Healthcare Informatics is attracting increasing attention from the computer science community, in both industry and academia. For example, electronic health records (EHR) are being implemented worldwide to improve dissemination of health information. Canada Infoway targets to provide EHR to 100 per cent of the population by 2015, and in 2010, both ACM and IEEE initialized new conference series on healthcare informatics.

An EHR is a repository of digitized health information about individual patients or populations. It is "electronic" so that it can be shared across different healthcare settings, by being embedded in network-connected information systems. Obviously, international standardization is needed for the interoperability between different EHR systems. There are several international organizations who publish their standards, e.g., openEHR and HL7. Those standards are results of decades of research, and contain plenty of valuable knowledge of the domain of Healthcare Informatics.

This seminar will first briefly review and compare several standards, then present two important notions: Archetype and Template, and finally outline some research challenges with respect to EHRs for computer scientists, such as process engineering, data integration and decision support.

Refreshments will be served before the talk in AX24A