

A STRATEGY FOR QUERIES IN ELECTRONIC PATIENT RECORDS IN DISTRIBUTED DATABASES

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This work describes the challenges to recover information from electronic patient records of the Brazilian health public system. The Brazilian model of healthcare is classified in three levels (primary, secondary and tertiary), and each one of these levels works with a specific set of information regarding patient care. In an ideal healthcare model, patient would be able to migrate through the different assistance levels, since primary care (most general) until tertiary care (most specialized), following a processes of reference and counter-reference, and the information generated in each service of these levels could be shared between the diverse professionals from other levels of care. This would make possible a unified vision of the patient past medical history providing better support for the decision process of the health professional. In this context, the Electronic Patient Record (EPR) unified appears as a tool that makes possible the work sharing and distribution through computer networks between health professionals, representing an advance to enhance quality to the healthcare of population. Therefore, the objective of this work is the development of an EPR environment that offers a unified information vision of EPR distributed by the public health network. This project, called *GridVida*, uses the mechanism of data integration *Integra* with the environment of grid computing *OurGrid*. After bibliographical review and analysis of several services working on different attention levels, a model of EPR was elaborated based on clinical information flow generated by patient consultations. The system architecture was established, alterations in *Integra* and *Ourgrid* had been carried through and a system archetype was developed and is under testing phase. The preliminary results of this work have provided better understanding about which queries best fit each level of healthcare and the advantages of using grid computing technology for accomplishment of these queries.

References

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