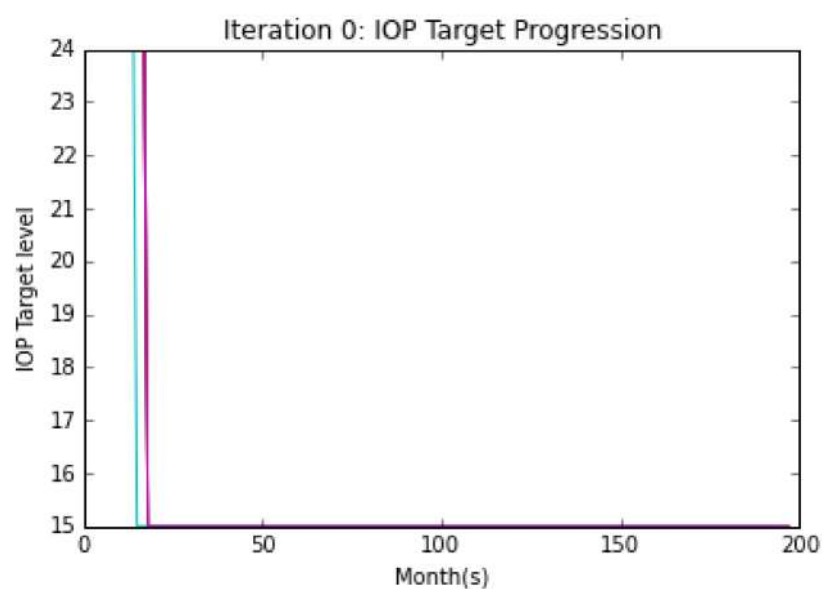
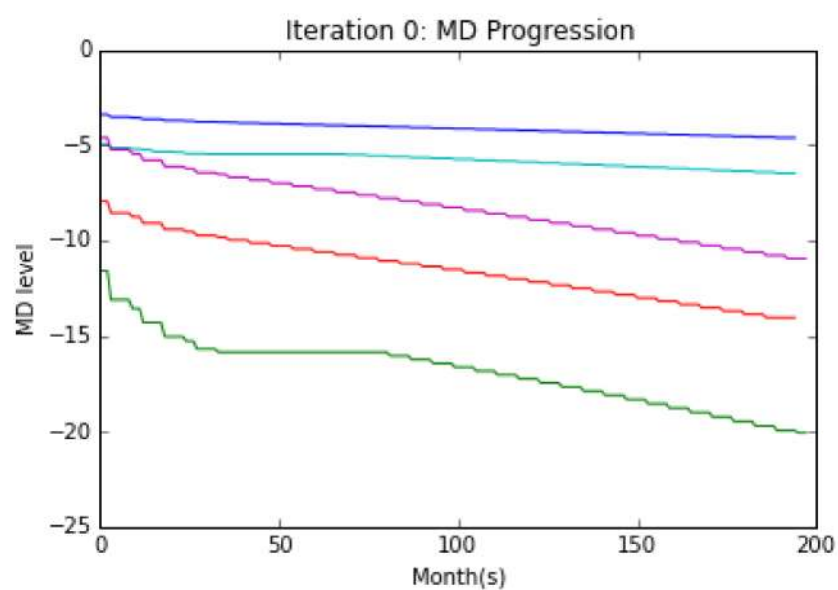
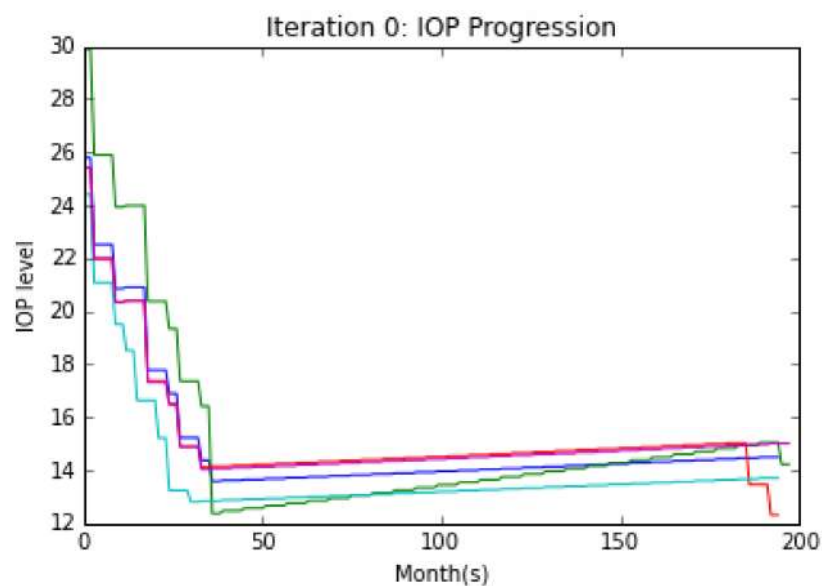
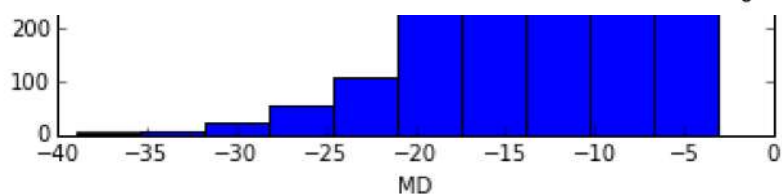


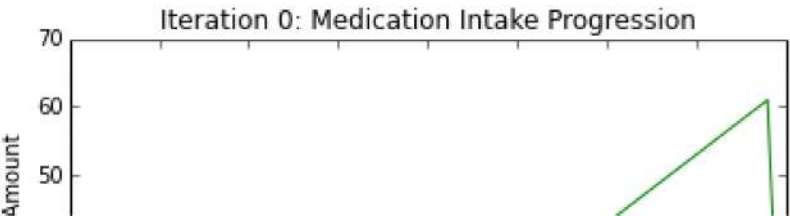
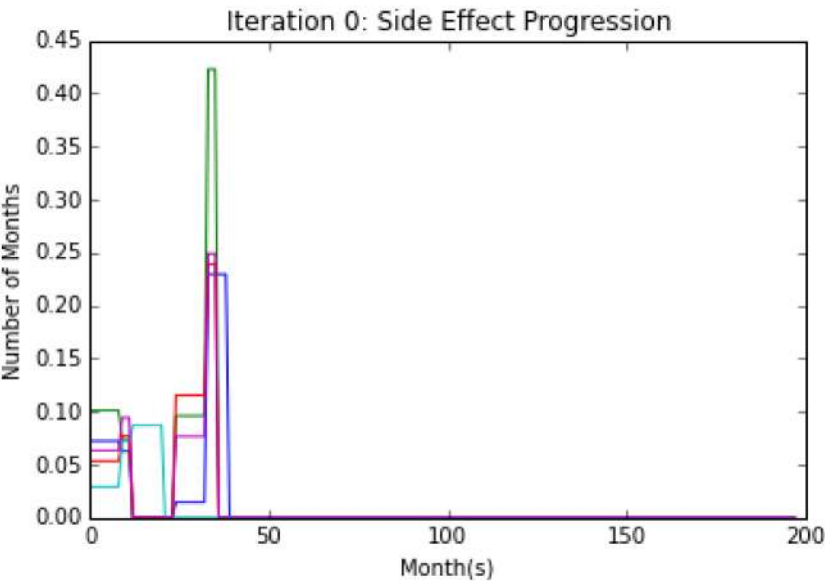
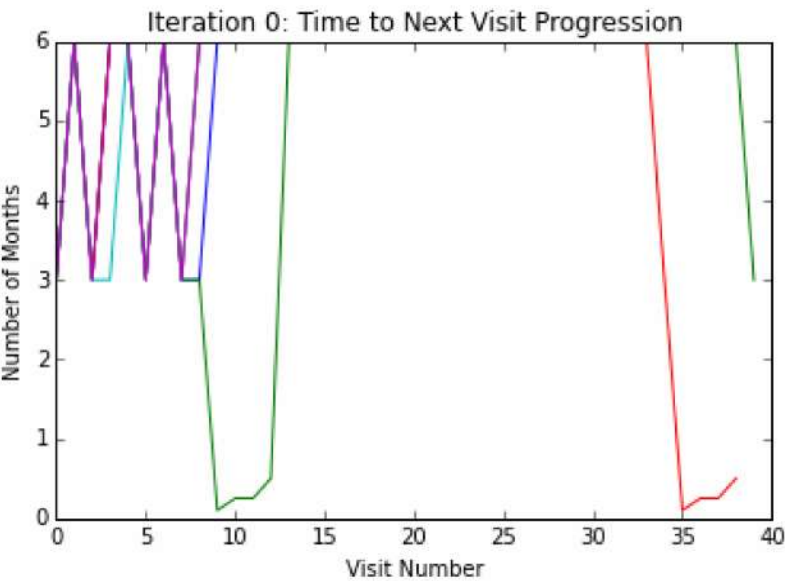
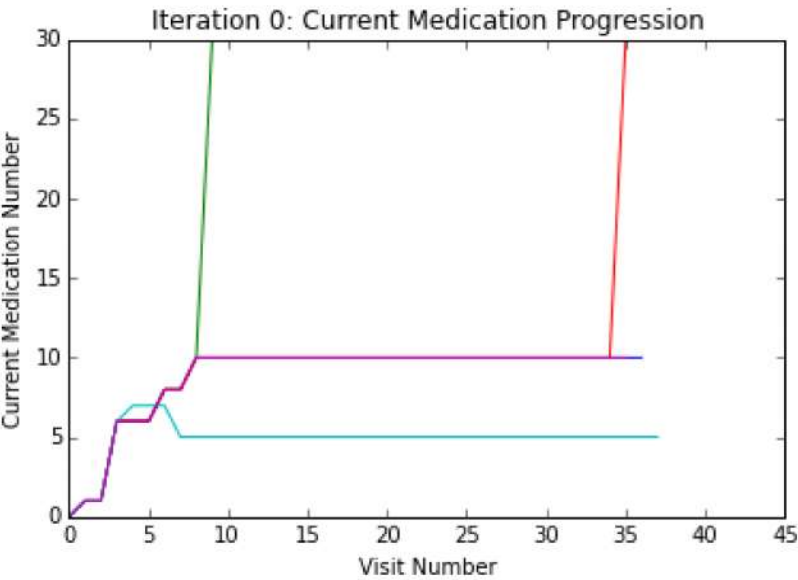
```
#error checking measures
import csv
import matplotlib.pyplot as plt
numberOfGraphs = 15
def csv_dict_writer(path, fieldnames, data):
    with open(path, "wb") as out_file:
        writer = csv.DictWriter(out_file, delimiter=',', fieldnames=fieldnames)
        writer.writeheader()
        for row in data:
            writer.writerow(row)
masterListforReplications = []
field_names = "QALY,TotalCost".split(",")
from PlottingSystemClass import PlottingSystem
from SimulationSystemClass import SimulationSystem
plottingssystem = PlottingSystem(plt)
order = 1
%matplotlib inline
for i in range(2):
    sysSimulation = SimulationSystem(3000,"PatientList/Patients_list_{}.csv".format(i))
    sysSimulation.SystemSimulation()
    plottingssystem.plot(sysSimulation,order,i,masterListforReplications)
    order += (numberOfGraphs*1)
del sysSimulation
print order
csv_dict_writer("MList.csv",field_names,masterListforReplications)
```

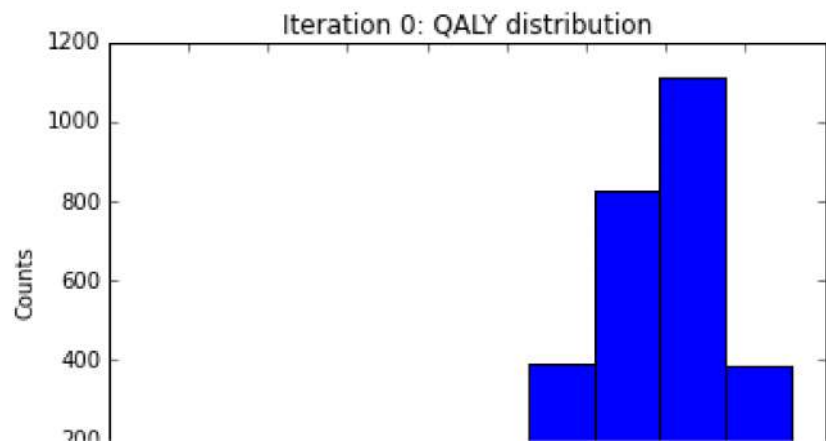
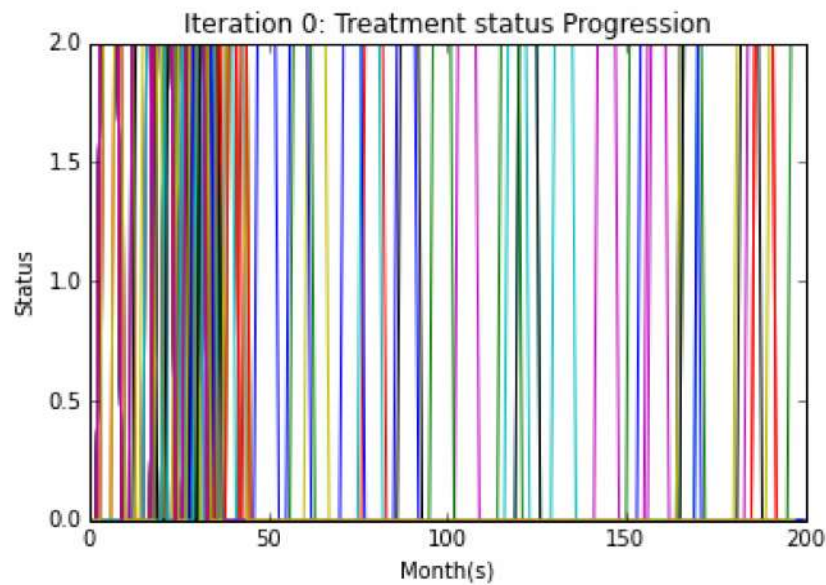
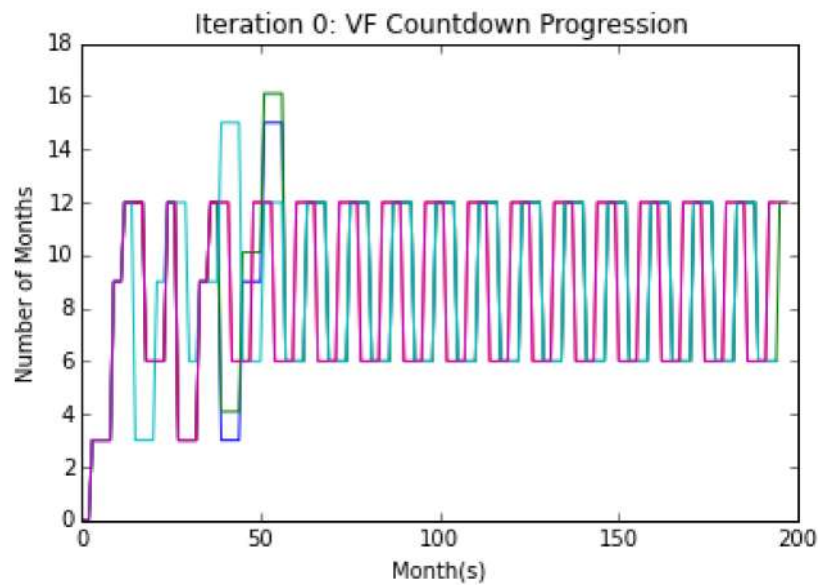
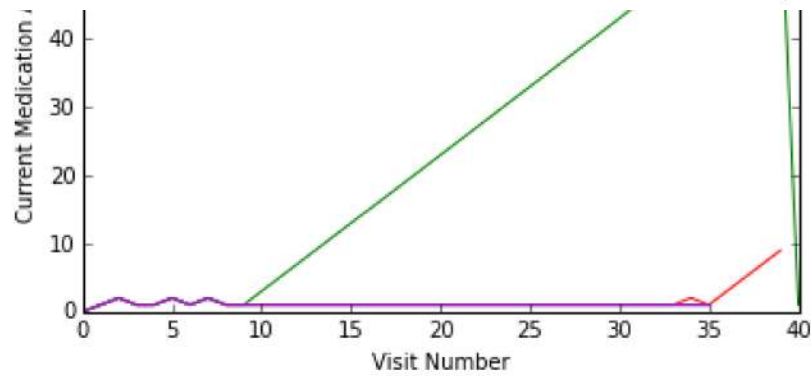
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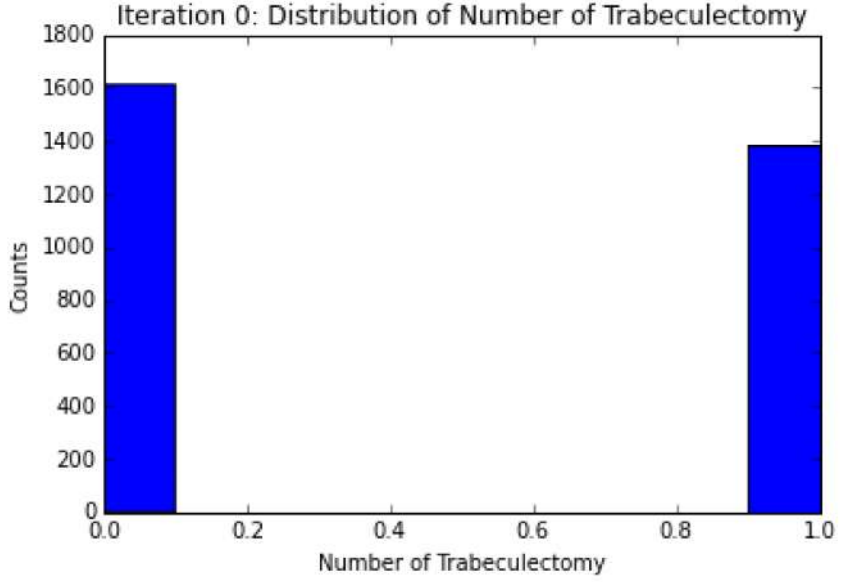
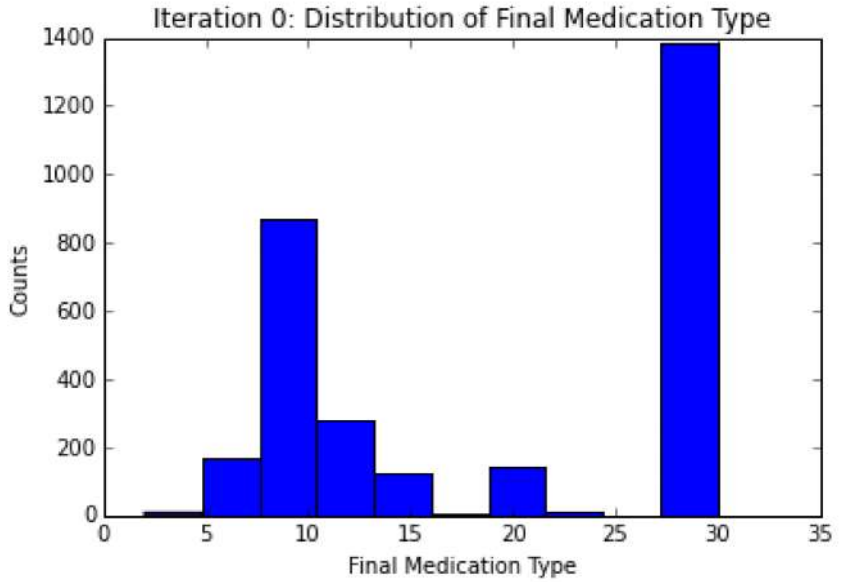
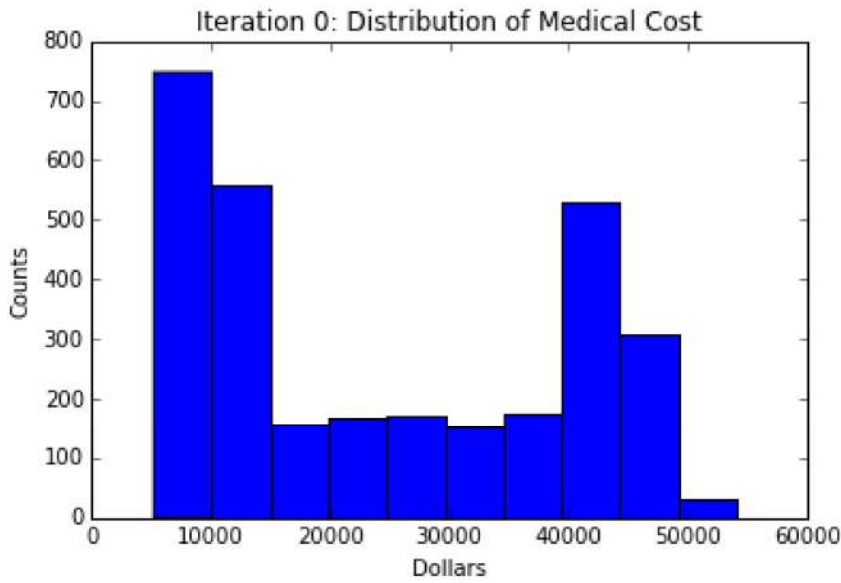
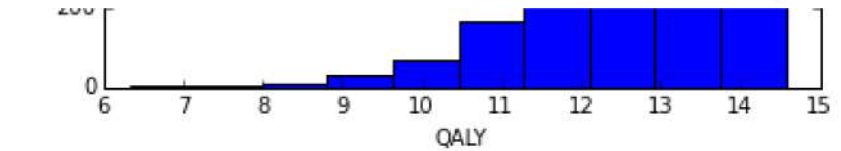
Patient 0: List of Medication Progression is [0, 1, 1, 6, 6, 6, 8, 8, 10, 10, 10, 1
0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
0, 10, 10, 10, 10]
Patient 0: List of Final Medication Amount is [8, 6, 4, 0, 2]
Patient 1: List of Medication Progression is [0, 1, 1, 6, 6, 6, 8, 8, 10, 30, 30, 3
0, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30, 3
0, 30, 30, 30, 30, 30, 30, 30, 30, 30]
Patient 1: List of Final Medication Amount is [8, 6, 4, 0, 2]
Patient 2: List of Medication Progression is [0, 1, 1, 6, 6, 6, 8, 8, 10, 10, 10, 1
0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
0, 10, 10, 30, 30, 30, 30, 30]
Patient 2: List of Final Medication Amount is [8, 6, 4, 0, 2]
Patient 3: List of Medication Progression is [0, 1, 1, 6, 7, 7, 7, 5, 5, 5, 5, 5, 5,
5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5]
Patient 3: List of Final Medication Amount is [5, 1, 2, 0, 3]
Patient 4: List of Medication Progression is [0, 1, 1, 6, 6, 6, 8, 8, 10, 10, 10, 1
0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
0, 10, 10, 10]
Patient 4: List of Final Medication Amount is [7, 5, 3, 0, 1]
CURRENT ITERATION: 1
Average QALY: 12.687301048
Average Medical Cost: 25179.1445667
Average MD: -12.1891528011

```

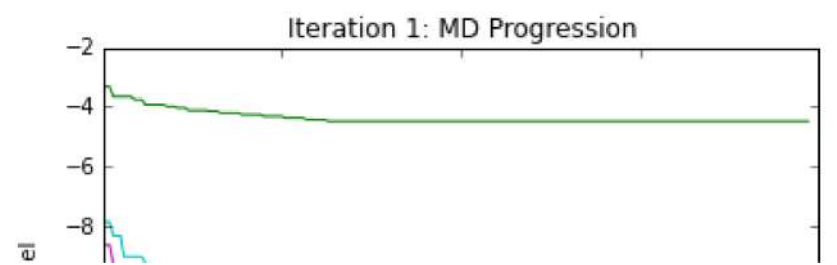
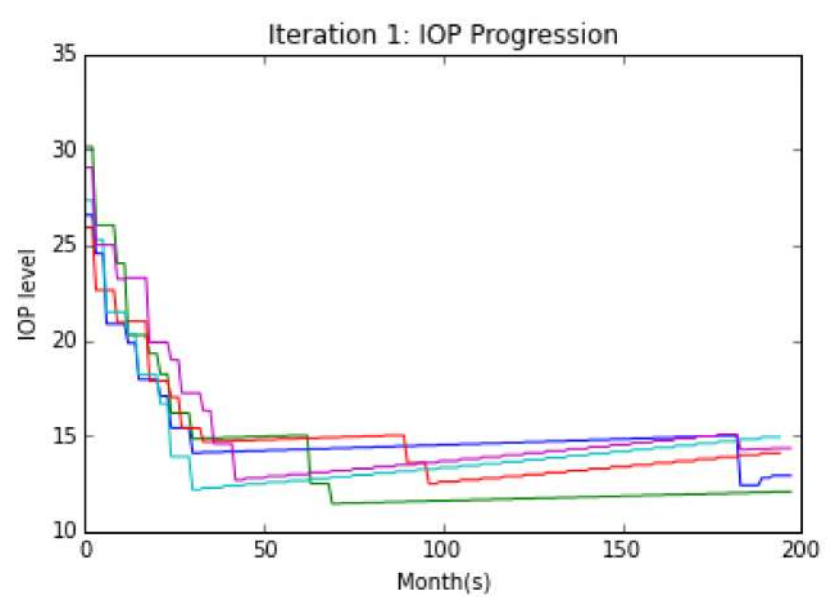
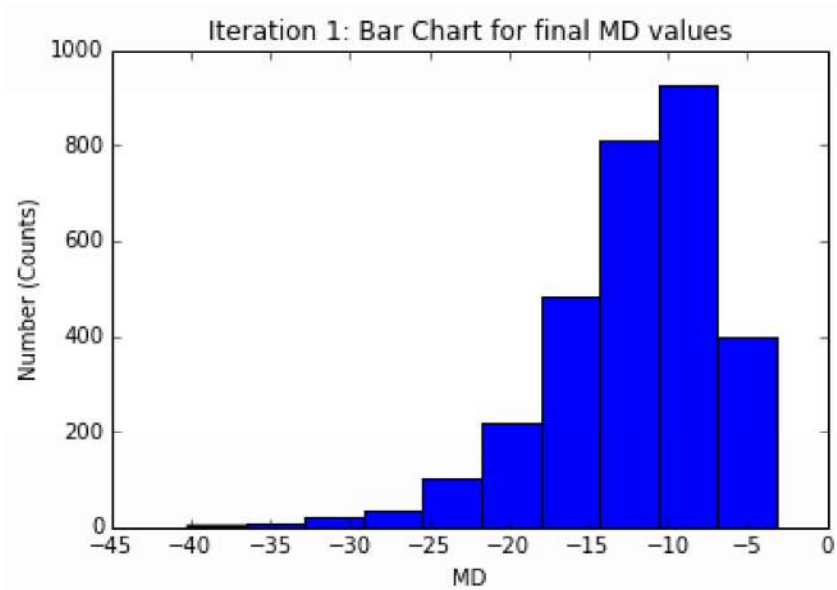
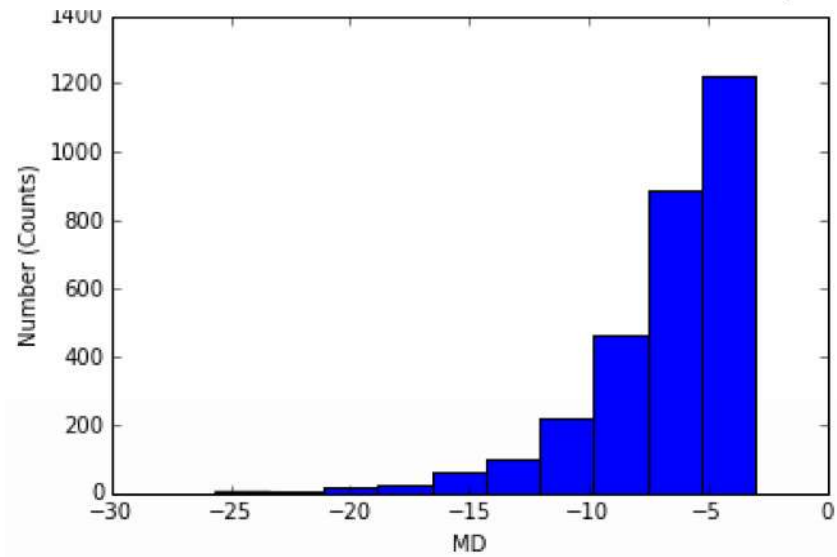



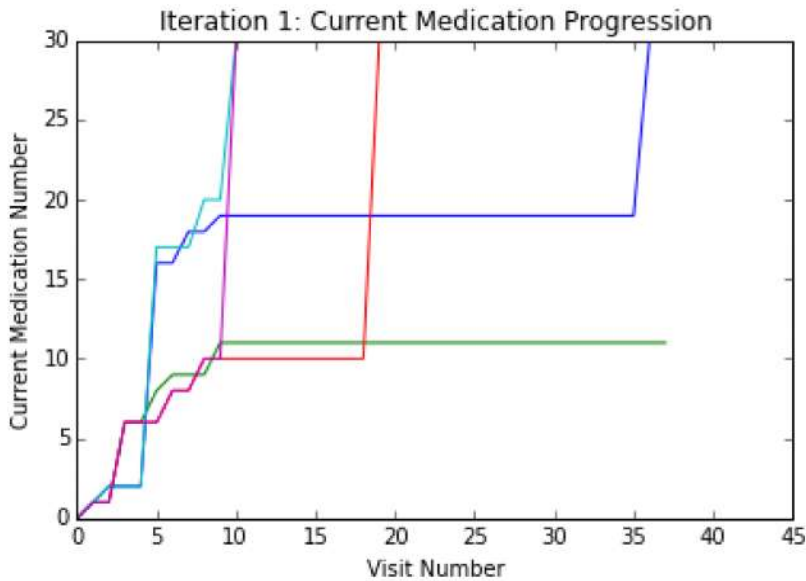
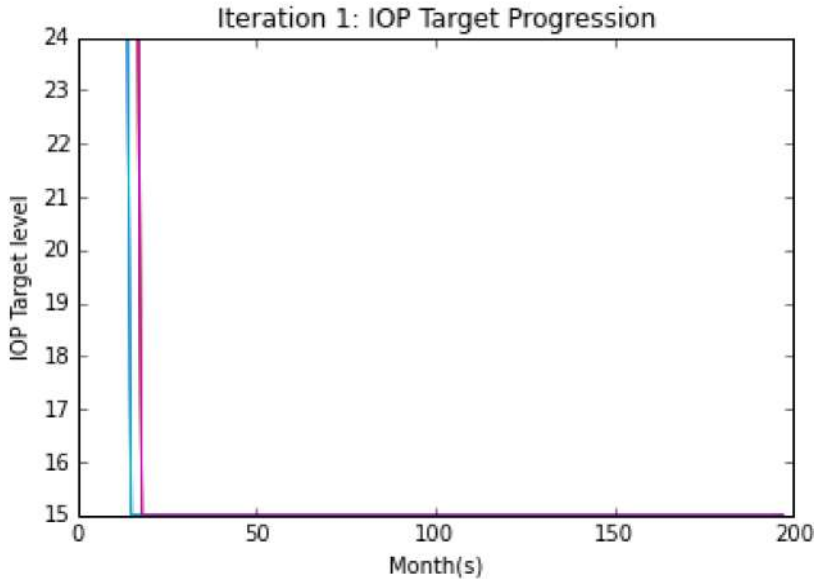
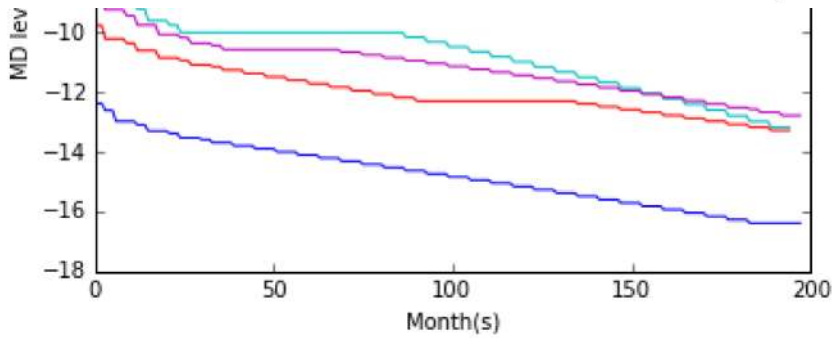


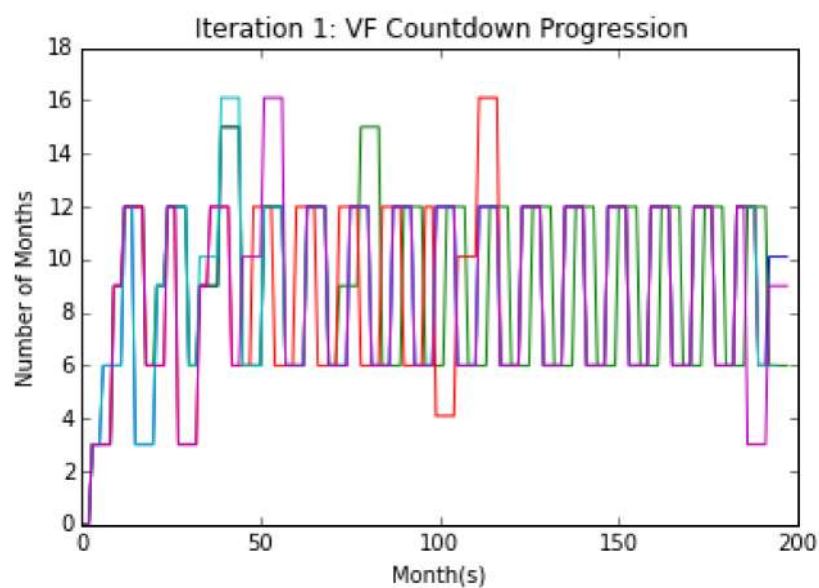
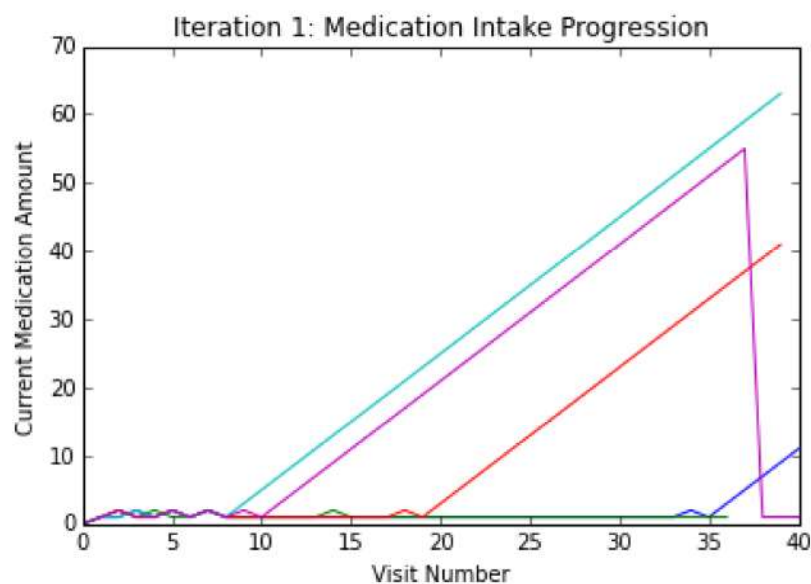
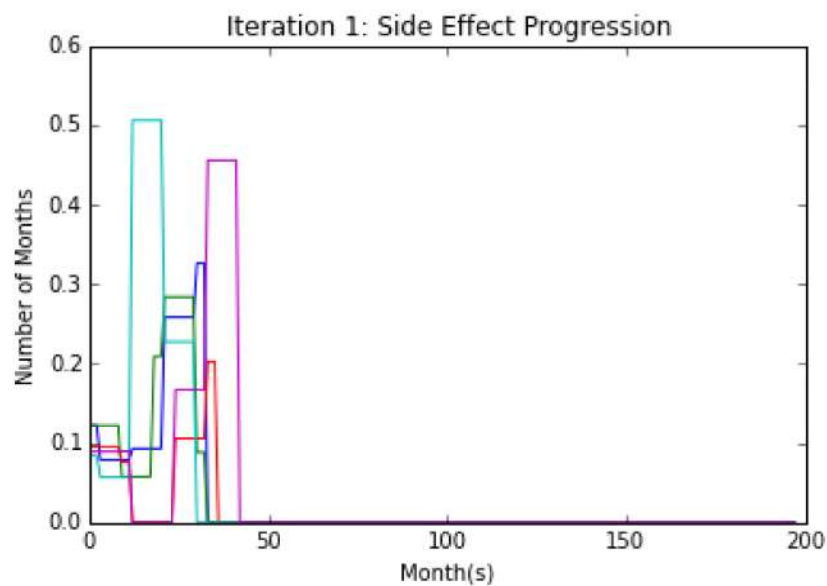


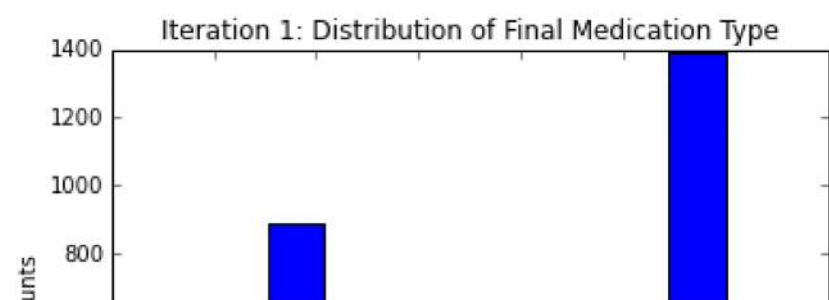
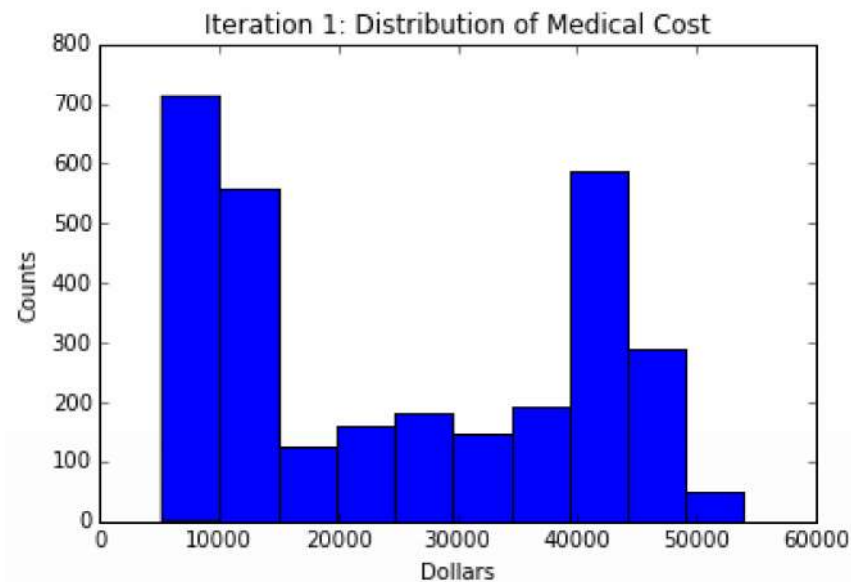
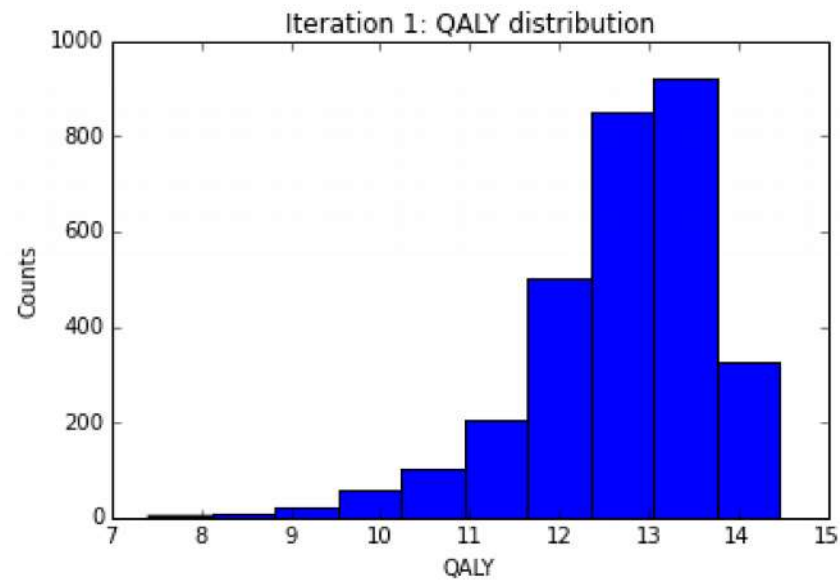
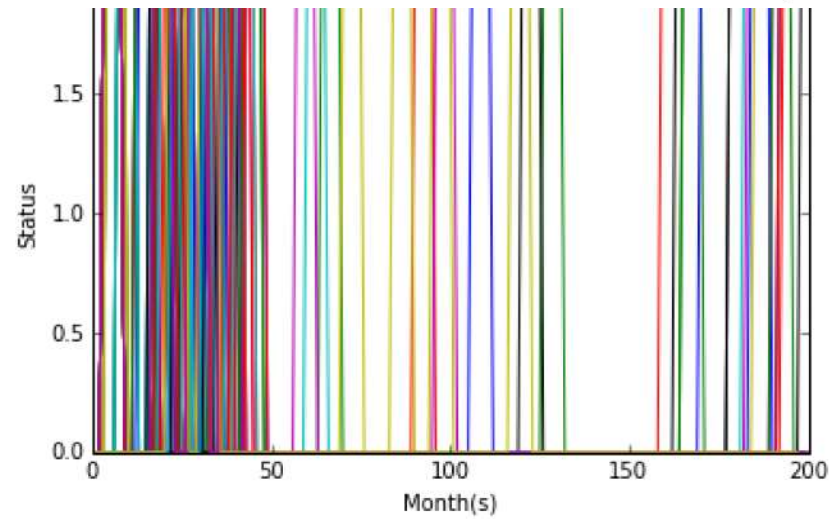


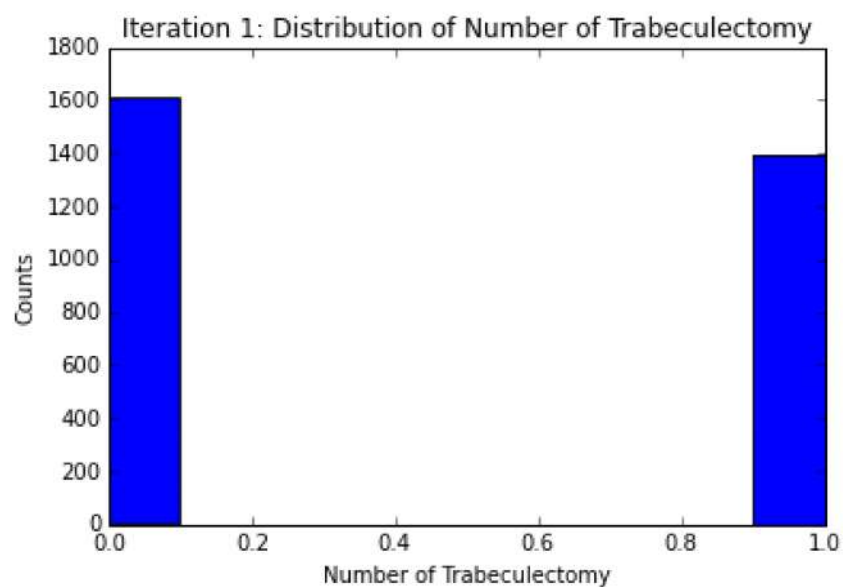
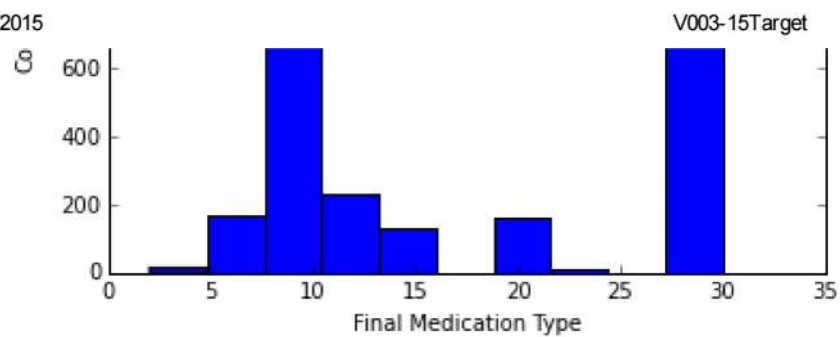
Iteration 1 :Bar Chart for initial MD values











In []: