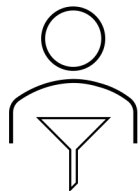


How long have you experienced soreness in your chest?



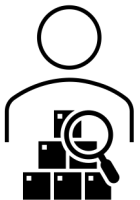
Medical Student  
(User)

**Abstraction:**  
What is the duration of patient's symptoms?



Abstraction  
Agent

**Nodes:**  
symptom, duration  
**Relationships:**  
HAS\_SYMPTOM, HAS\_DURATION



Retrieval  
Agent

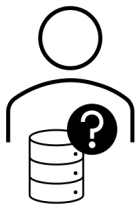
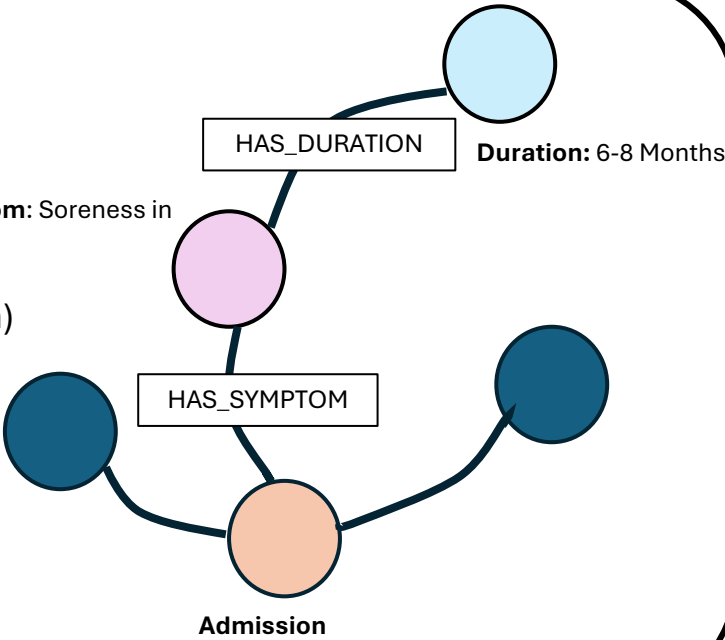
**Admission ID:** 143536

**Cypher Query:**

```
MATCH (p:Patient)-[:HAS_ADMISSION]->(a:Admission)
MATCH (a)-[:HAS_SYMPTOM]->(s:Symptom)
WHERE s.description =~ '(?i).*soreness.*chest.*'
MATCH (s)-[:HAS_DURATION]->(d:Duration)
RETURN p.name AS Patient, d.length AS Duration
```

**Retrieved Result:** 6-8 Months

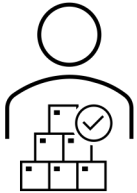
Symptom: Soreness in Chest



KG Query  
Generation Agent

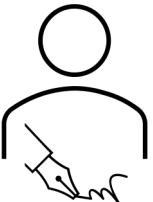
**Check:**  
Does "6-8 Months" answer the natural language query?

- Yes → Exit
- No → Paraphrase the natural language query and retry



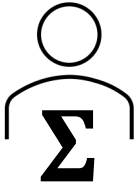
Checker Agent

**Personality:**  
expressive, anxious  
**Rewrite:**  
"Oh doctor, I am so worried. I have been feeling soreness in my chest for 6-8 months. What do you think is the reason?"



Rewrite Agent

**Summarize:**  
Patient ID 88539 (Admission ID 143536) reported soreness in chest for 6-8 Months. He has expressed concern. The current context relates to the duration of the patient's soreness in chest.



Summarization  
Agent