

Registration assessment framework for sittings in 2024

Introduction

The registration assessment framework explains what we are testing in the registration assessment.

The registration assessment tests some, but not all, of the learning outcomes set out in Future Pharmacists: standards for the initial education and training of pharmacists¹. The other outcomes will be tested during your MPharm degree and foundation training year - some may be tested in more than one way.

In the framework, each of the learning outcomes tested by the registration assessment has been linked to 'indicative assessment topics'. This will help you better understand how learning outcomes are applied.

The assessment topics give an idea of what will be tested – there will be other topics included in an assessment paper. Pharmacy is a very broad subject, so it is not realistic to provide a framework that covers every topic in detail.

To help you understand the relative importance of each outcome to the registration assessment, we have given them a weighting of high, medium, or low.

Outcome weightings

Weighting	Proportion of questions
high weighting	60% to 70%
medium weighting	25% to 35%
low weighting	up to 10%

¹ We published new **standards for the initial education and training of pharmacists (IETP)** in January 2021 and the registration assessment framework will reflect these standards for sittings in 2026 onwards.

Registration assessment outcomes

10.1 Expectations of a pharmacy professional

Weighting	Future pharmacists outcome	Indicative assessment topics
Low	Recognise the duty to take action if a colleague's health, performance or conduct is putting patients or the public at risk	<ul style="list-style-type: none">Regulatory standards and guidance documentsAction to take if a colleague's conduct has the potential to affect patient or public health
Low	Apply the principles of clinical governance in practice	<ul style="list-style-type: none">Purpose and principles of clinical governanceRisk management in pharmacy and other healthcare contextsSystems to reduce medication errors
Low	Demonstrate how the science of pharmacy is applied in designing and developing medicines and devices	<ul style="list-style-type: none">Factors affecting the stability of medicinal productsProcedures for the dilution of solid, semi-solid and liquid dosage forms
Medium	Respond appropriately to medical emergencies, including providing first aid	<ul style="list-style-type: none">Appropriate responses to medical emergencies

10.2 The skills required in practice

10.2.1 Implementing health policy

Weighting	Future pharmacists outcome	Indicative assessment topics
High	Access and critically evaluate evidence to support safe, rational and cost-effective use of medicines	<ul style="list-style-type: none">Principles of obtaining and applying evidence for use in current practiceInterpreting and applying information to improve patient care
Medium	Apply knowledge of current pharmacy-related policy to improve health outcomes	<ul style="list-style-type: none">Principles of promoting healthy lifestyles including current pharmacy-related policyCollaboration across the healthcare professions to improve patient outcomesPurpose of prescribing guidelines

10.2.2 Validating therapeutic approaches and supplying prescribed and over-the-counter medicines

Weighting	Future pharmacists outcome	Indicative assessment topics
High	Identify and employ the appropriate diagnostic or physiological testing techniques in order to promote health	<ul style="list-style-type: none"> • Selecting appropriate diagnostic or physiological testing techniques for use in clinical decision-making and to promote health • Normal ranges for test results, and actions to take when results are out of the normal range
Medium	Identify inappropriate health behaviours and recommend suitable approaches to interventions	<ul style="list-style-type: none"> • Concepts of health promotion, health education and health improvement programmes, based on national and local health priorities and parameters • Role of pharmacists and pharmacy support staff in promoting health and preventing disease • Social, environmental and dietary factors that influence health
High	Instruct patients in the safe and effective use of their medicines and devices	<ul style="list-style-type: none"> • Identifying appropriate advice on the use of medicines and devices
Medium	Analyse prescriptions for validity and clarity	<ul style="list-style-type: none"> • Legal and professional requirements for prescriptions, to enable the safe and legal supply of medicines
High	Clinically evaluate the appropriateness of prescribed medicines	<ul style="list-style-type: none"> • Appropriateness of prescribed medicines, for example in the context of presenting conditions, associated diseases, and test results • Circumstances in which prescribed medicines are contra-indicated • Interactions that occur between medicines (either prescribed or purchased), and between these medicines and food or other substances • Use of licensed, off-label and unlicensed medicines including providing information to patients

Weighting	Future pharmacists outcome	Indicative assessment topics
High	Provide, monitor and modify prescribed treatment to maximise health outcomes	<ul style="list-style-type: none"> Principles of medicines management, medicines optimisation and pharmaceutical care Dosages and dose adjustments, especially for people with particular needs due to, for example, age or health conditions Reasons for treatment failures Recognising and managing adverse effects of medicines Mechanism of action, administration, absorption, distribution, metabolism and excretion of medicines
Low	Record, maintain and store patient data	<ul style="list-style-type: none"> Maintaining confidentiality, and disclosing information both with and without the subject's consent Information governance Requirements for recording, maintaining and storing data
Medium	Supply medicines safely and efficiently, consistently within legal requirements and best professional practice. NB: This should be demonstrated for both human and veterinary medicines	<ul style="list-style-type: none"> Statutory regulations and professional requirements for the supply of human and veterinary medicines

10.2.3 Ensuring that safe and effective systems are in place to manage the risk inherent in the practice of pharmacy and the delivery of pharmaceutical services

Weighting	Future pharmacists outcome	Indicative assessment topics
Low	Ensure the quality of ingredients to produce medicines and products	<ul style="list-style-type: none"> Quality assurance processes for medicines and ingredients Storage requirements for medicines and ingredients
Medium	Apply pharmaceutical principles to the formulation, preparation and packaging of products	<ul style="list-style-type: none"> Formulation, preparation and packaging of products
High (Part 1)	Use pharmaceutical calculations to verify the safety of doses and administration rates	<ul style="list-style-type: none"> Accurately perform calculations affecting patient care

Weighting	Future pharmacists outcome	Indicative assessment topics
Low	Procure and store medicines and other pharmaceutical products working within a quality assurance framework	<ul style="list-style-type: none"> Procurement and storage of medicines Additional precautions necessary for particular formulations
Low	Dispose of medicines safely, legally and effectively	<ul style="list-style-type: none"> Statutory regulations covering the safe, legal and effective disposal of medicines Procedures for the disposal of special and controlled waste from the pharmacy
Low	Identify, report and prevent errors and unsafe practice	<ul style="list-style-type: none"> Supervising others involved in service delivery Identifying, reporting and preventing errors and unsafe practices Responding to complaints and concerns

10.2.4 Working with patients and the public

Weighting	Future pharmacists outcome	Indicative assessment topics
High	Identify and employ the appropriate diagnostic or physiological testing techniques to use in clinical decision-making	<ul style="list-style-type: none"> Identifying appropriate diagnostic or physiological testing techniques, and interpreting results Identifying conditions that need referring to another healthcare professional Identifying conditions that may be treated by non-prescription medicines

10.2.5 Maintaining and improving professional performance

Weighting	Future pharmacists outcome	Indicative assessment topics
Low	Demonstrate the characteristics of a prospective professional pharmacist as set out in relevant codes of conduct and behaviour	<ul style="list-style-type: none"> Characteristics and expected behaviours of a pharmacist as set out in the relevant standards and guidance Principles and application of the professional duty of candour
Low	Participate in audit and in implementing recommendations	<ul style="list-style-type: none"> Purpose of audit and principles of audit procedures Principles of change management

Therapeutic areas

Questions in part two that relate to clinical care are mapped to key therapeutic areas. An individual question may map to multiple therapeutic areas: for example, a patient may be described who has hypertension and type 2 diabetes. The weighting given to individual therapeutic areas is shown below.

High weighted therapeutic areas

Cardiovascular system

Nervous system

Endocrine system

Infection

Medium weighted therapeutic areas

Genito-urinary system

Gastro-intestinal system

Respiratory system

Immune system and malignant disease

Blood and nutrition

Low weighted therapeutic areas

Musculoskeletal system

Eye

Ear, nose, and oropharynx

Skin

Vaccines

Anaesthesia

High-risk drugs

Each assessment is likely to include at least one question on each of the following drugs or drug groups:

- antibiotics
- anticoagulants
- antihypertensives
- chemotherapy
- insulins
- antidiabetic drugs
- parenteral drugs
- drugs with a narrow therapeutic index
- non-steroidal anti-inflammatory drugs
- methotrexate
- opiates
- valproate

Paediatrics

Around 20 per cent of questions in the assessment will relate to paediatric patients.

Calculations

Each assessment is likely to include at least one calculation question involving each of the following in part 1:

- doses and dose regimens
- dosage and unit conversions
- estimations of kidney function
- displacement volumes and values
- concentrations (e.g., expressed as w/v, % or 1 in x)
- dilutions
- molecular weight
- using provided formulae
- infusion rates
- pharmacokinetics
- health economics
- quantities to supply

Some questions in part 1 will test underpinning pharmacy knowledge as well as calculations skill.

Some questions in part 2 may require calculation.

Additional resources

Additional resources are provided for up to 25% of questions in part 1 and part 2 of the registration assessment. Examples of additional resources include photographs and dosing information.

Abbreviations

The abbreviations listed may be used in the registration assessment without expansion.

Table 1: Clinical conditions and infections

Abbreviation	Meaning
ADHD	attention deficit hyperactivity disorder
AF	atrial fibrillation
AIDS	acquired immunodeficiency syndrome
AKI	acute kidney injury
CKD	chronic kidney disease
COPD	chronic obstructive pulmonary disease
DVT	deep vein thrombosis
GORD	gastro-oesophageal reflux disease
HIV	human immunodeficiency virus
HPV	human papillomavirus
MRSA	meticillin-resistant <i>Staphylococcus aureus</i>
NSTEMI	non-ST-segment elevation myocardial infarction
OCD	obsessive-compulsive disorder
PE	pulmonary embolism
STEMI	ST-segment elevation myocardial infarction
TIA	transient ischaemic attack
UTI	urinary tract infection

Table 2: Investigations/results

Abbreviation	Meaning
ABPM	ambulatory blood pressure monitoring (mmHg)
aPTT	activated partial thromboplastin time
BMI	body mass index
BP	blood pressure (mmHg)
BSA	body surface area
CHA2DS2-VASc score	calculates stroke risk for patients with atrial fibrillation
CrCl	estimated creatinine clearance
CRP	serum C-reactive protein
CT (scan)	computerised tomography
DEXA (scan)	dual-energy X-ray absorptiometry (scan)
ECG	electrocardiogram

ECHO	echocardiogram
EEG	electroencephalogram
eGFR	estimated glomerular filtration rate
ESR	erythrocyte sedimentation rate
FBC	full blood count
FEV ₁	forced expiratory volume in 1 second
FVC	forced vital capacity
Hb	haemoglobin
HbA1c	haemoglobin A1c (glycosylated haemoglobin)
HDL-cholesterol	high-density lipoprotein cholesterol
HR	heart rate (per minute)
INR	international normalised ratio
LDL-cholesterol	low-density lipoprotein cholesterol
LFTs	liver function tests
MCV	mean cell volume
MRI (scan)	magnetic resonance imaging
ORBIT	tool to estimate the risk of major bleeding for patients on anticoagulation for AF
PEFR	peak expiratory flow rate
RR	respiratory rate (per minute)
TFT	thyroid function tests
U&E	urea and electrolytes
WCC	white cell count

Table 3: Drug groups and individual drugs

Abbreviation	Meaning
ACE	angiotensin-converting enzyme
BCG (vaccine)	Bacillus Calmette-Guérin
DMARD	disease-modifying anti-rheumatic drug
DOAC	direct-acting oral anticoagulant
HRT	hormone replacement therapy
GTN	glyceryl trinitrate
MAOI	monoamine-oxidase inhibitor
MMR (vaccine)	measles, mumps and rubella
NSAID	non-steroidal anti-inflammatory drug
SGLT2	sodium-glucose co-transporter 2
SSRI	selective serotonin reuptake inhibitor

Table 4: Directions and routes of administration

Abbreviation	Meaning
IM	intramuscular
IV	intravenous

NEB	nebulised
PR	rectal
PV	vaginal
SC	subcutaneous
SL	sublingual
STAT	immediately
TOP	topical
OD	every day
BD	twice daily
TDS	to be taken three times daily
QDS	to be taken four times daily
OM	every morning
ON	every night
PRN	when required

Table 5: Institutions and resources

Abbreviation	Institution or resource
BNF/BNFC	British National Formulary/British National Formulary for Children
DVLA/ DVA	Driver and Vehicle Licensing Agency/ Driver and Vehicle Agency Northern Ireland
GOLD	Global Initiative for Chronic Obstructive Lung Disease
MHRA	Medicines and Healthcare products Regulatory Agency
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
SIGN	Scottish Intercollegiate Guidelines Network
SmPC	Summary of Product Characteristics
WHO	World Health Organization

Table 6: Miscellaneous

Abbreviation	Meaning
A&E	Accident and Emergency
ADR	adverse drug reaction
CPR	cardiopulmonary resuscitation
CD	controlled drugs
DH	drug history (includes non-prescription, herbal remedies and allergies)
e/c	enteric-coated (termed gastro-resistant in BP)
ED	Emergency department
EEA	European Economic Area
FH	family history
GP	General practitioner

GSL	general sales list
max.	maximum
m/r	modified release
NKDA	no known drug allergies
P	pharmacy only
PGD	patient group direction
PIL	patient information leaflet
PMR	patient medication record
POM	prescription only medicine
SH	social history
UK	United Kingdom

Table 7: Units

Abbreviation	Meaning
% w/w	weight per weight
% w/v	weight per volume
% v/v	volume per volume
g	gram
g/kg	grams per kilogram
g/L	grams per litre
kg	kilogram
kg/m ²	kilogram per metres squared
mg	milligram
mg/hour	milligram per hour
mg/g	milligram per gram
mg/kg	milligram per kilogram
mg/kg/day	milligram per kilogram per day
mg/L	milligram per litre
mg/mL	milligram per millilitre
mL	millilitre
mL/hour	millilitre per hour
mL/kg/hour	millilitre per kilogram per hour
mL/minute	millilitre per minute
mmol	millimole
mmol/kg	millimole per kilogram
mmol/kg/day	millimole per kilogram per day
mmol/L	millimole per litre