

Family Medicine Rotation Summary

includes: lectures, lecture notes, & doctors' notes.

Done by: Tamara Audeh

Edited by: Nada Abujbara



Introduction to Family Medicine Rotation

Comprehensive Clinical Handbook & Rotation Manual

Lecturer: Dr. Asma Omar Alghzawi
Department: Family & Community Medicine

Institution: Jordan University Hospital (JUH)
School of Medicine: The University of Jordan

What is Family Medicine?

Family Medicine is a core clinical specialty defined by:

- **Academic & Scientific Discipline:** Grounded in research and evidence-based practice.
- **Primary Care Focus:** Main gateway to personal healthcare.
- **Community-Oriented Care:** Contextualized to local society.
- **Patient-Centered Approach:** Prioritizing personhood over disease taxonomy.
- **Lifespan Care:** Caring for individuals across all ages and life stages.

The Four Cs of Primary Care

1. First Contact

Primary entry point for patients into the healthcare system for any new symptom or health concern.

2. Continuous Care

Establishes longitudinal doctor-patient relationships that extend across individual disease episodes.

3. Comprehensive Care

Addresses a vast spectrum of physical, mental, and social health issues (preventative, acute, chronic).

4. Coordinated Care

Integrates care across multidisciplinary teams, sub-specialists, allied health, and hospitals.

Core Principles of Family Medicine

- **Compassionate Care:** Empathy, active listening, and trust.
- **Generalist Approach:** Whole-person perspective.
- **Continuity of Care:** Enhances adherence & satisfaction.
- **Reflective Practice:** Managing clinical uncertainty.
- **Lifelong Learning:** Committing to guidelines & research.

The Generalist & Biopsychosocial Model

Bio-Psycho-Social Paradigm: Health results from interactions between biological, psychological, and social dimensions.

- **Biological:** Symptoms, pathophysiology, labs.
- **Psychological:** Emotional state, mental health.
- **Social:** Family structure, employment, culture.

Patient-Centered Consultation: ICE & The Clinical Iceberg

Exploring ICE (Ideas, Concerns, Expectations)

Ideas	"What do you think is causing this problem?"
Concerns	"What worries you most about what might be going on?"
Expectations	"What were you hoping we could achieve today?"

The Clinical Iceberg Concept

Symptoms presented in clinic represent only the visible peak above the waterline.

- **Above Surface:** Presenting complaints & symptoms.
- **Submerged:** Undetected disease, self-care, family dynamics, social determinants, & health beliefs.

The Doctor-Patient Relationship & Managing Difficult Patients

Ethical Standards, Psychodynamic Principles & Clinical De-escalation

Lecturer: Dr. Asma Alghzawi, MD | Lecturer of Family Medicine

Institution: Faculty of Medicine — University of Jordan

1. Foundations & Core Duties of Doctors

The doctor-patient relationship is a professional bond essential for accurate diagnosis, treatment adherence, and patient trust. It is built on mutual respect, empathy, and ethical standards.

Core Ethical Duties (GMC Guidance)

- Make patient care your first and primary concern.
- Respect patient dignity, privacy, and personal autonomy.
- Listen actively and communicate clearly and honestly.
- Maintain strict medical confidentiality.
- Do not allow personal beliefs to compromise care.

Psychodynamic Dynamics

- **Transference:** Patient projects feelings/expectations from past relationships onto the doctor (can be positive or negative). Common in chronic care.
- **Countertransference:** Doctor's emotional reaction toward the patient. Requires self-reflection to avoid compromised clinical judgment and burnout.

2. Ethical, Legal & Boundary Guidelines

Domain / Scenario	Professional & Ethical Standard
Communication Barriers	Must use professional interpreters. NEVER use family members for clinical translation. Adapt for visual/hearing impairments.
Medical Errors & Candor	Must inform the patient promptly, offer a sincere apology, explain what occurred, take immediate steps to mitigate harm, and formally report/learn from the error.
Professional Boundaries & Social Media	Do NOT accept friend/follow requests from patients on personal social media. Avoid entering business or financial transactions with patients. Do not treat friends/family except in emergency.
Patient Gifts	Small, culturally appropriate tokens (chocolates, plants, desk frames, flowers) may be accepted. Valuable gifts (gold, luxury watches) MUST be refused.
Covert Medication	Strictly UNACCEPTABLE. Involves deliberate deception of a competent patient and breaches basic legal and ethical consent requirements.
Conscientious Objection	Doctors cannot deny care or express personal judgment based on a patient's lifestyle choices. Safety and non-judgmental care remain paramount.
Remote Consultations	Prescribing remotely is permissible if safe. Remote care is UNSUITABLE if: physical exam is needed, patient capacity is uncertain, regular GP records are inaccessible, or coercion is suspected. Extra safeguards required for remote controlled drugs.

3. The "Heartsink" / Difficult Patient Archetypes

Difficult encounters comprise ~15% of consultations. Clinically, *"patients have the problems, while doctors have the difficulties."* Prior to labeling a patient, **always rule out organic disease or psychiatric disorders** (e.g., GAD, Depression, Panic, Somatic Symptom Disorder, Substance Abuse).

Archet ype	Core Behavior & Actions	Doctor's Reaction & Driver	Recommended Management Strategy
The Dependent Clinger	Seeks constant reassurance, affection, and contact. Calls at home, makes frequent unplanned visits, requests endless explanations.	Reaction: Feeling smothered, drained, threatened. Driver: Fear of abandonment & deep insecurity.	• Validate feelings & offer empathy. • Establish strict, predictable boundaries (e.g., set 15-min visits every 2 weeks). • Avoid fostering total dependency.
The Entitled Demander	Uses intimidation, guilt, threats, or complaints to control the consultation. Demands specific tests/ drugs; withholds payment.	Reaction: Fear, anger, despair, resentment. Driver: Severe fear of losing control; bluster is defense.	• Stay calm, respectful, and non-confrontational. • Confidently assert professional authority. • Firmly stop boundary crossing (e.g., <i>"I cannot continue if you raise your voice."</i>).
The Manipulative Help-Rejecter	Presents with vague, chronic symptoms. Rejects all medical advice with <i>"Yes, but..."</i> . Symptoms never resolve.	Reaction: Frustration, demoralization, incompetence. Driver: Craves ongoing relationship over a cure.	• Relinquish the need to "cure" the patient. • Focus on maintaining a supportive relationship. • Acknowledge hardship without endorsing ineffective treatments.
The Self-Destructive Denier	Engages in harmful habits (e.g., severe alcohol abuse with cirrhosis) while denying severity or consequences.	Reaction: Helplessness, aversion, indifference. Driver: Deep self-loathing and hopelessness.	• Maintain non-judgmental empathy. • Avoid power struggles over habits. • Set small, achievable goals and convey that they remain worthy of care.

4. Practical Management Models & De-escalation

The 3-Stage "Heartsink" Survival Framework

- **Stage 1: Feeling Understood:** Conduct a comprehensive history, explore psychosocial cues, and perform a focused physical exam to validate concerns.
- **Stage 2: Broadening the Agenda:** Gently introduce emotional and life stressors into the consultation. Link physical symptoms to stress.
- **Stage 3: Making the Link & Psychoeducation:** Explain the physiological link between stress/anxiety and somatic symptoms. Normalize the experience using examples of other sufferers.

Managing the Angry Patient

Anger stems from fear, unmet expectations, grief, long wait times, or medical costs. Never respond with anger.

De-escalation Actions

- Remain calm, still, and maintain steady eye contact.
- Ask the patient to sit down; mirror their posture non-aggressively.
- Address them formally by name.
- **Safety First:** For threatening patients, sit closest to the exit door.

Verbal Strategies

- **Rapport:** "I can appreciate how you feel."
- **Confrontation:** "You seem very angry right now."
- **Clarification:** "I find it puzzling... tell me more about this."
- **Searching:** "Do you have special concerns at home or work?"

Doctor-Patient Relationship & Difficult Patient Summary • Dr. Asma Alghzawi • Generated for Medical Education

Consulting "Dos"

- DO: Remain calm, make eye contact, and use a neutral tone.
- DO: Listen intently and allow them to ventilate their feelings without interruption.
- DO: Acknowledge their emotion: "I can see you are very angry about this."
- DO: Search for the hidden agenda: "What is the main thing that is upsetting you today?"
- DO: Ensure your own safety (e.g., sit near the door).

Consulting "Don'ts"

- DON'T: Meet anger with anger.
- DON'T: Touch the patient unexpectedly.
- DON'T: Be a "wimp" and give in to unreasonable demands.
- DON'T: Be judgmental or patronizing.
- DON'T: Reject the patient.

Clinical Prevention & Screening Guidelines

Dr. Suha Khalifa — Levels of Prevention, Wilson's Criteria, and USPSTF Recommendations

Levels of Prevention & Screening Criteria

Level	Goal	Clinical Examples
Primary	Prevent disease before onset	Health education, lifestyle counseling, vaccines, prophylaxis.
Secondary	Detect subclinical disease early	Screening mammography, Pap smears, FIT/colonoscopy.
Tertiary	Prevent clinical complications	Tight glycemic control in DM, stroke rehab.

Wilson's Screening Criteria: Prevalent condition, natural history understood, recognizable latent stage, accurate & acceptable test, effective & available treatment, early treatment superior, cost-effective.

USPSTF Clinical Recommendations Summary

Cardiovascular & Metabolic Prevention

- **CVD Risk Assessment:** Every 3–5 years starting at age 20. Behavioral lifestyle counseling for risk factors.
- **Lipid Screening:** Men ≥ 35 & Women ≥ 45 (Grade A); Younger adults 20–35 (M) / 20–45 (W) with risk factors (Grade B).
- **Statin Primary Prevention:** Adults 40–75 with 1+ CV risk factor & 10-yr risk $\geq 10\%$ (Grade B); 7.5–10% risk (Grade C).
- **Hypertension:** Screen all adults ≥ 18 (3–5 yr rescreen for 18–39 with low risk).
- **Diabetes Mellitus:** Screen overweight/obese asymptomatic adults aged 35–75 (USPSTF). ADA: BMI ≥ 25 + risk factor, or all ≥ 35 . Screen gestational DM at 24 weeks.
- **Aspirin Primary Prevention:** Age 40–59 with $\geq 10\%$ risk: Individualized decision. Age ≥ 60 : No net benefit. High-risk pregnancy preeclampsia: Low-dose aspirin after 12 wks.

Cancer Screening Protocols

Cancer Type	Screening Recommendation & Interval
Breast Cancer	Mammogram every 2 years for women aged 40–74 (Grade B). High risk (BRCA, ≥ 20 -25% lifetime risk): Annual MRI + Mammogram from age 30. (Mammogram is the modality of screening and not ultrasound.)
Colorectal Cancer	Screen age 45–75 (Grade A/B). Options: FIT/gFOBT yearly, sDNA-FIT 1-3 yrs, CT colonography 5 yrs, Sigmoidoscopy 5 yrs (or 10 yrs + annual FIT), Colonoscopy 10 yrs. Grade C for age 76–85.
Lung Cancer	Annual Low-Dose CT for adults aged 50–80 with 20 pack-year smoking history (current or quit in past 15 yrs).
Cervical Cancer	Age 21–29: Cytology every 3 yrs. Age 30–65: Cytology every 3 yrs, OR Co-testing (Pap + HPV) every 5 yrs, OR Primary HPV every 5 yrs. Discontinue post-hysterectomy (benign).
Prostate Cancer	Periodic discussion for men aged 55–69. Earlier (40–45) for high risk / family history / BRCA.

Psychological, Safety & Vaccines

- **Osteoporosis:** DXA for all women ≥ 65 , and postmenopausal women < 65 with risk factors.

• **Behavioral & Safety:** Depression screening in all adults; Anxiety screening in women/adolescents ≥ 13 (WPSI); Routine Intimate Partner Violence (IPV) screening.

• **Immunizations:** Influenza, Td/Tdap, HPV, Zoster, Pneumococcal, Meningococcal, Hep B, COVID-19, RSV.

Vaccines

Vaccine	Prevent	Type	Administration	Side Effects	Contraindications
BCG	Tuberculosis	Attenuated	Intradermal at the insertion of the deltoid	- Fever - Pain and scarring locally - Lymphadenitis - Osteomyelitis (rare)	- Impaired immunity
IPV	Poliomyelitis	Inactivated	IM in the thigh	- Redness and pain locally	- Antibiotics allergy (e.g., neomycin or streptomycin)
OPV	Poliomyelitis	Attenuated	Oral drops	- Vaccine-associated paralytic poliomyelitis	- Severe immunosuppression - Febrile illness
DPT	Diphtheria, Pertussis, Tetanus	Tetanus and diphtheria toxoids and inactivated whole-cell pertussis	IM in the vastus lateralis of the thigh	- Fever, fatigue - Seizure, encephalopathy (rare)	- History of anaphylactic rxn to vaccine ingredients
HBV	Hepatitis B	Recombinant (Subunit)	- IM in the anterolateral aspect of the thigh (<1 year) - IM in the deltoid (older children)	- Local pain	- History of anaphylactic rxn to previous doses, yeast, or neomycin
HiB	Hemophilus Influenza B	Polysaccharide Conjugate	- IM in the vastus lateralis of the thigh (young) - IM in the deltoid (older children)	- Redness or swelling locally - Fever	- History of anaphylactic rxn to previous doses
Rotarix	Rota virus	Attenuated	Oral drops	- Crying - Diarrhea and vomiting - Sore throat	- History of anaphylactic rxn to previous doses - Severe immunosuppression - Hx of intussusception
MMR	Measles Mumps Rubella	Attenuated	Subq in the anterolateral aspect of the thigh	- Pain or rash locally - Fever	- History of anaphylactic rxn to vaccine ingredients - Pregnancy - Immunosuppression
Td	Tetanus and diphtheria	Toxoids	IM in the vastus lateralis of the thigh	- Pain and redness - Headache - Myalgia - GI Sx	- History of anaphylactic rxn to vaccine ingredients

Notes:

- DTaP (acellular) produces fewer side effects and is a safer version of an older vaccine called DTP
- Live-attenuated vaccines are all contraindicated in immunosuppressed pts.
- BCG does not cause local scarring in 10%.
- **Influenza vaccine is given for everybody, it's a universal vaccine.**
- **Td vaccine: every ten years and for pregnant women to protect babies from pertussis.**
- **HPV vaccine for peds at the age of 11, and for adults for prevention of cervical cancer at 18 to 25 years.**
- **Zoster vaccine (not available in Jordan) is given for patients 50 and above as two doses, 6 months apart.**
- **Meningococcal vaccine is given in endemic areas, حج وعمره, dorms**
- **Hepatitis b vaccine is universal.**
- **Covid-19 is universal.**
- **RSV vaccine is new**

BREAKING BAD NEWS (BBN)

Comprehensive Medical Study Guide & Clinical Protocol Handbook

Lecturer: Dr. Ruba M. Jaber

Associate Professor, Family Medicine

Clinical Communication Skills

1. Overview & Core Principles

Definition: Breaking bad news (BBN) is a vital clinical communication skill involving the disclosure of unfavorable medical information that drastically alters a patient's view of their future.

Clinical Significance: Delivering bad news effectively requires structured preparation, methodical delivery protocols, and genuine therapeutic empathy. Proper execution reduces acute patient distress, manages emotional shock, fosters trust, and builds a collaborative doctor-patient relationship.

2. Framework 1: The ABCDE Approach

The ABCDE framework offers a comprehensive structured roadmap spanning pre-encounter preparation to post-encounter reflection.

A Advanced Preparation

- **Assess Baseline Knowledge:** Always determine what the patient already knows and understands about their health before delivering news.
- **Support System:** Arrange for key family members or support persons to be present if desired by the patient.
- **Environment Setup:** Secure an undisturbed time and quiet setting (e.g., turn off or hand off your beeper).
- **Self-Preparation:** Prepare emotionally. Formulate specific phrases/scripts in advance and rehearse delivery.

B Build a Therapeutic Relationship & Environment

- **Privacy & Seating:** Ensure complete privacy. Provide adequate seating for all present so everyone is at eye level.
- **Physical Proximity:** Sit close enough to facilitate genuine connection and touch appropriately if indicated.
- **Reassurance:** Explicitly reassure the patient regarding pain management, symptom control, and non-abandonment.

C Communicate Well

- **Direct Delivery:** Be straightforward (e.g., "I am sorry, but I have bad news to share.").
- **Language Choice:** **DO NOT** use medical jargon, acronyms, or euphemisms. **DO** use explicit, unambiguous words like "cancer" or "death".
- **Active Techniques:** Allow silence for absorption, use non-verbal touch tastefully, and ask the patient to repeat their understanding.
- **Follow-up:** Reinforce with written summary notes/diagrams and schedule dedicated follow-up visits.

D Deal with Patient and Family Reactions

Evaluate patient responses across **three key domains**:

RESPONSE DOMAIN	CLINICAL MANIFESTATIONS & BEHAVIORS
Physiologic Responses	Fight-or-flight activation, acute autonomic arousal, conservation-withdrawal response.
Cognitive Strategies	Denial, displacement of blame, intellectualization, disbelief, gradual acceptance.
Affective Responses	Anger/rage, fear/terror, intense anxiety, helplessness, hopelessness, guilt, shame, relief, anticipatory grief.

Provider Action: Actively listen, explore underlying emotions, and maintain an open empathic presence.

E Encourage & Validate Emotions

- **Correct Distortions:** Gently address any misunderstandings or irrational self-blame.
- **Offer Assistance:** Offer to communicate details to other loved ones on the patient's behalf.
- **Assess Impact & Meaning:** Explore what the diagnosis means for the patient's immediate life and future.
- **Safety Screening:** **CRITICAL** Always assess for suicidality or severe self-harm ideation when delivering devastating prognoses.
- **Action Plan & Self-Care:** Outline next steps, provide written materials, make support referrals, and process your own feelings post-session.

3. Framework 2: The SPIKES Model

The SPIKES model is a classic 6-step clinical protocol specifically designed for delivering unfavorable diagnoses and prognoses.

STEP	PHASE TITLE	CLINICAL ACTIONS & EXECUTION STRATEGIES
1	S - SETTING	Ensure absolute privacy, invite key relatives/friends, arrange seating, establish eye contact, manage time, and prevent phone/pager interruptions.
2	P - PERCEPTION	"Before you tell, ask." Assess what the patient already knows or suspects (e.g., <i>"What have you been told about your condition so far?"</i> or <i>"What is your understanding of why we ordered the MRI?"</i>). Uncovers denial or misperceptions.
3	I - INVITATION	Determine how much information the patient wants to know. Ask: <i>"Would you like me to go into detail about the results, or would you prefer a high-level overview?"</i> If declined, ask to inform a representative.
4	K - KNOWLEDGE	Deliver a Warning Shot: Fire a preliminary warning (e.g., <i>"Unfortunately, I have some serious news..."</i>). Match comprehension level. Avoid bluntness (e.g., do not say <i>"You have terminal cancer"</i>). Use lay words (<i>"spread"</i> instead of <i>"metastasized"</i>).
5	E - EMOTION	Respond empathetically to patient reactions. Observe the emotional response, identify the source, and validate their feelings using empathic & exploratory language.
6	S - STRATEGY	Establish a clear treatment/management plan. Assess ICE (Ideas, Concerns, Expectations). Reframe goals toward achievable targets (e.g., symptom control, pain management) to sustain hope.

4. Verbal Strategies & Clinical Statements (SPIKES Step E)

Real-World Clinical Interaction Scenario

Doctor: "I'm sorry to say that the X-ray shows that the chemotherapy is not working [pause]. Unfortunately, the tumor has grown somewhat."

Patient: "I've been afraid of this!" [Begins crying]

Doctor: [Moves chair closer, offers a tissue, pauses] "I know that this isn't what you wanted to hear. I wish the news were better."

Empathic Statements

- "I can see how upsetting this is to you."
- "I can tell you were not expecting to hear this."
- "I know this is not good news for you."
- "I'm sorry to have to tell you this."
- "I was also hoping for a better result."

Exploratory Questions

- "How do you mean?"
- "Tell me more about it."
- "You said it frightens you..."
- "You mentioned concern for your children, tell me more."
- "Could you tell me what you are most worried about?"

Validating Responses

- "I can understand how you felt that way."
- "I guess anyone might have the exact same reaction."
- "You are perfectly correct to think that way."
- "Your understanding of the reason for these tests is very good."
- "Many other patients have had a similar experience in this situation."

5. Alternative Frameworks

BREAKS Protocol

- **B** – Background
- **R** – Rapport
- **E** – Exploring
- **A** – Announce
- **K** – Kindling
- **S** – Summarize

SAD NEWS Protocol

- **S** – Set up and Set down
- **A** – Ask, do not tell
- **D** – Deliver
- **N** – No Fancy lingo
- **E** – Expect, permit, & respond to emotions
- **W** – Wait
- **S** – Support and summarize

SAAIQ Emergency Approach (Acute / ER Setting)

Specifically designed for high-stress, fast-paced emergency settings where immediate communication is vital:

1. **S – Setting:** Set the scene as soon as possible.
2. **A – Assessing:** Assess the understanding of the recipient rapidly.
3. **A – Alerting:** Alert about the bad news immediately (Warning Shot).
4. **I – Informing:** Inform clearly, without delay or ambiguity.

6. Board Exam & High-Yield Checklist

- ★ **"Before you tell, ask":** Always assess prior patient perception before revealing diagnostic results.
- ★ **Warning Shots:** Prepare the patient with a buffer statement (e.g., *"I'm sorry, but I have bad news..."*).
- ★ **Avoid Jargon & Harsh Bluntness:** Use lay terms (*"spread"* vs. *"metastasized"*) and avoid overly blunt prognostic declarations (*"You will die in 3 months"*).
- ★ **Explicit Terminology:** When confirming diagnoses or death, do NOT use vague euphemisms; use direct words like *"cancer"* or *"death"*.
- ★ **Suicidality Assessment:** Always assess for suicidality when delivering life-altering or terminal bad news.
- ★ **ICE Exploration:** Always explore **I**deas, **C**oncerns, and **E**xpectations during the strategy phase.

Evidence-Based Medicine (EBM)

A Practical Framework for Clinical Questions, Literature Appraisal, and Bedside Decision-Making

Definition (Sackett et al., 1996): "The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients."

The Triad of Evidence-Based Medicine:

- **Best Research Evidence:** Valid, clinically relevant findings from systematic, well-designed research.
- **Clinical Expertise:** Accumulated clinical experience, diagnostic judgment, and skill.
- **Patient Values & Circumstances:** Individual preferences, concerns, expectations, and unique clinical setting.

Why Evidence-Based Practice Matters

- **Information Overload:** ~2.5 million new biomedical articles published each year.
- **Translation Lag:** Documented ~17-year lag between research discovery and routine practice adoption.
- **Practice Variation:** Wide variation in treatment patterns for identical conditions across regions.

The Five Steps of EBP ("The 5 A's") !!!! (very important)

Step	Name	Clinical Focus
1	Ask	Convert a clinical problem into an answerable question using PICO.
2	Acquire	Search the literature efficiently for the best available evidence.
3	Appraise	Critically evaluate validity, results magnitude, and clinical applicability.
4	Apply	Integrate appraised evidence with clinical expertise and patient values.
5	Assess	Evaluate patient outcome and your own clinical performance.

Framing the Clinical Question: PICO

PICO Element	Description	Clinical Example
Population (P)	Patient group or clinical problem	Adults with type 2 diabetes
Intervention (I)	Drug, diagnostic test, or approach	Adding an SGLT2 inhibitor
Comparison (C)	Alternative treatment or placebo	Standard therapy alone
Outcome (O)	Clinically meaningful endpoint	Reduction in major cardiovascular events

Hierarchy of Evidence

1. **Systematic Reviews & Meta-Analyses:** Highest evidence strength; synthesizes multiple studies using explicit methods.
2. **Randomized Controlled Trials (RCTs):** Gold standard for causation; random allocation minimizes bias.
3. **Cohort Studies:** Follows exposed vs unexposed groups over time (Prognosis & Harm).
4. **Case-Control Studies:** Compares cases with outcome to controls backward in time (Rare outcomes).
5. **Case Series & Reports / Expert Opinion:** Descriptive or observational background reasoning.

Critical Appraisal: Three Key Questions

- **Are the results valid?** Check for randomization, allocation concealment, baseline similarity, complete follow-up, and intention-to-treat analysis.
- **What are the results?** Look at effect size magnitude and precision (95% Confidence Interval).
- **Will they help my patient?** Check if patient fits trial criteria, if all clinical outcomes were evaluated, and if benefits outweigh harms.

Key Statistical Vocabulary !!!!

Term	Meaning & Clinical Relevance
Relative Risk (RR)	Ratio of event risk in exposed vs unexposed group.
Odds Ratio (OR)	Ratio of odds of outcome between groups (approximates RR for rare outcomes).
Number Needed to Treat (NNT)	Patients treated for 1 additional person to benefit. lower = more effective.
Number Needed to Harm (NNH)	Patients treated for 1 additional person to experience harm. higher = safer.
95% Confidence Interval (CI)	Range likely containing true effect. A 95% CI crossing 1.0 (for RR/OR) indicates non-significance.

KEY TAKEAWAY

EBM blends research evidence, clinical expertise, and patient values — no single element is sufficient alone. It structures how clinicians find, weigh, and apply evidence to the person in front of them.

THE SCENARIO

A 68-year-old with atrial fibrillation asks whether a direct oral anticoagulant (DOAC) is safer than warfarin for stroke prevention.

- Ask: In patients with AF, does a DOAC vs. warfarin reduce stroke and major bleeding?
- Acquire: Search for recent systematic reviews and major RCTs
- Appraise: Check randomization, follow-up, and confidence intervals
- Apply: Weigh renal function, bleeding risk, and the patient's preference for monitoring
- Assess: Reassess after starting therapy and follow outcomes

THE TAKEAWAY

The evidence points to comparable or better outcomes with DOACs for many patients — but the right answer for this patient depends on kidney function, fall risk, cost, and what matters most to them.

EBM doesn't hand you the answer — it structures how you find, weigh, and apply the best available evidence to the person in front of you.

Common Biases & Pitfalls to Watch For

Recognizing these helps you judge whether a study's conclusions can be trusted



Selection Bias

Study participants differ systematically from the population of interest



Confounding

A third variable influences both exposure and outcome, distorting the apparent association



Publication Bias

Positive or striking results are more likely to be published than null findings



Funding / Sponsorship Bias

Study design or reporting favors the interests of the funding source

Management in Family Practice: Plantar Fasciitis

Clinical Encounter Outline, Differential Diagnosis, and Management of Acute Heel Pain

Clinical Case Presentation: A 32-year-old female presents with left heel pain lasting for 3 weeks, triggered after starting workouts to lose weight. Past medical history is unremarkable.

Dual Consultation Agendas

Doctor's Agenda	Patient's Agenda (ICE)
- History & physical examination - Formulate differential diagnosis - Targeted investigation & management - Referral & follow-up planning	Ideas: What does the patient think causes the pain? Concerns: Specific fears (e.g., permanent injury) Expectations: Immediate relief & return to workouts

Differential Diagnosis of Heel Pain

Etiology	Specific Conditions
Musculoskeletal	Plantar fasciitis, Calcaneal stress fracture, Achilles tendinitis, Bone cyst
Neurological	Tarsal tunnel syndrome, Medial or lateral plantar neuritis
Vascular	Peripheral arterial disease (PAD), Vascular insufficiency, Ischemic ulcers
Dermatological / Other	Plantar verruca (warts), Foreign body reaction

Plantar Fasciitis: Clinical Features & Diagnosis

- **Anatomy:** Plantar fascia spans sole of foot, acting like a bowstring to support the arch.
- **Epidemiology & Risks:** ~2M Americans affected yearly (>1M visits). Risk factors: Pes planus/cavus, obesity, limb length discrepancy, tight Achilles, prolonged standing.
- **Classic Presentation:** Sharp, stabbing heel pain **most severe in the morning (first steps)** or standing after rest. Improves with light ambulation, worsens at end of day.
- **Physical Exam:** Focal tenderness on palpation of the *medial calcaneal tubercle*. Pain reproduced by passive hallux dorsiflexion.

Management & Imaging Strategy

- **Imaging:** Rarely needed — diagnosis is predominantly clinical.
- **First-Line Conservative Therapy:** Plantar fascia & Achilles stretching, oral NSAIDs, night splints, corticosteroid injections.
- **Surgical Management:** Plantar fasciotomy (open or endoscopic) reserved for refractory pain lasting >1 year.

Clinical Pearl (Plantar Heel Spurs): Heel spurs result from chronic local inflammation and calcification at the insertion site. The spur is a *consequence* of chronic plantar fasciitis, **not the cause**.

ESSENTIALS OF DIAGNOSIS

1. Heel pain worse in morning upon initial weight-bearing or after rest.
2. Precipitated by recent increase in activity/workout.
3. Localized tenderness at medial calcaneal tubercle.
4. Pain with passive dorsiflexion of great toe.

The Consultation: Tasks & Competencies

Dr. Ruba M. Jaber — Stott & Davis Four Tasks and Fraser's Seven Areas of Competence

Stott & Davis (1979): Four Tasks of the Consultation

Task Domain	Description & Clinical Strategy
1. Presenting Problem	Identify and treat the primary reason for attendance. Explore patient's Ideas, Concerns, Expectations (ICE) and answer "Why now?"
2. Continuing Problems	Review coexisting chronic conditions (hypertension, diabetes, asthma, epilepsy) to improve adherence and long-term outcomes.
3. Help-Seeking Behavior	Teach self-medication, natural history of minor illness, and appropriate clinic/out-of-hours service utilization ("Doctor" = Teacher).
4. Opportunistic Health Promotion	Use visits to deliver preventive care (immunizations, screening, BP checks, smoking/alcohol advice).

Fraser (1992): Seven Areas of Competence

Area	Key Skills & Clinical Behaviors
1. History-Taking	Introduce self, put patient at ease, listen, clarify terms, use simple questions, embrace silence, recognize verbal/non-verbal cues, elicit ICE, consider physical/psych/social context.
2. Physical Exam	Examine correctly and sensitively; use diagnostic instruments selectively to confirm or refute working hypotheses.
3. Diagnosis	Diagnosis is a provisional statement of probability. In GP practice, ~50% of presentations lack a definitive pathological diagnosis and are managed at symptom/problem levels.
4. Patient Management	7 core options: Reassurance/Explanation, Advice/Counseling, Prescribing, Referral, Investigation, Observation/Follow-up, Prevention. (RAPRIOP !!!)
5. Relating to Patients	Maintain professional, friendly, ethical posture; show sensitivity to patient needs and recognize how physician attitudes influence compliance.
6. Anticipatory Care	Take opportunities during consults to promote lifestyle changes and disease prevention.
7. Record Keeping	Maintain accurate, legible records: date, history/exam findings, measurements, working diagnosis, management plan, prescriptions, and follow-up.

CORE TEACHING INSIGHT

Bad consultations result from having insufficient clinical knowledge, failing to relate to patients, or failing to understand the patient's behavior and context.

Consultation Skills

A Comprehensive Summary for Clinical Practice

Based on lectures by Dr. Ruba M Jaber

"It is more important to know what sort of person has a disease than to know what sort of disease a person has."

— Hippocrates (circa 400 BC)

The consultation is the absolute bedrock of all medical practice. During the course of a professional lifetime, most doctors will conduct between **160,000 to 300,000 interviews**. Effective doctor-patient communication is not merely a soft skill; it is a vital clinical instrument for establishing accurate diagnoses, managing problems, and ensuring patient safety.

Why Invest in Good Communication Skills?

- **Safety & Efficiency:** Ensures safe, efficient, and effective healthcare delivery.
- **Deeper Understanding:** Accurately interprets and grasps the patient's actual problems and underlying concerns.
- **Better Outcomes:** Direct improvements in communication directly lead to superior clinical outcomes and reduced diagnostic errors.

The Core Tasks of a Successful Consultation

Task 1: Initiating the Consultation

Establishing initial rapport is the critical first step in making the patient feel respected and heard.

- **Establish Rapport:** Greet the patient, obtain their name, introduce yourself and your role, and ensure their physical comfort.
- **Identify the Reason:** Ask open questions (e.g., "What would you like to discuss today?") and listen attentively to the opening statement without interrupting.
- **Negotiate Agenda:** Confirm the problem list, screen for further issues ("anything else?"), and negotiate a shared agenda taking both perspectives into account.

Task 2: Gathering Information

Efficient information gathering requires guiding the patient while allowing them space to tell their story.

- **Questioning Strategy:** Move appropriately from open-ended questions to targeted, closed questions.
- **Active Listening:** Leave space for the patient to think. Use verbal and non-verbal facilitation (encouragement, silence, repetition).
- **Pick Up Cues:** Carefully monitor body language, speech patterns, and facial expressions. Check out and acknowledge these cues.
- **Understand Perspective:** Actively explore the patient's **Ideas, Concerns, Expectations**, and the Effects of the illness on their life.

Task 3: Providing Structure

A well-structured interview helps both the doctor and the patient stay focused and ensures no key data is missed.

- **Make Organization Overt:** Summarize at the end of a specific line of inquiry to confirm understanding.
- **Signposting:** Use transitional statements to progress clearly from one section to the next, explaining the rationale.
- **Attend to Flow:** Structure the interview in a logical sequence while attending strictly to timing.

Task 4: Building the Relationship

Relationship building runs continuously throughout the consultation to secure trust and collaboration.

- **Non-Verbal Behavior:** Maintain appropriate eye contact, posture, and tone. If reading/writing notes, do so without interfering with dialogue.
- **Develop Rapport:** Be non-judgmental. Use empathy to acknowledge feelings and offer support/partnership.

- **Involve the Patient:** Share your thinking out loud (e.g., "What I am thinking now is..."). Always explain the rationale for parts of the physical examination and ask for permission.

Task 5: Explanation and Planning

Conveying medical information requires careful pacing and sensitivity to the patient's existing knowledge.

- **Chunk and Check:** Provide information in small, digestible "chunks" and frequently check for the patient's understanding.
- **Aid Recall:** Organize explanations systematically. Use explicit categorization, repetition, and visual aids (diagrams, written instructions) to reinforce the message. Avoid medical jargon.
- **Shared Decision Making:** Relate explanations to the patient's own illness framework. Offer choices, negotiate mutually acceptable plans, and ensure all concerns have been addressed.
- **Discussing Interventions:** Clearly outline the steps, benefits, potential side-effects, and obtain the patient's view on barriers and motivation.

Task 6: Closing the Consultation

A secure closure ensures safety and clarity regarding the next steps.

- **Forward Planning:** Contract with the patient regarding next steps. Implement strong safety netting (what to do if the plan fails, unexpected outcomes).
- **Final Summary:** Summarize the session briefly, clarify the care plan, and do a final check for agreement.
- **Final Opportunity:** Always ask if there are any final questions or corrections.

The Diagnostic Process & Clinical Reasoning

Dr. Ruba M. Jaber — Whole-Person Frameworks, Differentials, and Consultation Protocols

1. Patient-Centered Philosophy

Disease-Centered Model	Patient-Centered Model
Focuses primarily on biological mechanisms, organic disease search, localized pathology, and metabolic dysfunction.	Integrates whole-person medicine; prioritizes patient's thoughts, feelings, context, and shared decision-making.

Whole-Person Context Evaluation Metrics

- **A - B - C Metric:** Probes for **A**nxiety, personal **B**eliefs, and direct clinical **C**oncerns.
- **F - E - F - I Metric:** Probes for functional impact (**F**unction), patient **E**xpectations, emotional baseline (**F**eelings), and internal **I**deas.

2. Four Drivers of Differential Generation

Driver	Clinical Rationale
Probability	Most critical driver; guided by local prevalence, epidemiology, and clinical experience.
Seriousness	Life-threatening conditions (e.g., Malignant Melanoma) must be ruled out early regardless of low frequency.
Treatability	Easily remediable conditions (e.g., Hypothyroidism) must rank high due to major clinical benefit.
Novelty	Rare diseases presenting with common clinical features.

The Safety Net — Primary Masquerades: Always check for multi-system masquerades: Depression, Diabetes Mellitus, Anaemia, Iatrogenic/Drug effects, Endocrine/Thyroid dysfunction, Spinal dysfunction, Recurrent UTIs.

3. Operational Consultation Frameworks

Domain	Framework	Core Components
Symptom Review	SOCRATES	Site, Onset, Character, Radiation, Associations, Timing, Exacerbations, Severity.
Systemic Safety	4 Ds	D1: Disease profile, D2: Drug history, D3: Diet patterns, D4: Dokhan (smoking).
Treatment Plan	RAPRIOP	Reassurance, Advice, Prescription, Referral, Investigation, Observation, Prevention.

4. Inductive vs Hypothetico-Deductive Reasoning

Inductive Method (Bottom-Up)	Hypothetico-Deductive Method (Top-Down)
Unfocused fact gathering → general conclusion. Requires full checklists and routine tests. Used by junior trainees; time-consuming.	Formulates early hypotheses → targeted history & physical exam to rule in/out. Efficient standard for experienced practitioners.

Preventive Medicine & Clinical Guidelines

Dr.SuhaKhalifa—Evidence-basedscreening,anticipatorycare,andUSPSTF guidelines.

Levels of Prevention & Screening Principles

Level	Objective	Clinical Examples
Primary	Prevent disease onset by controlling risk factors.	Health education, lifestyle counseling, immunizations, chemoprophylaxis.
Secondary	Detect subclinical disease early to halt progression.	Systematic screening (Mammograms, Pap smears, Colonoscopies).
Tertiary	Minimize complications and disability in established disease.	Glycemic control in DM to prevent nephropathy; stroke rehabilitation.

Wilson's Criteria for Screening: (1) Prevalent/important health problem, (2) Understood natural history, (3) Identifiable latent phase, (4) Accurate, simple, acceptable test, (5) Agreed effective treatment, (6) Early treatment improves outcomes, (7) Cost-effective.

USPSTF Clinical Preventive Guidelines Summary

1. Cardiovascular & Metabolic Health

Domain	USPSTF Screening Recommendation & Grade
CVD Risk Assessment	Assess CV risk every 3–5 years for adults aged ≥20. Recommend behavioral counseling for diet & exercise.
Lipid Disorders	• Grade A: Men ≥35 & Women ≥45 with elevated risk. • Grade B: Younger adults (Men 20–35 / Women 20–45) with CV risk factors.
Statin Therapy	• Grade B: Age 40–75 + 1+ CV risk factor + 10-yr CVD risk ≥10%. • Grade C: Age 40–75 + 10-yr CVD risk 7.5%–10% (selective offer).
Hyper tension	Screen all adults ≥18. Rescreen low-risk adults aged 18–39 every 3–5 years.
Diabetes Mellitus	Screen asymptomatic adults aged 35–75 who are overweight/obese (USPSTF 2021). ADA recommends screening BMI ≥25 + risk factor, or all adults ≥35. Screen gestational DM at 24 weeks.
Preventive Aspirin	• Age 40–59 with ≥10% 10-yr risk: Individualized (small net benefit). • Age ≥60: No net benefit for primary prevention. • Preeclampsia: 81 mg/day after 12 wks gestation in high-risk pregnancy.

2. Cancer Screening Guidelines

Cancer Type	Target Population & Screening Modality / Interval
Breast Cancer	• Grade B: Biennial (every 2 yrs) mammogram for women aged 40–74. • High Risk (BRCA, lifetime risk ≥20–25%, chest radiation <30yo): Annual MRI + Mammogram from age 30.
Colorectal Cancer	• Grade A/B: Screen adults aged 45–75. • Modalities: FIT/gFOBT yearly, sDNA-FIT 1–3 yrs, CT colonography 5 yrs, Flexible sigmoidoscopy 5 yrs

Cancer Type	Target Population & Screening Modality / Interval
	(or 10 yrs + annual FIT), Colonoscopy every 10 yrs. • Grade C: Selective screening for age 76–85.
Lung Cancer	Annual Low-Dose CT (LDCT) for adults aged 50–80 with a 20 pack-year smoking history who currently smoke or quit within the past 15 years.
Cervical Cancer	• Age 21–29: Cytology (Pap) every 3 years. • Age 30–65: Cytology every 3 yrs, OR Co-testing (Pap + HPV) every 5 yrs, OR Primary HPV every 5 yrs. • Stop screening after total hysterectomy for benign disease.
Prostate Cancer	Shared decision-making for men aged 55–69. Initiate discussion at age 40–45 for high-risk (family history, BRCA1/2).

3. Other Preventive Services & Immunizations

- **Osteoporosis:** Dual-energy X-ray absorptiometry (DXA) for all women ≥ 65 , and postmenopausal women < 65 with risk factors.
- **Psychological & Safety:** Routine screening for Depression in adults, Anxiety in women/adolescent girls ≥ 13 (WPSI), and routine Intimate Partner Violence (IPV) screening.
- **Substance Abuse:** Single-item screening questions for alcohol and non-medical drug use.
- **Immunizations:** Ensure coverage for Influenza, Td/Tdap, HPV, Zoster, Pneumococcal, Meningococcal, Hep B, COVID-19, and RSV.

SUMMARY: ROLE OF PRIMARY CARE IN PREVENTION

Family physicians serve as the critical interface for population health — integrating evidence-based screening, counseling, early intervention, and anticipatory guidance to prevent disease and lower systemic healthcare expenditure.

A Geriatric Approach to Older Adult Patients

Comprehensive Guide to Physiology, Assessment, Syndromes & Clinical Management

Lecturer: Dr. Lana Halaseh, MD, MCFP (COE), FCGS | Associate Professor of Medicine

Specialties: Family Medicine, Geriatric Specialist & Hospitalist

1. Biological Concepts of Aging & Homeostenosis

Core Definitions

- **Aging:** Accumulation of biological, psychological, and social changes over time, marked by gradual functional decline. Major risk factor for most chronic human diseases.
- **Senescence:** Cellular growth arrest accompanied by Senescence-Associated Secretory Phenotype (SASP). Limits damaged cell proliferation but contributes to chronic tissue inflammation as cells accumulate.
- **Healthy Ageing (WHO):** Process of developing and maintaining functional ability that enables well-being in older age.

Homeostenosis Concept

Homeostenosis: The progressive narrowing of physiological reserve capacity with advancing age.

Under acute physiological stress, an older adult must tax a much higher proportion of their reserve capacity to maintain homeostasis. When stress exceeds corrective capacity, rapid loss of homeostasis and clinical disease occur (e.g., cardiac stress causing MI in elderly vs simple increased cardiac output in young).

2. Theories of Aging

Category	Theory	Core Mechanism
Evolutionary Theories	Mutation Accumulation	Nonadaptive process; late-acting deleterious mutations express post-reproductively and escape natural selection pressure, accumulating over time.
	Antagonistic Pleiotropy	Adaptive process; single genes yield pleiotropic effects that enhance fitness early in life but cause deleterious late-life aging phenotypes.
Physiologic Theories	Target & mtDNA Damage	Genetic hits alter structural/repair molecules. Mitochondrial DNA lacks robust repair, leading to rapid aberrant mitochondrial expansion.
	Free Radical & Telomere	Oxidative damage in mitochondria. Progressive telomere shortening during replication forces cells into replicative senescence upon reaching threshold.
	Transposable Elements	DNA sequences relocate within the genome, causing mutagenesis, DNA damage, and cellular genomic instability.
	Epigenetic Drift	Altered gene expression driven by environment and lifestyle (diet, obesity, physical activity, tobacco, alcohol, stress).

3. Comprehensive Geriatric Assessment (CGA)

CGA is a multidisciplinary diagnostic and treatment process evaluating medical, psychosocial, and functional capabilities in frail older adults to formulate an integrated care plan.

Domain	Assessment Tools & Focus	Clinical Scoring & Cutoffs
Cognitive & Mood	• MMSE: 30-point formal screen. • Mini-Cog: 3-word recall + Clock Drawing. • Mood: GDS-15 or 2-question screen.	• MMSE: Score ≥24 Normal; <24 Impaired. • Mini-Cog: Score <3 indicates dementia risk. • GDS-15: >5 indicates depressive symptoms.
Functional (ADLs)	• BADL (Katz Index): Bathing, dressing, toileting, transferring, continence, feeding. • IADL (Lawton Scale): Phone, shopping, food, housekeeping, laundry, transit, meds, finance.	• Katz ADL: 6 = Full function, 4 = Moderate impairment, ≤2 = Severe impairment. • Lawton IADL: Score 0 (Dependent) to 8 (Independent).
Gait & Fall Risk	• Timed Get-Up-And-Go (TUG): Time to stand from chair, walk 3m, turn, return, sit. • Annual fall risk screening for all adults ≥65.	• Slow gait speed predicts functional decline, falls, and early 10-year mortality. • History of ≥2 falls or unsteadiness warrants full exam.
Social & Safety	• Living arrangements, caregiver availability. • Financial status, Power of Attorney (POA), DNR. • Home safety: stairs, bathroom grab bars, transit.	• Identifies elder neglect/abuse. • Assesses caregiver burden to prevent burnout and premature institutionalization.

4. The Geriatric Syndromes ("Geriatric Giants")

Geriatric syndromes are complex, multifactorial conditions resulting from accumulated deficits across multiple organ systems. They are interconnected and cannot be explained by a single organ disease.

Classic Geriatric Giants: Dementia • Delirium • Urinary Incontinence • Falls & Gait Instability • Polypharmacy & Inappropriate Meds • Malnutrition & Dehydration • Sleep Disorders • Pressure Ulcers • Dizziness & Frailty

Co-morbidity vs. Multi-morbidity: Co-morbidity refers to conditions existing around a single index disease. Multi-morbidity refers to the co-occurrence of multiple medical/psychiatric conditions without a single index disease.

MNEMONIC: THE GERIATRIC GIANTS (THE "I"S)

Immobility
Instability (Falls)
Incontinence (Urinary & Fecal)
Intellectual Impairment (Dementia & Delirium)
Plus: Sleep issues, Weight loss, Deconditioning, Polypharmacy.

5. Clinical Systems Physical Examination Guidelines

System / Area	Key Examination Technique & Normal vs. Pathological Cues
Vital Signs & Pain	• Orthostatic BP: Measure supine after 10 min rest, then standing at 3 min. A SBP drop ≥ 20 mmHg = Orthostatic Hypotension. • Always include a standardized Pain Scale.
HEENT & Sensory	• Check visual acuity/fields (cataracts, macular degeneration, glaucoma). • Screen hearing (Whisper test, Audioscope). Inspect oral cavity/dentition (explains weight loss/ falls). • Auscultate carotids for bruits; evaluate cervical spine ROM.
Cardiovascular	• Atrial/ventricular ectopy and split S2 on inspiration are common/benign. • S4 heart sound is common in healthy elderly; S3 is ALWAYS pathological (CHF). • Soft systolic ejection murmurs (grade $\leq 2/6$) usually represent benign aortic sclerosis.
Respiratory	• Fixed ribcage leads to increased reliance on diaphragmatic breathing. • Breath sounds may be distant; dry basilar crackles often present without overt disease.
GU & Rectal	• Stress incontinence: Observe urethral meatus while patient coughs. • Rectal exam: Assess sphincter tone, fecal impaction (fecal soiling cause), and prostate size/nodules.
Neurological	• Normal aging changes (above 85 yrs): Unequal pupils (11%), reduced high-frequency hearing, diminished distal vibration sense (21%), absent ankle jerks (15%), primitive reflexes (snout 32%, grasp 28%). • Loss of smell (CN I) can be an early sign of Alzheimer's disease.
Skin Examination	• Inspect pressure points (sacrum, heels) for early pressure ulceration. • Check bruising patterns (indicator of falls or elder abuse). Monitor pigmented lesions for malignancy.

6. Preventive Care & CDC Immunization Schedule

Cancer Screening Guidelines

Cancer screening decisions depend on comorbidities, functional status, and life expectancy. Patients do **NOT** demonstrate survival benefit from cancer screening unless life expectancy exceeds **5 years** (utilize USPSTF & ePrognosis calculators).

CDC Adult Immunization Schedule Summary

- **Influenza:** 1 dose annually.
- **RSV Vaccine:** 1-time dose for all adults ≥ 75 years (or 60–75 if high clinical risk).
- **Tdap / Td:** Booster every 10 years.
- **Recombinant Zoster (Shingrix):** 2 doses (2–6 months apart) for all adults ≥ 50 years.
- **Pneumococcal Vaccine:**
 - Option A: PCV15 followed by PPSV23 1 year later.
 - Option B: PCV20 single dose (PPSV23 not required).

Family Medicine Rotation — Master Summary

The Most Important Points Across the Full Rotation Guide
Family & Community Medicine · Jordan University Hospital · JUH Family Medicine Rotation Guide

Core Framework: The Consultation

Patient-Centered Model & ICE / FIFE

- 4 Cs of Primary Care: First Contact, Continuous, Comprehensive, Coordinated.
- Always explore **ICE**: Ideas, Concerns, Expectations (or FIFE: + Feelings/Function).
- Stott & Davis 4 Tasks: presenting problem, continuing problems, help-seeking behavior, opportunistic health promotion.
- **RAPRIOP** management options: Reassurance, Advice, Prescribing, Referral, Investigation, Observation, Prevention.

Diagnostic Reasoning

- Hypothetico-deductive method (top-down) is the efficient standard — not exhaustive checklists.
- Differential drivers: Probability > Seriousness (rule out danger) > Treatability > Novelty.
- Diagnosis in primary care is a statement of **probability**, not certainty (~50% lack a definitive label).
- Safety-net masquerades: Depression, Diabetes, Anaemia, Drug effects, Thyroid, Spinal issues, Recurrent UTIs.

Difficult Patients & Communication

Managing Difficult Patients

- ~15% of consults are "heartsink"; always rule out organic/psychiatric disease before labeling.
- Archetypes: Dependent Clinger (set firm boundaries), Entitled Demander (calm, assert authority), Help-Rejecter (maintain relationship, don't chase cure), Self-Destructive Denier (non-judgmental empathy).
- Angry patient: stay calm, sit near exit, never meet anger with anger, search for hidden agenda.
- Transference = patient projects onto doctor; Countertransference = doctor's own emotional reaction.

Breaking Bad News — SPIKES

- **Setting** → **Perception** ("what have you been told?") → **Invitation** → **Knowledge** (warning shot, plain language) → **Emotion** (empathy) → **Strategy/summary**.
- Never use euphemisms for cancer/death; avoid jargon and blunt bluntness alike.
- **Always screen for suicidality** when delivering devastating prognoses.

Ethics & Boundaries

- Never use family members as clinical interpreters.
- Medical errors: disclose promptly, apologize sincerely, mitigate harm, report.
- No social media friend requests, financial dealings, or treating friends/family (except emergencies).
- Small gifts OK; valuable gifts (gold, luxury items) must be refused.
- **Covert medication is strictly unacceptable.**
- Cannot deny care based on a patient's lifestyle choices.

Geriatrics Essentials

- Homeostenosis: shrinking physiologic reserve with age → small stressors cause big decompensation.
- **S4 = normal** in elderly; **S3 is always pathological** (heart failure).
- Don't treat asymptomatic bacteriuria in the elderly.
- Orthostatic hypotension = SBP drop ≥20 mmHg after standing 3 min.
- Geriatric Giants ("I's"): Immobility, Instability/falls, Incontinence, Intellectual impairment — plus sleep, weight loss, polypharmacy (≥5 meds).
- Cancer screening only benefits if life expectancy >5 years.

Key Screening Intervals (USPSTF)

Screen	Population & Interval
Breast (mammogram)	40–74y, every 2 yrs (Grade B)
Cervical	21–29: cytology q3y; 30–65: cytology q3y OR co-test q5y
Colorectal	45–75y; colonoscopy q10y / FIT yearly
Lung (LDCT)	50–80y, 20 pack-yr history, quit <15y
AAA	Men 65–75 who ever smoked, one-time US
Aspirin primary prevention	Not routine ≥60y; individualize 40–59y

High-Yield Exam Traps

- Full ROS for every patient = FALSE (hypothesis-driven, focused history).
- Summarizing ≠ facilitation (facilitation = encouraging like "go on").
- Adolescent confidentiality is NOT absolute — break for safety risk (suicide, abuse).
- Don't withhold diagnosis from a competent adult just because family asks.
- Opioids are not first-line for chronic non-cancer back pain.

• FAMILY MEDICINE FINAL EXAM PAST PAPERS

- Comprehensive Past Paper Analysis, High-Yield Concepts & Exam Traps

Source: Past Papers Collection (017–020 Batches)

1. INTRODUCTION TO FAMILY MEDICINE & CONSULTATION

Family Medicine focuses on continuous, comprehensive, personal, and community-oriented care, addressing illness in the context of family and culture.

- **Scope of Practice:** Wide knowledge, manages acute self-limiting (~40%), chronic (~25%), and life-threatening (~15%) cases.
- **Consultation Tasks (Stott & Davis):**
 1. Identify/manage presenting problems.
 2. Manage continuing/chronic problems.
 3. Modify help-seeking behavior.
 4. Promote health & preventive care.
- **Patient Agenda:** Patients finish opening statements in average ~23–45 seconds if uninterrupted. Let them express their full list before directing questions.
- **Questioning Techniques:** Use *funneling* (open-ended → closed-ended). Avoid leading or controlling questions early.

⚠ EXAM TRAP #1: CONSULTATION & PRACTICE PRINCIPLES

- * **TRAP:** "A full multi-system review of systems must be taken for every patient regardless of complaint." → **FALSE!** Family practice uses hypothesis-driven, focused histories.
- * **TRAP:** "Summarizing patient words is called facilitation." → **FALSE!** Summarizing/paraphrasing is *reflection/clarification*. Facilitation means encouraging the patient to keep talking (e.g., "Mm-hmm", "Go on").
- * **TRAP:** Aim of family medicine is to turn community care into hospital care. → **FALSE!** FM aims to keep care community-based and reduce unnecessary hospitalizations.

2. PATIENT-CENTERED MEDICINE & DIAGNOSTIC PROCESS

Primary care relies on the **Hypothetico-Deductive Method**: early hypothesis generation, ranking differentials by probability, seriousness, and treatability.

💡 CORE CONCEPT: FIFE & PATIENT-CENTERED MODEL

Always explore: **F**eelings (fears), **I**deas (what they think it is), **F**unctioning (impact on daily life), and **E**xpectations (what they want from the visit). Diagnosis in primary care is a state of *probability* rather than absolute certainty.

Clinical Scenario	Most Likely Diagnosis / Priority	Key Exam Finding / Management Rule
30yo Male with Sudden Chest Pain	Anxiety → MI / Serious Cardiac → Musculoskeletal	Rank by <i>Prevalence</i> → <i>Danger (Rule-out)</i> → <i>Treatability</i> . Panic attack is common, but rule out acute coronary syndrome.
Neck Pain in 65yo Aggravated by Motion	Mechanical Pain / Osteoarthritis / Cervical Spondylosis	Radicular radiation down arm without neurological deficits; conservative therapy initially.
Tension Headache with High Stress	Tension-type Headache	First-line: NSAIDs, CBT, relaxation techniques. Consider antidepressants only if chronic/refractory.
Chronic Vague Pain / Frequent Visits	Somatization / Anxiety / Depression	Avoid ordering repetitive, invasive tests blindly. Establish scheduled regular 15-min visits every 2 weeks.

⚠️ EXAM TRAP #2: DIAGNOSTIC PROCESS MISTAKES

- * **TRAP:** Thinking diagnosis in FM is always a statement of absolute certainty. → **FALSE!** It is a statement of *probability*.
- * **TRAP:** For a patient asking for opioids for chronic back pain after declining physical therapy → Explain that opioids are not indicated for long-term chronic non-cancer back pain and emphasize the necessity of physiotherapy/exercise.

3. APPROACH TO GERIATRIC PATIENTS

Comprehensive Geriatric Assessment (CGA) evaluates physical, cognitive, affective, social, and functional domains (ADLs & IADLs).

Physiological / Clinical Finding	Normal Age-Related vs. Pathological	Action / Exam Distinction
Heart Sounds	NORMAL: S4 ABNORMAL: S3	S4 is common (decreased ventricular compliance). S3 indicates heart failure and needs workup.
Renal Function	Decreased Creatinine Clearance	Normal physiological change in elderly; serum creatinine may remain normal due to lower muscle mass.
Dementia vs. Normal Aging	Impairment of Daily Function (ADLs)	Functional impairment distinguishes dementia from benign memory loss.
Polypharmacy	Definition: ≥ 5 medications	Multimorbidity is the leading risk factor for polypharmacy. Always perform regular medication reviews.

⚠️ EXAM TRAP #3: GERIATRIC MANAGEMENT TRAPS

- * **TRAP:** Treating asymptomatic bacteriuria in elderly to prevent delirium. → **DO NOT TREAT** asymptomatic bacteriuria in elderly patients.
- * **TRAP:** Patient brings adult son who speaks for her. → Maintain direct eye contact with the *patient* while allowing her to respond.
- * **TRAP:** Pneumococcal vaccine revaccination rule → PPSV23 given before age 65 requires 1 booster dose after age 65 (at least 5 years after previous dose).

4. COMMUNICATION, ADOLESCENTS & BREAKING BAD NEWS

Breaking Bad News (SPIKES & ABCDE Protocols)

- **S - Setting up:** Private room, sit down, manage interruptions, invite family if requested.
- **P - Perception:** Assess what the patient already knows ("What have you been told so far?").
- **I - Invitation:** Ask how much detail the patient wants to know.
- **K - Knowledge:** Deliver information in clear small chunks, avoiding jargon.
- **E - Empathy:** Validate emotions ("It must be terrible to hear this"). Silence is effective.
- **S - Strategy & Summary:** Outline next steps clearly.

Adolescents & HEEDSSS Framework

Assess: **H**ome, **E**ducation/Employment, **E**ating, **A**ctivities, **D**rugs, **S**exuality, **S**uicide/Depression, **S**afety.

⚠️ EXAM TRAP #4: COMMUNICATION & BBN TRAPS

- * **TRAP:** Family requests not to tell the patient about cancer. → First assess what the *patient* knows and wants to know; do not blindly hide diagnosis from a competent adult.
- * **TRAP:** Patient becomes angry during BBN. → Stay calm, do not match anger with anger, do not call security immediately unless there is a physical threat.
- * **TRAP:** Adolescent confidentiality is absolute. → **FALSE!** Confidentiality must be broken if there is immediate safety risk (suicide attempt, abuse, severe harm).

5. PREVENTIVE SERVICES & SCREENING GUIDELINES (USPSTF)

Condition / Screening	Target Population	Screening Interval & High-Yield Rules
Hypertension	Adults ≥ 18 years	Annually for adults ≥ 40 years; every 3–5 years for 18–39 with normal BP and no risk factors.
Cervical Cancer (Pap)	Women 21–65 years	Cytology alone every 3 years (ages 21–65) OR Cytology + HPV co-testing every 5 years (ages 30–65).
Breast Cancer (Mammogram)	Women 40–74 years	Biennial (every 2 years) screening mammography.
Colorectal Cancer	Adults 45–75 years	Colonoscopy every 10 years, FIT yearly, or Sigmoidoscopy every 5 years. Stop if life expectancy < 5 yrs.
Lung Cancer (Low-Dose CT)	Adults 50–80 with 20+ pack-year smoking history	Annual Low-Dose CT (LDCT). Stop if quit > 15 years or limited life expectancy.
Abdominal Aortic Aneurysm	Men 65–75 who have EVER smoked	One-time Abdominal Ultrasound screening.
Depression Screening	All adults (including pregnant/postpartum)	PHQ-2 / PHQ-9 (assesses symptoms over the past 2 weeks). Score > 20 = Severe.

⚠️ EXAM TRAP #5: SCREENING & PREVENTION TRAPS

* **TRAP:** Primary Prevention vs Secondary vs Tertiary:

- *Primary:* Vaccines, smoking cessation counseling (prevents disease onset).
- *Secondary:* Pap smear, mammogram, BP check (early detection of asymptomatic disease).
- *Tertiary:* Stroke rehab, glycemic control in established DM, cardiac rehab (prevents disability/complications).

* **TRAP:** Aspirin for primary prevention of CVD → Updated guidelines recommend **against** routine initiation in adults ≥ 60.

6. EVIDENCE-BASED MEDICINE (EBM) & DOCTOR-PATIENT DYNAMICS

Study Design	Key Characteristics	Best Used For / Trap
Randomized Controlled Trial (RCT)	Experimental, random assignment, controls confounding	Best design to establish causality between intervention and outcome.
Cohort Study	Follows Exposed vs Unexposed groups forward/retrospectively	Calculates Relative Risk (RR). Best for rare exposures, expensive/time-consuming.
Case-Control Study	Compares Cases (with disease) vs Controls (without disease)	Calculates Odds Ratio (OR). Fast, inexpensive, best for rare outcomes/diseases .
Meta-Analysis	Statistical pooling of data from multiple studies	Highest level of evidence when combining well-conducted RCTs.

🧠 TRANSFERENCE VS. COUNTER-TRANSFERENCE

* **Transference:** Patient redirects emotions/feelings onto the doctor (e.g., patient treating doctor like their father).

* **Counter-Transference:** Doctor redirects personal feelings/biases onto the patient (e.g., doctor getting angry at a substance user due to personal past experiences).

⚠️ EXAM TRAP #6: DIFFICULT PATIENT MANAGEMENT

* **Entitled Demander:** Attempts to control doctor through intimidation, guilt, or fear. Best approach: set firm professional boundaries and structured follow-up visits.

* **Somatizing Patient:** Patient presents with multiple vague, non-organic symptoms. Strategy: Acknowledge suffering, do not dismiss symptoms as "fake", avoid ordering unnecessary invasive workups, and schedule regular periodic visits.

7. HIGH-YIELD

- **Tension Headache Therapy:** First step is NSAIDs & CBT/relaxation. Consider SSRIs/tricyclics if persistent.
- **Aspirin Guidelines (CAD/Stroke):** Do NOT routinely give aspirin for primary prevention regardless of age unless specific high-risk criteria met.
- **Mammogram Follow-up:** If a BI-RADS 3 (probably benign) result is found, follow up in 6 months. Routine screening interval remains every 2 years.
- **Cervical Screening + HPV:** Women 30–65 with Pap + HPV co-testing normal → Repeat every 5 years.
- **Pneumococcal Vaccines:** PCV13 produces stronger antibody response; PPSV23 covers more serotypes (23 pathogens).