



This presentation provides a sample of instructional and interactive screens developed as part of the **eLearning for Healthcare** project.

I was part of a team of **Instructional Designers** contributing to the design and development of the learning content. The course's overall look, feel, and templates were provided to the team, ensuring consistency across the project.

The slides included here illustrate examples of the instructional approach, screen layouts, and interactive elements used within the programme. They are intended to showcase the design style and learning experience rather than present the full course in sequence.

Drag+Drop Interaction

Menu

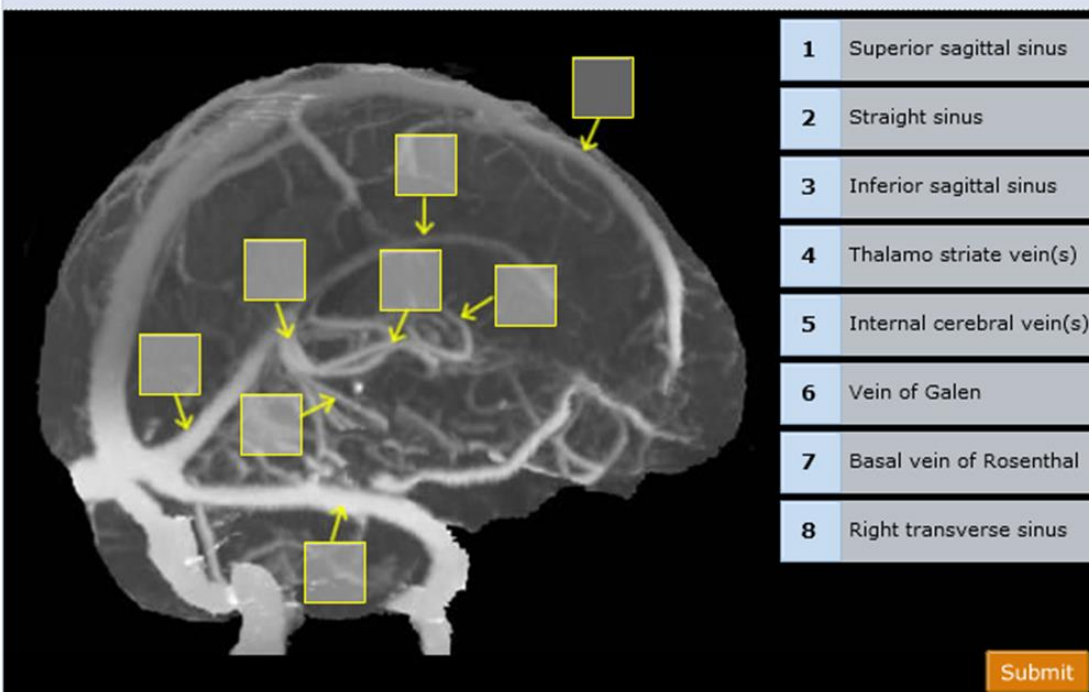
← Previous

7 / 47

Next →

Maximum intensity projection (MIP) images allow superficial and deep veins to be demonstrated with no overlying bone.

In this right oblique view, drag the numbered labels to identify all the marked veins.



Knowledge Checker – Drag and Drop Interaction

This screen presents a drag and drop anatomy exercise using a brain scan image to test knowledge of cerebral vein identification.

Learners drag numbered anatomical labels from the right panel to match them with the correct vein locations marked on the medical image, then submit for immediate feedback.

The interaction combines visual anatomy learning with active assessment, supporting medical knowledge by requiring learners to apply their understanding of brain vascular anatomy to real diagnostic imaging rather than simplified diagrams.

Animation, Interaction

Menu

← Previous

8 / 47

Next →

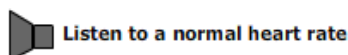
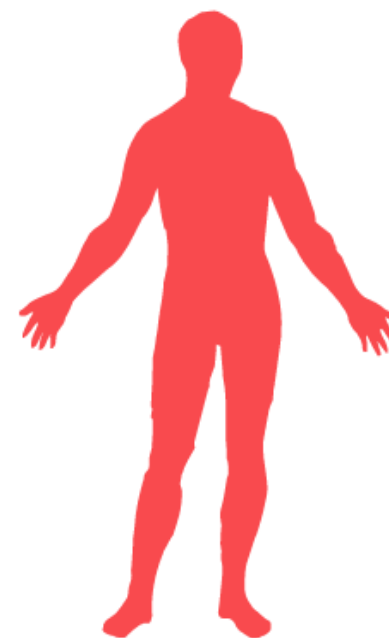
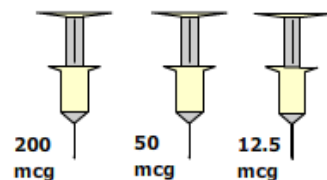
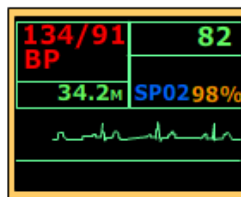
CVS: Fentanyl gives a vagally induced bradycardia. Cardiac output and mean arterial pressure are not affected by administration of the drug.

RS: Fentanyl is a potent respiratory depressant. It causes a decrease in both the respiratory rate and tidal volume. It also decreases the response to hypoxia and hypercapnia. It is an anti-tussive.

Fentanyl can cause a rigid chest, which will cause difficulty in respiration and ventilation. However, it rarely causes bronchospasm.

Exercise

Drag and drop the safe incremental dose of fentanyl in the animation opposite.

**Instruction – Animation Interaction**

This screen engages learners through an animation-based activity. Learners drag and drop incremental doses of fentanyl to observe the effect on the patient.

A hint button provides an audio clip of a normal heartbeat, while feedback is delivered via a movie clip showing changes on the monitor (heart rate, pulse, oxygen levels) for each dose.

This reinforces understanding of drug effects in a dynamic, visual way.

Click on the links below.

Technique

The fingers are placed behind the angle of the jaw (i.e. just in front of the ear). This pulls on the hyoepiglottic ligament, pulling the epiglottis out of the way. The jaw thrust is directed towards the ceiling, in the supine patient.

- **Illustration**
- [Photo](#)



Instruction – Click to Reveal Interaction

This screen introduces the jaw thrust technique, commonly used to maintain an open airway.

Learners read a short description of the procedure and then click to reveal an illustration or photo that demonstrates the correct positioning.

The interaction combines text with a visual example, supporting understanding by linking the explanation to a clear, practical image.

Click on the links below.

Technique

The fingers are placed behind the angle of the jaw (i.e. just in front of the ear). This pulls on the hyoepiglottic ligament, pulling the epiglottis out of the way. The jaw thrust is directed towards the ceiling, in the supine patient.

- [Illustration](#)
- [Photo](#)



Instruction – Click to Reveal Interaction

This screen introduces the jaw thrust technique, commonly used to maintain an open airway.

Learners read a short description of the procedure and then click to reveal an illustration or photo that demonstrates the correct positioning.

The interaction combines text with a visual example, supporting understanding by linking the explanation to a clear, practical image.

Video

Menu

← Previous

17 / 47

Next →

The purpose of the sessions on legal and ethical behaviour is to explore those issues that arise in healthcare and to discuss the ethical and legal implications of decisions which you or your colleagues might have to make. To do so, we shall examine the rights of patients and outline the effects of The Human Rights Act on the practice of medicine. The session also explores some key ethical and legal aspects of the duty of care placed upon the clinician.

An interactive format allows you to delve into your own thoughts and ideas on some complex issues, including human rights and life and death, and compare them with the legal standpoint. The guidance and legal cases given are based on English law and are current as of December 2002.

! If you have a potential legal problem, you should consult your professional organisation immediately as it will be able to advise you on your specific problem.

The video shows the type of dilemma that might occur in healthcare.

Click the play button to view the video.



(Reproduced with permission from www.nhs.uk)

Instruction - Video

This screen introduces legal and ethical behaviour concepts in healthcare practice, focusing on patient rights and professional responsibilities.

Learners read an overview of the session objectives and then click to play an embedded video that demonstrates real-world healthcare scenarios involving ethical dilemmas.

The interaction combines explanatory text with video content, supporting understanding by linking theoretical legal concepts to practical clinical situations that healthcare professionals encounter.

Pre-session Knowledge Check

Menu

← Previous

28 / 47

Next →

Even in the hands of a relative 'expert', ultrasound appearances can be misleading and may result in significant mismanagement of the patient.

Click on the links below.

Case History

A 19-year-old woman was admitted with a positive pregnancy test, low abdominal pain and slight PV bleed.

- A [transvaginal scan](#) was requested to confirm viability and to exclude ectopic pregnancy
- The ultrasound appearances demonstrate an [intrauterine gestation sac](#) with a single live fetal pole (not visible on this image)
- A [second gestation sac](#) was seen within the pouch of Douglas, within which a [live fetal pole](#) was demonstrated

Based on these facts, you might reach the conclusion that this is an intrauterine gestation with co-existing ectopic pregnancy. The patient was taken to theatre, where no evidence of an ectopic pregnancy was found. The scan was repeated, the appearances remained unchanged and the patient was taken to theatre again.

Question

What caused these appearances?

Click [here](#) to find out.

Answer

This was not an ectopic pregnancy. The ultrasound image shows an example of an artefact that is common in both upper abdominal and transvaginal scanning.

By the end of this session, you should be able to explain these appearances.

Pre-Session Knowledge Check

This screen presents a pre-session knowledge check using a clinical case study about ultrasound interpretation and ectopic pregnancy diagnosis.

Learners read through a detailed case history with embedded hyperlinks (that reveal definitions) and then access the model answer for the diagnostic question.

The interaction combines case-based learning with clickable links and expandable content, supporting knowledge assessment by linking clinical scenarios to key medical concepts and terminology.

Drag+Drop Interaction

Menu

← Previous

24 / 47

Next →

You should by now be getting an idea about the amounts of energy associated with different processes on the atomic scale. What can you remember and what you can surmise?

Drag each energy level on the right to the correct process on the left.

Energy of an ionic bond		>1,000,000
Energy from ionisation of a single atom		35
Energies of photons in a typical x-ray beam		12
Energy of a hydrogen bond		2-3
Minimum energy to ionise an atom		4
Typical energies of alpha-particles		20,000 - 100,000
Energies of light photons		0.4
Energy of gamma-ray from Tc99m used in nuclear medicine		140,0000

Submit

Knowledge Checker

Drag and Drop Interaction

This screen presents a drag and drop interaction testing knowledge of energy levels associated with different atomic and medical physics processes.

The interaction combines active learning with immediate assessment, supporting knowledge retention by requiring learners to actively match scientific concepts with their corresponding numerical values rather than simply reading passive content.

Video, Images, Interaction ▶ Myxoma

Menu

← Previous

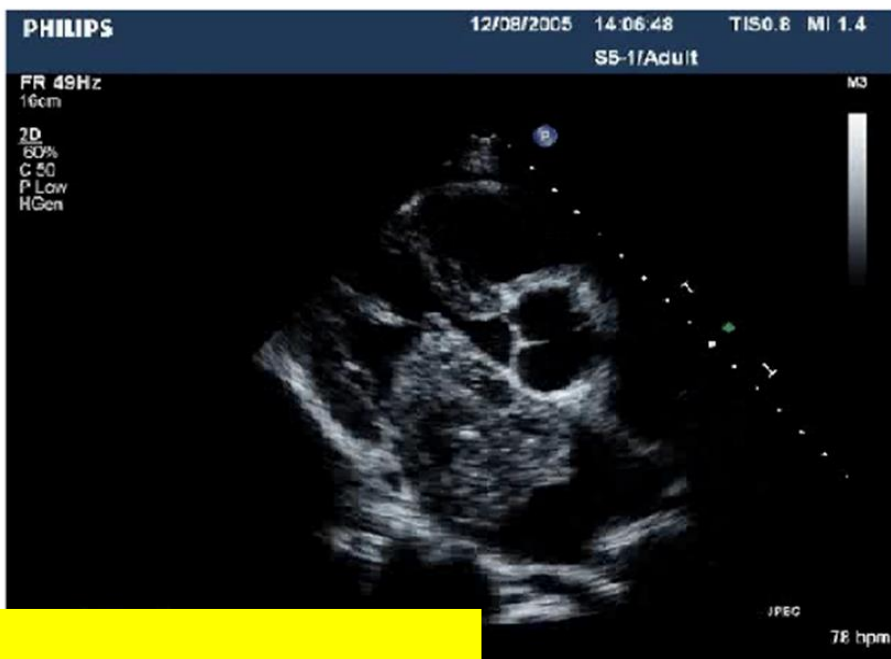
29 / 47

Next →

Myxomas are by far the commonest cardiac tumour and arise more frequently in the left atrium than in the right atrium.

The imaging characteristics are of a mass based on the atrial wall and protruding into the atrial cavity. They may become very large so prolapse through the mitral or tricuspid valve is well described and patients can present with symptoms of valvar obstruction.

Myxomas classically arise from the interatrial septum close to the fossa ovalis and are often based on a small pedicle.

**Video, Images Interaction**

This screen incorporates descriptive text and medical imaging, focusing on cardiac tumor identification and characteristics.

Learners read detailed information about myxoma symptoms and imaging features, then examine an actual ultrasound image that demonstrates atrial myxoma appearance in clinical practice.

The interaction combines theoretical knowledge with real diagnostic imaging, supporting clinical understanding by linking textbook descriptions of cardiac tumors to their actual appearance on medical scans.

Open-Ended Interaction ▶ Reflection 1

Menu

← Previous

42 / 47

Next →

Decide which of the following applies to you most:

“ My thoughts were positive ”

- [Click for feedback](#)

“ My thoughts were negative regarding the **asylum seeker or his son** ”

- [Click for feedback](#)

“ My thoughts were negative regarding the lack of **provision of a suitable translator** ”



Open-Ended Interaction

This screen presents an open-ended reflection activity where learners evaluate their personal responses to a healthcare scenario.

Learners select which statement best describes their thoughts from multiple options, then click for individualized feedback based on their chosen response, alongside a relevant newspaper article for context.

The interaction combines self-reflection with personalized guidance, supporting professional development by encouraging learners to examine their own attitudes and receive tailored feedback about ethical healthcare delivery.

Open-Ended Interaction ▶ Reflection 1

Menu

← Previous

42 / 47

Next →

Decide which of the following applies to you most:

“ My thoughts were positive ”

- [Click for feedback](#)

“ My thoughts were negative regarding the **asylum seeker or his son** ”

- [Click for feedback](#)

“ My thoughts were negative regarding the **lack of provision of a suitable** ”

Although your initial thoughts were positive, there are elements of this story that should not have happened within an NHS environment.

A recent survey of NHS trusts in the North West revealed that the provision of face-to-face interpreters, Linkworkers and even telephone interpreting services is quite patchy. In order to bridge the gap between the health care professional and the non-English speaking patients, staff resort to using family members (sometimes male relatives for intimate and personal gynaecological matters), children and even non-family members such as neighbours!

To fail to provide equal access to health care on the basis of race or ethnicity is discrimination under race equality legislation. Clearly equal access must begin with being able to talk to the people who are caring for you. To fail to put arrangements in place means trusts are flouting the law and could face legal action. In many cases, there are also issues of clinical governance especially where informed consent to treatment is a requirement. In this case study, there is an issue that forcing a young child to re-live the horrors that led to seeking asylum may amount to child abuse.

Open-Ended Interaction

This screen displays personalized feedback for learners who selected "positive thoughts" in the previous reflection exercise about asylum seeker healthcare scenarios.

The interaction provides individualized learning paths with comprehensive feedback, supporting critical thinking development by challenging learners to consider deeper ethical implications beyond their initial reactions to sensitive healthcare situations.