Diagnostic Reasoning Chains

Symptoms
Initial presentation
chief complaint

→

Differential Dx
Generate possible
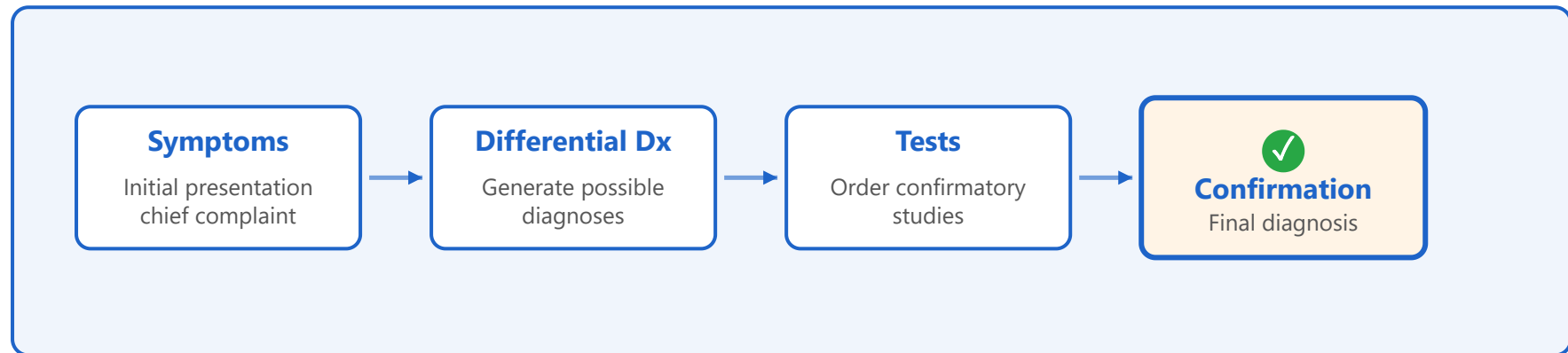diagnoses

→

Tests
Order confirmatory
studies

→

✅
Confirmation
Final diagnosis

Example: Chest Pain Evaluation

Symptoms: 65yo male, sudden chest pain, radiating to left arm, diaphoresis

Differential: 1) MI, 2) Angina, 3) GERD, 4) Costochondritis, 5) Pulmonary embolism

Key Tests: ECG (ST elevation), Troponin (elevated), Cardiac enzymes

Diagnosis: Acute ST-elevation myocardial infarction (STEMI)

Reasoning: Classic presentation + ECG changes + elevated biomarkers → STEMI confirmed