

# Temporal Reasoning

## Time Expression Extraction

- Absolute dates (Jan 1, 2024)
- Relative dates (3 days ago)
- Durations (for 2 weeks)
- Frequencies (twice daily)

## Event Ordering

- BEFORE, AFTER, OVERLAP
- Medication start/stop
- Surgery dates
- Symptom onset timing

## Timeline Construction

- Patient journey visualization
- Merging multi-source data
- Handling conflicts
- Uncertainty representation

## Clinical Applications

- Disease progression tracking
- Treatment efficacy evaluation
- Adverse event detection
- Longitudinal phenotyping