

Proposal to Develop CQF-Based Decision Support Framework for Caregivers of Patients with Dementia

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Long Term Goals and Objectives

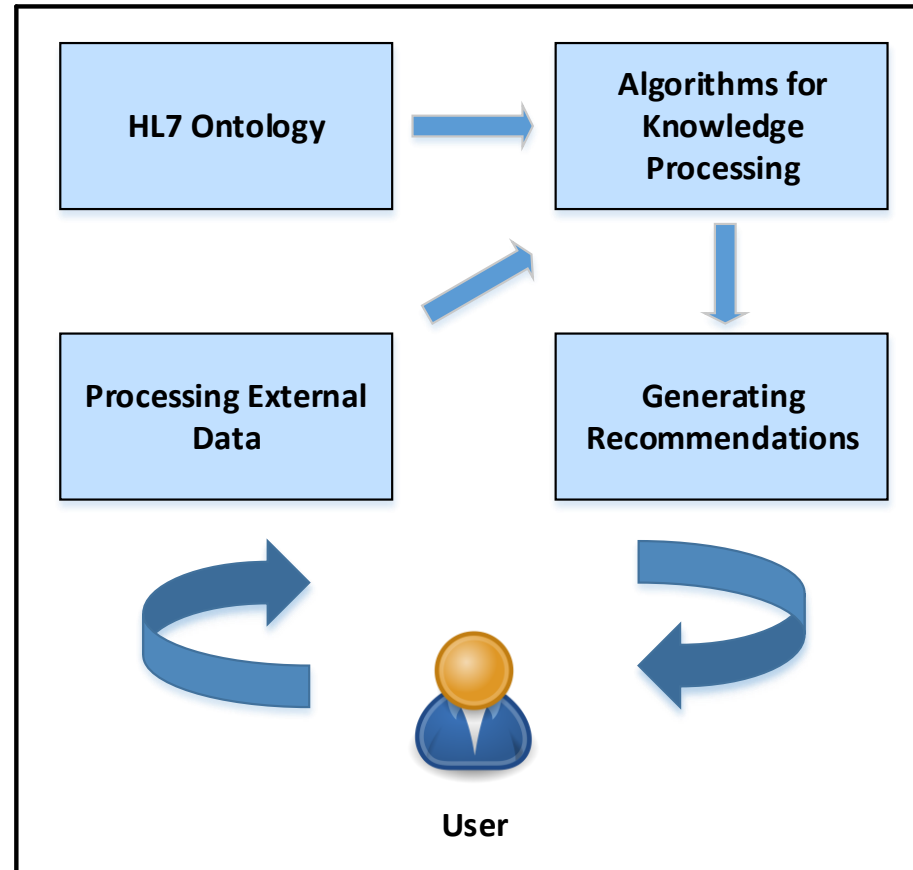
Long Term Goals:

- Development of standards that will facilitate the development of Clinical Decision Support Systems that will assist the caregivers of patients suffering from dementia
- Establishing the required connection between the decision support for clinician and caregiver of patients with dementia

Core objectives:

- Identify the key elements of the caregiving process for patients suffering from dementia
- Develop an CQF-based ontology based on the elements identified above
- Test the aforementioned ontology by developing an application prototype

Overview of the Proposed Pilot Project



Scenario 1

Without Decision Support

- Patient suffering from dementia has urinary tract infection
- The patient exhibits abnormal behavior
- The caregiver initially believes the patient's behavior is due to progress of dementia
- The caregiver witnesses the abnormal behavior and finally makes a decision to take the patient to the nearest Emergency Room
- The physician indicates that an earlier admission of the patient would have been a better choice

With Decision Support

- Patient suffering from dementia has urinary tract infection
- The patient exhibits abnormal behavior
- The caregiver consults the decision support system and identifies the possibility of the patient suffering from delirium
- The caregiver rushes the patient to the nearest Emergency Room

Scenario 2

Without Decision Support

- A patient suffering from severe Alzheimer's disease is wandering in the neighborhood and ends up in the bedroom of a neighbor
- The neighbor find a stranger relaxing on his bed and calls the police
- The police after performing some investigation identifies the individual and the fact that the individual was suffering from dementia and escorts him to his home

With Decision Support

- The caregiver finds out from the decision support system that the patient needs a electronic GPS tracker since there is a possibility of the patient getting lost while wandering
- The patient is lost in the neighborhood
- The caregiver informs the local law enforcement agency and they track the patient by receiving signals from the tracking device

Summary

- Our proposed pilot project will support the design and development of ontologies that will aid the development of decision support systems for caregivers of dementia patients
- We will work with clinicians and caregivers to develop the ontology
- The project if approved will bolster the design and development of new parsers that can be used to develop the necessary decision support system

Thank You

