

# Data Availability in Distributed Patients' Record System using Virtual Primary Copy

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## **Abstract**

*Digitization and networked computing in the healthcare sector have resulted in electronic patient records that are stored, managed and shared among different healthcare providers. Replication process enables the data availability and fast access to the distributed data. It improves healthcare service delivery, with the aim of nationally available records. This system presents electronic patient record management in distributed systems using network architectures and increases the data availability by replication. In the proposed system, patient records and their histories records are stored in multiple healthcare centers in order to improve the tracking patient history. To control the data availability and consistency, a variation of the primary copy algorithm, called "virtual primary copy" method will be applied in this system. Java programming is used to develop the distributed electronic patient record system.*