
PRELIMINARY RESULTS FOR BRAZIL COVID-19 DATASET

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1 Basic Analytics

	0
N	13899
N_Hosp	12638
N_Death	4751
Female	5949
Male	7949
Race	4021
Schooling	1062
Acute Respiratory Distress Syndrome	3430
Contracted At Hospital	361
Contact Birds Pigs	118
Fever	10144
Cough	10549
Throat	2922
Dyspnea	9617
Respiratory Discomfort	8027
SpO2 less 95\%	7618
Diarrhea	1893
Vomiting	1023
Other Symptoms	4372
Postpartum	68
Cardiovascular Disease	4281
Hematologic Disease	135
Down Syndrome	42
Liver Chronic Disease	112
Asthma	360
Diabetes	3300
Neurological Disease	566
Another Chronic Pneumopathy	466
Immunosuppression	434
Renal Chronic Disease	580
Obesity	510
Other Risks	3352
Antiviral Use	4564
Hospitalization	12638
ICU	4165
Ventilator	2557
Xray Torax Result	373
Result Final	0
Evolution	5366
Public Hospital	4704

Table 1: Number of observations with a specific observation

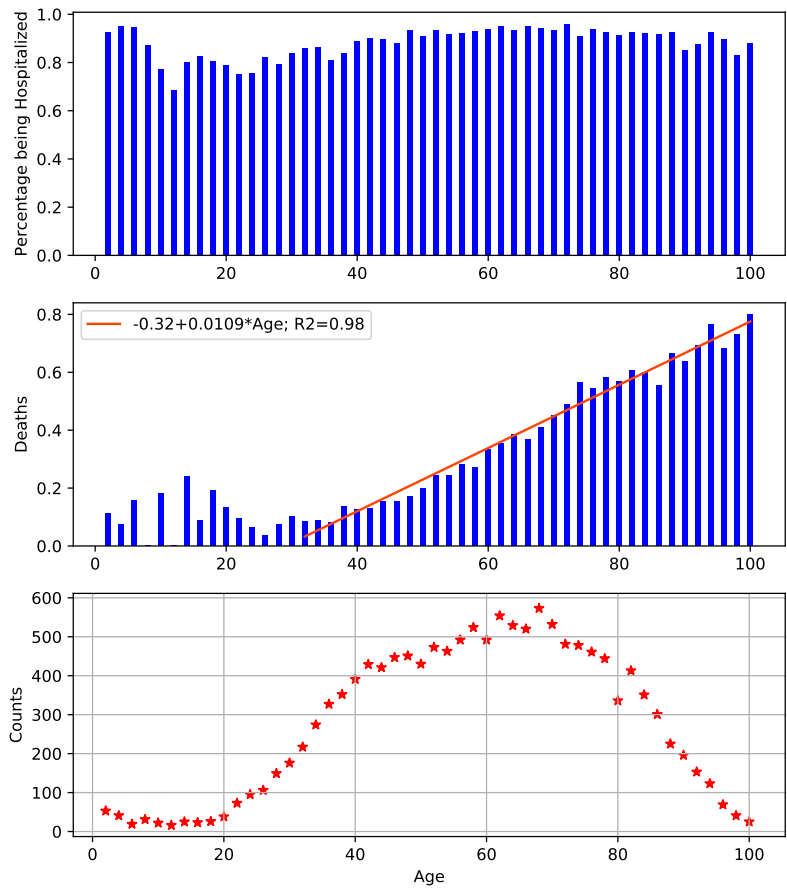


Figure 1: Distribution of hospitalization and deaths by age group

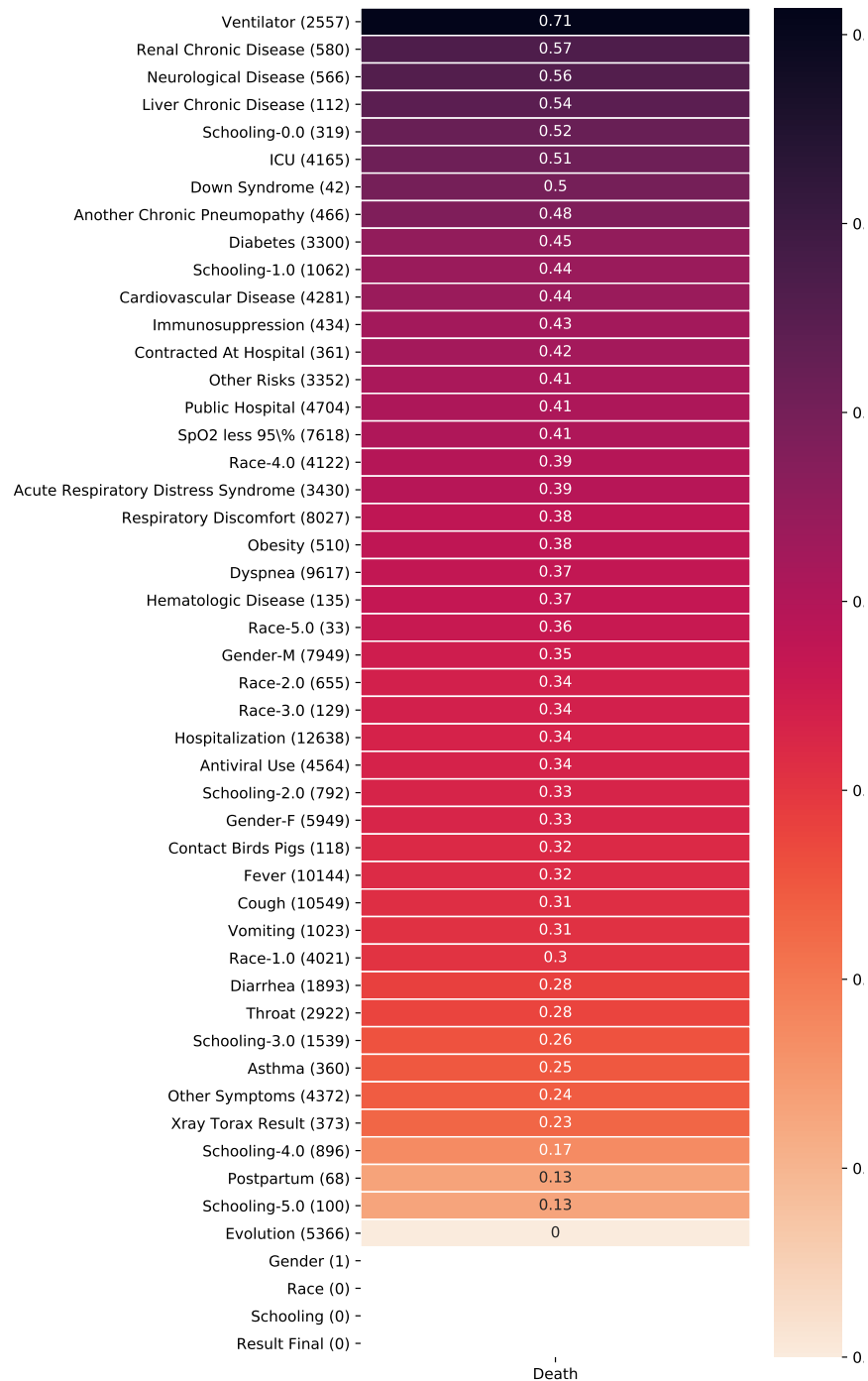


Figure 2: Share of hospitalized and deaths patients given characteristics

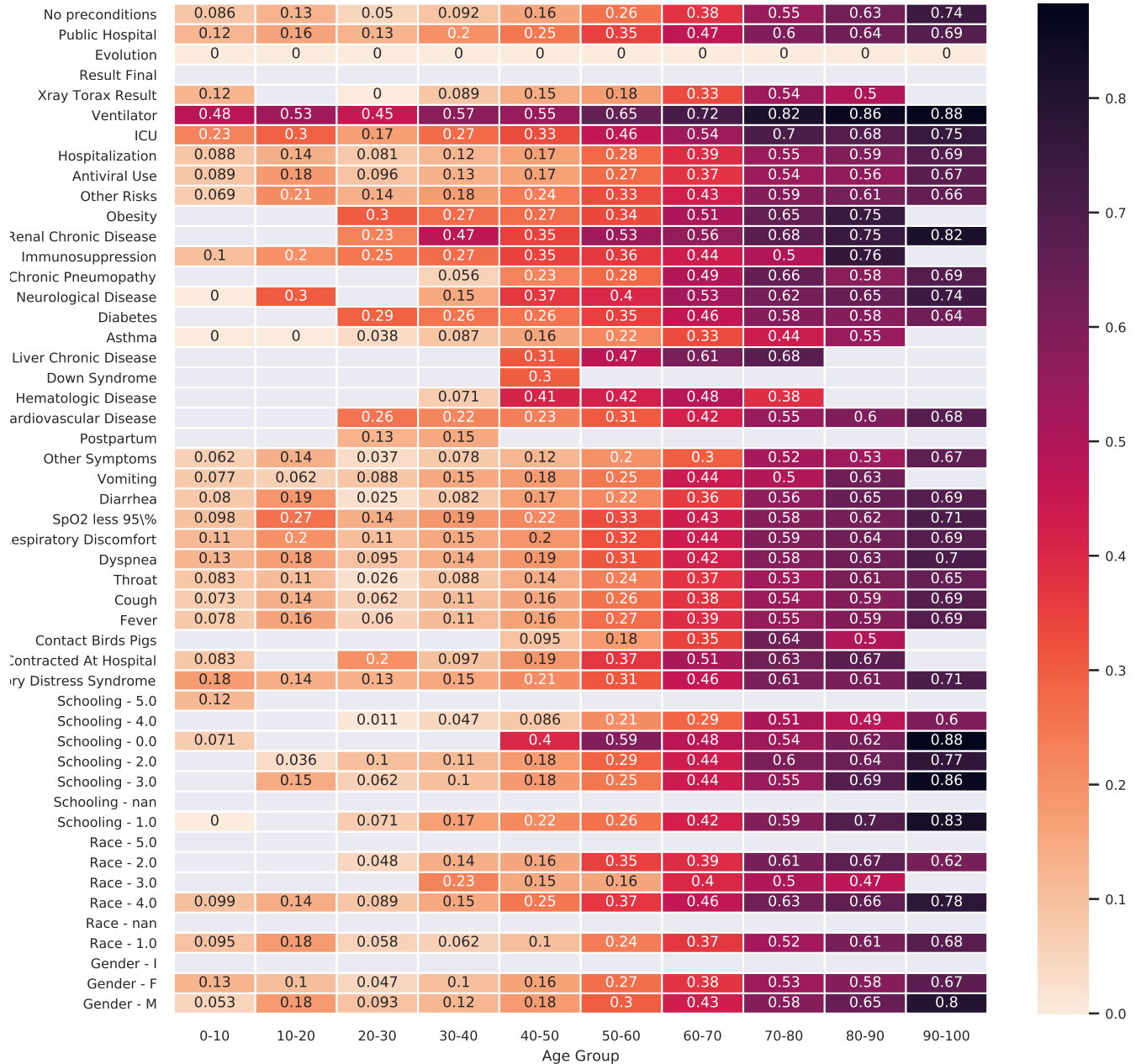
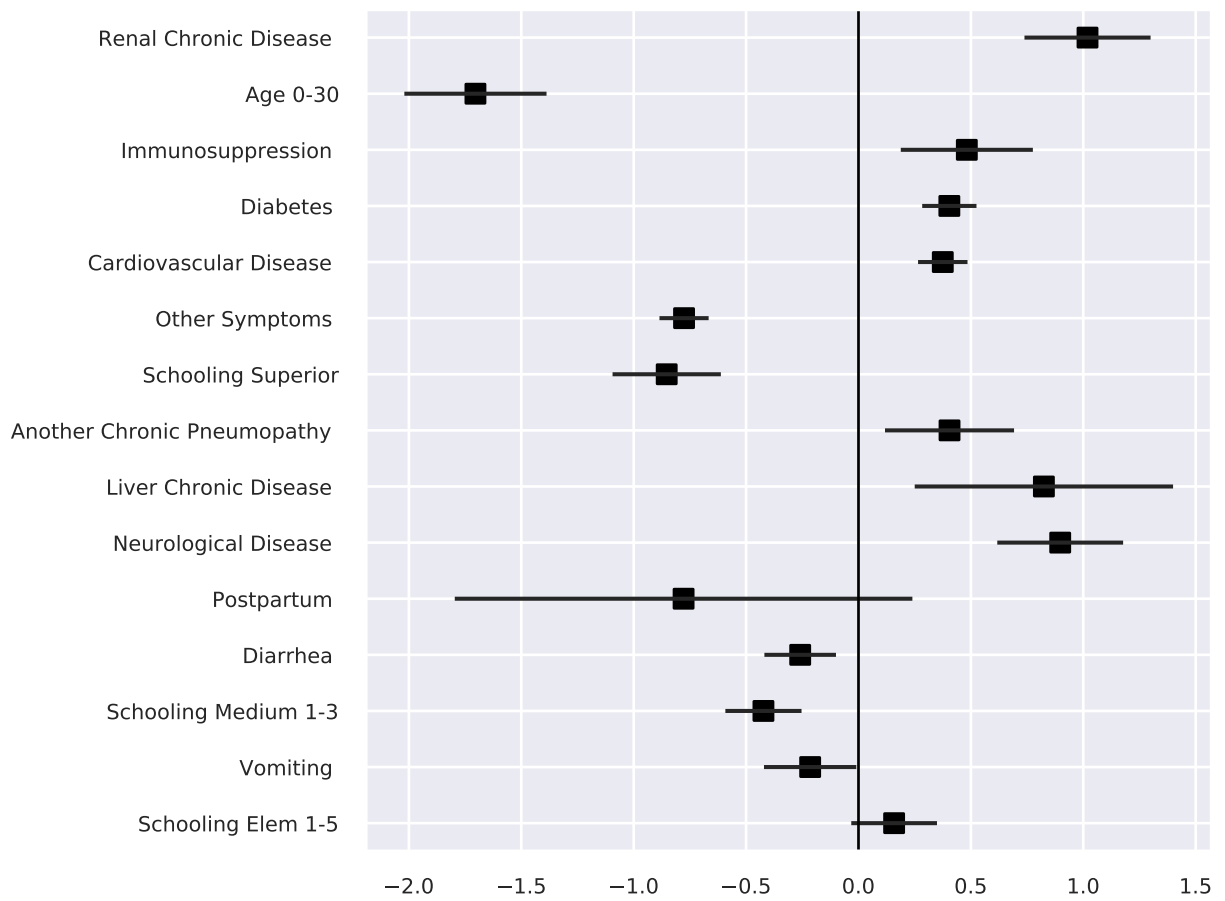


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

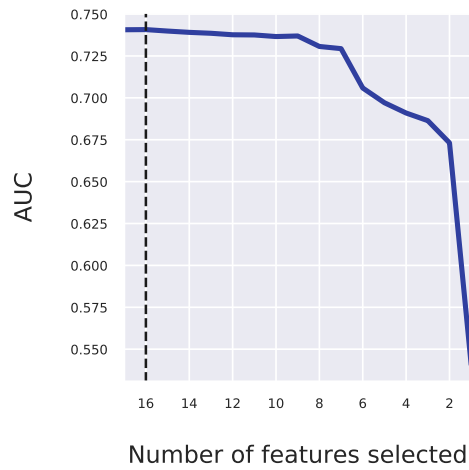
2 Results

2.1 Mortality (previous)

SVM-I1	Coef LR-I1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-1.704	-2.020	-1.388	0.182	0.133	0.250	0.486	0.123	0.000	0.000
-0.561	-1.592									
Another Chronic Pneumopathy	0.405	0.118	0.692	1.499	1.125	1.998	0.458	0.620	0.000	0.006
0.201	0.438									
Cardiovascular Disease	0.375	0.265	0.485	1.455	1.303	1.624	0.406	0.584	0.000	0.000
0.207	0.450									
Contracted At Hospital	0.168	-0.187	0.523	1.183	0.829	1.687	0.461	0.578	0.026	0.354
0.081	0.193									
Diabetes	0.404	0.283	0.525	1.498	1.328	1.690	0.418	0.599	0.000	0.000
0.216	0.465									
Diarrhea	-0.259	-0.419	-0.100	0.772	0.658	0.905	0.475	0.396	0.000	0.001
-0.090	-0.202									
Immunosuppression	0.482	0.188	0.776	1.619	1.207	2.172	0.459	0.610	0.000	0.001
0.232	0.524									
Liver Chronic Disease	0.825	0.250	1.399	2.281	1.284	4.053	0.462	0.716	0.000	0.005
0.338	0.754									
Neurological Disease	0.897	0.617	1.177	2.453	1.854	3.245	0.453	0.717	0.000	0.000
0.409	0.941									
Other Symptoms	-0.776	-0.885	-0.667	0.460	0.413	0.513	0.516	0.346	0.000	0.000
-0.309	-0.696									
Postpartum	-0.778	-1.796	0.240	0.459	0.166	1.271	0.466	0.172	0.011	0.134
-0.231	-0.458									
Renal Chronic Disease	1.019	0.738	1.299	2.770	2.092	3.667	0.450	0.747	0.000	0.000
0.430	1.022									
Schooling Elem 1-5	0.158	-0.032	0.349	1.172	0.968	1.418	0.456	0.564	0.000	0.103
0.102	0.215									
Schooling Medium 1-3	-0.423	-0.592	-0.253	0.655	0.553	0.776	0.475	0.373	0.000	0.000
-0.152	-0.335									
Schooling Superior	-0.853	-1.094	-0.612	0.426	0.335	0.542	0.477	0.264	0.000	0.000
-0.318	-0.751									
Vomiting	-0.215	-0.420	-0.010	0.807	0.657	0.990	0.470	0.397	0.015	0.040
-0.077	-0.169									



Recursive Feature Elimination:

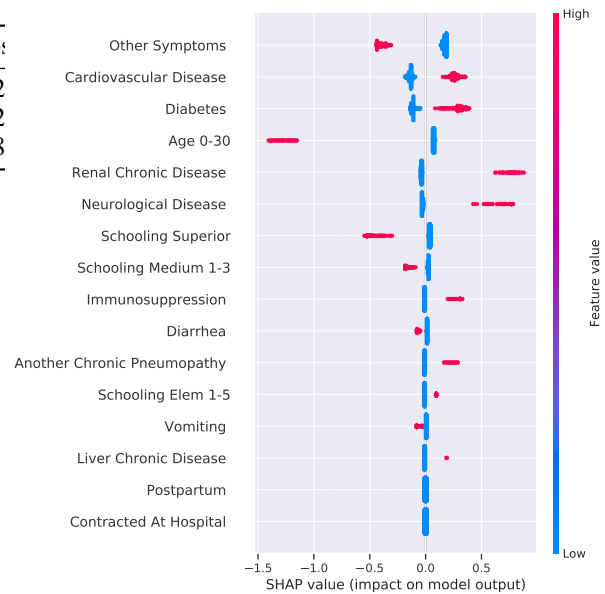
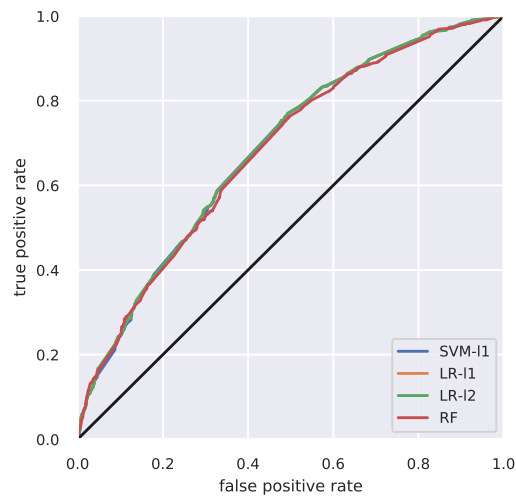


Coefficients:

	SVM-l1	LR-l1
Vomiting	-0.077	-0.169
Contracted At Hospital	0.081	0.193
Diarrhea	-0.090	-0.202
Schooling Elem 1-5	0.102	0.215
Schooling Medium 1-3	-0.152	-0.335
Another Chronic Pneumopathy	0.201	0.438
Cardiovascular Disease	0.207	0.450
Postpartum	-0.231	-0.458
Diabetes	0.216	0.465
Immunosuppression	0.232	0.524
Other Symptoms	-0.309	-0.696
Schooling Superior	-0.318	-0.751
Liver Chronic Disease	0.338	0.754
Neurological Disease	0.409	0.941
Renal Chronic Disease	0.430	1.022
Age 0-30	-0.561	-1.592

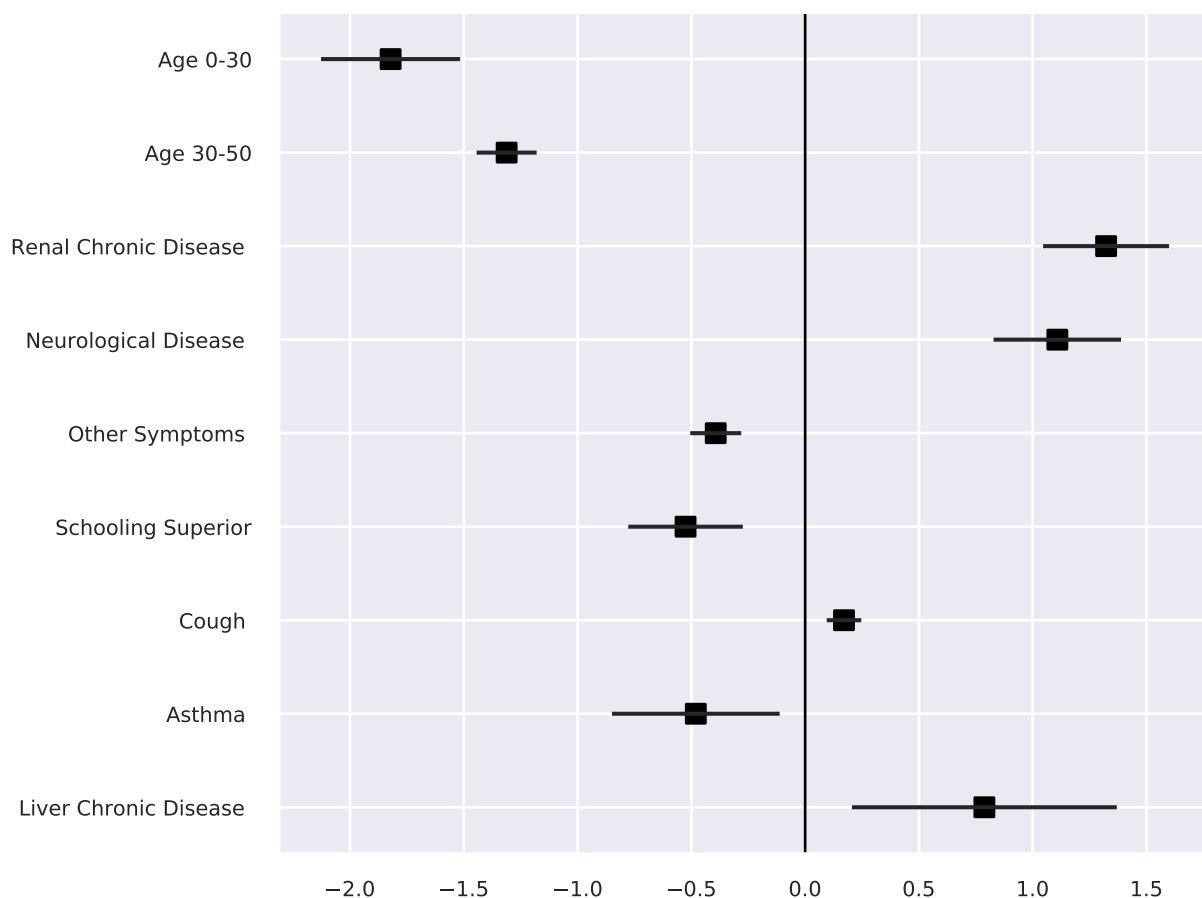
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.627	0.628	0.628	0.621	0.62
F1w	0.625	0.626	0.626	0.617	0.62
AUC	0.685	0.685	0.685	0.680	0.68

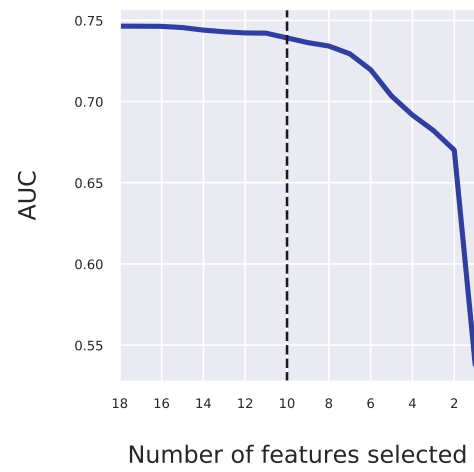


2.2 Mortality (previous) small

SVM-I1	Coef LR-I1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-1.822	-2.127	-1.516	0.162	0.119	0.220	0.487	0.138	0.000	0.000
-0.805	-2.040									
Age 30-50	-1.312	-1.444	-1.180	0.269	0.236	0.307	0.557	0.216	0.000	0.000
-0.645	-1.499									
Another Chronic Pneumopathy	0.622	0.344	0.901	1.863	1.410	2.462	0.460	0.633	0.000	0.000
0.190	0.425									
Asthma	-0.480	-0.849	-0.112	0.618	0.428	0.894	0.471	0.331	0.004	0.011
-0.239	-0.562									
Cough	0.171	0.095	0.246	1.186	1.100	1.279	0.582	0.433	0.000	0.000
-0.252	-0.600									
Liver Chronic Disease	0.788	0.206	1.370	2.198	1.228	3.934	0.465	0.650	0.030	0.008
0.249	0.560									
Neurological Disease	1.108	0.828	1.388	3.029	2.289	4.009	0.455	0.734	0.000	0.000
0.344	0.826									
Other Symptoms	-0.393	-0.505	-0.281	0.675	0.603	0.755	0.521	0.347	0.000	0.000
-0.281	-0.679									
Renal Chronic Disease	1.323	1.046	1.599	3.753	2.846	4.950	0.454	0.738	0.000	0.000
0.444	1.108									
Schooling Superior	-0.526	-0.777	-0.274	0.591	0.460	0.761	0.480	0.262	0.000	0.000
-0.247	-0.649									



Recursive Feature Elimination:

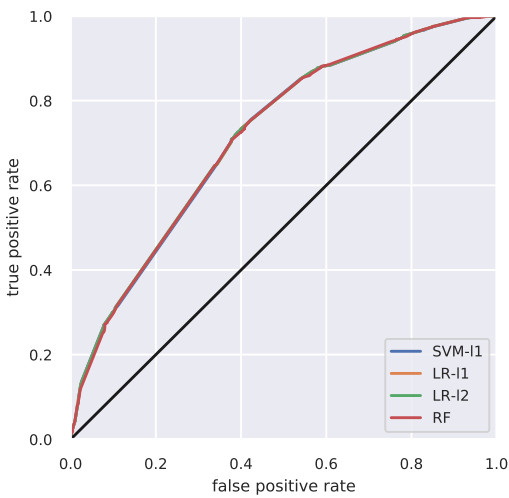
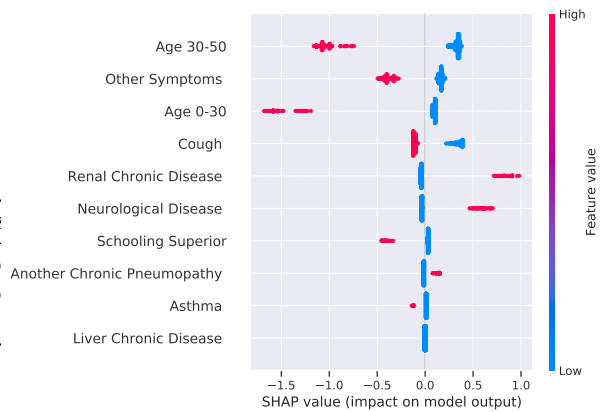


Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.661	0.662	0.662	0.657	0.66
F1w	0.661	0.662	0.662	0.657	0.66
AUC	0.718	0.718	0.719	0.717	0.71

Coefficients:

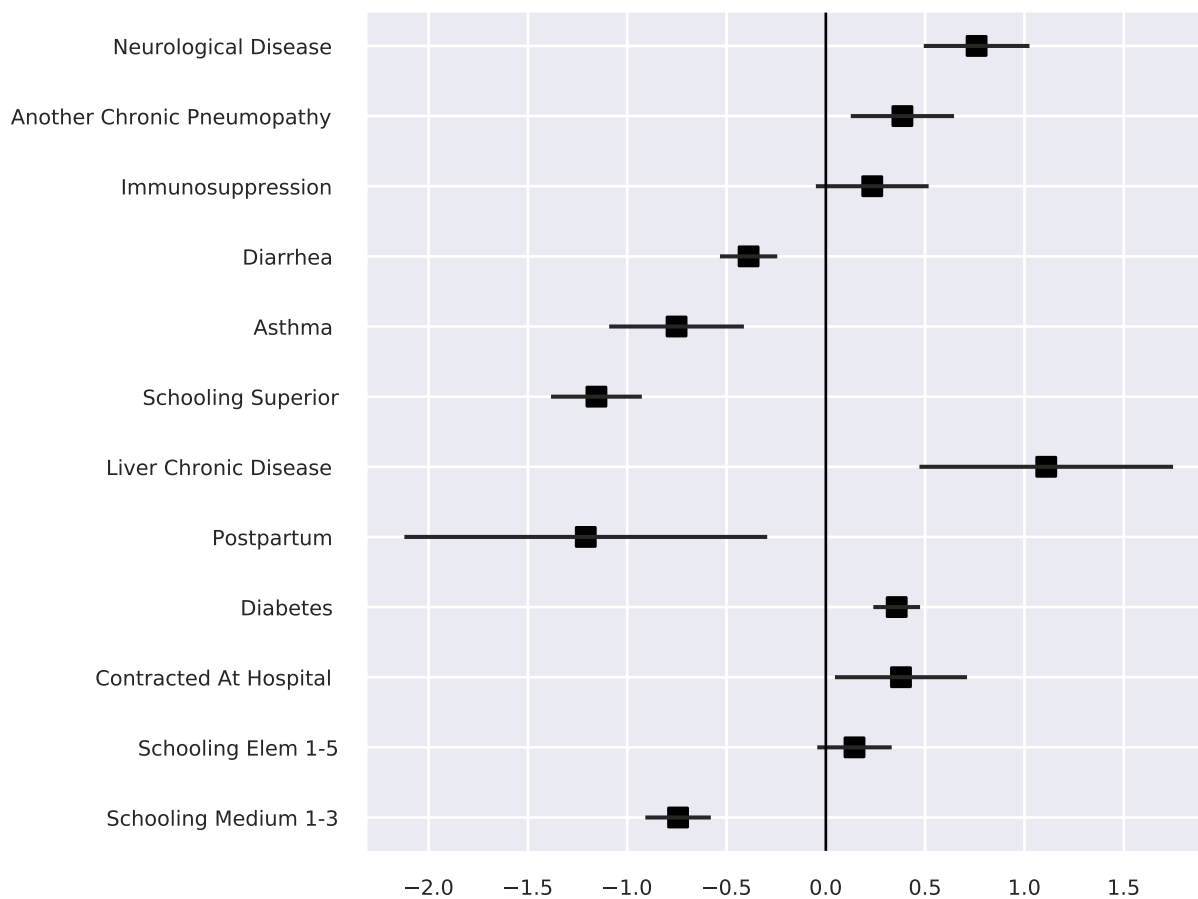
	SVM-l1	LR-l1
Another Chronic Pneumopathy	0.190	0.425
Liver Chronic Disease	0.249	0.560
Asthma	-0.239	-0.562
Cough	-0.252	-0.600
Schooling Superior	-0.247	-0.649
Other Symptoms	-0.281	-0.679
Neurological Disease	0.344	0.826
Renal Chronic Disease	0.444	1.108
Age 30-50	-0.645	-1.499
Age 0-30	-0.805	-2.040



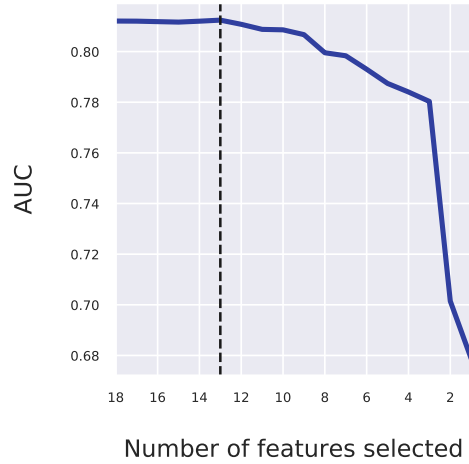
2.3 Mortality (advanced)

Include variables: Antiviral, ICU, Ventilator

SVM-I1	Coef LR-I1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Another Chronic Pneumopathy	0.386	0.126	0.646	1.470	1.134	1.907	0.458	0.621	0.000	0.004
0.243	0.521									
Asthma	-0.752	-1.091	-0.412	0.472	0.336	0.662	0.467	0.348	0.019	0.000
-0.264	-0.580									
Cardiovascular Disease	0.250	0.145	0.356	1.284	1.156	1.428	0.408	0.581	0.000	0.000
0.227	0.480									
Contracted At Hospital	0.378	0.046	0.711	1.460	1.047	2.036	0.460	0.637	0.000	0.026
0.221	0.486									
Diabetes	0.357	0.239	0.475	1.429	1.270	1.607	0.418	0.599	0.000	0.000
0.256	0.542									
Diarrhea	-0.389	-0.533	-0.245	0.678	0.587	0.783	0.473	0.413	0.008	0.000
-0.085	-0.182									
Immunosuppression	0.234	-0.050	0.518	1.263	0.951	1.678	0.460	0.575	0.007	0.107
0.182	0.386									
Liver Chronic Disease	1.110	0.471	1.748	3.034	1.602	5.745	0.462	0.768	0.000	0.001
0.517	1.129									
Neurological Disease	0.759	0.493	1.025	2.136	1.637	2.788	0.453	0.714	0.000	0.000
0.412	0.919									
Postpartum	-1.209	-2.122	-0.295	0.299	0.120	0.744	0.466	0.207	0.034	0.010
-0.355	-0.735									
Schooling Elem 1-5	0.144	-0.043	0.332	1.155	0.958	1.393	0.454	0.590	0.000	0.131
0.160	0.336									
Schooling Medium 1-3	-0.744	-0.909	-0.579	0.475	0.403	0.560	0.478	0.345	0.000	0.000
-0.226	-0.489									
Schooling Superior	-1.155	-1.383	-0.926	0.315	0.251	0.396	0.478	0.257	0.000	0.000
-0.385	-0.883									

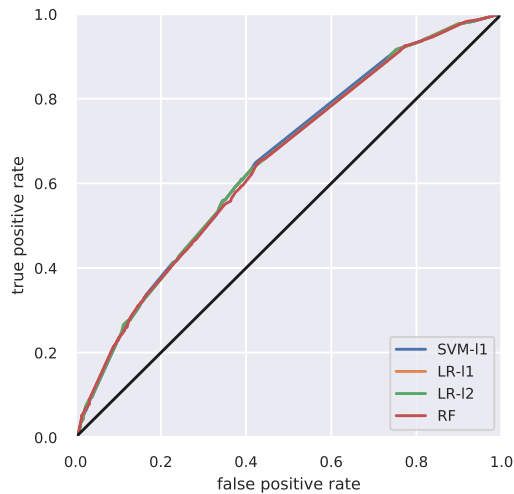


Recursive Feature Elimination:



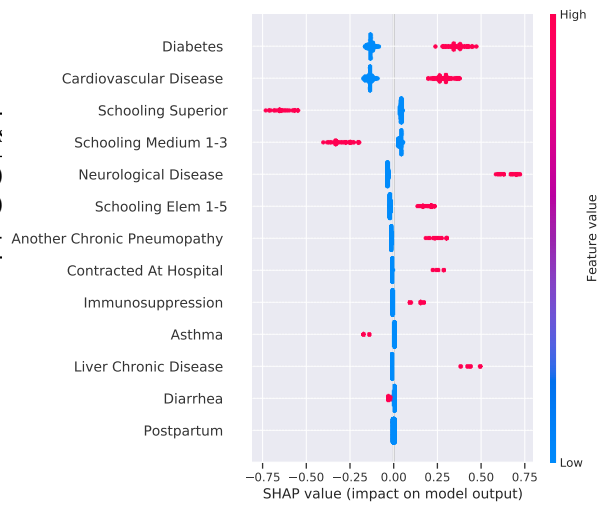
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.606	0.607	0.607	0.603	0.60
F1w	0.605	0.606	0.605	0.596	0.60
AUC	0.653	0.650	0.650	0.649	0.64



Coefficients:

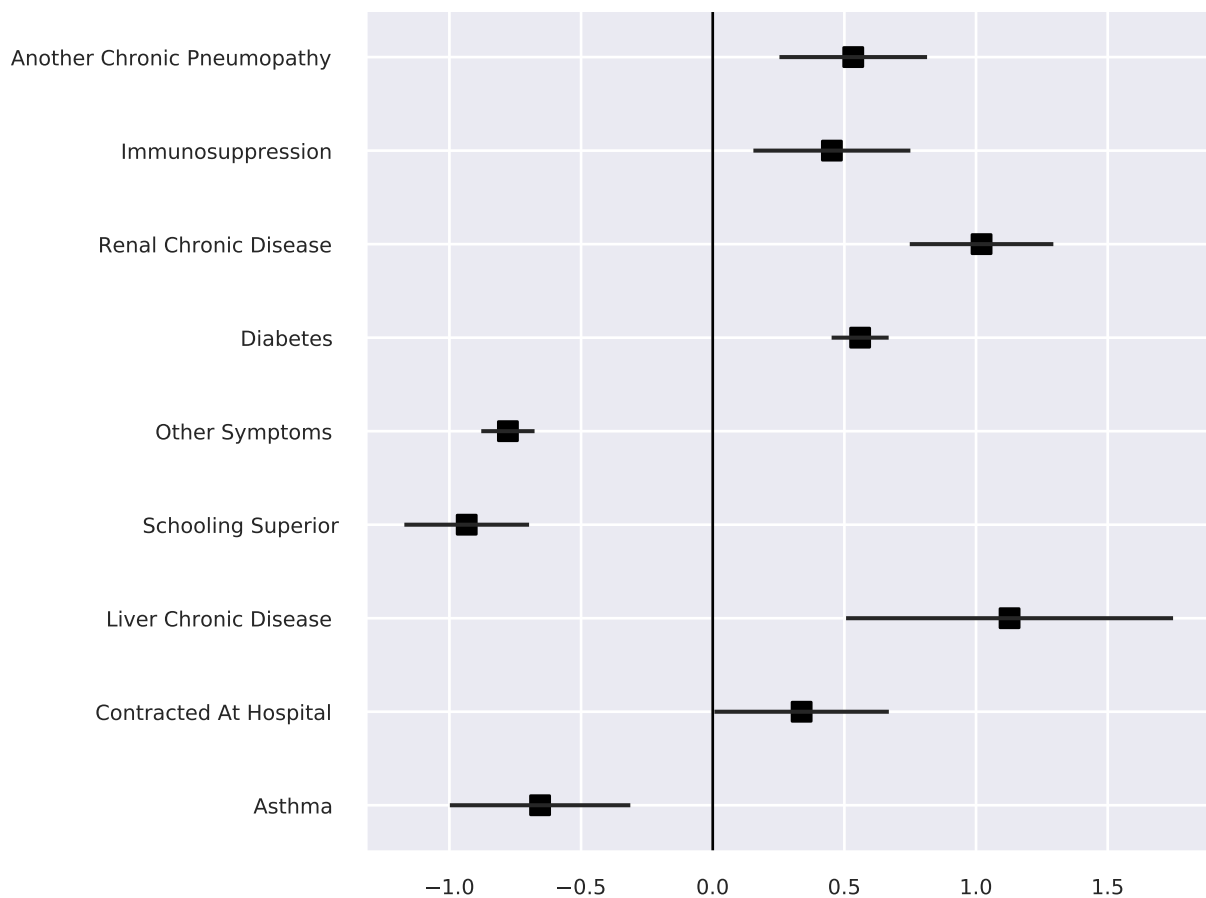
	SVM-l1	LR-l1
Diarrhea	-0.085	-0.182
Schooling Elem 1-5	0.160	0.336
Immunosuppression	0.182	0.386
Cardiovascular Disease	0.227	0.480
Contracted At Hospital	0.221	0.486
Schooling Medium 1-3	-0.226	-0.489
Another Chronic Pneumopathy	0.243	0.521
Diabetes	0.256	0.542
Asthma	-0.264	-0.580
Postpartum	-0.355	-0.735
Schooling Superior	-0.385	-0.883
Neurological Disease	0.412	0.919
Liver Chronic Disease	0.517	1.129



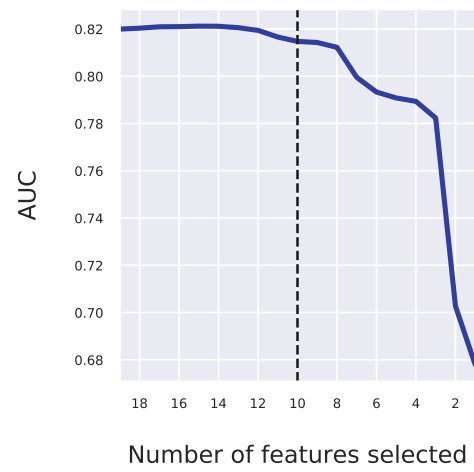
2.4 Mortality (advanced) small

Include variables: Antiviral, ICU, Ventilator

SVM-I1	Coef LR-I1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Another Chronic Pneumopathy	0.534 0.276	0.253	0.814	1.705	1.288	2.257	0.456	0.609	0.000	0.000
Asthma	-0.656 -0.248	-0.998	-0.313	0.519	0.369	0.731	0.465	0.333	0.007	0.000
Contracted At Hospital	0.338 0.185	0.006	0.669	1.402	1.006	1.952	0.458	0.605	0.002	0.046
Diabetes	0.560 0.317	0.451	0.668	1.750	1.571	1.950	0.416	0.595	0.000	0.000
Immunosuppression	0.452 0.244	0.154	0.751	1.572	1.167	2.118	0.456	0.630	0.000	0.003
Liver Chronic Disease	1.127 0.507	0.506	1.748	3.087	1.659	5.744	0.459	0.754	0.000	0.000
Other Symptoms	-0.778 -0.301	-0.879	-0.677	0.459	0.415	0.508	0.510	0.353	0.000	0.000
Postpartum	-1.745 -0.579	-2.804	-0.687	0.175	0.061	0.503	0.463	0.133	0.002	0.001
Renal Chronic Disease	1.021 0.465	0.748	1.294	2.776	2.113	3.646	0.448	0.742	0.000	0.000
Schooling Superior	-0.934 -0.352	-1.171	-0.697	0.393	0.310	0.498	0.474	0.264	0.000	0.000

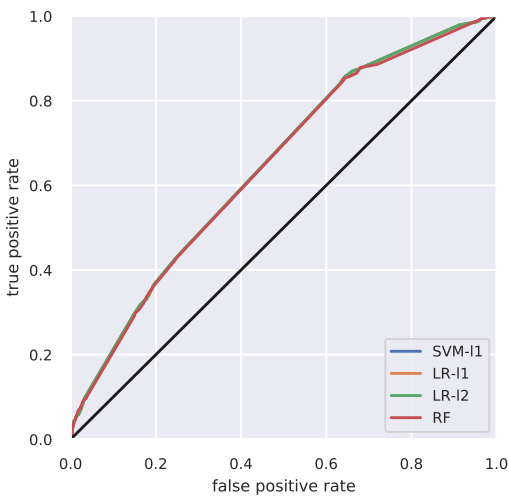


Recursive Feature Elimination:



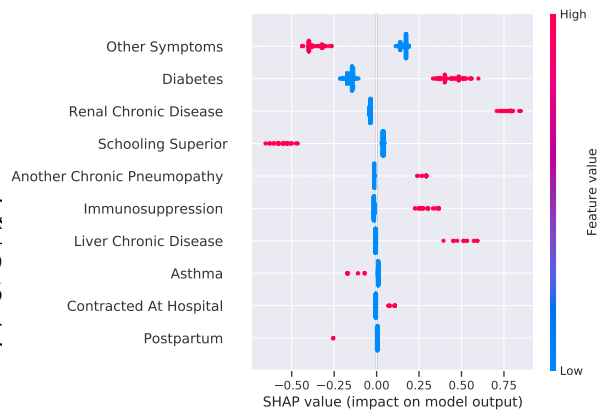
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.597	0.596	0.597	0.597	0.59
F1w	0.574	0.574	0.574	0.574	0.56
AUC	0.648	0.648	0.648	0.645	0.64



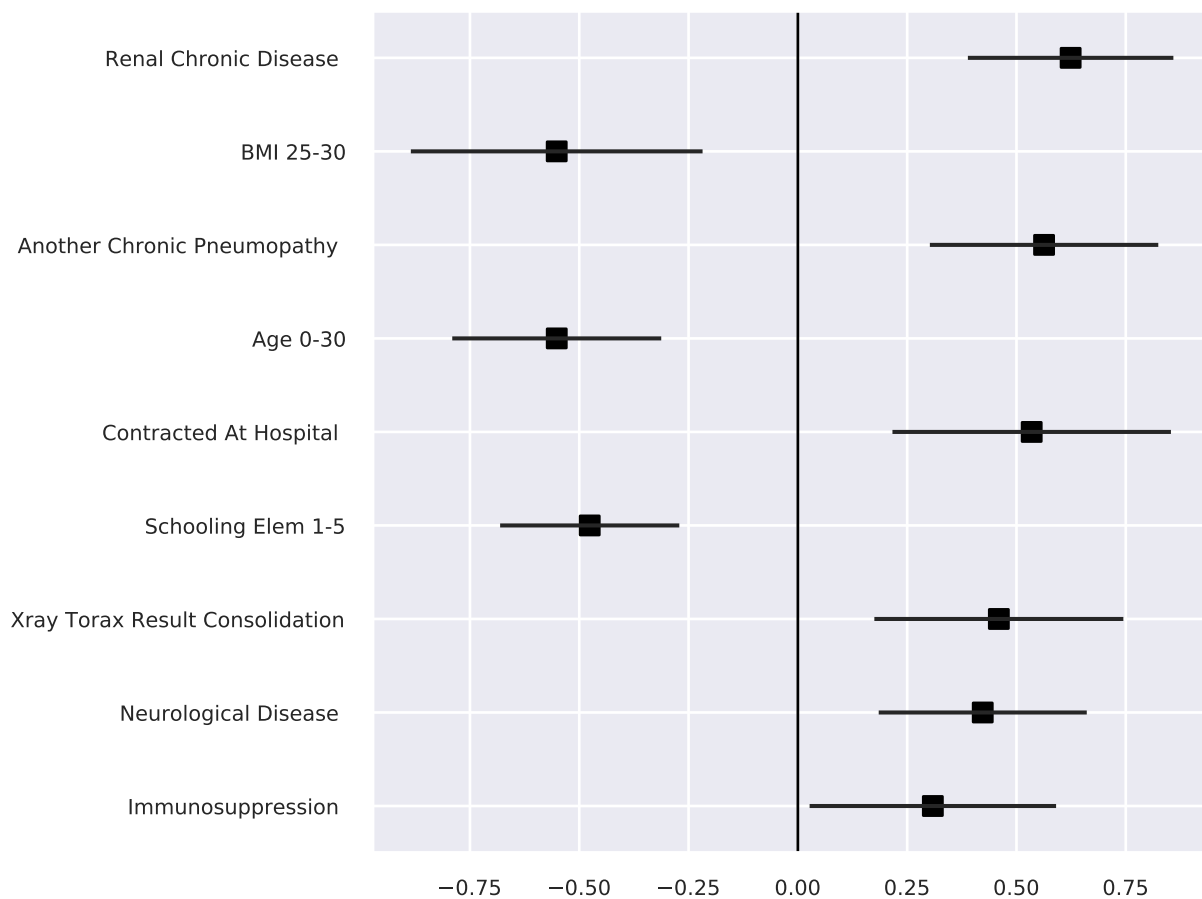
Coefficients:

	SVM-l1	LR-l1
Contracted At Hospital	0.185	0.393
Immunosuppression	0.244	0.522
Asthma	-0.248	-0.538
Another Chronic Pneumopathy	0.276	0.590
Other Symptoms	-0.301	-0.654
Diabetes	0.317	0.671
Schooling Superior	-0.352	-0.825
Renal Chronic Disease	0.465	1.060
Liver Chronic Disease	0.507	1.104
Postpartum	-0.579	-1.353

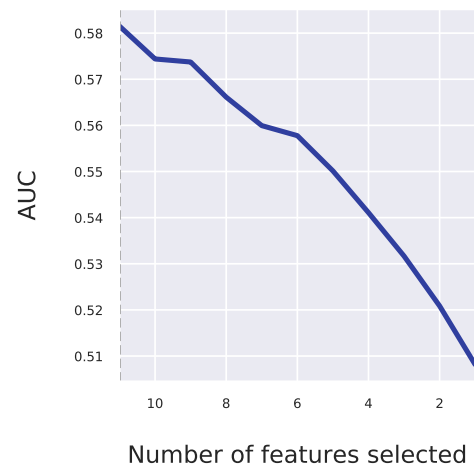


2.5 ICU

SVM-I1	Coef LR-I1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.551	-0.790	-0.313	0.576	0.454	0.732	0.359	0.245	0.000	0.000
-0.227	-0.543									
Another Chronic Pneumopathy	0.563	0.302	0.824	1.756	1.352	2.280	0.346	0.502	0.000	0.000
0.262	0.544									
BMI 25-30	-0.552	-0.885	-0.218	0.576	0.413	0.804	0.515	0.346	0.000	0.001
-0.270	-0.571									
BMI 30-40	-0.105	-0.437	0.227	0.900	0.646	1.255	0.581	0.349	0.001	0.535
-0.220	-0.432									
Contracted At Hospital	0.535	0.216	0.853	1.707	1.242	2.347	0.348	0.494	0.002	0.001
0.245	0.511									
Diarrhea	-0.229	-0.386	-0.073	0.795	0.680	0.930	0.359	0.304	0.022	0.004
-0.102	-0.233									
Immunosuppression	0.309	0.027	0.591	1.362	1.027	1.805	0.348	0.459	0.010	0.032
0.137	0.287									
Neurological Disease	0.423	0.185	0.661	1.526	1.203	1.936	0.346	0.460	0.001	0.000
0.195	0.408									
Renal Chronic Disease	0.624	0.389	0.859	1.866	1.475	2.361	0.344	0.511	0.000	0.000
0.293	0.609									
Schooling Elem 1-5	-0.476	-0.681	-0.271	0.621	0.506	0.762	0.359	0.266	0.001	0.000
-0.199	-0.465									
Xray Torax Result Consolidation	0.460	0.175	0.744	1.584	1.191	2.105	0.348	0.456	0.019	0.002
0.206	0.428									

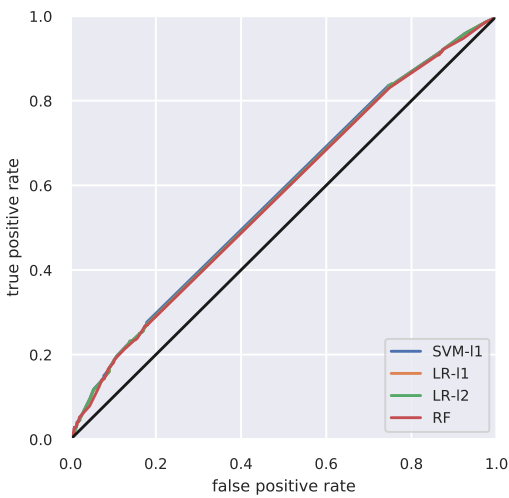


Recursive Feature Elimination:



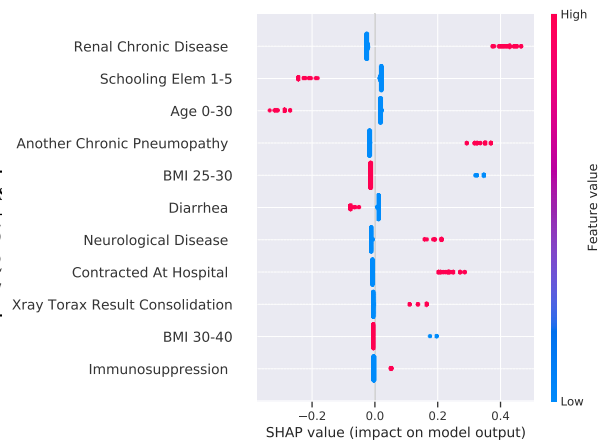
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.655	0.655	0.655	0.653	0.65
F1w	0.547	0.547	0.547	0.520	0.52
AUC	0.577	0.574	0.573	0.571	0.57



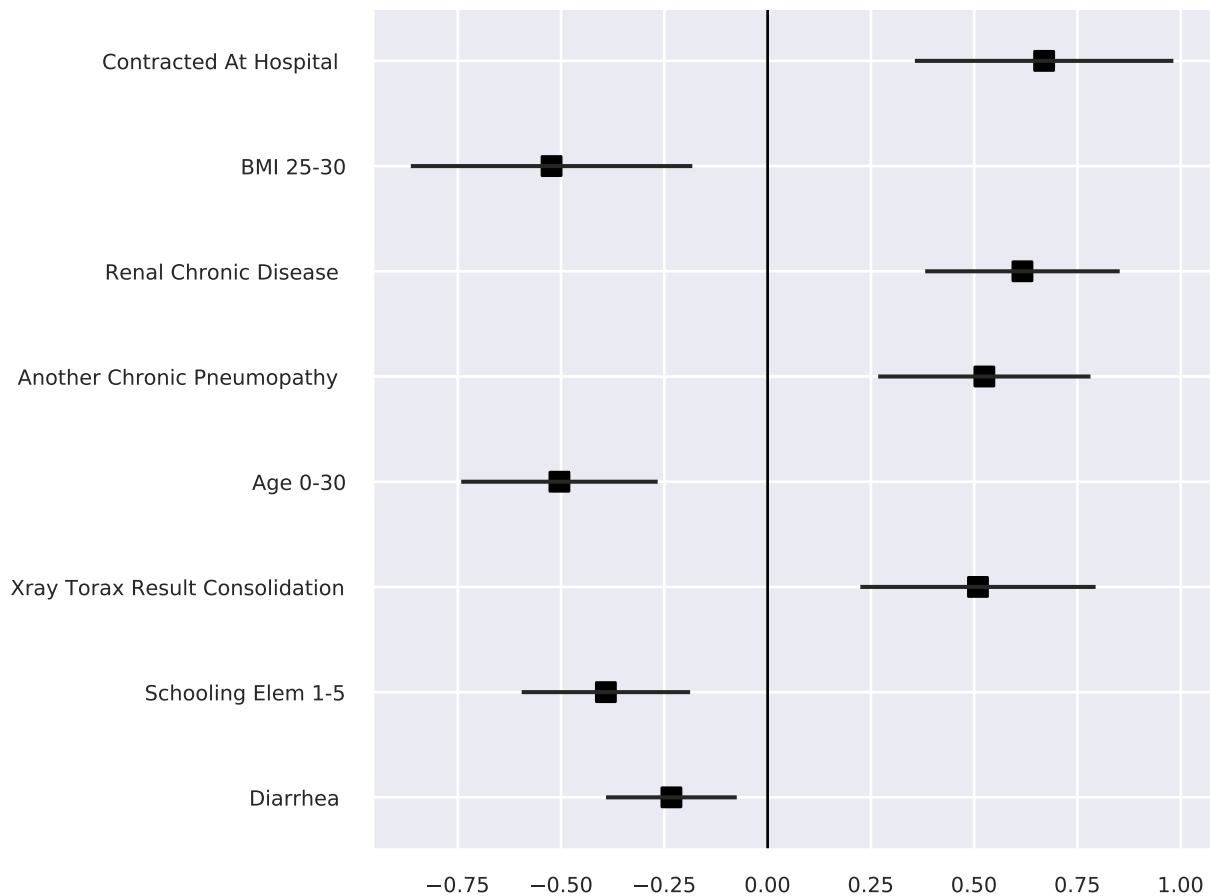
Coefficients:

	SVM-l1	LR-l1
Diarrhea	-0.102	-0.233
Immunosuppression	0.137	0.287
Neurological Disease	0.195	0.408
Xray Torax Result Consolidation	0.206	0.428
BMI 30-40	-0.220	-0.432
Schooling Elem 1-5	-0.199	-0.465
Contracted At Hospital	0.245	0.511
Age 0-30	-0.227	-0.543
Another Chronic Pneumopathy	0.262	0.544
BMI 25-30	-0.270	-0.571
Renal Chronic Disease	0.293	0.609

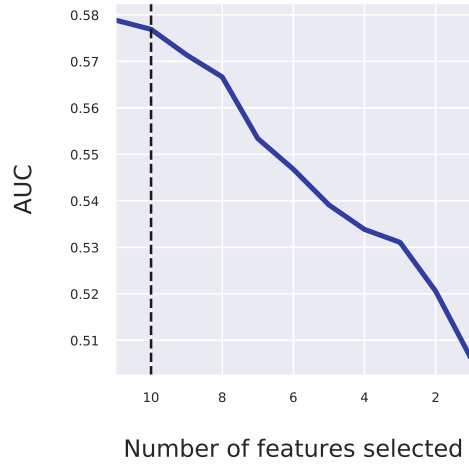


2.6 ICU small

SVM-l1	Coef LR-l1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.504	-0.742	-0.266	0.604	0.476	0.766	0.353	0.248	0.001	0.000
-0.210	-0.502									
Another Chronic Pneumopathy	0.525	0.268	0.782	1.690	1.307	2.185	0.341	0.478	0.000	0.000
0.244	0.506									
BMI 25-30	-0.523	-0.864	-0.182	0.593	0.422	0.833	0.520	0.341	0.000	0.003
-0.303	-0.613									
BMI 30-40	-0.138	-0.477	0.201	0.871	0.621	1.222	0.584	0.343	0.000	0.424
-0.315	-0.582									
BMI 40-100	0.158	-0.342	0.658	1.171	0.710	1.931	0.344	0.530	0.019	0.536
-0.148	-0.185									
Contracted At Hospital	0.669	0.357	0.982	1.953	1.428	2.670	0.342	0.506	0.000	0.000
0.310	0.642									
Diarrhea	-0.233	-0.391	-0.075	0.792	0.676	0.928	0.354	0.299	0.024	0.004
-0.103	-0.236									
Renal Chronic Disease	0.617	0.382	0.852	1.853	1.464	2.345	0.339	0.500	0.000	0.000
0.290	0.600									
Schooling Elem 1-5	-0.392	-0.595	-0.188	0.676	0.551	0.829	0.352	0.276	0.008	0.000
-0.163	-0.380									
Xray Torax Result Consolidation	0.509	0.224	0.794	1.664	1.252	2.212	0.342	0.465	0.005	0.000
0.231	0.478									

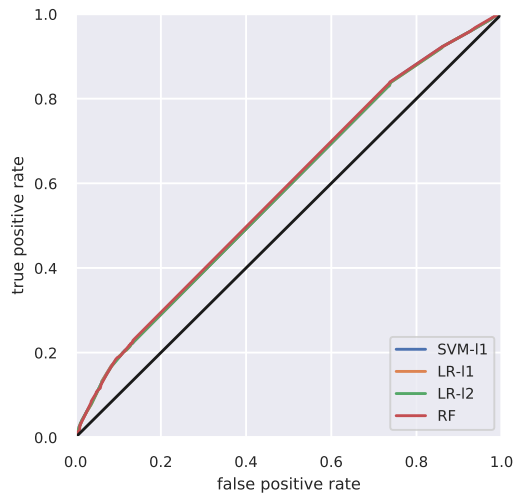


Recursive Feature Elimination:



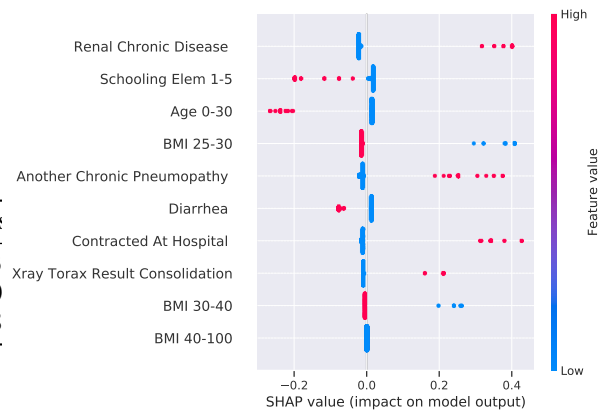
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.642	0.642	0.642	0.638	0.63
F1w	0.520	0.520	0.520	0.505	0.50
AUC	0.579	0.579	0.579	0.582	0.58



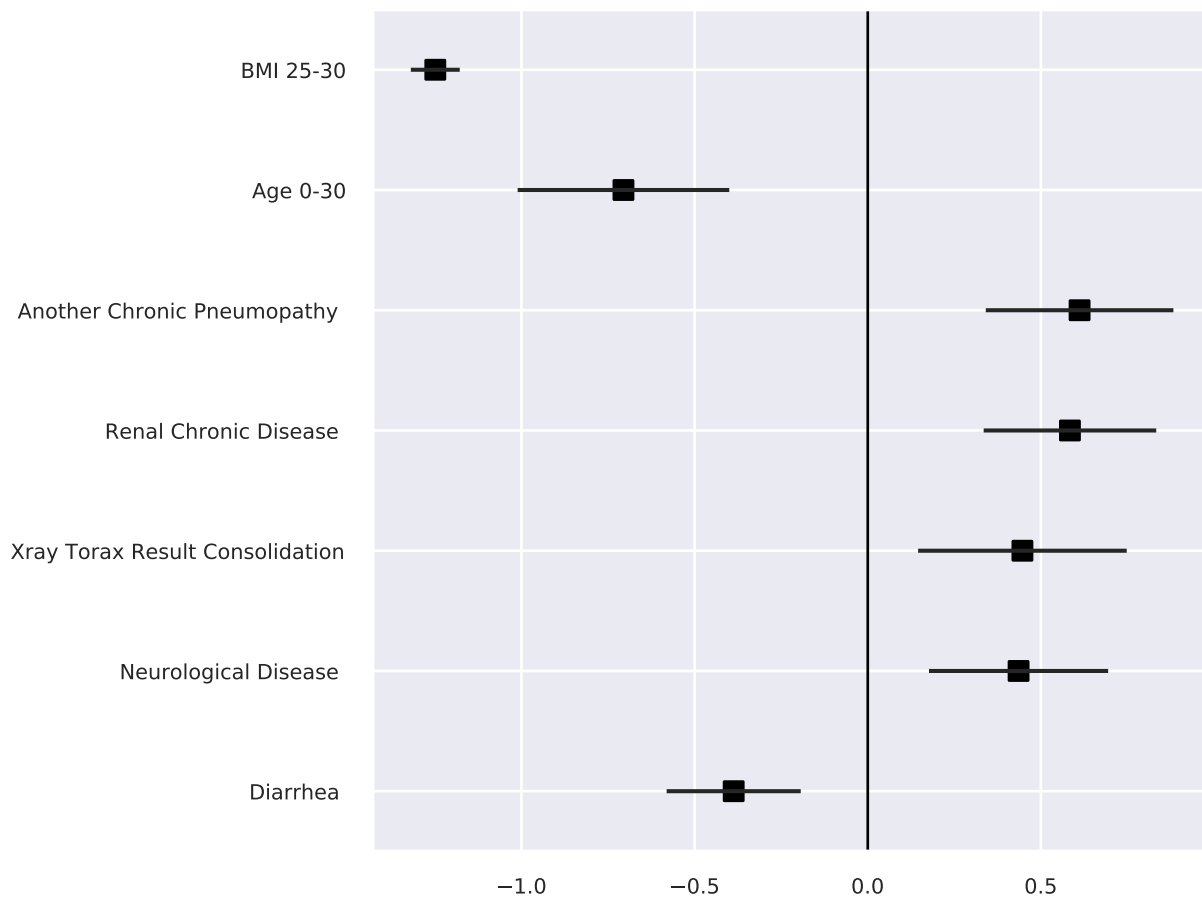
Coefficients:

	SVM-l1	LR-l1
BMI 40-100	-0.148	-0.185
Diarrhea	-0.103	-0.236
Schooling Elem 1-5	-0.163	-0.380
Xray Torax Result Consolidation	0.231	0.478
Age 0-30	-0.210	-0.502
Another Chronic Pneumopathy	0.244	0.506
BMI 30-40	-0.315	-0.582
Renal Chronic Disease	0.290	0.600
BMI 25-30	-0.303	-0.613
Contracted At Hospital	0.310	0.642

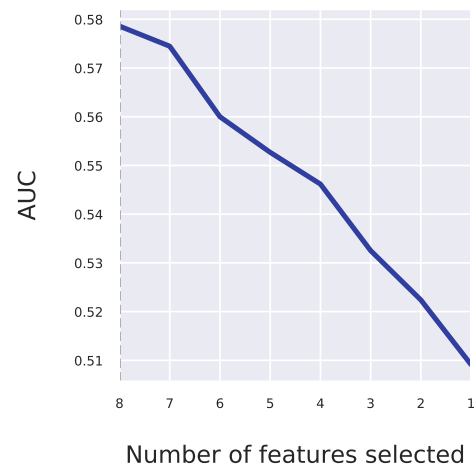


2.7 Ventilator

SVM-l1	Coef LR-l1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.705	-1.011	-0.400	0.494	0.364	0.670	0.232	0.129	0.001	0.000
-0.188	-0.647									
Another Chronic Pneumopathy	0.612	0.341	0.882	1.843	1.406	2.417	0.220	0.363	0.000	0.000
0.256	0.620									
BMI 25-30	-1.249	-1.319	-1.178	0.287	0.267	0.308	0.351	0.222	0.004	0.000
-0.274	-0.672									
Diarrhea	-0.387	-0.581	-0.194	0.679	0.559	0.824	0.235	0.169	0.003	0.000
-0.110	-0.347									
Neurological Disease	0.435	0.177	0.694	1.546	1.193	2.002	0.222	0.314	0.017	0.001
0.168	0.424									
Renal Chronic Disease	0.584	0.335	0.833	1.793	1.397	2.300	0.220	0.343	0.000	0.000
0.234	0.582									
Vomiting	-0.316	-0.567	-0.065	0.729	0.567	0.937	0.231	0.167	0.046	0.014
-0.088	-0.276									
Xray Torax Result Consolidation	0.447	0.145	0.748	1.563	1.157	2.112	0.223	0.319	0.043	0.004
0.178	0.446									



Recursive Feature Elimination:

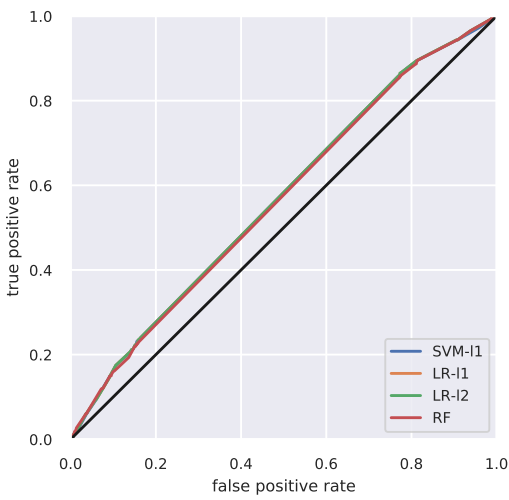
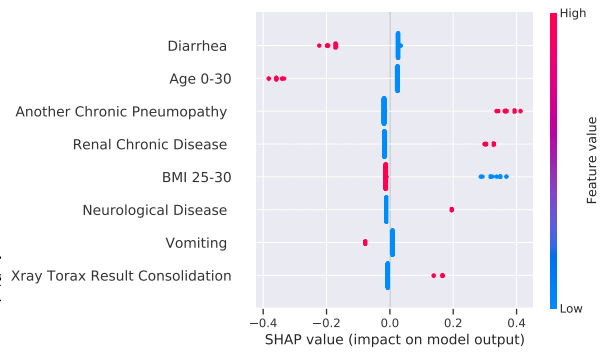


Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.755	0.756	0.755	0.758	0.75
F1w	0.654	0.653	0.654	0.654	0.65
AUC	0.568	0.568	0.568	0.564	0.568

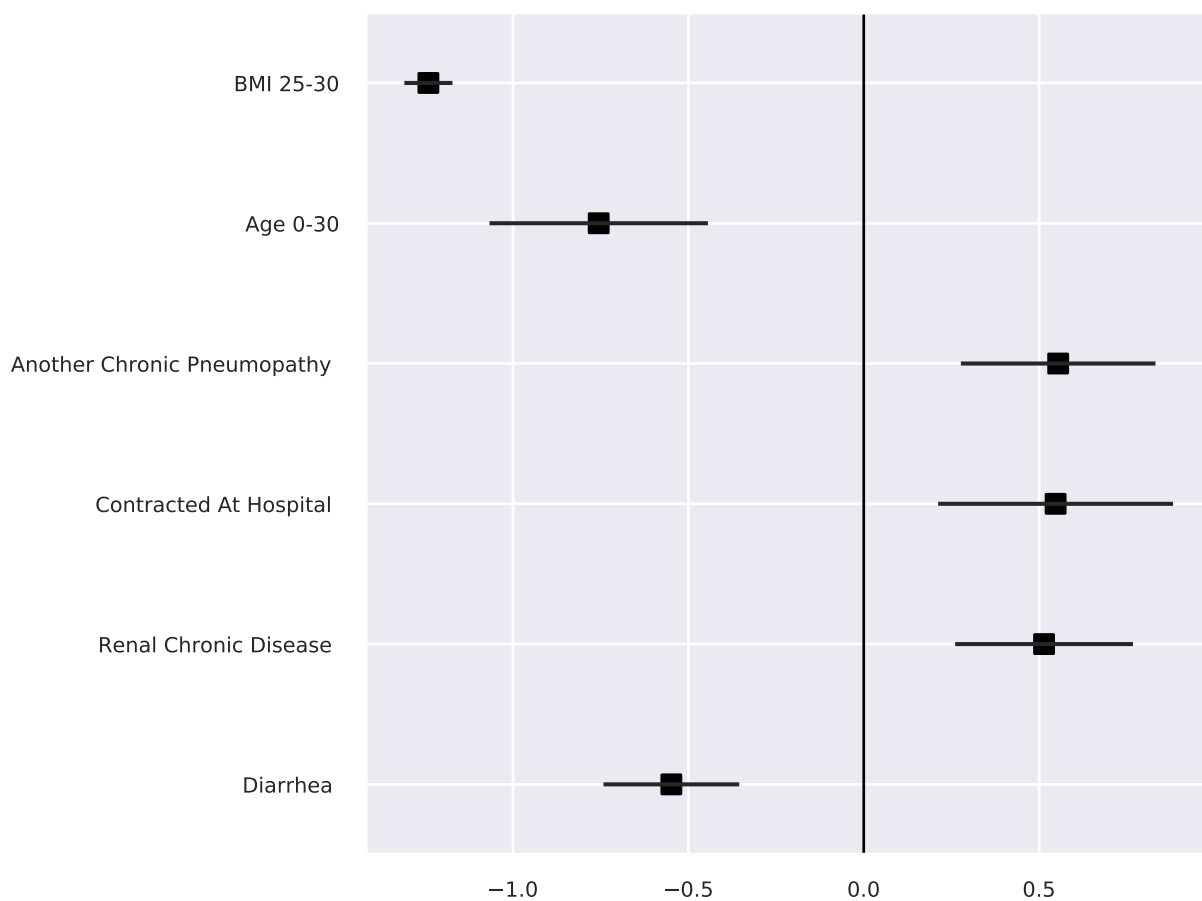
Coefficients:

	SVM-l1	LR-l1
Vomiting	-0.088	-0.276
Diarrhea	-0.110	-0.347
Neurological Disease	0.168	0.424
Xray Torax Result Consolidation	0.178	0.446
Renal Chronic Disease	0.234	0.582
Another Chronic Pneumopathy	0.256	0.620
Age 0-30	-0.188	-0.647
BMI 25-30	-0.274	-0.672



2.8 Ventilator small

SVM-l1	Coef LR-l1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.756	-1.067	-0.444	0.470	0.344	0.641	0.232	0.125	0.000	0.000
-0.203	-0.707									
Another Chronic Pneumopathy	0.554	0.277	0.832	1.741	1.319	2.297	0.221	0.349	0.001	0.000
0.226	0.554									
BMI 25-30	-1.241	-1.310	-1.173	0.289	0.270	0.310	0.379	0.221	0.000	0.000
-0.312	-0.751									
Contracted At Hospital	0.547	0.212	0.882	1.728	1.236	2.416	0.223	0.335	0.029	0.001
0.212	0.524									
Diarrhea	-0.549	-0.742	-0.355	0.578	0.476	0.701	0.237	0.156	0.000	0.000
-0.157	-0.507									
Renal Chronic Disease	0.514	0.261	0.768	1.672	1.298	2.155	0.220	0.337	0.001	0.000
0.207	0.519									
Xray Torax Result Consolidation	0.461	0.163	0.759	1.586	1.177	2.136	0.222	0.322	0.029	0.002
0.187	0.469									

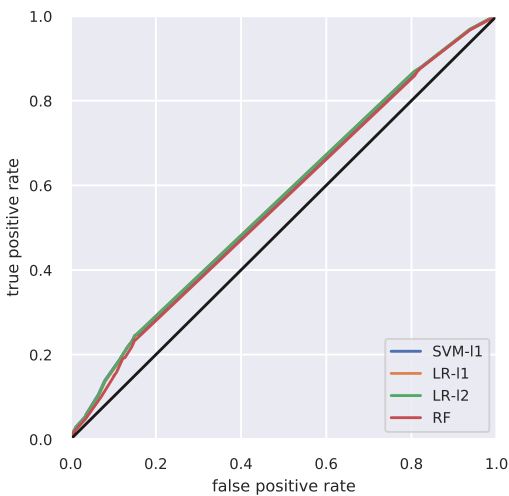


Recursive Feature Elimination:



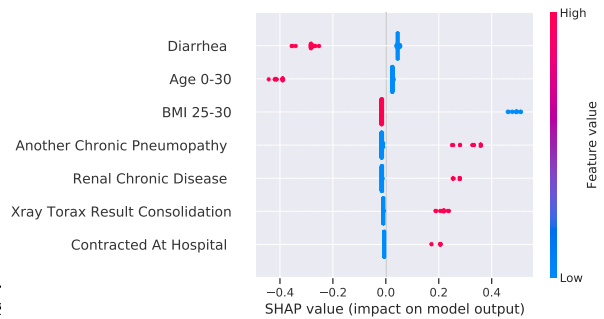
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.755	0.754	0.754	0.755	0.755
F1w	0.654	0.651	0.651	0.649	0.649
AUC	0.563	0.565	0.565	0.556	0.560



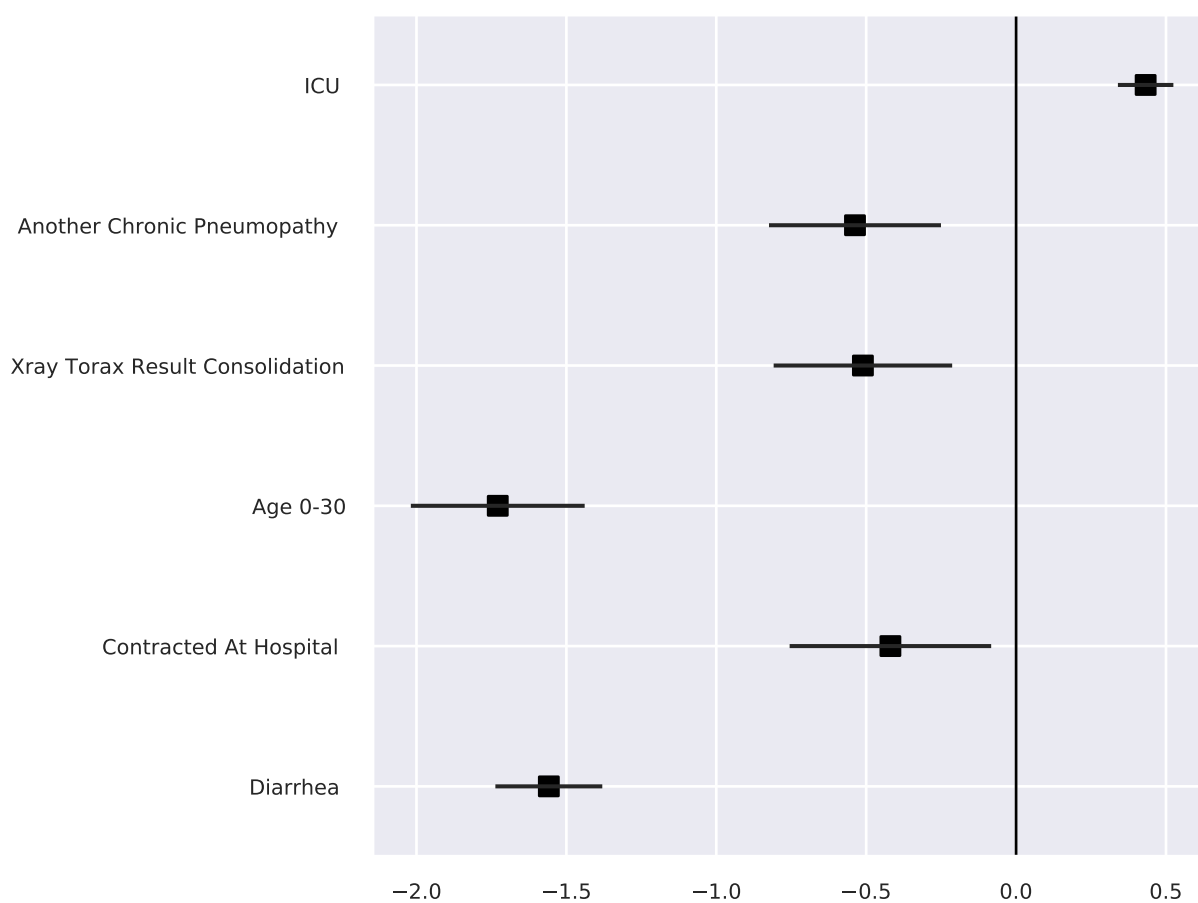
Coefficients:

	SVM-l1	LR-l1
Xray Torax Result Consolidation	0.187	0.469
Diarrhea	-0.157	-0.507
Renal Chronic Disease	0.207	0.519
Contracted At Hospital	0.212	0.524
Another Chronic Pneumopathy	0.226	0.554
Age 0-30	-0.203	-0.707
BMI 25-30	-0.312	-0.751

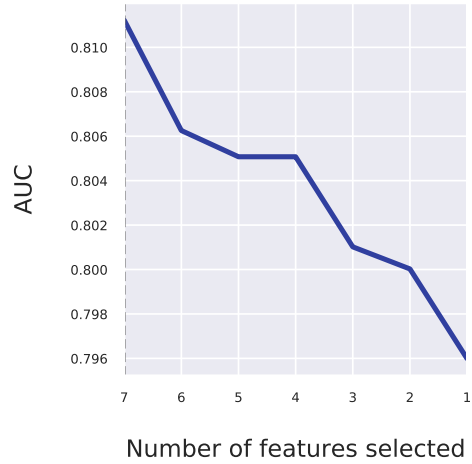


2.9 Ventilator with ICU

SVM-l1	Coef LR-l1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-1.729	-2.019	-1.439	0.177	0.133	0.237	0.231	0.141	0.005	0.000
-0.091	-0.403									
Another Chronic Pneumopathy	-0.537	-0.824	-0.251	0.584	0.439	0.778	0.221	0.361	0.000	0.000
0.170	0.541									
Contracted At Hospital	-0.419	-0.755	-0.083	0.658	0.470	0.920	0.222	0.353	0.006	0.015
0.096	0.272									
Diarrhea	-1.559	-1.737	-1.380	0.210	0.176	0.252	0.233	0.175	0.013	0.000
-0.063	-0.257									
ICU	0.432	0.340	0.525	1.540	1.404	1.690	0.067	0.524	0.000	0.000
0.899	2.689									
Renal Chronic Disease	-0.574	-0.825	-0.323	0.563	0.438	0.724	0.219	0.349	0.000	0.000
0.080	0.236									
Xray Torax Result Consolidation	-0.511	-0.809	-0.213	0.600	0.445	0.808	0.221	0.351	0.002	0.001
0.143	0.447									

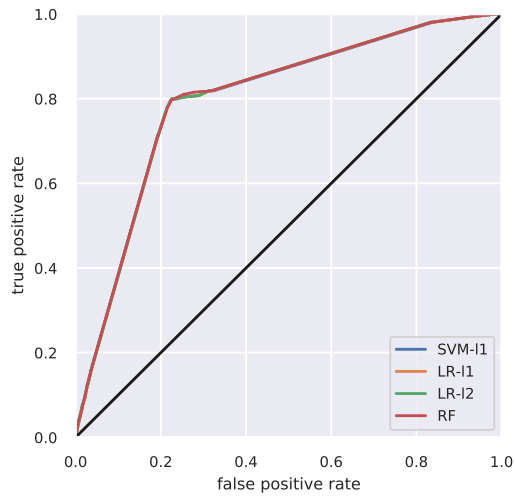


Recursive Feature Elimination:



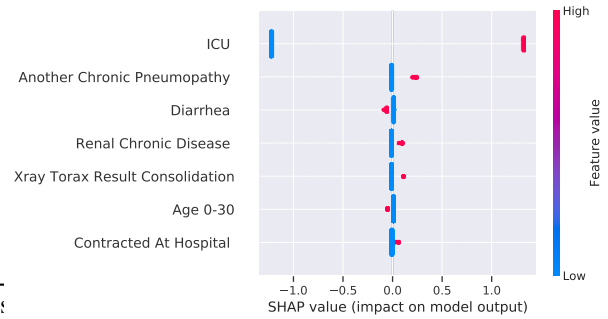
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.784	0.783	0.783	0.762	0.784
F1w	0.792	0.792	0.792	0.695	0.793
AUC	0.799	0.799	0.799	0.800	0.798



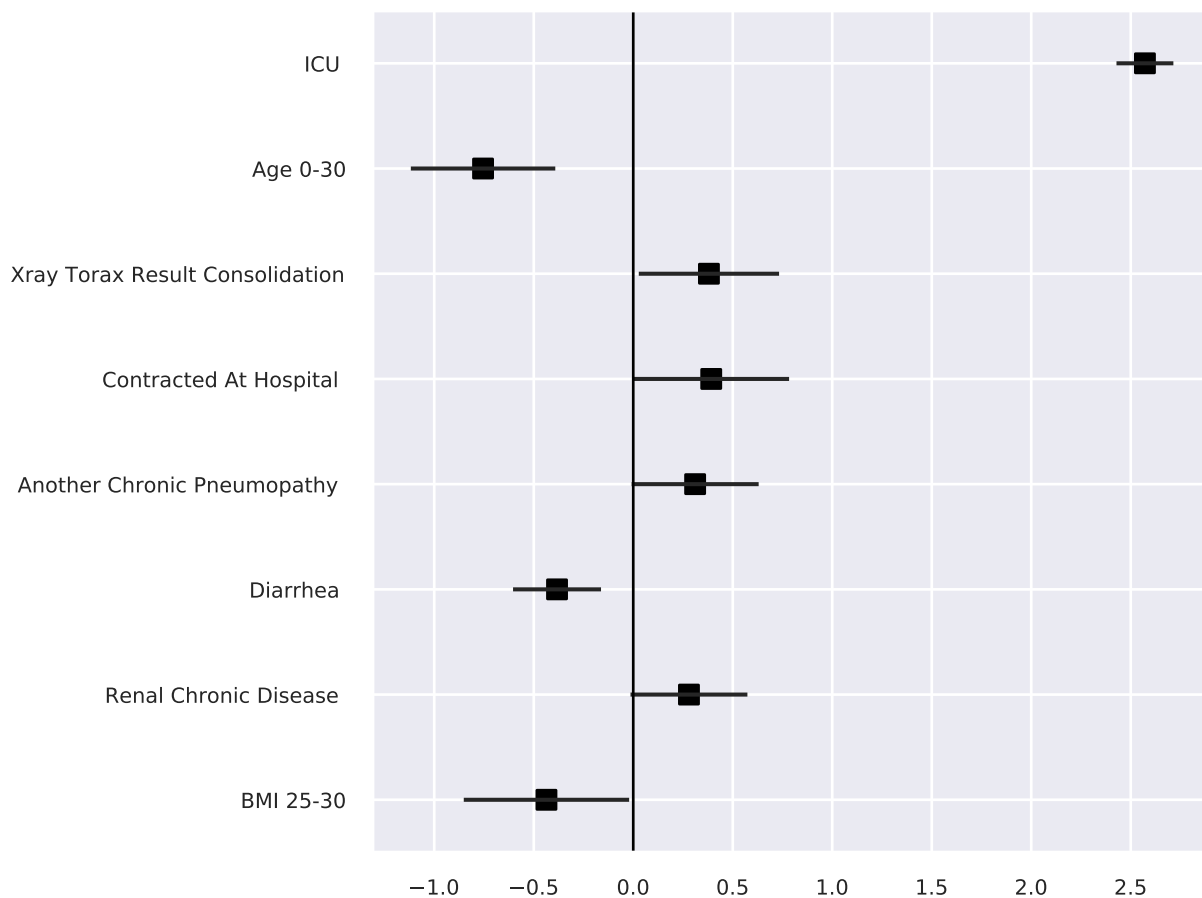
Coefficients:

	SVM-l1	LR-l1
Renal Chronic Disease	0.080	0.236
Diarrhea	-0.063	-0.257
Contracted At Hospital	0.096	0.272
Age 0-30	-0.091	-0.403
Xray Torax Result Consolidation	0.143	0.447
Another Chronic Pneumopathy	0.170	0.541
ICU	0.899	2.689

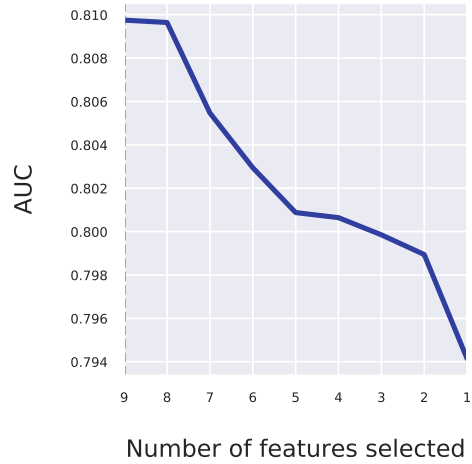


2.10 Ventilator with ICU small

SVM-l1	Coef LR-l1	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.755	-1.118	-0.392	0.470	0.327	0.676	0.236	0.115	0.000	0.000
-0.128	-0.603									
Another Chronic Pneumopathy	0.311	-0.008	0.630	1.365	0.992	1.878	0.224	0.346	0.002	0.056
0.106	0.322									
BMI 25-30	-0.436	-0.852	-0.021	0.647	0.427	0.980	0.358	0.225	0.002	0.040
-0.083	-0.250									
BMI 30-40	-2.066	-2.489	-1.643	0.127	0.083	0.193	0.397	0.227	0.027	0.000
-0.029	-0.024									
Contracted At Hospital	0.392	0.001	0.783	1.480	1.001	2.188	0.225	0.366	0.003	0.050
0.122	0.354									
Diarrhea	-0.383	-0.604	-0.162	0.682	0.547	0.850	0.238	0.167	0.001	0.001
-0.076	-0.310									
ICU	2.571	2.428	2.714	13.083	11.340	15.094	0.070	0.528	0.000	0.000
0.897	2.650									
Renal Chronic Disease	0.280	-0.014	0.574	1.323	0.986	1.775	0.223	0.349	0.000	0.062
0.096	0.294									
Xray Torax Result Consolidation	0.380	0.028	0.733	1.463	1.028	2.081	0.225	0.351	0.003	0.034
0.132	0.404									

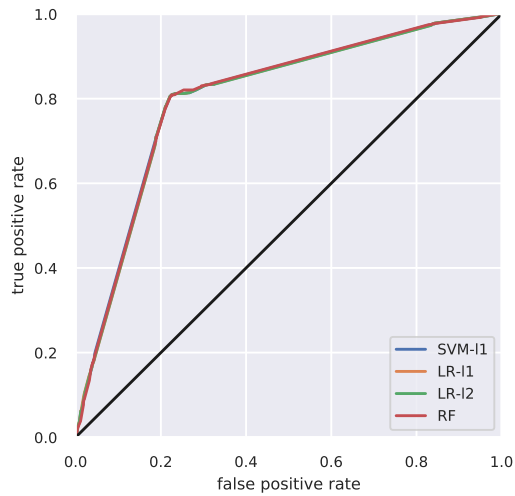


Recursive Feature Elimination:



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.787	0.786	0.786	0.774	0.78
F1w	0.796	0.795	0.795	0.724	0.79
AUC	0.805	0.802	0.802	0.804	0.80



Coefficients:

	SVM-l1	LR-l1
BMI 30-40	-0.029	-0.024
BMI 25-30	-0.083	-0.250
Renal Chronic Disease	0.096	0.294
Diarrhea	-0.076	-0.310
Another Chronic Pneumopathy	0.106	0.322
Contracted At Hospital	0.122	0.354
Xray Torax Result Consolidation	0.132	0.404
Age 0-30	-0.128	-0.603
ICU	0.897	2.650

