouped into six clusters, each containing between two and nine competencies. The six competency clusters and competencies identified from the literature are shown in Table 2. The expert panel used these clusters and competencies to form the basic structure of the competency framework. Descriptors were drafted for each competency to represent progression from "foundation" to "excellence" to "mastery".

Consensus development panel findings Changes to the descriptor terms were agreed to ensure that they captured a progression in competency level; for example, amendments to the expert clinical skills and knowledge descriptors were made to demonstrate the change from working under supervision at foundation level, to working independently at excellence level and advancing the knowledge base at mastery level. The consensus panels also achieved a consistency of language throughout the relevant cluster(s) and assessed whether descriptors were appropriate for a given competency level.

Outcomes of the expert panel review The expert panel modified the descriptors to enable the framework to be applied across a range of specialties, including non-clinical pharmacy disciplines. The structure of the finalised competency framework provides an over-arching statement giving the purpose of the cluster, lists some of the competencies associated with this cluster and describes a progression in competency from "foundation" to "excellence" to "mastery". The entire framework consisted of 34 competency statements spread over the six clusters.

Mapping exercise Twenty eight of the 35 leading-edge practitioners returned the completed framework, yielding a total of 952 possible competency ratings (34 competencies from each of 28 respondents). The percentage

Panel 1: National clinical groups surveyed

- British Oncology Pharmacy Association
- Renal Pharmacy Group
- Neonatal and Paediatric Pharmacy Group
- UK Psychiatric Pharmacy Group/ College of Mental Health Pharmacists
- HIV Pharmacy Association
- UKCPA Critical Care Group

of competencies rated by respondents at foundation, excellence or mastery is shown in Table 3. Although a majority of competencies in the "expert practice", "building relationships", "leadership" and "management" clusters were rated at mastery this was not the case for "education, training and development" or "research and evaluation". Few of the competencies were not rated by respondents but "research and evaluation" appeared to generate the most null replies and the largest percentage of competencies rated at foundation.

Discussion

This study has enabled an evidence-based competency framework to be developed, which is grounded in the literature and validated by expert opinion. A robust process was used to prepare the framework, ensuring initial content and face validity. In addition, no member of the consensus development panels indicated that the approach adopted was inappropriate. As a result the work has progressed in consultation with the United Kingdom Clinical Pharmacy Association and the Guild of Healthcare Pharmacists.

The mapping exercise indicated that the framework could be used, by practitioners, to self-evaluate their current level of practice. As this involved a purposive sample of leading-edge practitioners the majority of competencies were rated at mastery although this was not the case for "education, training and development" or "research and evaluation". This is not surprising since these aspects of advanced practice tend not to form a major component of most senior posts. However, the literature supports the inclusion of these clusters within the framework since these are attributes for both consultant therapists and nurses. A more extensive mapping exercise is required in order to inform agreement on the competency profile of a consultant pharmacist but this work raises important questions; for example, in how many clusters would a practitioner be required to demonstrate "mastery" before being eligible for a consultant post? It is almost certain that mastery in both "expert practice" and "building relationships" clusters will be required, but what of the remaining clusters? Would it be acceptable for these to be at the "excellence" level? We have recently embarked on a programme to extend the mapping exercise across a range of disciplines, which should provide answers to the above questions. However, it is important to understand that even if individuals attain a profile consistent with consultant practice, this does not guarantee such a post, since workforce planning and patient need will dictate the availability of these positions.

Although the mapping exercise was performed in the clinical pharmacy and primary care arenas the framework was developed by panels representing the breadth of the profession. This approach was adopted so that the framework might be applied to practitioners working in different disciplines within the profession and might offer the prospect of a universal template for recognising advanced and consultant practice. Further testing of the framework is essential to achieve this goal. The advanced framework does not devalue or replace those which already exist. Its generic nature should allow it to be used in a manner complementary to discipline or specialty-specific competencies; that is, the existing frameworks should inform judgements on practice level within the "expert practice" cluster.

The ability of the advanced practice competency framework to characterise practice at general, advanced and consultant level relates meaningfully to the job profiles and pay bands published under Agenda for Change. It will provide a tool for making judgements on an individual's current level of practice and to signpost future developmental needs under AfC. However, the national acceptance of a set of competencies for advanced pharmacy practitioners will not, on its own, be sufficient to ensure the development of pharmacists into these roles. Hunt and Halle identified that a lack of an appropriate career pathway within the NHS failed to provide nurses with personal development plans that encouraged the acquisition of a well-balanced set of skills.[11] They addressed this issue by developing a competency package that described the progression in competency from "novice" to "proficient" to "expert", which provided a template for the development of nurses into consultant roles. The competencies and descriptors developed during this research can be used in the same way to provide a template for the development of consultant pharmacists.

The current development programme will map individuals from a range of disciplines and specialties against the advanced level competency framework. This further validation will ensure that the framework excludes bias towards one particular group of pharmacists and that it is relevant to all potential users. There remains a need to describe the underpinning knowledge and experience essential to practice within each specialty. This work is best undertaken by the recognised specialist interest groups in the UK using the advanced level competency framework as a template. Individuals can follow the progress of both general and advanced level competency frameworks on www.londonpharmacy.nhs.uk/clinical.

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