Automatic Medical Knowledge Graph Construction

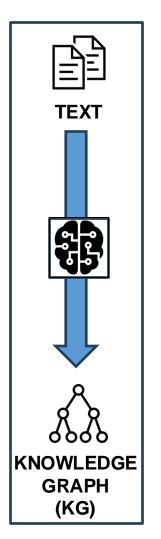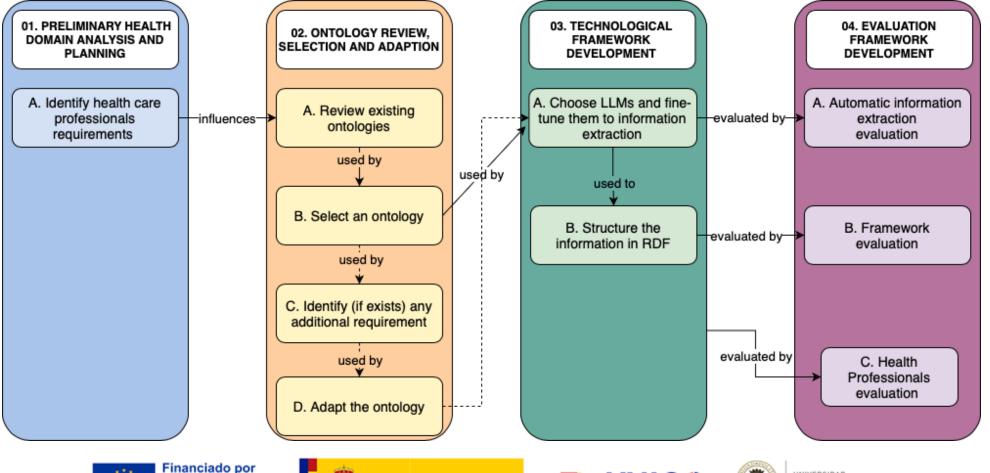**Joel Pardo (Second Year PhD Candidate),**

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PAPER & POSTER

Developing an automated framework to generate **domain-specific KGs** for the **electronic health sector**, aimed at assisting **medical professionals** in the **decision-making process**.

TEXT

KNOWLEDGE GRAPH (KG)

01. PRELIMINARY HEALTH DOMAIN ANALYSIS AND PLANNING

A. Identify health care professionals requirements

— influences →

02. ONTOLOGY REVIEW, SELECTION AND ADAPTION

A. Review existing ontologies

used by

B. Select an ontology

used by

C. Identify (if exists) any additional requirement

used by

D. Adapt the ontology

used by →

03. TECHNOLOGICAL FRAMEWORK DEVELOPMENT

A. Choose LLMs and fine-tune them to information extraction

used to

B. Structure the information in RDF

— evaluated by →

04. EVALUATION FRAMEWORK DEVELOPMENT

A. Automatic information extraction evaluation

B. Framework evaluation

— evaluated by →

C. Health Professionals evaluation