

# Data Quality Assurance in Information Systems for Precision Medicine

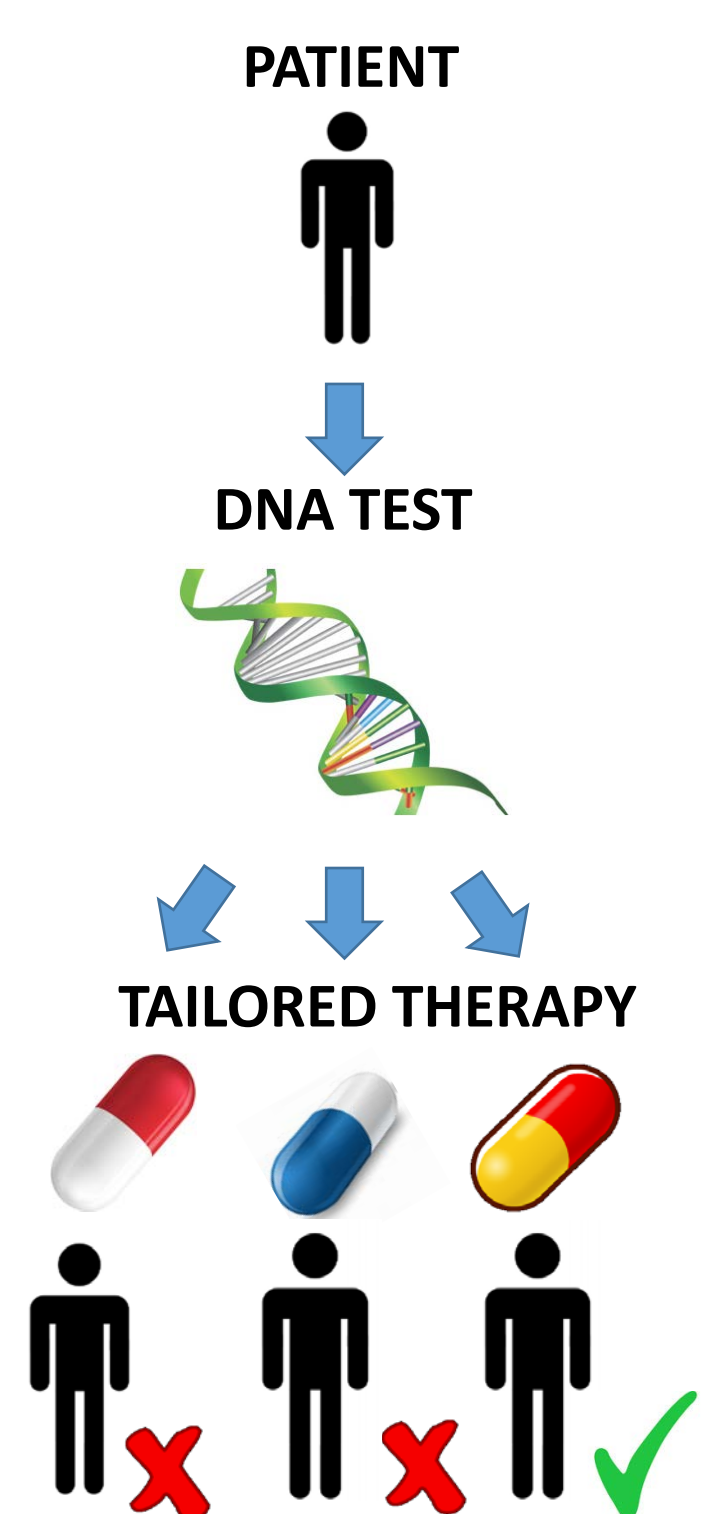


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To provide a platform based on the Human Genome Conceptual Model (HGCM) to allow an easy, structured and high-quality data integration.

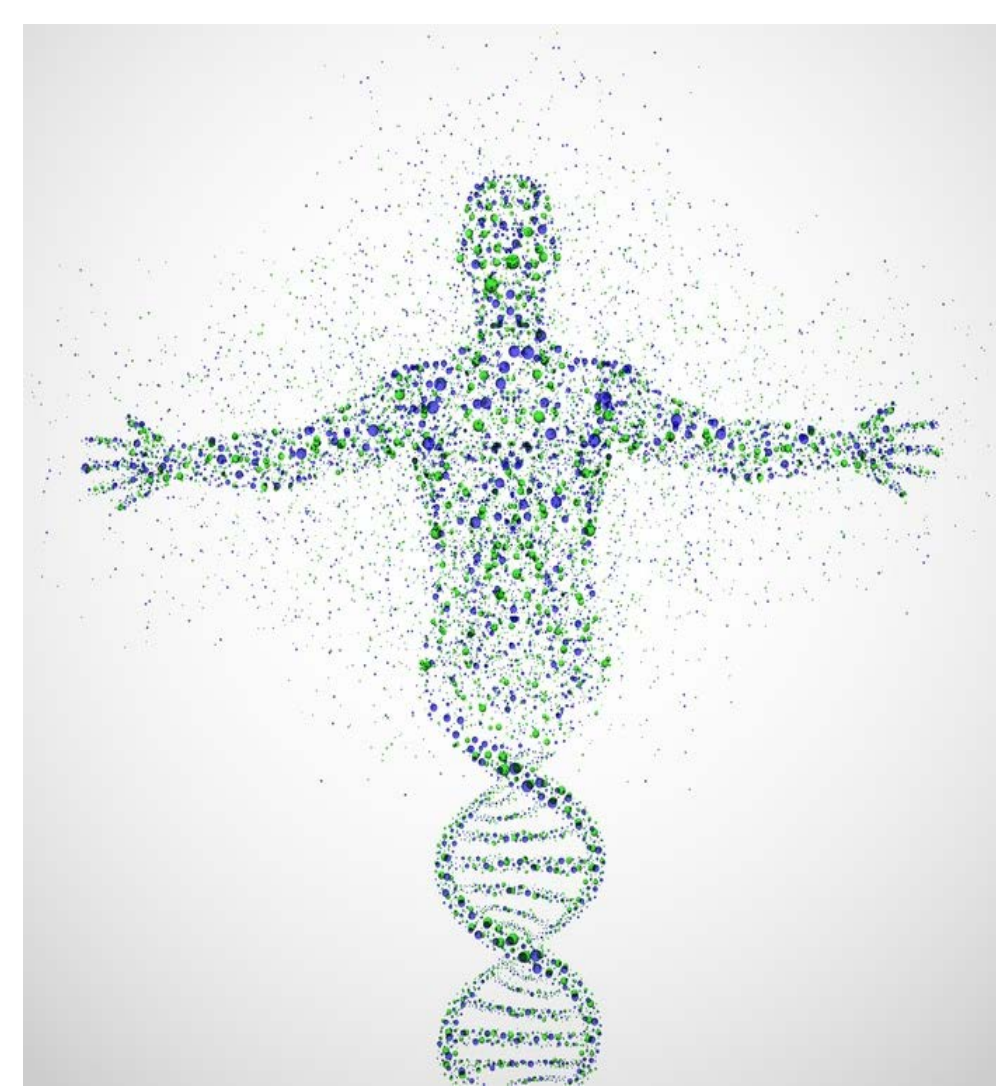
## 1. PRECISION MEDICINE



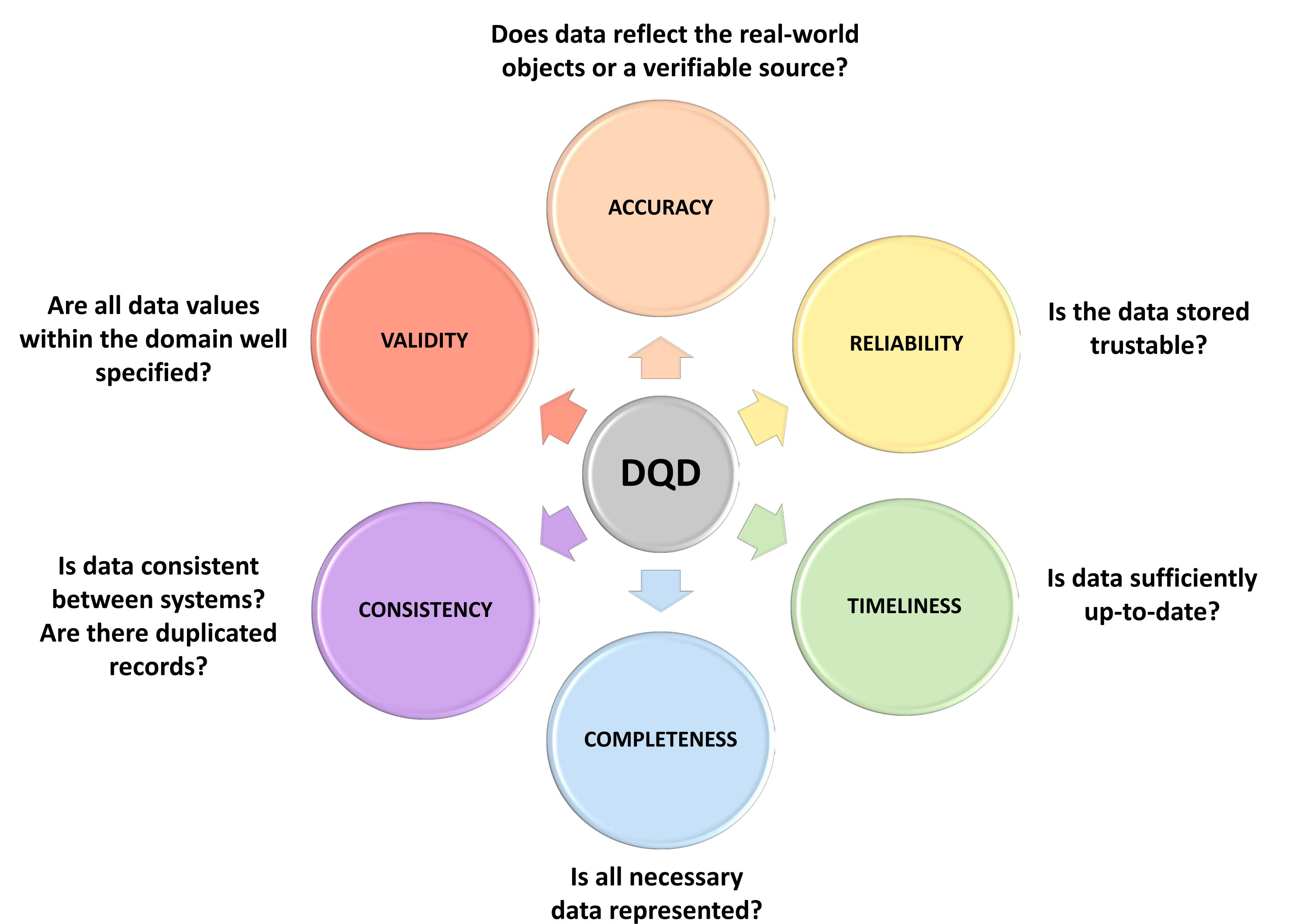
Precision Medicine must be based on Information Systems which can assure the high quality of the information managed.

## 2. GENOMIC INFORMATION IS CHAOTIC

Genomic information is very heterogeneous, unstructured and complex, which hinders and slows the integration process.



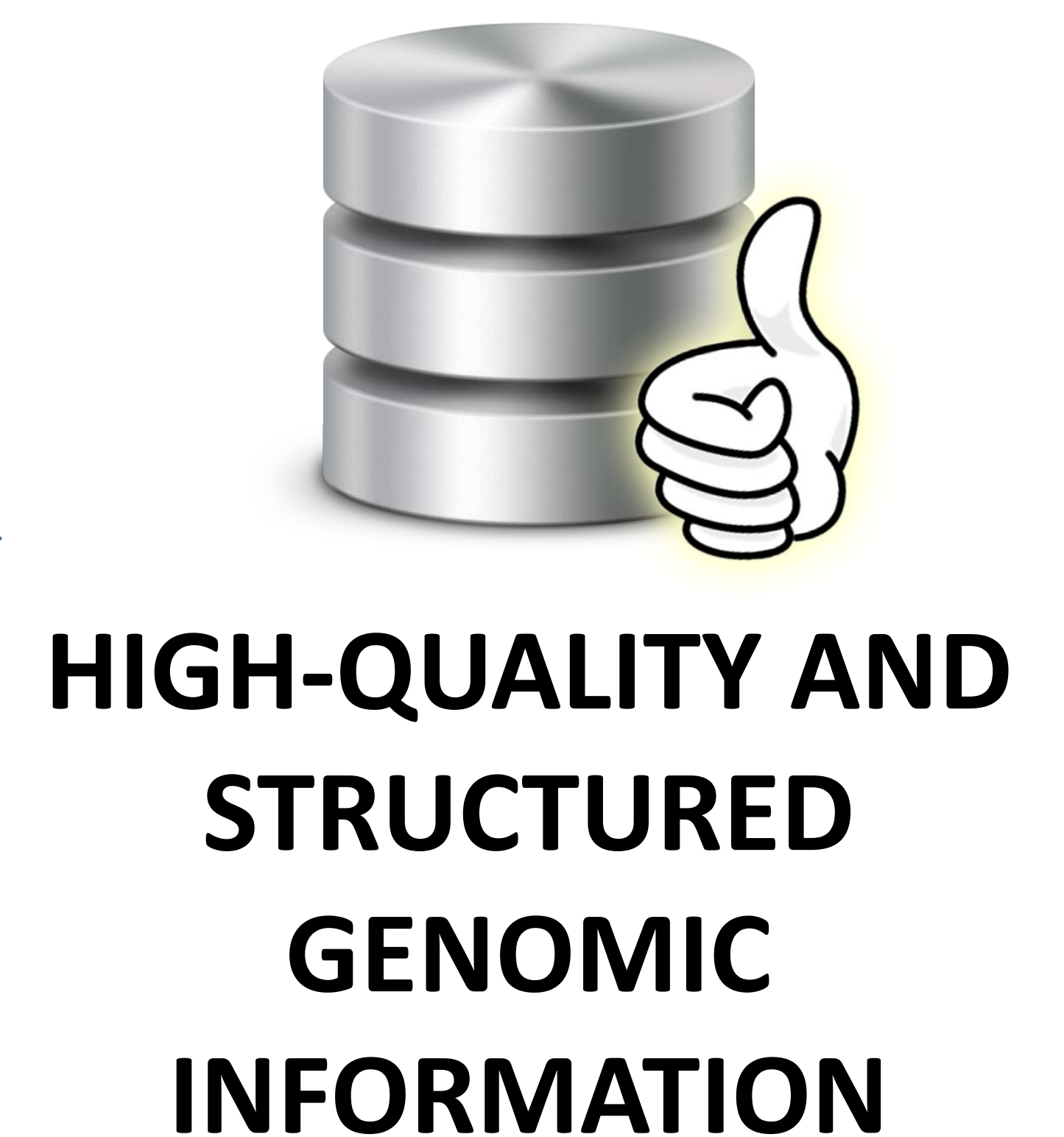
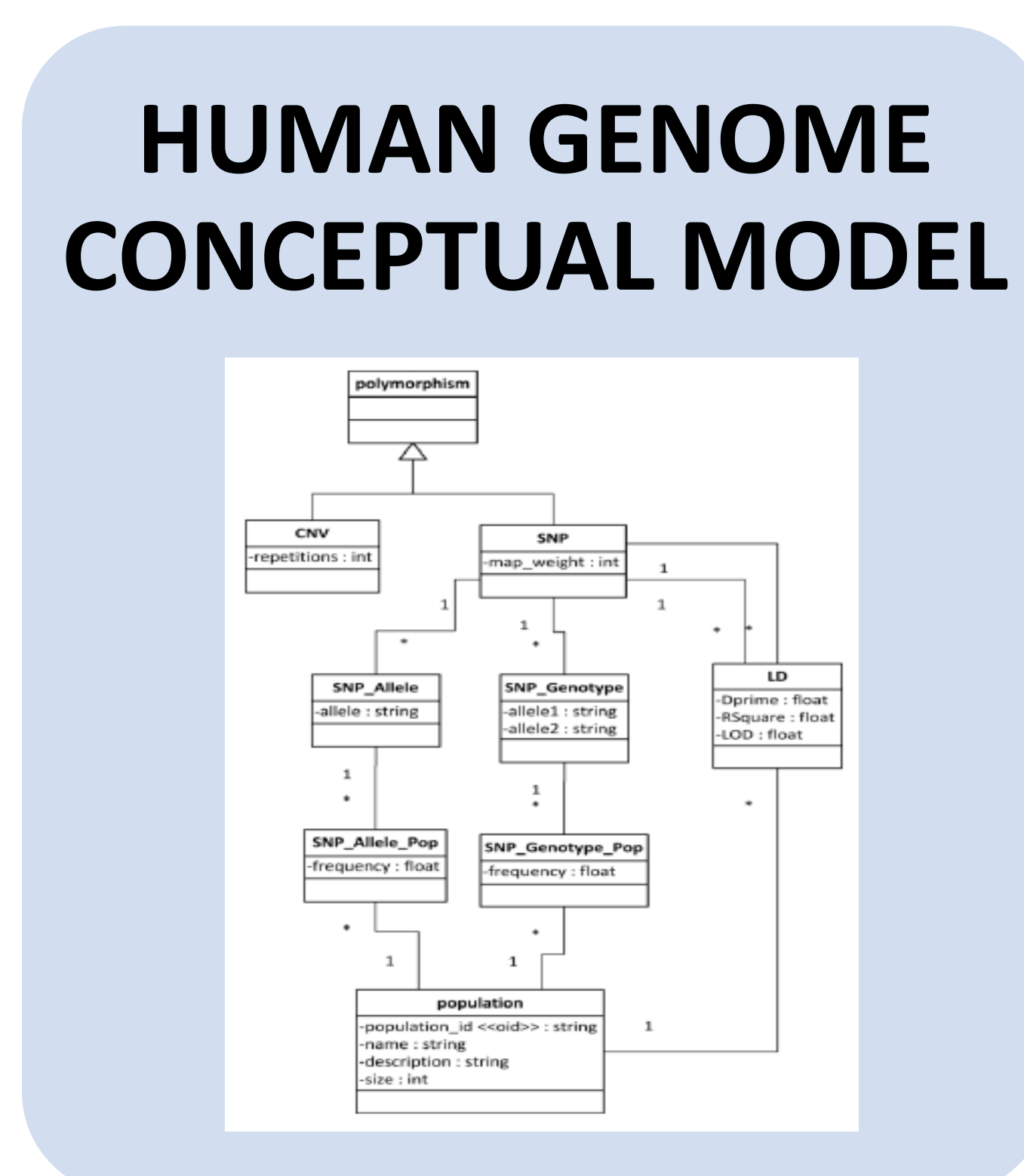
## 3. DATA QUALITY DIMENSIONS (DQD)



Using Data Quality Dimensions we can develop a framework to classify the errors detected in the biological datasources, in order to solve them before the integration in the Information System.

## 4. FRAMEWORK FOR GENOMIC INFORMATION INTEGRATION

### CONCEPTUAL MODELING INTEGRATION PLATFORM



## 5. CONCLUSIONS

The use of an appropriate software platform will help bioinformaticians to integrate information from different repositories. Having a quality framework based on a sound conceptual model to represent the genomic information, many of the quality problems during the integration process would no longer exist or would be greatly reduced.

**With precision medicine based in high quality information each patient benefits.**