Topic 1: Clinical governance basics

1) Definition: Clinical governance can be defined as a framework through which UK National Health Service (NHS) organisations and their staff are accountable for continuously improving the quality of patient care. NHS staff need to ensure that the appropriate systems and processes are in place to monitor clinical practice and safeguard high quality of care. Clinical governance is central to the UK Government's agenda to ensure that quality of care becomes a key driver in the development of health services.

2) Components of Clinical governance:
o Clinical audit
o Clinical effectiveness
o Risk management
o Research and development
o Openness
o Continuous professional development

• **Clinical audit:** Measurement of performance against set standards
• **Clinical effectiveness**: It is all about whether a new intervention, a diagnostic or a screening test is going to prove effective in-patient management or not. Has to be **COST EFFECTIVE** since it has to be applied throughout the NHS.
• **Risk management:** Takes place at 3 levels
-Patient risk management
-Staff risk management/ Health professional risk management
-Trust risk management
• **Research and development:**
Governed by NICE (National Institute of Clinical Excellence)
Appraisal of all the new literature being published and launched
Issuing of guidelines regarding a particular intervention, a screening or a diagnostic procedure
• **Openness**: NHS is open to legislative and public scrutiny.
• **Continuous professional development (CPD):**
Documentation of every new knowledge or skill acquired formally or informally.
GMC guidelines for CPD: ADVISABLE to accumulate 250 credit hours every 5 years for renewal of GMC registration.

Who will implement the guidelines given by **NICE** and make sure they are followed?
CHIMP/ CHI: Commission for Health Improvement

3. Quality control in the NHS:
o IQAS and EQAS.
o **IQAS is mandatory for EVERY TEST, EVERY DAY**
o Who provides samples for EQAS? UKAS (United Kingdom Accreditation Service)
o Lab standards: ISO 15189 2012
o EQAS: ISO 17043
o If any lab fails in EQAS, then it is reported to NQAAP (National Quality Assurance Advisory Panel) which then reports this event to CWGQA (Common Working Group for Quality Assessment)

Questions?
1.Who conducts CPD review?
PSD (professional standards department) of the concerned Royal College.
2.Which official is concerned with CPD review?
Clinical Director of Safety and Quality.
3. How much time is given to the concerned individual to file the response?
4 weeks.

• If a pathologist is under review for any discrepancy/ error, then it is assessed under which category the concerned discrepancy/ error falls:
o Category A: grossing error, failure to order further workup.
o Category B: microscopic error
▪ Benign reported as malignant or vice versa (gross error)
▪ Discrepancy
o Category C: errors concerning parameters which are subjective, those which differ from pathologist to pathologist (discrepancies in grading etc.); failure to clinically correlate the findings.
o Category D: failure to take second opinion
o Category E: typing error.

Topic 2: Records and specimen retention times and storage

Record / specimen type	Recommended retention period
● Primary copy of record in patient's paper or electronic medical record	● 30 years
● Information (paper or electronic) or permanent specimens held in the laboratory that may also be regarded as primary components of the patient's medical record	● 30 years
● Records relating to cells and tissue used for transplantation, including transfusion	● Lifetime of recipient
● Records and serum samples used for microbiological investigations prior to transplantation	● Lifetime (recipient) At least ten years (donor)
● Tissue sections and other permanent microscopy preparations replaceable from a primary specimen such as a tissue block	● Minimum of 15 years If from a child, until they reach the age of 25
● Working records (paper or electronic) needed for laboratory accreditation	● Minimum of eight years (two accreditation cycles)

Post-mortem samples of human tissue: may be retained by the Coroner without consent for as long as they are required to fulfil the Coroner's duties.

Frozen tissue for immediate histological assessment (frozen section):
Stained microscope slides should be kept as described below for sections from fixed specimens. Residual tissue should be processed as a normal, fixed specimen once the frozen section is complete.

Fetal tissues
Currently fetal remains of less than 24 weeks' gestation are not defined as human remains but are regarded as components of the mother's tissue. Hospital systems for the sensitive disposal of such tissue should comply with Human Tissue Authority guidance

Topic 7: Forensic pathology Subtopic 5: Asphyxial deaths

• Asphyxiation can be caused by the following
o Environmental factors: Gases such as Cyanide, Carbon
monoxide, Hydrogen sulfide, enclosed spaces with low oxygen, mechanical asphyxiation, smothering, drowning, hanging, choking, crucifixion, ligature strangulation, manual strangulation
• Not all forms of asphyxiation will leave marks on the decedent's body
o Some findings are nonspecific, like cyanosis, petechiae, abrasions
• Scene information and circumstances are critical in the determination of the manner as well as the cause of asphyxiation
• Confined/Enclosed spaces
o Cause asphyxiation due to reduced O2 environment with lack of O2 exchange
• Mechanical Asphyxiation
Causes asphyxiation by restriction of chest movement that does not allow for adequate inhalation
Either traumatic or positional
• Smothering
o Causes asphyxiation by the inability of O2 to reach the lungs, usually from pillows or blankets
• Drowning
o Causes asphyxiation by filling the lungs with water and preventing the exchange of gasses
• Hanging
o Causes asphyxiation by compression of neck by some or all the decedent's weight on a rope or other item
▪ Judicial hanging→fractures neck
o It does not require suspension to occur
o Hyoid bone does not need to be fractured
▪ On test→always fractured
o Death occurs when the force on the head and neck exceeds 13.6 kg (~30 lbs.) of pressure
o Venous occlusion occurs at 4 lbs. of pressure
o Arterial occlusion of carotids occurs at approximately 10 lbs. of pressure
o Tracheal collapse occurs at 20 lbs. (of pressure
o Occlusion of vertebral arteries occurs at approximately 35 kg of pressure
• Choking
o Causes asphyxiation by blockage of the trachea and preventing adequate oxygen passage
o Often seen in children or elderly
• Crucifixion
o Causes asphyxiation by exhaustion
o Stretching of arms in an outward position which prevents adequate respiration while lower extremities hang
• Ligature strangulation
o Causes asphyxiation by an external force (unrelated to weight of the decedent) that is compressing the trachea
• Manual strangulation
o Causes asphyxiation by external force (assailants' hands, arms, feet) that compresses the decedent's trachea