Clinical Foundations: Communication, Reasoning and Ethics

Curated preclinical study track (not a medical degree, no licensure claim; fictional consultations, role-play communication, jurisdiction-named ethics). Original explanations and practice only, following the reviewed course handout.

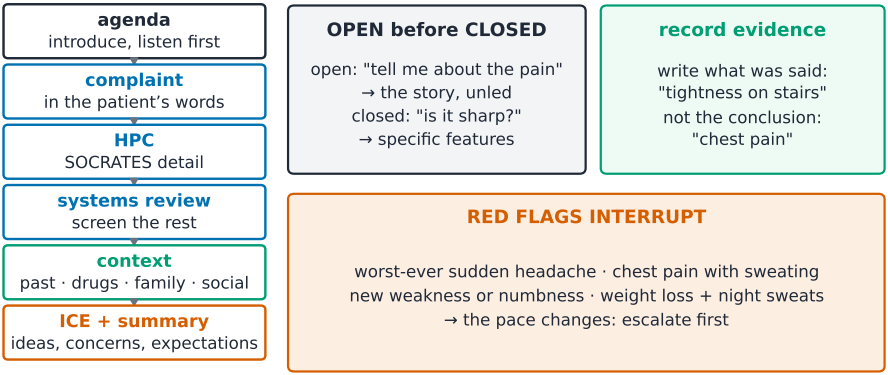
From science to encounter

- 13.1-13.3 the encounter; 13.4-13.5 the relationship; 13.6-13.7 the system.
- Every consultation fictional; ethics names its jurisdiction.

The consultation and history-taking: the arc

1. **Arc** Agenda → complaint in the words of the patient → HPC (SOCRATES) → **systems review** → past, drugs, family, social → ICE.
2. **Questions** Open elicits the story unled; closed harvests specifics - reversed order primes the answers.
3. **Red flags** Severity, speed, associated deficits - worst-ever headache with vomiting, chest pain with sweating, new focal deficit: the pace changes.

The structure of a complete history



Open questions open the story; closed questions close the details; red flags interrupt.

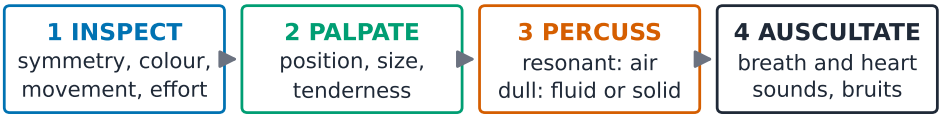
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Principles of physical examination: four steps, one order

1. **Steps** Inspect → palpate → percuss → auscultate; **palpation** changes guarding, **percussion** disturbs sounds.
2. **Mapping** Rate 24 with accessory use = MED05; dull right base with absent sounds = MED10 fluid.
3. **Records** Per region, what was examined and found - never a bare word normal; hands and eyes are trained, not read.

The examine-by-look-feel-tap-listen sequence

least intrusive first: each step keeps the next one clean



why the order is fixed

pressing first makes the patient guard; observe them as they arrived (abdomen: many listen before pressing)

findings map to the sciences

rate 24 + accessory muscles: effort
right base dull and silent → fluid
record findings region by region

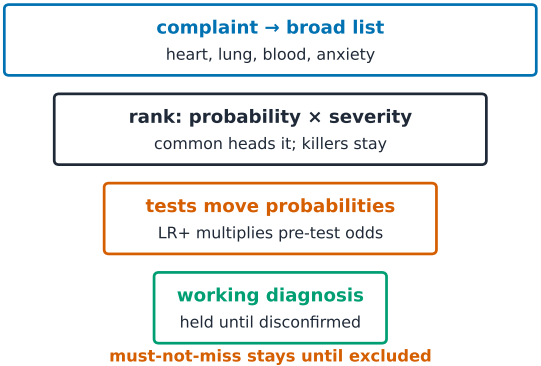
hands and eyes are trained by supervised practice, not by reading

> Inspect, palpate, percuss, auscultate - least intrusive first.

Clinical reasoning and differential diagnosis: the funnel

1. **Funnel** Complaint $\rightarrow$ broad list $\rightarrow$ ranked (must-not-miss stays) $\rightarrow$ tests as LR multipliers $\rightarrow$ working diagnosis held until disconfirmed.
2. **Biases** Anchoring (require an alternative) · availability (base rates) · **premature closure** (what else?) · confirmation · framing.
3. **Case** Breathless 58-year-old: orthopnoea raises failure; desaturation with a clear X-ray raises the clot.

The differential funnel



the walls: biases → antidotes

anchoring
require an alternative

availability
base rates vote

premature closure
ask: what else?

confirmation
seek the disproof

framing
read the data yourself

> Broad to ranked to tested to working - the walls are the biases.

Communicating with patients: hard conversations, structure

1. **SPIKES** Setting, Perception, Invitation, Knowledge (warning shot, plain words), Empathy, Strategy.
2. **Loop Teach-back**: what will you tell your family? - checks the explanation, never the patient.
3. **Shared** Clinician brings NNT and harms, patient brings values; numbers as natural frequencies (NNT 13 = about 8 of 100 like you).

The structured communication steps

the difficult-news sequence — structure replaces recall under stress



TEACH-BACK closes the loop
so I know I explained it well — what will you tell your family? — checks the EXPLAINER, never tests the patient

SHARED DECISION
clinician brings evidence (NNT, harms); patient brings values — option talk, decision talk, enrolment talk

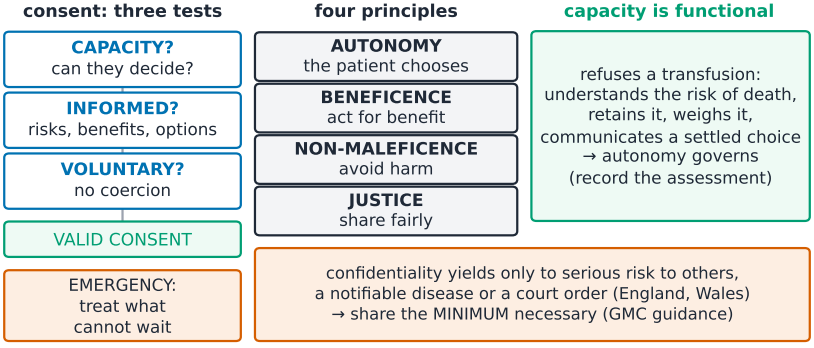
natural frequencies: NNT 13 → about 8 of 100 people like you benefit

Setting, Perception, Invitation, Knowledge, Empathy, Strategy - and **teach-back**.

Medical ethics: autonomy, consent and confidentiality

1. **Four Autonomy**, **beneficence**, non-maleficence, justice - patient values arbitrate what counts as benefit.
2. **Consent Capacity** (understand, retain, weigh, communicate) + information + voluntariness; the form records, the talk consents.
3. **Breach** England and Wales: serious risk to others (notifiable disease) or law only, minimum necessary, GMC-framed.

The consent decision map



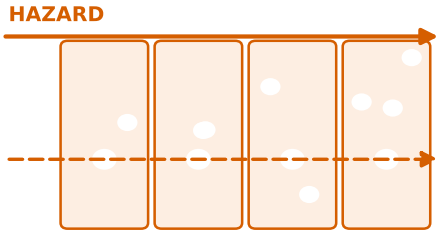
Capacity, information, voluntariness - and the emergency exception.

Patient safety and quality: systems, not culprits

1. **Model** Swiss cheese: design, barriers, procedures, people - each with holes; alignment is the failure.
2. **Analysis** London Protocol seven factor groups (patient $\rightarrow$ institutional context); SBAR for handovers; five rights at the bedside.
3. **Quality** Structure + process + outcome; near-misses are free lessons; tall-man names and do-not-interrupt zones.

The layered-defence error model

harm passes only when the holes align



fixes change the design (tall-man names, checks, no-interruption zones), not blame

fix the system, not the person

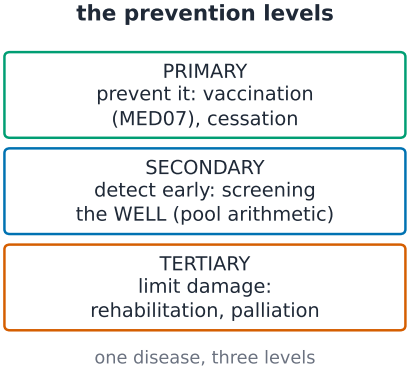
London Protocol: seven factor groups, from the patient to the institution
SBAR structures every handover; five rights check every dose
quality: structure · process · outcome
near-misses are free lessons

Harm passes only when the holes align - analyse the alignment, not the person.

Public health and health systems: populations and financing

1. **Levels** Primary prevents (vaccination), secondary screens the well, tertiary limits damage - three denominators.
2. **Screening** Important, treatable-early, valid, acceptable + pool arithmetic: yield is PPV (MED12), **over-diagnosis** counts as harm.
3. **Systems** Beveridge (taxation, national service) · Bismarck (social insurance) · private · out-of-pocket - coverage, payment, gatekeeping.

The prevention levels



screening criteria + arithmetic

important condition · treatable early · valid test · acceptable · pre-clinical pool real

yield = PPV, and PPV lives on prevalence (MED12 §4) — count over-diagnosis too

financing models shape access

Beveridge — general taxation, national service
Bismarck — social insurance from wages
private insurance · out-of-pocket

they set coverage, point-of-care payment, gatekeeping — every consultation inherits

> Primary stops the disease, secondary catches it early, tertiary limits its damage.

Check yourself

- The four **capacity** elements…? (Understand, retain, weigh, communicate.)
- SPIKES letters…? (Setting, Perception, Invitation, Knowledge, Empathy, Strategy.)
- A must-not-miss diagnosis is dropped when…? (Only when excluded — never by rarity.)
- Beveridge vs Bismarck…? (Tax-funded state vs wage-funded insurance.)