

# Script

## Nursing

An eLearning programme to improve the management and optimisation of medicines

A Guide for Undergraduate Nursing Students



Health Education England



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## 1.0 BACKGROUND

Medication is the most common intervention in clinical practice, costing the National Health Service (NHS) in England around £18 billion per year. There are many problems with medication use in practice, including:

- 30–50% of medicines are not taken as intended,
- Whilst there is an expectation that patients should share in making decisions about their treatment, they often have insufficient information about their medicines,
- Medication errors and adverse drug events are relatively common across all sectors and age groups, and
- Avoidable wastage on medicines has been estimated at £300 million per year in the NHS<sup>1</sup>.

Medication errors can be defined as “**a failure in the treatment process that leads to, or has the potential to lead to, harm to the patient**”<sup>2</sup>. Medication administration errors are those that have specifically occurred during the administration process, where there is a failure to administer the right drug, at the right dose, at the right frequency, for the right patient. In the UK, medication errors account for 10–20% of all adverse events in the NHS, and the estimated cost of ‘probably avoidable’ adverse drug reactions is £1.6 billion per year<sup>3</sup>. A quarter of litigation claims in the NHS also stem from such errors.

Reducing medication errors and improving patient safety is at the heart of the West Midlands Academic Health Science Network (WM-AHSN) Drug Safety theme. In 2014, the Drug Safety theme, led by Professor Jamie Coleman, applied for funding to develop an eLearning programme for nurses. The overall aims of the proposed project were to:

- Create an eLearning platform for undergraduate and qualified nurses that can support their ongoing professional development and process of revalidation.
- Maintain and develop professional knowledge and competence of undergraduate and qualified nurses related to medicines.
- Encourage safe and effective medicines management by developing modules that reflect current practice in the UK.

In 2014, the WM-AHSN commissioned the University of Birmingham and OCB Media Ltd, in collaboration with Coventry and Warwickshire NHS Partnership Trust to develop an eLearning programme for nurses. Based on the established successful SCRIPT programme for Foundation trainee doctors, Nursing SCRIPT has been developed in close collaboration with Health Education England (HEE).

Following dissemination to qualified nurses in the West Midlands, the resource is now available for undergraduate nurses to support their learning relating to medicines management and optimisation.

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<sup>1</sup>NHS England. Pharmaceutical waste reduction in the NHS. 2015; Available online at <https://www.england.nhs.uk/publication/pharmaceutical-waste-reduction-in-the-nhs/>

<sup>2</sup>Ferner RE, Aronson JK. Clarification of Terminology in Medication Errors: Definitions and Classification. *Drug Safety*. 2006;29(11):1011-22.

<sup>3</sup>Elliott RA, Camacho E, Campbell F, et al. Prevalence and Economic Burden of Medication Errors in the NHS in England. Policy Research Unit in Economic Evaluation of Health and Care Interventions. Sheffield, United Kingdom: University of Sheffield and University of York; 2018.

## 2.0 THE RESOURCE

SCRIPT modules are web-based to facilitate ‘just-in-time’ learning. The programme comprises 24 web-based eLearning modules relating to medicines management across three categories:

Principles of Medicines Management	
Dose Calculations	
Evidence-Based Practice	
Formulation and Administration	
Fundamentals of Pharmacology*	
Medicines Management in Care Homes	
Root Cause Analysis*	
UK Medicines Policy	
Utilising the BNF(C)	
Managing the Risks	
Adverse Drug Reactions	
Drug Interactions	
Medication Errors	
Practical Paediatrics*	
Sepsis	
Special Patient Groups	

  

Therapeutic Groups	
Advanced Pain Management	
Affective Disorders*	
Anticoagulation (1)	
Anticoagulation (2)	
Disorders of Psychosis*	
Introduction to Mental Health*	
Introduction to Pain Management	
Pharmacological Pain Management	
Respiratory	
Treatment of Infection	

\* Under development, due in 2019

The modules are aligned with the relevant Nursing and Midwifery Council’s (NMC) Standards of proficiency for registered nurses<sup>4</sup> (see Appendix 2). All modules have been authored by specialist healthcare professionals and have been externally peer reviewed to ensure accuracy and relevance to practice.

### 2.1 Structure of the modules

Each module has the same core components, commencing with a pre-test of 10 questions designed to allow you to determine your baseline knowledge on the subject area. The pre-test will automatically load when you enter the module. You will be given a score out of 10 at the end of the test, but will not be provided with feedback at this stage. This will be followed by a brief *Module Overview*, recommendations for any reading that may facilitate progress through the module (*‘Pre-requisites’*), *Learning Outcomes* and a summary of the main NMC ‘Standards of proficiency for registered nurses’ to which the module aligns (*‘NMC Standard Alignment’*).

The learning commences with a *Case Vignette*, which introduces some key concepts covered in the module content. In-module activities are included throughout the modules to embed learning.

At the end of the module, you will sit a post-test of the same 10 questions presented in the pre-test. These will be asked in a random order and as the resource develops, the post-test questions may be different for some modules. You will be given a score out of 10 at the end of the test and be provided with feedback for each question as you answer it. In order for the post-test to be activated you must have viewed all content in each module. Guidance on this is given in the post-test page in the *Summary* section of each module.

<sup>4</sup>Nursing and Midwifery Council (NMC). Standards of proficiency for registered nurses. 2018; Available online at <https://www.nmc.org.uk/standards/standards-for-nurses/standards-of-proficiency-for-registered-nurses/>

## 2.2 Certification

Upon completion of the module, a certificate will be made available as a PDF stating:

- Your name
- The module title
- The learning outcomes of the module
- The date and time the certificate was generated

This can be used as evidence of CPD, and printed or uploaded to portfolios.

## 2.3 The pre/post-test score

The pre/post-tests are intended to help you determine your baseline knowledge on the module subject and be a measure of knowledge acquisition. The pre/post-tests are intended to add an element of interactivity.

The questions have not been reviewed by an examination board. Your institution has decided if a pass mark has been assigned to the modules and whether your post-test score is generated onto your module certificate. This information is outlined in Appendix 3 if your institution has requested a bespoke guide from the SCRIPT team. However, whether or not a pass mark has been set, your progress through the modules may be monitored by your institution, and consistent low scores throughout may call for modules to be re-set and for the test to be re-taken.

## 3.0 THE RESOURCE IN PRACTICE

### 3.1 Mandated modules

Some Nursing Schools may choose to mandate specific SCRIPT modules. These will be set and communicated to you by your institution (these will also be outlined in Appendix 3 if your institution has requested a bespoke guide from the SCRIPT team).

Should modules be mandated, the certificates provided at the end of the module can serve as evidence of module completion. SCRIPT also has a dedicated management site that can be accessed by tutors to monitor the uptake of mandated modules. This function serves two purposes:

1. Institutions can ensure that you are taking steps to develop your knowledge relating to medicines management and optimisation
2. It can encourage discussion about medicines management throughout your teaching

A designated person in your institution will see the following information about your progress through the eLearning modules:

- When you have completed the modules (day of week and time of day)
- How long you spent on the learning
- Your pre- and post-test scores

Information from the management site may be used in addition to module certificates to confirm that the learning has been completed in full.

Tutors monitoring your progress through the learning can re-set the module and request that you re-take the test. This is a local decision and one that should be taken in discussion with both yourself and your tutor. In addition, you can also re-set the module yourself.

### 3.2 Probity

Probity is at the heart of any healthcare profession. Probity means being honest and trustworthy and acting with integrity. The Nursing and Midwifery Councils Code for nurses and midwives states you must *“act with honesty and integrity at all times”*<sup>5</sup>.

Since the launch of SCRIPT, we have monitored its use by users. This has been conducted for quality assurance and to ensure that users are using the resource as intended. We have learned of dishonest behaviours to ‘work around’ the mandated modules. This includes fraudulently creating certificates for modules that have not been completed, completing multiple modules simultaneously by opening a number of tabs on the computer, and rushing through modules in under 10 minutes (the average time to complete a module is 60 minutes). We would like to remind you of the standards set out by the NMC.

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<sup>5</sup>Nursing and Midwifery Councils (NMC). The Code. 2015; Available online at <https://www.nmc.org.uk/standards/code/>

## 4.0 REGISTRATION

1. Go to [www.safeprescriber.org](http://www.safeprescriber.org) , and select 'Nursing'.
2. Click 'Sign up', then under member select 'Sign up' again.
3. Select your 'Nursing School', then under 'Register' enter your email address and click 'Get Started'.
4. During registration, you will be asked to provide the following information:
  - Name
  - Email address
  - Telephone number
  - Profession (select 'Nursing student')
  - Student Number
  - Degree (including year of study)
  - Password
5. When you have entered your details, you will need to agree to the terms and conditions.
6. You will receive an email confirming your registration. When this is complete, you can login and access all the modules.
7. When you have completed a module, a certificate will be made available.

Your registration information is not shared with a third party, and is maintained on a secure server.



## 5.0 FREQUENTLY ASKED QUESTIONS

### 5.1 Technical problems

#### *What should I do if I have forgotten my password?*

On the login page, click to indicate you have forgotten your password. Enter your email address and click submit. You will receive an email that contains a link to change your password.

#### *What do I do if I have forgotten the email address I registered with?*

Email us at [info@safeprescriber.org](mailto:info@safeprescriber.org) or click 'Feedback' in the bottom right hand corner of the homepage. The technical team will respond accordingly.

### 5.2 Content queries and feedback

#### *Who do I contact if I spot an error on the site?*

Email us at [info@safeprescriber.org](mailto:info@safeprescriber.org) or click 'Feedback' in the bottom right hand corner of the homepage. The editorial team will review your query and respond accordingly.

### 5.3 SCRIPT

#### *How long do the modules take to complete?*

Each module takes an average of 60 minutes to complete.

#### *Is there a pass mark for the post-test?*

Your institution will have decided whether to set a pass mark. If this has been set, this will be communicated to you by your relevant tutors or supervisors.

#### *How do I get the module certificate?*

A certificate is generated upon completion of all elements of the module. This includes the pre- and post-test.

#### *What should I do with the certificates?*

Once you have downloaded a certificate, it is important that you save this. The certificate may be used by your tutor to monitor your progress.

## 6.0 APPENDICES

APPENDIX 1: Module titles and learning outcomes

APPENDIX 2: Module alignment to the NMC's 'Standards of proficiency for registered nurses'

APPENDIX 3: Mandatory modules (if applicable)

## APPENDIX 1: Module titles and learning outcomes

Category	Principles of Medicines Management
Module Title	Learning Outcomes
Dose Calculations	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>List some common calculation errors and how these may occur.</li> <li>Describe the standards in place to reduce the risk of medication errors as a result of calculation errors.</li> <li>Access and use appropriate resources to assist your calculations.</li> <li>Convert units and measures.</li> <li>Discuss the various terms used to define a patient's weight, and calculate doses based on these parameters.</li> <li>Calculate doses to be administered for enteral and parenteral medicines.</li> <li>Calculate a percentage change in dose.</li> </ul>
Evidence-Based Practice	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>Describe the principles of Evidence-Based Practice (EBP).</li> <li>Describe how EBP is crucial in the development of healthcare policies, protocols and formularies.</li> <li>Know where to access reputable, reliable and up-to-date information.</li> <li>Analyse and appraise evidence.</li> <li>Describe the role of Area Prescribing Committees (APC) and the National Institute for Health and Care Excellence (NICE).</li> <li>Describe the role of the UK Medicines Information Service (UKMi) and how it can support healthcare professionals (and patients) with queries about medicines.</li> <li>Describe the role of clinical audit and the stages involved.</li> </ul>
Medicines Management in Care Homes	<p>By the end of this module, and with reference to the NICE guidance on '<i>Managing Medicines in Care Homes</i>' (SC1), you should be able to:</p> <ul style="list-style-type: none"> <li>List the six 'rights' of medicines administration.</li> <li>Discuss the practical options available to aid medicines administration and list their limitations.</li> <li>Describe the interventions that support adherence to treatment regimens.</li> <li>Discuss importance of monitoring, documenting and reporting adverse drug reactions.</li> <li>Discuss the importance of effective communication at the transfer of patient care.</li> <li>Define 'medicines reconciliation' and know your role and responsibilities within this process.</li> </ul>
Fundamentals of Pharmacology*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>Define the following terms: agonist, antagonist and partial agonist.</li> <li>Define, and explain the differences between affinity, efficacy and potency.</li> <li>Describe how drugs can desensitise their receptor targets.</li> <li>List the different routes of drug administration.</li> <li>Describe how changing the route of administration can influence drug exposure.</li> <li>Define and explain the terms 'bioavailability', 'volume of distribution', 'half-life', and 'clearance', and the factors that can affect them.</li> <li>Discuss the main processes involved in drug metabolism in the body.</li> </ul>

\* In development, due 2019

Category	Principles of Medicines Management
Module Title	Learning Outcomes
Formulation and Administration	<p>By the end of this module, you should be able to:</p> <p><b>Formulation</b></p> <ul style="list-style-type: none"> <li>• Describe the role of excipients in medicines formulation and give examples of when they are cautioned or contraindicated in specific patient groups.</li> <li>• List the drugs that are recommended to be prescribed as brands, owing to changes in bioavailability between formulations.</li> <li>• Define unlicensed and off-label medicines and provide guidance on the administration of these.</li> </ul> <p><b>Administration</b></p> <ul style="list-style-type: none"> <li>• Discuss the process measures that should be taken to reduce the risk of administration errors (e.g. second checks).</li> <li>• Discuss the risks of preparing injectables in advance, considering both the stability of the medicine and risk of inadvertent administration to the wrong patient.</li> <li>• Describe some complications of drug administration and how they can be managed.</li> <li>• Discuss the practical aspects of administering medicines via enteral feeding tubes and the cautions and contraindications with regards the manipulation of medicines for this route.</li> <li>• List reputable evidence-based resources available to assist the preparation of medicines for parenteral administration or via enteral feeding tubes.</li> <li>• With reference to national statistics on omissions of medicines ('missed doses'), discuss the importance of timely administration and working with pharmacy to ensure availability of treatments to avoid patient harm.</li> <li>• With reference to specific drugs and formulations, discuss the importance of timely administration in relation to response and monitoring (e.g. nitrate free period, timing prior to therapeutic drug monitoring).</li> </ul>
Root Cause Analysis*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the importance of 'being open' when a patient safety incident occurs.</li> <li>• Discuss the tools used in the Root Cause Analysis (RCA) of incidents.</li> <li>• Know how the tools for RCA help identify ways of improving patient safety.</li> </ul>

\* In development, due 2019

Category	Principles of Medicines Management
Module Title	Learning Outcomes
UK Medicines Policy	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the Nursing and Midwifery Council's (NMC) '<i>Standards for Medicines Management</i>'.</li> <li>• Describe the scope of the Human Medicines Regulations 2012, in relation to the: <ul style="list-style-type: none"> <li>○ Authority to prescribe, supply and administer medicines.</li> <li>○ The use of medicines that are controlled by the Misuse of Drugs Regulations 2001.</li> <li>○ Storage, supply and destruction of medicines.</li> </ul> </li> <li>• Define what a 'Patient Specific Direction' (PSD) is and why local guidance in the form of a Medicines Policy informs the use of medicines in hospitals.</li> </ul>
Utilising the BNF(C)	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the basic layout and structure of the BNF and BNFC.</li> <li>• Navigate the smartphone mobile app, online and printed book versions.</li> <li>• Describe the information contained within <i>General Guidance</i> section.</li> <li>• Find and accurately interpret the dose, route, frequency and indication for a given medicine.</li> <li>• Find information on the licensed status of a medicine.</li> <li>• Find information about the different formulations available for a medicine, and identify excipients contained within these.</li> <li>• Find instructions on the administration of medicines given via intravenous infusions.</li> <li>• Describe the information available in the appendices and indices of the BNF and BNFC.</li> </ul>

Category	Managing the Risks
Module Title	Learning Outcomes
Adverse Drug Reactions	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Define an ADR and say how ADRs are classified.</li> <li>• Identify susceptibility factors that place patients at increased risk of ADRs.</li> <li>• Discuss the concept of pharmacovigilance and its importance for public health.</li> <li>• Explain the role and function of the Yellow Card Scheme.</li> <li>• Name sources of information on ADRs.</li> </ul>
Medication Errors	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Define medication errors, including subtypes.</li> <li>• Identify individual and system factors that can lead to error.</li> <li>• List examples of medication errors from all stages of the medication process, and use these to draw attention to the standards required throughout the process to ensure patient safety.</li> <li>• Discuss the importance of local and national reporting systems as a means to improve patient safety, and their responsibilities should they identify an error.</li> <li>• Explain the role of the Medicines and Healthcare Products Regulatory Agency (MHRA) and NHS England in providing information on both the use of medication and how the risk of errors can be minimised.</li> <li>• Describe the role of clinical governance in the monitoring and continuous improvement of healthcare to safeguard high standards of care.</li> <li>• Discuss the potential benefits of electronic prescribing and barcode technology in reducing medication errors, and the potential pitfalls of such systems [e.g. use of work arounds to avoid decision support].</li> </ul>
Practical Paediatrics*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss why children are more vulnerable to medication errors, and how to avoid them.</li> <li>• List the different ways a paediatric dose may need to be calculated, including those based on body weight and Body Surface Area (BSA).</li> <li>• Explain what is meant by unlicensed and off-label medicines, and provide examples of these in paediatrics.</li> <li>• Recognise that age appropriate medicines are not always readily available for children, and understand how this is managed in practice.</li> <li>• Describe how children and neonates handle drugs differently from adults, and how this influences prescribing and administration.</li> <li>• Explain how the processes of drug metabolism differ in neonates and children compared to adults.</li> </ul>

\* In development, due 2019

Category	Managing the Risks
Module Title	Learning Outcomes
Drug Interactions	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Define pharmacodynamic and pharmacokinetic mechanisms of drug interactions.</li> <li>• List the patient factors that may increase the risk of a drug interaction occurring.</li> <li>• Describe some common drug interactions in clinical practice and strategies for minimising their risk of occurrence.</li> <li>• Access reputable information on the risk of a drug interactions occurring and the potential effects.</li> <li>• Report all suspected drug interactions for new medicines (black triangle drugs) and serious reactions for all medicines to the Medicines and Healthcare Products Regulatory Agency (MHRA) Yellow Card Scheme.</li> </ul>
Special Patient Groups	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss how impaired kidney and liver function can alter the way the body handles medicines (i.e. the pharmacokinetics of the medicine).</li> <li>• List some common medicines that are toxic to the kidney and liver.</li> <li>• Identify common medicines that need dose adjustment or increased monitoring in kidney and liver dysfunction.</li> <li>• Describe the physiological changes that occur with age and how this can alter the way in which the body handles medicines.</li> <li>• Describe how drug exposure to the fetus can be minimised to reduce the risk of harm during pregnancy.</li> <li>• Describe the factors that should be considered when administering medicines to a breastfeeding mother.</li> <li>• Know where to find reputable, reliable and up-to-date information.</li> </ul>
Sepsis	<p>By the end of this session, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the spectrum of infection and continuum of sepsis.</li> <li>• Know where to find and how to use tools to help you to recognise the acutely ill patient with sepsis.</li> <li>• List situations where patients may not manifest the traditional signs and symptoms of sepsis.</li> <li>• Discuss the factors to be considered when initiating treatment for the patient with sepsis.</li> <li>• List the six elements of the Sepsis Six® Care bundle and the time frame in which these should be administered.</li> <li>• Discuss good antimicrobial stewardship relating to the management of sepsis.</li> <li>• Discuss the ongoing management of the patient with sepsis, including the importance of source control.</li> </ul>

Category	Therapeutic Groups
Module Title	Learning Outcomes
Anticoagulation Part 1	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the basic pharmacology of Vitamin K Antagonists (VKAs).</li> <li>• Discuss the indications for treatment, the recommended dosing regimens and duration of treatment.</li> <li>• List the cautions and contraindications of treatment.</li> <li>• Discuss the potential complications of therapy.</li> <li>• Describe the monitoring requirements.</li> <li>• Describe the common drug-drug and drug-food interactions.</li> <li>• Counsel patients prescribed a VKA so to minimise the risk of harm and to support adherence.</li> <li>• Describe the role of the anticoagulant clinic and the importance of communication at the transfer of care.</li> <li>• Discuss the national recommended standards for prescribing, dispensing and administration of anticoagulant therapy.</li> </ul>
Anticoagulation Part 2	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the basic pharmacology of Direct Oral Anticoagulants (DOACs), unfractionated heparin and Low Molecular Weight Heparins (LMWHs).</li> <li>• Discuss the indications for treatment, the recommended dosing regimens and duration of treatment for each.</li> <li>• List the cautions and contraindications of therapy.</li> <li>• Discuss the potential complications of therapy.</li> <li>• Describe the monitoring requirements.</li> <li>• List some common drug-drug interactions.</li> <li>• Counsel patients prescribed a DOAC or a LMWH so to minimise the risk of harm and to support adherence.</li> </ul>
Respiratory Medicine	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Administer oxygen safely in both the acute and long-term settings.</li> <li>• Counsel patients about the options available for smoking cessation and suggest appropriate Nicotine Replacement Therapy (NRT).</li> <li>• Describe the different devices available for delivering inhaled therapy, and demonstrate correct inhaler technique.</li> <li>• Manage patients with both acute and chronic asthma, and Chronic Obstructive Pulmonary Disease (COPD).</li> </ul>
Introduction to Mental Health*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the difference between functional and organic mental illness.</li> <li>• List the different categories of mental health services that are available.</li> <li>• Describe how the specialist psychiatric service liaises with both primary and secondary care.</li> <li>• Discuss the underlying principles of the Mental Health Act and the Mental Capacity Act.</li> <li>• Explain the impact of the Mental Health Act and the Mental Capacity Act on the prescribing and administration of medicines.</li> <li>• Describe the aims of rapid tranquilisation together with the various treatment options available.</li> </ul>

\* In development, due 2019.

Category	Therapeutic Groups
Module Title	Learning Outcomes
Affective Disorders*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the stepwise management of depression, including the non-pharmacological interventions available.</li> <li>• Describe the various classes of antidepressants available in the UK and their place in therapy for the treatment of depression or depressive symptoms.</li> <li>• Discuss the risk of withdrawal syndrome when antidepressants are discontinued abruptly.</li> <li>• Describe the pharmacological treatment options available for the management of bipolar disorder, their adverse effects and monitoring requirements.</li> <li>• List the pharmacological treatment options available for the management of anxiety.</li> <li>• Describe the key adverse effects and drug-drug interactions associated with medicines used in the management of mood (affective) disorders.</li> <li>• Discuss the use of hypnotic medicines in the management of insomnia.</li> <li>• Describe the management of insomnia in special patient groups (e.g. children, elderly).</li> </ul>
Disorders of Psychosis*	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the pharmacological treatment options available for the management of schizophrenia and psychotic disorders.</li> <li>• Describe how the typical and atypical antipsychotics differ in their adverse effect profiles.</li> <li>• Describe the physical health monitoring required for patients prescribed antipsychotics. Discuss the use of clozapine for the management of schizophrenia, its place in therapy, adverse effects and monitoring requirements.</li> <li>• Describe the risks and benefits of intramuscular administration of depot formulations/ long-acting injections, and when these may be appropriate for the management of mental illness.</li> <li>• Describe the key drug-drug interactions associated with medicines used in the management of psychosis disorders.</li> <li>• Discuss the key counselling points for patients to support treatment choice and adherence.</li> </ul>
Treatment of Infection	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the different types and classes of antibacterials available and their spectrum of cover.</li> <li>• List the infections that are notifiable to Public Health England (PHE).</li> <li>• Describe how bacteria can develop resistance to antibacterials.</li> <li>• Discuss the importance of timely administration of antibacterials.</li> <li>• Counsel patients who are prescribed an antibacterial in order to minimise the risk of harm and to support adherence.</li> <li>• Explain why certain antibacterials might be restricted in an organisation such as a hospital.</li> <li>• Discuss the common healthcare associated infections.</li> <li>• Know where to look for guidelines on treating infections and why adherence to these is important.</li> </ul>

\* In development, due 2019



Category	Therapeutic Groups
Module Title	Learning Outcomes
Introduction to Pain Management	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss how pain can be classified according to its underlying pathology, speed of onset and the way it responds to analgesic treatment.</li> <li>• Describe some of the models and frameworks available to assess and measure pain.</li> <li>• Discuss the importance of shared decision-making in pain management, taking into account the priorities of the patient and their relatives and/or carers.</li> <li>• Describe the non-pharmacological options available for the management of pain.</li> <li>• Describe the importance of effective communication in the management of pain.</li> </ul>
Pharmacological Pain Management	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe how the WHO Pain ladder assists in the pharmacological management of both acute and chronic pain.</li> <li>• Discuss the risks associated with paracetamol and Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), and how these may be minimised.</li> <li>• List the weak opioid analgesics available for prescribing in the UK, and when they are appropriate for use.</li> <li>• List strong opioid analgesics, and understand how they are initiated and titrated.</li> <li>• List the medicines recommended for the management of neuropathic pain, and how these are initiated.</li> <li>• Describe the signs and symptoms of toxicity associated with the administration of local anaesthetics.</li> </ul>
Advanced Pain Management	<p>By the end of this module, you should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the strong opioid analgesics used in the management of advanced disease.</li> <li>• Identify patients with complex analgesic requirements where input may be required from specialist teams.</li> <li>• Discuss the medicines that can be administered by subcutaneous infusion using a syringe driver, and where to find information about compatibilities.</li> <li>• Describe the indications and cautions of Patient Controlled Analgesia (PCA).</li> </ul>

## APPENDIX 2: Alignment of SCRIPT modules to the NMC's 'Standards of proficiency for registered nurses' (2018)

Module Title	Outcomes in Platforms 1-7 to which each module aligns	Skills from Annexe A reinforced/ underpinned by each module	Skills from Annexe B reinforced/ underpinned by each module
Dose Calculations	1.15, 4.5, 4.14		11.4
Evidence-Based Practice	1.1, 1.7, 1.8, 2.10, 4.5, 6.4		
Medicines Management in Care Homes	3.6, 3.8, 4.5, 4.14, 4.18, 7.10	2.2	11.3
Fundamentals of Pharmacology	3.2, 4.5, 4.15, 4.17		
Formulation and Administration	1.9, 1.10, 1.16, 3.6, 3.8, 4.5, 4.14, 4.15, 4.16	1.6	11.2, 11.7, 11.8, 11.9
Root Cause Analysis	4.5, 6.6, 6.8, 7.11		
UK Medicines Policy	1.1, 1.2, 1.16, 4.5, 4.14, 7.2	1.11	11.2, 11.5, 11.6, 11.11
Utilising the BNF©	4.5, 4.15		
Adverse Drug Reactions	4.5, 4.15		11.1
Medication Errors	1.2, 1.3, 4.5, 4.15, 6.8		
Practical Paediatrics	4.5		
Drug Interactions	4.5		
Special Patient Groups	3.1, 4.5, 4.15		
Sepsis	3.3, 3.11, 3.12 4.5, 4.10	2.2	1.2.3, 2.13
Anticoagulation Part 1	3.3, 4.5	2.2	
Anticoagulation Part 2	3.3, 4.5	2.2	
Respiratory Medicine	2.4, 3.3, 4.5	2.2	
Introduction to Mental Health	3.6, 3.8, 4.5		
Affective Disorders	4.5		
Disorders of Psychosis	4.5		
Treatment of Infection	2.12, 3.3, 4.5	2.2	
Introduction to Pain Management	3.3, 3.4, 4.5, 4.8	2.2	3.1, 10.1
Pharmacological Pain Management	3.3, 4.5, 4.8	2.2	3.5
Advanced Pain Management	3.3, 4.1, 4.5, 4.8	2.2	3.5, 10.2