Table 1. Competency framework

Competency	Details
1. Qualifications and experience	
Qualifications	• Pharmacist independent prescriber registered with the General Pharmaceutical Council • Secondary care clinical diploma
Experience	• Experience of working on cardiology wards as a pharmacist • Integrated into the cardiology multidisciplinary team • Understanding of the roles of all multidisciplinary team members (e.g. community cardiac rehab, cardiology psychologist); know how and when to refer to them
2. Knowledge	
Cardiology	• Basic cardiac anatomy • Presentation and diagnosis of MI – NSTEMI and STEMI, troponin changes, and ECG • Angiogram and PCI procedures and reports • Basic principles of cardiac stents • ECHO test and interpretation of report findings • Relevant conditions: o Angina o Heart failure o Hypertension o Atrial fibrillation and stroke prevention

	○ Lipid management and familial hypercholesterolaemia ○ Diabetes • Normal progress / recovery timeline after MI • Lifestyle advice (smoking cessation, exercise, flying, driving, cardiac rehab exercise programmes, diet, return to work) • Risk scoring tools (CHA_2DS_2-VASc, GRACE, TIMI, HAS-BLED, PRECISE-DAPT)
Laboratory results and actions	The following blood tests, normal limits, and reasons for deranged results: • Urea and electrolytes • Full blood count • Liver function tests • HbA1c (limits for no diabetes, pre-diabetes, and new diabetes) • Full lipid profile
Medication classes	• Antianginals • Antiarrhythmics (for rate and rhythm control) • Anticoagulants • Antiplatelets • Dual antiplatelet strategies (including assessment for extended duration antiplatelet therapy) • Triple therapy guidance

	• Antihypertensives • Lipid-modifying drugs • Diuretics • Post-MI secondary prevention • Oral hypoglycaemic agents and insulin • Gastrointestinal protection For each of these classes: • Mechanisms of action • Rationale for use • Monitoring • Contraindications and cautions • Side effects • Interactions • Dose adjustments • Likely durations for treatment • Equivalent doses between drugs (in class and between classes) • Link to interpretation of history, results, symptoms
Cardiology guidelines	These include (but are not limited to) relevant guidelines from: • National Institute for Health and Care Excellence (NICE) • Scottish Intercollegiate Guidelines Network (SIGN) • Joint British Societies (JBS)

	• European Society of Cardiology (ESC)
3. Skills	
Cardiac symptoms since MI / discharge	• Take clinical history of any angina, chest pain, shortness of breath, dizziness, palpitations, pedal oedema • Assess symptoms, make a management plan, undertake or recommend monitoring, know red flags and referral criteria • Understand possible anxiety post-MI
Practical clinical skills	• Take heart rate and blood pressure; understand normal limits and trends • Assess weight • Assess physical symptoms and side effects (e.g. rash, chest pain, musculoskeletal pain, indigestion) • Request blood tests if required, and provide appropriate follow-up or monitoring plan • ECG interpretation (advanced)
Cardiology medicines optimisation	• Apply evidence-based medicine to offer patient-centred, high-quality, safe and cost-effective prescribing • Explore medicines-taking behaviours • Identify nonadherence behaviours • Recognise polypharmacy and de-prescribe unnecessary medication(s)

	• Understand principles of medicines reconciliation to allow accurate medication history and communication of changes with GP and patient
Consultation communication skills	• Provide patient-centred care and support patients to achieve better outcomes from their medicines • Lead discussion and shared decision-making around medications to empower patients • Identify medication adherence issues • Discuss risks and benefits of medication to support decision-making • Manage difficult conversations; overcome communication barriers • Provide clear information, and plan for monitoring and follow-up • Check patients' understanding
4. Practicalities of clinic management	
Local IT systems	Know how to use IT systems to access patients results, clinical records and appointments; relevant systems may vary locally, but those used at our centre include: • EPRO, for letter writing, PCI letter • Cardiobase, for ECHO test results • PPM+, for test results, patient history, discharge letters, GP tab for current medications, ECHO and PCI reports

	• ICE, to request blood tests and see some out-of-area blood tests
Record keeping	• Dictation of clinic letters to GP and patient • Document history, clinical findings, monitoring and plan in medical notes and letter • Arrange referral and follow-up
Clinic management	• Triage patients to the post-MI medicines optimisation clinic • Management of medical notes • Timekeeping for consultations • Outpatient booking procedures, criteria for arranging follow-up and referrals

ECG, electrocardiogram; ECHO, echocardiogram; GRACE, Global Registry of Acute Coronary Events; HAS-BLED, hypertension, abnormal renal and liver function, stroke, bleeding, labile international normalised ratio, elderly, drugs or alcohol; HbA1c, glycated haemoglobin; MI, myocardial infarction; PRECISE-DAPT, **predicting bleeding complications in patients undergoing stent implantation** and subsequent dual antiplatelet therapy; NSTEMI; non-ST-elevation MI; PCI, percutaneous coronary intervention; STEMI, ST-elevation MI; TIMI, thrombolysis in MI.