

Week 1: Complexity and Clinical Decision-Making

Application of Course Knowledge

Client complexity factors (HPI). Maria Rodriguez's presentation is clinically complex because suspected hypothyroidism is occurring in the setting of poorly controlled type 2 diabetes mellitus (T2DM) and hypertension. This multimorbidity increases treatment burden (multiple labs, visits, lifestyle tasks, and medications), which is associated with poorer adherence and downstream outcomes for patients living with multiple chronic conditions. (Lee et al., 2024). Contextual determinants further amplify complexity: limited English proficiency (LEP) can reduce symptom-reporting accuracy, decrease shared decision-making, and increase communication-related safety risks, particularly when chronic disease self-management instructions are complex (Woods et al., 2022). Low socioeconomic status may constrain access to laboratory testing, follow-up, and medications, and her caregiving responsibilities for her older mother create time scarcity that can delay monitoring and treatment adjustments. Together, Maria's biomedical and contextual risks require an individualized, feasible plan rather than a "one-size-fits-all" approach.

Diagnostic complexity and error prevention. Maria's symptoms (fatigue, weight gain, cold intolerance) are compatible with hypothyroidism. However, they also overlap with uncontrolled diabetes, sleep disorders (e.g., obstructive sleep apnea), anemia, depression, and medication adverse effects (e.g., fatigue with certain antihypertensives). This overlap increases vulnerability to cognitive errors such as anchoring and premature closure. Diagnostic safety literature emphasizes that both cognitive and system factors contribute to misdiagnosis and harm, highlighting the need for structured diagnostic processes (Newman-Toker et al., 2025). To reduce diagnostic error, the FNP should: (1) use a broad differential diagnosis for fatigue/weight change; (2) confirm thyroid dysfunction before treatment by ordering serum TSH and free T4 (and thyroid peroxidase antibodies when autoimmune thyroiditis is suspected); (3) review A1c trends, current medications, sleep quality, and screen for anemia and depression when indicated; and (4) use a professional interpreter and teach-back to ensure history accuracy and patient understanding. A brief "diagnostic time-out" (explicitly asking, "What else could this be?") before finalizing treatment can also help mitigate bias in outpatient reasoning (Newman-Toker et al., 2025).

Clinical decision-making factors (resources, finances, and feasibility). Clinical decision-making must integrate guideline-based care with what Maria can realistically do given her LEP, financial constraints, and caregiving load. Resource limitations shape which tests and treatments are prioritized (e.g., starting with high-value labs: TSH/free