# Supplementary Table 3.1: Core Graduate Competencies and roles related to ESH Learning Objectives: HEALTHCARE PRACTITIONER

ROLE	1 HEALTHCARE PRACTITIONER		
	Abbreviated EC	ESH Learning Objectives	Source
KEY COMPETENCY	1.1 Fu	unction effectively as entry-level healthcare practitioners	
	A. Perform a consultation or clinical encounter	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020
ENABLING	B. Respond to ethical issues in care and clinical decision-making	KVA1.1 Discuss examples of eco-ethical leadership.	AMEE 2020
COMPETENCIES (EC)	C. Prioritise professional duties when caring for multiple patients/clients		
	D. Provide compassionate empathetic & patient/client centred care		

	E. Demonstrate commitment in primary health-care settings		
KEY COMPETENCY	1.2	Acquire skills, knowledge, attitudes & character	
ENABLING COMPETENCIES	A. Apply, integrate, reflect on & evaluate CORE knowledge, skills, attitudes & character  B. Apply life-long learning skills to enhance competence	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020
KEY COMPETENCY	1.3	Perform comprehensive assessments of patients/clients	
ENABLING COMPETENCIES	A. Identify issues in patient/client encounter in patient context & preferences  B. Elicit a concise accurate history of patient/client	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020

	C. Perform a focussed examination
	D. Select investigative methods in a resource-effective &ethical manner
	E. Judge and solve patient/client's problems by interpreting data & integrating info for diagnosis and a management plan
	F. Demonstrate increasing proficiency in clinical decision-making
KEY COMPETENCY	1.4 Use preventative, promotive, therapeutic & rehabilitative interventions
	A. Demonstrate timely application of therapeutic interventions
ENABLING COMPETENCIES	B. Include prevention & health promotion in management plan
	C. Consider range of solutions for treatment and prevention of health problems for all ages and communities

	D. Formulate cost-appropriate and effective management plans	KS1.1 Evaluate the environmental impacts of a patient pathway to care and identify ways to enhance environmental sustainability.	AMEE 2020
	E. Obtain appropriate informed consent for interventions		
	F. Use and/or adapt clinical care, patient guidelines and protocols to local settings		
	G. Develop and deliver follow-up and ongoing care		
	H. Recognize acute life-threatening emergencies and initiate treatment and/or referral		
	I. Compile care plan in context of SA healthcare system		
KEY COMPETENCY	1.5 D	emonstrate use of diagnostic & therapeutic procedural skills	
ENABLING COMPETENCIES	A. Perform diagnostic, therapeutic & rehabilitative procedures		

	B. Document and disseminate information related to procedures performed and outcomes are ecological challenge or opportunity in healthcare.  AMEE 2020
	C. Follow-up care and care continuity for procedures performed
KEY COMPETENCY	1.6 Consult with other healthcare professionals
ENABLING	A. Demonstrate insight into own limitations of expertise
COMPETENCIES	B. Demonstrate effective, appropriate and timely consultation of other healthcare professionals for optimal care  KS3.1 Communicate clearly with health professional colleagues when responding to an ecological challenge or opportunity in healthcare.  AMEE 2020

ROLE	2 COMMUNICATOR		
	Abbreviated EC	ESH Learning Objectives	Source
KEY COMPETENCY	, I	and ethical therapeutic relationships with patients/clients, far mmunities from different cultural backgrounds.	nilies and
	A. Demonstrate patient/client-centred and community-centred approach	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020
	B. Practise good communication as a core clinical skill	KS3.1 Communicate clearly with health professional colleagues when responding to an ecological challenge or opportunity in healthcare.	AMEE 2020
ENABLING COMPETENCIES (EC)	C. Establish positive therapeutic relationships		
	D. Respect patient/client confidentiality, privacy & autonomy		
	E. Motivate patients/clients/families/communities to take personal responsibility for their health	KS3.2 Demonstrate how to motivate behaviour change to promote environmental sustainability at an individual, professional and community level	AMEE 2020

	F. Demonstrate flexible communication skills		
KEY COMPETENCY	2.2 Elicit & synthesise	information & perspectives from patients, families & other professionals	S
	A. Gather info about health conditions & functioning & patient/ client's beliefs, concerns & expectations	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020
ENABLING COMPETENCIES	B. Find & synthesise info from relevant sources	KS1.2 Describe how changes in disease burden due to environmental change may be identified, characterised and quantified and how such information can inform planning and practice to address health needs	AMEE 2020
	C. Listen, clarify, probe, be aware of & responsive to non-verbal cues		
KEY COMPETENCY	2.3 Co	nvey information & explanations accurately & effectively	
ENABLING	A. Retrieve info from clinical data system		
COMPETENCIES	B. Deliver info in humane manner & encourage discussion		

	C. Present well-documented assessments & recommendations	KS3.1 Communicate clearly with health professional colleagues when responding to an ecological challenge or opportunity in healthcare.	AMEE 2020
	D. Compile accurate reports for statutory & professional purposes		
KEY COMPETENCY	2.4 Develop a common	understanding of issues, problems & plans & a shared plan of action/car	e
	A. Explore problems to be addressed from patient/client encounter		
	B. Respect diversity & difference and ethnicity, gender, religion, education & culture in decision-making		
ENABLING COMPETENCIES	C. Encourage discussion, questions & interaction		
	D. Engage others in decision-making & development of plan of care/action	KS3.1 Communicate clearly with health professional colleagues when responding to an ecological challenge or opportunity in healthcare.	AMEE 2020
	E. Address challenging communication issues: obtaining consent, delivering bad news, anger, confusion & misunderstanding		

KEY COMPETENCY	F. Communicate costs and risks implicit in clinical interventions and care – avoid medico-legal issues  Convey accurate oral and/or written information about a clinical encounter
ENABLING COMPETENCIES	A. Maintain clear, accurate records (written or electronic) of all clinical encounters  B. Present oral & written reports of clinical encounters & plans – apply visual, technology & numeracy skills  KS3.1 Communicate clearly with health professional colleagues when responding to an ecological challenge or opportunity in healthcare.  C. Recognise ethical & legal issues in compiling patient/client documentation

ROLE	3 COLLABORATOR		
	Abbreviated EC	ESH Learning Objectives	Source
KEY COMPETENCY	3.1 D	emonstrate team work in a variety of situations/settings	
	A. Describe own roles & responsibilities to other professionals		
	B. Recognise & respect the diversity of roles	KS3.4 Identify how Indigenous traditional knowledge and voice can inform healthcare practice and promotion of planetary health and sustainable development in your local context.	AMEE 2020
ENABLING COMPETENCIES (EC)	C. Work interdependently and share task	as s	
	D. Collaborate with others	KVA1.3 Discuss the role of health professionals in mitigation, adaptation, advocacy and activism in terms of sustainable development, planetary health and environmental stewardship.	AMEE 2020
	E. Participate in interprofessional team meetings		

	F. Demonstrate leadership in healthcare team KVA1.1	Discuss examples of eco-ethical leadership.	AMEE 2020
KEY COMPETENCY	3.2 Pr	omote positive professional relationships	
	team members healthcare	entify how Indigenous traditional knowledge and voice can inform e practice and promotion of planetary health and sustainable nent in your local context.	
ENABLING	B. Employ negotiation skills to achieve consensus or resolve conflict		
COMPETENCIES	C. Recognise own and others' differences or limitations that may contribute to tension		
	D. Reflect on improving interprofessional & transprofessional team functioning		

ROLE	4 LEADER & MANAGER		
	Abbreviated EC	ESH Learning Objectives	Source
KEY COMPETENCY	4.1	Participate in healthcare organisations and systems	
	A. Understand the structure & functionin of healthcare systems	<sup>19</sup> K2.3 Understand how the health system contributes to the problem	Delphi R1
ENABLING	B. Work in home & community-based care settings		
COMPETENCIES (EC)	C. Participate in quality process evaluation & improvement of systems		
	D. Use problem-solving & creativity to improve & manage health care system	KS1.3 Apply critical thinking, problem-solving and systems thinking to sustainable healthcare challenges.	AMEE 2020
KEY COMPETENCY	4.2	Manage career and practice	

	A. Prioritise time, patient/client care, practice requirements, activities & personal life  B. Manage professional practice: finances, human resources & record-keeping	
ENABLING COMPETENCIES	C. Improve personal practice	KVA1.2 Understand what is expected of health professionals in their personal and professional behaviour
	D. Use information technology in managing healthcare environments	
KEY COMPETENCY	4.3	Utilize finite healthcare resources
ENABLING	A. Use resources carefully and fairly	KVA1.2 Understand what is expected of health professionals in their personal and professional behaviour
COMPETENCIES	B. Achieve cost-appropriate care using good management & evidence	
KEY COMPETENCY	4.4	Serve in administration and leadership roles as appropriate
ENABLING COMPETENCIES	A. Participate in committees & meetings	

	B. Participate in change where necessary	KS3.2 Demonstrate how to motivate behaviour change to promote environmental sustainability at an individual, professional and community level	AMEE 2020
	C. Plan elements of healthcare delivery (e.g. rosters, etc)		
KEY COMPETENCY	4.5	Provide healthcare to geographically defined communities	
	A. Deliver profession-specific services in community, hospital & other facilities		
	B. Evaluate burden of disease: local, regional, national & global		
	C. Identify health determinants of population	K1.2 Describe the interaction between local and global ecological crises and the social determinants of health.	AMEE 2020
ENABLING COMPETENCIES	D. Evaluate existing primary health-care practice & community health programme	K2.1 Discuss how the promotion of environmental sustainability generally and in healthcare can support progress on social determinants of health, health sequity and respect for cultural diversity, including Indigenous traditional knowledge.	AMEE 2020
	E. Evaluate elements of the local health system	K2.1 Discuss how the promotion of environmental sustainability generally and in healthcare can support progress on social determinants of health, health equity and respect for cultural diversity, including Indigenous traditional knowledge.	AMEE 2020
	F. Draw up a plan to manage health priorities & promote health in collaboration with others	K2.1 Discuss how the promotion of environmental sustainability generally and in healthcare can support progress on social determinants of health, health equity and respect for cultural diversity, including Indigenous traditional knowledge.	AMEE 2020

G. Determine functional links between primary & public healthcare, hospital & home-based care, & principles of ethics & human rights

ROLE	5 HEALTH ADVOCATE			
	Abbreviated EC	ESH Learning Objectives	Source	
KEY COMPETENCY	5.1	Respond to individual patient/client health needs		
	A. Identify individual health needs in cultural context	K1.1 Discuss how local and global ecological crises impact on individual patients and communities	AMEE 2020	
ENABLING COMPETENCIES (EC)	B. Promote health & disease prevention ethically & by human rights principles	KS3.2 Demonstrate how to motivate behaviour change to promote environmental sustainability at an individual, professional and community level	AMEE 2020	
	C. Advocate health needs of poor & marginalized	KS3.4 Identify how Indigenous traditional knowledge and voice can inform healthcare practice and promotion of planetary health and sustainable development in your local context.	AMEE 2020	
KEY COMPETENCY	5.2	Respond to health needs of communities		
ENABLING COMPETENCIES	A. Gain insight into functioning of local health systems, resources & health care	KVA1.3 Discuss the role of health professionals in mitigation, adaptation, advocacy and activism in terms of sustainable development, planetary health and environmental stewardship.	AMEE 2020	

B. Identify vulnerable & marginalised populations & respond appropriately	KS3.3 Demonstrate the ability to advocate for planetary health and the SDGs.	AMEE 2020
C. Identify opportunities for health promotion & disease prevention	KS3.2 Demonstrate how to motivate behaviour change to promote environmental sustainability at an individual, professional and community level	AMEE 2020
D. Enable communities to identify, prioritise & address healthcare needs		
E. Recognise & respond to competing interests within a community		
F. Apply ethical & professional principle inherent in health advocacy	es	

ROLE	6	SCHOLAR	
	Abbreviated EC	ESH Learning Objectives	Source
KEY COMPETENCY	6.1	Maintain ongoing learning locally & globally	
	A. Reflect on strengths & limitations of own knowledge & skills		
	B. Enhance knowledge & skills using a personal development plan		
ENABLING COMPETENCIES (EC)	C. Use strategies & opportunities for CPD & life-long learning		
	D. Maintain accurate records for good practice, audits & research		
	E. Document learning process – pose questions, interpret evidence & integrate learning into practice	KS2.1 Apply key policies and frameworks related to sustainable development including the SDGs to evaluate a population health challenge.	AMEE 2020

	F. Know HPCSA regulations for CPD
KEY COMPETENCY	6.2 Question practice, evidence, information & sources & apply the information
ENABLING COMPETENCIES	A. Phrase clear, answerable questions related to practice  B. Critically evaluate health-related literature to keep up to date with new developments  C. Access relevant research findings from reliable resources  D. Appraise retrieved evidence for quality and relevance & interpret findings  E. Consider research findings for own setting  F. Understand basic principles of research design & analysis & ethics  KS1.2 Describe how changes in disease burden due to environmental change may be identified, characterised and quantified and how such information can inform planning and practice to address health needs

	G. Comply with laws of plagiarism, confidentiality, intellectual property		
KEY COMPETENCY	6.3	Facilitate learning of others	
	A. Identify learning needs & outcomes of others	KS3.4 Identify how Indigenous traditional knowledge and voice can inform healthcare practice and promotion of planetary health and sustainable development in your local context.	AMEE 2020
ENABLING COMPETENCIES	B. Select teaching strategies & content to facilitate learning of others		
	C. Reflect on teaching encounters & seek feedback to guide future learning		
	D. Create supportive & enabling learning environment		
	E. Listen & provide feedback		
	F. Seek & use opportunities to develop facilitators & mentors		

ROLE	7	PROFESSIONAL		
	Abbro	eviated EC	riated EC ESH Learning Objectives	
KEY COMPETENCY	7.1	Demonstra	Demonstrate commitment & accountability through ethical practice	
	A. Exhibehavio	ibit and promote professional our	KVA1.2 Understand what is expected of health professionals in their personal and professional behaviour	Delphi R1
	B. Del	iver quality care		
ENABLING COMPETENCIES (EC)		ognize and respond to ethical, ad human rights issues		
	D. Reco	ognize and manage conflict of		
		ognize the principles and limits nt/client confidentiality		

	F. Mair	ntain professional relations		
KEY COMPETENCY	7.2	Participate in profession-led self-regulation		
		ere to ethical, professional and odes of practice		
	B. Recognize and interrogate public health policy in terms of ethics and human rights		KS2.2 Critique current environmental protections in the SA Constitution and other legislation i.t.o. how they affect other health rights of your patients, families and communities (e.g.: equity in housing, clean water, food safety, property ownership, etc.)	Delphi R1
ENABLING COMPETENCIES	C. Demonstrate accountability and fulfil regulatory & legal obligations			
		ognize, address and report essional behaviour		
		ntain professional competence n ongoing self-reflection & peer		
KEY COMPETENCY	7.3	Der	monstrate commitment to own health & sustainable practice	

ENABLING COMPETENCIES	A. Make informed career choices		
	B. Balance personal & professional priorities for health and a sustainable & effective practice	KS1.1 Evaluate the environmental impacts of a patient pathway to care and identify ways to enhance environmental sustainability.	AMEE 2020
	C. Demonstrate insight and develop problem solving strategies for physical, psychological, social & spiritual well- being		
	D. Recognize and respond to other professionals in need		