

MODULE SPECIFICATION

KEY FACTS

Module name	Independent and Supplementary Non-Medical Prescribing (V300)
Module code	NMM110
School	School of Health Sciences
Department or equivalent	Division of Nursing
UK credits	30
ECTS	15
Level	7

MODULE SUMMARY

Module outline and aims

The intention of this module is to enable appropriately qualified, experienced healthcare practitioners such as nurses, midwives, health visitors, physiotherapists, podiatrists and radiographers to enhance their scope of practice by facilitating their development into competent/proficient prescribers in keeping with the standards set out by the NMC (2006), GPhC (2006), the DH(2006), the NPC (2012) and the HCPC (2013). It is envisaged that collaborative inter-professional approaches will enrich your learning opportunities and encourage you to acquire, critically explore, share, apply & synthesize specialist knowledge and technical expertise fundamental in accountable, proficient prescribing of medicinal products.

It is an NMC, HCPC requirement that this module is completed within one year of commencing it and that no prescribing can be undertaken until NMC or HCPC appropriate annotation/registration has been obtained.

Aims of this module will enable you to:

- Acquire, critically examine, share and synthesize specialist knowledge and related technical expertise that meet the standards set out by the NMC (2006), the NPC (2012) and the HCPC (2013).
- Draw on collaborative inter-professional approaches that will enrich your learning opportunities
- Prepare for safe, appropriate & cost-effective independent and supplementary prescribing within your designated area of professional practice.

Content Outline:

This module consists of taught (theory and research) sessions and supervised practice-based learning experiences. Lectures, critical debates, discussions, problem-solving group activities, and practice-based learning will reflect the following:

- Applied and developmental anatomy, biochemistry, physiology, pathophysiology and microbiology
- Developmental physical, cognitive, emotional and psychosocial differences

between neonates, children and adults

- Recognition of, and response to, common signs and symptoms indicative of clinical problems; Appropriate use of diagnostic aids for assessments of patients' general state of health e.g. stethoscope, sphygmomanometer, glucometer
- Clinical pharmacology: pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, related to specific drug groups
- Recognising, reporting and managing adverse drug reactions and interactions
- Chemical and biochemical methods used in monitoring patients response to treatment
- Models of (adult) patient consultation, clinical assessment, diagnostic decision-making, clinical reviews, therapeutic interventions, monitoring and referrals of adult patients/clients and their partners/carers
- Models of child-centred consultation, clinical assessment, diagnostic decision-making, clinical reviews, therapeutic interventions, monitoring and referrals of neonates/children/young people, their parents/carers
- Clinical examination skills relevant to the assessment of patients' conditions for which you intends to prescribe
- Critical perspectives in consultation, clinical assessment diagnostic decision-making, clinical monitoring, reviews, monitoring and referrals of patients requiring/requesting cosmetic procedures; prescribing and administration of *botulinum* toxins and related products.
- Critical perspectives on design and implementation of Clinical Management Plans in adult and child care contexts
- Clinical governance, legal and policy perspectives on prescribing medicinal products
- Drug development, licensing, guidance on off-label drugs and prescribing of unlicensed medicine
- Prescribing in a team and public health contexts, public health policies, duty of care to patients, clients & society; the principles of informed consent.
- Pharmacologically and clinically relevant numeracy, mathematics & drug calculations in child and adult-centred prescribing contexts
- Evidence-based prescribing, critical appraisal of research and clinically significant evidence,
- Methods for risk assessment and corresponding management
- Therapeutic drug monitoring used in patients taking medicines
- Issuing legally and therapeutically appropriate patient-centred prescriptions
- Managing options including non-drug treatment and referrals
- Policy context for accountable prescribing; Influences on prescribing practice, patient preferences and scope for shared decision making
- Confidentiality, Data Protection, Freedom of Information
- Maintaining professional knowledge and competence in practice,
- Professional accountability & responsibility when managing patients within specific prescribing contexts
- Exercising professional judgment in keeping with the HCPC's, NMC's standards of professional conduct.
- Autonomous working and decision making within the practitioners' own scope of professional practice, competence/proficiency.
- Duty of care to patients and the wider society.

Recommended Pre-requisite Modules:

- APM022 Pathophysiological basis for Advanced Practice
- APM024 Advanced Physical Assessment, Critical Thinking and Diagnostic Reasoning Across the Lifespan

WHAT WILL I BE EXPECTED TO ACHIEVE?

On successful completion of this module, you will be expected to be able to:

Knowledge and understanding:

- Demonstrate in-depth understanding of the responsibilities and accountability implicit in the role of independent and supplementary prescribing and associated with competence and professionalism in practice.
- Demonstrate abilities to critically consider and uphold the importance of effective relationships and communication/consultation with patients, carers & other members of the healthcare team.
- Utilize in-depth knowledge of anatomy, physiology, biochemistry, pathophysiology and microbiology relevant in varied child and adult-centred prescribing contexts.
- Critically examine the pathophysiology of the child and adult-centred diseases/conditions being treated, and critically evaluate the significant signs & symptoms.
- Take a comprehensive, accurate history, carry out holistic patient assessments and critically evaluate the significant findings and presenting complaints.
- Critically evaluate the pharmacokinetics, pharmacodynamics and pharmacogenetics relevant to drug(s) that are prescribed for your patients & utilizing scientific evidence draw conclusions about the possible effects of these drugs on the pharmacotherapeutic outcome.
- Demonstrate critical awareness of drug development, licensing, guidance on off-label drugs and prescribing of unlicensed medicine.
- Critically examine the statutory roles, responsibilities and relationships with others involved in prescribing, supplying and administering medicinal products for children and adults.

Skills:

- Critically appraise sources of information, advice, and decision support systems and respond appropriately to possible influences on prescribing practice at

individual, local and national/international levels.

- Use appropriate diagnostic aids relevant in the assessment of patients' health problems & needs, critically evaluate the diagnostic evidence and demonstrate competent use of that evidence in therapeutic interventions and prescribing decisions within child and adult care contexts.
- Draw on relevant knowledge and apply appropriate assessment skills when taking detailed history & gathering relevant data regarding the patients' physical and mental health; formulate/review a working/differential diagnosis, create treatment plans, prescribe appropriately, monitor response to therapy, and modify treatment or refer/consult/seek further guidance about the therapeutic management of children and adults.
- Critically review the principles of evidence based practice utilising ethical, legal and professional frameworks for accountability/responsibility demonstrating safe practice in medicine management and appropriate prescribing practice in child-centred and adult care contexts.
- Apply your knowledge and capabilities of mathematics and numeracy to calculations required when prescribing for children and adults.
- Work effectively within clinical governance frameworks that include auditing of prescribing practice, scope for continuing personal and professional development, and evaluate operational issues that could impact on safe prescribing practice.
- Demonstrate critical ability when monitoring the patients' responses to medicines, and other forms of therapeutic interventions, modify treatments and refer child and adult patients appropriately for further consultation.
- Develop clinical management plans with your Designated Medical Practitioner within legislative requirements (in the context of supplementary prescribing), analyse their content and evaluate their implementation potential and shortfalls.
- Maintain accurate and contemporaneous records and ensure that other prescribers and healthcare staff are informed appropriately.

Values and attitudes:

- Synthesize knowledge of public health issues related to medicines use and critically evaluate the use of this knowledge in child and adult centred prescribing practice.
- Take part in shared approaches to decision making; in assessing & evaluating the patients' need for medicine/therapy, taking into account their wishes and values, and those of their carers when making prescribing decisions within the context of therapeutic management of children and adults.
- Demonstrate awareness of the risks related to cosmetic procedures, when

- prescribing and administering *botulinum* toxins and related products.
- Critically evaluate the factors and circumstances which contribute to safe, appropriate, cost effective and ethically managed prescribing practice.
 - Demonstrate understanding of the principles that underpin remote patient consultation, assessment and the provision of safe therapeutic interventions.
 - Critically evaluate and respond appropriately to possible influences on prescribing practice at the individual/local/national and international levels.
 - Demonstrate understanding of the differences between licensed and unlicensed medicine; give an account of the responsibilities involved in prescribing unlicensed medicine and explain the methods that should be used when monitoring and overseeing the patients' therapeutic management.
 - Work effectively within prescribing partnerships, critically evaluate and respond appropriately to possible influences on prescribing practice at individual, local and national/international levels.

HOW WILL I LEARN?

You will have opportunities to attend lectures, clinically centred and evidence-based debates and problem solving activities.

Teaching component	Teaching type	Contact hours (scheduled)	Self-directed study hours (independent)	Placement hours	Total student learning hours
Lectures	Lecture	140	60	0	200
Supervised Practice 12 days x 7.5 hours	Placement	0	30	90	120
EBL & Problem Focused Critical Discussions	Seminar	30	60	0; however students do sometimes request tutorial support from the module leader	90
Totals:		170	150	90	410

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessments

You will be assessed by the following methods:

1. Formative assessments:

- I. multiple choice and short answer questions related to clinically significant biosciences and aspects of applied pharmacology
- II. multiple choice and short answer questions assessing numeracy related to applied pharmacology and therapeutics

The purpose of these assessments is to diagnose your learning needs, identify gaps in your knowledge and understanding and determine how to enhance your learning and preparation for knowledgeable, evidence-based, safe prescribing practice.

2. Summative assessments as follows:

- I. A summative pharmacology examination consisting of MCQ and SAQ; the intention is to examine the principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics.
- II. An Objective Structured Clinical Examination (OSCE) within a simulated learning environment
- III. Submitting a completed Practice-based Portfolio (based on the Single Competency Framework, NPC, 2012) wherein you demonstrate your knowledge, understanding, technical skills, numeracy & professional values pertaining to Independent and Supplementary prescribing of medicinal products within your area of practice.
- IV. Submitting a 3,000 word reflective essay wherein you critically examine your learning achievements and demonstrate your understanding of the principles implicit in safe, evidence-based, appropriate, ethically managed Independent and Supplementary Prescribing.

Assessment component	Assessment type	Weighting	Minimum qualifying mark	Pass/Fail?
Formative assessment consisting of multiple choice and short answer questions related to clinically significant biosciences	Written exam	0	0	N/A
Formative assessment consisting of multiple choice and short answer questions related to clinically significant numeracy	Written exam	0	0	N/A

Multiple Choice Questions & Short Answer Questions (Pharmacology)	Written exam	50	80%	N/A
OSCE & Numeracy Assessment	Written exam	50	N/A	Yes
Practice-based Portfolio and Numeracy Assessment	Portfolio	50	N/A	Yes
3,000 word Reflective Essay	Written Assessment, including essay	50	50%	N/A

Assessment criteria

The Assessment Criteria and specific details pertaining to the two examinations and two assessments will be issued to you at the start of the module.

Feedback on assessment

Following every assessment and examination you will be issued with the awarded grade/marks and corresponding markers feedback in line with the Assessment Regulations and Policy.

Assessment Regulations

The Pass mark for the module is 50%. Any minimum qualifying marks for specific assessments are listed in the table above. The weighting of the different components can also be found above. The Programme Specification contains information on what happens if you fail an assessment component or the module.

INDICATIVE READING LIST

Barber, P., (2013) *Medicine Management for Nurses*. Oxford: McGraw-Hill/OUP

Beauchamp, T. L. and Childress, J. F. (2009) *Principles of Biomedical Ethics*. 5th ed. Oxford: Oxford University Press.

Bickley, L., and Szilagy, P., (2011) *Guide to Physical Examination and History Taking*. Philadelphia: Lippincott, Williams & Wilkins

BMJ, (2012/14) *British National Formulary/British National Formulary for Children*. London: BMJ Publishing Group

Brooks, D. and Smith, A. (2007) *Non-Medical Prescribing in Health Care Practice*. Hampshire: Palgrave.

Brunton, L., Parker, K. Blumenthal, D., Buxton I., (2008) *Manual of Pharmacology and Therapeutics*. London: McGraw-Hill

Brunton, L., Chabner, B., and Knollman, B., (2012) *Goodman and Gilman's the Pharmacological Basis of Therapeutics*. London: McGraw-Hill

Bulman, C., and Schutz, S., (2011) *Reflective Practice in Nursing*. Oxford: Blackwell Publishing

Costello, I., et al. (2007) *Paediatric Drug Handling*. London: Pharmaceutical Press

Cross, S. [ed.] (2013) *Underwood's Pathology*. London: Elsevier

Dale, M., & Haylett, D., (2009) *Pharmacology Condensed*. Edinburgh: Churchill Livingstone

Diamond, B., (2010) *Legal Aspects of Nursing*. Harlow: Pearson Longman

Downie, G., Mackenzie, J. and Williams, A. (2006) *Calculating Drug Doses Safely: A Handbook for Nurses and Midwives*. London: Churchill Livingstone/Elsevier.

Golan, D., et al (2011) *Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy*. London: Wolters Kluwer/LW&W

Grossman, S. (2013) *Porth's Pathophysiology: Concepts of Altered Health States*. London; Wolters Kluwer

Healy, D., (2005) *Psychiatric Drugs Explained*. Edinburgh: Elsevier

Herfindal, E., and Gourley, D., (2010) *Textbook of Therapeutics: Drugs and Disease Management*. London: London: Lippincott Williams & Wilkins

Higgins, C., (2011) *Understanding Laboratory Investigations for Nurses and Health Professionals*. Oxford: Blackwell Publishing

Katzung, B. et al (2012) *Basic and Clinical Pharmacology*. London: McGraw Hill Lange

Kumar, P., and Clark, M., (2011) *Acute Clinical Medicine*. Edinburgh, Saunders/Elsevier

Lissauer, T., and Claydon, G., (2007) *Illustrated Textbook of Paediatrics*. London: Elsevier Health Science

Lubkin, I., and Larsen, P., (2013) *Chronic Illness Impact and Interventions*. London: Jones and Bartlett

Luellmann, H., Mohr, K., A. and Hein, L., (2011) *Pocket Atlas of Pharmacology*. Stuttgart: Thieme

Marieb, E., and Hoehn, K., (2012) *Human Anatomy and Physiology*. London, Pearson International Edition.

McCance, K., and Huether, (2010) *Pathophysiology: The Biological basis for Disease in Adults and Children*. Philadelphia: Elsevier/Mosby

MacQueen, S., Bruce, E., and Gibson, F., (2012) *The GOSH Manual of Children's Nursing Practice*. London: Wiley-Blackwell

National Prescribing Centre (2012) *A Single Competency Framework for all Prescribers*. London: NICE

Porth, C., (2010) *Essentials of Pathophysiology: Concepts of Altered Health States*. Philadelphia: Lippincott Williams & Wilkins

Rang, H., Dale, M., Ritter, J., and Flower, R., (2011) *Pharmacology*. 6th ed. Edinburgh: Churchill Livingstone.

Reid, J. L., Rubin, P. C., and Whiting, B. (2011) *Lecture Notes on Clinical Pharmacology*. 6th ed. Oxford: Blackwell Science.

Rhoads, J., and Wiggins Petersen, S., (2014) *Advanced Health Assessment and Diagnostic Reasoning*. London: Jones & Bartlett Learning

Schmidt, N. and Brown, J., (2012) *Evidence-based Practice for Nurses*. London: Jones & Bartlett

The intention is not to provide formal on-line teaching although in addition to lectures and problem solving tutorials students will be encouraged to seek advice/support from the Module Leader by electronic correspondence.

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For Use From: 2014-15

Appendix: see <http://www.hesa.ac.uk/content/view/1805/296/> for the full list of JACS codes and descriptions

CODES

HESA Code	Description	Price Group

JACS Code	Description	Percentage (%)
B100	Anatomy, Physiology & Pathology	50%
B200	Pharmacology, Toxicology & Pharmacy	50%