1 Experiment I: The percentage change between the original and normalized Features Patients Data (Before Perturbation)

Table 1: Accuracy Before Removal Edges

Accuracy			
Models:	**Original**	**Normalized**	**percentage(%)**
GCNs	1	1	0.000
SVML	0.97	0.98	1.031
KNN	0.965	0.968	0.311
DT	0.948	0.948	0.000
GNB	0.935	0.935	0.000
RF	0.93	0.93	0.000
SVMnl	0.883	0.928	5.096

Table 2: Precision Before Removal Edges

Precision			
Models:	**Original**	**Normalized**	**Percentage(%)**
GCNs	0.982	1	1.833
SVML	0.972	0,982	1.029
KNN	0.952	0.972	2.101
GNB/SVMnl	0.951	0.951	0,000
RF/GNB	0.945	0.948	0.317
RF	0.933	0.945	1.286
SVMnl/RF	0.891	0.933	4.714

Table 3: Recall Before Removal Edges

Recall			
Models:	**Original**	**Normalized**	**Percentage(%)**
GCNs	1	1	0,000
KNN	0.965	0.979	1.451
SVML	0.949	0.967	1.897
DT	0.947	0.947	0.000
GNB	0.933	0.945	1.286
RF	0.93	0.933	0.323
SVMnl	0.855	0.93	5.085

Table 4: F1-Score Before Removal Edges

F1-Score			
Models:	**Original**	**Normalized**	**Percentage(%)**
GCNs	1	1	0.000
SVML	0,969	0,98	1,135
KNN	0,965	0,967	0,207
DT	0,947	0,947	0,000
GNB	0,932	0,945	1,395
RF	0,929	0,932	0,323
SVMNL	0,869	0,929	6,904

2 Experiment II: The percentage change between the removal edges and normalized removal Edges Features Patients

Table 5: Accuracy After Removal Edges

Accuracy			
Models:	**Removed Edges**	**Normalized**	**Percentage(%)**
GCNs	1	1	0.000
SVML	0.97	0.978	0.825
KNN	0.958	0.963	0.522
DT	0.938	0.938	0.000
RF/GNB	0.933	0.935	0.214
GNB/RF	0.933	0.933	0.000
SVMnl	0.895	0.918	2.570

Table 6: Precision After Removal Edges

Precision			
Models:	**Removed Edges**	**Normalized**	**Percentage(%)**
GCNs	1	1	0,000
SVML	0,974	0,979	0,513
KNN	0,956	0,967	1,151
GNB	0,947	0,947	0,000
DT	0,946	0,946	0,000
RF	0,936	0,936	0,000
SVMnl	0,895	0,925	3,352

Table 7: Recall After Removal Edges

Recall			
Models:	**Removed Edges**	**Normalized**	**Percentage(%)**
GCNs	1	1	0,000
SVML	0.974	0.979	0.513
KNN	0.956	0.967	1.151
GNB	0.947	0.947	0,000
DT	0.946	0,946	0.215
RF	0.936	0.936	0.000
SVMnl	0.895	0.925	3.352

Table 8: F1-Score After Removal Edges

F1			
Models:	**Removed Edges**	**Normalized**	**Percentage(%)**
GCNs	1	1	0,000
SVML	0,969	0,969	0,000
KNN	0,957	0,957	0,000
DT	0,937	0,937	0,000
GNB	0,93	0,93	0,000
RF	0,927	0,927	0,000
SVMnl	0,887	0,887	0,000

3 Experiment III: Application in New Patients Data

Table 9: accuracy result new patients

Accuracy			
Models:	**Original**	**Normalized**	**Percentage(%)**
SVM	0,971	0,981	1,030
KNN	0,966	0,977	1,139
RF	0,959	0,975	1,668
GNB	0,958	0,97	1,253
GCNs	0,93	0,957	2,903
SVMnl	0,928	0,955	2,909
DT	0,911	0,928	1,866

Table 10: precision result new patients

Precision			
Models:	**Original**	**Normalized**	**Percentage(%)**
KNN	0,975	0,981	0,615
SVML	0,971	0,978	0,721
RF	0,96	0,977	1,771
GNB	0,939	0,971	3,408
SVMnl	0,935	0,958	2,460
GCNs	0,933	0,957	2,572
DT	0,914	0,934	2,188

Table 11: recall result new patients

Recall			
Models:	**Original**	**Normalized**	**Percentage(%)**
KNN	0,974	0,981	0,719
SVML	0,97	0,977	0,722
RF	0,959	0,975	1,668
GNB	0,957	0,97	1,358
GCNs	0,929	0,957	3,014
SVMnl	0,927	0,954	2,913
DT	0,909	0,928	2,090

Table 12: f1 result new patients

F1			
Models:	**Original**	**Normalized**	**Percentage(%)**
KNN	0,974	0,981	0,719
SVML	0,97	0,977	0,722
RF	0,959	0,975	1,668
GNB	0,957	0,97	1,358
GCNs	0,929	0,957	3,014
SVMnl	0,927	0,955	3,020
DT	0,909	0,927	1,980