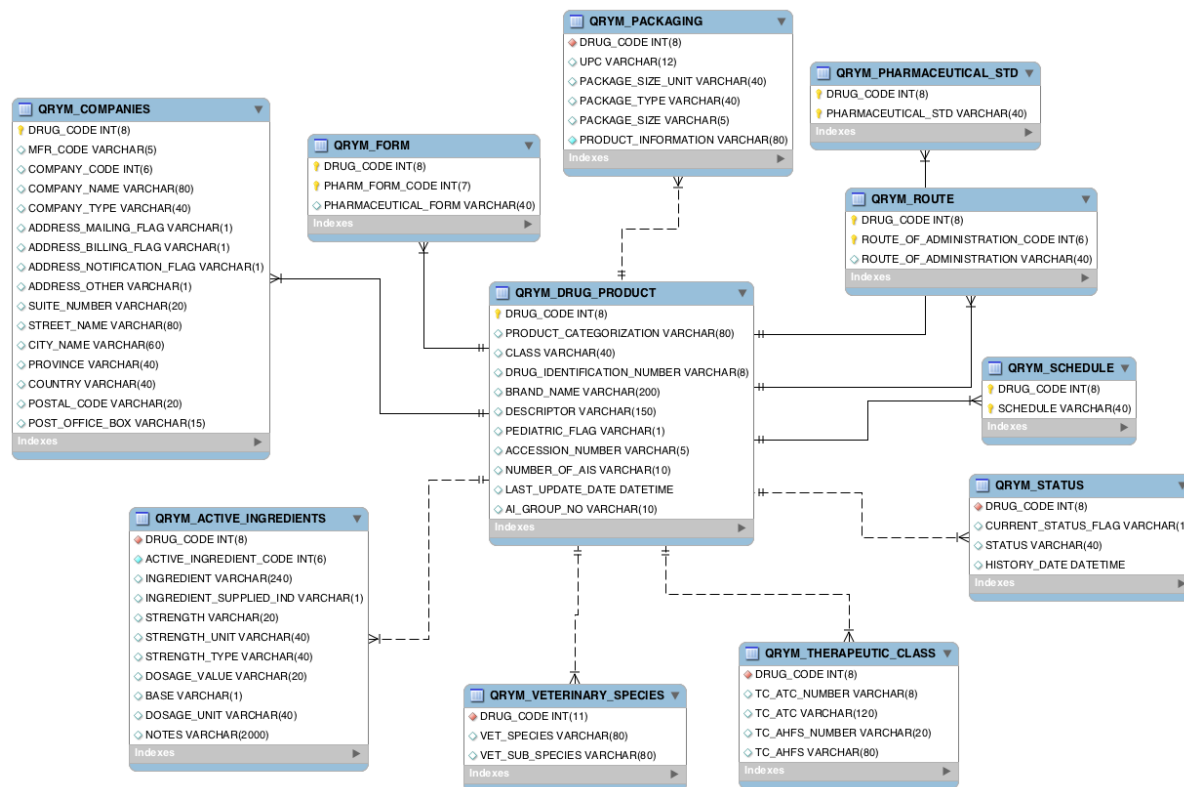# Health Canada Drug Product Database (DPD) in MySQL

The most recent LeadLab development effort is enhancing OSCAR to support the new BC Interoperability Specification for Primary Care (See PITO EMR-TO-EMR DATA TRANSFER & CONVERSION (E2E-DTC) SPECIFICATIONS).

The E2E-DTC is a CDA-based spec. Some new lab members are now getting their feet with HL7, the RIM, and all these wonderful things.

More recently the focus has been on mapping medications from OSCAR to the E2E spec. There is some very detailed analysis happening on medication codes, form codes, route codes, etc. However, because OSCAR relies heavily on the DPD this mapping work is almost like mapping purely from the D2D to E2E.

To help me I quickly created a MySQL table structure so I could query the DPD export tables in a relational fashion. The SQL script to create this database can be downloaded here.

QRYM_PACKAGING
- DRUG_CODE INT(8)
- UPC VARCHAR(12)
- PACKAGE_SIZE_UNIT VARCHAR(40)
- PACKAGE_TYPE VARCHAR(40)
- PACKAGE_SIZE VARCHAR(5)
- PRODUCT_INFORMATION VARCHAR(80)
- Indexes

QRYM_PHARMACEUTICAL_STD
- DRUG_CODE INT(8)
- PHARMACEUTICAL_STD VARCHAR(40)
- Indexes

QRYM_COMPANIES
- DRUG_CODE INT(8)
- MFR_CODE VARCHAR(5)
- COMPANY_CODE INT(6)
- COMPANY_NAME VARCHAR(80)
- COMPANY_TYPE VARCHAR(40)
- ADDRESS_MAILING_FLAG VARCHAR(1)
- ADDRESS_BILLING_FLAG VARCHAR(1)
- ADDRESS_NOTIFICATION_FLAG VARCHAR(1)
- ADDRESS_OTHER VARCHAR(1)
- SUITE_NUMBER VARCHAR(20)
- STREET_NAME VARCHAR(80)
- CITY_NAME VARCHAR(60)
- PROVINCE VARCHAR(40)
- COUNTRY VARCHAR(40)
- POSTAL_CODE VARCHAR(20)
- POST_OFFICE_BOX VARCHAR(15)
- Indexes

QRYM_FORM
- DRUG_CODE INT(8)
- PHARM_FORM_CODE INT(7)
- PHARMACEUTICAL_FORM VARCHAR(40)
- Indexes

QRYM_ROUTE
- DRUG_CODE INT(8)
- ROUTE_OF_ADMINISTRATION_CODE INT(6)
- ROUTE_OF_ADMINISTRATION VARCHAR(40)
- Indexes

QRYM_DRUG_PRODUCT
- DRUG_CODE INT(8)
- PRODUCT_CATEGORIZATION VARCHAR(80)
- CLASS VARCHAR(40)
- DRUG_IDENTIFICATION_NUMBER VARCHAR(8)
- BRAND_NAME VARCHAR(200)
- DESCRIPTOR VARCHAR(150)
- PEDIATRIC_FLAG VARCHAR(1)
- ACCESSION_NUMBER VARCHAR(5)
- NUMBER_OF_AIS VARCHAR(10)
- LAST_UPDATE_DATE DATETIME
- AI_GROUP_NO VARCHAR(10)
- Indexes

QRYM_SCHEDULE
- DRUG_CODE INT(8)
- SCHEDULE VARCHAR(40)
- Indexes

QRYM_STATUS
- DRUG_CODE INT(8)
- CURRENT_STATUS_FLAG VARCHAR(1)
- STATUS VARCHAR(40)
- HISTORY_DATE DATETIME
- Indexes

QRYM_ACTIVE_INGREDIENTS
- DRUG_CODE INT(8)
- ACTIVE_INGREDIENT_CODE INT(6)
- INGREDIENT VARCHAR(240)
- INGREDIENT_SUPPLIED_IND VARCHAR(1)
- STRENGTH VARCHAR(20)
- STRENGTH_UNIT VARCHAR(40)
- STRENGTH_TYPE VARCHAR(40)
- DOSAGE_VALUE VARCHAR(20)
- BASE VARCHAR(1)
- DOSAGE_UNIT VARCHAR(40)
- NOTES VARCHAR(2000)
- Indexes

QRYM_VETERINARY_SPECIES
- DRUG_CODE INT(11)
- VET_SPECIES VARCHAR(80)
- VET_SUB_SPECIES VARCHAR(80)
- Indexes

QRYM_THERAPEUTIC_CLASS
- DRUG_CODE INT(8)
- TC_ATC_NUMBER VARCHAR(8)
- TC_ATC VARCHAR(120)
- TC_AHFS_NUMBER VARCHAR(20)
- TC_AHFS VARCHAR(80)
- Indexes

After you have created the empty database in MySQL, you will need to download the HC DPD extract files here. Simply download the "All Files" option.

Next you can load the extract files into MySQL using the following statements (Note: there is an assumption here that since you want to navigate the DPD in MySQL that you actually know enough about MySQL to run these commands from the right location).

```
LOAD DATA INFILE 'drug.txt' INTO TABLE QRYM_DRUG_PRODUCT FIELDS TERMINATED
BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n' (DRUG_CODE,
PRODUCT_CATEGORIZATION, CLASS, DRUG_IDENTIFICATION_NUMBER, BRAND_NAME,
DESCRIPTOR, PEDIATRIC_FLAG, ACCESSION_NUMBER, NUMBER_OF_AIS, @date,
AI_GROUP_NO) SET LAST_UPDATE_DATE = str_to_date(@date, '%d-%b-%Y');
LOAD DATA INFILE 'comp.txt' INTO TABLE QRYM_COMPANIES FIELDS TERMINATED BY
',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, MFR_CODE, COMPANY_CODE, COMPANY_NAME, COMPANY_TYPE,ADDRESS_MAI
LING_FLAG, ADDRESS_BILLING_FLAG, ADDRESS_NOTIFICATION_FLAG,ADDRESS_OTHER,
SUITE_NUMBER, STREET_NAME, CITY_NAME, PROVINCE, COUNTRY,POSTAL_CODE, POST_
OFFICE_BOX);
LOAD DATA INFILE 'form.txt' INTO TABLE QRYM_FORM FIELDS TERMINATED BY ','
OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE,PHARM_FORM_CODE, PHARMACEUTICAL_FORM);
LOAD DATA INFILE 'ingred.txt' INTO TABLE QRYM_ACTIVE_INGREDIENTS FIELDS
TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, ACTIVE_INGREDIENT_CODE, INGREDIENT,INGREDIENT_SUPPLIED_IND, ST
RENGTH, STRENGTH_UNIT, STRENGTH_TYPE,DOSAGE_VALUE, BASE, DOSAGE_UNIT, NOTE
S);
LOAD DATA INFILE 'package.txt' INTO TABLE QRYM_PACKAGING FIELDS TERMINATED
BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, UPC, PACKAGE_SIZE_UNIT, PACKAGE_TYPE, PACKAGE_SIZE,PRODUCT_INF
ORMATION);
LOAD DATA INFILE 'pharm.txt' INTO TABLE QRYM_PHARMACEUTICAL_STD FIELDS
TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, PHARMACEUTICAL_STD);
LOAD DATA INFILE 'route.txt' INTO TABLE QRYM_ROUTE FIELDS TERMINATED BY
',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE,ROUTE_OF_ADMINISTRATION_CODE, ROUTE_OF_ADMINISTRATION);
```

```
LOAD DATA INFILE 'schedule.txt' INTO TABLE QRYM_SCHEDULE FIELDS TERMINATED
BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, SCHEDULE);
LOAD DATA INFILE 'status.txt' INTO TABLE QRYM_STATUS FIELDS TERMINATED BY
',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, CURRENT_STATUS_FLAG, STATUS, @date) SET HISTORY_DATE =
str_to_date(@date, '%d-%b-%Y');
LOAD DATA INFILE 'ther.txt' INTO TABLE QRYM_THERAPEUTIC_CLASS FIELDS
TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, TC_ATC_NUMBER, TC_ATC, TC_AHFS_NUMBER, TC_AHFS);
LOAD DATA INFILE 'vet.txt' INTO TABLE QRYM_VETERINARY_SPECIES FIELDS
TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"' LINES TERMINATED BY '\r\n'
(DRUG_CODE, VET_SPECIES, VET_SUB_SPECIES);
```