

OVERVIEW

The Clinical Research Chart (CRC) repository cell is one of the core cells in the i2b2 Hive. The CRC cell is designed with several requirements. The main requirements are:

1. It must be able to hold healthcare information from many different venues and allow it to be queried rapidly even if there are hundreds of millions of rows.
2. It must be easily combined with other project repositories to form large unified repositories.
3. Finally, it must allow objects to be stored that are present in the genomic data.

Currently information in the CRC cell is related to clinical data and hence it's also called Clinical Research Chart. For the remainder of this document, the terms **CRC** and **Data Repository Cell** will be used interchangeably to refer to the same cell.

The CRC is a data warehouse of patient's phenotype and genotype information. It is supported by a powerful metadata management module (the Ontology Cell). Currently the CRC handles concepts such as diagnoses, procedures, medications, and lab tests, but the structure of the table gives enough flexibility to expand this to include virtually any kind of observation. The presence of both genotype and phenotype information makes this cell a powerful tool for researchers.

All patient data present in the CRC is de-identified; the only exception is the patient notes from hospitals. These notes are stored in encrypted form, so only users enabled with an encryption key can view them.