

N°	Project	Coordinating hospital	Participating hospitals	Summary
322	Digitalisatie thuishospitalisatie (Digitalisation at home hospitalisation)	UZ Leuven	Plexusnetwerk (AZ Diest, RZ Tienen, HHT Leuven), Nexuzhealth ziekenhuizen	<p>Ideally, all communication regarding the organisation and coordination of care for both forms of home hospitalization between primary and secondary care should occur in a standardised manner and fully digitally from within the electronic patient record (EPR). Ideally, both primary care providers and the hospital care team should be able to work directly from their own EPR, with documentation on daily nursing assessments, medication administration and follow-up being structured and efficiently consultable in both EPR systems. With the ongoing financial support for innovation projects, we therefore aim to implement digital connectivity for communication and coordination for both current and possible future forms of home hospitalization—linking the various existing EPRs used by the involved actors, namely hospitals, general practitioners, and home nurses. In this way, data relating to the organisation and follow-up of care should be accessible from the different EPRs by the GP, home nurses, as well as the multidisciplinary OPAT and oncology care teams (specialist, infectious disease specialist/oncologist, hospital pharmacist) who hold final responsibility for the home hospitalization.</p> <p>Additionally, the digital connectivity that is being realised can later also be deployed for other forms of home hospitalization and thus contributes to the effective and safe ‘ambulantisation’ of care.</p>
710	NLP > OMOP Connect	AZ Klina	Jan Yperman Ziekenhuis, Noorderhart, UZ Gent, ZAS	<p>In the Data Capabilities project NLP > OMOP, unstructured medical data are structured using SNOMED CT and deep learning models, and incorporated into the OMOP Common Data Model (CDM). This is implemented across four different hospitals that use two different Electronic Health Record (EHR) systems. By adding NLP tables to the OMOP CDM and populating them with concepts generated by the developed deep learning models, we can now also make unstructured data FAIR. We developed this as a generic solution that is not disease-domain-specific, language-dependent, nor EHR-dependent, and which is easy to implement.</p> <p>The data are made available for exchange with other hospitals, for real-world evidence (RWE) studies, for communication with governmental bodies, as a source for FHIR, and to prepare hospitals for the European Health Data Space (EHDS). Thanks to the structuring towards SNOMED CT and the harmonisation inherent to OMOP, data exchange becomes possible.</p> <p>During the ongoing Data Capabilities project NLP > OMOP, extensive documentation is being developed and validated. The technology is demonstrated through three methods: (1) by developing internal search queries within each individual partner hospital, (2) by benchmarking the results between partner hospitals, and (3) by participating in an international RWE study. At this stage, the technology is end-to-end ready for use. This outcome forms the basis for a logical and relevant follow-up trajectory.</p> <p>The experience and knowledge gained, as well as the technology developed in the NLP > OMOP project, are being transferred to four hospitals. These hospitals are guided end-to-end to bring the technology fully into production. We provide base funding for infrastructure (hardware) and a budget for the personnel needed to ensure project success. We demonstrate that, with a limited investment, a hospital can structure its unstructured data into SNOMED CT and make them available for real-world evidence use and analysis.</p>
010	QualiFHIR	Grand Hôpital de Charleroi	Clinique Notre Dame de Grâce à Gosselies, Centre Hospitalier de Mouscron, CHC Mont Légia	<p>The QUALIFHIR project has the objective of pooling data from several hospitals through the deployment of components within each hospital participating in the project. Consequently, QUALIFHIR naturally includes the possibility of deploying its solution in additional hospitals. Today, within the framework of the QUALIFHIR project, three hospitals are involved. With the CROSS-OVER project built on QUALIFHIR, a fourth hospital—using a different EHR system—will be added.</p> <p>Since the number of hospital institutions that can be connected to this solution is not limited (as demonstrated by the CROSS-OVER project on QUALIFHIR), the architecture is therefore scalable both in terms of the number of participating hospitals and the types of data concerned (and consequently, the use of this data to support care practices).</p> <p>The components of the QUALIFHIR solution that ensure data extraction and integration into FHIR servers are available as Open Source.</p>

670	SHIFT 2 FAITH	UZ Gent	UZ Gent, AZ Maria Middellares, AZ Jan Palfijn, AZ Sint-Lucas & CoZo; CH Jean Titeca, UMC Sint-Pieter, Epsilon, UMC Brugmann; CHR Citadelle, CHU Liège, CHR Huy; PZ ASSTER, PC Ariadne, Alexianen Zorggroep Tienen, Zorggroep Guislain, PZ Sint-Alexius, PC Sint-Amandus, PC Sint-Jan-Baptist, Zorggroep Sint-Kamillus, Zorggroep Multiversum, CNP Saint-Martin, CP Saint-Bernard	<p>This project focuses on the further development, validation, and evaluation of a scalable, interoperable, FHIR-based infrastructure for the Belgian healthcare system.</p> <p>By adopting a distributed model, healthcare institutions operating on different networks and using different EHR systems can be connected in a standardized manner, enabling more efficient and consistent data exchange. The architecture builds on existing initiatives and ensures uniform and scalable data exchange without requiring major modifications to existing systems.</p> <p>Within this model, each FHIR client communicates exclusively with one designated FHIR Node, which serves as a standardized access point to both local and external FHIR servers. This node coordinates requests, aggregates data, and ensures that each connected FHIR-enabled institution only has access to the information relevant to them—without requiring direct links between all participating networks.</p> <p>This architecture strengthens interoperability between different regional networks and contributes to the development of a national, distributed FHIR architecture. By using federated FHIR queries, data from multiple repositories can be retrieved efficiently and securely without relying on central storage.</p> <p>In the first phase, a pilot setup will be explored to connect, in addition to the already participating general hospitals, psychiatric hospitals of vzw Myna and vzw Organisatie Broeders van Liefde. Based on available documentation, feasibility within this context will be assessed. For hospitals in Brussels and Wallonia involved in other Data Capabilities projects, a pilot setup will be created to validate this federated architecture. The SHIFT project architecture will be used as a reference model, and instead of a metahub, local registries will be used temporarily within the pilot environment.</p> <p>This pilot setup serves as a blueprint for much broader deployment and can be adopted and implemented by other FHIR-enabled nodes. By demonstrating this model within the project, fragmentation and parallel experiments can be avoided, allowing future initiatives to scale more quickly and efficiently. In addition, healthcare institutions that are not currently part of the Data Capabilities projects will also be involved. This makes it possible to assess—based on available documentation and capabilities—whether the proposed model is feasible for them, without requiring concrete implementations in those hospitals at this stage.</p>
959	Zorgvragen in kaart (Mapping care needs)	Karus vzw	Karus, Gent Sleidinghe, PC Hiëronimus	<p>Through this project, we aim to establish a uniform registration of care requests within the mental healthcare networks, enabling:</p> <ul style="list-style-type: none"> Better alignment between care demand and available services within the region Detection of duplicate care requests for the same patient across different institutions Generation of policy-relevant information at the network level More efficient use of existing tools and consultation structures <p>To achieve this, we intend to implement a shared registration framework that can function as an extension to the existing hospital systems, including a common library of care requests and a minimal dataset.</p>