

CTF Working Group 1

Framework | Final version | September 2017

Numbers overview

24 Competencies: see below (summary on page 2)

87 Knowledge items identified

136 Behaviour competencies

Clusters with individual outcomes:

Patient care and clinical pharmacy skills competencies – pages 3 to 6

Medicines and their use related competencies – pages 7 to 9

Management competencies – pages 10 to 12

Professional competencies – pages 13 to 15

Overview of the Framework

Scientific knowledge			
Patient focus		Medicines focus	
Patient care and clinical pharmacy skills competencies		Medicines and their use related competencies	
1.	Patient consultation	6.	Development, production, analyses and control of medicines
2.	Medicine, medication safety and medical devices issues	7.	Provision of medicine and medical devices
3.	Information and communication	8.	Medicines and medical devices information and patient education
4.	Providing information	9.	Monitoring medicines therapy and medical devices
5.	Expert practice	10.	Interface management
Management knowledge			
System focus		Practice focus	
Management competencies		Professional competencies	
11.	Procurement – and management of medicines and medical devices	17.	Professionalism
12.	Hospital and medication safety management	18.	Effective communication skills
13.	Collaborative work	19.	Team work
14.	Clinical Governance	20.	Organisation
15.	Staff management	21.	Service Provision
16.	Development and research	22.	Costs systems
		23.	Training other healthcare professionals
		24.	Leadership development

Framework

Patient care and clinical pharmacy skills competencies						
Competencies		Attitude	Knowledge		Behaviour Competencies	
1.	Patient consultation	Patient oriented and safety attentive, reliable and confident	1.1	Patient Assessment	1.1.1	Can take a health status and medication history directly from the patient where this is possible, or using medical records or other relevant information sources as appropriate, to identify conditions, symptoms and the specific needs of individual patients.
					1.1.2	Can retrieve all appropriate, relevant and available information about patients' health, social status and ethnic background from different sources.
					1.1.3	Knows how basic physical health examinations are performed (<i>for example</i> : blood pressure, body mass index), can interpret and respond appropriately to such data, and when required can carry out relevant components of basic physical examination.
					1.1.4	Can document an accurate and comprehensive medication history (including medical devices, if appropriate), including information about adherence, adverse effects, and outcomes.
			1.2	Patient consent (<i>if applicable</i>)	1.2.1	Ensures that patients receive appropriate and sufficient information to obtain informed consent when this is required for procedures, treatment or research.
			1.3	Consultation or referral	1.3.1	Can appropriately refer, or seek advice about complex pharmaceutical and/or complex healthcare issues from a senior or specialist colleague, or other healthcare professional, or other service.
1.3.2	Ensures the judicious use of standard operating procedures and guidelines, especially for complex situations.					
2.	Medicines, medication safety and medical devices	Safety attentive, reliable and confident	2.1	Ensure appropriate selection of dosing regime: formulation and concentration, route and timing.	2.1.1	In collaboration with other relevant health care professionals, ensures the right medicine is given for the right reason, in the right dose, using the right route of administration, at the right time, with the right documentation, to the right person.
					2.1.2	Understands the attributes of the full range of formulations available, and routes of administration, to ensure optimal choice of medication.
					2.1.3	Considers whether medical devices for administration are required to ensure safe and effective administration.
					2.1.4	Ensures optimal time of dose has been chosen and provides appropriate solutions for missed, delayed and duplicate doses.
			2.2	Medication therapy management	2.2.1	Can evaluate patient-specific drug therapy and therapeutic problems, through monitoring of patients in health care settings. Achieved by evaluation of disease progression, any disease related complications, efficacy of drug therapy, and any drug-related adverse effects.
					2.2.2	Can design a comprehensive drug therapy plan for patient specific problems.

Patient care and clinical pharmacy skills competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
			2.3	Medication reconciliation	2.3.1	Uses an accurate and comprehensive medication history, including the use of medical devices, to identify any discrepancies and reconcile medicines, in collaboration with patients, carers and other relevant health care professionals.
					2.3.2	Communicate and resolve any identified medicines discrepancies with patients, prescribers, community pharmacist, nurse, or patient carer.
					2.3.3	Document all reconciliation changes in the appropriate records.
			2.4	Pharmacoeconomics	2.4.1	Can identify cost effective medicines and medical devices using valid and relevant pharmacoeconomic data.
3.	Information and communication	Critically thinking while gathering the information	3.1	Accessing and summarising medicines related information	3.1.1	Can effectively find and identify relevant and valid information using specific pharmacy expert databases, information services, evidence-based literature and relevant local summaries of evidence to promote rational and safe use of medicines.
					3.1.2	Can use medicines information effectively in order to undertake a review and provide a summary of the rational and safe use of medicines.
					3.1.3	Can apply relevant and valid evidence-based data for medicine and medical devices use to the care of individual patients.
			3.2	Appraisal options	3.2.1	Assesses options available for problem solving, considering possible outcomes of any actions.
			3.3	Decision making and logical approaches to decision making	3.3.1	Understands and demonstrates clear decision making actions. Can identify the most appropriate decision pathways.
					3.3.2	Is aware of one's own limits and seeks advice when necessary. Knowing what to do when one does not know what to do.
4.	Providing information	Helpful and good communicator	4.1	Provides accurate information	4.1.1	Ensures information provided is accurate, validated and understandable to other professionals, patients and carers, according to their needs.
					4.1.2	Uses effective verbal, non-verbal, listening and written communication skills to communicate clearly, precisely and appropriately.
5.	Expert practice	Responsible for own lifelong learning and development,	5.1	Pathophysiology and anatomy	5.1.1	Understands normal organ anatomy and function, the effects of disease states that affect medicines use.
					5.1.2	Can apply knowledge of pathophysiology to specific therapeutic areas and to particular patient groups (e.g. paediatric, older people, etc).
			5.2	Pharmacology and	5.2.1	Can describe and discuss the pharmacology and pharmacotherapy of drugs in routine use.

Patient care and clinical pharmacy skills competencies

Competencies		Attitude	Knowledge	Behaviour Competencies		
		self-directed		Pharmacotherapy	5.2.2	Is aware of and can discuss the importance of emerging technologies in pharmacology and pharmacotherapy (e.g. pharmacogenomics).
			5.3	Pharmaceutical technology & biopharmacy	5.3.1	Understands the scientific basis of different dosage formulations, how they are designed and how they may influence the clinical efficacy of medicines.
					5.3.2	Understands how administration, drug distribution, drug elimination influences medicines outcomes (ADME, pharmacokinetics, biopharmacy).
					5.3.3	Is able to understand the advantages and risks of the new formulations (e.g. nanotechnology, Advanced Therapy Medicinal Products [ATMPs]).
					5.3.4	Has knowledge on the purposes and risks of the adjuvant compounds in medicines formulations.
					5.3.5	Is able to make a patient oriented choice for the best individual pharmaceutical formulation to obtain optimal outcomes.
			5.4	Adverse effects and toxicology	5.4.1	Can recognise side effects of medicines and, in collaboration with other health care professionals, patients and carers, can recommend alternative treatment strategies and is able to take action, when required.
					5.4.2	Can support the management of acute toxicity and advise on appropriate antidotes.
			5.5	Microbiology and hygiene	5.5.1	Can describe the microbiological interactions associated with pharmacotherapy including resistance mechanisms and anti-microbial stewardship.
					5.5.2	Can support staff training activities regarding infection control and infection control strategies.
			5.6	High-alert medications	5.6.1	Can identify high-risk medicines and high-risk administration of medicines relevant to the healthcare setting.
					5.6.2	Can plan and implement medicines management actions to minimize the risk related to these medicines.
			5.7	Medical devices	5.7.1	Understands and applies knowledge of medical devices for drug delivery, administration and reconstitution.
			5.8	Research	5.8.1	Can describe, explain and discuss commonly used research methodologies in order to be able to participate in pharmacy practice research and clinical research.
					5.8.2	Can use benefit-risk assessments for evaluating alternative treatment strategies.
					5.8.3	Can plan, lead on, and conduct research/practice development projects* to promote safe and rational use of

Patient care and clinical pharmacy skills competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
						medicines. Able to collaborate with other healthcare professionals. * this includes audit and service evaluation projects.

Medicines and their use related competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
6.	Development, production, analyses and control of medicines	Involved and cooperative in the process	6.1	Development	6.1.1	Can demonstrate an understanding of the principles of the processes required for the development, production, formulation, quality assurance (analysis and control) and distribution of pharmaceutical products.
			6.2	Formulation	6.2.1	Applies knowledge related to the design, manufacture and performance of dosage forms and can critically appraise the inter-relationships between formulation (including excipients), drug delivery and therapeutic product.
			6.3	Production	6.3.1	Can apply the knowledge related to the quality requirements for Good Manufacturing Practice (GMP) of pharmaceutical production (on both a small and industrial scale) including Standard Operating Procedures (SOP) and the supervision standards required to achieve these quality levels.
					6.3.2	Can develop and maintain written procedures for sterile and aseptic production of medicines, total parental nutrition; this includes radio-pharmaceuticals where appropriate.
			6.4	Analysis of available medicines	6.4.1	Has an appropriate understanding of the principles and application of the common techniques for the analysis of pharmaceutical products.
			6.5	Quality	6.5.1	Can apply the knowledge and principles of quality control and quality assurance in the manufacturing of a quality pharmaceutical product.
			6.6	Distribution	6.6.1	Can apply an integrated understanding of the organisation and monitoring of the distribution of medicinal and other healthcare products including their regulations.
			6.7	New technologies	6.7.1	Works with others to ensure the effective introduction of new technologies for production and quality assurance; for example, applications of biotechnology, nanotechnology and genomics. This includes handling and distribution of medicines, formulations, reconstitution, and advanced therapy medicinal products (ATMPs).
			6.8	Qualified person	6.8.1	Can describe the roles and responsibilities of the Qualified Person, accordingly to locally applicable legislation and best practice.
			6.9	Quality management systems	6.9.1	Demonstrates familiarity with quality management systems applied to pharmaceutical products and pharmacovigilance (for example, adverse reaction reporting systems).
7.	Provision of	Considerate of	7.1	Prescription	7.1.1	Ensures prescriptions meet national legal requirements for medicines and medicinal products.

Medicines and their use related competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
	medicine and medical devices	details and legal aspects			7.1.2	Can participate in the development and updating of the hospital formulary.
			7.2	Labelling the medicine <i>(if applicable)</i>	7.2.1	Ensures medicines are labelled accurately and comply with legislation and local and national guidance, and that the label is appropriate.
			7.3	Stock management	7.3.1	Ensure effective stock management, including tracking of expiry dates, production lot numbers, and storage conditions.
7.3.2	Works with others in the organisation for monitoring the distribution of medicines and medicines-related products to efficiently maintain the supply chain, applying Good Distribution Practice (this includes the recall of stock).					
8.	Medicines and medical devices information and patient education	Informed and thoughtful	8.1	Public health and health needs	8.1.1	Where applicable, can provide lifestyle advice appropriate to the needs of the patient.
					8.1.2	Can assess an individual patient's need for information, and is able to provide relevant support appropriate for that patient. This includes a consideration of the patient's ethnic, cultural, linguistic and social background.
			8.2	Medicines information	8.2.1	Provides printed information when this would be helpful or is required by national regulation.
9.	Monitoring medicines therapy and medical devices	Proactive, knowledgeable and informed	9.1	Medicines management problems	9.1.1	Can identify patients for which ongoing monitoring is required together with other responsible healthcare professionals. This includes monitoring parameters.
					9.1.2	Can establish a plan for review of objectives and treatment outcomes together with other responsible healthcare professionals.
					9.1.3	Can ensure appropriate action is taken promptly when medicines management issues are identified and ensures that the required actions are implemented, to ensure that patient harm is avoided or minimised.
			9.2	Use of evidence based guidelines or protocols	9.2.1	Can apply current clinical guidelines and protocols, local and national, applicable to therapeutic requirements.
			9.3	Record of contributions <i>(if applicable)</i>	9.3.1	Documents information to support contributions to patient care, for example maintains pharmaceutical care plans.
			9.4	Therapeutic Drug Monitoring (TDM) / pharmacokinetic	9.4.1	Can describe the principles of bio-analytical testing to support therapeutic dose monitoring.

Medicines and their use related competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
10.	Interface management	Determined and focussed	10.1	Seamless care	10.1.1	Identifies and manages medicines-management and transfer of pharmaceutical care related to the healthcare interface.
					10.1.2	Identifies and manages the problems related to switch patient's medication to formulary medicines especially in specific groups like elderly and paediatric patients.

Management competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
11.	Procurement – and management of medicines and medical devices	Resourceful, safe and organised	11.1	Sourcing	11.1.1	Knows where medicines and medical devices can be sourced from, and is able to suggest suitable alternatives when required and in a timely manner.
			11.2	Supply chain management	11.2.1	When supply problems occur arranges alternative products for patients.
			11.3	Cost effectiveness	11.3.1	In collaboration with others, considers cost effectiveness when purchasing and dispensing stock and advising on prescribing choices (e.g. dispensing generics, bulk buying, selecting a product from several therapeutic equivalents, using sources that are recognised in each country as being best value for money. This may include wholesaler discount offers or contract purchasing).
12.	Hospital and medication safety management	Committed with a strategic and systems based approach to management	12.1	Systems approach to medication safety	12.1.1	Understands the role of medication safety as part of patient safety and quality of healthcare.
					12.1.2	Can describe systems approach to patient safety and rational medication therapy promotion.
					12.1.3	Understands the role of safety culture in organisation-wide patient safety risk management and how this culture could be promoted.
			12.2	Tools for medication safety risk management	12.2.1	Understands the principles of medicines risk management and is familiar with the basic patient safety risk management tools related to medicines.
			12.3	Role of pharmacy	12.3.1	Can describe and discuss the national healthcare system and how it functions, and the role of hospital pharmacy within it.
			12.4	Financial information	12.4.1	Has a working knowledge of organisational finances and relevant legal framework and an understanding of medicines budgets.
					12.4.2	Can describe and discuss the complexity of how medicines are financed within the health care system, including specialised funding streams and arrangements.
			12.5	Hospital organisation	12.5.1	Can describe organisational structures and functions of hospitals, and seeks to maximise the contribution medicines management makes. This encompasses how medicines are evaluated (HTA reports), selected, procured, delivered, prescribed, administered and reviewed.
					12.5.2	Understands the role of medication safety, working with others to enhance the safety and quality of medicines and their use as part of wider patient safety and quality of healthcare programmes.
			12.6	Technology automation	12.6.1	Can understand the role of technology and automation in medicines safety.

			12.7	Medical gases	12.7.1	Performs the pharmacist's role as appropriate including procurement, distribution, surveillance, safety and control.
13.	Collaborative work	Cooperative and motivated	13.1	Drug & Therapeutic Committee	13.1.1	Can describe the functions of a Drug and Therapeutics Committee, and can critically appraise formulary applications. This includes medicines safety implications, financial implications, and implications for treatment pathways and protocols.
			13.2	Infections' Control Committee	13.2.1	Is able to be the responsible member of the infections' control team.
					13.2.2	Can work to improve the rational use of antibiotics and to reduce antibacterial resistance.
14.	Clinical Governance	Compliant	14.1	Working Environment	14.1.1	Applies legal and professional requirements for a safe system of work, such as the Code of Ethics, Hygiene, Standards, Health and Safety at Work.
					14.1.2	Identifies possible deficiencies (e.g. lack of information sources) in the working environment as contributing factors to medication errors and as a risk to patient safety.
					14.1.3	Understands the role of medication safety and clinical governance, working to enhance the safety and quality of medicines and their use as part of wider, continuous patient safety and quality of healthcare programmes.
			14.2	Risk Management	14.2.1	Records and reports patient safety incidents such as dispensing and prescribing errors and patient complaints in line with local and national policies.
					14.2.2	Understands and applies quality systems.
			15.	Staff management	Supportive, thoughtful towards others and assertive	15.1
15.2	Staff development	15.2.1				Can support staff in their professional and personal development.
15.3	Performance management	15.3.1				Knows how to carry out staff appraisals.
15.4	Employment issues	15.4.1				Is aware of employment legislation, including statutory rights and disciplinary procedures and has competent interviewing skills.
16.	Development and research	Committed and innovative	16.1	Application	16.1.1	Can contribute to the care of patients by the appropriate application of evidence based medicine.
			16.2	Ethics committee	16.2.1	Can describe and discuss common ethical principles and their application in research.
			16.3	Clinical trials	16.3.1	Understands the differences and significant of clinical trials phases, the importance of GCP and the role of pharmacy in clinical trials.
					16.3.2	Can ensure the pharmacy role in storing, preparing, dispensing and the destruction of investigational medicines.

Professional competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
17.	Professionalism	Assertive, rigorous and objective	17.1	Confidentiality	17.1.1	Respects and maintains the individual's right to confidentiality and understands when information about the patient's condition can be shared with colleagues.
			17.2	Confidence	17.2.1	Works with patients, other health care professionals, colleagues and carers in ways that will inspire confidence and generate professional respect.
			17.3	Responsibility of own action	17.3.1	Takes responsibility for one's own action. Is prepared to give an account of professional judgments, acts and omissions in relation to own professional roles.
			17.4	Responsibility for patient care	17.4.1	Takes responsibility for patient care, and recognising their needs as individuals.
			17.5	Recognition of limitation	17.5.1	Is aware of one's own and other's professional and personal limitations and seeks advice or refers when necessary (knowing what to do when you do not know what to do).
			17.6	Quality and accuracy of documentation	17.6.1	Ensures that legally required information is documented in a timely and accurate manner.
			17.7	Legislation	17.7.1	Is aware of legislation that is directly linked to the delivery of a service to an individual patient and all any other activity and acts accordingly.
			17.8	Ethics	17.8.1	Exercises transparency and probity in the relationship with pharmaceutical industry.
					17.8.2	Respects the rights of patients in therapeutic decisions and assists in providing information to facilitate their decision (e.g. informing patients on risks associated with medicines).
					17.8.3	Recognises ethical dilemmas in practice and engages with the team and patient/carers in working through these in a structured manner.
17.9	Responsibility for CPD	17.9.1	Understands the need for continuing professional development, takes a personal responsibility for it, and demonstrates that commitment.			
		17.9.2	Complies with local CPD requirements; can self-assess competence and reflect on performance.			
18.	Effective communication skills	Attentive, reliable and confident	18.1	Patient/Carer	18.1.1	Communicates in a clear, accurate and concise way whether verbally, electronically or in writing, at a level appropriate to each patient/carers.
			18.2	Other healthcare professionals and	18.2.1	Communicates with other healthcare professionals and colleagues in a clear, precise and appropriate way.

Professional competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
				staff	18.2.2	Is self aware when communicating with other healthcare professionals and staff and is able to use a range of communications skills and styles, selecting the most appropriate one for a specific situation.
			18.3	Mentor/tutor	18.3.1	In meetings with trainees, ensures time is allocated for discussion of progress, including strengths and weaknesses.
			18.4	Transfer of care	18.4.1	Communicates with other organisations that affect the delivery of patient care, especially involving the transfer of care, and including information on reconciliation of medication on the base of the patient's acute state and specific needs.
19.	Team work	Cooperative, willing to guide, coach and motivate	19.1	Pharmacy team	19.1.1	Understands the roles and responsibilities of pharmacy team members, knows how the team works, respects the skills and contributions of others, and recognises one's own limitations.
			19.2	Multi-disciplinary team	19.2.1	Recognises the value of other healthcare professionals working in the inter-professional team and seeks to establish co-operative working relationships with colleagues, based on a mutual understanding of and respect for each other's roles.
					19.2.2	Understands own role as a medicines expert in an inter-professional patient care team.
			19.3	Organisational team	19.3.1	Recognises the roles and skills of non-clinical staff and works in collaboration with them.
20.	Organisation	Practical, safe, punctual and realistic	20.1	Prioritisation	20.1.1	Prioritises tasks appropriately, manages time efficiently and responds flexibly to changing circumstances.
			20.2	Punctuality	20.2.1	Ensures satisfactory completion of tasks with appropriate handover; recognises the importance of timeliness and attention to detail.
			20.3	Initiative	20.3.1	Demonstrates the ability to work independently within one's own limitations.
			20.4	Safety	20.4.1	Puts patient safety first when making decisions with or for patients.
21.	Service Provision	Strategic thinking and innovator	21.1	Quality of service	21.1.1	Reviews services provided to ensure they meet local and national standards and specifications.
					21.1.2	Participates actively in local or national quality improvement projects involving pharmacy services.
			21.2	Service development	21.2.1	Identifies new services or ways of working to support local plans or projects which address local health needs.
					21.2.2	Contributes to the sustainability and works to maintain the availability of the service.
22.	Costs systems	Use of resources	22.1	Service reimbursement (if applicable)	21.1.1	Uses relevant reference source to ensure appropriate and accurate reimbursement.

Professional competencies

Competencies		Attitude	Knowledge		Behaviour Competencies	
			22.2	Prescribing budgets <i>(if applicable)</i>	22.1.1	Considers cost-minimisation when appropriate as part of medication reviews and medicines use reviews.
23.	Training others healthcare professionals	Willing and collaborative	23.1	Pharmacy staff	23.1.1	Ensures that staffs, under ones' responsibility are competent to undertake the tasks allocated to them.
					23.1.2	Ensures that staff, under one's responsibility, have access to appropriate education and training.
			23.2	Other healthcare professionals	23.2.1	Participates actively in training other healthcare professionals and non clinical staff.
24.	Leadership development	Reliable and confident	24.1	Role model	24.1.1	Understands and demonstrates key attributes of a role model. Acts as a role model.
			24.2	Mentorship	24.2.1	Able to demonstrate mentorship behaviour.