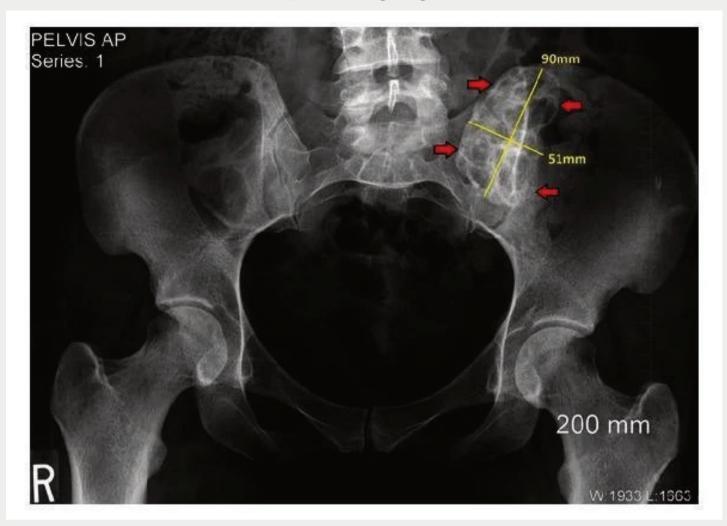
Q: Is the lesion purely lytic or sclerotic?



A: Purely lytic C: Purely sclerotic B: Mixed lytic and sclerotic

D: Cannot be determined

Step 1: Recruitment



The recruiter agent dynamically assembles a specialized team of agents tailored to the task or question at hand.



Pediatrician

0.25

Cardiologist 0.35



Endocrinologist 0.40

The recruiter agent assigns relevance-based weights to agents, establishing a hierarchical structure tailored to the task.

Step 2: **Team Component Assembly**



Closed-Loop

Mutual Trust

Mutual Monitoring

Shared Mental Model

Team **Orientation**

Task-specific teamwork modules are selectively activated by the recruiter agent to optimize agent coordination for the current question.

All teamwork components are activated in this example to facilitate systematic understanding of component interactions with the framework.

Step 3: Cooperative Problem Solving

Round 1: Initial independent assesment

Shared Mental Model

Initializes task understanding



Team Orientation

Tracks goal alignment

Knowledge Bank

Agent (Answer):

1 (B)

2 (C) 3 (C)

After initializing team orientation and a shared mental model, all information is stored in a shared knowledge bank, from which agents independently derive their answers.

End of Round 1: Inter-Round activities:

Mutual Trust • Establishes baseline trust levels

Leadership • Assigns a leader → Defines team coordination strategy

Sets collaborative approach for Round 2

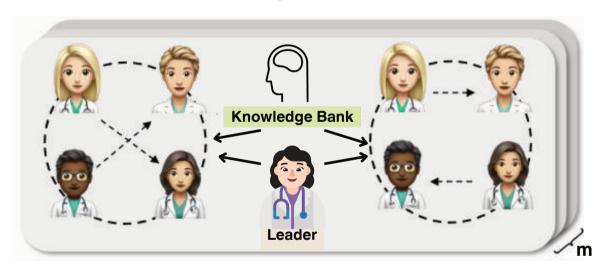
Shared Mental Model • Updated with insights

Each agent receives other agents answer and reasoning

Round 2: Discussions

Mutual Monitoring • Analyzes teammate responses for issues and provide feedback

Closed-Loop • Verifies every message via acknowledgement and validation.



Collaborative Reasoning: In each round,

Team Orientation: • Encourages pursue of team success

Mutual Trust • Updates trust scores based on collaboration

Leadership • Monitors team coordination and discussion

Round 3: Final Decision aggregate (weight × confidence)

Final decision: 1 (B) 0.27 2 (C) 0.32 3 (C) 0.21

WINNER

C (0.53)

Combines each agent's answer using a weighted sum of their confidence and assigned relevance/weight.