
PRELIMINARY RESULTS FOR BRAZIL COVID-19 DATASET

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1 Basic Analytics

	0
N	13899
N_Hosp	12645
N_Death	4746
Female	5998
Male	7898
Race	3897
Schooling	1071
Acute Respiratory Distress Syndrome	3472
Contracted At Hospital	355
Contact Birds Pigs	109
Fever	10155
Cough	10570
Throat	2953
Dyspnea	9630
Respiratory Discomfort	8002
SpO2 less 95\%	7568
Diarrhea	1935
Vomiting	1093
Other Symptoms	4416
Postpartum	54
Cardiovascular Disease	4309
Hematologic Disease	116
Down Syndrome	41
Liver Chronic Disease	114
Asthma	393
Diabetes	3321
Neurological Disease	571
Another Chronic Pneumopathy	499
Immunosuppression	426
Renal Chronic Disease	563
Obesity	497
Other Risks	3366
Antiviral Use	4517
Hospitalization	12645
ICU	4152
Ventilator	2506
Xray Torax Result	379
Result Final	0
Evolution	5286
Public Hospital	4631

Table 1: Number of observations with a specific observation

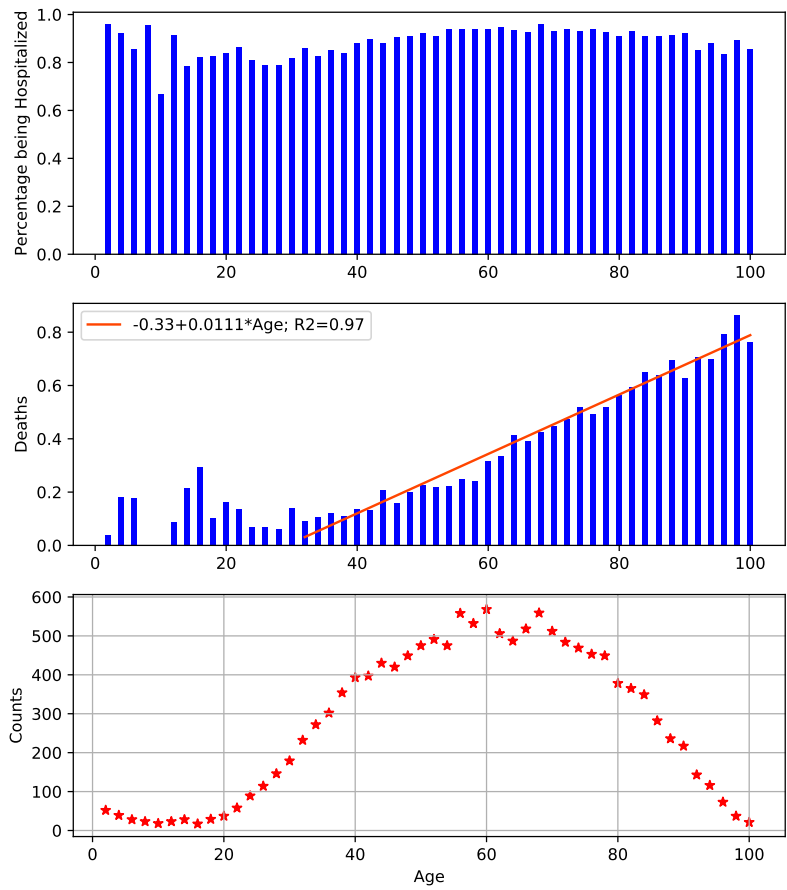


Figure 1: Distribution of hospitalization and deaths by age group

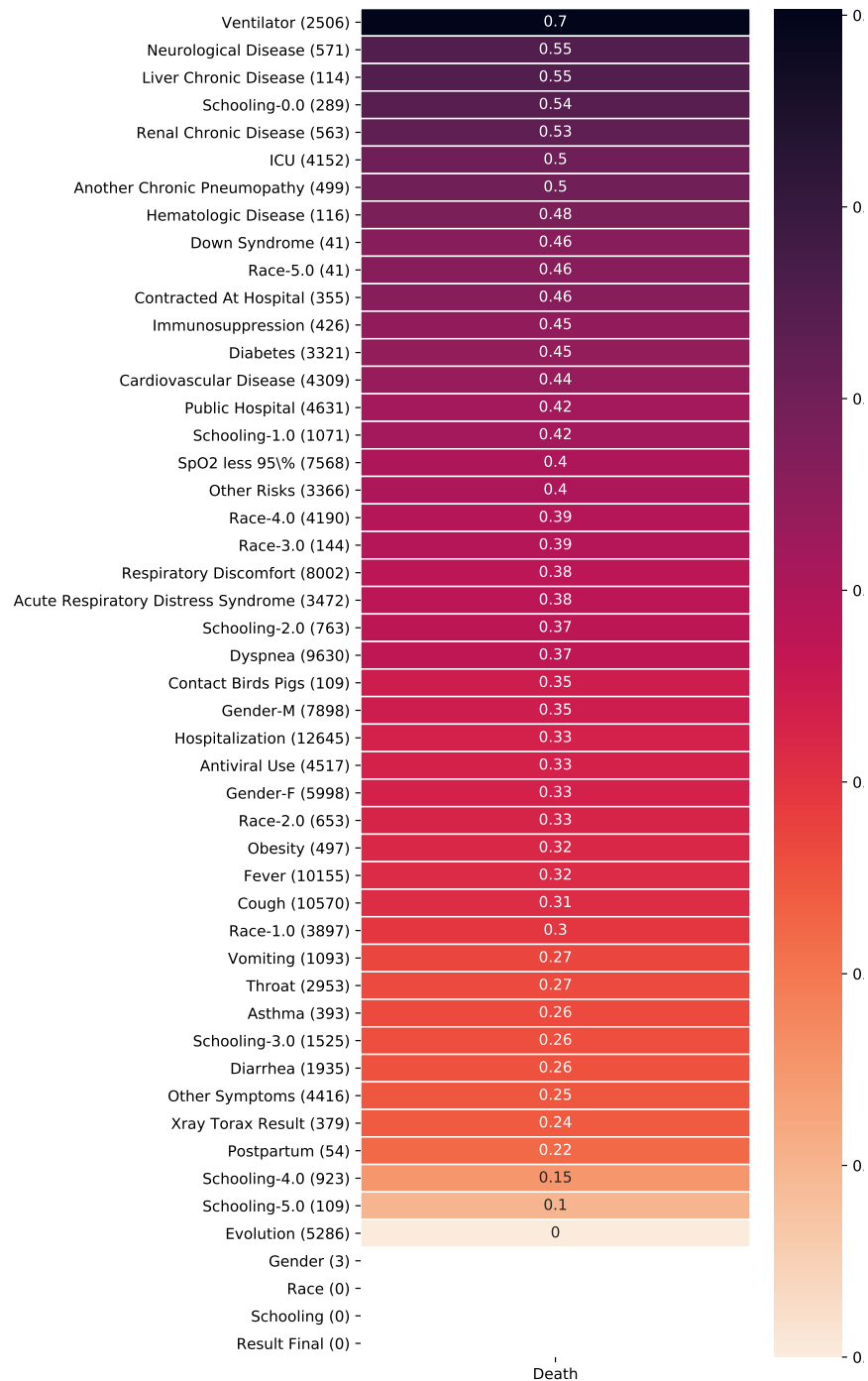


Figure 2: Share of hospitalized and deaths patients given characteristics

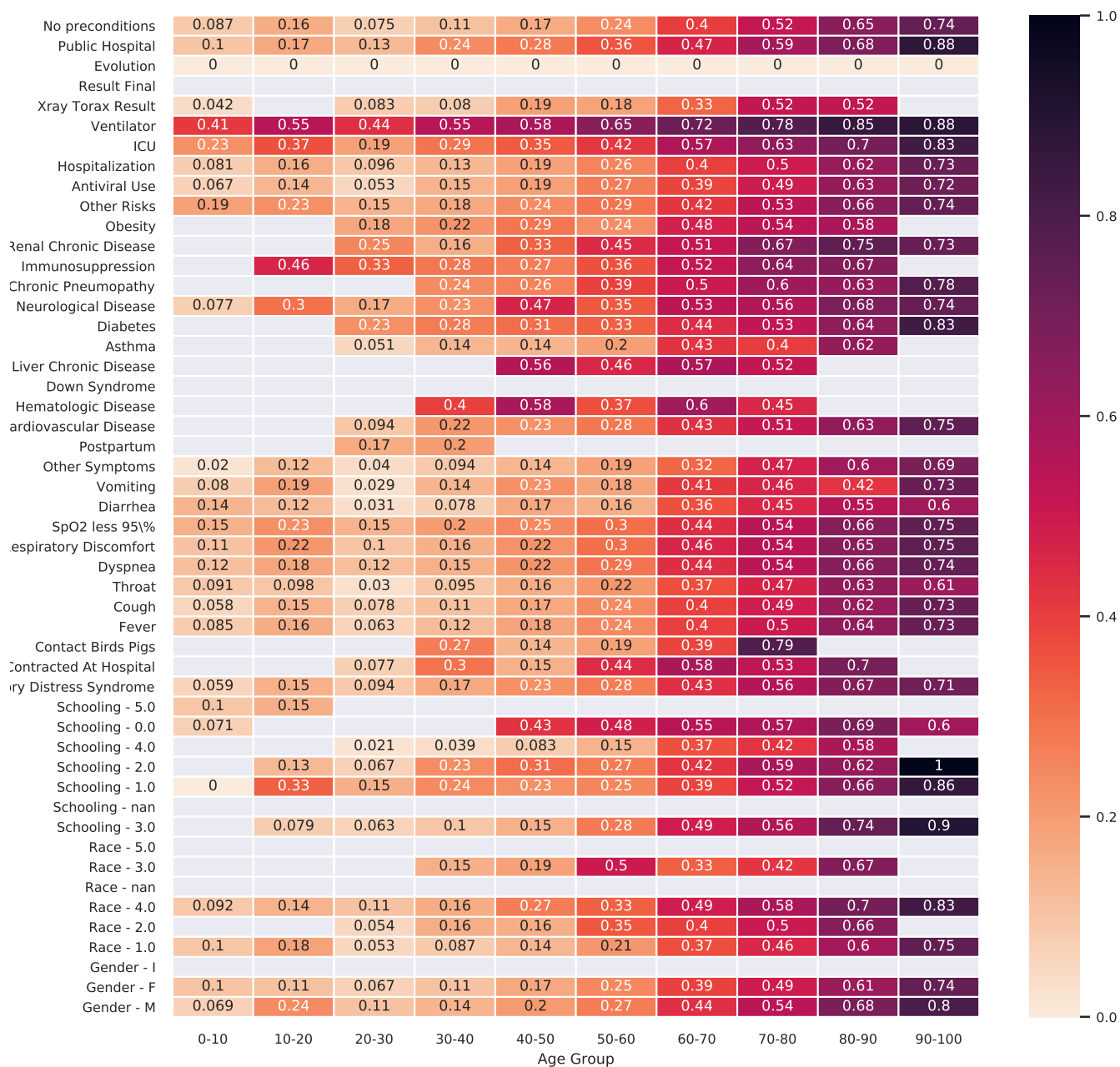
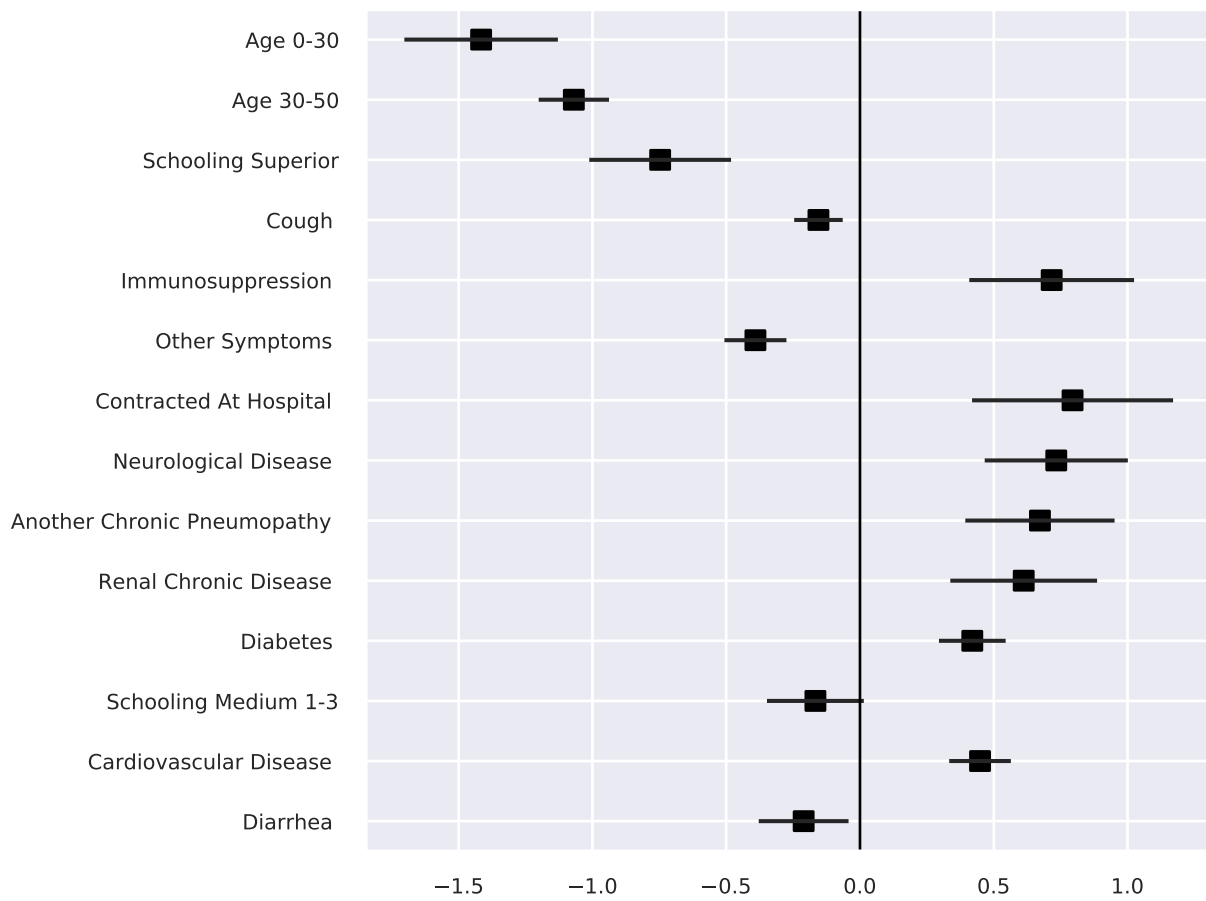


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

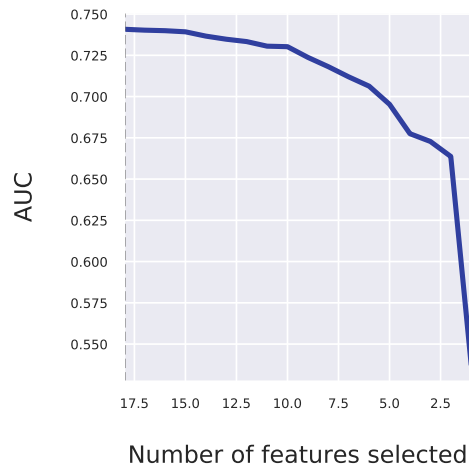
2 Results

2.1 Mortality (previous)

SVM-II	Coef LR-II	2.5	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-1.416	-1.703	-1.129	0.243	0.182	0.323	0.486	0.160	0.000	0.000
0.514	0.189									
Age 30-50	-1.069	-1.201	-0.938	0.343	0.301	0.391	0.555	0.226	0.000	0.000
0.576	0.275									
Another Chronic Pneumopathy	0.673	0.394	0.952	1.959	1.482	2.590	0.458	0.669	0.000	0.000
1.246	1.692									
Asthma	-0.219	-0.564	0.127	0.804	0.569	1.135	0.469	0.364	0.044	0.215
0.884	0.755									
Cardiovascular Disease	0.449	0.334	0.564	1.566	1.396	1.758	0.409	0.582	0.000	0.000
1.125	1.314									
Contracted At Hospital	0.795	0.419	1.170	2.214	1.520	3.223	0.461	0.673	0.000	0.000
1.253	1.799									
Cough	-0.155	-0.246	-0.065	0.856	0.782	0.938	0.604	0.428	0.000	0.001
0.732	0.475									
Diabetes	0.420	0.295	0.544	1.522	1.343	1.724	0.427	0.583	0.000	0.000
1.132	1.329									
Diarrhea	-0.210	-0.378	-0.043	0.810	0.685	0.958	0.482	0.366	0.000	0.014
0.896	0.765									
Immunosuppression	0.717	0.409	1.025	2.047	1.505	2.786	0.462	0.604	0.000	0.000
1.279	1.813									
Liver Chronic Disease	0.462	-0.168	1.092	1.587	0.845	2.979	0.465	0.654	0.044	0.151
1.135	1.271									
Neurological Disease	0.734	0.466	1.001	2.083	1.594	2.722	0.456	0.695	0.000	0.000
1.261	1.718									
Other Symptoms	-0.391	-0.507	-0.275	0.677	0.603	0.760	0.514	0.358	0.000	0.000
0.783	0.555									
Renal Chronic Disease	0.612	0.338	0.886	1.844	1.402	2.426	0.457	0.675	0.000	0.000
1.223	1.627									
Schooling Elem 1-5	0.283	0.085	0.481	1.327	1.089	1.617	0.458	0.565	0.000	0.005
1.061	1.142									
Schooling Medium 1-3	-0.167	-0.347	0.014	0.847	0.706	1.015	0.482	0.341	0.000	0.071
0.889	0.756									
Schooling Superior	-0.747	-1.012	-0.482	0.474	0.364	0.618	0.481	0.233	0.000	0.000
0.719	0.426									
Vomiting	-0.078	-0.292	0.136	0.925	0.747	1.146	0.475	0.370	0.000	0.476
0.945	0.875									

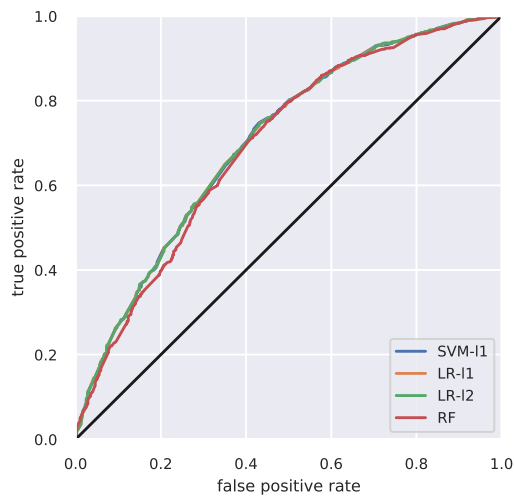


Recursive Feature Elimination:



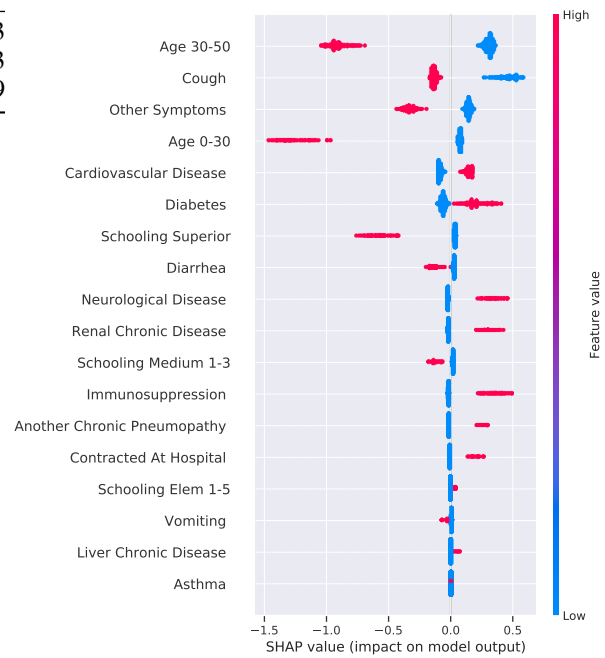
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.647	0.647	0.648	0.638	0.63
F1w	0.647	0.647	0.648	0.638	0.63
AUC	0.704	0.704	0.704	0.695	0.69



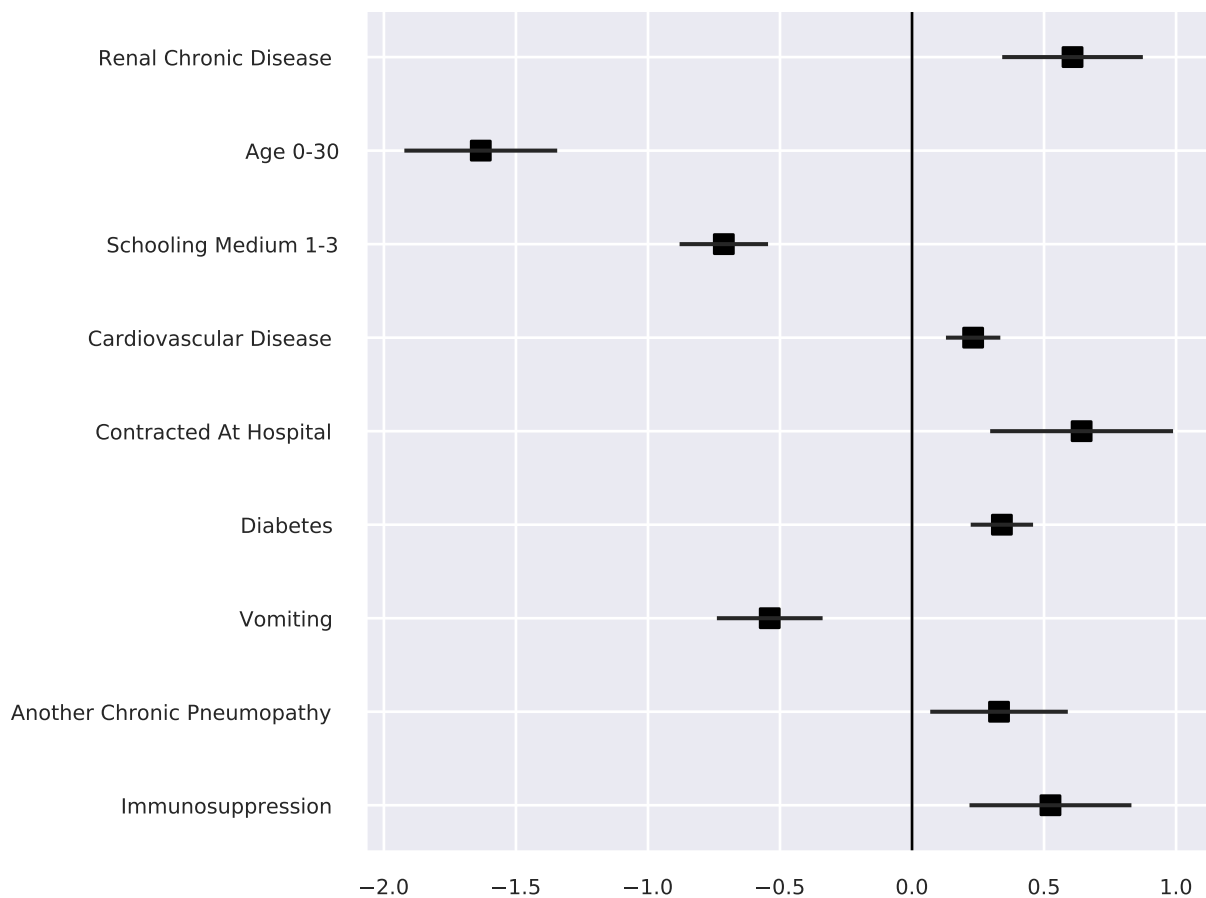
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.514	0.189
Age 30-50	0.576	0.275
Schooling Superior	0.719	0.426
Cough	0.732	0.475
Other Symptoms	0.783	0.555
Asthma	0.884	0.755
Schooling Medium 1-3	0.889	0.756
Diarrhea	0.896	0.765
Vomiting	0.945	0.875
Schooling Elem 1-5	1.061	1.142
Liver Chronic Disease	1.135	1.271
Cardiovascular Disease	1.125	1.314
Diabetes	1.132	1.329
Renal Chronic Disease	1.223	1.627
Another Chronic Pneumopathy	1.246	1.692
Neurological Disease	1.261	1.718
Contracted At Hospital	1.253	1.799
Immunosuppression	1.279	1.813

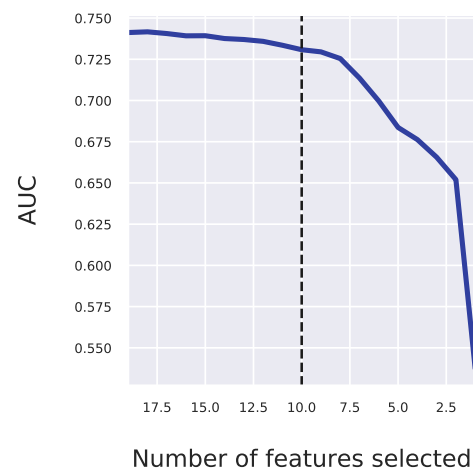


2.2 Mortality (previous) small

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	-1.633	-1.923	-1.344	0.195	0.146	0.261	0.484	0.149	0.0	0.000
0.584	0.243									
Another Chronic Pneumopathy	0.329	0.069	0.590	1.390	1.071	1.804	0.458	0.616	0.0	0.013
1.227	1.546									
Cardiovascular Disease	0.231	0.128	0.334	1.260	1.137	1.397	0.409	0.572	0.0	0.000
1.208	1.488									
Contracted At Hospital	0.642	0.296	0.989	1.901	1.344	2.687	0.459	0.652	0.0	0.000
1.367	2.018									
Diabetes	0.340	0.222	0.458	1.405	1.249	1.581	0.422	0.591	0.0	0.000
1.243	1.585									
Immunosuppression	0.524	0.218	0.831	1.689	1.243	2.295	0.460	0.611	0.0	0.001
1.322	1.851									
Renal Chronic Disease	0.608	0.342	0.874	1.836	1.407	2.397	0.454	0.692	0.0	0.000
1.343	1.934									
Schooling Medium 1-3	-0.713	-0.880	-0.545	0.490	0.415	0.580	0.479	0.342	0.0	0.000
0.776	0.574									
Schooling Superior	-1.309	-1.550	-1.068	0.270	0.212	0.344	0.480	0.229	0.0	0.000
0.612	0.320									
Vomiting	-0.539	-0.739	-0.339	0.583	0.478	0.713	0.473	0.363	0.0	0.000
0.826	0.660									

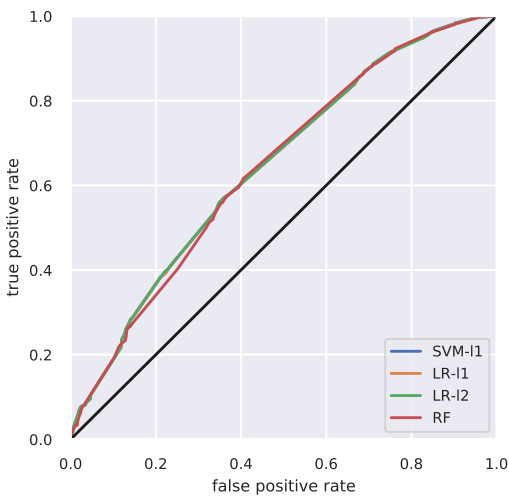


Recursive Feature Elimination:



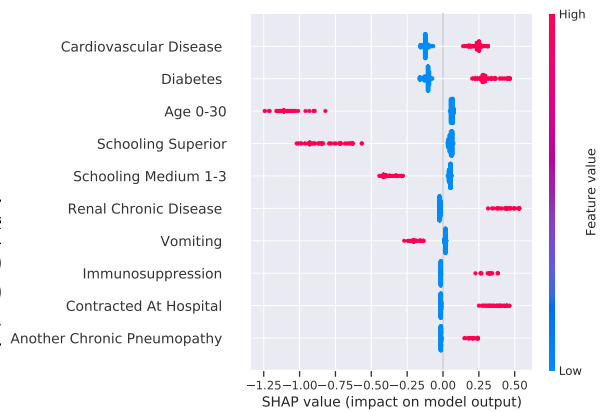
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.608	0.608	0.608	0.602	0.60
F1w	0.607	0.607	0.607	0.600	0.60
AUC	0.645	0.645	0.645	0.643	0.64



Coefficients:

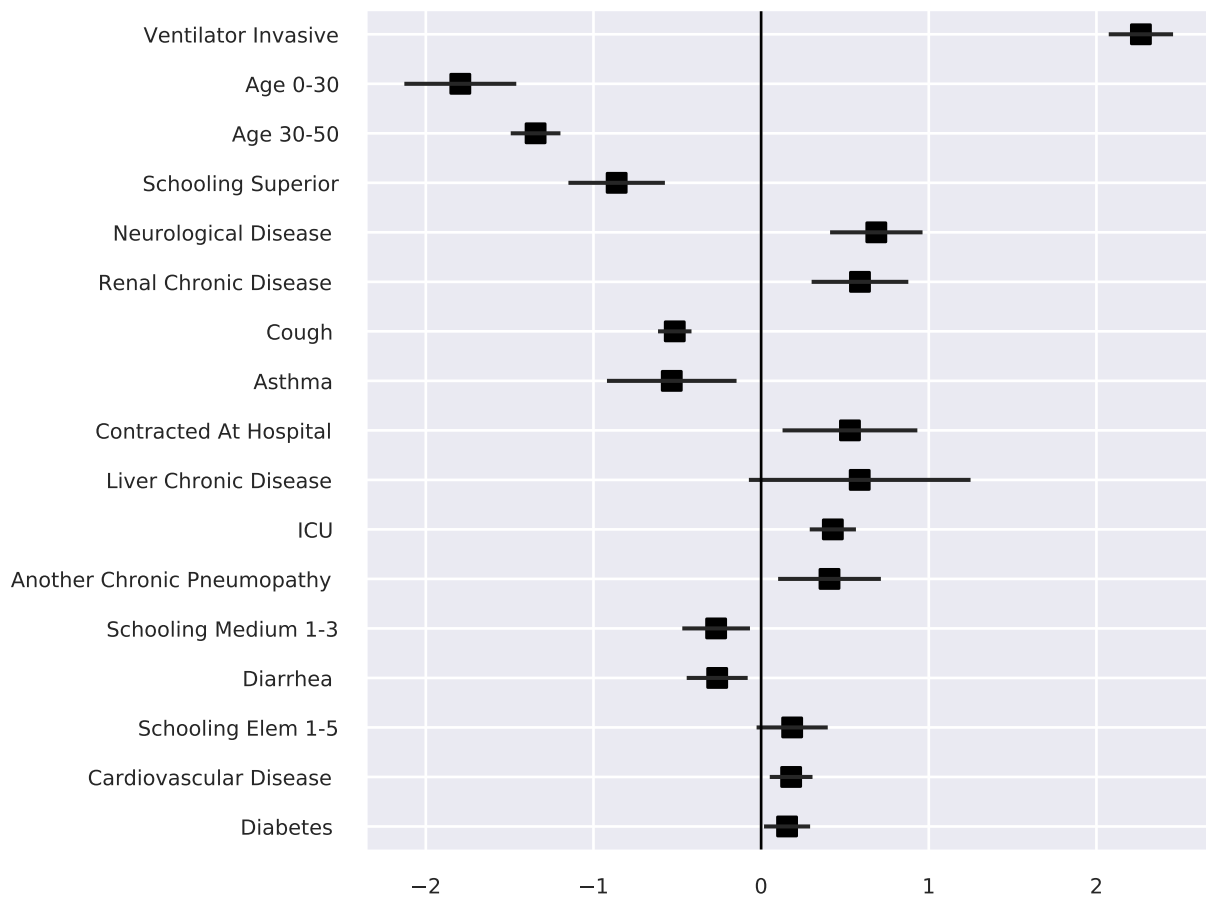
	SVM-l1	LR-l1
Age 0-30	0.584	0.243
Schooling Superior	0.612	0.320
Schooling Medium 1-3	0.776	0.574
Vomiting	0.826	0.660
Cardiovascular Disease	1.208	1.488
Another Chronic Pneumopathy	1.227	1.546
Diabetes	1.243	1.585
Immunosuppression	1.322	1.851
Renal Chronic Disease	1.343	1.934
Contracted At Hospital	1.367	2.018



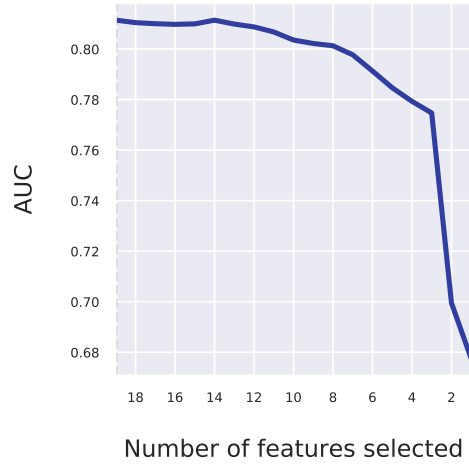
2.3 Mortality (advanced)

Include variables: Antiviral, ICU, 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	-1.794	-2.128	-1.460	0.166	0.119	0.232	0.480	0.156	0.000	0.000
0.553	0.168									
Age 30-50	-1.345	-1.493	-1.197	0.260	0.225	0.302	0.549	0.223	0.000	0.000
0.612	0.258									
Another Chronic Pneumopathy	0.408	0.101	0.714	1.504	1.107	2.043	0.452	0.672	0.000	0.009
1.173	1.465									
Asthma	-0.533	-0.919	-0.147	0.587	0.399	0.864	0.465	0.318	0.001	0.007
0.833	0.608									
Cardiovascular Disease	0.179	0.052	0.306	1.196	1.053	1.359	0.404	0.570	0.000	0.006
1.069	1.181									
Contracted At Hospital	0.530	0.128	0.932	1.699	1.136	2.539	0.455	0.659	0.000	0.010
1.208	1.622									
Cough	-0.515	-0.615	-0.415	0.597	0.541	0.660	0.595	0.423	0.000	0.000
0.808	0.576									
Diabetes	0.155	0.017	0.292	1.167	1.017	1.339	0.419	0.580	0.000	0.027
1.061	1.155									
Diarrhea	-0.262	-0.444	-0.080	0.769	0.642	0.923	0.476	0.366	0.000	0.005
0.910	0.770									
ICU	0.428	0.290	0.565	1.534	1.336	1.760	0.358	0.661	0.000	0.000
1.173	1.513									
Immunosuppression	0.163	-0.171	0.498	1.178	0.843	1.645	0.456	0.581	0.003	0.338
1.056	1.144									
Liver Chronic Disease	0.588	-0.073	1.249	1.800	0.930	3.487	0.458	0.689	0.003	0.081
1.221	1.616									
Neurological Disease	0.687	0.411	0.963	1.988	1.509	2.619	0.450	0.687	0.000	0.000
1.345	1.944									
Renal Chronic Disease	0.590	0.301	0.878	1.803	1.351	2.406	0.449	0.692	0.000	0.000
1.259	1.765									
Schooling Elem 1-5	0.185	-0.027	0.397	1.203	0.973	1.488	0.452	0.564	0.000	0.087
1.074	1.181									
Schooling Medium 1-3	-0.268	-0.470	-0.067	0.765	0.625	0.936	0.475	0.348	0.000	0.009
0.908	0.765									
Schooling Superior	-0.862	-1.149	-0.574	0.422	0.317	0.563	0.475	0.240	0.000	0.000
0.756	0.428									
Ventilator Invasive	2.265	2.073	2.457	9.634	7.952	11.671	0.348	0.865	0.000	0.000
2.293	9.523									
Vomiting	-0.155	-0.387	0.077	0.856	0.679	1.080	0.469	0.370	0.000	0.190
0.943	0.860									

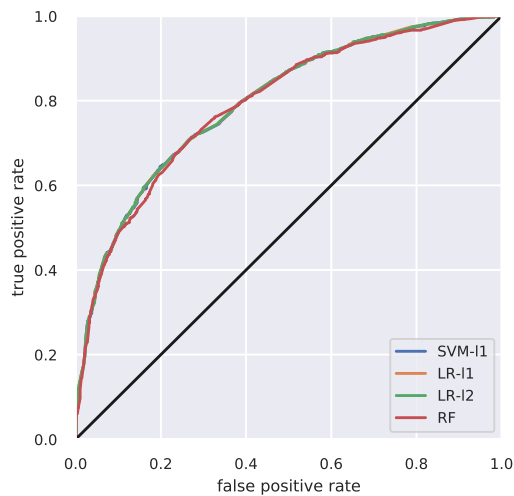


Recursive Feature Elimination:



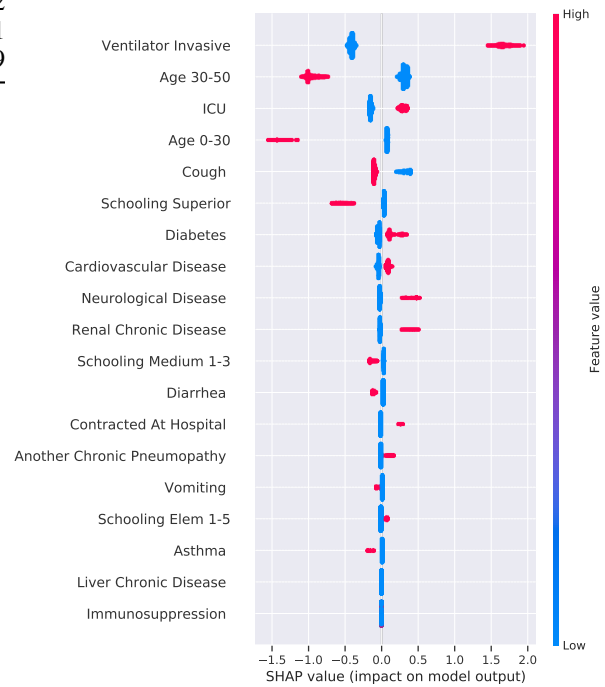
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.725	0.725	0.725	0.704	0.721
F1w	0.723	0.722	0.722	0.694	0.71
AUC	0.796	0.797	0.797	0.792	0.79



Coefficients:

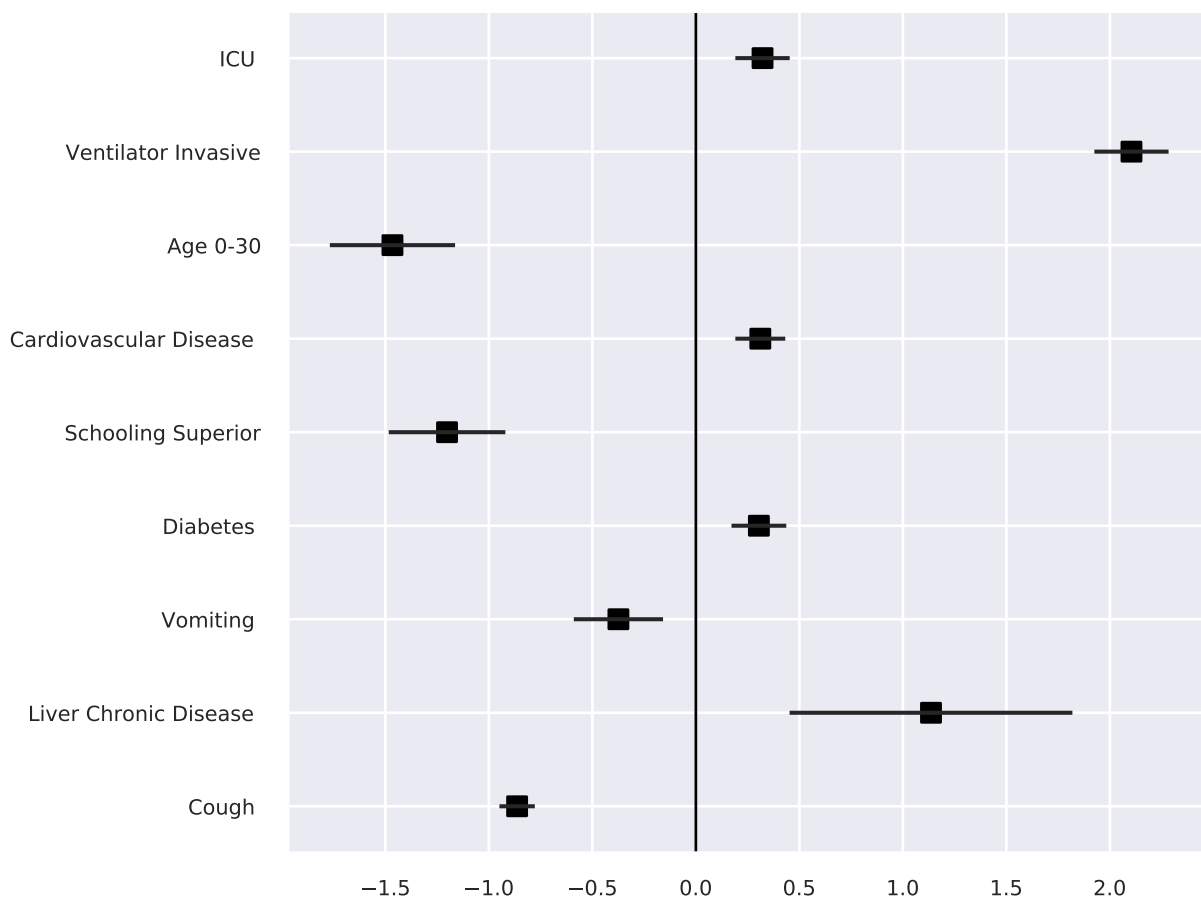
	SVM-l1	LR-l1
Age 0-30	0.553	0.168
Age 30-50	0.612	0.258
Schooling Superior	0.756	0.428
Cough	0.808	0.576
Asthma	0.833	0.608
Schooling Medium 1-3	0.908	0.765
Diarrhea	0.910	0.770
Vomiting	0.943	0.860
Immunosuppression	1.056	1.144
Diabetes	1.061	1.155
Schooling Elem 1-5	1.074	1.181
Cardiovascular Disease	1.069	1.181
Another Chronic Pneumopathy	1.173	1.465
ICU	1.173	1.513
Liver Chronic Disease	1.221	1.616
Contracted At Hospital	1.208	1.622
Renal Chronic Disease	1.259	1.765
Neurological Disease	1.345	1.944
Ventilator Invasive	2.293	9.523



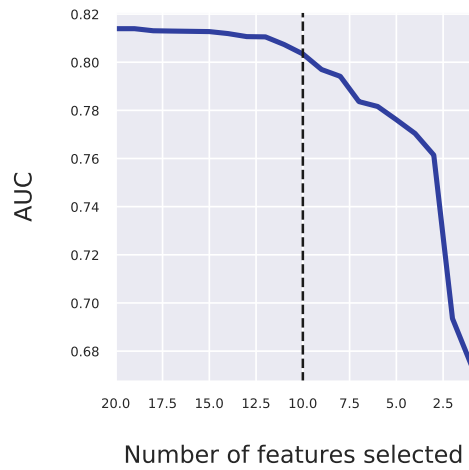
2.4 Mortality (advanced) small

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
Age 0-30	-1.466	-1.768	-1.163	0.231	0.171	0.312	0.476	0.171	0.0	0.000
0.651	0.269									
Cardiovascular Disease	0.311	0.191	0.432	1.365	1.210	1.540	0.403	0.566	0.0	0.000
1.170	1.471									
Contracted At Hospital	0.655	0.277	1.033	1.925	1.319	2.808	0.452	0.667	0.0	0.001
1.342	2.006									
Cough	-0.864	-0.949	-0.778	0.422	0.387	0.459	0.578	0.423	0.0	0.000
0.795	0.566									
Diabetes	0.304	0.172	0.437	1.356	1.188	1.548	0.418	0.574	0.0	0.000
1.159	1.429									
ICU	0.322	0.191	0.453	1.380	1.210	1.574	0.356	0.652	0.0	0.000
1.176	1.491									
Liver Chronic Disease	1.136	0.453	1.819	3.114	1.573	6.166	0.454	0.780	0.0	0.001
1.592	2.864									
Schooling Superior	-1.202	-1.484	-0.920	0.301	0.227	0.398	0.472	0.226	0.0	0.000
0.672	0.324									
Ventilator Invasive	2.104	1.925	2.284	8.202	6.856	9.812	0.347	0.852	0.0	0.000
2.332	8.284									
Vomiting	-0.374	-0.590	-0.159	0.688	0.554	0.853	0.465	0.363	0.0	0.001
0.892	0.741									



Recursive Feature Elimination:

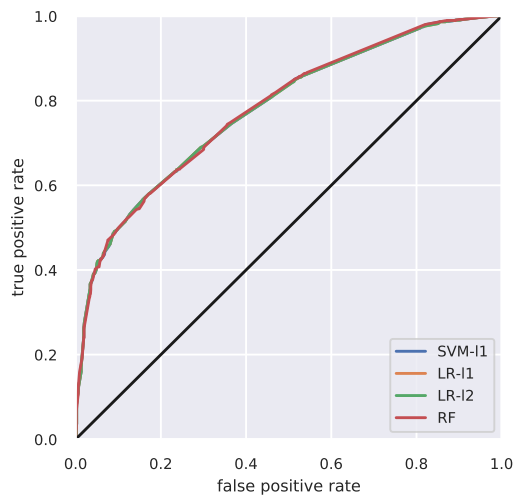
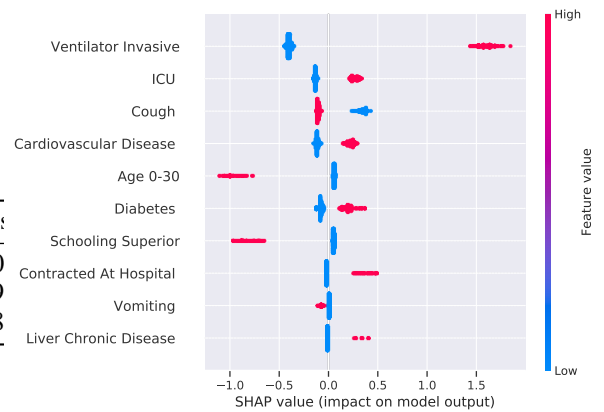


Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.706	0.708	0.708	0.705	0.70
F1w	0.694	0.698	0.698	0.688	0.69
AUC	0.780	0.780	0.780	0.781	0.78

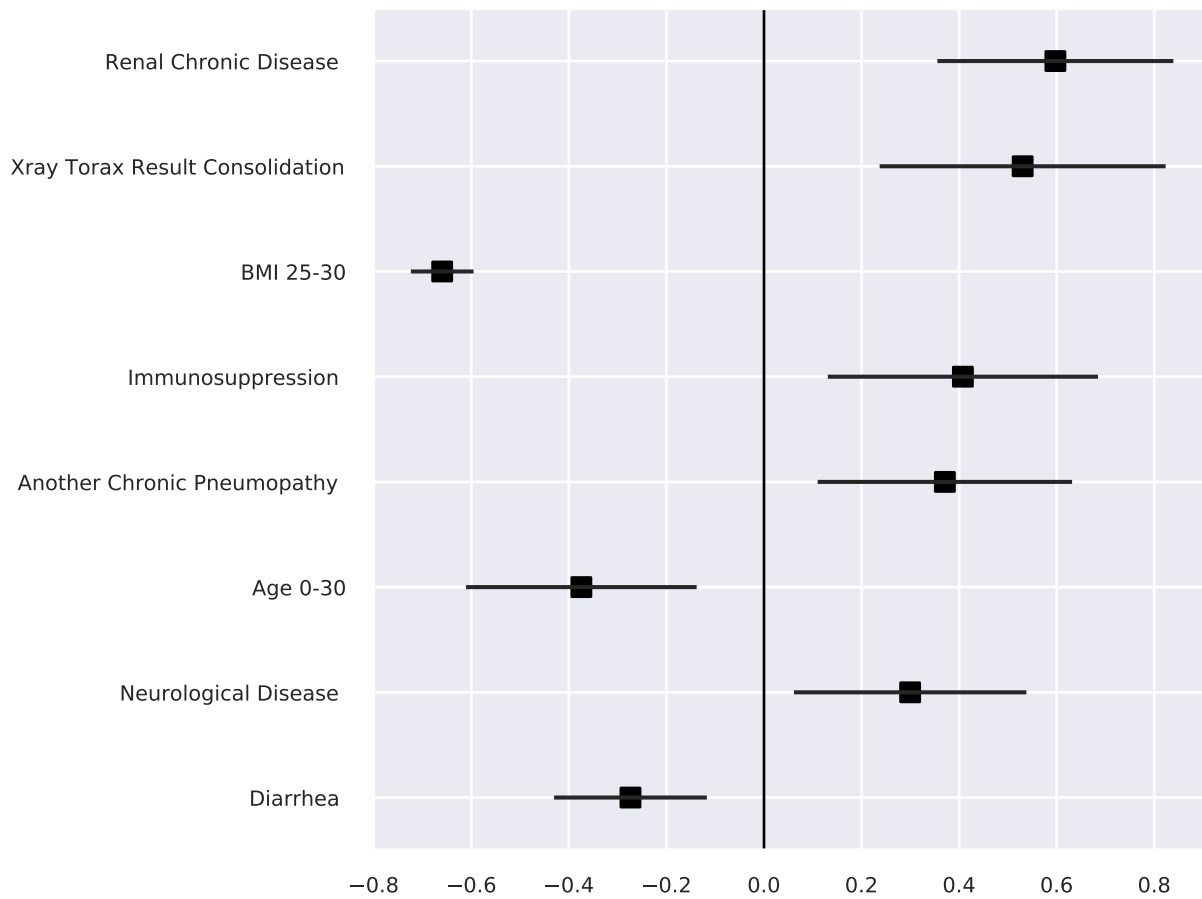
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.651	0.269
Schooling Superior	0.672	0.324
Cough	0.795	0.566
Vomiting	0.892	0.741
Diabetes	1.159	1.429
Cardiovascular Disease	1.170	1.471
ICU	1.176	1.491
Contracted At Hospital	1.342	2.006
Liver Chronic Disease	1.592	2.864
Ventilator Invasive	2.332	8.284

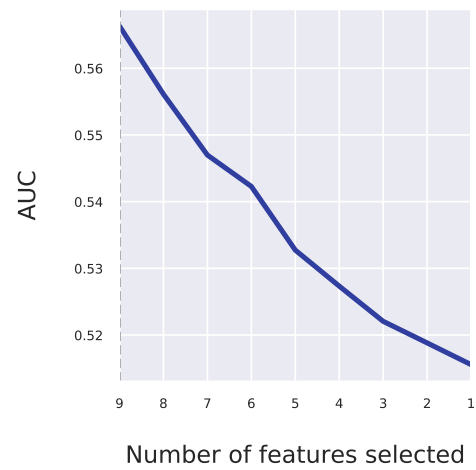


2.5 ICU

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	-0.374	-0.611	-0.138	0.688	0.543	0.871	0.350	0.265	0.010	0.002
0.861	0.703									
Another Chronic Pneumopathy	0.371	0.110	0.631	1.449	1.116	1.880	0.341	0.449	0.008	0.005
1.191	1.434									
BMI 25-30	-0.660	-0.724	-0.595	0.517	0.485	0.551	0.455	0.342	0.024	0.000
0.791	0.618									
Diarrhea	-0.274	-0.430	-0.117	0.761	0.650	0.889	0.354	0.292	0.006	0.001
0.893	0.771									
Immunosuppression	0.408	0.131	0.685	1.503	1.140	1.983	0.341	0.459	0.005	0.004
1.210	1.484									
Neurological Disease	0.300	0.061	0.538	1.349	1.063	1.712	0.341	0.428	0.025	0.014
1.149	1.335									
Renal Chronic Disease	0.597	0.355	0.839	1.817	1.427	2.314	0.338	0.504	0.000	0.000
1.331	1.802									
Schooling Medium 1-3	-0.263	-0.436	-0.089	0.769	0.647	0.915	0.352	0.290	0.015	0.003
0.898	0.780									
Xray Torax Result Consolidation	0.530	0.237	0.823	1.699	1.267	2.278	0.342	0.466	0.006	0.000
1.281	1.669									

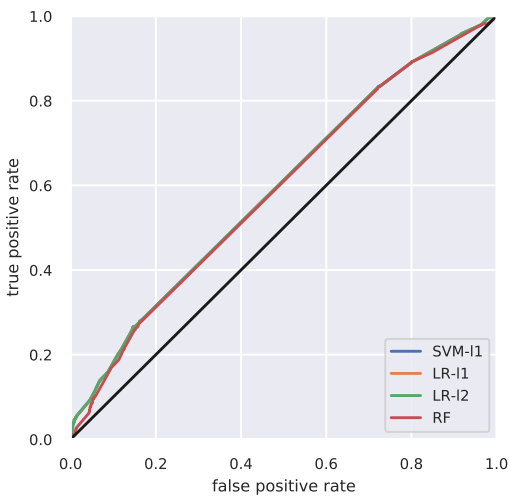


Recursive Feature Elimination:



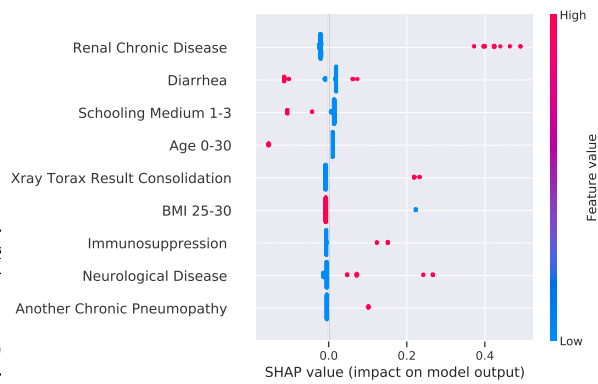
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.659	0.659	0.659	0.649	0.65
F1w	0.544	0.544	0.546	0.525	0.51
AUC	0.592	0.592	0.592	0.587	0.59



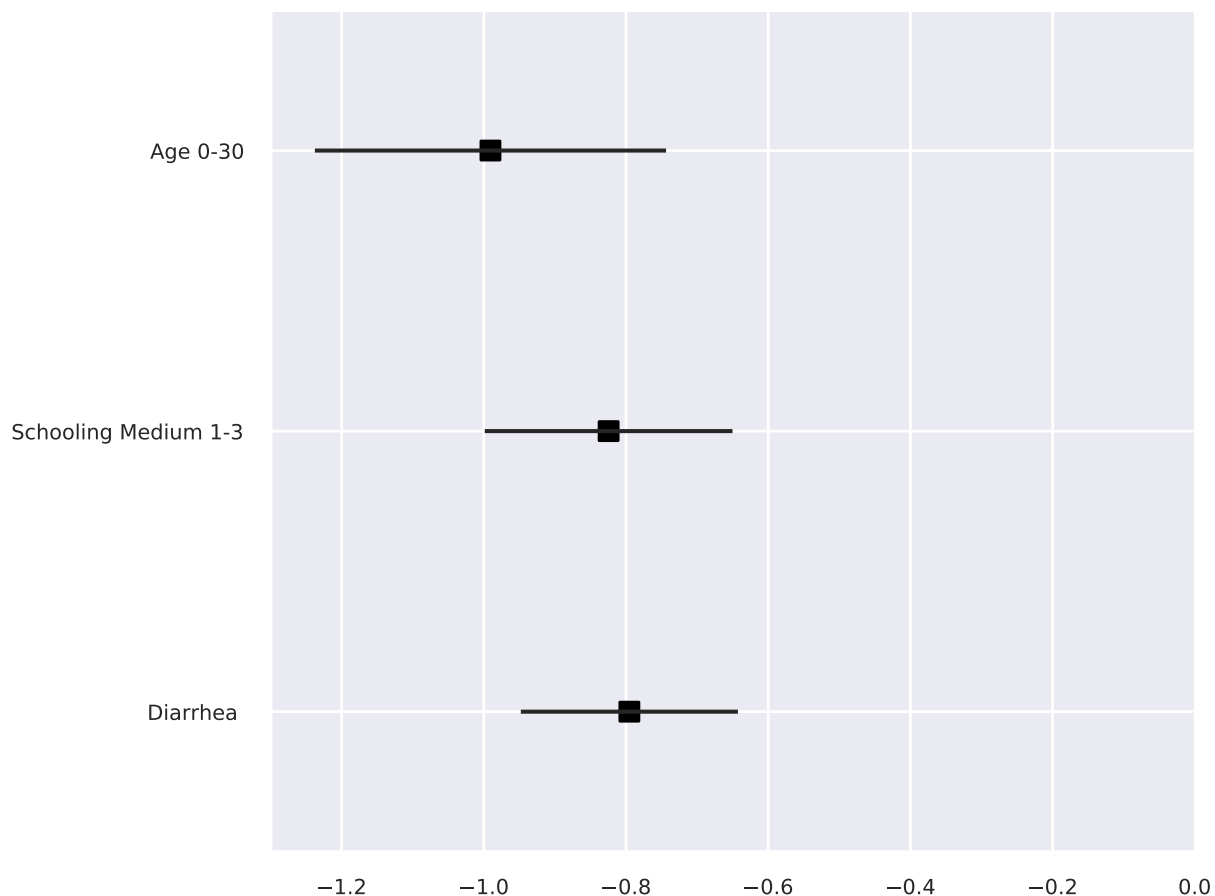
Coefficients:

	SVM-l1	LR-l1
BMI 25-30	0.791	0.618
Age 0-30	0.861	0.703
Diarrhea	0.893	0.771
Schooling Medium 1-3	0.898	0.780
Neurological Disease	1.149	1.335
Another Chronic Pneumopathy	1.191	1.434
Immunosuppression	1.210	1.484
Xray Torax Result Consolidation	1.281	1.669
Renal Chronic Disease	1.331	1.802

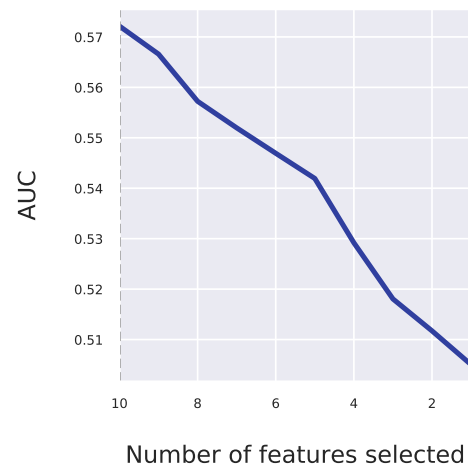


2.6 ICU small

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	-0.991	-1.238	-0.744	0.371	0.290	0.475	0.345	0.234	0.000	0.000
0.822	0.619									
Another Chronic Pneumopathy	0.100	-0.154	0.354	1.105	0.858	1.424	0.333	0.484	0.000	0.440
1.287	1.688									
Contracted At Hospital	-0.063	-0.375	0.248	0.939	0.688	1.282	0.336	0.448	0.025	0.690
1.127	1.277									
Diarrhea	-0.795	-0.948	-0.643	0.451	0.388	0.526	0.348	0.280	0.002	0.000
0.887	0.755									
Hematologic Disease	0.337	-0.171	0.845	1.401	0.843	2.327	0.337	0.523	0.020	0.193
1.304	1.678									
Immunosuppression	-0.016	-0.299	0.266	0.984	0.741	1.305	0.335	0.447	0.010	0.909
1.162	1.373									
Neurological Disease	-0.131	-0.370	0.109	0.877	0.691	1.115	0.334	0.436	0.006	0.285
1.159	1.361									
Renal Chronic Disease	0.136	-0.104	0.376	1.146	0.901	1.457	0.331	0.495	0.000	0.266
1.295	1.713									
Schooling Medium 1-3	-0.824	-0.999	-0.650	0.438	0.368	0.522	0.347	0.268	0.001	0.000
0.873	0.724									
Xray Torax Result Consolidation	0.202	-0.094	0.499	1.224	0.910	1.647	0.334	0.486	0.000	0.181
1.347	1.858									

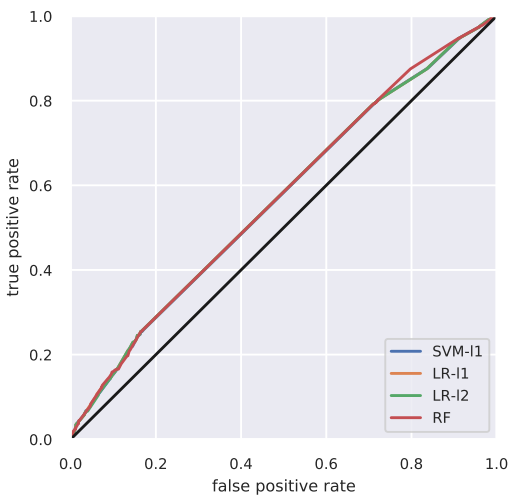


Recursive Feature Elimination:



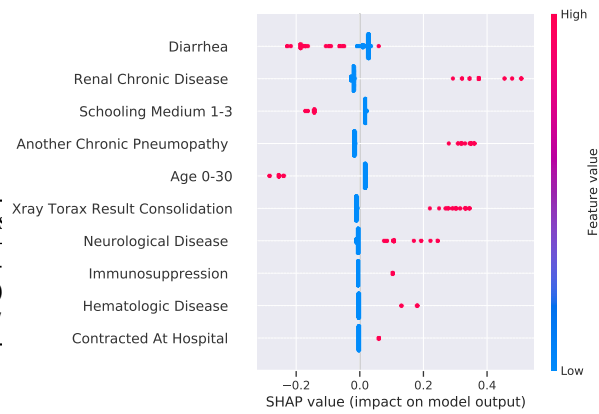
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoo:
Accuracy	0.644	0.644	0.644	0.641	0.64
F1w	0.524	0.524	0.524	0.508	0.50
AUC	0.566	0.567	0.567	0.570	0.57



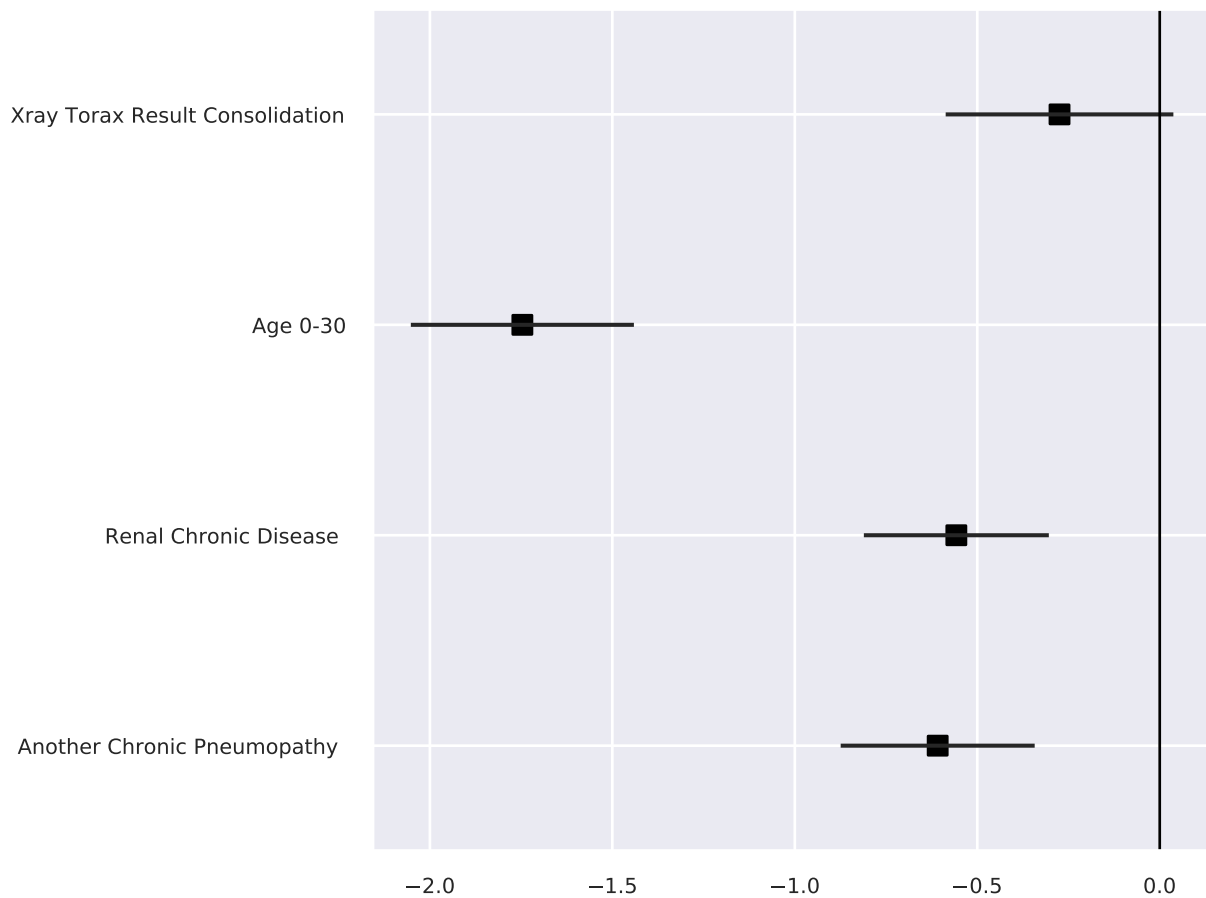
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.822	0.619
Schooling Medium 1-3	0.873	0.724
Diarrhea	0.887	0.755
Contracted At Hospital	1.127	1.277
Neurological Disease	1.159	1.361
Immunosuppression	1.162	1.373
Hematologic Disease	1.304	1.678
Another Chronic Pneumopathy	1.287	1.688
Renal Chronic Disease	1.295	1.713
Xray Torax Result Consolidation	1.347	1.858

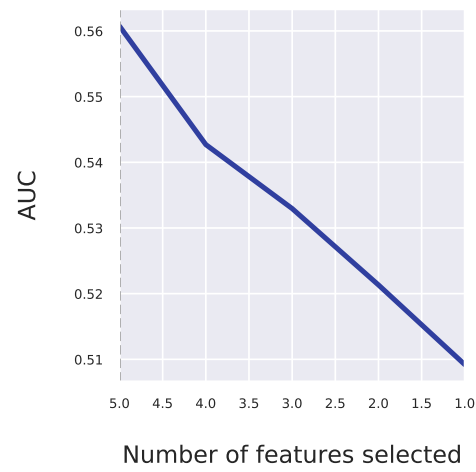


2.7 Ventilator

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	-1.747	-2.052	-1.441	0.174	0.128	0.237	0.221	0.128	0.005	0.000
0.844	0.550									
Diarrhea	-1.515	-1.695	-1.334	0.220	0.184	0.263	0.223	0.164	0.011	0.000
0.892	0.693									
Another Chronic Pneumopathy	-0.608	-0.874	-0.343	0.544	0.417	0.710	0.211	0.306	0.018	0.000
1.184	1.538									
Renal Chronic Disease	-0.557	-0.811	-0.304	0.573	0.445	0.738	0.210	0.322	0.002	0.000
1.226	1.679									
Xray Torax Result Consolidation	-0.275	-0.587	0.037	0.760	0.556	1.038	0.211	0.353	0.001	0.085
1.324	2.015									

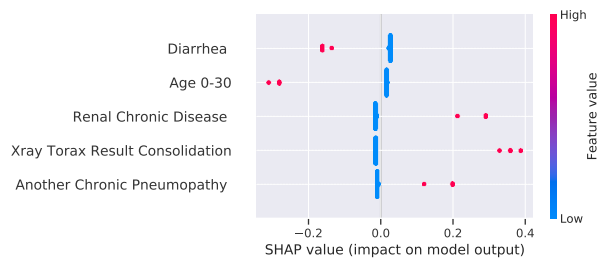


Recursive Feature Elimination:



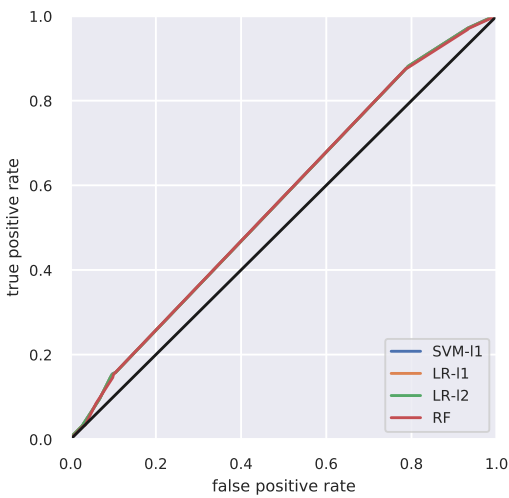
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.844	0.550
Diarrhea	0.892	0.693
Another Chronic Pneumopathy	1.184	1.538
Renal Chronic Disease	1.226	1.679
Xray Torax Result Consolidation	1.324	2.015



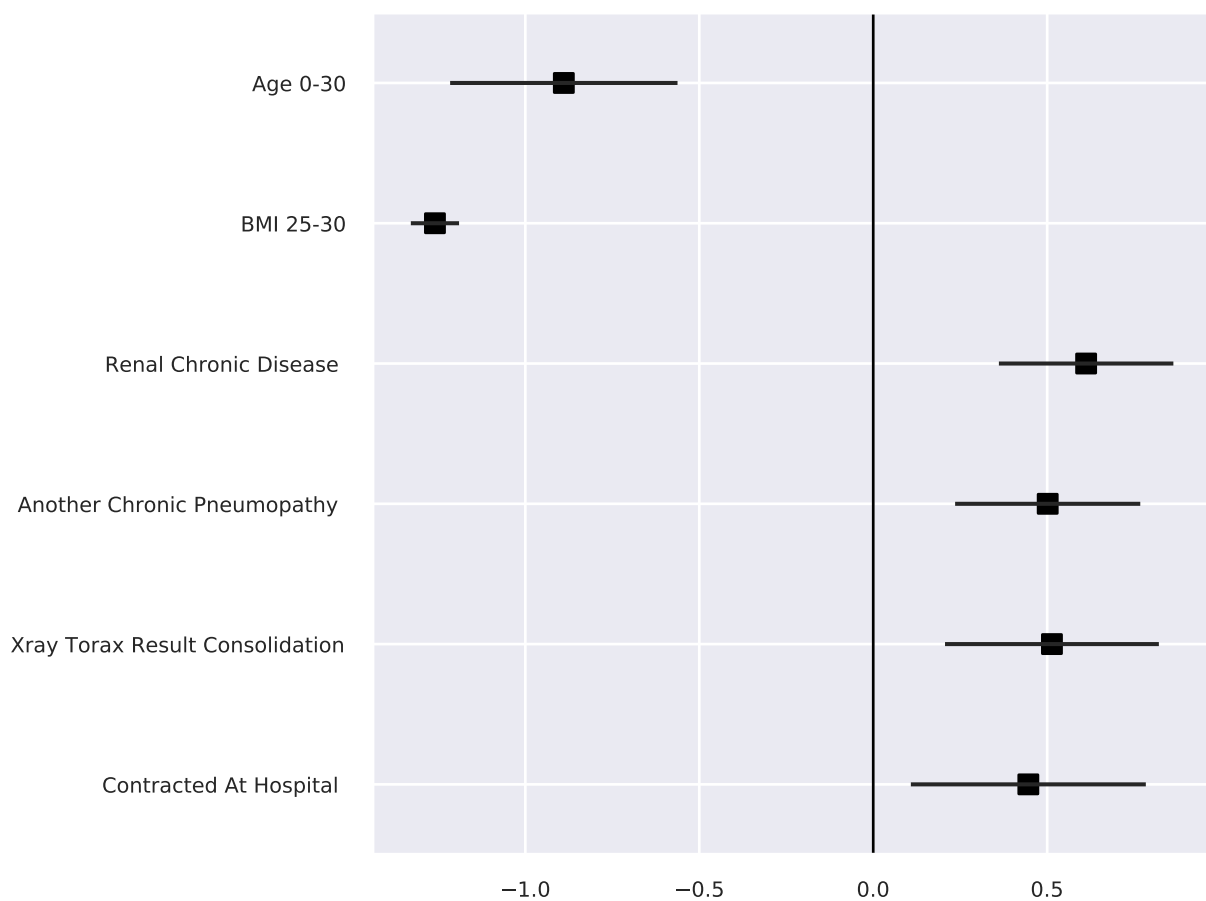
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.757	0.757	0.757	0.756	0.757
F1w	0.652	0.652	0.652	0.651	0.652
AUC	0.561	0.561	0.561	0.561	0.561



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	-0.889	-1.216	-0.563	0.411	0.296	0.570	0.231	0.115	0.000	0.000
0.798	0.444									
Another Chronic Pneumopathy	0.502	0.235	0.768	1.651	1.265	2.155	0.219	0.340	0.001	0.000
1.231	1.674									
BMI 25-30	-1.260	-1.329	-1.191	0.284	0.265	0.304	0.353	0.221	0.006	0.000
0.765	0.519									
Contracted At Hospital	0.446	0.108	0.784	1.562	1.114	2.189	0.221	0.331	0.037	0.010
1.189	1.525									
Diarrhea	-0.414	-0.605	-0.223	0.661	0.546	0.800	0.233	0.170	0.006	0.000
0.888	0.688									
Renal Chronic Disease	0.612	0.361	0.863	1.844	1.435	2.370	0.218	0.363	0.000	0.000
1.288	1.852									
Xray Torax Result Consolidation	0.514	0.206	0.821	1.672	1.229	2.273	0.221	0.328	0.022	0.001
1.226	1.671									



Recursive Feature Elimination:

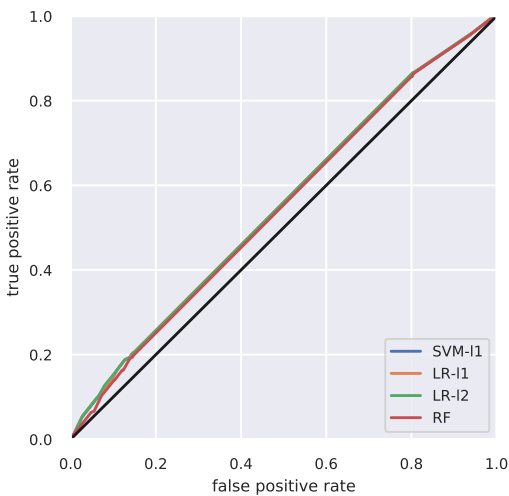
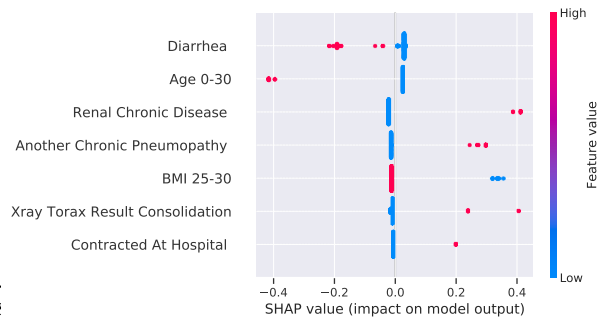


Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.778	0.779	0.779	0.780	0.780
F1w	0.683	0.683	0.683	0.684	0.684
AUC	0.549	0.551	0.551	0.545	0.551

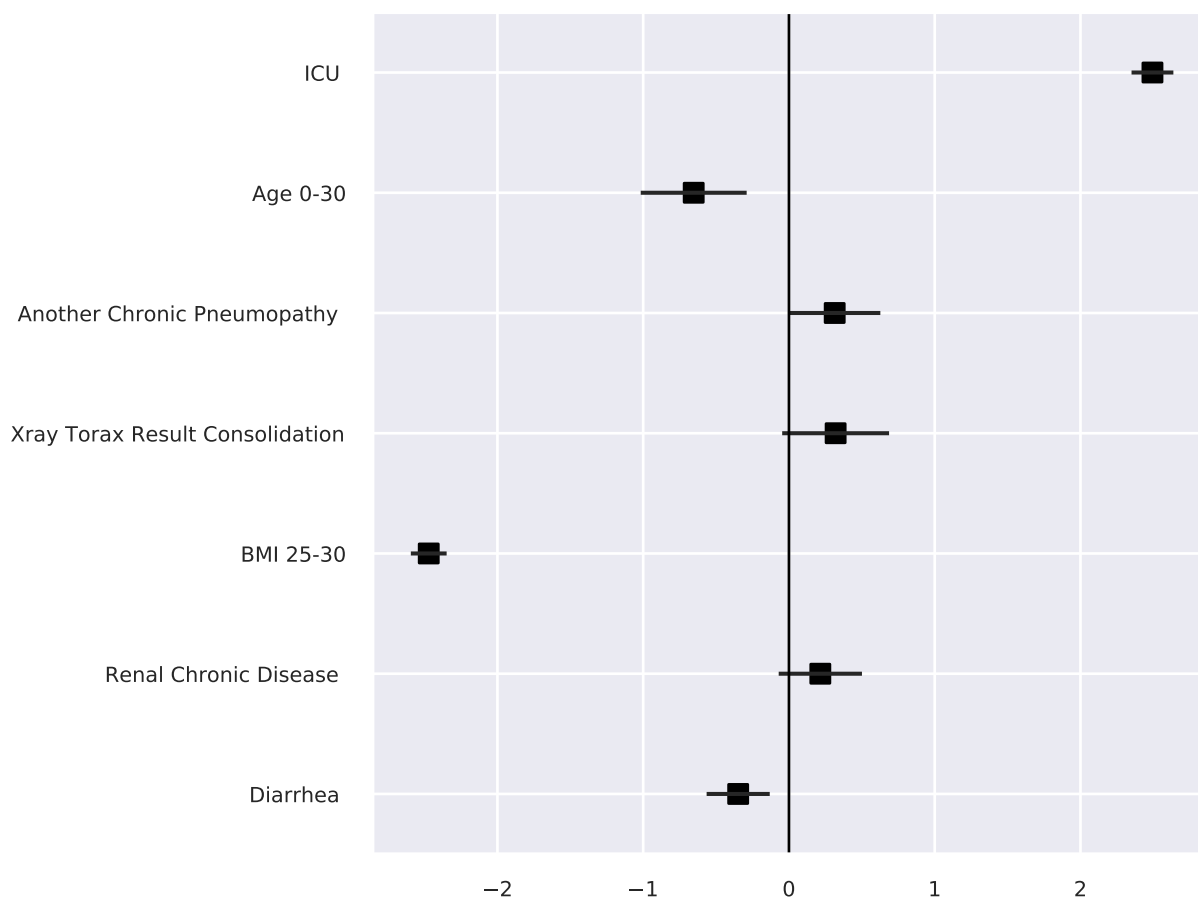
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.798	0.444
BMI 25-30	0.765	0.519
Diarrhea	0.888	0.688
Contracted At Hospital	1.189	1.525
Xray Torax Result Consolidation	1.226	1.671
Another Chronic Pneumopathy	1.231	1.674
Renal Chronic Disease	1.288	1.852

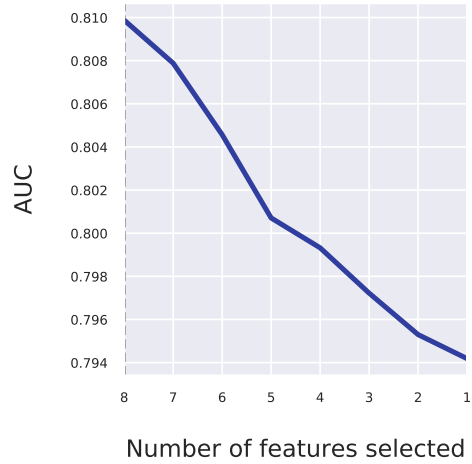


2.9 Ventilator with ICU

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	-0.654	-1.017	-0.290	0.520	0.362	0.748	0.225	0.125	0.002	0.000
0.911	0.639									
Another Chronic Pneumopathy	0.314	0.001	0.627	1.369	1.001	1.872	0.214	0.332	0.002	0.050
1.124	1.433									
BMI 25-30	-2.471	-2.594	-2.349	0.084	0.075	0.096	0.347	0.215	0.006	0.000
0.902	0.752									
Diarrhea	-0.348	-0.565	-0.132	0.706	0.568	0.876	0.226	0.172	0.026	0.002
0.950	0.808									
ICU	2.494	2.350	2.637	12.108	10.489	13.977	0.066	0.513	0.000	0.000
2.408	14.280									
Renal Chronic Disease	0.215	-0.070	0.501	1.240	0.932	1.650	0.213	0.329	0.001	0.140
1.084	1.275									
Schooling Medium 1-3	-0.275	-0.519	-0.031	0.760	0.595	0.970	0.225	0.169	0.050	0.027
0.965	0.853									
Xray Torax Result Consolidation	0.320	-0.046	0.687	1.377	0.955	1.987	0.215	0.330	0.013	0.087
1.118	1.407									



Recursive Feature Elimination:

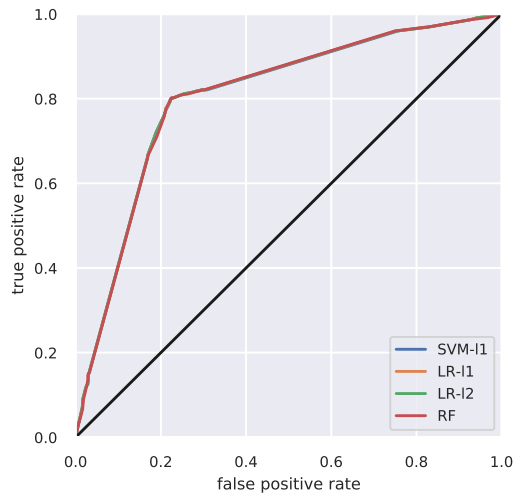
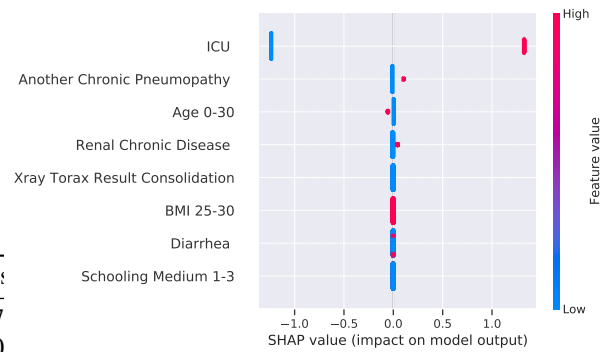


Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.793	0.793	0.793	0.772	0.77
F1w	0.800	0.800	0.800	0.684	0.70
AUC	0.805	0.805	0.805	0.805	0.794

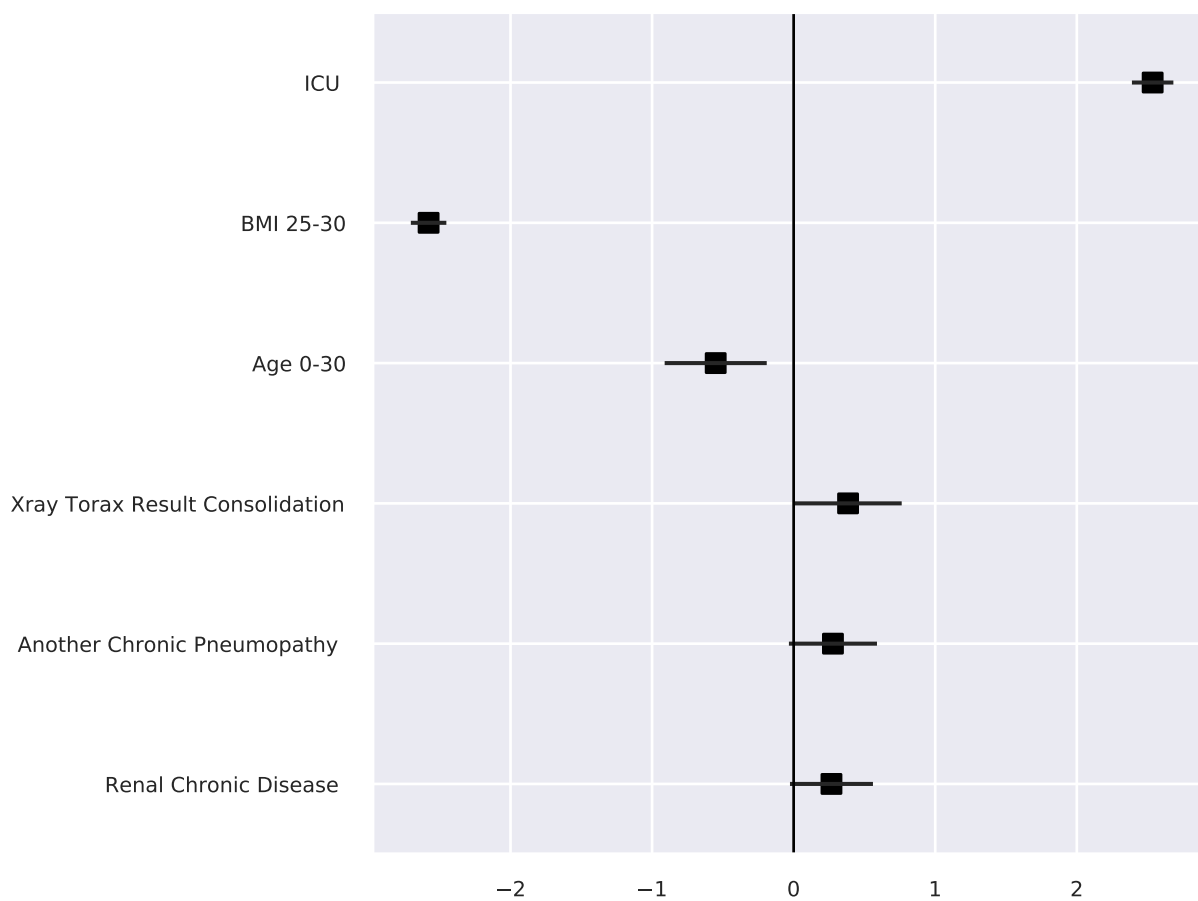
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.911	0.639
BMI 25-30	0.902	0.752
Diarrhea	0.950	0.808
Schooling Medium 1-3	0.965	0.853
Renal Chronic Disease	1.084	1.275
Xray Torax Result Consolidation	1.118	1.407
Another Chronic Pneumopathy	1.124	1.433
ICU	2.408	14.280

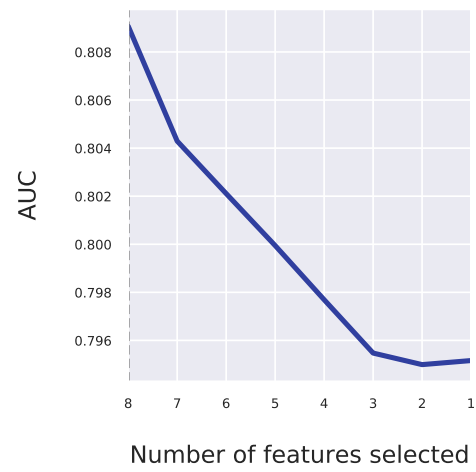


2.10 Ventilator with ICU small

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	-0.551	-0.911	-0.190	0.577	0.402	0.827	0.219	0.126	0.006	0.003
0.921	0.679									
Another Chronic Pneumopathy	0.278	-0.033	0.589	1.320	0.967	1.801	0.209	0.327	0.001	0.080
1.108	1.365									
BMI 25-30	-2.579	-2.704	-2.453	0.076	0.067	0.086	0.352	0.211	0.003	0.000
0.859	0.640									
Diarrhea	-0.331	-0.550	-0.112	0.718	0.577	0.894	0.222	0.165	0.017	0.003
0.951	0.802									
ICU	2.536	2.389	2.682	12.627	10.908	14.618	0.063	0.505	0.000	0.000
2.383	14.485									
Immunosuppression	0.188	-0.165	0.541	1.207	0.848	1.718	0.211	0.312	0.029	0.297
1.081	1.281									
Renal Chronic Disease	0.267	-0.026	0.560	1.306	0.974	1.751	0.209	0.321	0.001	0.074
1.095	1.338									
Xray Torax Result Consolidation	0.384	0.006	0.763	1.469	1.006	2.145	0.211	0.328	0.015	0.047
1.128	1.452									



Recursive Feature Elimination:



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoo
Accuracy	0.768	0.767	0.767	0.758	0.76
F1w	0.720	0.719	0.719	0.666	0.71
AUC	0.797	0.798	0.798	0.799	0.800

Coefficients:

	SVM-l1	LR-l1
BMI 25-30	0.859	0.640
Age 0-30	0.921	0.679
Diarrhea	0.951	0.802
Immunosuppression	1.081	1.281
Renal Chronic Disease	1.095	1.338
Another Chronic Pneumopathy	1.108	1.365
Xray Torax Result Consolidation	1.128	1.452
ICU	2.383	14.485

