

A Federated Collaborative Care Cloud Architecture for Addressing the Needs of Multi-morbidity and Managing Poly-pharmacy



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C3-Cloud will establish an ICT infrastructure enabling a collaborative care and cure cloud to enable continuous coordination of patient-centred care activities by a multidisciplinary care team and patients/informal care givers. This will be achieved through the following work tasks:

A Personalised Care Plan Development Platform will allow collaborative creation and execution of personalised care plans for multimorbid patients through systematic and semi-automatic reconciliation of clinical guidelines, with the help of:

- Decision Support Modules for risk prediction and stratification, recommendation reconciliation, poly-pharmacy management and goal setting.
- Development of C3-Cloud Interoperability Middleware for seamless integration with existing information systems, fusion of multimodal patient and provider data.
- Providing an Integrated Terminology Server with advanced semantic functions to enable meaningful analysis of multimodal data and clinical rules.
- Supporting active patient involvement and treatment adherence through a Patient Empowerment Platform ensuring patient needs are respected in decision making and taking into account preferences and psychosocial aspects.
- Co-design and 4-layered multi-method multi-stakeholder evaluation will lead to a user friendly solution.
- Demonstrating feasibility through pilot studies focusing on diabetes, heart failure, renal failure, depression in different comorbidity combinations. Pilots will operate for 15 months in 3 European regions with diverse health and social care systems and ICT landscape, which will allow for strengthening the evidence base on health outcomes and efficiency gains.
- Validation of C3-Cloud adaptive patient pathways and organisational models by patient organisations and a clinical reference group, change management and training guidelines will be shared with the European community.
- Facilitating commercial exploitation of C3-Cloud integrated care solutions through an Industry Vendor Forum and commercial EHR/PHR products of 3 leading SMEs.

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