

SCRIPT: An innovative eLearning programme to improve medicines management by qualified nurses in the West Midlands

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Background

Medication is the most common intervention in clinical practice, costing the National Health Service (NHS) around £13 billion per year. 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*”^[1]. In the UK, medication errors account for 10–20% of all adverse events in the NHS, and preventable harm from medicines is estimated to cost more than £750 million each year.

SCRIPT was first developed in 2011 by a team of clinical pharmacists and clinical pharmacologists working in both education and healthcare in the West Midlands. Commissioned by Health Education England’s (HEE) West Midlands Team, the aim of the project was to provide an eLearning programme to improve the prescribing competency of junior doctors in the region.

Drug Safety and Medicines Optimisation are clinical priorities of the West Midlands Academic Health Science Network (WM-AHSN). To address these key issues, the WM-AHSN has commissioned the University of Birmingham and OCB Media Ltd, in collaboration with Coventry and Warwickshire Partnership NHS Trust to develop an eLearning programme for qualified nurses. Based on the established successful SCRIPT programme for junior doctors, Nursing SCRIPT has been developed in close collaboration with Health Education England.

Aim and Objectives

Aim:

- To develop a web-based resource to improve nurses’ knowledge about managing medicines and optimising the use of medicines in the NHS to benefit patient care.

Objectives:

- To develop 17 modules across a wide range of therapeutic areas aligned with the Nursing and Midwifery Council’s (NMC) Standards for Medicines Management^[2].
- To create an eLearning platform that qualified nurses can access easily for *just-in-time* learning.
- To provide a resource that supports a qualified nurse’s Continuing Professional Development (CPD).
- To help maintain and develop professional knowledge and competence related to medicines.

Developing the Resource

A scoping exercise was performed at Coventry and Warwickshire Partnership NHS Trust, aligning the NMC Standards for Medicines Management^[2] to a list of potential module titles. A multidisciplinary team was then commissioned to author eLearning content for 17 modules relating to medicines management across three categories (see Figure 1).

The eLearning Modules

The programme is accessible online at www.safeprescriber.org, and is freely available to all qualified nurses in the West Midlands. The module content for the 17 modules (see Figure 2) has been developed to provide an interactive blend of background pharmacological knowledge and patient-centred learning by presenting scenarios that nurses are likely to encounter.

Principles of Medicines Management	
Dosing and Calculations	
Evidence-Based Practice	
Formulation and Administration	
Medicines Management in Care Homes	
UK Medicines Policy	
Utilising the BNF(C)	
Managing the Risks	
Adverse Drug Reactions	
Drug Interactions	
Medication Errors	
Special Patient Groups	
Therapeutic Groups	
Anticoagulation (1)	
Anticoagulation (2)	
Treatment of Infection	
Introduction to Pain Management	
Pharmacological Pain Management	
Respiratory Medicine	
Advanced Pain Management	

Figure 2: Nursing SCRIPT module titles

Each module (Figure 3) has the same core components, commencing with a pre-test of 10 questions, designed to allow the nurse to determine their baseline knowledge on the subject area. The learning starts with a brief session overview and recommendations for any reading that may facilitate progress through the module (‘Pre-requisites’) and learning outcomes. The nurse is then presented with a Case Vignette that will introduce some key concepts from the module.

The main module content takes approximately 30-40 minutes to complete. Additional activities are presented throughout to embed learning. At the end of the module, the nurse is presented with the same 10 questions (in a random order) and optional further reading. The pre/post-test is intended to help the nurse measure their knowledge acquisition on the module subject.

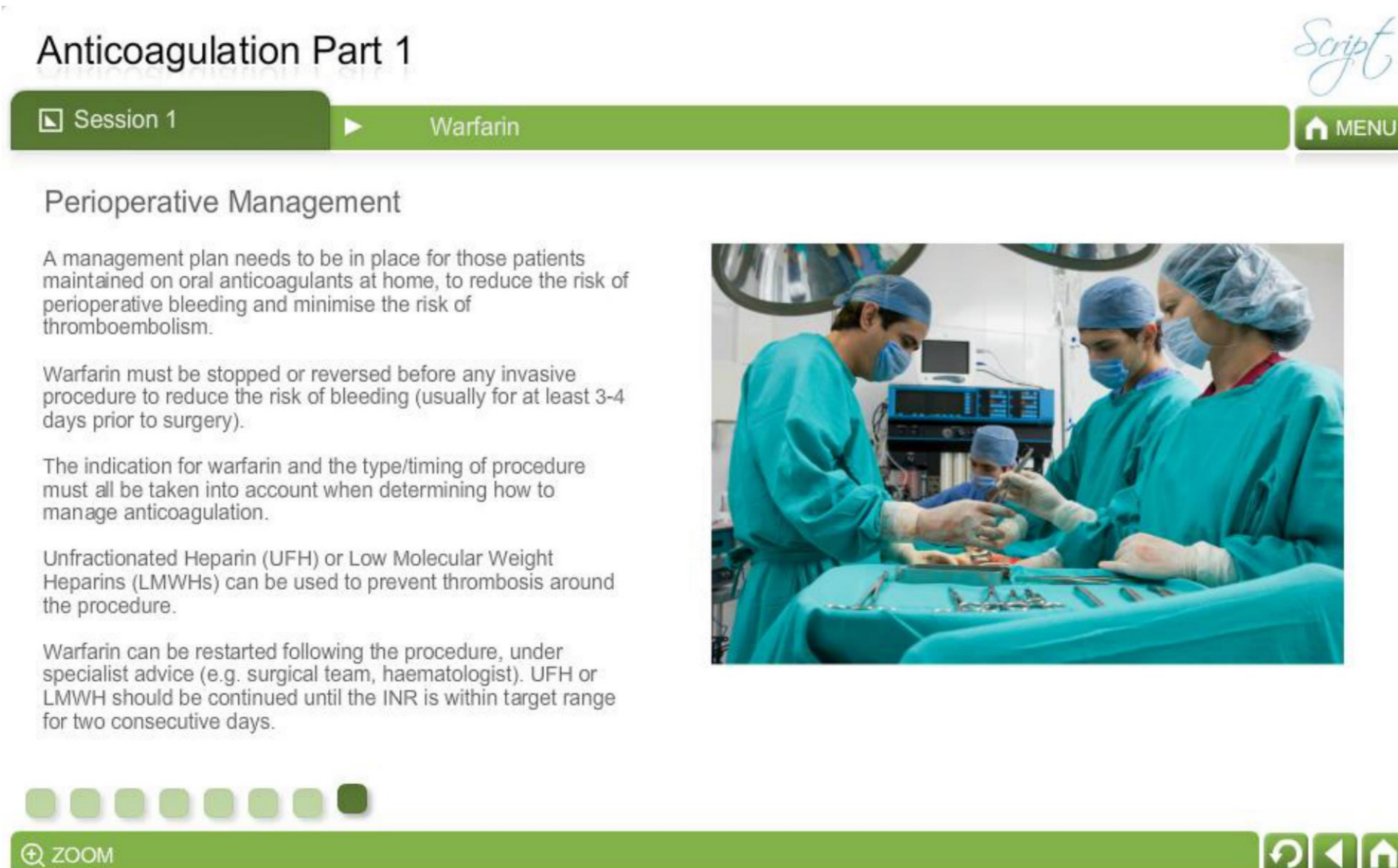


Figure 3: SCRIPT eLearning content

CPD

The regulations governing the prescribing, administration and supply of medicines are subject to regular review. In addition, as new evidence emerges, guidance on the management of conditions and monitoring of pharmacological treatments can change. Keeping up-to-date with changes in prescribing and administration practice is essential for patient safety and to maintain high standards in the profession. It is also a legal requirement that qualified nurses undertake CPD as part of their revalidation process.

Upon completion of a module, a personalised certificate is made available as evidence of CPD. The pre/post-test questions have not been reviewed by an examination board. As such, a pass mark has not been set and the post-test score is not generated onto the module certificate.

Use in Practice

To ensure that the module content is accurate and relevant to current clinical nursing practice, all the modules have been externally peer reviewed, and will be reviewed by the author every 2–3 years. In addition, the editorial team continually update the content to reflect new guidance or alerts as they are issued. There is also a feedback functionality on the website that allows users to contact the editorial and technical team.

NHS Trusts, institutions or practices in the region may choose to mandate specific SCRIPT modules. This will be communicated to nurses from local education leads, and not regionally from HEE or the WM-AHSN. SCRIPT has a dedicated management site that can be accessed by named individuals to monitor the uptake of mandated modules. This function serves two purposes:

- Institutions can ensure that qualified nurse practitioners are taking steps to develop their medicines management knowledge.
- It can encourage discussion about medicines management in workplace education and during appraisals.

A Nursing SCRIPT User Guide has been developed and disseminated to all the Educational Leads for nurses in the region.

Conclusion

Nursing SCRIPT is a web-based eLearning programme for qualified nurses in all sectors of healthcare in the West Midlands. The resource will help develop their knowledge of medicines and medicines optimisation to benefit patient care.

For further information please contact: script@contacts.bham.ac.uk



Figure 1: Nursing SCRIPT module categories

References

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