

College of Radiographers Education and Career Framework Practitioner Mapping Tool: Advanced Level Knowledge, Skills and Attributes

Name (Print)	Signature:
Current employer	
Current job title/pay band	
Area of clinical practice/	
specialism	
Time in current post	
Date mapping completed	
Agreed date for review	
Service manager/line manager	Signature:
(Print)	

Introduction

The following education and qualification expectations and mapping statements are taken from the fourth edition of the College of Radiographers (CoR)

Education and Career Framework (ECF) [1]. They set out the underpinning education and qualifications and the knowledge, skills and attributes (KSAs) expected at the advanced level of practice in radiography. These are in addition to those already determined as essential at the practitioner and enhanced levels of practice as defined in the ECF.

The ECF KSAs have been informed by a modified Delphi consensus study [2]. This sought to identify – through expert agreement – the KSAs that will meet both the current and future needs of the workforce and service across all levels of practice. Direct KSA outcomes from the modified Delphi consensus study are denoted by *coloured italic font* within this mapping tool.

Additionally, the ECF KSAs have been developed to align with the relevant capabilities as found within the Health Education England Multi-professional framework for advanced clinical practice in England [3], the Northern Ireland Advanced AHP Practice Framework [4], the Scottish Nursing, Midwifery and Allied Health Professionals Development Framework [5] and the Allied Health Professions Framework for Wales [6].

How to use

This mapping tool is intended to be used by individual practitioners currently working at an advanced level clinically, or who are working towards this level of practice, to identity their current and/or future learning and development needs. This is a self-assessment tool that uses an adapted version of Benner's 1984 model of skill acquisition and development [7].

First, log your **education and qualifications** against the ECF expectations for comparison.

Next, for each of the **KSAs** detailed in the mapping tool, consider what activities you currently do, or have been recently involved in, that would evidence this work.

Use Benner's 1984 adapted model [7] to consider your level of performance and engagement for each of these activities in more detail. For example, would you class yourself as a novice, advanced beginner, competent, proficient or expert in relation to the activity? Figure 1 below explains Benner's five stages of performance and may be helpful when seeking to describe your performance at this advanced level [7].

Novice	Advanced beginner	Competent	Proficient	Expert
0	1	2	3	4
Beginner with no experience, knowledge or skill in relation to this outcome/KSA.	 Demonstrates acceptable performance. Has some experience relating to the given KSA but needs help and support in applying this to practice. 	 Typically, 2–3 years' experience of role/level of practice in this area. Has the knowledge and skill to practise in relation to this outcome/KSA without supervision. 	 More holistic understanding with improved decision-making. Has considerable knowledge, skill and experience of practising in relation to this aspect of practice. Feels able to begin to develop and supervise others in this area of practice. 	 Intuitive grasp of clinical situations, underpinned by expert knowledge of principles, rules and/or guidelines. Has in-depth knowledge, skill and experience of practising in relation to this outcome/KSA. Feels confident in teaching and supervising others in relation to this KSA or aspect of practice.

Figure 1: Levels of performance adapted from Benner's 1984 model of skills acquisition and development [7]

For example, consider the first advanced-level knowledge listed in the mapping tool: [AdvP.K.01] Legal, ethical and professional responsibilities of the advanced practice role, including autonomy, limits of own competence and professional scope of practice. A practitioner new to working at this level of practice may be seen as a novice or advanced beginner. Alternatively, a practitioner who has been working at the advanced level for some time may have moved on from the novice or advanced beginner, through being competent, to have now reached the proficient or expert stage (i.e. holding in-depth knowledge).

Once you have determined where your performance for an activity sits on the Benner scale, tick the corresponding box.



Next, consider which **pillar of practice** the activity sits under, putting a tick in the corresponding pillar of practice column. If working at an **advanced level**, it is expected that a practitioner's level of engagement across the four pillars of practice will be equal. This is important as engagement across the four pillars will support the holistic development of the individual practitioner. In turn, this will support the embedding of evidence-based practice and radiographer-led service transformation to ultimately enable the delivery of excellence for patients and service users.

At the end of each row in the mapping tool there is space for you to record any self-identified **learning needs and actions** in relation to each KSA. To help make these achievable, consider using SMART (Specific, Measurable, Achievable, Relevant and Time-bound) goals.



In completing the mapping tool in this way, you will be able to determine:

- ✓ How your current education and qualifications align with the expectations in the ECF
- √ The type of activities you are currently engaged in
- ✓ The level of your performance relating to these activities
- ✓ Your level of engagement across the four pillars of practice.

This will help you to identify areas for further improvement and engagement that may be actioned through targeted and strategic continuing professional development activities.

ECF Education and Qualifications Mapping

Advanced-level practice education and development, as detailed within the ECF, requires completion of a full postgraduate master's degree* (FHEQ** Level 7/SCQF*** Level 11) as a minimum following initial education, training and, where relevant, registration.

Completion of leadership training is also recommended to support the leadership and management aspects often associated with this level of practice.

ECF expectations and recommendations	Current ed	lucation and qualificati	ons held
Pre-registration (include up to FHEQ Level 7/SCQF Level 11 for pre-registration master's programmes)	Award title	Date (year awarded)	Education provider
 Diploma of the College of Radiographers (DCR) or BSc (Hons) bachelor's degree, or BSc (Hons) degree apprenticeship, or MSc (pre-registration) degree/degree apprenticeship 			
Postgraduate/post-registration	Award title	Date (year awarded)	Education provider
Expected: postgraduate/post-registration master's degree* (FHEQ Level 7/SCQF Level 11) relevant to own area of advanced practice			
Further professional qualifications/awards/ accreditation/fellowships etc	Award title	Date (year awarded)	Education provider
Recommended: leadership and mentorship training e.g. NHS Leadership Academy. Centre for Advancing Practice Accreditation, if applicable.			

^{*}For those holding a pre-registration master's qualification in radiography, progression onto enhanced, advanced and/or consultant-level practice will require additional learning and development as is relevant to the specific area of practice or role, and delivered at FHEQ Level 7/SCQF Level 11 and/or, in the case of consultant-level practice, FHEQ Level 8/SCQF Level 12, in alignment with the expectations associated with these levels of practice as defined within the ECF and other relevant national advancing practice frameworks. **Framework for Higher Education Qualifications. ***Scottish Credit and Qualifications Framework.

ECF Knowledge Mapping

Complete the following section using the 'How to use' guidance found at the beginning of the document. For individuals looking to develop into, or those already working at, the advanced level of practice, it has been identified through the expert consensus panel that the following knowledge is relevant. This is in addition to the knowledge already determined as essential knowledge required at the practitioner and enhanced practitioner levels as detailed in the ECF.

A practitioner working at the advanced level of practice requires in-depth knowledge and understanding of the following, unless otherwise stated:

ECF advanced level knowledge	Evidence/ activities currently		Ranki	ing of activity [7]			Associated pillar(s) of practice for each activity				Identified development need(s)	Actions (SMART)
	engaged in	Novice 0	Advanced beginner 1	Competent 2	Proficient 3	Expert 4	Clinical	Education	Leadership	Research		
[AdvP.K.01] Legal, ethical and professional responsibilities of the advanced practice role, including autonomy, limits of own competence and professional scope of practice												

	1				-	
[AdvP.K.02] Advanced communication, influencing and negotiating skills						
[AdvP.K.03] Disease processes within own scope of advanced practice						
[AdvP.K.04] Current and emerging clinical technology within own scope of advanced practice						
[AdvP.K.05] Pharmacology within own scope of advanced practice						
[AdvP.K.06] Principles and evidence base underpinning specialist interventions/ activities within own scope of advanced practice						

[AdvP.K.07] NHS			1					
organisations, the			//					
integrated care								
system and issues			1					
impacting upon			/					
own scope of			/					
<i>practice</i> and the		7						
wider healthcare								
agenda								
[AdvP.K.08]		1						
Multiprofessional				1				
working and the								
impact of working	/							
across								
organisational								
and system								
boundaries								
			1					
[AdvP.K.09]								
Mentoring,								
coaching and								
supervision								
theories		A						
underpinning								
development of	/							
those working								
within a	/							
multidisciplinary								
team								
[AdvP.K.10]								
Education								
theories								
underpinning								
development of								
those working								
within a								

				ı				
multidisciplinary								
team								
[AdvP.K.11]		7						
Service								
development and								
evaluation within					-4			
own scope of								
practice								
[AdvP.K.12]	7							
Patient, public								
and practitioner								
<u>partnerships</u> in								
the development								
of clinical								
pathways and								
service redesign								
		1						
[AdvP.K.13]								
Principles								
underpinning								
effective project management	/							
munugement	1							
[AdvP.K.14]								
Principles								
underpinning								
effective								
leadership								
[AdvP.K.15]								
Research								
techniques within								
own scope of								
practice								
,								

[AdvP.K.16]		-/				
Research						
governance						
processes, local		1				
and national						
infrastructures		7				
and personnel	7					
available to						
support advanced	1					
practice	1					
researchers						

ECF Skills Mapping

Complete the following section using the 'How to use' guidance found at the beginning of the document.

For individuals looking to develop into, or those already working at, the advanced level of practice, it has been identified through the expert consensus panel that the following skills are relevant. These are in addition to those already determined as essential skills required at the practitioner and enhanced practitioner levels as detailed in the ECF.

A practitioner working at the advanced level of practice should be able to:

ECF advanced level skills	Evidence/ activities currently	Ranking of activity [7]						Assoc pillar practi ach a	(s) of ce fo	r	Identified development need(s)	Actions (SMART)
	engaged in	Novice 0	Advanced beginner 1	Competent 2	Proficient 3	Expert 4	Clinical	Education	Leadership	Research		
[AdvP.S.01] Demonstrate autonomy in clinical decision- making within own scope of practice												
[AdvP.S.02] Evidence a critical understanding of their broadened level of responsibility and autonomy when working at												

						700		
advanced			1		24			
practice level			1/4					
			7					
			7					
[AdvP.S.03]		- 7						
Utilise advanced								
communication								
skills								
[AdvP.S.04] Use	7							
shared decision-								
making skills to								
support person-								
centred care and								
manage complex			1					
clinical situations			C					
[AdvP.S.05]								
Develop practice								
in response to								
changing								
population needs								
and technological	/							
and professional								
development								
[AdvP.S.06]								
Operate critically in accordance								
with latest								
guidance and								
current evidence								
base.								

						9.19	7	
[AdvP.S.07]			1					
Demonstrate			/					
ability to improve								
and enhance								
quality of care			1					
provided by self			/					
and others		7						
[AdvP.S.08]		1						
Efficiently								
organise and								
manage								
workloads for self								
and others	1							
[AdvP.S.09]				/				
Identify								
development								
needs of self and								
those in the team			1					
and act as a								
supervisor,								
mentor, coach								
and educator to								
increase the		A						
confidence and								
competence of								
others	/							
[AdvP.S.10]	/							
Contribute to the								
understanding of								
the impact of								
practice on								
planetary health								
by adopting and								
promoting								
sustainable and								
environmentally								

	1	1	1	/	1		0		
friendly			7			34			
approaches									
[AdvP.S.11]			- 7						
Support			1						
multidisciplinary			/						
team learning						1			
using a range of									
learning,									
teaching,		7							
supervision,									
feedback and					4				
assessment									
methods				A					
[AdvP.S.12]									
Demonstrate									
effective									
leadership in			1						
relation to own									
scope of practice,									
the team they									
lead and the									
multidisciplinary		/							
environment they									
are working in									
[AdvP.S.13]									
Effectively									
manage projects									
[AdvP.S.14]	1								
Engage in audit									
and evaluation									
projects and use									
the results to									

inform practice developments								
[AdvP.S.15]		4	/-					
Contribute to								
research and								
implement								
evidence into								
practice	/							
[AdvP.S.16]								
Actively engage								
with patients and								
members of the								
public in relation								
to research and			/					
service delivery								
[AdvP.S.17] Use a								
range of								
techniques for								
the dissemination								
of research								
findings								

ECF Attributes Mapping

Complete the following section using the 'How to use' guidance found at the beginning of the document.

For individuals looking to develop into, or those already working at, the advanced level of practice, it has been identified through the expert consensus panel that the following attributes are relevant. These are in addition to those already determined as essential attributes required at practitioner and enhanced practitioner levels as detailed in the ECF.

A practitioner working at the advanced level of practice should actively demonstrate and/or uphold the following:

ECF advanced level knowledge	Evidence/ activities currently	Ranking of activity [7]						pillar racti	ciated (s) of ce fo	r	Identified development need(s)	Actions (SMART)
	engaged in	Novice 0	Advanced beginner 1	Competent 2	Proficient 3	Expert 4	Clinical	Education	Leadership	Research		
[AdvP.A.01] Practise autonomously and in a way that demonstrates an understanding of the role of the advanced practitioner												
[AdvP.A.02] Role model high levels of professionalism to others in the team and nationally												

				/		-10-			
[AdvP.A.03]									
Show			/						
commitment to,									
and evidence of,			7						
operating at the			1						
highest standards			/						
across all four		2							
pillars of									
advanced clinical									
practice		7							
[AdvP.A.04]		/							
Works in a	/				8				
collaborative and									
inclusive way,									
promoting									
respect, tolerance									
			_/						
and integrity			/						
[AdvP.A.05]									
Ability to work									
well under		-/-							
<i>pressure</i> , while									
caring for									
themselves and		A.							
recognising when									
others may									
require further									
support									
[AdvP.A.06] /s									
dynamic and self-									
motivated and									
demonstrates a									
responsive									
leadership style									
to achieve results									

					-	1			
[AdvP.A.07]			1						
Communicate			/						
complex issues									
clearly to a wide			1						
range of			1						
stakeholders,			/						
with empathy		7							
and compassion									
[AdvP.A.08]		- /							
Recognise the									
sustainability and									
environmental									
impact of									
decisions and									
actions and									
demonstrate a									
commitment to									
minimise any			/						
resultant negative									
effects on									
planetary health		/							
[AdvP.A.09]		1							
Ability to step		A							
into challenging									
situations									
involving patients	/								
and apply a									
values-based									
approach									
[AdvP.A.10]									
Positively lead on									
addressing									
concerns raised									
by patients,									
carers and									
members of the									

			/				
multidisciplinary team							
[AdvP.A.11] Support learners at all levels in the multidisciplinary environment		/					
[AdvP.A.12] Share knowledge, expertise and experience with others and create a culture of learning, mentoring and coaching							
[AdvP.A.13] Create a culture in which practice is continuously reviewed and improved							
[AdvP.A.14] Formulate plans that translate strategy into action and evaluate change, outcomes and impact							

[AdvP.A.15] An		- /				
ability to lead		/				
research projects,						
dissemination						
and	5	/				
implementation	/					

References

- 1. College of Radiographers (2022). Education and Career Framework for the Radiography Workforce (4th edition). Available at: https://www.collegeofradiographers.ac.uk/education-and-career-framework-ecf [Accessed July 7, 2025].
- 2. Appleyard R, Nightingale J and Labinjo T (2021) *Informing the development of the Education and Career Framework for the radiography profession using a modified Delphi consensus study*. Available at: https://www.sor.org/learning-advice/professional-body-guidance-and-publications/policy-guidance-document-library/education-and-career-framework-for-the-radiogr-(1) [Accessed July 7, 2025].
- 3. Health Education England (2017). *Multi-professional framework for advanced clinical practice in England*. Available at: https://www.hee.nhs.uk/sites/default/files/documents/multi-professionalframeworkforadvancedclinicalpracticeinengland.pdf [Accessed December 6, 2024].
- 4. Department of Health Northern Ireland (2019) Advanced AHP Practice Framework: Guidance for Supporting Advanced Allied Health Professions Practice in Health and Social Care. Available at: https://www.health-ni.gov.uk/publications/advanced-ahp-practice-framework [Accessed December 6, 2024].
- 5. NHS Education for Scotland (2020). *Nursing, Midwifery and Allied Health Professionals Development Framework*. Available at: https://www.nmahpdevelopmentframework.nes.scot.nhs.uk/ [Accessed December 6, 2024].
- 6. Welsh Government and NHS Wales (2020). *Allied Health Professions Framework for Wales: Looking Forward Together*. Available at: https://www.gov.wales/allied-health-professions-ahp-framework [Accessed March 13, 2025].
- 7. Benner P (1984). From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Menlo Park (CA): Addison-Wesley.