



**Newly Qualified Pharmacist Training Pathway 2023-24**

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Thank you for considering the University of East Anglia School of Pharmacy for the next stage of your training. Our innovative Newly Qualified Pharmacist Training pathway (NQP) is a flexible programme with elements of choice that means it can be structured to precisely match your learning needs, in any sector, at your pace.

You may be interested in studying for the award of Postgraduate Diploma (NQP) with the RPS Post-registration Foundation Credential to mark the completion of your basic clinical training, in which case you’ll be with us for at least two years, or you may be interested in discrete modules to support your continuing professional development and can also apply on a ‘per-module’ basis.

Our list of available modules is below for your interest. Three advanced practice modules are available and these are designed for pharmacists in the second year of the NQP programme, pharmacists who are looking to make moves into the clinical specialism as an advanced pharmacist or pharmacists changing discipline/returning from career breaks

* **Renal Disease and Pharmacotherapy**
* **Management of Diabetes**
* **Hepatology and Public Health**

We're looking forward to being part of your journey.

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**Figure 1.** If you are using the modules to create the Postgraduate Diploma (NQP), this is how the modules could be organised

**FOUNDATION CLINICAL SKILLS**

Students taking this module will be learning the most basic skills needed to effectively undertake the role of the Clinical Pharmacist professionally and autonomously. There is a focus on broad data collection and integration (including physical assessment), the fundamental aspects of clinical reasoning as well as clear, unambiguous communication both verbally and in writing.

**Learning Outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care
2. Predict how these patient-specific data could be altered by drugs and disease processes
3. Identify factors which may produce erroneous or misleading patient-specific data
4. Analyse patient-specific data to classify organ function (e.g. renal or liver impairment) in order to design alternative regimes and monitor treatment goals
5. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
6. Integrate a broad range of patient-specific data and form reasonable judgements about the nature and severity of the underlying clinical issues
7. Create patient-centred, evidence-informed management plans focussed around the effective, safe and judicious use of therapeutics relative to the current clinical status of the patient and their predicted clinical trajectory
8. Communicate in verbal and written form using language and behaviour that is motivational and unambiguous, in a structured, concise way that leads to action
9. Practice with the autonomy and authority required of a clinical pharmacist

**FOUNDATION CONSULTATION SKILLS**

Students taking this module will continue to develop the early consultation skills from their undergraduate training, moving into more complex areas such as shared decision making. There is a focus on achieving concordance and training includes techniques such as ALOBA and simulation with professional actors in order to develop consultation skills in safe environments.

**Learning Outcomes:**

1. Develop a professional relationship with patients, carers, advocates, other prescribers and members of the healthcare team and communicate with them effectively, to achieve shared decision making and concordance.
2. Formulate an individualised treatment plan for the use of one of more medicines, or other appropriate intervention, and record according to legal and organisational protocols relating to information governance.

**CLINICAL EDUCATION**

Students taking this module will be introduced to the theory and practice of being clinical educators. They will explore a variety of learning support techniques including a broad range of enhancing technologies that they will use to design effective interventions that optimise clinical behaviour through education.

**Learning outcomes:**

1. Discuss the attributes of Clinical Educators and the impact of those attributes on learner success
2. Identify learning needs at an individual, departmental and organisational level
3. Create learning outcomes based on Blooms Taxonomy that are appropriate to the learner and the knowledge
4. Design evidence-based teaching interventions that illicit deep learning and lead to long term behaviour change
5. Facilitate a range of clinical educational opportunities including one to one, small group, large scale, synchronous and asynchronous, incorporating appropriate tools and technologies and including a range of learners
6. Measure learner success

**MANAGEMENT AND LEADERSHIP**

Students taking this module will be introduced to industry recognised approaches to negotiating complex systems in order to achieve organisational goals. They will look closely at theories of people, power, culture and change and apply them to their own workplace, starting their journey towards becoming a visionary leader.  Through self-reflection and facilitated discussion, they will explore pharmacy leadership in the key contexts of Patient Experience (PE) and Equality, Diversity and Inclusion (EDI). .

**Learning outcomes:**

1. Describe the key principles of Equality, Diversity and Inclusivity (EDI) and Patient Experience (PE) as leadership priorities in own workplace
2. Identify and distribute resources effectively (including financial and human resources)
3. Explain the significance of effective leadership in organisations using Golden Threads Theory
4. Define leadership as a behaviour, and be able to spot good leadership, in differing styles
5. Critically evaluate self as a manager and leader, plan and pursue personal development in this area
6. Implement coaching-based leadership to maximise team development
7. Analyse a service in the context of key healthcare leadership priorities
8. Lead in the application of the Professional Standards for Pharmacy

**RESEARCH**

Students taking this module will develop the knowledge and skills to enable them to critically appraise primary literature with a particular focus on determining whether evidence is generalisable to their context and evaluate potential for bias. Students will develop their understanding of the research trials process and formulate a feasibility study protocol for a trial of a pharmacy service of their choice, informed by their critique of the literature.

**Learning outcomes:**

1. Perform a systematic literature search using appropriate search engines and utilising appropriate search terms, MESH search terms and Boolean operands
2. Compare the evidence base in terms of primary literature utilising appropriate methods including Relative Risk (RR), Absolute Risk (AR) and Number Needed to Treat (NNT)
3. Critique evidence including evaluating strengths and limitations
4. Recognise the core elements of the research process
5. Explain the different elements within a feasibility study and the rationale for them
6. Design a protocol for a feasibility study

**PATIENT SAFETY**

Students taking this module will be introduced to industry recognised strategies and toolkits to improve safety culture in their organisation as well as safety outcomes for individual patients. This module is underpinned by the NHS Patient Safety Syllabus developed by the Academy of Medical Colleges in conjunction with Health Education England.

**Learning outcomes:**

1. Recognise the effect of system design on safety
2. Describe the difference between Safety I and Safety II and use the approaches in a complementary way to achieve safety improvements
3. Apply medicolegal, regulatory and professional standards pertaining to patient safety
4. Explain the role and effect of humans in complex systems and the fundamentals of human factors and evaluate their impact
5. Demonstrate confidence in speaking to healthcare professionals across the multidisciplinary team; seeking to use positive appropriate language to influence others, creating an open, positive and confidential culture in their working environment
6. Contribute to the development of safety culture through reflection, self-awareness and role modelling
7. Apply the quality improvement evidence base as it relates to patient safety in healthcare
8. Use industry mapping techniques to identify and mitigate risks to patients
9. Demonstrate learning from incidents and implement cultural change as a result

**MANAGEMENT OF CARDIOVASCULAR DISEASE**

Students taking this module will be able to integrate the key clinical and public health considerations in order to deliver pharmaceutical care to a range of patients experiencing acute and chronic cardiac conditions, including hypertension, acute coronary syndromes and heart failure.

**Learning Outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in the acute and chronic cardiac setting
2. Predict how these patient-specific data could be altered by drugs and disease processes
3. Analyse patient-specific data in order to advise on treatment, primary and secondary prevention strategies in cardiovascular disease
4. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
5. Advise colleagues on the evidence-based treatment of patients with chronic heart failure and ischaemic heart disease
6. Discuss cardiovascular disease and risk from a public health perspective

**RESPIRATORY DISEASE (ASTHMA AND COPD)**

Students taking this module will be able to integrate the key clinical and public health considerations in order to deliver pharmaceutical care to a range of patients experiencing acute and chronic respiratory conditions, including asthma, COPD and bronchiectasis.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in the acute and chronic respiratory setting
2. Predict how these patient-specific data could be altered by drugs and disease processes
3. Analyse patient-specific data in order to advise on treatment strategies in respiratory disease, including escalation, de-escalation and rescue
4. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
5. Advise colleagues on the evidence-based treatment of patients with bronchiectasis, COPD and asthma
6. Discuss respiratory disease and risk from a public health perspective (for instance, smoking cessation and self-care)

**INFECTIOUS DISEASES AND ANTIMICROBIALS**

Students taking this module will be able to integrate the key clinical and public health considerations in order to deliver pharmaceutical care to a range of patients affected by infectious disease, with a particular focus on antimicrobial stewardship, antibiotic choice and monitoring.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with the monitoring of patients with infectious disease
2. Predict how these patient-specific data could be altered by drugs and disease processes
3. Analyse patient-specific data in order to design regimes and monitor treatment goals
4. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
5. Advise colleagues on the evidence-based treatment of patients with infectious diseases
6. Apply the principles of antimicrobial stewardship at the level of the patient, the organisation and for public health more widely

**CARE OF THE SURGICAL PATIENT**

Students taking this module will be able to predict and assess the impact of a range of surgeries on pharmaceutical care needs and plan for safe, optimal medicines use around key priorities that are demonstrated to improve surgical outcomes throughout the pre-, peri- and postoperative stages of care.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in the pre, peri and postoperative settings
2. Predict how these patient-specific data could be altered by drugs and disease processes, including the impact of surgical procedures.
3. Analyse patient-specific data in order to advise on and optimise pharmaceutical care for patients about to undergo elective surgery
4. Describe common surgical procedures and predict their impact on pharmaceutical care planning at all stages of the surgical journey
5. Design medication regimes to support symptom management in the peri and postoperative patient including but not limited to analgesia, anti-emetics, fluid support, VTE prophylaxis, antimicrobial prophylaxis and bowel management
6. Advise colleagues on the management of anticoagulants and diabetes in pre, peri and postoperative patients

**CARE OF THE OLDER PATIENT**

Students taking this module will be introduced to the complex clinical discipline of Older People’s Medicine and the key pharmaceutical care considerations needed to safety and effectively manage this cohort of patients. Skills in high level medication review and information management and integration across care settings are particularly prioritised for development.

**Learning outcomes:**

1. Evaluate the impact of age associated physiological changes and their relationships with geriatric syndromes
2. Evaluate the impact of age associated physiological changes on the pharmacokinetic and pharmacodynamic processing of medicines
3. Predict the effect of geriatric syndromes and changes in medicine processing in older people in terms of the appropriateness of prescribing
4. Apply the principles of medicines optimisation when performing medication reviews for older people
5. Compare and contrast the range of medicines optimisation and deprescribing resources and tools available
6. Evaluate which of the medicines optimisation and deprescribing resources and tools available may be useful for you to incorporate into your practice
7. Create patient-centred, evidence-informed pharmaceutical care plans focussed around person-centred use of therapeutics relative to the current clinical status of the patient and their care goals

**THERAPEUTICS FOR MENTAL HEALTH**

Students taking this module will be able to plan for the safe and effective pharmaceutical management of the care of patients with acute mental health disorders or mental health-related comorbidities alongside physical illness, in presentations relevant to their place of practice. There is a focus on patient-centred, evidenced based care as well as pragmatic considerations, all underpinned by the relevant medicolegal frameworks.

**Learning outcomes:**

1. Define the following mental health disorders: depression, anxiety, delerium and dementia
2. Apply simple assessment tools to determine the severity of presentation
3. Explore medico-legal and medico-ethical concepts of capacity, consent, covert administration, enforced treatment and deprivation of liberty (DoL) safeguards
4. Apply the Mental Health Act 1983 and Mental Capacity Act 2005 appropriately and proportionately when providing pharmaceutical care
5. Design pharmacotherapeutic regimes to manage acute presentations of the mental health disorders above, combining an evidence-based approach with individual needs
6. Lead on the safe, effective and judicious use of pharmacotherapeutics including monitoring, dose adjustments and recognition of ADRs
7. Provide patient with information and support regarding the pharmacotherapeutics above
8. Explore and provide MDT support for non-pharmacological interventions

**HEPATOLOGY WITH PUBLIC HEALTH**

Students taking this module will be looking to advance their knowledge of and increase their confidence in providing pharmaceutical care to a range of patients affected by acute and chronic liver dysfunction. As well as disease pathophysiology and contemporary management there is a strong focus on biopsychosocial influences and a broader public health approach that looks at disease prevention and harm minimisation strategies alongside key therapeutics.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in acute and chronic hepatology specialisms, including disease staging, and functional impairment (decompensation)
2. Identify drugs that pose pharmacokinetic challenges when designing therapeutic regimes in liver disease
3. Analyse patient-specific data in order to advice on treatment, primary and secondary prevention strategies in hepatic disease
4. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
5. Advise colleagues on the evidence-based treatment of patients with chronic and acute manifestations of hepatic disease
6. Discuss hepatic disease from multiple public health perspectives including disease prevention and harm reduction

**DIABETES**

Students taking this module will be looking to advance their knowledge of and increase their confidence in providing pharmaceutical care to a range of patients affected by all types of diabetes in acute, chronic and emergency presentations. As well as disease pathophysiology and contemporary management there is a strong focus on biopsychosocial influences and a broader public health approach that looks at disease minimisation strategies alongside key therapeutics and the latest technologies.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in Type 1, Type 2 and gestational diabetes, including diabetic emergencies
2. Analyse patient-specific data in order to advise on treatment and primary and secondary prevention strategies in Type 1 and Type 2 diabetes, including initiation and intensification of therapy
3. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
4. Advise colleagues on the evidence-based treatment of patients with Type 1 and Type 2 diabetes, including the management of diabetic ketoacidosis, hypoglycaemia and hyperglycaemic hyperosmolar state.
5. Discuss diabetes and its risks from multiple public health perspectives including disease prevention, harm reduction and non-adherence.

**RENAL DISEASE AND THERAPEUTICS**

Students taking this module will be looking to advance their knowledge of and increase their confidence in providing pharmaceutical care to a range of patients affected by acute and chronic renal dysfunction, including renal replacement, associated hormonal disorders and renal transplant. As well as disease pathophysiology and contemporary management there is a strong focus on service design and disease modification alongside key therapeutics.

**Learning outcomes:**

1. Evaluate and interpret patient-specific data commonly associated with disease risk, general diagnostics and the monitoring of patient care in acute kidney injury, chronic kidney disease, during renal replacement therapy and the care of a transplanted kidney
2. Identify drugs that pose pharmacokinetic challenges when designing therapeutic regimes in low clearance states
3. Analyse patient-specific data in order to advice on treatment strategies in low clearance states
4. Recommend and apply an appropriate selection of patient-specific data to monitor patient outcomes
5. Advise colleagues on the evidence-based treatment of patients with chronic and acute manifestations of renal disease, including dose adjustment, nephroprotection and dialysability
6. Discuss renal disease from multiple public health perspectives including disease prevention and harm reduction

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