# Pharmacy Technician Entry-to-Practice Assessment Blueprint



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#### Introduction

With the introduction of the National Competency Standards for Entry-Level Pharmacy Technicians, the Entry-to-Practice (ETP) competency assessment framework was developed by the Pharmacy Technicians Training and Development Committee to ensure minimum practice standards of entry-level pharmacy technicians. For students, this framework aims to help them to be more job-ready as pharmacy technicians upon attainment of the Diploma in Pharmaceutical Science.

To support the implementation of the ETP competency assessments, the ETP Competency Assessment Blueprint was developed to define the passing criteria for each of the performance criteria listed in the National Competency Standards for Entry-Level Pharmacy Technicians (2015). The ETP performance criteria could be assessed by polytechnics, PSS or healthcare institutions during internships or upon on-boarding. Selected performance criteria to be strengthened by training healthcare institutions during structured internships are listed in the ETP assessment checklists. These checklists were developed in consultation with preceptors across public healthcare institutions to facilitate tracking of assessments and to ensure that relevant competency areas are covered during the structured internships.

The approved assessment methods are as follows: **Direct Observation (DO)**, **Verbal Response (VR)**, **Written Assessment (WA) OR Multisource Feedback (MSF)**. The recommended assessment method(s) for each performance criteria are marked ( $\sqrt{}$ ) in this document. Assessors could choose to assess students or trainees through **one OR more** of the approved modes of assessment with necessary customization based on trainee's learning style.

The scope of drug knowledge for Pharmacy Technician ETP assessments is listed in the Core Drug List (CDL). The CDL is a list of drugs to scope relevant questions for assessments at schools and healthcare training institutions.

For further information on the Pharmacy Technicians ETP competency standards and the ETP assessment checklists are available online via MOH Health Professional Portal:

https://www.moh.gov.sg/hpp/all-healthcare-professionals/guidelines/GuidelineDetails/competency-standards

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#### **DOMAIN 1: Support Optimal Use of Drugs**

Performance Criteria	Passing Criteria	Assessment Method			
		DO	VR	WA	MSF
1.1 Understand the general principles in clinical pharmacology and therapeutic use(s) of prescribed medicines	Able to understand basic clinical pharmacology of the clinical condition and potential reason for a drug therapy to be selected for a clinical condition		V	1	
1.2 Understand the use of drugs in special population including pregnant women, children and elderly	<ul> <li>i. Assess a minimum of TEN unique prescriptions and able to:</li> <li>a) Check that the dosing is appropriate for special population (including pregnant women, children or elderly) and special patient groups (such as renal or liver impairment);</li> <li>b) Identify contraindication(s);</li> <li>c) Refer to pharmacists for review</li> </ul>	7	1	1	

Elei	Element 1 – Demonstrate knowledge of the general principles of drug actions (cont.)										
Per	formance Criteria	Passing Criteria	А	ssessme	nt Meth	od					
			DO	VR	WA	MSF					
1.3	Explain and counsel patients on the indication of the drugs, drug actions, appropriate storage conditions, signs and symptoms of common and serious side effects and when to seek medical attention	i. Assess a minimum of TEN unique prescriptions and able to explain and counsel patient accordingly	1	√							
1.4	Identify common/significant drug-related problems in prescriptions and respond in accordance with organisational guidelines	Assess a minimum of TEN unique prescriptions and able to identify drug-related problems in prescriptions and respond accordingly	1	<b>√</b>	1						
1.5	Know common medications by generic and proprietary brand names	<ul> <li>i. Able to identify, using appropriate references, 100% of the commonly prescribed medications by generic &amp; proprietary brand names based on Core Drug List for Pharm Tech ETP assessment</li> </ul>		1	1						
1.6	Use available sources of information or escalate to the appropriate authorities when in doubt	<ul> <li>i. Assess a minimum of TEN unique problematic prescriptions or simple enquiries by patient and is able to identify drug-related problem in prescription and able to demonstrate the use of drug references or made reference to hospital policies and the escalation procedure when in doubt</li> </ul>	٧	1							

Elei	nent 2 – Providing information rela	Element 2 – Providing information related to medications and general health products										
Per	formance Criteria	Passir	ng Criteria	А	ssessme	nt Metho	od					
				DO	VR	WA	MSF					
2.1	Demonstrate understanding and able to answer simple enquiries from patients regarding basic drug indications, drug dosages, common side effects and drug interactions	i.	Assess a minimum of TEN drug or product enquiries and MUST be able to address ALL enquiries from patients (minimum of THREE should be acute medications and a minimum of THREE chronic medications)	√	√							
2.2	Provide appropriate advice on simple enquiries from patients	i.	Assess a minimum of FIVE drug or product enquiries and MUST be able to address ALL enquiries and provide advice accordingly	1	1							
		ii.	Able to demonstrate the ability to refer queries to relevant staff when it is beyond the scope of own work and knowledge.	1	1							
2.3	Check understanding of patient/caregiver on instructions/ information	i.	Able to assess patient/care giver understanding on instruction through read back process	1								
	provided	ii.	Able to demonstrate the ability to utilize appropriate interpersonal and communication skills to engage their patients / customers to assess understanding	V								

Element 2 – Providing information related to medications and general health products (cont.)								
Performance Criteria	Passing Criteria	А	Assessment Method					
		DO	VR	WA	MSF			
2.4 Use available sources of information or seek clarification from supervisor/ pharmacist when in doubt	<ul> <li>i. Assess a minimum of TEN unique prescriptions or drug/product enquiries by patient and is able to demonstrate the use of drug references or made reference hospital policies and seek clarification effectively and accurately when needed</li> </ul>	1	√					

Standard 1.2 - Comply with medicati	on safety practices								
Element 1 – Demonstrate understanding of medication safety									
Performance Criteria	Passing Criteria	Assessment Method							
		DO	VR	WA	MSF				
1.1 Demonstrate understanding of medication safety practices	<ul> <li>i. Able to identify and describe the intention of medication safety practices around the workplace</li> </ul>	<b>✓</b>	V	1	1				
1.2 Comply with medication safety practices	<ul> <li>Able to demonstrate compliance with the checking of the medications steps against the prescription (Right drug, patient, route, frequency, dose, time and dosage form)</li> </ul>	1	٧		1				
	ii. Able to demonstrate compliance with the good dispensing guideline or hospital policies, handling of Look-alike and Sound-alike drugs (LASA), High Alert Medicines (HAM)	1	1		1				

Ele	Element 2 – Maintain a working environment that promotes medication safety									
Pei	Performance Criteria		ng Criteria	Assessment Method						
				DO	VR	WA	MSF			
2.1	Maintain a working environment that promotes safety	i.	Able to follow with institution policies and procedures on safe handling of medications (e.g. LASA & HAM policy, packing procedures etc.)	√			7			
2.2	Report and handle near-miss incident or medication error	i.	Able to recognise and to escalate near miss and/or medication error according to institution's Standard Operating Procedure (SOP)	1			1			

#### **DOMAIN 2: Dispense Medications**

Element 1 – Validate prescriptions	Province City to						
Performance Criteria	Passing Criteria		Assessment Method				
		DO	VR	WA	MSF		
1.1 Check the authenticity of prescriptions and identity of prescribers	<ul> <li>i. Assess a minimum of TEN non-CD prescriptions or CD prescriptions and able to ascertain the legal validity of ALL of them</li> </ul>	٧	<b>V</b>	1			
	ii. Able to identify fraudulent prescriptions when presented with one	1	1	1			
	iii. Able to list out or verbalise the legal requirements of a legal prescription in Singapore		1	1			
	iv. Able to list out or verbalise at least THREE common drugs classes (e.g. narcotics, benzodiazepines, psychotropics) that have the potential to be abused or misused		<b>V</b>	٧			
1.2 Confirm and verify that the prescriptions comply with all legal requirements and	i. Able to ACCURATELY perform verification/confirmation for a minimum of TEN prescriptions received verbally or electronically	1	1	1			
pharmacy practice guidelines	ii. Able to articulate the institutional prescribing guidelines for commonly used drugs and formulary restrictions and identify prescriptions or medication orders that deviate from it	V	1	V			

Elen	nent 1 – Validate prescriptions (co	ont.)				
Perf	ormance Criteria	Passing Criteria	Ass	sessmen	t Meth	od
			DO	VR	WA	MSF
	Act to ensure fraudulent or illegal prescriptions are not	i. Able to halt the dispensing of fraudulent or illegal prescriptions when presented with one	1	1	1	
	dispensed	ii. Able to demonstrate follow-up actions upon identification of illegal prescriptions	1	1	1	
Elem	nent 2 – Check medication orders	and perform simple interventions		l		
Perf	ormance Criteria	Passing Criteria	Ass	sessmen	t Meth	od
			DO	VR	WA	MSF
	Read prescriptions to ensure they are accurate, complete and clearly communicate the prescriber's intended treatment	<ul> <li>i. Able to perform checks on a minimum of FIVE prescriptions and identify any incomplete / inaccurate information presented</li> </ul>	√	√	1	
	Identify required drugs and ingredients by the International Non-proprietary Name (INN), generic or common name or brand name	i. Able to identify, using appropriate references, generic and trade names (where relevant) of 100% of the Core Drug List for Pharm Tech ETP Assessment	V	<b>√</b>	1	
2.3	Compare individual patient medication history and current medication information	<ul> <li>i. Able to ACCURATELY identify changes to medication order, and/or to clarify discrepancies based on individual patient medication history and current medication information for a minimum of FIVE patients</li> </ul>	1	٧	1	

Elei	ment 2 – Check medication orders	and perform simple interventions (cont.)				
Per	formance Criteria	Passing Criteria	Ass	sessmen	t Metho	od
			DO	VR	WA	MSF
2.4	Obtain enough information required to dispense medicines from the patient or caregiver	<ul> <li>Assess a minimum of FIVE prescriptions/medication orders for special populations such as paediatrics to obtain information like age and weight of patient in order to verify dosing</li> </ul>	√	√	1	
		ii. Able to accurately calculate the dose of a minimum of TEN different drugs that are dosed by weight	1	1	√	
		iii. Able to obtain appropriate references and refer patients from special populations to pharmacists	1	1	1	
2.5	Identify common drug-related problems in prescription/medication orders	<ul> <li>i. Able to ACCURATELY check a minimum of TEN prescriptions/medication orders for appropriate dosage form, dose, frequency, route and/or duration of therapy</li> </ul>	1	1	1	
		ii. Able to identify drug-related problems in TEN unique prescriptions	1	1	1	
2.6	Contact prescriber for intervention in accordance with organisational guidelines	<ul> <li>i. Able to contact the prescriber or pharmacist for interventions to a minimum of FIVE prescriptions/medication orders, identify oneself and explain clearly the purpose of the call</li> </ul>	1	1		

Element 2 – Check medication orders	and perform simple interventions (cont.)				
Performance Criteria	Passing Criteria	Ass	essmen	t Metho	od
		DO	VR	WA	MSF
2.7 Recommend optimal medicine, dosage form, dose, frequency, route and/or duration of therapy for patient and provide justification if needed	<ul> <li>i. Perform a minimum of FIVE recommendations to ensure appropriate medicine, dosage form, dose, frequency, route and/or duration of therapy for patient and provide justification if needed</li> </ul>	٧	√	1	
	ii. Able to describe interventions that should be escalated to pharmacist		1	1	
	iii. Able to refer the case to a pharmacist if prescriber is not agreeable to the recommendation	1	1		
2.8 Confirm outcome of intervention with prescriber	Able to read-back verbally or communicate and receive confirmation for a minimum of FIVE recommendations and follow up actions needed for the interventions	1	1	1	
2.9 Record intervention	<ul> <li>Able to document a minimum of FIVE interventions and outcomes in accordance with professional standards and organisational procedures</li> </ul>	1	1	1	
2.10 Refer to supervisor/pharmacist when in doubt	<ul> <li>i. Able to refer patients/caregivers to a pharmacist, doctor or other healthcare professionals for the following cases or whenever in doubt. For example, pregnant patients, breastfeeding mothers, elderly with multiple conditions/medications, paediatric patients, customers seeking recommendation of pharmacy-only medications.</li> </ul>	√	٨	1	

Ele	ment 3 – Confirm availability of me	edicine	s					
Per	formance Criteria	Passing Criteria		Assessment Method				
				DO	VR	WA	MSF	
3.1	Aware of the institution's drug formulary and availability of prescribed medicines, and special arrangement needed to	i.	Able to identify the legal classification of drugs (e.g. GSL, PM, POM, CD) and articulate the special arrangements (if applicable) needed to supply them	√	√			
	supply certain prescribed medicine not readily available	ii.	Able to make use of appropriate references to find out if drugs belong to the formulary and the requirements for supply	√	1			
		iii.	Able to demonstrate the steps needed for emergency supply of drugs in accordance with organizational guidelines	٧	1			
		iv.	Able to refer cases of emergency supply to pharmacist	1	1			
3.2	Liaise with prescribers to identify suitable alternative products where supply	i.	Able to use appropriate references to verify required product and its availability and to follow institution's SOP for handling of supply issues	1	1			
	difficulties are apparent	ii.	Able to verify information with a pharmacist before making the recommendations to prescribers	1	1			
		iii.	Able to ACCURATELY document the alternative recommendations on prescriptions/medication orders	V		1		

Element 3 – Confirm availability of me	dicines (cont.)					
Performance Criteria	Passing Criteria	Assessment Method				
		DO	VR	WA	MSF	
3.3 Accept responsibility for advising patients/caregiver on any issue likely to cause a delay to medicines being dispensed	<ul> <li>i. Able to use the appropriate language and tone when communicating with patients/caregiver to ensure professionalism</li> </ul>	√	1			
	<ul> <li>ii. Able to address questions from patients/caregivers regarding availability of medicines such as lead time, quantity of medication available for supply</li> </ul>	1	1			
	iii. Able to advise patients/caregiver where and when the medicine can be obtained if not available	1	1			
	<ul> <li>iv. Able to follow up and ensure that patients/caregivers obtained the medicine as per communicated</li> </ul>	1	1			

Standard 2.2 – I	Prepare prescribed n	nedicine	es				
	cess prescriptions						
Performance Cr	iteria	Passir	ng Criteria	As			
				DO	VR	WA	MSF
	ne order in which ns are processed	i.	Able to prioritise order for prescriptions based on factors such as urgency of clinical need (e.g. now, stat and regular orders), preparation time required and patient safety under the supervision of a pharmacist				<b>√</b>
data are en	t the prescription stered accurately t's medication	i.	Able to demonstrate proficiency in operating computerized dispensing software packages, where applicable, independently in all aspects relating to dispensed medications and patient medication profiles	1	√		
		ii.	Able to check that the prescription in the pharmacy dispensing system is complete and accurate prior to confirming the order	1			
1.3 Perform ph calculations		i.	Able to check for accuracy in prescription processing, for a minimum of TEN prescriptions, taking into account:  a) dose b) frequency c) duration d) strength of medication e) quantity supplied in repeat prescriptions	<b>V</b>	1		

Element 2 – Pack Medications					
Performance Criteria	Passing Criteria	Ass	sessmen	t Metho	od
		DO	VR	WA	MSF
2.1 Ensure that the medications are packed accurately and appropriately according to the prescriptions	<ul> <li>i. Able to pick the right product, dosage form and quantity as specified by the prescriptions in accordance to institutional packing standards and SOP</li> </ul>	<b>√</b>	√		
	ii. Able to determine integrity of products by checking expiry dates, colour, product condition (e.g. broken tablets, difference from usual appearance) or other factors which might affect product integrity or stability	√	√		
	iii. Able to select an appropriate container for product repackaging based on quantity, stability, safety, legal requirements, and patient's requirements	1	1		
Element 3 – Label Medications					
Performance Criteria	Passing Criteria	Ass	sessmen	t Metho	od
		DO	VR	WA	MSF
3.1 Apply legible, comprehensible and complete labels to packed medicines	<ul> <li>i. Able to describe requirements for a medication label to contain (at a minimum): a) name of patient; b) name and address of approved institution; c) date of dispensation; d) name and strength of drug and e) direction for use</li> </ul>	√	√		
	ii. Able to affix label to ensure important information such as expiry date, batch number, dosing instructions and storage requirements are appropriately displayed	1	1		

Standard 2.3 – Supply Medications					
Element 1 – Supply medications und Performance Criteria	Passing Criteria	۸۵	sessment	t Mothe	.d
r errormance criteria	rassing criteria		VR	WA	MSF
1.1 Check that the medications and the labels are prepared in accordance to the prescriptions	For a minimum of TEN prescriptions:  i. Able to articulate and demonstrate types of information to be checked on label	DO √	√		
	ii. Able to demonstrate checking of medications to be supplied in accordance with prescription	1	1		
	iii. Able to identify all discrepancies (if any) between prescription and label and/or packed medications	1	1		
	iv. Able to report discrepancies (if any) to supervisor with suggestions on corrective actions required	1	√		
1.2 Ensure medicines supplied are issued to the correct patient	i. Able to demonstrate or articulate the checks on at least two patient identifiers (e.g. name, NRIC or address) before dispensing	1	√		
1.3 Check drug allergy status of patients, and identify common drug interactions and	i. Able to demonstrate checking and documentation of allergy status of patients	1	√		
contraindications	ii. Able to identify and describe the common drug interactions and contraindications that may occur with the drugs listed in the Core Drug List	1	√		
	iii. Able to demonstrate an intervention to prevent supply of inappropriate medications to the patient	1	1		

Eler	nent 1 – Supply medications und	er pha	rmacist's supervision (cont.)		Element 1 – Supply medications under pharmacist's supervision (cont.)									
Per	formance Criteria	Passi	ing Criteria	Ass	essmen	t Metho	od							
				DO	VR	WA	MSF							
1.4	Take prompt action to minimise the impact of dispensing errors on patients	i.	Able to demonstrate ways to identify potential risks of medication errors (e.g. look-alike, sound-alike drugs listed within the organisation's formulary)	√	√									
		ii.	Able to articulate and adhere to the organisational guidance for prevention of medication errors (e.g. medications with similar sounding names are separated into separate sections or shelves)	1	√									
1.5	Communicate with patient to obtain relevant or additional information related to medication compliance and	i.	Able to articulate ways to request for relevant information from patients (with examples of appropriate questions to be asked) while establishing good rapport	1	1									
	adverse drug reactions	ii.	Able to obtain relevant and accurate information from patients with regards to medication compliance and adverse drug reactions	1	1									
1.6	Know when to refer to pharmacists when problem arises during dispensing	i.	Able to identify and articulate examples of situations which will require referral to other healthcare professionals	1	1									
	process	ii.	Able to articulate examples of situations which will require escalation to the appropriate persons	1	1									
		iii.	Able to identify the appropriate references to be used to obtain different types of information and refer to pharmacist if in doubt.	٧	V									

Eler	nent 2 – Provide basic counsellin	g to pat	tient when supplying medications				
Per	formance Criteria	Passir	ng Criteria	Ass	essmen	t Metho	od
				DO	VR	WA	MSF
2.1	Explain to patient/caregiver the name, strength, dosage form, indication, dose of medicines and any common side effects and precautions to be observed when using the medicines	i.	<ul> <li>Able to apply technical knowledge to:</li> <li>a) Supply medications safely, accurately and efficiently within defined scope</li> <li>b) Utilize essential counselling points when dispensing</li> <li>c) Utilize Pharmacy references and software effectively and accurately to obtain information</li> </ul>		√		
		ii.	Communication skills:  a) Able to demonstrate flexibility in communication skills to adjust to the patients understanding b) Able to demonstrate respect for diversity and cultural, ethnic, and age-specific differences in patients c) Able to demonstrate effective listening skills and elicit and provide information using effective explanatory, questioning, and writing	1	1		
2.2	2 Explain to patient/caregiver how to administer the medications correctly	i.	Able to explain the mode of administration clearly and correctly to a level suitable for the patients understanding	1	1		
		ii.	Able to provide and explain suitable materials and references to patients	1	1		
		iii.	Able to show the patient or the caregiver the correct method to administer the medications	1	√		
		iv.	Able to ensure patient has understood the instructions	1	1		

Element 2 – Provide basic counselling	Element 2 – Provide basic counselling to patient when supplying medications (cont.)									
Performance Criteria	Passing Criteria		Assessment Method							
		DO	VR	WA	MSF					
2.3 Inform patient/caregiver of the storage conditions and special handling of medications	<ul> <li>i. Able to explain clearly storage conditions verbally and when available, through the use of pamphlets and videos</li> </ul>	1	1							
2.4 Check understanding of patient/caregiver on instructions or information	<ul> <li>Able to use appropriate questioning methods to assess the patient/caregiver's understanding</li> </ul>	٧	1							
provided	<ul> <li>ii. Able to demonstrate appropriate problem solving skills if the patient/caregiver shows sign of misunderstanding</li> </ul>	V	1							

Standard 2.4 – Assist in M	edication Reconc	liation							
		graphic and medication use record							
Performance Criteria	erformance Criteria Passing Criteria				Assessment Method				
			DO	VR	WA	MSF			
1.1 Assist the pharmacist obtaining patient's demographic and meduse record in accorda	i. dication	separate occasions (where applicable): Able to demonstrate the steps to access patient past and current medication records	1	<b>√</b>					
organisational proced	ures ii.	Able to articulate comprehension of patient's demographic data, drug allergy and medication use from patient information records	<b>√</b>	√					
	iii.	Able to articulate requests for patient's demographic data, social history, drug allergy and medication use to complete patient information record	1	1					
1.2 Determine quantities patient's own medica match against medica records	tions and i.	separate occasions:  Determine quantities of patient's own medications via  physical counting and/or interpretation of electronic records  accurately	1	1					
	ii.	Able to perform pharmaceutical calculations to compute quantities in medication orders / records	1	1					
	iii.	Able to identify and report to supervisor all discrepancies between physical medications and medication orders / records	<b>\</b>	√					

Performance Criteria	Passing Criteria	Assessment Method				
		DO	VR	WA	MSF	
1.3 Perform up-to-date documentation of patient's medication information in patient records	<ul> <li>i. Able to articulate the professional standards and guidelines in documentation of medication records.         Example:         <ul> <li>Handwriting is legible</li> <li>Free of error-prone, non-approved and "Do Not Use" abbreviations/symbols and dose expressions</li> <li>Alert the pharmacist of unclear information</li> <li>Double-check information entries</li> <li>Document accountability for information entries (e.g. personal log-in for electronic records; initial on paper records)</li> <li>Free of ambiguous statements or corrections</li> </ul> </li> <li>(Reference: National Medication Safety Guidelines Manual, MOH Medication Safety Practice Guidelines and Tools, PSS Good Pharmacy Practice Guide)</li> </ul>	V	V			
	ii. Able to articulate steps to verify patient medication information are up-to-date	√	√			
	iii. Able to document necessary updates of patient's medication information	1				

#### **Domain 3: Compound Pharmaceutical Products**

Performance Criteria	Passing Criteria	Asse	essmen	t Meth	od
		DO	VR	WA	MSF
1.1 Distinguish between sterile and non-sterile extemporaneous products and the corresponding	i. Able to describe the differences between sterile and non- sterile extemporaneous products and to list examples of each		1	√	
work environment	ii. Able to describe appropriate work environment required for the preparation of sterile and non-sterile products		1	1	
1.2 Describe principles behind Good Manufacturing Practice, including quality control and	<ul> <li>i. Able to describe the principles of Good Manufacturing Practice (GMP)</li> </ul>		1	1	
quality assurance practices	ii. Able to identify extemporaneous products which have not been prepared in accordance to best practice		1	1	

Eler	nent 2 – Prepare for small-scale c	ompounding of non-sterile extemporaneous products				
Per	formance Criteria	Passing Criteria	Ass	essmen	t Meth	od
			DO	VR	WA	MSF
2.1	Select formulation corresponding to the non-sterile extemporaneous product to be compounded	i. Able to select for the most updated formulation	√			
2.2	Understand the formulation instructions, including preparation methods	i. Able to interpret common terminology and pharmaceutical abbreviations accurately	1		√	
		ii. Able to interpret the formulation preparation steps accurately	1		√	
2.3	Differentiate active ingredients from excipients	i. Able to identify the active ingredient (s) based on the formulation	1		1	
2.4	Prepare work area for compounding activity	<ul> <li>i. Able to demonstrate appropriate cleaning of the work area before compounding activities and exhibit a conscious effort to keep the work area clean at all times</li> </ul>	1			
		ii. Able to organise work area such that compounding can proceed in an orderly and unimpeded manner	1			
2.5	Calculate the weight / volume / quantity, dilutions and percentages required for each of the raw ingredients in the product	i. Able to perform calculations to determine the amount of raw ingredients required for the product accurately	√		٧	

Ele	ment 2 – Prepare for small-scale o	compou	nding of non-sterile extemporaneous products (cont.)				
Per	formance Criteria	Passing Criteria		Ass	essmen	t Meth	od
				DO	VR	WA	MSF
2.6	Prepare raw ingredients for compounding according to formulations/worksheet	i.	Able to obtain adequate and the correct strength and form of raw ingredients for compounding	√			
	specifications	ii.	Able to demonstrate conscious effort to check that each ingredient is fit for use in terms of pharmaceutical grade, expiry date and signs of deterioration	√			
2.7	Prepare tools and equipment required for compounding	i.	Able to select for appropriate tools and equipment for compounding	√			
		ii.	Able to demonstrate conscious effort to check that tools and equipment are maintained, calibrated and in good working condition before compounding activities	√			
		iii.	Able to demonstrate appropriate cleaning of tools and equipment required for compounding activities	1			
2.8	Document accurately and completely on the worksheet	i.	Able to complete documentation	1		1	
2.9	Prepare label consistent with labelling requirements and details on the worksheet, including handling and storage instructions	i.	Able to prepare label based on standard requirements for labelling of non-sterile extemporaneous products, including handling and storage instructions	٨		٧	

Elei	ment 3 – Perform small-scale com	oounding of non-sterile extemporaneous products				
Per	formance Criteria	Passing Criteria	Ass	essmer	t Meth	od
			DO	VR	WA	MSF
3.1	Employ techniques to minimize contamination of non-sterile extemporaneous products	<ul> <li>i. Able to demonstrate personal hygiene and don appropriate attire</li> </ul>	√			
		ii. Able to demonstrate proper techniques of hand hygiene	<b>V</b>			
3.2	Measure quantities of raw ingredients required according to worksheets	i. Able to measure or weigh required raw ingredients accurately	<b>V</b>			
3.3	Adopt a systemic process for combining ingredients that is consistent with sound	i. Able to plan and work in a systematic manner to prevent confusion and potential error or mix-ups	√			
		ii. Able to demonstrate the appropriate compounding techniques (e.g. grinding, mixing, blending) and in appropriate sequence in accordance to worksheet requirements	<b>√</b>			
		iii. Able to demonstrate use of appropriate tools and equipment for compounding in accordance to worksheet requirements	√			
3.4	Obtain appropriate authorisations/ checks at designated points	i. Able to follow procedure to obtain appropriate checks as indicated on worksheet	٧			

Elei	ment 3 – Perform small-scale com	oounding of non-sterile extemporaneous products (cont.)				
Per	formance Criteria	Passing Criteria	Assessment I			od
			DO	VR	WA	MSF
3.5	Compound under supervision, in compliance with worksheet specifications	<ul> <li>Able to demonstrate compliance with worksheet specifications during the compounding process</li> </ul>	1			
		ii. Able to report any concerns in using defective product to supervisor	1	1		
3.6	Perform visual inspection on finished non-sterile extemporaneous product for	<ul> <li>i. Able to check finished products for particulate contamination, uniform mixing, signs of instability</li> </ul>	1			
	particulate contamination and homogeneity	ii. Able to report concerns to supervisor on compromises to the integrity of products and consumables	V	√		
3.7	Report to supervisor when there are doubts/concerns or unforeseen incidents/deviations/exceptions in work activities immediately	i. Able to report concerns to the supervisor on any deviation from standard procedures	1	1		

Eler	nent 4 – Perform proper packagin	g, labell	ing, storage and documentation of the non-sterile extemporan	eous pro	ducts		
Per	formance Criteria	Passing	g Criteria	Ass	essmen	t Meth	od
				DO	VR	WA	MSF
4.1	Pack finished non-sterile extemporaneous products using appropriate storage containers and closures in compliance with worksheet specifications	i.	Able to perform proper packing using appropriate storage containers and closures	√			
4.2	Label finished non-sterile extemporaneous products correctly including any auxiliary labels	i.	Able to label finished product in accordance to legal requirements	√			
4.3	Place final non-sterile extemporaneous product in appropriate storage area/conditions	i.	Able to store finished products	٧			
4.4	Complete, reconcile and file compounding records	i.	Able to complete all documentation and compounding records and reconciling differences arising between records and physical product/raw materials	<b>V</b>			
		ii.	Able to maintain all records in accordance to legal requirements	1			
4.5	Reinstate and clean work area	i.	Able to demonstrate appropriate cleaning of tools, equipment and work area after preparation	1			
4.6	Dispose of waste correctly	i.	Able to demonstrate disposal of waste materials properly	1			

### **Domain 4: Drug Distribution and Supply**

Performance Criteria	Passing Criteria	Assessment Method			
		DO	VR	WA	MSF
1.1 Receive products and report to supervisor when there are	i. Able to describe the process of receiving pharmaceutical goods	\ √	√	√	
deviations or breakages of products	ii. Able to describe the management of breakages, damage and/or expiring pharmaceutical products	√	√	1	
1.2 Store products in accordance with manufacturers' guidelines	Able to identify storage requirements of pharmaceutical products in the pharmacy	1	√	1	
	ii. Able to describe product storage according to FEFO manner (first-expiry-first-out)	√	√	1	
1.3 Monitor and maintain correct storage conditions of products in accordance with manufacturers' guidelines	<ul> <li>i. Able to identify unique products from the following categories:</li> <li>a. Controlled Drugs: To refer to the pharmacist in-charge for handling</li> <li>b. Cold chain products such as insulins, vaccines, etc.: 1) To receive and store the products in the fridge (between 2 to 8°C); 2) To provide a cooler box and ice pack when supplying cold chain products.</li> <li>c. Light sensitive products: To store them in the original container; Alternatively, to store them in amber plastic bottles or boxes with covers to prevent excessive exposure to light</li> </ul>	1	1	٧	

Ele	ment 2 – Assist with disposal of ph	narmac	eutical products					
Performance Criteria		Passing Criteria		Assessme			ent Method	
				DO	VR	WA	MSF	
2.1	Understand the conditions in which products have to be disposed of, e.g. expired, deteriorated and obsolete	i.	Able to explain the correct procedures to dispose products that are expired, deteriorated and/or obsolete	<b>V</b>	1	1		
2.2	Understand the legal and safety requirements regarding the disposal of different types of products, including controlled drugs, cytotoxics and antibiotics	i.	Able to describe the process of disposal of different types of products, including controlled drugs, cytotoxics and antibiotics		٧	٧		
2.3	Dispose of expired, deteriorated and obsolete products							

	ndard 4.2 – Distribution of drugs						
	ment 1 – Assist with distribution o	_		<u> </u>			
Per	formance Criteria	Passir	ng Criteria		sessme		1
				DO	VR	WA	MSF
1.1	Interpret and process drug orders in accordance with legal requirement	i.	Able to describe the drug supply process in accordance with legal requirements / regulation	<b>√</b>	√	√	
1.2	Supply drugs to users in accordance with legal requirement/ regulation						
1.3	Identify inappropriate drug handling processes and transportation (e.g. cold chain) that may contribute to medication errors and product deterioration	i.	Able to describe drug handling of special drugs (e.g. cytotoxic drugs), fridge items and consequences of its deviation		٧	٨	
1.4	Recognise and respond to unusual patterns of drug	i.	Able to identify situations of unusual patterns of drug order		√	1	
	distribution including diversion, drug misuse, and fluctuations in	ii.	Able to describe possible counter-actions to take		1	1	
	utilization	iii.	Able to identify situations where there is a need to raise concerns to supervisor		٧	٧	

Elei	ment 2 – Assist with inventory cor	ntrol					
Per	formance Criteria	Passii	ng Criteria	Ass	sessme	nt Metl	nod
				DO	VR	WA	MSF
2.1	Maintain batch traceability and rotate stock	i.	Able to explain FIFO/ FEFO in drug distribution	1	1	1	
		ii.	Able to retrieve batch information when required e.g. product recall	1	√	1	
		iii.	Able to identify products of short expiry with stickers or other methods of identification	1	√	1	
2.2	Monitor stock levels of all products	i.	Able to interpret stock inventory report	1	1	√	
	P	ii.	Able to describe course of action for out of range stock levels	1	1	1	
2.3	Monitor expiry dates of products and check for signs of deterioration of products	i.	Able to identify damaged goods e.g. leakage from products or breakages	1	1	1	
2.4	Monitor stock level and identify stock discrepancies	i.	Able to identify stock discrepancies	1	√	1	
2.5	Assist in stock-taking of pharmacy inventory	i.	Able to describe the process of stock take or cycle count	1	√	1	
	p,	ii.	Able to describe ways of reconciliation of stocks	1	1	1	
		iii.	Able to describe the required course of action in case of stock take discrepancy	1	1	1	

Element 3 – Assist with product recal					
Performance Criteria	Passing Criteria	Ass	nod		
		DO	VR	WA	MSF
.1 Understand the different levels and implications of product	i. Able to describe the 2 classes of product recall		1	1	
recall	ii. Able to describe the 3 levels of product recall		1	1	
	iii. Able to describe the implications of product recall		1	1	
3.2 Understand the procedures for handling product recall	i. Able to describe the procedures relating to product recall		1	1	
	ii. Able to identify sources of information to validate the recalled product from Health Science Authority (HSA) website		1	√	

### Domain 5: Workplace Safety & Health

Per	formance Criteria	Passing Criteria			Assessment Metho			
				DO	VR	WA	MSF	
1.1	Observe personal hygiene at	i.	Able to demonstrate practice of personal hygiene	√	√			
	workplace including hand washing technique, 5 moments of hand hygiene	ii.	Able to list examples of personal hygiene practices at the workplace such as keeping fingernails clean, wearing clean attire, keeping hair neat or tied back, covering of mouth when sneezing or coughing, covering sores or cuts with plasters		√	1		
1.2	Understand and use personal protective equipment (PPE) required for the work	i.	Able to select with justification, the appropriate PPE for specific job functions	1	1	1		
		ii.	Able to explain the importance of mask-fitting	1	1	1		
		iii.	Able to demonstrate the use of appropriate PPE for different work functions	1	1			
1.3	Use and maintain workplace equipment and safety devices based on manufacturer's instructions		Not for assessment in schools. However, schools could generate eness of common workplace safety devices.					
1.4	Comply with safety signs and safe work procedures in work areas	i.	Able to follow the various safety signs and safe work procedures in the workplace	1	1	√		

Elei	ment 1 – Understand the controls	and wo	ork environment required for preparing particular types of pharmac	eutical	produc	ts (cont.	.)		
Per	formance Criteria	Passir	Passing Criteria	Assessment Method					
				DO	VR	WA	MSF		
1.5	Understand risk control measures	i.	Able to identify common hazards at the workplace		√	<b>√</b>			
		ii.	Able to describe risk control measures such as waste management procedures	1	1	√			
1.6	Report workplace safety and health issues in accordance with Workplace Safety and Health Act	i.	Able to list workplace safety and health issues such as unsafe working conditions/ work practices/ behaviours/ acts, biological hazards and signs of communicable diseases		√	1			
		ii.	Able to list the steps/procedures involved in the escalation process.		1	1			
1.7	Understand safe handling of drugs (e.g. cytotoxic medications) and sharps (e.g. proper disposal)	i.	Able to describe safe handling of hazardous drugs (e.g. cytotoxics) and sharps		√	1			

Element 1 – Particip	ate in workplace	safety a	and health management activities							
Performance Criteria		Passir	Passing Criteria			Assessment Method				
				DO	VR	WA	MSF			
	work practices in hother the workplace	i.	Able to list the potential hazards and risks associated with unsafe working conditions/ work practices/ behaviours/ acts (e.g. improper carrying or lifting of things, improper or awkward postures)		√	√				
		ii.	Able to identify situations where there is a need to raise concerns to supervisor		1	1				
1.2 Assess hazards identified in the		i.	Able to list problem-solving tools such as Plan-Do-Check-Action (PDCA), root cause analysis to resolve hazards and risks identified at the workplace		1	1				
		ii.	Able to list the proper PPE (where applicable) and safety devices required for safe work procedures, safe operations of machinery and equipment to resolve hazards and risks identified		1	1				
1.3 Participate in wo and health traini	= = =	Note:	For assessment under Standard 5.3							

Standard 5.3 – Comply with workplace						
Performance Criteria	Passing Criteria	As	Assessment Method			
		DO	VR	WA	MSF	
1.1 Respond to the types of emergencies at the workplace such as fire, hazardous materials spills, unconscious person and infectious disease outbreak	<ul> <li>i. Able to describe appropriate responses to emergency scenarios such as:         <ul> <li>a. Role of self and others</li> <li>b. Use of appropriate equipment</li> <li>c. Use of personal protective gears during infectious disease outbreak</li> <li>d. Appropriate escalation</li> </ul> </li> </ul>		√	1		
1.2 Understand emergency mechanism in the event of emergency at the workplace	i. Able to identify the appropriate emergency services to be activated during an emergency		1	1		
	ii. Able to articulate at least three types of workplace emergency response equipment and materials		1	1		
1.3 Handle workplace emergencies	i. Able to differentiate emergency and non-emergency incidents		1	1		
	ii. Able to articulate the required steps and information (such as emergency telephone number, Safety Data Sheet for information on first-aid measures) to handle workplace emergencies	1	√	√		

## **Domain 6: Professionalism, Ethics and Team Work**

Performance Criteria	Passing Criteria	As	sessme	nt Meth	od
		DO	VR	WA	MSF
1.1 Understand the state governance structure and legislations relating to	i. Able to list the appropriate legislations/regulations/guidelines related to pharmacy practice		1	√	
pharmacy practice	<ul> <li>ii. Understanding legislation:         <ul> <li>a) Able to demonstrate how to access statute laws and legislations relating to pharmacy practice</li> <li>b) Able to describe legal requirements for prescriptions</li> </ul> </li> </ul>		√	1	
1.2 Observe and comply with the legal requirements relating to pharmacy practice	For a minimum of TEN unique prescriptions:  i. Able to check if the prescription meets the legal requirements for dispensing	1	√		
	ii. Able to recognise situations whereby there are restrictions to the supply of Pharmacy-only medication	1	1		
	iii. Able to describe the legal requirements governing controlled drug storage and prescription	٧	1		

Element 2 - Comply with core values	and code of conduct				
Performance Criteria	Passing Criteria	As	sessme	nt Meth	od
		DO	VR	WA	MSF
2.1 Behave appropriately in accordance to institutional core values and code of conduct	i. Able to demonstrate articulate institutional policies on code of conduct and core values	1			1
	ii. Able to exhibit institutional core values in daily work	√			1

Standard 6.2 – Maintain professional	Standard 6.2 – Maintain professionalism and ethics								
Element 1 – Behave in professional and ethical manner									
Performance Criteria	Passing Criteria	Assessment Method							
		DO	VR	WA	MSF				
1.1 Place patient's health outcome as top priority in the supply of therapeutic products or medical devices	i. Able to ensure supply is not excessive and comply with legal requirements	√	√						
	ii. Able to clarify with the prescriber or pharmacist if the medication dosage, duration, quantity, indication is inappropriate	٧	1						
	iii. Able to supply safe and efficacious products (e.g. not supplying expired medicines, over supply of medicinal products or medical devices.)	√	1						

Per	formance Criteria	Passing Criteria	Ass	essmer	it Meth	od
			DO	VR	WA	MSF
1.2	Work within the limitations of own professional knowledge and expertise and access appropriate resources or personnel when deemed to be in the best interest of the patient	<ul> <li>i. Able to describe situations that require escalation to the pharmacy supervisor and/or pharmacist such as adverse drug reactions, drug interactions and service recovery</li> </ul>	<b>\</b>	1	<b>V</b>	
1.3	Provide appropriate professional advice and counselling on medications when deemed in the best interest of the patient	<ul> <li>i. Able to explain to patient/caregiver the name, strength, dosage form, indication, dose of medicines, common side effects (if any), precautions to be observed when using the medicines (if any), how to administer and store the medications</li> </ul>	<b>V</b>	<b>V</b>	<b>V</b>	
1.4	Demonstrate appropriate conduct or professional behaviour towards colleagues and other healthcare professionals	i. Able to demonstrate compliance to institutional code of conduct and discipline policies	1			1

Performance Criteria	Ass	essmer	t Meth	od	
	Passing Criteria	DO	VR	WA	MSF
1.5 Protect patient privacy and maintain the confidentiality of the patient information	i. Able to describe the legal requirements on Personal Data Protection Act (PDPA)	1	1	1	
'	ii. Able to explain the steps taken to protect patient rights and privacy	√	1	1	
1.6 Maintain or reinforce the confidence and trust placed in	For FIVE prescriptions / theoretical scenarios:	1	√		
other healthcare professionals by patients	<ul> <li>Able to demonstrate dispensing of prescription in accordance to medications prescribed with product substitution only upon approval of the prescriber</li> </ul>				
	ii. Able to answer patients or caregivers queries on therapeutic efficacy of prescriptions or outcome of prescription interventions in an appropriate manner without undermining their confidence to prescriber	1	1		
	iii. Able to describe scenarios when escalation to Pharmacist is required	1	1	1	
1.7 Handle staff or patient complaints and feedback in a professional and receptive manner	<ul> <li>For FIVE theoretical scenarios:         <ol> <li>Able to respond to staff or patient's feedback/complaint in a polite and courteous manner</li> </ol> </li> </ul>	٧	<b>V</b>		

Element 2- Demonstrate personal ar	nd professional integrity				
Performance Criteria	Passing Criteria	Ass	essmen	t Meth	od
		DO	VR	WA	MSF
2.1 Demonstrate personal and professional integrity when dealing with other healthcare professionals and the public	<ul> <li>i. Able to recognize and discuss situations where conditions of service will compromise his/her professional independence</li> </ul>	√	√		
Element 3- Maintain professional co	mpetence through life-long learning				1
Performance Criteria	Passing Criteria	Ass	essmen	t Meth	od
		DO	VR	WA	MSF
3.1 Keep abreast of progress in pharmaceutical knowledge in order to maintain highest	<ul> <li>i. Able to attend continuing education talks, workshops or programmes (where applicable)</li> </ul>	√			
standards of professional competence	ii. Able to pass in-house competency assessment (where applicable)	√			

Performance Criteria	and partnerships of care with other health professionals.  Passing Criteria	Ass	Assessment Method					
		DO	VR	WA	MSF			
1.1 Demonstrate awareness of the duties and responsibilities of other health professionals	i. Able to describe the roles of other health professionals (e.g. doctors, nurses, allied health professionals)		1	1				
1.2 Maintain respectful and cooperative relationship with co-workers or other health professionals involved in the care of patients	i. Able to demonstrate respect for colleagues (including other healthcare professionals and establish rapport with them)	<b>V</b>	1		1			
1.3 Promote and demonstrate teamwork with others in the	i. Able to demonstrate effective communication in the workplace	<b>√</b>	1		1			
workplace	ii. Able to demonstrate teamwork and build good working relationships with others to provide an efficient and safe dispensing service	1	1		√			
	iii. Able to participate actively in team activities	<b>V</b>	1		1			
	iv. Able to assist colleagues when called upon for assistance	√	1		√			

## **Domain 7 - Communication and Education**

Standard 7.1 – Communicate effective Element 1 – Good communication ski					
Performance Criteria	Passing Criteria	Ass	sessmen	t Metho	od
		DO	VR	WA	MSF
1.1 Demonstrate proficiency in verbal and written English	<ul> <li>Able to demonstrate comprehension in verbal and written English by giving appropriate response or action when receiving enquiries, or communicating with fellow colleagues</li> </ul>	√	√	1	
1.2 Communicate clearly when writing or speaking	Able to express opinions and ideas clearly and concisely in verbal and written form (e.g. demonstrate proper documentation on prescription and effective communication with fellow colleagues)	٧	1	1	
1.3 Possess basic presentation skills	i. Able to conduct a simple presentation	1	<b>V</b>		
	ii. Able to handle questions and answer appropriately	1	1		
1.4 Value the inputs of others	i. Able to demonstrate respect for others' opinions and feedback	1			
1.5 Establish rapport with the target audience	i. Able to actively engage the audience	1			
target addresses	ii. Able to sustain interest during the presentation	1			
1.6 Understands the importance of non-verbal communication that may have an impact on information transmitted	i. Able to demonstrate appropriate non-verbal body language	1			

<b>Element 2– Communicate effectively</b>	with general public, patients and other health care professionals				
Performance Criteria	Passing Criteria	Ass	essmen	t Metho	od
		DO	VR	WA	MSF
2.1 Communicate effectively by ensuring target audience understand material/ information provided	<ul> <li>Able to use appropriate communication technique to respective target audience (e.g. general public, patients and healthcare providers)</li> </ul>	√	√		<b>√</b>
	ii. Able to clearly explain material/information in a manner which is appropriate for the situation and the audience	٧	√	1	1
2.2 Understand institutional guidelines and government healthcare policies related to	<ul> <li>i. Able to articulate guidelines and policies (e.g. drug financing framework implemented by the government/institution)</li> </ul>	√	√	1	
access of medications to ensure correct information is conveyed to public	<ul> <li>ii. Able to convey accurate information to the general public for enquiries related to the pharmacy (e.g. cost and availability of medicines)</li> </ul>	√	√	1	
2.3 Possess basic conflict management skills	i. Able to handle difficult individuals in a calm and professional manner		1		<b>V</b>
	ii. Able to escalate conflict to supervisory level when required	1	1		√
	<ul> <li>iii. Able to present on 2 conflict management mock-up scenarios such as:</li> <li>a) Patient is unhappy over long waiting time hence wants to be serve first;</li> <li>b) Staff nurse claims patient's own medications was sent to pharmacy however pharmacy didn't receive any</li> </ul>		√		

Elei	ment 2- Communicate effectively	with ge	eneral public, patients and other health care professionals (cont.)	_				
Per	formance Criteria	Passir	ng Criteria	Ass	Assessment Meth			
				DO	VR	WA	MSF	
2.4	Communicate with empathy, sensitivity, and respect	i.	Able to show empathy, to be tactful and polite during communication	1	<b>√</b>		1	
		ii.	Able to show respect and professionalism when communicating with other healthcare professionals	1	1		1	
			on in response to social differences and diversity	<u> </u>				
Per	formance Criteria	Passir	ng Criteria		essmen	1	1	
				DO	VR	WA	MSF	
3.1	Recognize and address barriers to communication (e.g. deafness, blindness, mental	i.	Able to use of appropriate tools to overcome such barriers to communication	<b>√</b>	√	√		
incapacity, emotional status)	ii.	Able to demonstrate active listening skills to enhance professional rapport with general public, patients and other healthcare professionals	√	√	1			
3.2	Recognize the impact of different racial, cultural, linguistic background on the	i.	Able to communicate effectively in order to be understood by audience of different racial, cultural, linguistic background	√	√	1		
	effectiveness of communication	ii.	Able to use appropriate patient counselling aids to enhance the effectiveness of communication	√	1	1		

Standard 7.2 – Provide education					
Element 1 – Provide patient education Performance Criteria	n Passing Criteria	Δς	sessme	nt Meth	nod
Terrormance enterio	T dooring criteria	DO	VR	WA	MSF
1.1 Provide necessary information to assist patients in understanding and	i. Able to use relevant patient counselling aids (e.g. patient information leaflets) effectively	1	1	1	
management of their conditions	ii. Able to demonstrate lifestyle modification counselling on ONE chronic disease with relevant counselling points	1	1		
	iii. Able to assess patient or caregiver's understanding of the information given	1	√		
1.2 Communicate relevant information to questions raised by patient or caregivers	For ONE case scenario presentation on patient education topic:  i. Able to convey accurate information to questions raised on health or medications	√	<b>V</b>	1	
1.3 Handle basic enquiries from public	i. Able to use appropriate reference to address the crux of enquiry	1	1		
public	ii. Able to identify when to seek advice from pharmacists when required	1	1		
1.4 Provide non-pharmacological advice to assist management of symptoms	i. Able to provide appropriate non-pharmacological advices to patients or caregivers to assist in management of symptoms	V	V	1	

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Element 1 – Provide patient education (cont.)					
Performance Criteria	Passing Criteria	Assessment Method			
		DO	VR	WA	MSF
1.5 Promote public awareness on relevant healthcare issues through participation of health campaigns organised in-house or through healthcare organizations	<ul> <li>i. Participate in programme/session organised in-house or through healthcare organisations</li> </ul>	1			
	ii. Understands and able to articulate information on public health promotion	1	7	1	