Provide list of patients and their conditions

SQL Query

SELECT DISTINCT

co.condition\_occurrence\_id,

co.person\_id,

p.year\_of\_birth,

p.gender\_concept\_id,

gender\_concept.concept\_code AS gender\_concept\_code,

p.race\_concept\_id,

p.ethnicity\_concept\_id,

co.condition\_concept\_id,

condition\_concept.concept\_code AS condition\_concept\_code,

condition\_concept.concept\_name AS condition\_concept\_description,

co.condition\_start\_date,

co.condition\_start\_datetime,

co.condition\_end\_date,

co.condition\_end\_datetime,

co.condition\_type\_concept\_id,

co.condition\_status\_concept\_id,

co.stop\_reason,

co.provider\_id,

co.visit\_occurrence\_id,

co.visit\_detail\_id,

co.condition\_source\_value,

co.condition\_source\_concept\_id,

co.condition\_status\_source\_value

FROM

condition\_occurrence co

JOIN

person p ON co.person\_id = p.person\_id

JOIN

concept gender\_concept ON p.gender\_concept\_id = gender\_concept.concept\_id

JOIN

concept condition\_concept ON co.condition\_concept\_id = condition\_concept.concept\_id;

Total count of Male and Female patients for each disease conditions

**SQL Query**

SELECT

condition\_concept.concept\_code AS condition\_concept\_code,

condition\_concept.concept\_name AS condition\_concept\_description,

SUM(CASE WHEN gender\_concept.concept\_code = 'M' THEN 1 ELSE 0 END) AS male\_patient\_count,

SUM(CASE WHEN gender\_concept.concept\_code = 'F' THEN 1 ELSE 0 END) AS female\_patient\_count

FROM

condition\_occurrence co

JOIN

person p ON co.person\_id = p.person\_id

JOIN

concept gender\_concept ON p.gender\_concept\_id = gender\_concept.concept\_id

JOIN

concept condition\_concept ON co.condition\_concept\_id = condition\_concept.concept\_id

GROUP BY

condition\_concept.concept\_code,

condition\_concept.concept\_name

ORDER BY

condition\_concept.concept\_name;

Provide counts of Male and Female patients with over 50 years of age and have been diagnosed with Acute bacterial sinusitis

SQL Query

SELECT

    gender\_concept.concept\_name AS gender\_name,

    COUNT(\*)

FROM

    condition\_occurrence co

    JOIN concept c ON co.condition\_concept\_id = c.concept\_id

    JOIN person p ON co.person\_id = p.person\_id

    JOIN concept gender\_concept ON p.gender\_concept\_id = gender\_concept.concept\_id

WHERE

    gender\_concept.concept\_class\_id = 'Gender'

    AND TIMESTAMPDIFF(YEAR, STR\_TO\_DATE(p.birth\_datetime, '%Y-%m-%d'), CURDATE()) > **50**

    AND c.concept\_name LIKE '%Acute bacterial sinusitis%'

GROUP BY

    gender\_concept.concept\_name;

List of patients with multiple co-existing conditions

**SQL Query**

SELECT

co.person\_id,

p.year\_of\_birth,

p.gender\_concept\_id,

gender\_concept.concept\_code AS gender\_concept\_code,

COUNT(DISTINCT co.condition\_concept\_id) AS condition\_count,

GROUP\_CONCAT(condition\_concept.concept\_name SEPARATOR ', ') AS coexisting\_conditions

FROM

condition\_occurrence co

JOIN

person p ON co.person\_id = p.person\_id

JOIN

concept gender\_concept ON p.gender\_concept\_id = gender\_concept.concept\_id

JOIN

concept condition\_concept ON co.condition\_concept\_id = condition\_concept.concept\_id

GROUP BY

co.person\_id,

p.year\_of\_birth,

p.gender\_concept\_id,

gender\_concept.concept\_code

HAVING

COUNT(DISTINCT co.condition\_concept\_id) > 1

ORDER BY

condition\_count DESC,

co.person\_id;

Provide list of Patients who have been diagnosed with Asthama and Chronic sinusitis as co-existing conditions

SQL Query

SELECT person\_id,year\_of\_birth,gender\_source\_value

FROM (

SELECT CO.person\_id, CO.condition\_concept\_id, P.year\_of\_birth,P.gender\_source\_value

FROM condition\_occurrence CO, concept CC, person P

WHERE CC.concept\_name IN ( 'Asthma','Chronic sinusitis')

AND CC.concept\_id = CO.condition\_concept\_id

AND P.person\_id = CO.person\_id

AND CURDATE() between CO.condition\_start\_date AND CO.condition\_end\_date

) comorbidity

GROUP BY person\_id

HAVING COUNT(DISTINCT condition\_concept\_id) = 2;

Provide the count of patients by Gender

SQL Query

SELECT

gender\_concept.concept\_name AS gender\_name,

COUNT(\*) AS patient\_count

FROM

person p,

concept gender\_concept

WHERE

p.gender\_concept\_id = gender\_concept.concept\_id

AND gender\_concept.concept\_class\_id = 'Gender'

GROUP BY

gender\_concept.concept\_name;

List of Patients who have been diagnosed with Brain Injury

SQL Query

SELECT

p.person\_id,

p.year\_of\_birth,

gender\_concept.concept\_name AS gender\_name

FROM

condition\_occurrence co

JOIN concept c ON co.condition\_concept\_id = c.concept\_id

JOIN person p ON co.person\_id = p.person\_id

JOIN concept gender\_concept ON p.gender\_concept\_id = gender\_concept.concept\_id

WHERE

c.concept\_name LIKE '%Brain Injury%';

List of Patients who have been diagnosed with Brain Injury and the drugs that were prescibed

SQL Query

SELECT

p.person\_id,

p.year\_of\_birth,

gender\_concept.concept\_name AS gender\_name,

de.drug\_concept\_id,

drug\_concept.concept\_name AS drug\_name

FROM

condition\_occurrence co,

concept c,

person p,

concept gender\_concept,

drug\_exposure de,

concept drug\_concept

WHERE

co.condition\_concept\_id = c.concept\_id

AND co.person\_id = p.person\_id

AND p.gender\_concept\_id = gender\_concept.concept\_id

AND p.person\_id = de.person\_id

AND de.drug\_concept\_id = drug\_concept.concept\_id

AND c.concept\_name LIKE '%Brain Injury%';

What are the Most Commonly Prescribed Drugs

SQL Query

SELECT

de.DRUG\_CONCEPT\_ID,

c.concept\_name AS drug\_description,

COUNT(de.DRUG\_EXPOSURE\_ID) AS prescription\_count,

COUNT(DISTINCT de.PERSON\_ID) AS unique\_patients

FROM

drug\_exposure de

JOIN

concept c ON de.DRUG\_CONCEPT\_ID = c.CONCEPT\_ID

GROUP BY

de.DRUG\_CONCEPT\_ID, c.concept\_name

ORDER BY

prescription\_count DESC

LIMIT 10;

Find Patients with Overlapping Drug Exposure Periods

SELECT

a.PERSON\_ID,

a.DRUG\_CONCEPT\_ID AS DRUG\_A,

drug\_concept\_a.concept\_name AS DRUG\_A\_DESCRIPTION,

b.DRUG\_CONCEPT\_ID AS DRUG\_B,

drug\_concept\_b.concept\_name AS DRUG\_B\_DESCRIPTION,

a.DRUG\_EXPOSURE\_START\_DATE AS START\_DATE\_A,

a.DRUG\_EXPOSURE\_END\_DATE AS END\_DATE\_A,

b.DRUG\_EXPOSURE\_START\_DATE AS START\_DATE\_B,

b.DRUG\_EXPOSURE\_END\_DATE AS END\_DATE\_B

FROM

drug\_exposure a

JOIN

drug\_exposure b

ON a.PERSON\_ID = b.PERSON\_ID

AND a.DRUG\_CONCEPT\_ID <> b.DRUG\_CONCEPT\_ID

AND a.DRUG\_EXPOSURE\_START\_DATE <= b.DRUG\_EXPOSURE\_END\_DATE

AND a.DRUG\_EXPOSURE\_END\_DATE >= b.DRUG\_EXPOSURE\_START\_DATE

JOIN

concept drug\_concept\_a ON a.DRUG\_CONCEPT\_ID = drug\_concept\_a.CONCEPT\_ID

JOIN

concept drug\_concept\_b ON b.DRUG\_CONCEPT\_ID = drug\_concept\_b.CONCEPT\_ID

ORDER BY

a.PERSON\_ID;

List Patients with Multiple Drug Exposures

SELECT

de.PERSON\_ID,

COUNT(DISTINCT de.DRUG\_CONCEPT\_ID) AS unique\_drugs\_count,

COUNT(de.DRUG\_EXPOSURE\_ID) AS total\_exposures,

GROUP\_CONCAT(c.concept\_name SEPARATOR ', ') AS drug\_descriptions

FROM

drug\_exposure de

JOIN

concept c ON de.DRUG\_CONCEPT\_ID = c.CONCEPT\_ID

GROUP BY

de.PERSON\_ID

HAVING

COUNT(DISTINCT de.DRUG\_CONCEPT\_ID) > 1

ORDER BY

unique\_drugs\_count DESC;

Lab results for a patient

SELECT

DISTINCT m.MEASUREMENT\_ID,

m.PERSON\_ID,

p.YEAR\_OF\_BIRTH,

p.GENDER\_CONCEPT\_ID,

gender\_concept.concept\_name AS gender,

m.MEASUREMENT\_CONCEPT\_ID,

measurement\_concept.concept\_name AS measurement\_description,

m.MEASUREMENT\_DATE,

m.MEASUREMENT\_DATETIME,

m.VALUE\_AS\_NUMBER,

m.VALUE\_AS\_CONCEPT\_ID,

value\_concept.concept\_name AS value\_as\_concept\_description,

m.UNIT\_CONCEPT\_ID,

unit\_concept.concept\_name AS unit\_description,

m.RANGE\_LOW,

m.RANGE\_HIGH,

m.VISIT\_OCCURRENCE\_ID,

vo.VISIT\_START\_DATE,

vo.VISIT\_END\_DATE,

visit\_concept.concept\_name AS visit\_type,

m.MEASUREMENT\_SOURCE\_VALUE,

m.MEASUREMENT\_SOURCE\_CONCEPT\_ID,

m.UNIT\_SOURCE\_VALUE,

m.VALUE\_SOURCE\_VALUE

FROM

measurement m

LEFT JOIN

concept measurement\_concept ON m.MEASUREMENT\_CONCEPT\_ID = measurement\_concept.CONCEPT\_ID

LEFT JOIN

concept value\_concept ON m.VALUE\_AS\_CONCEPT\_ID = value\_concept.CONCEPT\_ID

LEFT JOIN

concept unit\_concept ON m.UNIT\_CONCEPT\_ID = unit\_concept.CONCEPT\_ID

LEFT JOIN

visit\_occurrence vo ON m.VISIT\_OCCURRENCE\_ID = vo.VISIT\_OCCURRENCE\_ID

LEFT JOIN

concept visit\_concept ON vo.VISIT\_CONCEPT\_ID = visit\_concept.CONCEPT\_ID

LEFT JOIN

person p ON m.PERSON\_ID = p.PERSON\_ID

LEFT JOIN

concept gender\_concept ON p.GENDER\_CONCEPT\_ID = gender\_concept.CONCEPT\_ID

WHERE m.PERSON\_ID = '1102'

ORDER BY

m.PERSON\_ID, m.MEASUREMENT\_DATE;