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## **An Integrated Solution for Sustainable Care for Multimorbid Elderly Patients with Dementia**



### **WP3: Foundations of the Clinical Decision Support Services for the management of multimorbid elderly patients with dementia**

#### **D3.4: Smart Early Warning CDS Services**

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## Executive Summary

This deliverable provides the design and implementation of the Clinical Decision Support (CDS) module as a means of integrating the advanced early warning smart decision tools delivered by Task 3.3 with the rest of the CAREPATH architecture. It reports the results of Task 3.4, which aims to deliver the mechanisms to interact with the advanced early warning smart decision tools reactively or pro-actively, so that the results of the assessments (risk assessments, early warning notifications, new states of the patient deduced such as intrinsic capacity and dementia profile estimations) can be integrated with the CAREPATH secure patient repository and also with Adaptive Integrated Care Platform (AICP) to be presented as notifications to clinicians, as well as to be further processed by other clinical decision support services to have impact on personalized care planning.

In addition to this, this deliverable also provides implementable specifications of clinical decision support services automating the computer interpretable guideline specifications delivered by Task 3.1 in conformance to CDSHooks standard. It clearly identifies input parameters as FHIR resources coded with international code systems, the implementation logic of the CDS services as rules and outputs of the clinical decision support services as CDS Hooks Information or Suggestion Cards. This paves the way of implementing these CDS services in parallel in Task 4.5 to deliver personalized support for creating patient-tailored care plans in the light of the recommendations of evidence-based guidelines for the diseases and comorbidities targeted to be addressed by CAREPATH.

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