

# BHI Oswego Overview of Projects

*SUNY Upstate RDoC Integration*

*MIMIC III Database Implementation*

*Loretto Fall Prevention*


*Med Conformity: Opioid Medication Compliance*

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# DATA INTEGRATION: SUNY UPSTATE

RDoC-Integr8 for Upstate Medical, version 1.2.2



## RDoC-Integr8



Choose the "comma separated values" (csv) source files containing the research subjects, the csv source "GUIDs" and specify the location for your output.

Choose Research Subjects File: File Not Specified

Choose GUID File: File Not Specified

Choose Output Directory: C:\Users\Teva\Documents\Joe Computer\Oswego\BHI509\Internship\RDoC-Integr8\Output\

**Start Processing** Clear Open Output Directory

Open fsd.csv Open Res\_Subj.csv Open Processing Log

Exit

# DATA INTEGRATION: SUNY UPSTATE

```
1761 rows read
of which, 0 rows did not give consent for NIMH upload
and 0 records were empty.
Total of 1761 records processed
End subject source data processing

Begin GUID source data processing:

Column numbers of found titles *case insensitive, spaces ignored
Title text: Column Number
src_subject: 2
subjectkey: 1

1763 GUIDs processed
End GUID source data processing

BEGIN OUTPUT CREATION:

C:\Users\RoeC\Desktop\RDoC-Integr8\RDoC-Integr8\Output\fsd.csv created

C:\Users\RoeC\Desktop\RDoC-Integr8\RDoC-Integr8\Output\Res_Subj.csv created

***Family 0074 is lacking a 01 proband: 007402
***Family 0148 is lacking a 01 proband: 014802
^^^Subject 060742 has an individual id outside of scope 01-07: 42
***Family 0648 is lacking a 01 proband: 064803

1761 of 1761 records processed
```

# MIMIC-III RELATIONAL DATABASE AND SQL

## MIMIC-III

Graphical Interface for the MIMIC database  
by Joseph Miles

2 queries performed; 2 rows returned; elapsed time: 110.16 milliseconds.

Enter MySQL code below. Multiple lines and queries allowed.  
Click "Process" to execute code.

Must use:  
SELECT  
SHOW or  
DESCRIBE  
For example:  
SHOW tables;

```
SELECT COUNT(DISTINCT SUBJECT_ID) FROM ADMISSIONS;  
SELECT COUNT(*) FROM PATIENTS;
```

**Process**

Query 1:  
**COUNT(DISTINCT SUBJECT\_ID)**  
46520

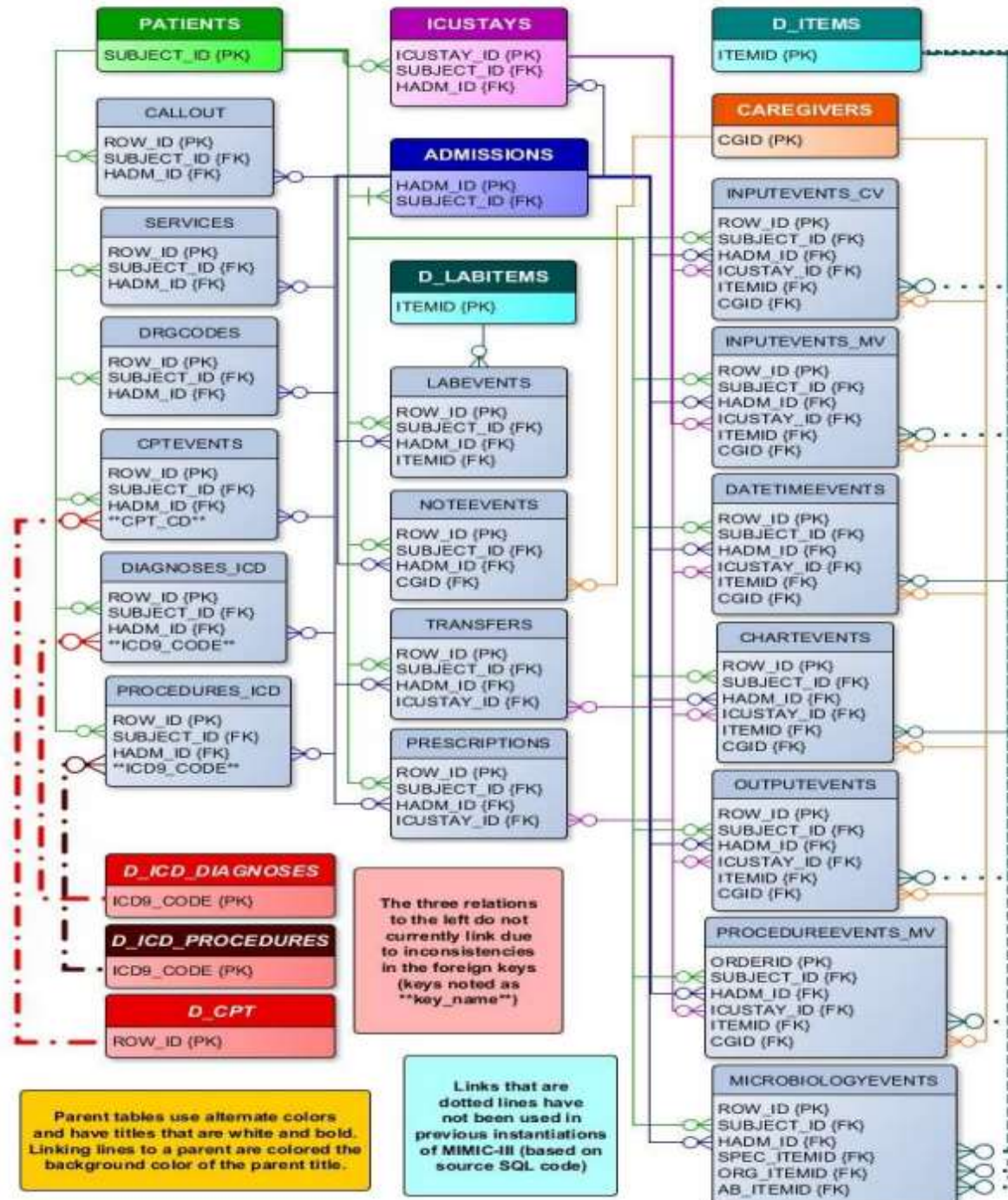
Query 2:  
**COUNT(\*)**  
46520

**MIMIC Data Dictionary** **MIMIC Entity Relationship Diagram**

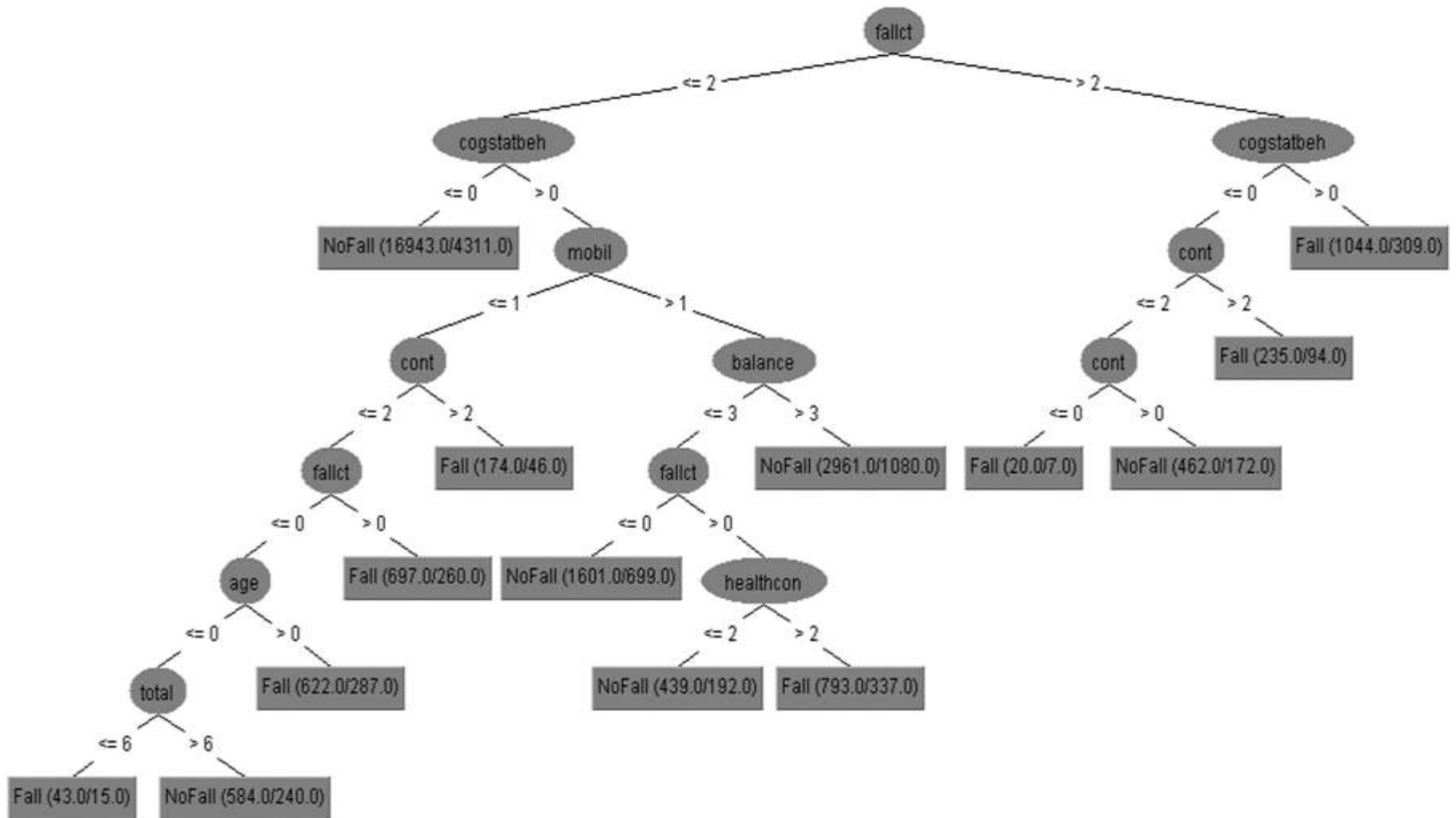
MySQL server version 10.1.16-MariaDB · MIMIC-III Graphical Interface, Version 1.0.0  
Adapted from the original "SID" design by [Bill Weinman](#); Copyright © 2009-2013 The BearHeart Group LLC

# MIMIC-III

Figure 2: MIMIC-III Entity Relationship Class Diagram



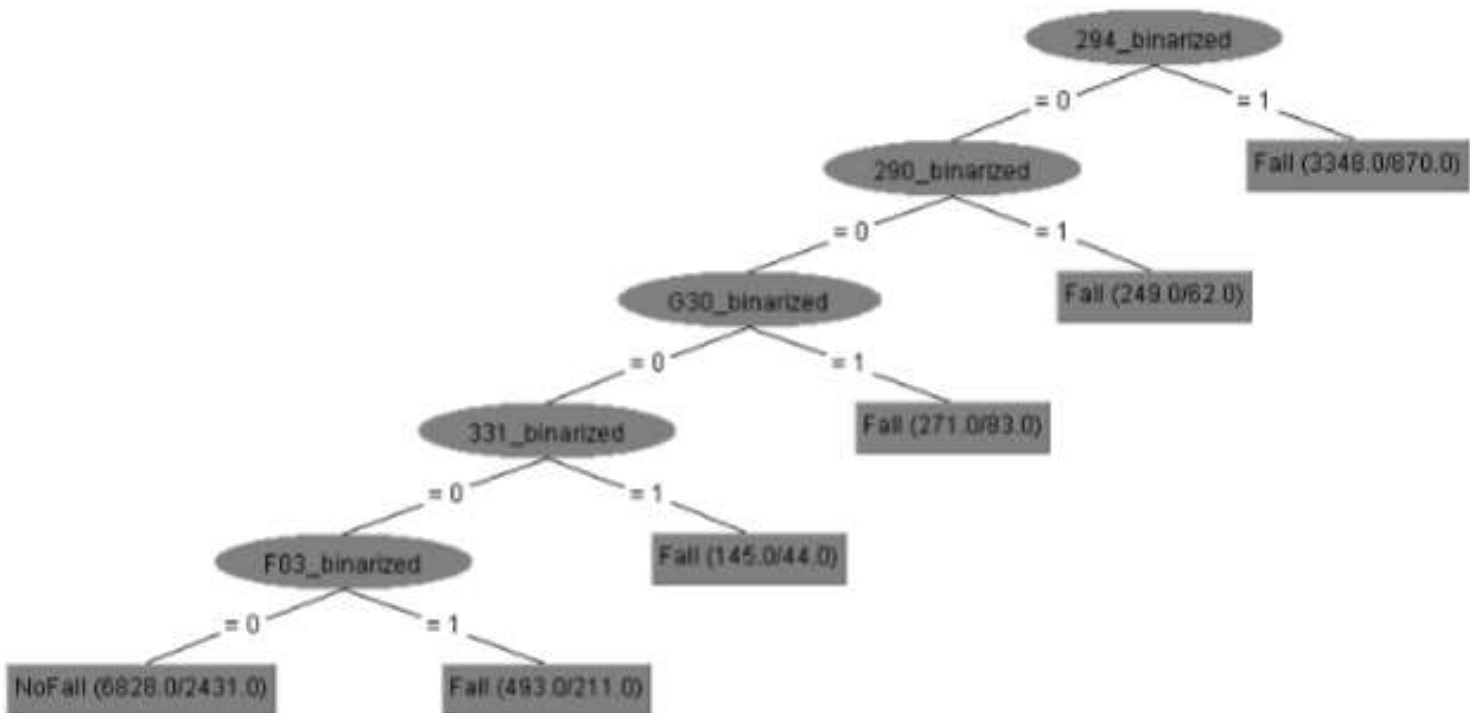
# LORETTO FALL PREVENTION: DATA ANALYSIS



# LORETTO FALL PREVENTION: DATA ANALYSIS

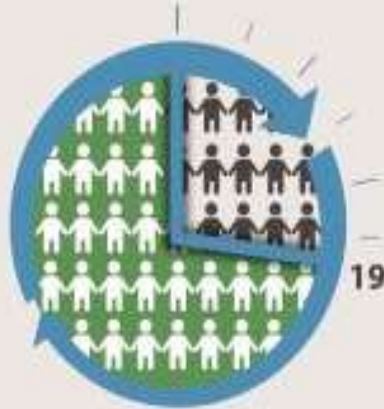
=== Confusion Matrix ===

a b <-- classified as  
3231 2436 | a = Fall  
1269 4398 | b = NoFall

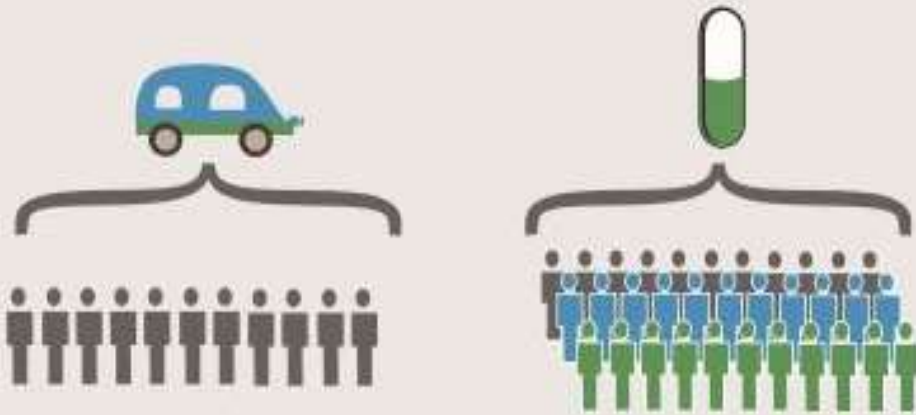


# MED CONFORMITY: DIGITAL HEALTH

Every 19 minutes  
someone dies from  
the misuse of opioids.



Every year more people die from opioid  
overdose than in car accidents.



# MED CONFORMITY: OPEN SOURCED APP

**A** Login to Med Conformity  
Enter Username:  
Password:  
Login  
Login Attempts: 0  
You will have 5 attempts to login.

**B** Medications  
View a list of medications  
Active medications: 3  
Inactive medications: 0  
Archived medications: 0  
Doses To Be Taken  
View a list of doses due to be taken:  
(App looks for up to 5 doses of each med)  
Doses due today: 8  
Any Dose Due Now: Yes  
Taken Doses  
View a list of taken doses  
Reminders  
View a list of currently set reminders

**C** Future Doses  
Bumple 100mg (1 tab)  
Due: Dec 05, 2017 12:41 PM  
BHI Power 100000mg (1 tab)  
Due: Dec 05, 2017 12:55 PM  
BHI Power 100000mg (1 tab)  
Due: Dec 05, 2017 2:55 PM  
BHI Power 100000mg (1 tab)  
Due: Dec 05, 2017 4:55 PM  
Bumple 100mg (1 tab)  
Due: Dec 05, 2017 6:41 PM  
KeepMeGoing 50mg (2 tabs)  
Due: Dec 05, 2017 6:48 PM  
BHI Power 100000mg (1 tab)  
Due: Dec 05, 2017 6:55 PM  
BHI Power 100000mg (1 tab)  
Due: Dec 05, 2017 8:55 PM

**D** Medication Name  
Acetaminophen 325mg  
Dosage  
2 tabs  
Time of first dose  
Dec 10, 2017 12:54 PM  
Frequency of Doses  
4 per day or E.  Set Reminder  
Save Medication

**E** Acetaminophen 325mg  
Dose taken Edit Delete  
Dosage: 2 tabs  
Frequency: 4 per day or Every 6 hours  
Date due: Dec 10, 2017 12:54 PM

**F** Acetaminophen 325mg  
Dose taken Edit Delete  
WARNING: Early Dose  
Dose is early, are you sure you want to take the dose now?  
No, cancel Yes, it's taken  
Date due: Dec 10, 2017 6:54 PM