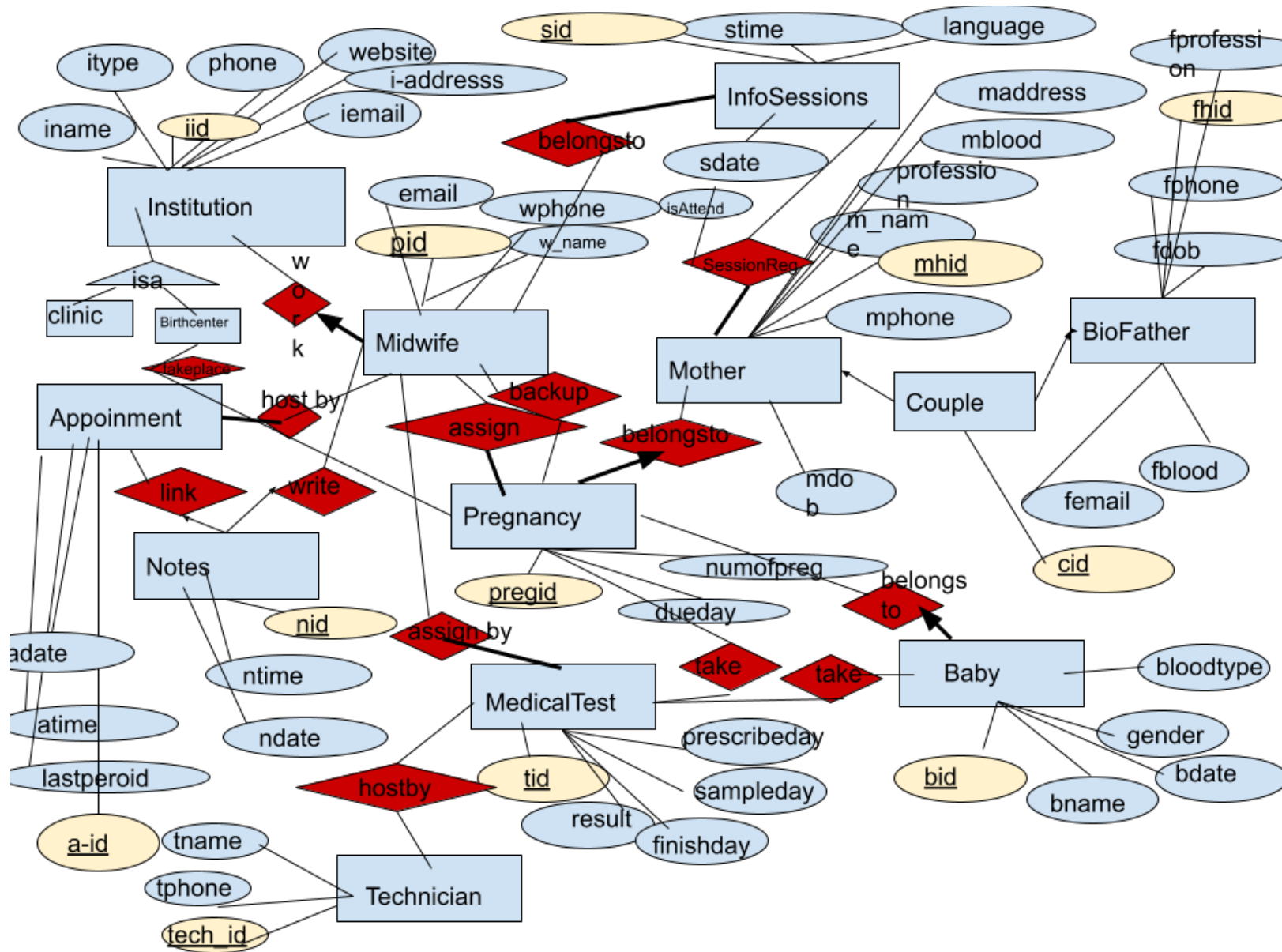


## Relational Model



## Pending constraints

- Cannot show if a pregnancy is homebirth
- Cannot force couple overlap
- Cannot show if a couple is interested the infosession
- Cannot prevent overlap of birthcenter and clinic
- Cannot force the medicaltest only for one mother or one baby at a time
- Cannot force midwife that host the infosession be the same as the one holding appointment

## SQL Queries

5

A

```
SELECT adate,atime,m.mhid,mname,mphone FROM Midwife w,Appointment a,Pregnancy p,mother m
```

```
WHERE w.pid=p.ppid AND p.mhid=m.mhid AND a.pid=w.pid AND a.pregid=p.pregid AND w.wname='Marion Girard' AND adate>='2022-03-21' AND adate<='2022-03-25';
```

```
db2 => SELECT adate,atime,m.mhid,mname,mphone FROM Midwife w,Appointment a,Pregnancy p,mother m
WHERE w.pid=p.ppid AND p.mhid=m.mhid AND a.pid=w.pid AND a.pregid=p.pregid AND w.wname='Marion Girard' AND adate>='2022-03-21' AND adate<='2022-03-25';
db2 (cont.) =>
ADATE      ATIME      MHID      MNAME
      MPHONE
-----
03/22/2022 15:26:21 m1000004 Isabelle Gauthier
                        4186472091
03/23/2022 14:40:28 m1000006 Cathy Wei
                        4506665725

  2 record(s) selected.
```

B

```
SELECT result,finishday FROM MedicalTest t,Pregnancy p,Mother m
```

```
WHERE p.mhid=m.mhid and t.pregid=p.pregid AND mname='Victoria Gutierrez' AND numofpreg=2 AND mtype= 'blood iron';
```

```
db2 => SELECT result,finishday FROM MedicalTest t,Pregnancy p,Mother m
WHERE p.mhid=m.mhid and t.pregid=p.pregid AND mname='Victoria Gutierrez' AND numofpreg=2 AND mtype= 'blood iron';
db2 (cont.) =>
RESULT                                           FINISHDAY
-----
gjslgjko                                           02/09/2022
fasdfhasdjkfha                                     03/09/2022

  2 record(s) selected.
```

C

```
WITH a as(SELECT *,
```

```
CASE
```

```
    WHEN EXPECTDUE IS NOT NULL THEN EXPECTDUE
```

```
    WHEN EXPECTDUE IS NULL THEN INITDUE
```

```
END AS DUEDAY
```

```
FROM PREGNANCY)
```

```
SELECT MAX(iname), COUNT(pregid) numofpreg FROM midwife w,institution i,a WHERE
a.dueday>='2022-07-01' AND a.dueday<='2022-07-31' AND w.pid=a.ppid AND w.iid=i.iid GROUP
BY iname;
```

```
db2 => WITH a as(SELECT *,
CASE
db2 (cont.) => db2 (cont.) => WHEN EXPECTDUE IS NOT NULL THEN EXPECTDUE
db2 (cont.) => WHEN EXPECTDUE IS NULL THEN INITDUE
END AS DUEDAY
db2 (cont.) => db2 (cont.) => FROM PREGNANCY)
db2 (cont.) => SELECT MAX(iname), COUNT(pregid) numofpreg FROM midwife w,institution i,a WHERE a.dueday>='2022-07-01' AND a.dueday<='2022-07-31' AND w.pid=a.ppid AND w.iid=i.iid GROUP BY iname;

1                                     NUMOFPREG
-----
Lac-Saint-Louis                      3

1 record(s) selected.
```

D

```
SELECT DISTINCT m.mhid,mname,mphone FROM mother m, midwife w,baby b,institution i,pregnancy p
WHERE m.mhid=p.mhid AND b.pregid=p.pregid AND w.pid=p.ppid AND i.iid =w.iid AND iname='Lac-
Saint-Louis' and bdate is NULL;
```

```
db2 => SELECT DISTINCT m.mhid,mname,mphone FROM mother m, midwife w,baby b,institution i,pregnancy p
WHERE m.mhid=p.mhid AND b.pregid=p.pregid AND w.pid=p.ppid AND i.iid =w.iid AND iname='Lac-Saint-Louis' and bdate is NULL;
db2 (cont.) =>
MHID      MNAME
-----
m1000001 Victoria Gutierrez      8196762034
m1000002 Audrey Jones           4187423842
m1000003 Madison Williams       8199865007

3 record(s) selected.
```

E

WITH b as(

WITH a as(SELECT \*,

CASE

WHEN bdate is NULL THEN 'NOT BORN'

WHEN bdate is NOT NULL THEN 'BORN'

END AS isBorn

FROM Baby)

```
SELECT MAX(PREGID) pregid, MAX(a.isBorn) isBorn FROM a GROUP BY PREGID HAVING
COUNT(PREGID)>1)
```

```
SELECT m.mhid,mname FROM mother m,pregnancy p,b WHERE m.mhid=p.mhid AND p.pregid
=b.pregid;
```

```

db2 => WITH b as(
WITH a as(SELECT *,
CASE
    WHEN bdate is NULL THEN 'NOT BORN'
db2 (cont.) => db2 (cont.) => db2 (cont.) =>    WHEN bdate is NOT NULL THEN 'BORN'
db2 (cont.) => END AS isBorn
FROM Baby)
db2 (cont.) => db2 (cont.) => SELECT MAX(PREGID) pregid, MAX(a.isBorn) isBorn FROM a GROUP BY PREGID HAVING COUNT(PREGID)>1)
db2 (cont.) => SELECT m.mhid,mname FROM mother m,pregnancy p,b WHERE m.mhid=p.mhid AND p.pregid =b.pregid;

MHID      MNAME
-----
m1000002  Audrey Jones
-----
1 record(s) selected.

```

## Midwife Information

6a

**CREATE VIEW midwifeinfo AS**

**SELECT pid,wname,wphone,wemail,iname,iaddress FROM midwife w, institution i where w.iid=i.iid;**

**b**

```

db2 => CREATE VIEW midwifeinfo AS
SELECT pid,wname,wphone,wemail,iname,iaddress FROM midwife w, institution i where w.iid=i.iid;
db2 (cont.) => DB20000I The SQL command completed successfully.

```

**c**

**SELECT \* FROM midwifeinfo limit 5;**

```
db2 => SELECT * FROM midwifeinfo limit 5;
```

PID	WNAME WEMAIL	IADDRESS	INAME	WPHONE
p100001	Hannah Johnson 151 wgosselin@gmail.com	1383 rue Ellice Joliette, Quebec(QC), J6E 3E8	Clinic Anderson	3045451
p100002	Abigail Miller 734 thomas.lalonde@hotmail.com	1884 rue Garneau, Quebec, Quebec(QC), G1V 3V5	Clinic Brown	6712190
p100004	Emilia Davis 797 isabelle25@bernier.net	610 rue de la Gauchetière, Montreal, Quebec(QC), H3B 2M3	Clinic Smith	7193725
p100003	Marion Girard 425 renee24@gmail.com	4741 Boulevard Laflèche, Rivière Du Loup, Quebec(QC), G5R 3E9	Peter Birth Center	9193489
p100005	Violet Pelletier 791 timothee50@gmail.com	2828 rue Saint-Edouard, Trois Rivières, Quebec(QC), G9A 5S8	Mary Birth Center	4765316

5 record(s) selected.

**D**

**SELECT \* FROM midwifeinfo WHERE iname='Lac-Saint-Louis' limit 5;**

```
db2 => SELECT * FROM midwifeinfo WHERE iname='Lac-Saint-Louis' limit 5;
```

PID	WNAME	WEMAIL	IADDRESS	INAME	WPHONE
p100011	Isabelle Bergeron	844 emilie96@vaillancourt.com	3345 rue des Églises Est, East Hereford, Quebec(QC), J0B 1S0	Lac-Saint-Louis	4703351
p100012	Audrey Jones	616 vparent@hotmail.com	3345 rue des Églises Est, East Hereford, Quebec(QC), J0B 1S0	Lac-Saint-Louis	5134789

2 record(s) selected.

E

Insert into midwifeinfo values('p1000013','first last','1234567890','firstlast@gmail.com',  
'Lac-Saint-Louis', 'some address');

```
db2 => Insert into midwifeinfo values('p1000013','first last','1234567890','firstlast@gmail.com', 'Lac-Saint-Louis', 'some address');
DB21034E The command was processed as an SQL statement because it was not a
valid Command Line Processor command. During SQL processing it returned:
SQL0150N The target fullselect, view, typed table, materialized query table,
range-clustered table, or staging table in the INSERT, DELETE, UPDATE, MERGE,
or TRUNCATE statement is a target for which the requested operation is not
permitted. SQLSTATE=42807
```

We can only insert to the tables where view are built on.

### Check Constraints

ALTER TABLE MedicalTest

ADD CONSTRAINT date\_check

CHECK(sampleday>presday);

```
db2 => ALTER TABLE MedicalTest
ADD CONSTRAINT date_check
CHECK(sampleday>presday);
db2 (cont.) => db2 (cont.) => DB20000I The SQL command completed successfully.
```

INSERT INTO MEDICALTEST VALUES('t100006','first last','1234567890','2022-03-08', '2022-03-06', '2022-03-07', 'p100010', 'pg100001', NULL, NULL);

```
db2 => INSERT INTO MEDICALTEST VALUES('t100006','first last','1234567890','2022-03-08', '2022-03-06', '2022-03-07', 'p100010', 'pg100001', NULL, NULL);
DB21034E The command was processed as an SQL statement because it was not a
valid Command Line Processor command. During SQL processing it returned:
SQL0545N The requested operation is not allowed because a row does not
satisfy the check constraint "JXIA016.MEDICALTEST.DATE_CHECK". SQLSTATE=23513
```