

Reasoning Challenge (RC) Example: Chest Pain Under Uncertainty		
Top-Level Metadata		
Field	Value	
challenge id	CHAL.CHEST PAIN UNCERTAINTY	
title	Chest Pain Under Uncertainty	
version	1.0.0	
domain tags	<i>medical clinical reasoning, diagnostic reasoning</i>	
description	A family of chest pain scenarios featuring incomplete and evolving	
Integrity	Hash, signature	
Governance	Clinical Reasoning	
Prohibited	Learner identity, performance scores, answer keys, scoring rubrics, fixed	
Scenario Envelope		
Field	Value	
presenting complaint family	chest pain	
uncertainty features	incomplete history evolving symptoms conflicting risk factors	
allowable evidence types	history physical exam basic tests follow up info	
progressive disclosure	TRUE	
allow ambiguous findings	TRUE	
require assumption tracking	TRUE	
Required Reasoning Dimensions		
PROBE.HYPOTHESIS GENERATION PROBE.DIFFERENTIAL DIAGNOSIS PROBE.EVIDENCE WEIGHTING PROBE.UNCERTAINTY MANAGEMENT PROBE.ASSUMPTION TRACKING PROBE.HYPOTHESIS REVISION		
Counterfactual Templates		
Template ID	Description	Knobs
CF.RISK FACTOR INVERSION	Invert or remove a key risk factor to test robustness of the reasoning strategy.	risk factor presence, risk factor strength
CF.TEST RESULT CONTRADICTION	Introduce a test finding that conflicts with the learner's leading hypothesis.	evidence type, contradiction severity
Constraint Set		
Constraint ID	Description	Parameters
C.TIME PRESSURE	Impose time pressure requiring prioritization and explanation of tradeoffs.	max minutes: 7
C.LIMITED TESTS	Limit number of tests that may be requested to force evidence weighting.	max tests: 2
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