

A Professional Development Framework  
for Pharmacy Staff involved in

# Education, Training and Workforce Development

**Report on the validation of the framework**

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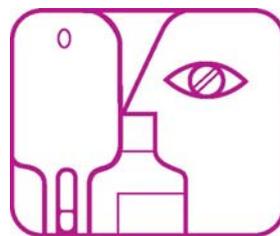
# Organisations involved in the development and validation of the framework

## NHS Pharmacy Education & Development Committee



including Northern Ireland

The NHS Pharmacy Education and Development Committee exists to provide co-ordination in pharmacy education, development, and training within the National Health Service. [www.nhspecd.nhs.uk](http://www.nhspecd.nhs.uk)



**United  
Kingdom  
Clinical  
Pharmacy  
Association**

- The United Kingdom Clinical Pharmacy Association (UKCPA) Education & Training group [www.ukcpa.org](http://www.ukcpa.org) aims to improve patient care
- establish and promote standards in clinical pharmacy education
- support the continuing professional development of practitioners with roles in pharmacy education, training and development



Competency Development & Evaluation Group

This work builds on the Advanced & Consultant Level Framework (ACLF) developed and validated by The Competency Development & Evaluation Group (CoDEG) [www.codeg.org](http://www.codeg.org)

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### Background

The NHS Pharmacy Education and Development Committee (NHS PEDC) and the UKCPA Education and Training (E&T) group jointly identified the need to develop a professional development framework for the pharmacy workforce with roles in Education, Training and Workforce Development.

The aspiration was to develop a *single* framework (ETWD Framework) to:

- provide clarity and consistency across the profession in terms of the range of education, training and workforce development skills needed when developing others
- define competences for the diverse range of pharmacists and pharmacy support staff with roles in education, training and workforce development
- support 'Higher Level Practice' in ETWD across all sectors of pharmacy practice
- act as a structured professional development tool for individuals

### Developing the framework

The development of 'A Professional Development Framework for Pharmacy Staff Involved in Education, Training and Workforce Development' (ETWD Framework) has been reported elsewhere <sup>1</sup>. A copy of the framework and supporting information <sup>2</sup> can be downloaded from <http://www.nhspecd.nhs.uk/ProfDevelFr.htm>

The ETWD Framework can be used by *any* member of pharmacy staff (across any sector of practice) involved in the education, training and development of others. In addition the framework is suitable for those seeking to:

- develop their roles as trainers/educators as part of their 'professional' activities
- become 'expert' practitioners in pharmacy education, training and workforce development

### Validating the framework

This paper reports on an evaluation programme undertaken by a group consisting of members of the NHS PEDC, the UKCPA E&T group and the Competency Development and Evaluation group (CoDEG) to validate the ETWD Framework.

#### Methods:

A small study using both qualitative and quantitative methods was designed. The quantitative methods used were consistent with those used by CoDEG to validate the Advanced & Consultant Level Framework (ACLF)<sup>3</sup>. The Qualitative methods involved conducting semi-structured interviews to validate the ETWD Framework. The participants were chosen purposively and were diverse in relation to their roles, the sector of practice in which they worked and the stages of their career.

Validation of the framework focused on three aspects:

1. Testing the content validity of the framework
2. Testing the discriminate validity i.e. does the framework distinguish between different levels of practice in relation to education, training and workforce development

3. Testing the utility of the framework to ensure it meets the needs of potential users (Utility testing includes testing the usability and usefulness of the framework)

### Results:

*Content validity:* The results suggest that the content of the framework is valid because those who took part in the study could not identify anything missing from the framework in relation to ETWD.

*Discriminate validity:* The results indicate that the framework distinguishes between levels of practice e.g. Experienced ETWD Practitioners and Leading Edge ETWD Practitioners. The results also indicate that the framework distinguishes between levels of practice in relation to an individual's career.

*Utility of the framework:* The fact that all participants were able to self-assess their current level of practice against the framework demonstrates that it is fit for purpose as a self-assessment tool to identify current level of practice and identify learning needs. Whilst the participants were diverse, they were all able to use the framework which suggests that it is flexible enough to be usable and useful across a variety of roles in ETWD in all sectors of practice. Participant's comments highlighted the fact that the framework can be linked with other sector specific frameworks and professional development models e.g. the NHS Knowledge and Skills Framework (KSF) <sup>4</sup> and the Higher Education Academy UK Professional Standards Framework for teaching and supporting learning in higher education <sup>5</sup>.

### Discussion:

Whilst the framework distinguished between levels of practice, perhaps surprisingly only one in four of the pharmacists who had been identified as Leading Edge ETWD Practitioners reached 'Mastery' level (the highest 'overall' practice level) in relation to the framework. Some of the competencies in the ETWD Framework e.g. workforce planning may not be relevant to all Leading Edge ETWD Practitioners, which would then affect the scoring system and prevent individuals from reaching 'Mastery' level. Expert professional roles in ETWD are diverse and there is no single profile that fits all of these roles. Therefore it is recommended that the framework is used flexibly and competencies and levels of practice relevant to the role are selected.

The limitations of the study included the subjectivity of self-assessment of competence and lack of generalisability to a wider population due to the small sample size. Following the launch of the framework it may be necessary to undertake further evaluation of the framework and include a broader and greater number of participants.

Early implementers have been identified which will enable the research team to see how the framework is used in practice as opposed to how it can be used, especially in relation to competence assessment and performance management of staff.

## A Pharmacy Practitioner Development Strategy

In 2002, a competency-based approach to fitness to practise was proposed<sup>6,7</sup> in pharmacy resulting in a pharmacy practitioner development strategy<sup>8,9</sup>. The strategy integrates training, experience and competency progression and proposes two distinct training phases for qualified pharmacists: general and advanced. Each of these phases is supported by a competency framework that has been constructed using a recognised process and validated in the practice setting for post registration practice:

- The General Level Framework (GLF)<sup>10</sup>
- The Advanced and Consultant Level Framework (ACLF)<sup>3</sup>

The ACLF includes competencies within the following 6 clusters:

- Cluster 1 - Expert Professional Practice
- Cluster 2 - Building Working Relationships
- Cluster 3 - Leadership
- Cluster 4 - Management
- Cluster 5 - Education Training & Development
- Cluster 6 - Research & Evaluation

The ACLF describes 'advanced' and 'consultant' level practice and is included in the Department of Health for the development of NHS Consultant Pharmacists posts in England<sup>11</sup>. The notion of advanced practice refers to a level and implies vertical differentiation – that is distinguishing a set of competencies and their application in practice that exceeds those associated with initial qualification and registration<sup>12</sup>. The competencies within the ACLF contain descriptor terms used to define competency at 'Foundation', 'Excellence', or 'Mastery' level practice.

The ACLF structure has been used to develop other frameworks within pharmacy e.g. The Pharmacists with a Special Interest (PhwSI) framework<sup>13</sup> which has applications in primary care and community pharmacy and the 'Chief Pharmacists Career Strategy'<sup>14</sup>.

## A Professional Development Framework for Pharmacy Staff Involved in Education, Training and Workforce Development (ETWD Framework)

The NHS Pharmacy Education and Development Committee (NHS PEDC) and the UKCPA Education and Training (E&T) Group jointly identified the need to develop "a Professional Development Framework for pharmacy staff Involved in Education, Training and Workforce Development" (ETWD Framework).

The structure of the ETWD Framework was based on the structure of the ACLF. Cluster 5 of the ACLF describes competencies for all pharmacy staff involved in education, training and development. However this cluster did not capture all the competencies required for those working as experts in education & workforce development. Cluster 1 of the ACLF 'Expert Professional Practice' is designed for those working as experts in a specialist area of

pharmacy practice e.g. clinical pharmacy, Medicines Information or Technical Services. It was therefore deemed necessary to develop the ETWD Framework for pharmacy staff wishing to develop expert roles in pharmacy education, training and workforce development.

An alternative ACLF cluster 1 called 'Expert Professional Management' had been developed for "a Chief Pharmacists Career Strategy"<sup>14</sup>. This set the precedent that it was possible to have more than one cluster related to management. The same principles apply for education, training and development and it was therefore possible to have more than one cluster relates to education. A new cluster 1 called "Expert Professional Role in Education and Workforce Development" (EPREWD) was developed for the ETWD Framework for use by those seeking to achieve an expert role in education, training and workforce development. The new cluster 1 included competencies required for those working as experts in education & workforce development that were missing from the ACLF cluster 5.

National Occupational Standards (NOS) for 'Learning and Development'<sup>15</sup> were mapped to Cluster 5 of the framework (ACLF cluster 5) in order to describe in more detail knowledge and skills required to meet the competence level descriptors. 'Learning and Development' NOS and 'Workforce Planning' NOS<sup>16</sup> were also mapped to cluster 1 of the framework. A copy of the ETWD Framework complete with NOS mapping and case studies can be downloaded from <http://www.nhspedc.nhs.uk/ProfDevelFr.htm>

## Validating the ETWD Framework

An evaluation programme was undertaken by a group consisting of members of the NHS PEDC, the UKCPA E&T group and CoDEG to validate the ETWD Framework.

The ACLF was previously validated by CoDEG through two stages. The first stage of validation involved 35 UK leading edge NHS practitioners using the ACLF to undertake a self-assessment to map their current level of practice<sup>17</sup>. Further work to test the generalisability of such mapping involved 390 pharmacists self-assessing their competence using the framework and providing evidence to support their practice at 'Foundation', 'Excellence' or 'Mastery' level<sup>18, 19</sup>. The ACLF was able to differentiate between 'Specialists in Training'<sup>a</sup> (Trainee Specialists), 'Experienced Practitioners' and 'Leading Edge Practitioners' (terms derived by previous research in other professions)<sup>17, 18, 19</sup>.

The CoDEG evaluations indicate that the ACLF is a valid tool for individual's to base their development, to map where they sit in terms of current practice and to identify further development needs.

Because the validated ACLF was the basis for the ETWD Framework, it was not necessary to revalidate the framework through a large scale quantitative study. Therefore a small scale qualitative study was used to illustrate how the framework can be used by a range of people in different sectors of practice at different stages of their careers and to compare and contrast data collected from a range of pharmacy staff.

## Aim

This study aimed to validate "a Professional Development Framework for pharmacy staff involved in Education, Training and Workforce Development" (ETWD Framework).

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<sup>a</sup> The term 'Specialist in Training' has been derived from previous research in other professions and describes those undergoing training in order to become a 'specialist'. This term should not be confused with an individual whose specialist area of practice is Education & Training.

## Objectives

1. To test the content validity of clusters 1 & 5 of the framework
2. To test the discriminate validity of clusters 1 & 5 of the framework
3. To test the utility of the framework for a range of pharmacy staff, with a variety of roles in education, training and workforce development in different sectors of practice and at different stages of their careers

## Research questions

1. Are clusters 1 & 5 of the framework comprehensive and is there anything missing? (Content validity)
2. Do clusters 1 & 5 of the framework distinguish between different levels of practice in relation to education, training and workforce development i.e. Trainee ETWD Specialists, Experienced ETWD Practitioners and Leading Edge ETWD Practitioners? (Discriminate validity)
3. Can the framework be used by a range of pharmacy staff, with a variety of roles in education, training and development in all sectors of practice? (Utility of the framework)

## Expectations

The ACLF has been shown to be a valid tool to make judgments about an individual's current level of practice and to signpost future development needs. The ACLF enables differentiation between trainee specialists, those who have progressed to an advanced level of practice and those who may be recognised as practicing at 'consultant' level. The validation of the ACLF demonstrated that 'Specialists on Training' (trainee specialists) tended towards "Foundation" level (the lowest), while Experienced Practitioners clustered around "Excellence" and Leading Edge Practitioners clustered around "Mastery"<sup>17, 18, 19</sup>. Because the ETWD Framework followed the same principles as the ACLF, it was expected that it would also differentiate between these levels of practice in relation to ETWD i.e. Trainee ETWD Specialists, Experienced ETWD Practitioners and Leading Edge ETWD Practitioners.

## Methods

The research was conducted in accordance with British Education Research Association (BERA) ethical guidelines (2004)<sup>20</sup>. Approval from a NHS Research Ethics Committee (REC) was not required because research on NHS staff is exempt from this process<sup>21</sup>.

## Sampling

Purposive sampling was used in order to sample a diverse range of 'advanced' practitioners involved in education, training and workforce development. The diversity of the sample included a range of roles, different stages of career and sectors of practice. Some of those interviewed had expert professional roles in education, training and workforce development; others had different areas of expertise e.g. technical services but were involved in education and training as part of their role. All participants signed a consent form to take part after receiving information about the study (informed consent). A copy of information provided for potential participants can be found in [Appendix 1](#) and a copy of the consent form can be found in [Appendix 2](#). The participants were given a participant number (P1 - 16) to make them anonymous.

**Table 1.0: Demographic data**

Participant number	Gender	Job role	Interviewer
P1	Male	Lead E&T Pharmacist (NHS teaching hospital)	HM
P2	Female	Lead E&T Pharmacy Technician (NHS teaching hospital)	SL
P3	Female	Regional Specialist E&T Pharmacy Technician	JS
P4	Female	NHS Regional Pharmacist Director of E&T	HM
P5	Female	Academia HEI – Senior Lecturer	HM
P6	Female	Further Education College - Pharmacy Technician	SL
P7	Male	Teacher Practitioner – Hospital Pharmacy (Hospital post = Senior Pharmacist E&T)	HM
P8	Female	Teacher Practitioner – Community Pharmacy	JS
P9	Male	Teacher Practitioner – PCT	JS
P10	Male	Community Pharmacy CPD Facilitator	SL
P11	Male	CPPE Tutor	SL
P12	Female	Pre-registration Tutor	JS
P13	Female	Technical Services Specialist	HM
P14	Female	Potential Pharmacist with a Special Interest (Community Pharmacy Manager) <i>P14 Is a Community Pharmacy Manager with a specialist area of clinical pharmacy practice. She aspires to becoming a Pharmacist with a Special Interest.</i>	JS
P15	Female	Industrial Pharmacist	SL
P16	Female	Training Manager - Community Pharmacy	HM

## Data collection

Sixteen participants were interviewed by three interviewers (HM, JS and SL). The interviewers' profiles can be found in [Appendix 3](#).

The interviews were conducted either on the telephone or face-to-face. Semi-structured interviews were used which enabled the participants to describe what is significant to them and allowed the interviewers to probe and explore the topic in depth. The disadvantage of semi-structured interviews is that the data generated is more difficult to analyse. The interviews provided a valid account from the perspective of the participants.

To make the study as reliable as possible an interview schedule was used in an attempt to standardise the questions used by the three interviewers. [See Appendix 4](#) for a copy of the interview schedule. In addition a procedure for conducting, carrying out and transcribing the interviews was agreed between the three interviewers. [See Appendix 5](#) for a copy of this procedure. In order to ensure congruency of the findings the lead researcher reviewed the first interview transcript from each of the three interviewers to check congruency of the processes. However because the interviews were semi-structured and the interviewers came from eclectic backgrounds it is difficult to fully replicate the interview methods used by the three interviewers.

The interviews explored the participants':

- perceptions of their current level of practice in relation to the framework
- evidence to support their perceived level of practice in relation to the framework
- thoughts on how the framework could be used to identify learning and development needs and help them achieve their career aspirations in ETWD
- career pathway to date and how the framework could have facilitated career development (*N.B. Roles in ETWD are diverse and there has been no clear career pathway prior to the framework*)

Self-assessment against the framework (mapping) was an important aspect of the interview.

The participants self-assessed their perceived level of competence (as 'Foundation', 'Excellence' or 'Mastery' level) in relation to the following clusters of the framework:

- Cluster 1 – Expert Professional Role in Education and Workforce Development (if the participant considered it relevant to their role)
- Cluster 5 – Education, Training and Development (all participants)

Participants also provided verbal evidence to support their current level practice at 'Foundation', 'Excellence' or 'Mastery' level. This method was appropriate for this research project, however once the framework is launched users will be expected to collect a portfolio of written evidence to demonstrate competence.

The participants then self-assessed their perceived level of competence in relation to clusters 1 and / or cluster 5 of the framework for their previous roles. Two participants (P11 – CPPE Tutor; P12 pre-registration Tutor) were excluded from this process because tutoring is a role, not a whole job and can be undertaken at various stages in an individual's career.

Notes were taken during the interviews and these notes were transcribed and coded. The interviews were not recorded or transcribed word for word, therefore, all the participants were asked to check their interview transcript and confirm that it was an accurate reflection of what was discussed during the interview.

All of the interview transcriptions were further summarised and written up as case studies by a member of the research team who had not conducted any of the interviews. These case studies illustrated descriptively how the framework can be used by a range of people in

different sectors of practice at different stages of their careers. Copies of the case studies are included as an appendix to the ETWD Framework which can be downloaded from <http://www.nhspedc.nhs.uk/ProfDevelFr.htm>

The data obtained from the participants' self-assessments against cluster 1 and / or cluster 5 of the framework was also analysed using quantitative methods. More details of the data analysis, coding, results, discussion and conclusions will be presented in the following sections of the report:

- Section 4: Content validity
- Section 5: Discriminate validity
- Section 6: Usability of the Framework

Section 7 of the report contains a more general discussion and draws together overall conclusions.

### Content validity

The first objective of the project was to test the content validity of clusters 1 & 5 of the framework. This involved answering the following research question: Are clusters 1 & 5 of the framework comprehensive and is there anything missing? (Content validity)

### Method

The participants were asked to study the following clusters of the framework:

- Cluster 1 – Expert Professional role in Education & Workforce Development (EPREWD)
- Cluster 5 – Education, Training & Development (ET&D)

Participants were asked to identify if there was anything that they did in their current role in relation to education, training and development that was missing from clusters 1 & 5 of the framework. The other four clusters of the framework were not shown to participants as these remain unchanged from the ACLF clusters and it was therefore not necessary to revalidate their content.

### Results

A number of missing ETWD activities were identified, all of which were activities related to the other four clusters of the framework which the participants were not asked to self-assess themselves against. It was likely that the participants did not fully familiarise themselves with the clusters for which they did not make a self-assessment.

Many of the missing activities are not specifically mentioned in the competence level descriptors because the competencies in the framework are broad in order to maintain flexibility. Table 2.0 shows the missing activities identified and where these can be linked to other areas of the framework.

**Table 2.0 - Missing areas identified and links to other clusters of the framework**

Missing activity identified	Link to Framework cluster
Managing budgets and finance for an educational service or organisation	Cluster 4: Management (Competency 2: Resource utilisation)
Working with other professions i.e. integration of pharmacy education with medical education	Cluster 2: Building working relationships (Competency 2: Teamwork and consultation)
Facilitating networks and sharing best practice	Cluster 2: Building working relationships (Competency 2: Teamwork and consultation)
Administration	Cluster 4: Management (Competency 2: Resource utilisation)
Educational research	Cluster 6: Research and Evaluation (whole cluster)
Partnership Working	Cluster 2: Building working relationships (Competency 2: Teamwork and consultation)
Staff Appraisal	Cluster 4: Management (Competency 6: Performance Management)

## Discussion

Participants were not specifically asked if there was anything in the framework that shouldn't have been there. However a number of participants questioned the relevance of the workforce planning competence for their role. Workforce planning is an important but highly specialised activity within education, training and workforce development. Very few pharmacists will reach 'Mastery' level or indeed need to meet 'Mastery' level in relation to workforce planning as part of their role.

"There are two competencies that I have not scored at 'Mastery' for my current role ('Educational Policy' and 'Workforce Planning') but these competencies do not relate to my role so I don't have learning needs in these areas" (Participant 5 - Senior Lecturer)

It would therefore seem reasonable for a Leading Edge ETWD Practitioner to have a 'Foundation' level knowledge of workforce planning if this competency was not an important part of the role whilst demonstrating the other competencies in cluster 1 of the framework at 'Mastery' level. Expert professional roles in ETWD are diverse and there is no single profile that fits all of these roles. Therefore it is recommended that the framework is used flexibly and competencies and levels of practice relevant to the role are selected.

## Conclusions

In conclusion, the results of the analysis of the interviews suggest that the content of the framework is valid for this diverse group of pharmacy practitioners across all sectors of pharmacy practice, practicing a range of roles and at different stages of their career.

## Discriminate validity

The second objective of the project was to test the discriminate validity of clusters 1 & 5 of the framework. This involved answering the following research question: Do clusters 1 & 5 of the framework distinguish between different levels of practice in relation to education, training and workforce development i.e. Trainee ETWD Specialists, Experienced ETWD Practitioners and Leading Edge ETWD Practitioners?

The discriminate validity of the framework was tested in two ways:

1. Comparing and contrasting data from the participants in the sample
2. Analysing data provided by individual participants in relation to their professional development in ETWD throughout their career

Each of these methods of data analysis will be reported separately within this section of the report.

### 5.1: Comparing and contrasting data from the participants in the sample

This stage of the analysis tested the discriminate validity of clusters 1 & 5 of the framework by comparing and contrasting data from the participants in the sample.

#### Method

The following sources of information were collected prior to the interview and used by the lead researcher to assign participants to groups:

- Job description (where available)
- The participant's answers to the following questions:
  - What are your main responsibilities for education training and workforce development in your current job?
  - What has been your career pathway leading up to your current job?

Details of the five groups and the participants assigned to each group are shown in table 3.0.

**Table 3.0 – Group details and participants assigned to each group**

Group number	Group title	Number in group	Demographics of the group
1	Leading Edge ETWD Practitioners (pharmacists)	4	P1 - Lead E&T Pharmacist (NHS teaching hospital) P4 - NHS Regional Pharmacist Director of E&T P5 - Academia HEI – Senior Lecturer P16 - Training Manager - Community Pharmacy

2	Leading Edge ETWD Practitioners (pharmacy technicians)	3	P2 - Lead E&T Pharmacy Technician (NHS teaching hospital) P3 - Regional Specialist E&T Pharmacy Technician P6 - Further Education College - Pharmacy Technician
3	Experienced ETWD Practitioners (Teacher Practitioners)	3	P7 - Teacher Practitioner – Hospital Pharmacy (Hospital post = Senior Pharmacist E&T) P8 - Teacher Practitioner – Community Pharmacy P9 - Teacher Practitioner – PCT
4	Non specialised ETWD roles = Tutors	3	P10 - Community Pharmacy CPD Facilitator P11 – CPPE Tutor P12 – Pre-registration Tutor
5	Experienced and Leading Edge Practitioners in areas other than ETWD	3	P13 - Technical Services Specialist P14 - Potential Pharmacist with a Special Interest P15 – Industrial Pharmacist

The participants self-assessed their perceived level of competence (as ‘Foundation’, ‘Excellence’ or ‘Mastery’ level) in relation to the following clusters of the framework:

- Cluster 1 – Expert Professional Role in Education and Workforce Development (if the participant considered it relevant to their role)
- Cluster 5 – Education, Training and Development (all participants)

Participants also provided verbal evidence to support their current level practice at ‘F’, ‘E’ or ‘M’ level.

## Analysis of data

The data was analysed using methods consistent with that used to validate the ACLF<sup>18, 19</sup>. The following points were assigned:

- 1 point per competency scored at ‘Foundation’ level
- 2 points per competency scored at ‘Excellence’ level
- 3 points per competency scored at ‘Mastery’ level

The points for each cluster were then added up and divided by the number of competencies in the cluster to provide a mean score. These mean scores were used to define an ‘overall’ practice level for each cluster as follows:

<u>‘Overall’ practice level</u>	<u>Mean score</u>	<u>Code</u>
‘Foundation’	1.00	‘F’
‘Foundation’ to ‘Excellence’	1.10 – 1.99	‘F’ – ‘E’
‘Excellence’	2.00	‘E’
‘Excellence’ to ‘Mastery’	2.10 – 2.99	‘E’ – ‘M’
‘Mastery’	3.00	‘M’

For instance, if an individual self-assesses himself or herself as “Excellence” in four competencies within cluster 5 and “Foundation” in the other two competencies in the cluster, his or her mean result would be 1.33. Therefore he or she would fall in the ‘Foundation’ – ‘Excellence’ ‘overall’ practice level. N.B. For an ‘overall’ practice level of ‘Mastery’ all competencies in the cluster must be scored at ‘Mastery’.

## Results

**Cluster 1:** Twelve out of the sixteen participants completed a self-assessment of their current level of practice in relation to cluster 1 of the framework. Four participants decided not to self-assess against cluster 1 (Expert Professional Role in Education & Workforce Development):

- Participant 13 recognised that their expert professional practice was in clinical pharmacy and they would choose instead to map to cluster 1 of the Pharmacists with a Special Interest Framework (PhwSI) as they aspired to this role
- Likewise, Participant 14 (Technical Services Specialist) recognised that their expert professional practice was in technical services and clinical pharmacy and she would choose instead to map to cluster 1 of the ACLF
- Participant 12 felt that cluster 1 was not relevant for their role as a pre-registration tutor
- Participant 8 was fairly new in their role as a Teacher Practitioner and had some evidence for foundation level of cluster 1 but felt it was too early for them to engage with this cluster

Table 4.0 shows the number of competencies scored at each level by each participant, the mean score for cluster 1 and the 'overall' practice level assigned.

**Table 4.0 - Cluster 1: Number of competencies at each level and 'overall' practice level for each participant**

Participant number	Group	Number of competencies at each level for cluster 1			Mean Score	'Overall' practice level
		Foundation	Excellence	Mastery		
P1	1	0	2	5	2.72	'E' - 'M'
P2	2	0	5	2	2.29	'E' - 'M'
P3	2	3	3	1	1.71	'F' - 'E'
P4	1	0	0	7	3.00	'M'
P5	1	0	1	6	2.86	'E' - 'M'
P6	2	1	6	0	1.86	'F' - 'E'
P7	3	1	1	5	2.57	'E' - 'M'
P9	3	3	4	0	1.57	'F' - 'E'
P10	4	4	3	0	1.43	'F' - 'E'
P11*	4	3	3	0	1.29	'F' - 'E'
P15*	5	5	0	0	0.83	< 'F'
P16	1	0	4	3	2.42	'E' - 'M'

\*Two of the participants (P11 – CPPE Tutor; P15 – Potential Pharmacist with a Special Interest) did not map to all the competencies in cluster 1. The unmapped competencies included 'Workforce Planning' (n = 2) and 'Developing Others in Education, Training and Workforce Development' (n = 1).

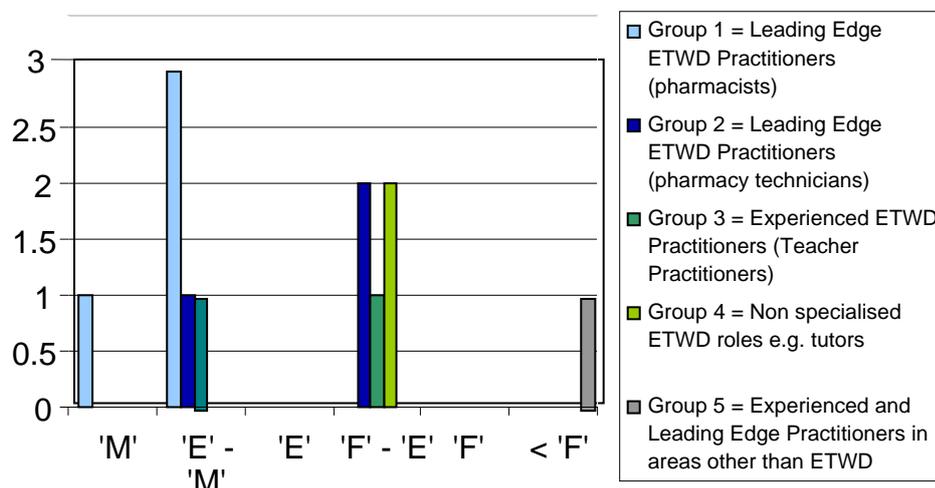
Table 5.0 shows the number of participants per group assigned to each 'overall' practice level for cluster 1 and figure 2.0 shows the same information as a graph.

**Table 5.0: Number of participants per group assigned to each 'overall' practice level for cluster 1**

Group		Number of participants at 'overall' practice level for cluster 1					
		< 'F'	'F'	'F-E'	'E'	'E-M'	'M'
1	Leading Edge ETWD Practitioners (pharmacists)					3	1
2	Leading Edge ETWD Practitioners (pharmacy technicians)			2		1	
3	Experienced ETWD Practitioners			1		1	

	(Teacher Practitioners)					
4	Non-specialised ETWD roles (Tutors)			2		
5	Experienced & Leading Edge Practitioners in areas other than ETWD	1				

Figure 1.0: Number of participants per group who scored at each 'overall' practice level for cluster 1



**Cluster 5:** All sixteen participants completed a self-assessment of their current level of practice in relation to cluster 5 of the framework. Table 6.0 shows the number of competencies scored at each level by each participant, the mean score for cluster 5 and the 'overall' practice level assigned.

Table 6.0: Cluster 5 - Number of competencies at each level and 'overall' practice level for each participant

Participant number	Group	Number of competencies at each level for cluster 5			Mean Score	'Overall' practice level
		Foundation	Excellence	Mastery		
P1	1	0	0	6	3.0	'M'
P2	2	0	4	2	2.33	'E' - 'M'
P3	2	0	0	6	3.0	'M'
P4	1	0	2	4	2.67	'E' - 'M'
P5	1	0	1	5	2.83	'M'
P6	2	1	2	3	2.33	'E' - 'M'
P7	3	0	2	4	2.67	'E' - 'M'
P8	3	0	4	2	2.33	'E' - 'M'
P9	3	0	3	3	2.5	'E' - 'M'
P10	4	3	3	0	1.5	'F' - 'E'
P11	4	4	2	0	1.33	'F' - 'E'
P12*	4	2	3	0	1.33	'F' - 'E'
P13	5	1	5	0	1.83	'F' - 'E'
P14	5	0	3	3	2.5	'E' - 'M'
P15	5	6	0	0	1.0	'F'
P16	1	2	2	2	2.0	'E'

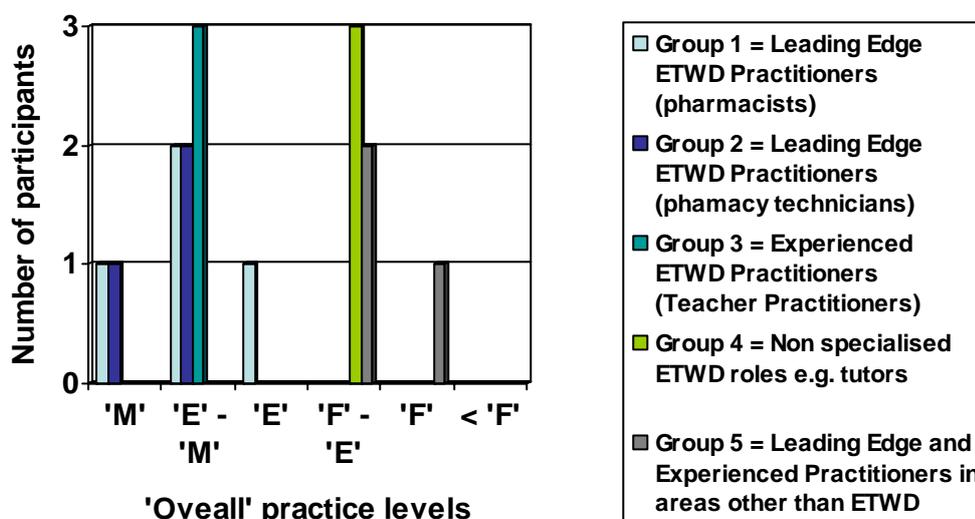
\*One participant (P12 – Pre-registration Tutor) did not map to the 'Links Practice & Education' competency in cluster 5.

Table 7.0 shows the number of participants per group assigned to each 'overall' practice level for cluster 5 and figure 2.0 shows the same information as a graph.

**Table 7.0: Number of participants per group assigned to each 'overall' practice level for cluster 5**

Group		Number of participants at 'overall' practice level for cluster 5					
		< 'F'	'F'	'F-E'	'E'	'E-M'	'M'
1	Leading Edge ETWD Practitioners (pharmacists)				1	2	1
2	Leading Edge ETWD Practitioners (pharmacy technicians)					2	1
3	Experienced ETWD Practitioners (Teacher Practitioners)					3	
4	Non-specialised ETWD roles (Tutors)			3			
5	Experienced & Leading Edge Practitioners in areas other than ETWD		1	2			

**Figure 2.0: Number of participants per group who scored at each 'overall' practice level for cluster 5**



## Discussion

The results suggest that both cluster 1 and cluster 5 of the framework distinguish between levels of practice in relation to ETWD:

**Cluster 1:** The 'overall' practice level of participants in group 1 (Leading Edge ETWD Practitioners – pharmacists) tended towards the 'Mastery' or 'Excellence' – 'Mastery' levels which was higher than the Experienced Practitioners (group 3) and non ETWD specialised groups (groups 4 & 5). This result would suggest that cluster 1 of the framework distinguishes between levels of practice and is consistent with the research team's expectations prior to the study.

*Pharmacy technicians:* An unexpected result was that Group 2 (Leading Edge ETWD Practitioners – technicians) tended towards similar ‘overall’ practice levels as group 3. Group 2 was the only one of the five groups to include pharmacy technicians. It is possible that group 2 contained a mixture of both Leading Edge ETWD Practitioners and Experienced Practitioners.

In particular, the pharmacy technicians in group 2 all self-assessed their level of practice as lower than the pharmacists in group 1 for the following competencies in cluster 1:

- Professional Autonomy
- Patient Care Focus
- Quality Assurance and Enhancement (of education)

Possible reasons for pharmacy technicians’ self-assessment of practice at these lower levels are outlined below:

- Professional Autonomy – This may be because the levels of freedom to act, under Agenda for Change, are generally lower for pharmacy technicians than pharmacists
- Patient Care Focus – This may be due to pharmacy technicians providing less clinical services than pharmacists
- Quality Assurance and Enhancement – This was surprising considering the participants involvement in the quality assurance of NVQs

*Self-selection of cluster 1:* Participants chose whether to self-assess against cluster 1 of the framework or not. Other versions of cluster 1 for ACLF based frameworks are as follows:

- ACLF – Expert Professional Practice (EPP)
- PhwSI – Expert Professional Practice (EPP) (This contains the same competencies as the ACLF but only contains two levels (‘Practitioner’ level equivalent to ACLF ‘Foundation’ level and ‘PhwSI level’ equivalent to ACLF ‘Excellence’ level)
- Chief Pharmacists Career Strategy - Expert Professional Management (EPM)

The participants had different levels of familiarity with these frameworks. Those participants who were more familiar with these frameworks e.g. P14 – Technical Services Specialist and P15 – Potential Pharmacist with a Special Interest chose not to self-assess cluster 1 of the ETWD Framework because they were aware that cluster 1 of the ACLF and PhwSI were more relevant for their roles. Participant 15 (Industrial Pharmacist) chose to self-assess against cluster 1 of the ETWD Framework even though their expert professional role was in a different area of practice. Participant 15 had an ‘overall’ practice level score of 0.83 for cluster 1 which is below ‘Foundation’ level and this suggests that cluster 1 was not relevant for their role.

Some participants were only able to provide generic evidence (rather than specific ETWD evidence) for the following competencies in cluster 1 of the framework:

- Competency 3 – Reasoning and Judgment
- Competency 4 – Professional Autonomy

Non ETWD specific evidence and ‘overall’ practice levels below ‘Foundation’ level may indicate that the participant was attempting to self-assess against to the wrong version of cluster 1. In hindsight it would have been useful to show the participants all three versions and ask them which they would be most likely to use.

**Cluster 5:** The ‘overall’ practice levels of participants in groups 1 & 2 (Leading Edge ETWD Practitioners) tended towards the ‘Mastery’ or ‘Excellence – Mastery’ levels which was higher than Experienced Practitioners (group 3) and non ETWD specialised groups (groups 4 & 5). This result would suggest that cluster 5 of the framework distinguishes between levels of practice. This result is consistent with the research team’s expectations prior to the study.

*Achieving 'Mastery' level:* A perhaps unexpected result was that only 1 in 4 of the participants in group 1 was assigned an 'overall' practice level of 'Mastery' for clusters 1 & 5. In order to be assigned an 'overall' practice level of 'Mastery' the participant would need to score 'Mastery' for all of the competencies in the cluster. This is not possible to achieve if certain competencies are not relevant to the role. This may explain why fewer Leading Edge ETWD Practitioners were assigned an 'overall' practice level at 'Mastery' level. Roles in ETWD are diverse and there is no single profile that fits all of these roles. Therefore it is recommended that the framework is used flexibly and competencies and levels of practice relevant to the role are selected. This was suggested by one of the participants in answer to the interview question: *How could the framework be used for competence assessment and performance management?*

"It would be useful to map E&T jobs within my team to the framework to see where the post holder should be in terms of competency levels (a bit like setting levels for a KSF outline). The post holder could then demonstrate competence through a portfolio" (Participant 4 - NHS Regional Pharmacist Director of E&T)

"It would be useful to map roles e.g. pre-registration tutor to the framework to see where tutors should be in terms of competency levels and then link the pre-registration tutor training to the framework." (Participant 4 - NHS Regional Pharmacist Director of E&T)

## Conclusions

The results of this first stage of discriminate testing suggest that the framework distinguishes between levels of practice in relation to ETWD for pharmacists for clusters 1 & 5 i.e. distinguishing between Leading Edge ETWD Practitioners and Experienced ETWD Practitioners.

A perhaps unexpected result was that only 1 of the 4 'Leading Edge ETWD Practitioners (pharmacists) was assigned an 'overall' practice level of 'Mastery'. However, this is a small study and it is not possible to generalise based on these findings.

Only one of the five groups contained pharmacy technicians and it is possible that this group contained both Leading Edge ETWD Practitioners and Experienced ETWD Practitioners.

The limitations of the study include the use of self-assessment of competence which can be subjective. Therefore it is important to note that the data was based on participant's perceptions. Some participants may have under assessed and some may have over assessed their level of practice. Once the framework has been launched and becomes embedded in professional development across the pharmacy profession the required evidence for 'Foundation', 'Excellence' and 'Mastery' will become more objective. The researchers could have attempted to verify the evidence provided at each level but this was outside the scope of this project.

Further evaluation following the launch of the framework may be needed involving a larger sample of pharmacists and pharmacy technicians.

## 5.2: Analysing data provided by individual participants

This stage of the analysis tested the discriminate validity of clusters 1 & 5 of the framework by analysing data provided by individual participants in relation to their professional development in ETWD throughout their career.

### Method

Fourteen out of the sixteen participants were asked to self-assess their perceived level of competence (as 'Foundation', 'Excellence' or 'Mastery' level) in relation to the following clusters of the framework:

- Cluster 1 – Expert Professional Role in Education and Workforce Development (if the participant considered it relevant to their role)
- Cluster 5 – Education, Training and Development (all participants)

The self-assessment was completed for current roles and previous roles. Two participants (P11 – CPPE Tutor; P12 pre-registration Tutor) were excluded from this section of the testing process because tutoring is a role, not a whole job and can be undertaken at various stages in an individual's career. Therefore comparison between an individual tutors current and previous roles would not generate useful data.

### Analysis of data

The same scoring system as previously described was used to calculate mean scores for clusters 1 & 5 and assign 'overall' practice levels.

### Results

Cluster 1: Three of the fourteen participants chose not to self-assess their current or previous level of practice against cluster 1 of the framework (P8 – Teacher Practitioner; P14 – Technical Services Specialist; P15 – Potential Pharmacist with a Special Interest).

Three of the eleven participants who self-assessed their current level of practice against cluster 1 of the framework did not self-assess their level of practice in their previous roles against cluster 1 (P1, P9 and P10) because they felt that it would not have been relevant for their previous roles.

Table 8.0 shows the mean scores for the participants' current and previous jobs can for cluster 1.

**Table 8.0: Participants' mean scores for current and previous roles for cluster 1**

Participant	Mean score for cluster 1				
	Current role	Previous role 1 = most recent	Previous role 2	Previous role 3	Previous role 4 = least recent
P1 - Lead E&T Pharmacist - NHS	2.72				
P2 - Lead E&T Pharmacy Technician - NHS	2.29	0.71			
P3 - Regional Specialist E&T Pharmacy Technician	1.71	1.43			

P4 - NHS Regional Pharmacist Director of E&T	3.00	1.57	1.00		
P5 - Senior Lecturer (Academia)	2.86	2.29	2.43	1.00	
P6 - Further Education College - Pharmacy Technician	1.86	1.57			
P7 - Teacher Practitioner – Hospital Pharmacy	2.57	2.43	1.57		
P9 - Teacher Practitioner – PCT	1.57				
P10 - Community Pharmacy CPD Facilitator	1.43				
P15 - Industrial Pharmacist	0.83	1.86			
P16 - Training Manager - Community Pharmacy	2.42	1.43			

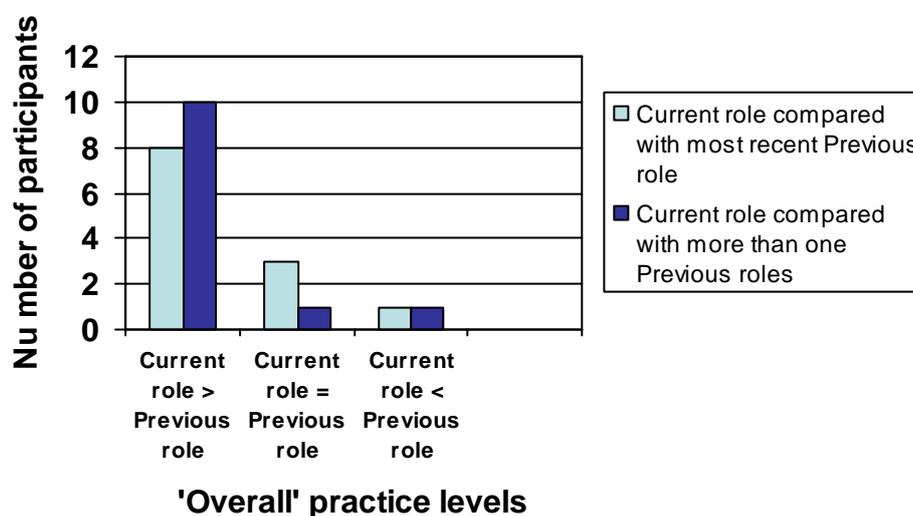
Table 9.0 shows the ‘overall’ practice levels for the participants’ current and previous jobs for cluster 1.

**Table 9.0: Participants’ ‘overall’ practice level for current and previous roles for cluster 1**

Participant	‘Overall’ Practice Level for cluster 1				
	Current role	Previous role 1 = most recent	Previous role 2	Previous role 3	Previous role 4 = least recent
P1 - Lead E&T Pharmacist - NHS	E-M				
P2 - Lead E&T Pharmacy Technician - NHS	E-M	< F			
P3 - Regional Specialist E&T Pharmacy Technician	F-E	F-E			
P4 - NHS Regional Pharmacist Director of E&T	M	F-E	F		
P5 - Senior Lecturer (Academia)	E-M	E-M	E-M	F	
P6 - Further Education College - Pharmacy Technician	F-E	F-E			
P7 - Teacher Practitioner – Hospital Pharmacy	E-M	E-M	F-E		
P9 - Teacher Practitioner – PCT	F-E				
P10 - Community Pharmacy CPD Facilitator	F-E				
P15 - Industrial Pharmacist	< F	F-E			
P16 - Training Manager - Community Pharmacy	E-M	F-E			

Eight participants self-assessed both their current and previous levels of practice against cluster 1. Figure 3.0 shows how the participants' 'overall' practice levels differed when comparing current role with previous roles and with more than one previous role.

**Figure 3.0 – 'Overall' practice levels for current role compared with previous roles**



Three of these participants had a higher 'overall' practice level in their current role compared with their most recent previous role. Four of these participants maintained the same 'overall' practice level in their current role as in their most recent previous role. However, two of these four showed an overall progression when comparing their current role with more than one previous role. Participant 15 (Industrial Pharmacist) had a higher 'overall' practice level in her previous job (Medicines Information) than in her current job because the previous role had more of focus on education and workforce development.

**Cluster 5:** All fourteen participants self-assessed their current level of practice against cluster 5 of the framework. Two participants did not self-assess their levels of practice for their previous roles:

- P10 (Community Pharmacy CPD Facilitator) he felt that this cluster would not have been relevant for his previous roles.
- P14 (Potential Pharmacist with a Special Interest / Community Pharmacy Manager) had been in her current role as a Community Pharmacy Manager since 1980. She felt that her previous role was too long ago to perform a self-assessment.

Table 10.0 shows the mean scores for the participants' current and previous jobs can for cluster 1.

**Table 10.0: Participants' mean scores for current and previous roles for cluster 5**

Participant	Mean score for cluster 5				
	Current role	Previous role 1 = most recent	Previous role 2	Previous role 3	Previous role 4 = least recent
P1 - Lead E&T Pharmacist - NHS	3.0	2.0	1.0		
P2 - Lead E&T Pharmacy	2.33	0.5			

Technician - NHS					
P3 - Regional Specialist E&T Pharmacy Technician	3.0	2.5	1.5		
P4 - NHS Regional Pharmacist Director of E&T	2.67	2.33	1.0		
P5 - Senior Lecturer (Academia)	2.83	2.0	2.17	1.17	
P6 - Further Education College - Pharmacy Technician	2.33	1.67			
P7 - Teacher Practitioner – Hospital Pharmacy	2.67	2.3	2.0	1.17	1.5
P8 - Teacher Practitioner – Community Pharmacy	2.33	1.17			
P9 - Teacher Practitioner – PCT	2.5	0.5			
P10 - Community Pharmacy CPD Facilitator	1.5				
P13 - Technical Services Specialist	1.83	1.83	1.83	1.17	
P14 - Potential Pharmacist with a Special Interest	2.5				
P15 - Industrial Pharmacist	1.0	1.5			
P16 - Training Manager - Community Pharmacy	2.0	1.67	1.5	1.5	

Table 11.0 shows the ‘overall’ practice levels for the participants’ current and previous jobs for cluster 1.

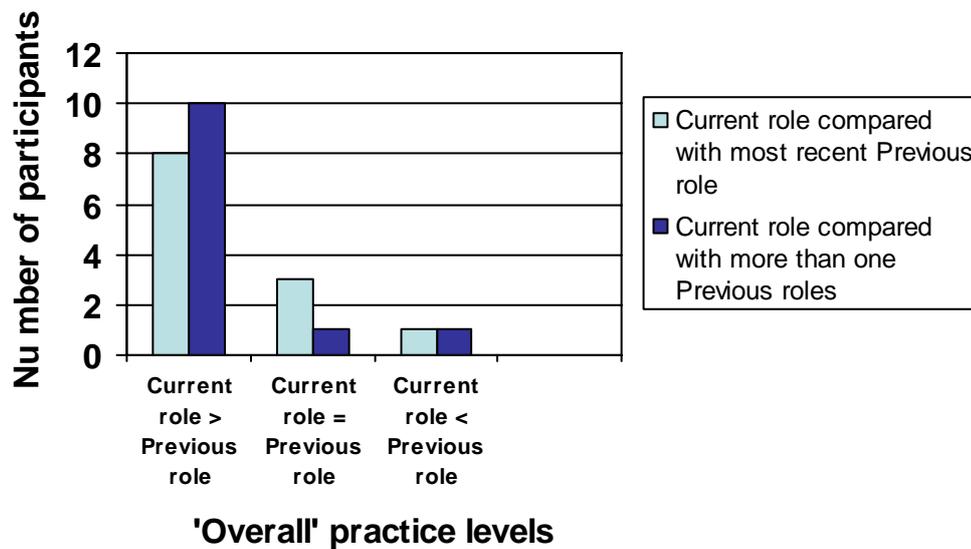
**Table 11.0: Participants’ ‘overall’ practice level for current and previous roles for cluster 5**

Participant	‘Overall’ Practice Level				
	Current	Previous 1	Previous 2	Previous 3	Previous 4
P1 - Lead E&T Pharmacist - NHS	M	E	F		
P2 - Lead E&T Pharmacy Technician - NHS	E-M	<F			
P3 - Regional Specialist E&T Pharmacy Technician	M	E-M	F-E		
P4 - NHS Regional Pharmacist Director of E&T	E-M	E-M	F		
P5 - Senior Lecturer (Academia)	M	E	E-M	F-E	
P6 - Further Education College - Pharmacy Technician	E-M	F-E			
P7 - Teacher Practitioner – Hospital Pharmacy	E-M	E-M	E	F-E	F-E
P8 - Teacher Practitioner – Community Pharmacy	E-M	F-E			
P9 - Teacher Practitioner – PCT	E-M	<F			
P10 - Community Pharmacy CPD Facilitator	F-E				
P13 - Technical Services Specialist	F-E	F-E	F-E	F-E	

P14 - Potential Pharmacist with a Special Interest	E-M				
P15 - Industrial Pharmacist	F	F-E			
P16 - Training Manager - Community Pharmacy	E	F-E	F-E	F-E	

Twelve participants self-assessed both their current and previous levels of practice against cluster 1. Figure 4.0 shows how the 'overall' practice levels differed when comparing current role with most recent previous role and with more than one previous role.

**Figure 4.0 – 'Overall' practice levels for current role compared with previous roles**



Eight of these participants had a higher 'overall' practice level in their current role compared with their most recent previous role. Three of these participants maintained the same 'overall' practice level in their current role as in their most recent previous role. However, two of these three showed an overall progression when comparing their current role with more than one previous role. Participant 15 (Industrial Pharmacist) had a higher 'overall' practice level in her previous job (Medicines Information) than in her current job because the previous role had more of focus on education and workforce development.

## Discussion

Of those who self-assessed both their current and previous levels of practice against clusters 1 & 5 of the framework, all except one participant had a higher 'overall' practice level in their current role compared with one or more previous roles. These results suggest that clusters 1 and 5 of the framework can distinguish between levels of practice in an individual career.

Participants also commented on how they could see progression in ETWD throughout their career in relation to the framework

"When 'mapping' my current and previous posts I could see the progression from different roles. This demonstrates to me that the framework is sound as it distinguishes between different levels of practice" (Participant 5 - Senior Lecturer: Academia, practicing at mastery level).

*General level practice vs. Advanced level practice:* The ETWD Framework is a framework designed to support 'advanced' level practice in relation to ETWD. Participants were asked to self-assess their level of practice against the framework for all their previous roles post-qualification. Participant 2 (Lead E&T Pharmacy Technician NHS) completed a self-assessment for her previous role (Managerial) but the mean score for cluster 1 was 0.71 and for cluster 5 was 0.5. Participant 9 (Teacher – Practitioner PCT) also completed a self-assessment for her previous role (Managerial) against cluster 5 and also had a mean score of 0.5. These mean scores of less than one give an 'overall' practice level below 'Foundation'. These scores would therefore suggest that these participants were not practicing at a higher level in relation to ETWD in these roles.

Other participants were able to identify a stage in their career where their level of practice would have been below the 'Foundation' level on clusters 1 and 5 of the framework:

"[At the start of my C grade post] I wasn't even on the map! I was below 'Foundation' level [both cluster 1 & 5]. I wasn't consciously aware of the skill set needed or my development needs."  
(Participant 1 - discussing his role as a C grade clinical pharmacist)

"Prior to my role as a D grade clinical pharmacist I would not have even been at 'Foundation' level on either cluster [clusters 1 & 5]..." (Participant 4 - discussing her role as a D grade clinical pharmacist)

The stage of the career described by participants 1 and 4 relates to the early part of their career where they would not be expected to be working at an 'advanced' level. These results suggest that clusters 1 and 5 of the framework can distinguish between 'general level' and 'advanced' level practice as well as distinguishing between levels of advanced practice i.e. distinguishing between Experienced ETWD Practitioners and Leading Edge ETWD Practitioners.

*Comparison between previous roles:* Comparison was not made with previous roles for a number of reasons. Firstly the interview was not designed to collect a high level of detail for previous roles as for current roles. Secondly, pharmacy has changed over time and so have the roles within the profession. Therefore comparing a current role with a role with a similar job title from 10 or 20 years ago would not provide meaningful results. In her interview, participant 5 commented on how her practice had changed as a result of changes in pharmacy:

"I feel that my career reflects the changes in pharmacy e.g. in the 1980s we did ward pharmacy, in the 1990s the emphasis changed to clinical pharmacy and now the emphasis is on medicines management and patient centred care. I have been involved in developing new courses and qualifications to meet changing postgraduate needs". (Participant 5 - Senior Lecturer)

The third edition of the ACLF on which cluster 5 is based was designed in 2005 and cluster 1 of the ETWD Framework has been under development since 2006; therefore the framework reflects the current nature of pharmacy roles. This means that some of the competencies e.g. Patient Care Focus in Education & Training and Continuing Professional Development (CPD) would not have applied prior to the late 1990's. Participant 4 (currently NHS Regional Pharmacist Director of E&T) & Participant 5 (currently a Senior Lecturer) commented on how they didn't do certain things in their previous roles that are now expected of the post holders:

"It was quite difficult to 'map' my previous career to some of the competencies e.g. patient care focus as in the 1980's and 90's we didn't have this focus. Similarly prior to 1999 we had not really heard about CPD so when I was a Teacher Practitioner I didn't do CPD (though current teacher

practitioners would do CPD)" (Participant 5 - commenting on her previous Teacher Practitioner role from 1986 - 1988)

"I think things have moved on e.g. CPD wasn't really around when I was a trust E&T lead pharmacist. I think if I was in this role now I would be expected to work at a higher level and shape the local CPD strategy" (Participant 4 - commenting on her previous Lead E&T Pharmacist role - NHS from 1994 - 1995)

In addition Participant P1 (currently Lead E&T Pharmacist – NHS) chose not to map his previous role as a Teacher Practitioner to cluster 1 of the framework. He described his previous Teacher Practitioner role as being:

"[Teacher Practitioner] ...someone who is reactive i.e. told to teach certain subjects" (Participant 1 - commenting on his previous teacher practitioner role from 1998 - 2001)

Two of the three current Teacher Practitioners in the sample self-assessed against cluster 1 for their current role. Participant 8 - The Teacher Practitioner who chose not to self-assess against cluster 1 was fairly new in post and felt that this cluster would be useful for future development for her role. Participant 7 was assigned an 'overall' practice level of 'Excellence' – 'Mastery' for his current role and Participant 9 was assigned an 'overall' practice level of 'Foundation' – 'Excellence' for his current role. Participant 7 is a very experienced Teacher Practitioner and his non-university role is as 'Lead E&T Pharmacist – NHS'. Participants 8 & 9 were both senior managers in their non-university roles. These factors may explain why Participant 7 was assigned a higher 'overall' practice level than the other Teacher Practitioners in the sample.

## Conclusions

The results of this second stage of discriminate testing suggest that clusters 1 and 5 of the framework distinguish between levels of 'advanced' practice in relation to ETWD in an individual career. The results also suggest that clusters 1 and 5 can distinguish between 'advanced' and 'general' level practice in relation to ETWD.

The limitations of the study include the subjectivity of self-assessment of competence. Therefore it is important to note that the data was based on participant's perceptions. Some participants may have under assessed and some may have over assessed their level of practice. Once the framework has been launched and becomes embedded in professional development across the pharmacy profession the required evidence for 'Foundation', 'Excellence' and 'Mastery' will become more objective. The researchers could have attempted to verify the evidence provided at each level but this was outside the scope of this project.

It was not possible to compare current roles with previous roles with similar job titles because pharmacy and pharmacy roles have changed over time making such a comparison meaningless.

A greater number of participants were able to self-assess their level of practice in their previous role to cluster 5 (85.7%; n=12) compared with cluster 1 (57.1%; n=8) of the framework. This suggests that cluster 1 is associated with a higher level of expert practice in ETWD than cluster 5.

This is a small study and it is not possible to generalise the findings to a wider population. Therefore following the launch of the framework a further evaluation involving a larger sample of pharmacists and pharmacy technicians may be needed.

## Utility of the Framework

The framework aimed to be a structured professional development tool for both those aspiring to achieve an expert role in education, training and workforce development (ETWD) as well as those who train others as a less substantive part of their role. The third objective of the project was to test the utility of the framework (i.e. usability and usefulness). This involved answering the following research question: Can the framework be used by a range of pharmacy staff, with a variety of roles in education, training and development in all sectors of practice?

### Method

The participants self-assessed their perceived level of competence (as 'Foundation', 'Excellence' or 'Mastery' level) in relation to the following clusters of the framework:

- Cluster 1 – Expert Professional Role in Education and Workforce Development (if the participant considered it relevant to their role)
- Cluster 5 – Education, Training and Development (all participants)

Semi-structured interviews (telephone or face-to-face) explored the participants':

- evidence to support their perceived level of practice in relation to the framework
- thoughts on how the framework could be used to identify learning and development needs and help them achieve their career aspirations in ETWD
- career pathway to date and how the framework could have facilitated career development

### Results

Participants highlighted the fact that prior to the development of the ETWD framework there was no clear career pathway for ETWD.

"There was no formal preparation as such. I picked things up as I go along. Scary, isn't it!"

(Participant 10 - currently CPD Facilitator, Community Pharmacy)

"I stumbled into education & training almost by accident... I was given the responsibility of the certificate programme without any thought of whether I had teaching skills or aptitudes... I felt uncomfortable. Because I had the MSc it was assumed I could automatically teach! I wanted to do something about it! I wanted some underpinning theory and confidence as a clinical teacher"

(Participant 1 - talking about his experiences as a C grade pharmacist in 1994)

The participants described how they learnt through self-directed experiential learning, attending courses and studying for qualifications, through role models. Participants also commented on how the framework could have facilitated their previous career development.

"If I had the framework [in 2005] when I applied to become a member of the Higher Education Academy [by portfolio] it would have made the application process easier and would have helped me to demonstrate the relevance of E&T to clinical practice as well as demonstrate my knowledge and skills as a teacher" (Participant 5 - Senior Lecturer (Academia))

All participants were able to self-assess their current level of practice in relation to cluster 1 and or cluster 5 of the framework and use the framework to identify learning and development needs in relation to ETWD. Participant's comments on the usefulness and usability of the framework included:

"The framework helps me to identify the criteria and level of practice I should aspire to. It also benchmarks me, where I am at present and gives me confidence in the skill set and knowledge I have" (Participant 1 - Lead E&T pharmacist - NHS Hospital)

"I may have excellent knowledge [of the subject I am teaching] but may not have the most excellent tools to deliver that knowledge. The Framework and the National Occupational Standards that are mapped to it can help me identify what I don't know" (Participant 13 - Technical Services Specialist)

"This is a good framework in helping to identify my learning and development needs... It has raised my awareness" (Participant 10 - CPD Facilitator - Community Pharmacy)

"It allows you to identify the gaps. You can use the framework to look at where you are now and see if you have any gaps and if you have jumped any levels. You can then identify what you need to backfill and check you are not working on shaky foundations" (Participant 9 - Teacher Practitioner)

"Without the framework I don't have something to assess myself against (apart from a job description). I would like to see the framework used as a national standard to ensure people are working at an agreed level appropriate for their role. I can then use the framework to help identify areas where I need to develop for my role and use it as a guide for CPD. It can help me identify areas I may not have considered before" (Participant 7 - Teacher Practitioner)

Participants highlighted the fact that the framework could be linked to existing models for professional development e.g. the NHS KSF.

"It would be interesting to map yourself on the framework and then run it back against your KSF outline and see how it cross references. This would enable you to see how the framework could move you along the KSF" (Participant 9 - Teacher Practitioner)

Teacher practitioners commented on how their development in their university role and non-university roles were separated and how the framework could help them to consider their overall development in a more holistic way:

"My development review (linked to Agenda for Change and the KSF) is done by the NHS. I don't have a development review at the university and my NHS development review does not consider my university role. The framework could link in with my development review. I can see how a lot of the competencies in the framework can be used in my university role and the framework could be used by the university to set standards for Teacher Practitioners" (Participant 7 - Teacher Practitioner)

"I have a Personal Development Plan (PDP) for both jobs [Teacher Practitioner = university lecturer and PCT pharmacist]. The framework may help align these two PDPs [because] the framework is specific to you personally and cuts through all the roles." (Participant 9 - Teacher Practitioner)

## Discussion

The fact that all participants were able to self-assess their current level of practice against the framework demonstrates that it is fit for purpose as a self-assessment tool to identify both current level of practice and an individual's learning and development needs. Whilst the participants were diverse, they were all able to use the framework which suggests that it is flexible enough to be usable and useful across a variety of roles in ETWD in all sectors of practice.

Participant's comments highlighted the fact that the framework can be linked with other sector specific frameworks and professional development models e.g. the NHS KSF and the Higher Education Academy UK Professional Standards Framework for teaching and supporting learning in higher education.

Following the interviews, case studies have been developed to illustrate how the framework can be used by pharmacy staff, with a variety of roles in ETWD in different sectors of practice and at different stages of their careers. Evidence from participants supported their level of ETWD practice in relation to the framework has been collated. The case studies and collated evidence can be used to facilitate self-assessment of competence against the framework by other practitioners. Selection of case studies that most closely match a practitioner's role or aspiration in relation to ETWD can aid reflection on current level of practice and help to identify learning and development needs. A copy of these case studies can be downloaded from <http://www.nhspedc.nhs.uk/ProfDevelFr.htm>

A limitation of the study is the fact that some aspects of the usability testing relied on participants opinions of how the framework could be used in practice rather than how the framework is actually used in practice. Early implementers have been identified which will enable the research team to see how the framework is used in practice as opposed to how it can be used, especially in relation to competence assessment and performance management of staff.

## Conclusions

A diverse range of participants were able to self-assess their current level of practice against the framework. This demonstrates that the framework is fit for purpose as a self-assessment tool to identify current level of practice and identify learning and development needs. The results also suggest that the framework it is flexible enough to be usable and useful across a variety of roles in ETWD in all sectors of practice.

This research project attempted to validate the ETWD Framework by:

1. Testing the content validity of the framework
2. Testing the discriminate validity i.e. does the framework distinguish between different levels of practice in relation to education, training and workforce development
3. Testing the utility of the framework to ensure it meets the needs of potential users

The results suggest that the content of the framework is valid because those who took part in the study could not identify anything that was missing from the framework in relation to ETWD.

The results indicate that clusters 1 and 5 of the framework distinguish between levels of practice in relation to ETWD e.g. Experienced ETWD Practitioners and Leading Edge ETWD Practitioners. The results also indicate that the framework distinguishes between levels of practice in relation to an individual's career.

The fact that all participants were able to self-assess their current level of practice against the framework demonstrates that it is fit for purpose as a self-assessment tool to identify current level of practice and identify learning needs. Whilst the participants were diverse, they were all able to use the framework which suggests that it is flexible enough to be usable and useful across a variety of roles in ETWD in all sectors of practice. Participant's comments highlighted the fact that the framework can be linked with other sector specific frameworks and professional development models e.g. the NHS Knowledge and Skills Framework (KSF) 4 and the Higher Education Academy UK Professional Standards Framework for teaching and supporting learning in higher education 5.

Whilst the framework distinguished between levels of practice, a perhaps surprising result was that only one in four of the pharmacists who had been identified as Leading Edge ETWD Practitioners reached 'Mastery' level (the highest 'overall' practice level) in relation to the framework. Expert professional roles in ETWD are diverse and there is no single profile that fits all of these roles. Therefore it is recommended that the framework is used flexibly and competencies and levels of practice relevant to the role are selected.

The limitations of the study include the subjectivity of self-assessment of competence. Therefore it is important to note that the data was based on participant's perceptions. Some participants may have under assessed and some may have over assessed their level of practice. Once the framework has been launched and becomes embedded in professional development across the pharmacy profession the required evidence for 'Foundation', 'Excellence' and 'Mastery' will become more objective. The researchers could have attempted to verify the evidence provided at each level but this was outside the scope of this project.

This is a small study and it is not possible to generalise the findings to a wider population. Therefore following the launch of the framework a further evaluation involving a larger sample of pharmacists and pharmacy technicians may be needed.

Early implementers have been identified which will enable the research team to see how the framework is [used in practice](#) as opposed to how it [can be used](#), especially in relation to competence assessment and performance management of staff.

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## Appendix 1: Information for potential participants

### Development of a ‘Professional Development Framework for Pharmacy Staff Involved in Education, Training and Workforce Development’

#### Introduction

The NHS Pharmacy Education and Development Committee and UKCPA Education and Training Group are collaboratively developing a professional development framework for all those in pharmacy who are involved in education, training and workforce development. Representatives of all sectors of pharmacy practice are actively involved in this work to ensure applicability.

The drivers for the work include:

- an increased emphasis on capability and competency-based approaches in all areas of practice
- a need to support all groups of pharmacy staff with the education and training elements of their role
- the need for detailed guidance for people who want to develop an expert professional role in education, training and workforce development

Competence in education and training is vital for our profession today and tomorrow, and the clarity, consistency and focus of this framework will enable the development of the necessary underpinning competencies. The framework can be used by:

- those seeking to achieve an expert role in education, training and workforce development
- those for whom education and training is an important, but less substantial part of their role, as it takes account of other frameworks and approaches used by different pharmacy groups

#### Research to test and validate the framework

The aim of the research is to test and validate the framework. This is a small study that aims to describe and explore themes through the use of case studies; we are not aiming for generalisability. Data will be gathered using semi-structured interviews. The data will be used in the following ways:

- Written up as case studies (stories) to illustrate how the framework can be used by a range of pharmacy staff in different sectors of practice at different stages of their careers. These will form an appendix to the document and can help make the framework more meaningful for users. Extracts from the case studies may also be included in journal publications
- To validate the framework by comparing and contrasting participants responses

The research is being conducted in accordance with British Education Research Association (BERA) ethical guidelines and participants will receive a copy of these guidelines. The Department of Health (2005) Report of the Ad Hoc Advisory Group on the Operation of NHS Research Ethics Committees states that approval from a NHS Research Ethics Committee (REC) isn't necessary for this type of research:

*"...research, such as surveys, service evaluation and research on NHS staff, does not require ethical review". (DH 2005, p13)<sup>b</sup>*

Further information can be provided by the interviewers:

Helen Middleton	<a href="mailto:Helen.middleton@chelwest.nhs.uk">Helen.middleton@chelwest.nhs.uk</a>
Sally Lau	<a href="mailto:sflau@ntlworld.com">sflau@ntlworld.com</a>
Julie Sowter	<a href="mailto:j.r.sowter@leeds.ac.uk">j.r.sowter@leeds.ac.uk</a>

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<sup>b</sup> The Department of Health (2005) Report of the Ad Hoc Advisory Group on the Operation of NHS Research Ethics Committees. London: The Stationary Office (online)  
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## Appendix 2: Consent form

### Research project

#### A professional development framework for pharmacy staff involved in Education, Training and Workforce Development

**Researchers** – a joint project led by the NHS Pharmacy Education & Development Committee and the UKCPA Education & Training Group

**Interviewers** - Helen Middleton, Julie Sowter, Sally Lau

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### Informed consent form

I have read and understood the information provided by the interviewers regarding this research project. I consent to take part in this research. In giving my consent I agree to:

- be interviewed by the researcher
- work with the researcher to map myself against 'A Professional Development Framework for Pharmacy Staff Involved in Education, Training and Workforce Development'

I have been informed about the aims of the research and that the findings may be published. I am aware that the research is being conducted in accordance with British Education Research Association (BERA) ethical guidelines and have received a copy of these guidelines.

I understand that I am at liberty to withdraw from the study at any time.

Name.....Date.....

....

Signature.....

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Please return this consent form to **Helen Middleton** prior to the interview

**Fax xxxxxxxx**

## **Appendix 3: Interviewers' profiles**

### **Helen Middleton (lead researcher)**

Helen Middleton has been employed as CPD Manager at London Pharmacy Education & Training since 2003. Helen has worked in NHS hospital pharmacy since 1988 gaining experience in a wide range of roles including pharmacy management, clinical pharmacy and training and development of pre-registration and qualified pharmacy staff.

Helen completed a Masters in Education, Training & Development of Adults in 2006. The modular programme of study allowed Helen to gain further expertise in mentoring, coaching and supervision; group dynamics and facilitation styles and critical perspectives in adult learning (encompassing competency based learning & CPD). Helen's research was on professional socialization of pharmacy technicians.

### **Sally Lau**

Sally Lau has been employed as an educator in pharmacy professional education at the Welsh Centre for Pharmacy Professional Education (WCPPE) since 1993. After graduation in 1976 Sally has worked in NHS hospital pharmacy, community pharmacy, and primary care pharmacy gaining experience in a wide range of roles including pharmacy management, sterile production, clinical pharmacy and prescribing support. In addition to providing pharmacy professional education and CPD support Sally has provided training to pharmacy trainers, prescribing advisers and other health and social care professionals such as nurses, doctors and social care staff.

Sally has gained a degree in Master of Philosophy in Education and is a Fellow of the Higher Education Academy. Her research was on how pharmacists learn and the impact of a mandatory continuing professional development scheme in pharmacy. Sally is the WCPPE lead in e-learning development. Her present research focuses on the pedagogy of e-learning and on e-assessment in particular.

### **Julie Sowter**

Julie Sowter is Professional Lead for Pharmacy and Head of the Pharmacy Practice and Medicines Management Group within the School of Healthcare at the University of Leeds. Her career background includes more than a decade of experience in both hospital and community pharmacy practice, before joining the University of Leeds in 1996. Her current responsibilities include leading on curriculum development for pharmacy courses and regional co-ordination of the NHS preregistration trainee pharmacist training for Yorkshire and the Humber.

Julie completed a Masters in Education in 1999; her research was on the use of OSCEs for formative assessment. She is currently a member of the programme management team for the multi-professional Masters in Clinical Education programme run by the School of Education at the University of Leeds. She also jointly developed and runs a 'Training the Trainers' course to support the development of clinical tutors who facilitate work-based learning.

## **Appendix 4: Interview Schedule**

### ***Pre interview questions***

Q1: What are your main responsibilities for education training and workforce development in your current job?

Q2: What has been your career pathway leading up to your current job?

### ***Questions to ask during the interview***

Q3: What were your main responsibilities for education, training and workforce development in each of your previous jobs?

Q4: How did your previous job/s prepare you for your current job? (in relation to education, training and workforce development) – (consider on the job learning, courses and qualifications)

Q5: How have you developed your role in education, training and workforce development within your current job?

Q6: In your opinion, how do the responsibilities in your current job relate to:

- Cluster 5: Education, Training and Development  
*and if applicable*
- Cluster 1: Expert Professional Role in Education & Workforce Development

What evidence could you use to demonstrate where you think you are?

Q7: In your opinion, how did the responsibilities in your previous jobs relate to:

- Cluster 5: Education, Training and Development  
*and if applicable*
- Cluster 1: Expert Professional Role in Education & Workforce Development?

Q8: What are your priorities for your future development within education, training and development?

Q9: How could you use the framework for your future development within education, training and workforce development?

Q10: Is there anything that you do in relation to education, training and workforce development that is not covered by the framework? (i.e. is there anything missing)

Q11: How could the framework be used for competence assessment and performance management?

## **Appendix 5: Procedures for preparing for, conducting and transcribing interviews**

### ***Contacting participants***

- Initial contact will be made by a nominated interviewer by telephone or email – to determine whether the person would be willing to take part in the research
- Further details will be provided in the second contact i.e. BERA ethical guidelines, consent form, written information about the research project
- The consent form must be returned prior to the interview or on the day of the interview

### ***Information provided prior to the interview***

A of The 'Professional Development Framework for Pharmacy Staff involved in Education, Training and Workforce Development' should be given to participants prior to the interview so they are able to think about how the framework applies to them. The interviewer will need to explain to them that part of the interview will involve a facilitated self-assessment of their level of practice against one or two clusters of the framework. This may be cluster 5 only or clusters 1 & 5 depending on their role – the participant will decide which clusters are relevant to their role.

The whole framework should be given because for example educational research is covered in cluster 6 and question 10 asked if there is anything missing from the framework.

### ***Information gathered prior to the interview (optional)***

The following information may be obtained from the participants by email prior to the interview to save time during the interview

Name of Participant	
Current role / job title	
Pay band or grade	
Ethnic group	

Q1: What are your main responsibilities for education training and workforce development in your current job? (In addition to getting a summary from the participants obtain a copy of the job description if possible)

Q2: What has been your career pathway leading up to your current job?

### ***Conducting the interviews***

- The interviews may be conducted face-to-face or on the telephone.
- The interviewer will ask the questions on the interview schedule in the order specified
- As the interviews are semi-structure the interviewers are able to probe to obtain information
- The interviewer will take notes and transcribe the interview. The interviews are not transcribed word for word as this is too time consuming. However the transcript should make clear which aspects of the transcript are paraphrased and which are actual quotes
- The interviewer will transcribe participants evidence onto the framework grids for cluster 1 and cluster 5
- The participants will be asked to read the interview transcript and grids to check for accuracy and confirm this by email (confirmation emails to be kept)
- All transcripts (interviews and grids) will be sent to the lead researcher
- The interviewers will conduct one interview each – after which the date will be used for a pilot analysis
- Second interviews will not be conducted until after the pilot analysis has take place to ensure that meaningful data is generated