
PRELIMINARY RESULTS FOR BRAZIL COVID-19 DATASET

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1 Basic Analytics

	0
N	4633
N_Hosp	4237
N_Death	1619
Female	2005
Male	2627
Race	1305
Schooling	357
Acute Respiratory Distress Syndrome	1166
Contracted At Hospital	123
Contact Birds Pigs	44
Fever	3393
Cough	3546
Throat	988
Dyspnea	3203
Respiratory Discomfort	2637
SpO2 less 95\%	2585
Diarrhea	615
Vomiting	354
Other Symptoms	1500
Postpartum	23
Cardiovascular Disease	1470
Hematologic Disease	47
Down Syndrome	12
Liver Chronic Disease	58
Asthma	136
Diabetes	1131
Neurological Disease	181
Another Chronic Pneumopathy	186
Immunosuppression	159
Renal Chronic Disease	203
Obesity	161
Other Risks	1145
Antiviral Use	1505
Hospitalization	4237
ICU	1365
Ventilator	835
Xray Torax Result	106
Result Final	0
Evolution	1779
Public Hospital	1621
Region	0

Table 1: Number of observations with a specific observation

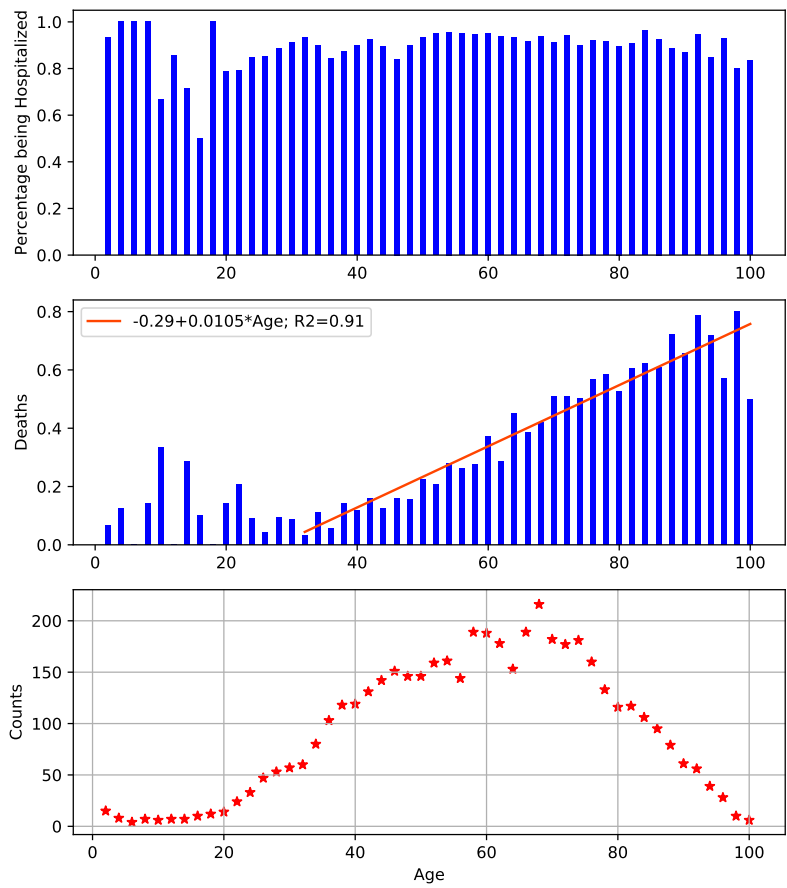


Figure 1: Distribution of hospitalization and deaths by age group

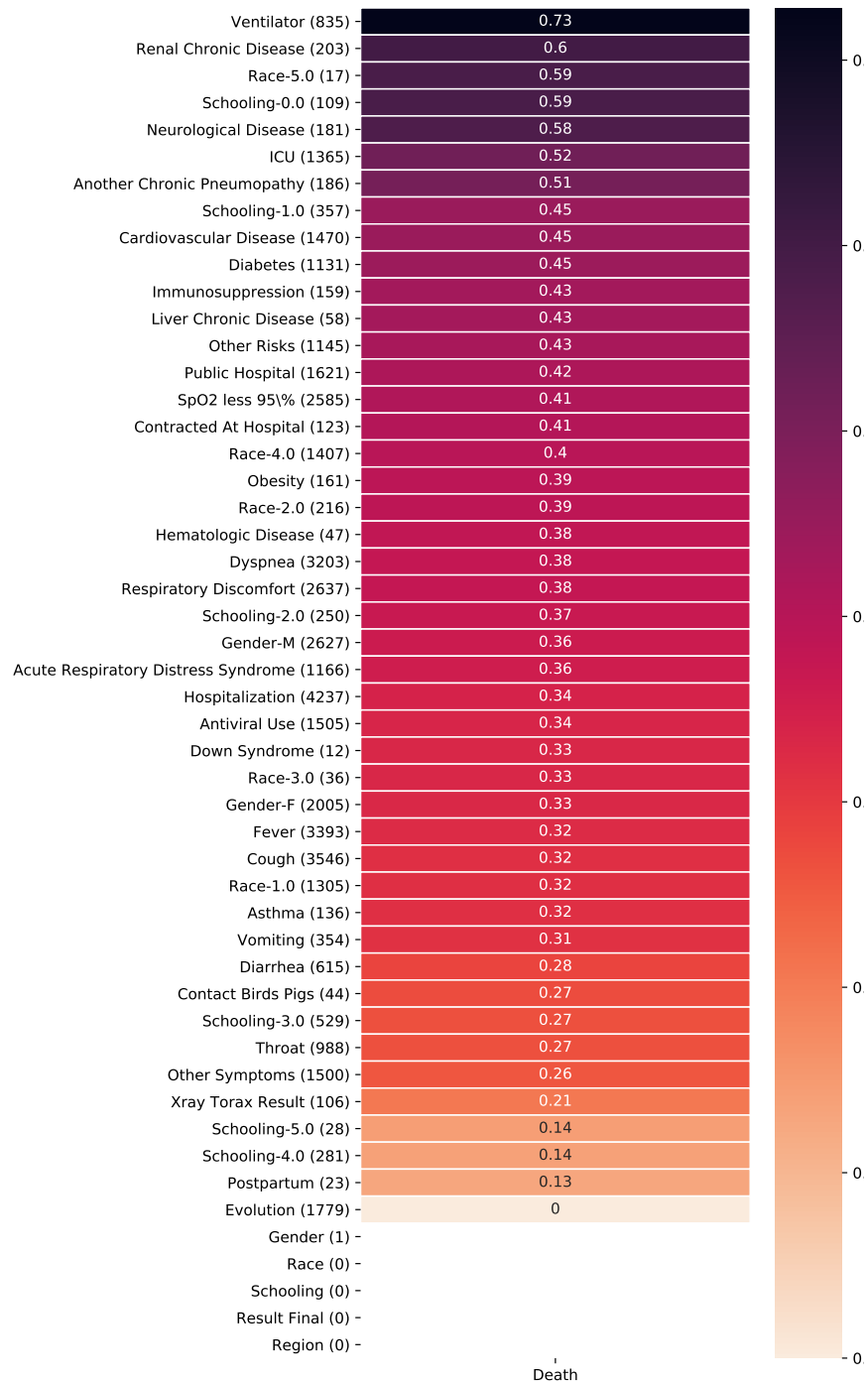


Figure 2: Share of hospitalized and deaths patients given characteristics

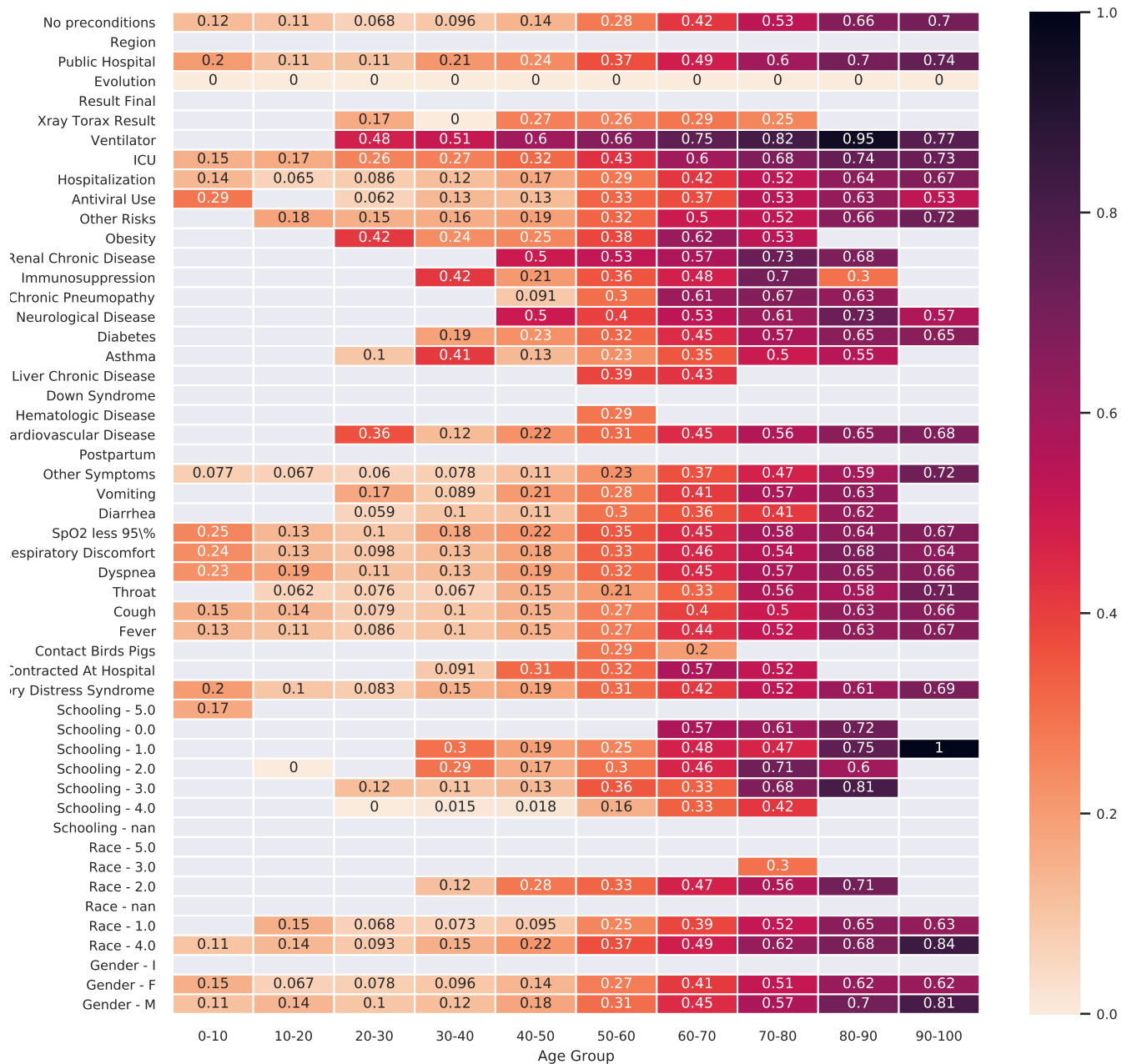
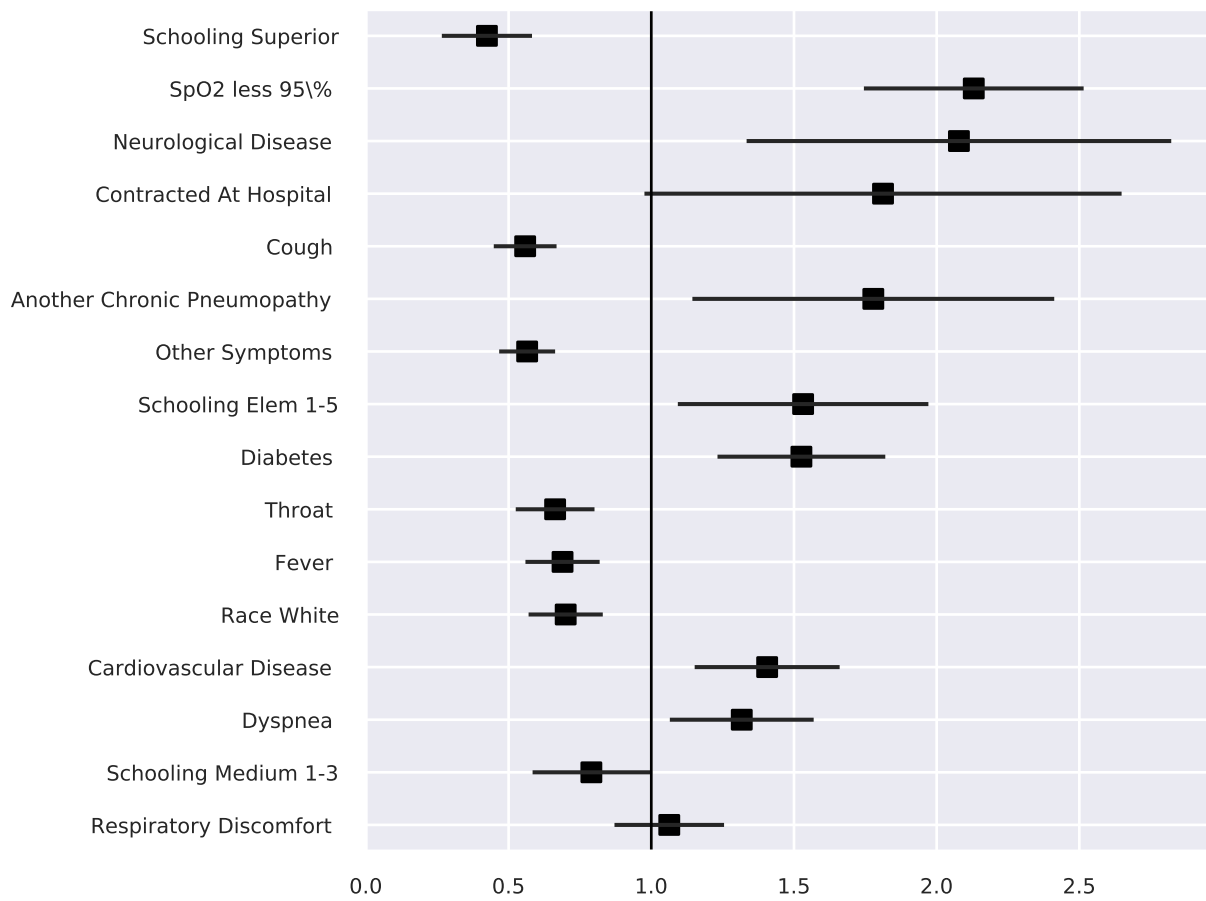


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

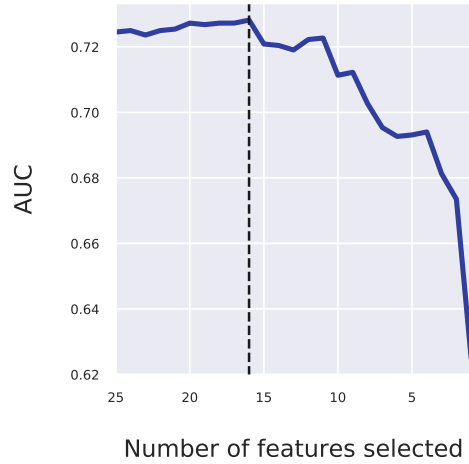
2 Results

2.1 Mortality (previous)

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Schooling Superior	-0.859	-1.323	-0.395	0.424	0.266	0.674	0.484	0.226	0.000	0.000
0.722	0.441	0.158								
SpO2 less 95\%	0.756	0.557	0.955	2.130	1.745	2.600	0.351	0.548	0.000	0.000
1.387	2.090	0.385								
Neurological Disease	0.731	0.288	1.175	2.078	1.334	3.238	0.458	0.689	0.000	0.001
1.360	1.971	0.744								
Contracted At Hospital	0.595	-0.024	1.213	1.812	0.976	3.365	0.465	0.654	0.046	0.060
1.256	1.613	0.836								
Cough	-0.583	-0.802	-0.364	0.558	0.448	0.695	0.595	0.435	0.000	0.000
0.764	0.542	0.110								
Another Chronic Pneumopathy	0.576	0.134	1.017	1.778	1.144	2.765	0.461	0.627	0.008	0.011
1.268	1.692	0.634								
Other Symptoms	-0.572	-0.762	-0.381	0.565	0.467	0.683	0.520	0.362	0.000	0.000
0.773	0.556	0.098								
Schooling Elem 1-5	0.427	0.089	0.764	1.532	1.093	2.147	0.459	0.581	0.016	0.013
1.200	1.476	0.439								
Diabetes	0.423	0.209	0.637	1.526	1.232	1.891	0.431	0.574	0.000	0.000
1.197	1.504	0.294								
Throat	-0.411	-0.644	-0.178	0.663	0.525	0.837	0.494	0.376	0.000	0.001
0.841	0.673	0.138								
Fever	-0.373	-0.582	-0.163	0.689	0.559	0.849	0.571	0.435	0.000	0.000
0.837	0.672	0.130								
Race White	-0.357	-0.562	-0.152	0.700	0.570	0.859	0.494	0.406	0.002	0.001
0.854	0.701	0.130								
Cardiovascular Disease	0.340	0.141	0.540	1.406	1.152	1.715	0.419	0.567	0.000	0.001
1.158	1.382	0.254								
Dyspnea	0.275	0.063	0.487	1.317	1.065	1.628	0.390	0.499	0.000	0.011
1.110	1.270	0.252								
Schooling Medium 1-3	-0.235	-0.539	0.068	0.790	0.584	1.070	0.480	0.377	0.022	0.128
0.900	0.795	0.206								
Respiratory Discomfort	0.061	-0.138	0.261	1.063	0.871	1.298	0.429	0.496	0.017	0.548
1.022	1.044	0.192								



Recursive Feature Elimination:

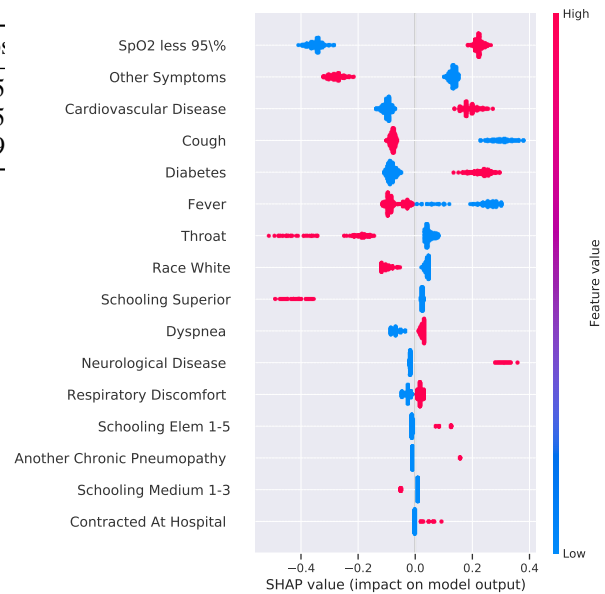
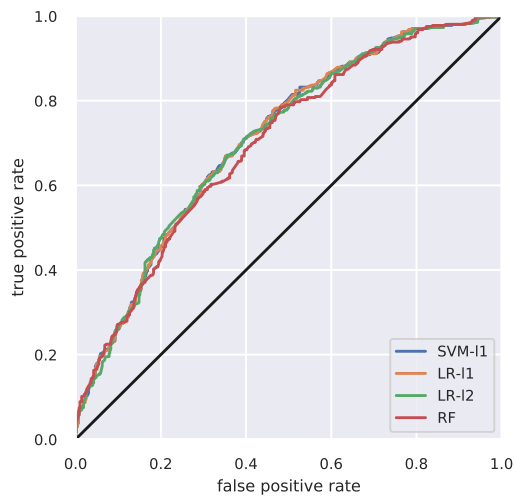


Coefficients:

	SVM-l1	LR-l1
Schooling Superior	0.722	0.441
Cough	0.764	0.542
Other Symptoms	0.773	0.556
Fever	0.837	0.672
Throat	0.841	0.673
Race White	0.854	0.701
Schooling Medium 1-3	0.900	0.795
Respiratory Discomfort	1.022	1.044
Dyspnea	1.110	1.270
Cardiovascular Disease	1.158	1.382
Schooling Elem 1-5	1.200	1.476
Diabetes	1.197	1.504
Contracted At Hospital	1.256	1.613
Another Chronic Pneumopathy	1.268	1.692
Neurological Disease	1.360	1.971
SpO2 less 95\%	1.387	2.090

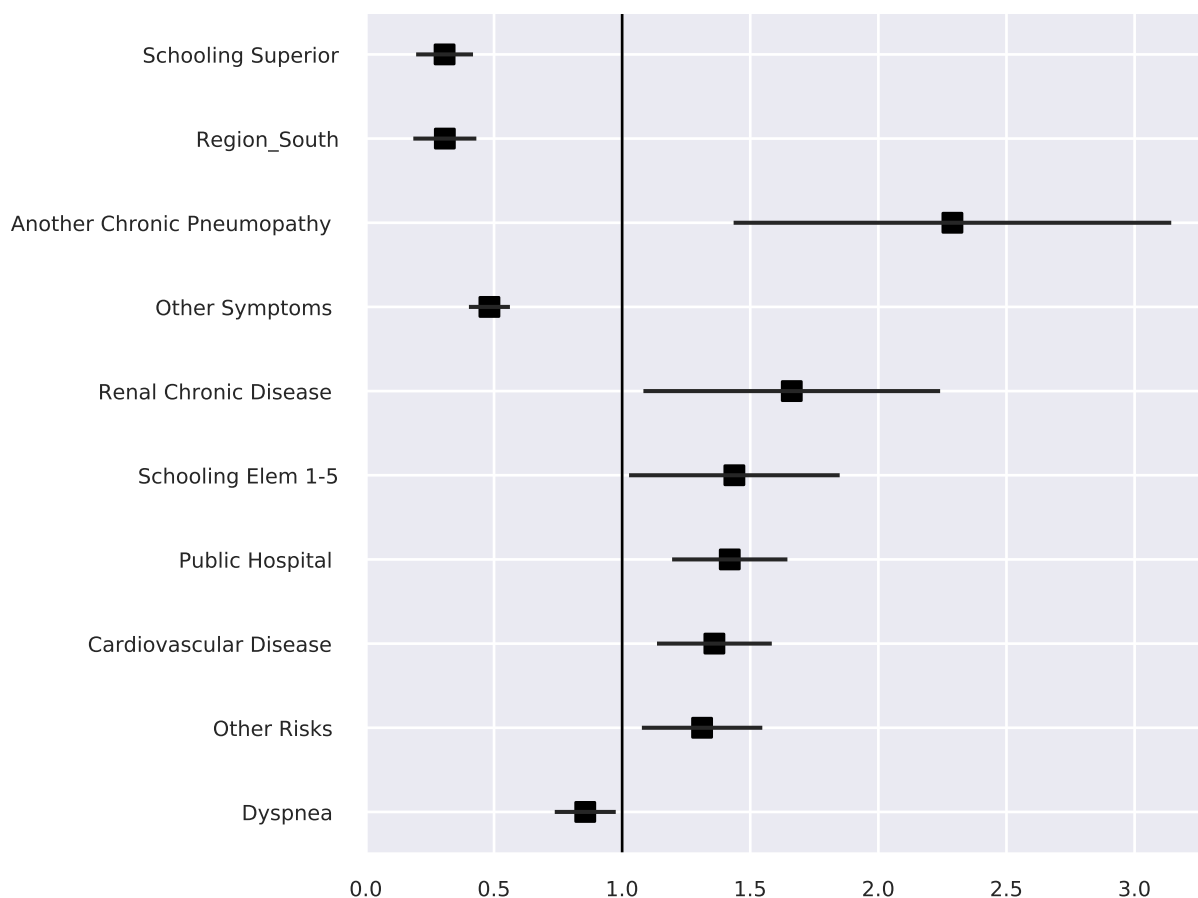
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.658	0.657	0.658	0.647	0.65
F1w	0.657	0.656	0.657	0.646	0.65
AUC	0.709	0.710	0.708	0.699	0.69

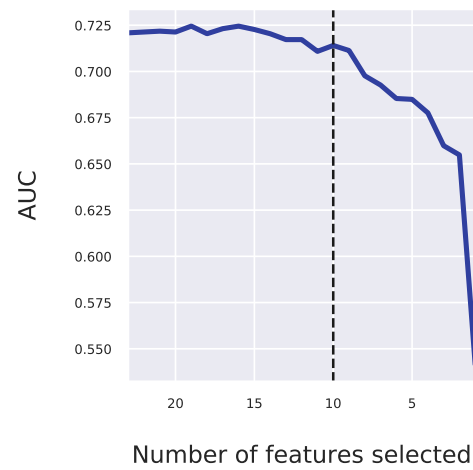


2.2 Mortality (previous) small

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Schooling Superior	-1.180	-1.631	-0.728	0.307	0.196	0.483	0.475	0.200	0.000	0.000
0.680	0.372	0.111								
Region_South	-1.177	-1.688	-0.667	0.308	0.185	0.513	0.470	0.219	0.000	0.000
0.672	0.368	0.123								
Another Chronic Pneumopathy	0.828	0.361	1.296	2.289	1.435	3.653	0.448	0.688	0.000	0.001
1.461	2.344	0.854								
Other Symptoms	-0.729	-0.911	-0.548	0.482	0.402	0.578	0.503	0.362	0.000	0.000
0.798	0.607	0.080								
Renal Chronic Disease	0.508	0.080	0.935	1.662	1.083	2.548	0.448	0.664	0.000	0.020
1.292	1.751	0.579								
Schooling Elem 1-5	0.363	0.027	0.699	1.438	1.027	2.011	0.449	0.573	0.017	0.034
1.218	1.539	0.411								
Public Hospital	0.351	0.178	0.524	1.420	1.195	1.688	0.397	0.557	0.000	0.000
1.292	1.738	0.225								
Cardiovascular Disease	0.307	0.127	0.487	1.360	1.136	1.627	0.409	0.552	0.000	0.001
1.253	1.630	0.224								
Other Risks	0.271	0.074	0.469	1.312	1.077	1.598	0.433	0.531	0.000	0.007
1.203	1.500	0.235								
Dyspnea	-0.155	-0.305	-0.005	0.856	0.737	0.995	0.371	0.493	0.000	0.043
1.148	1.361	0.119								

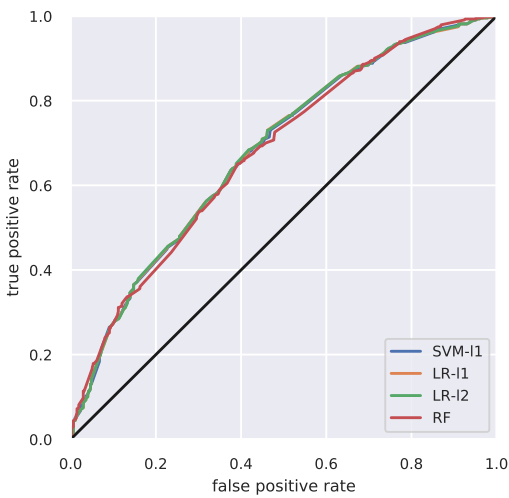


Recursive Feature Elimination:



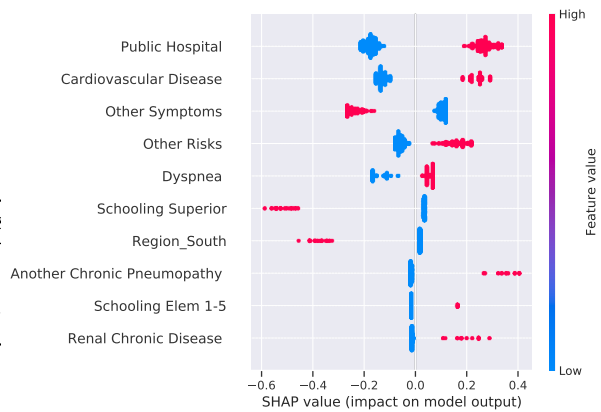
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.623	0.621	0.621	0.618	0.61
F1w	0.622	0.620	0.620	0.618	0.61
AUC	0.680	0.681	0.681	0.677	0.67



Coefficients:

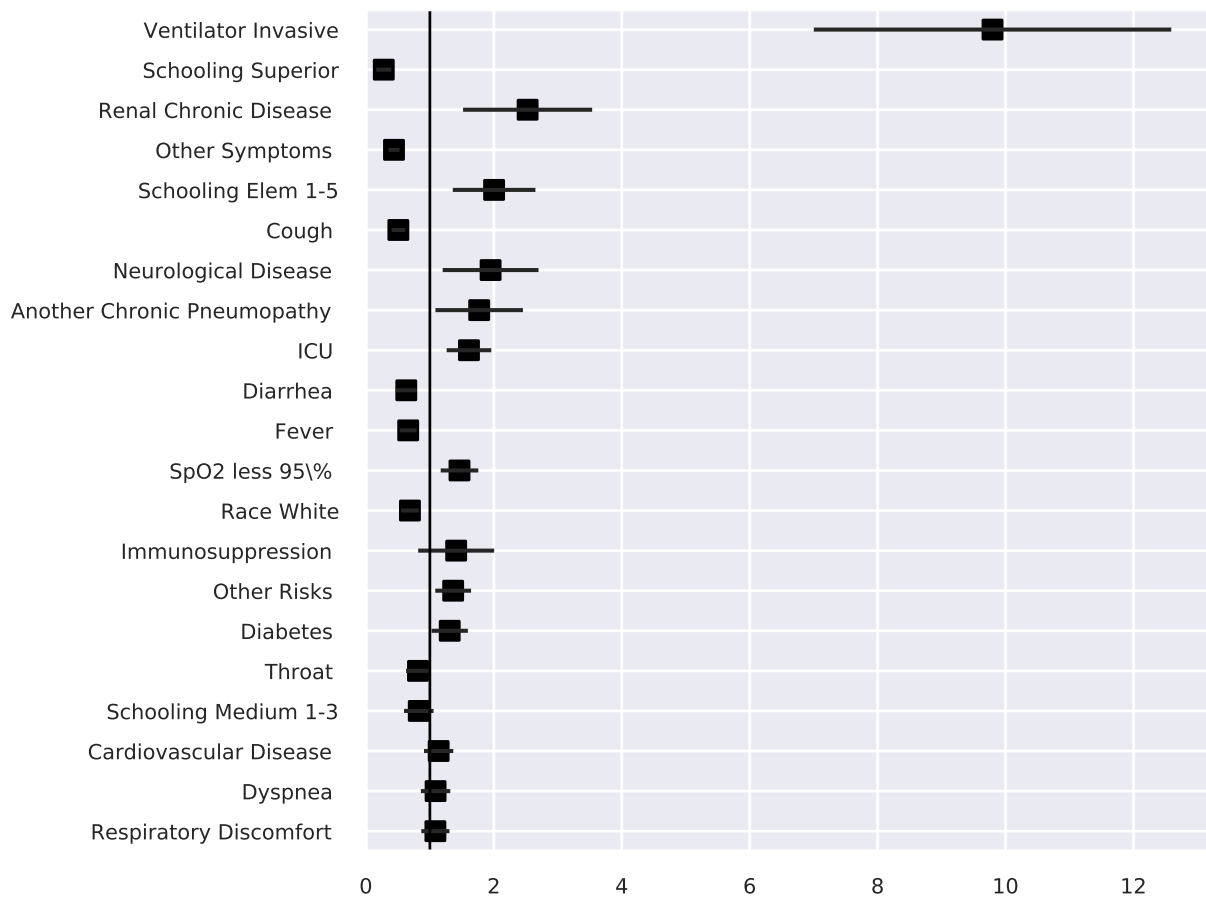
	SVM-l1	LR-l1
Region_South	0.672	0.368
Schooling Superior	0.680	0.372
Other Symptoms	0.798	0.607
Dyspnea	1.148	1.361
Other Risks	1.203	1.500
Schooling Elem 1-5	1.218	1.539
Cardiovascular Disease	1.253	1.630
Public Hospital	1.292	1.738
Renal Chronic Disease	1.292	1.751
Another Chronic Pneumopathy	1.461	2.344



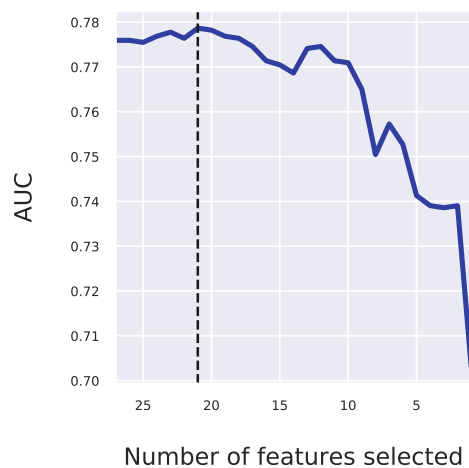
2.3 Mortality (advanced)

Include variables: Antiviral, ICU, Ventilator

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Ventilator Invasive	2.282	1.946	2.618	9.796	7.002	13.705	0.346	0.879	0.000	0.000
2.355	9.466	2.794								
Schooling Superior	-1.277	-1.823	-0.731	0.279	0.162	0.481	0.482	0.171	0.000	0.000
0.694	0.305	0.117								
Renal Chronic Disease	0.927	0.418	1.437	2.528	1.519	4.206	0.448	0.755	0.000	0.000
1.482	2.467	1.009								
Other Symptoms	-0.823	-1.041	-0.605	0.439	0.353	0.546	0.516	0.353	0.000	0.000
0.754	0.466	0.086								
Schooling Elem 1-5	0.695	0.306	1.084	2.004	1.358	2.956	0.450	0.628	0.000	0.000
1.342	1.974	0.646								
Cough	-0.678	-0.916	-0.441	0.507	0.400	0.643	0.587	0.426	0.000	0.000
0.794	0.554	0.107								
Neurological Disease	0.668	0.182	1.153	1.949	1.200	3.168	0.452	0.683	0.000	0.007
1.311	1.870	0.749								
Another Chronic Pneumopathy	0.572	0.084	1.060	1.771	1.087	2.886	0.454	0.634	0.004	0.022
1.243	1.679	0.684								
ICU	0.477	0.233	0.721	1.611	1.262	2.056	0.355	0.677	0.000	0.000
1.208	1.634	0.349								
Diarrhea	-0.461	-0.761	-0.160	0.631	0.467	0.852	0.480	0.360	0.001	0.003
0.855	0.655	0.164								
Fever	-0.414	-0.640	-0.188	0.661	0.527	0.828	0.559	0.430	0.000	0.000
0.875	0.714	0.134								
SpO2 less 95\%	0.381	0.156	0.605	1.463	1.169	1.832	0.353	0.539	0.000	0.001
1.157	1.478	0.294								
Race White	-0.374	-0.604	-0.144	0.688	0.547	0.866	0.486	0.408	0.007	0.001
0.877	0.709	0.141								
Immunosuppression	0.344	-0.202	0.890	1.411	0.817	2.436	0.457	0.617	0.032	0.216
1.140	1.337	0.594								
Other Risks	0.311	0.081	0.540	1.364	1.084	1.717	0.436	0.540	0.000	0.008
1.134	1.389	0.280								
Diabetes	0.270	0.026	0.514	1.310	1.026	1.672	0.427	0.567	0.000	0.030
1.111	1.312	0.284								
Throat	-0.206	-0.466	0.054	0.814	0.628	1.056	0.486	0.377	0.000	0.121
0.931	0.823	0.186								
Schooling Medium 1-3	-0.191	-0.519	0.137	0.826	0.595	1.147	0.475	0.364	0.008	0.254
0.944	0.861	0.231								
Cardiovascular Disease	0.128	-0.097	0.354	1.137	0.908	1.424	0.412	0.562	0.000	0.264
1.060	1.163	0.229								
Dyspnea	0.085	-0.151	0.322	1.089	0.859	1.380	0.380	0.494	0.000	0.480
1.052	1.144	0.230								
Respiratory Discomfort	0.083	-0.144	0.309	1.086	0.866	1.362	0.403	0.502	0.000	0.473
1.035	1.095	0.220								

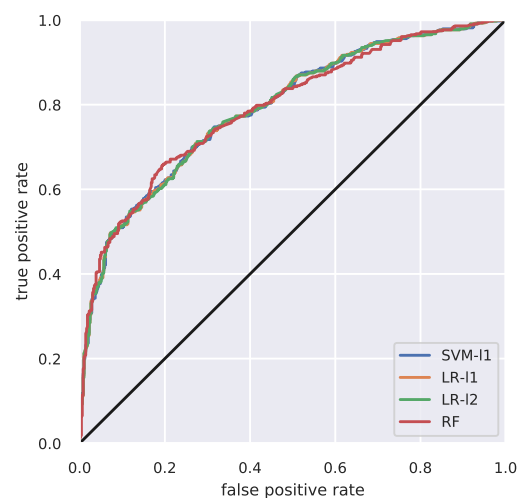


Recursive Feature Elimination:



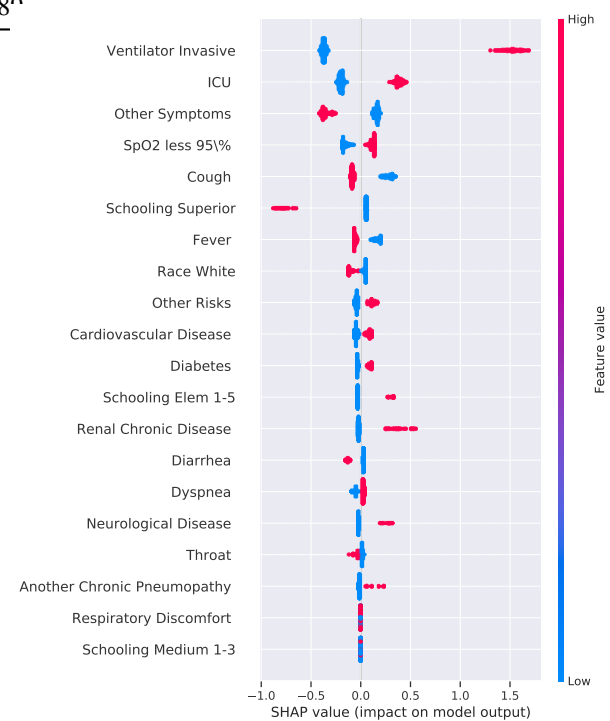
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.720	0.714	0.713	0.721	0.721
F1w	0.716	0.710	0.709	0.713	0.713
AUC	0.791	0.791	0.791	0.792	0.786



Coefficients:

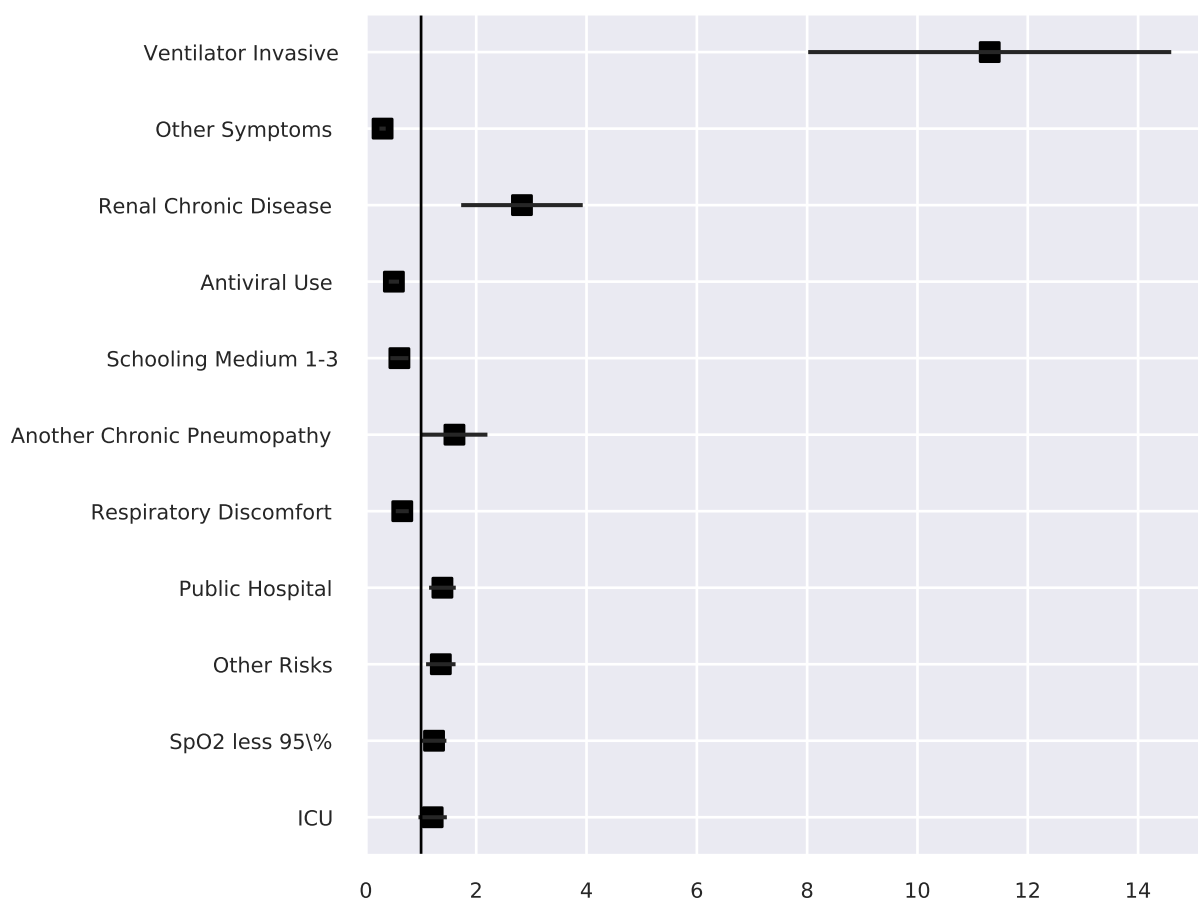
	SVM-l1	LR-l1
Schooling Superior	0.694	0.305
Other Symptoms	0.754	0.466
Cough	0.794	0.554
Diarrhea	0.855	0.655
Race White	0.877	0.709
Fever	0.875	0.714
Throat	0.931	0.823
Schooling Medium 1-3	0.944	0.861
Respiratory Discomfort	1.035	1.095
Dyspnea	1.052	1.144
Cardiovascular Disease	1.060	1.163
Diabetes	1.111	1.312
Immunosuppression	1.140	1.337
Other Risks	1.134	1.389
SpO2 less 95\%	1.157	1.478
ICU	1.208	1.634
Another Chronic Pneumopathy	1.243	1.679
Neurological Disease	1.311	1.870
Schooling Elem 1-5	1.342	1.974
Renal Chronic Disease	1.482	2.467
Ventilator Invasive	2.355	9.466



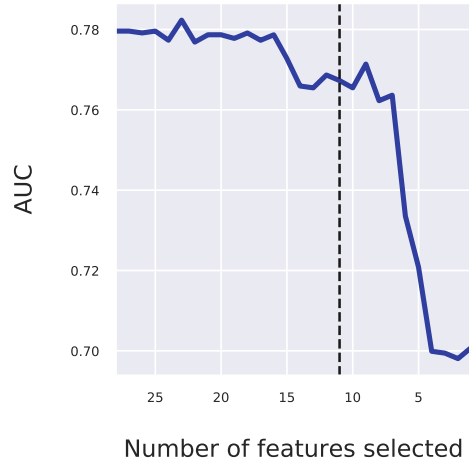
2.4 Mortality (advanced) small

Include variables: Antiviral, ICU, Ventilator

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Ventilator Invasive	2.426	2.082	2.769	11.310	8.019	15.949	0.346	0.874	0.000	0.000
2.410	9.467	3.291								
Other Symptoms	-1.198	-1.406	-0.990	0.302	0.245	0.372	0.515	0.338	0.000	0.000
0.717	0.420	0.057								
Renal Chronic Disease	1.040	0.547	1.533	2.829	1.727	4.633	0.444	0.752	0.000	0.000
1.634	2.869	1.102								
Antiviral Use	-0.679	-0.883	-0.475	0.507	0.414	0.622	0.481	0.421	0.049	0.000
0.822	0.616	0.093								
Schooling Medium 1-3	-0.500	-0.815	-0.184	0.607	0.443	0.832	0.470	0.368	0.023	0.002
0.889	0.758	0.164								
Another Chronic Pneumopathy	0.473	0.007	0.940	1.605	1.007	2.559	0.451	0.629	0.003	0.047
1.257	1.594	0.598								
Respiratory Discomfort	-0.418	-0.615	-0.220	0.659	0.541	0.802	0.417	0.488	0.009	0.000
0.965	0.950	0.118								
Public Hospital	0.327	0.135	0.518	1.387	1.145	1.679	0.402	0.548	0.000	0.001
1.266	1.795	0.242								
Other Risks	0.306	0.087	0.524	1.358	1.091	1.689	0.430	0.540	0.000	0.006
1.203	1.578	0.267								
SpO2 less 95\%	0.211	0.011	0.412	1.235	1.011	1.509	0.353	0.535	0.000	0.039
1.218	1.618	0.224								
ICU	0.190	-0.048	0.429	1.210	0.953	1.535	0.356	0.667	0.000	0.117
1.203	1.572	0.257								



Recursive Feature Elimination:

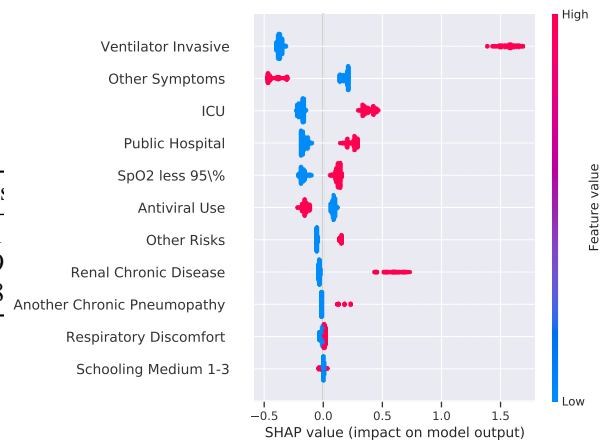
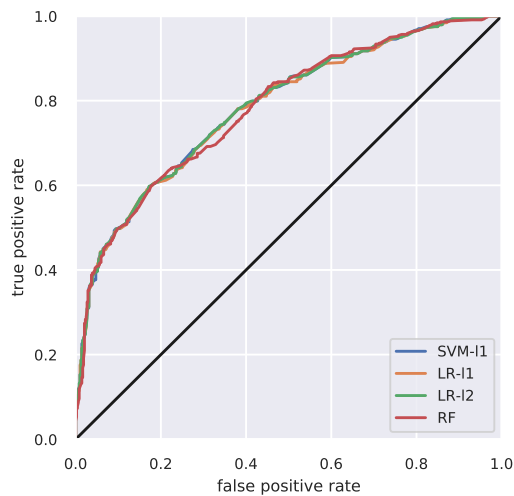


Coefficients:

	SVM-l1	LR-l1
Other Symptoms	0.717	0.420
Antiviral Use	0.822	0.616
Schooling Medium 1-3	0.889	0.758
Respiratory Discomfort	0.965	0.950
ICU	1.203	1.572
Other Risks	1.203	1.578
Another Chronic Pneumopathy	1.257	1.594
SpO2 less 95\%	1.218	1.618
Public Hospital	1.266	1.795
Renal Chronic Disease	1.634	2.869
Ventilator Invasive	2.410	9.467

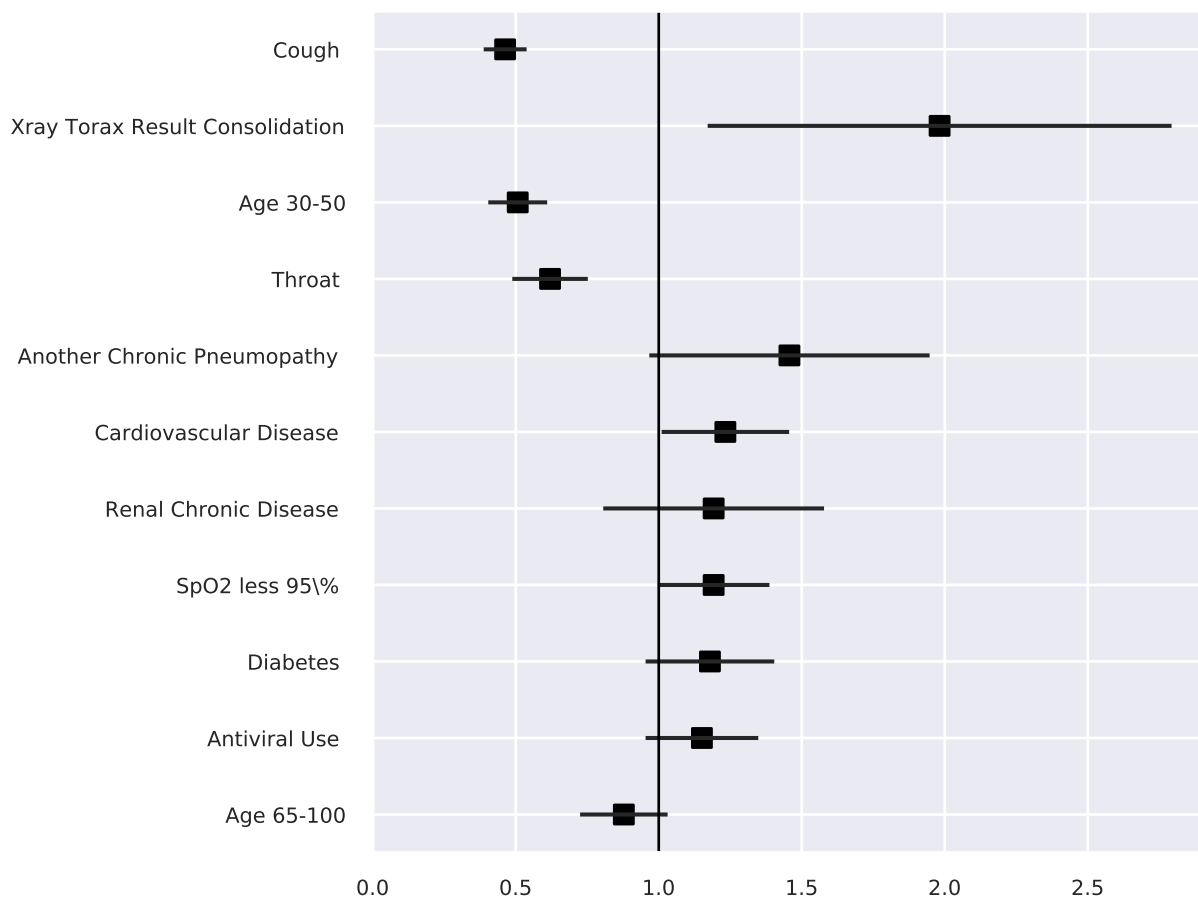
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.716	0.716	0.714	0.708	0.71
F1w	0.712	0.712	0.710	0.700	0.69
AUC	0.785	0.783	0.785	0.782	0.78

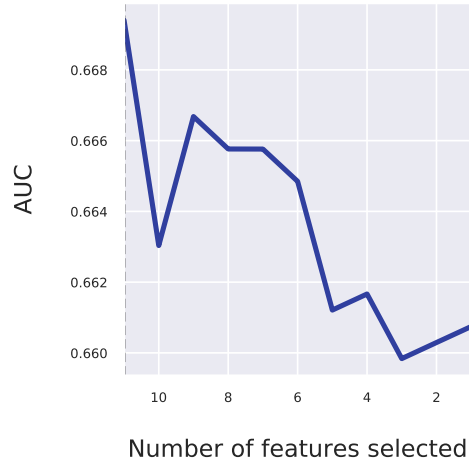


2.5 ICU

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.769	-0.947	-0.590	0.463	0.388	0.554	0.395	0.320	0.025	0.000
0.869	0.726	0.075								
Xray Torax Result Consolidation	0.684	0.158	1.210	1.982	1.171	3.353	0.331	0.516	0.028	0.011
1.415	2.141	0.811								
Age 30-50	-0.678	-0.906	-0.451	0.507	0.404	0.637	0.368	0.242	0.000	0.000
0.902	0.761	0.103								
Throat	-0.479	-0.717	-0.240	0.620	0.488	0.787	0.357	0.257	0.001	0.000
0.846	0.655	0.132								
Another Chronic Pneumopathy	0.376	-0.033	0.786	1.457	0.967	2.194	0.328	0.490	0.010	0.072
1.227	1.541	0.490								
Cardiovascular Disease	0.209	0.010	0.408	1.233	1.010	1.504	0.292	0.416	0.000	0.039
1.142	1.355	0.223								
Renal Chronic Disease	0.176	-0.215	0.567	1.192	0.806	1.764	0.329	0.470	0.021	0.378
1.142	1.323	0.386								
SpO2 less 95\%	0.175	-0.003	0.354	1.192	0.997	1.425	0.269	0.381	0.000	0.054
1.186	1.513	0.195								
Diabetes	0.165	-0.047	0.376	1.179	0.954	1.457	0.305	0.422	0.000	0.127
1.115	1.275	0.225								
Antiviral Use	0.141	-0.047	0.329	1.151	0.954	1.389	0.313	0.376	0.033	0.142
1.101	1.261	0.197								
Age 65-100	-0.130	-0.322	0.061	0.878	0.725	1.063	0.287	0.402	0.000	0.182
1.091	1.218	0.153								

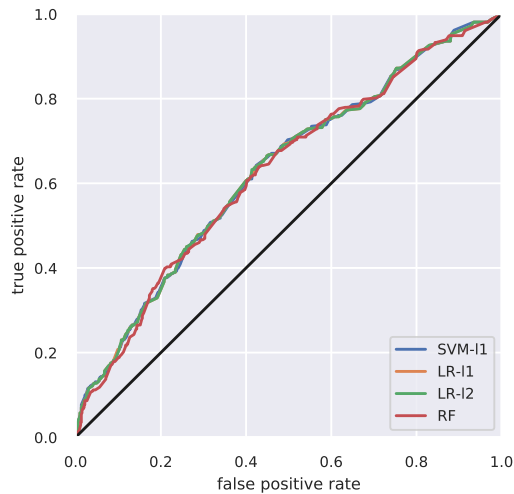


Recursive Feature Elimination:



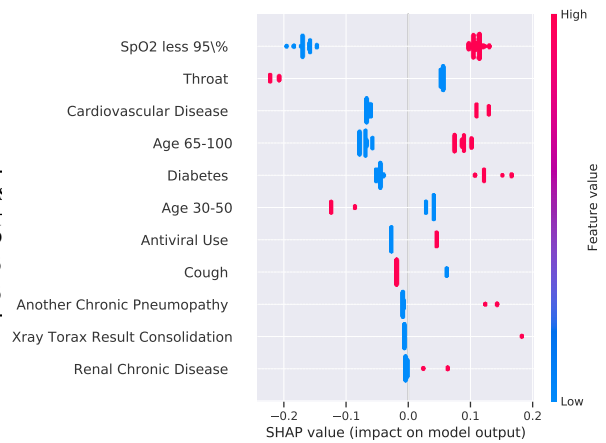
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.673	0.670	0.670	0.670	0.66
F1w	0.595	0.594	0.594	0.562	0.53
AUC	0.630	0.631	0.630	0.626	0.63



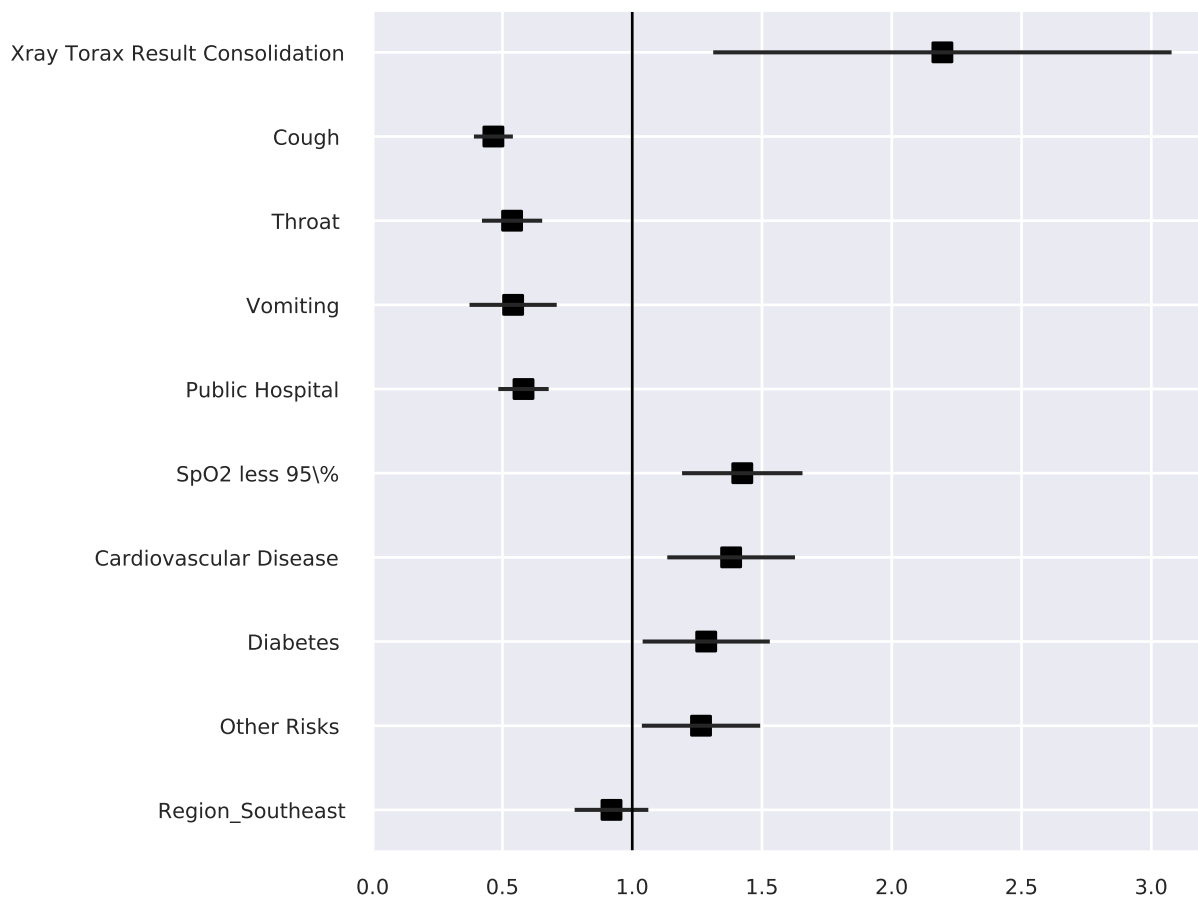
Coefficients:

	SVM-l1	LR-l1
Throat	0.846	0.655
Cough	0.869	0.726
Age 30-50	0.902	0.761
Age 65-100	1.091	1.218
Antiviral Use	1.101	1.261
Diabetes	1.115	1.275
Renal Chronic Disease	1.142	1.323
Cardiovascular Disease	1.142	1.355
SpO2 less 95\%	1.186	1.513
Another Chronic Pneumopathy	1.227	1.541
Xray Torax Result Consolidation	1.415	2.141

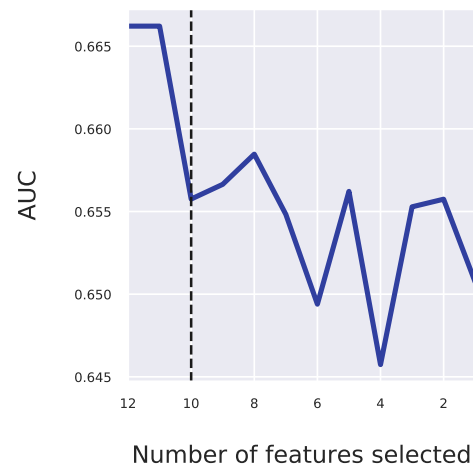


2.6 ICU small

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Xray Torax Result Consolidation	0.786 1.460	0.272 0.883	1.301	2.195	1.312	3.671	0.341	0.552	0.005	0.003
Cough	-0.766 0.887	-0.940 0.075	-0.592	0.465	0.390	0.553	0.405	0.331	0.028	0.000
Throat	-0.622 0.810	-0.865 0.116	-0.378	0.537	0.421	0.685	0.374	0.245	0.000	0.000
Vomiting	-0.614 0.837	-0.985 0.168	-0.243	0.541	0.373	0.784	0.356	0.243	0.030	0.001
Public Hospital	-0.543 0.872	-0.725 0.097	-0.361	0.581	0.484	0.697	0.373	0.307	0.020	0.000
SpO2 less 95\%	0.354 1.284	0.176 0.232	0.532	1.424	1.192	1.702	0.264	0.405	0.000	0.000
Cardiovascular Disease	0.323 1.207	0.126 0.246	0.519	1.381	1.135	1.681	0.299	0.442	0.000	0.001
Diabetes	0.251 1.163	0.039 0.245	0.462	1.285	1.040	1.588	0.314	0.443	0.000	0.020
Other Risks	0.235 1.199	0.036 0.228	0.434	1.265	1.037	1.543	0.319	0.428	0.000	0.021
Region_Southeast	-0.083 1.103	-0.251 0.142	0.085	0.920	0.778	1.088	0.303	0.377	0.006	0.331

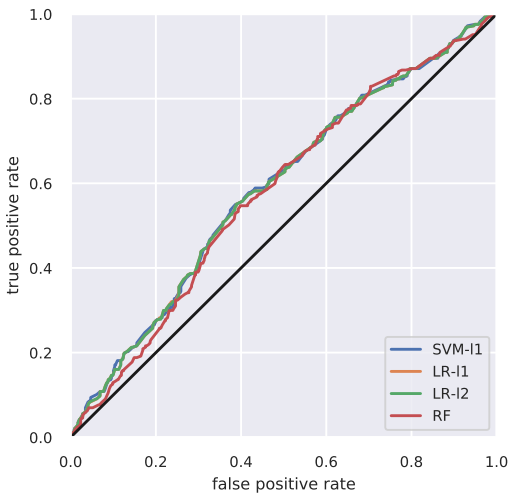


Recursive Feature Elimination:



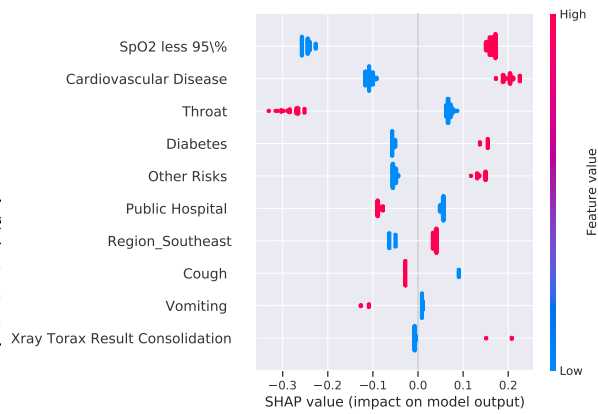
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.668	0.665	0.665	0.666	0.68
F1w	0.613	0.619	0.619	0.586	0.58
AUC	0.588	0.587	0.587	0.578	0.58



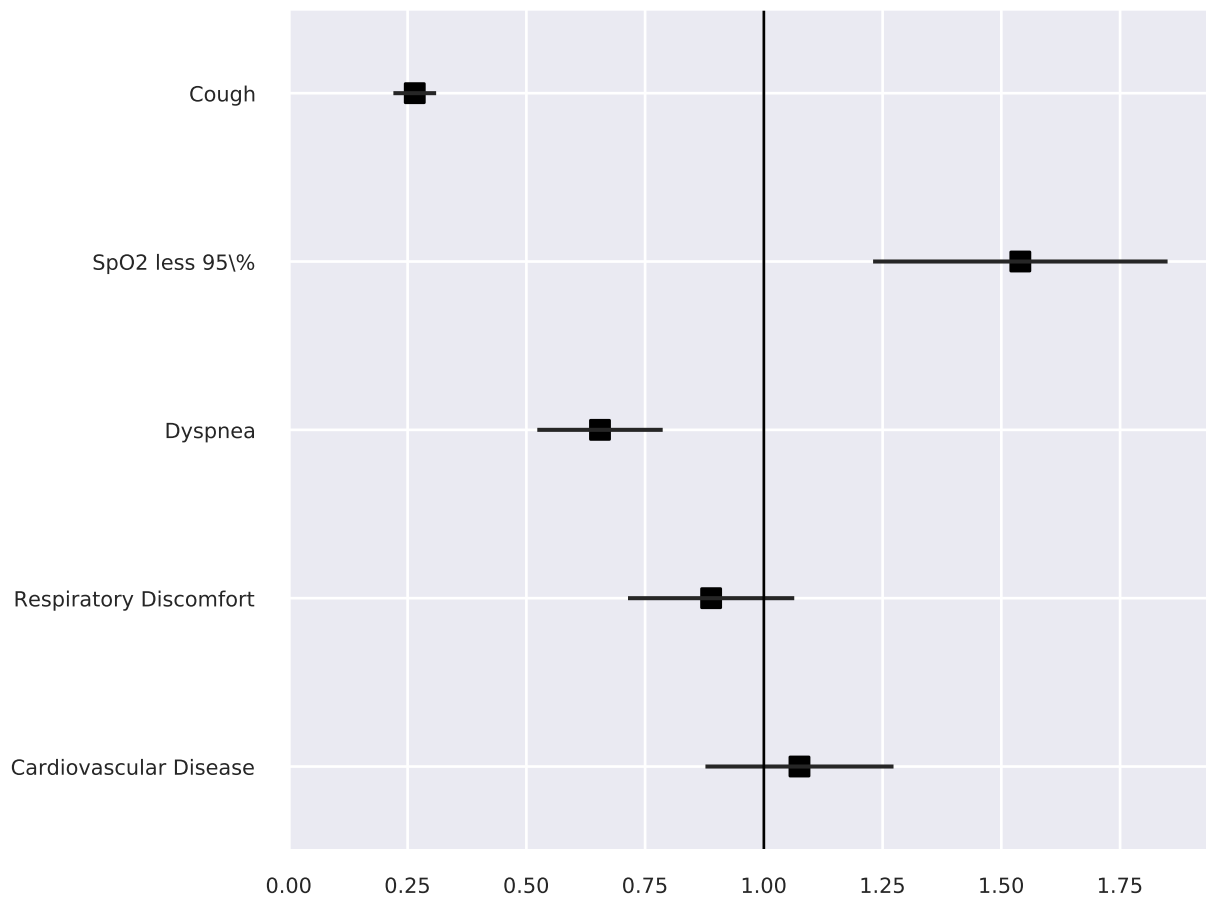
Coefficients:

	SVM-l1	LR-l1
Throat	0.810	0.583
Vomiting	0.837	0.629
Public Hospital	0.872	0.718
Cough	0.887	0.760
Region_Southeast	1.103	1.281
Diabetes	1.163	1.411
Other Risks	1.199	1.519
Cardiovascular Disease	1.207	1.538
SpO2 less 95\%	1.284	1.828
Xray Torax Result Consolidation	1.460	2.301

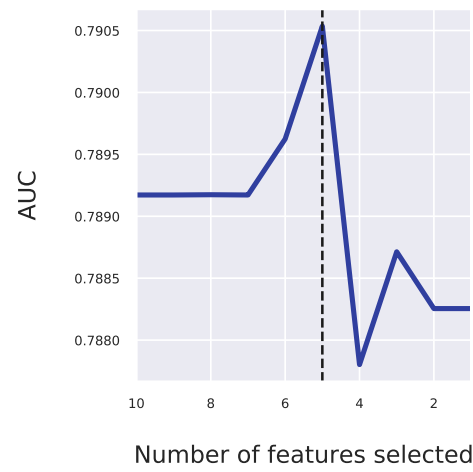


2.7 Ventilator

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-1.328	-1.515	-1.141	0.265	0.220	0.319	0.273	0.194	0.015	0.000
0.835	0.593	0.045								
SpO2 less 95\%	0.432	0.207	0.657	1.540	1.230	1.929	0.122	0.274	0.000	0.000
1.285	2.329	0.310								
Dyspnea	-0.422	-0.649	-0.196	0.655	0.523	0.822	0.152	0.234	0.005	0.000
1.067	1.237	0.132								
Respiratory Discomfort	-0.118	-0.337	0.102	0.889	0.714	1.107	0.161	0.244	0.001	0.293
1.071	1.237	0.175								
Cardiovascular Disease	0.073	-0.131	0.276	1.075	0.877	1.318	0.177	0.279	0.000	0.484
1.167	1.580	0.198								

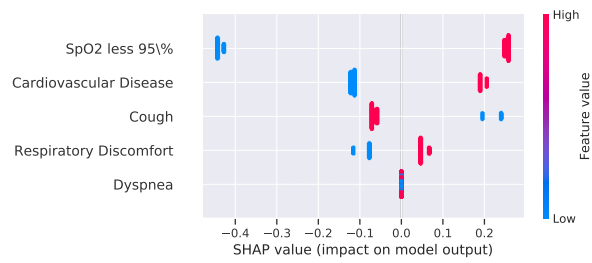


Recursive Feature Elimination:



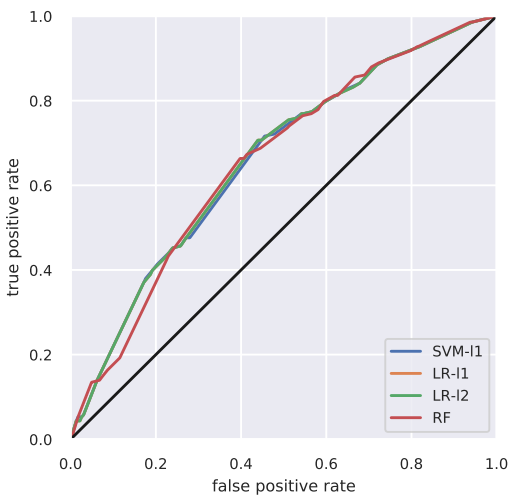
Coefficients:

	SVM-l1	LR-l1
Cough	0.835	0.593
Dyspnea	1.067	1.237
Respiratory Discomfort	1.071	1.237
Cardiovascular Disease	1.167	1.580
SpO2 less 95\%	1.285	2.329



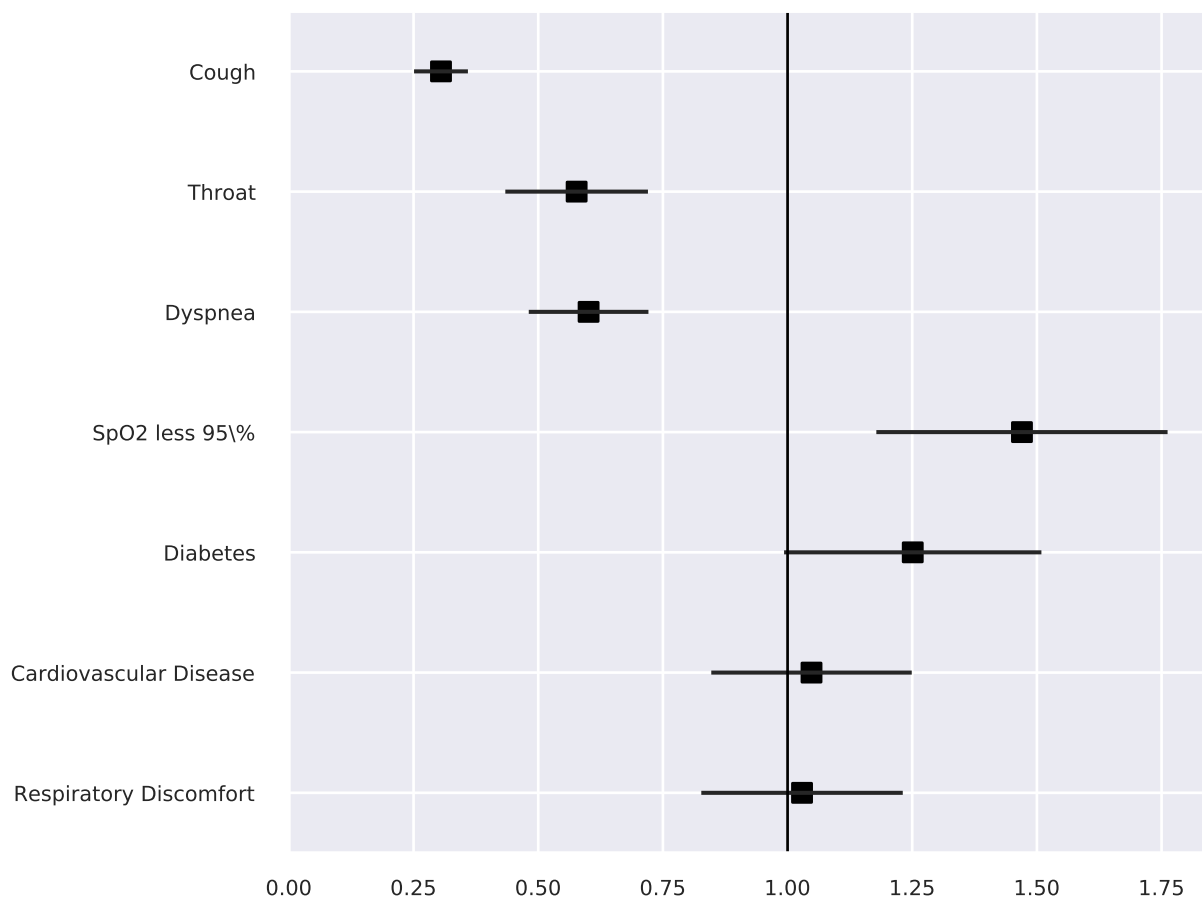
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.769	0.769	0.769	0.768	0.769
F1w	0.669	0.669	0.669	0.673	0.669
AUC	0.658	0.660	0.660	0.656	0.657

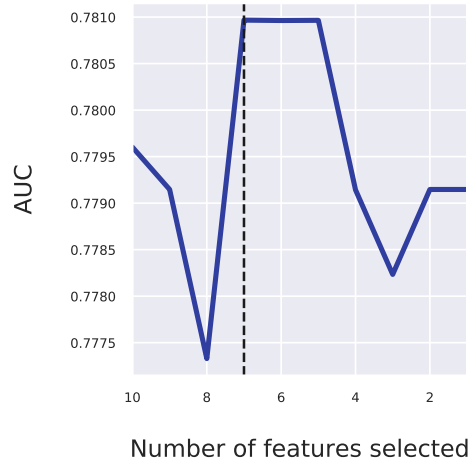


2.8 Ventilator small

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-1.189	-1.381	-0.997	0.305	0.251	0.369	0.276	0.205	0.041	0.000
0.866	0.797	0.054								
Throat	-0.550	-0.834	-0.266	0.577	0.434	0.766	0.238	0.156	0.015	0.000
0.866	0.768	0.143								
Dyspnea	-0.508	-0.733	-0.284	0.601	0.481	0.753	0.173	0.238	0.048	0.000
1.024	1.000	0.120								
SpO2 less 95\%	0.385	0.164	0.607	1.470	1.178	1.835	0.132	0.283	0.000	0.001
1.272	2.001	0.292								
Diabetes	0.224	-0.007	0.455	1.251	0.993	1.577	0.193	0.305	0.000	0.057
1.171	1.369	0.258								
Cardiovascular Disease	0.047	-0.167	0.261	1.048	0.847	1.298	0.187	0.285	0.000	0.666
1.115	1.267	0.201								
Respiratory Discomfort	0.029	-0.190	0.248	1.029	0.827	1.281	0.166	0.257	0.000	0.797
1.115	1.224	0.202								

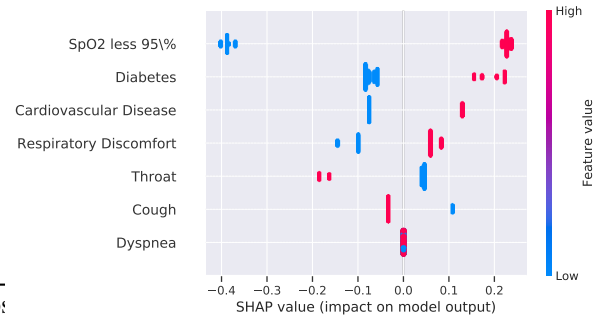


Recursive Feature Elimination:



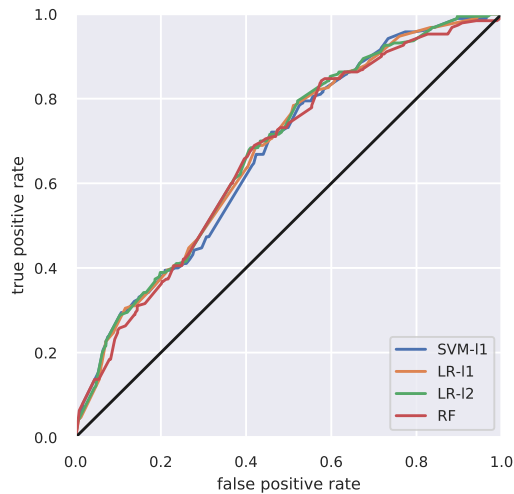
Coefficients:

	SVM-l1	LR-l1
Throat	0.866	0.768
Cough	0.866	0.797
Dyspnea	1.024	1.000
Respiratory Discomfort	1.115	1.224
Cardiovascular Disease	1.115	1.267
Diabetes	1.171	1.369
SpO2 less 95\%	1.272	2.001



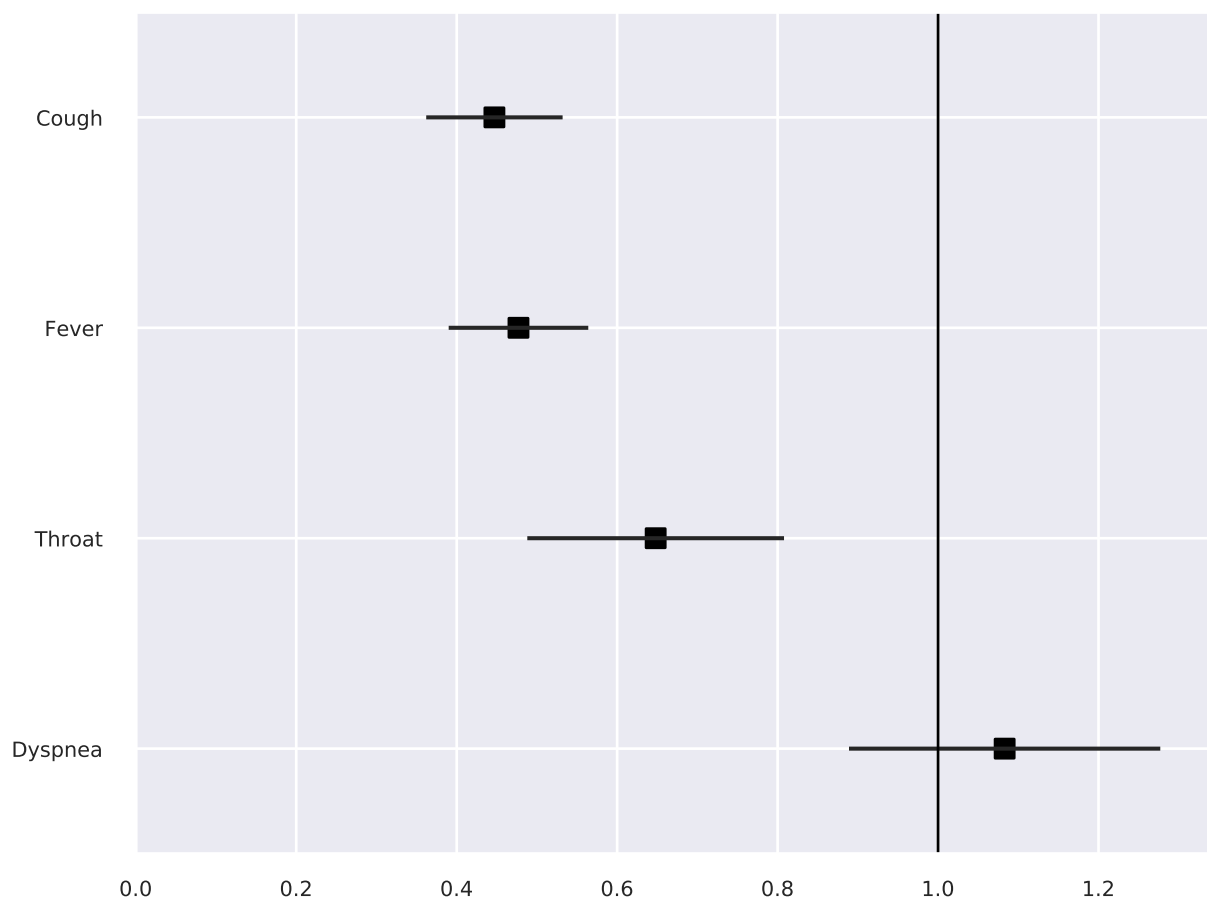
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.796	0.791	0.791	0.791	0.791
F1w	0.715	0.699	0.699	0.699	0.699
AUC	0.670	0.673	0.676	0.666	0.674

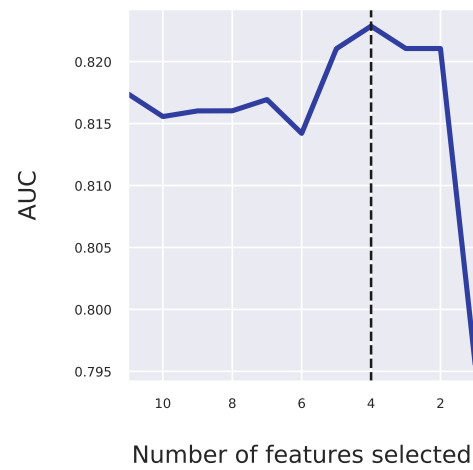


2.9 Ventilator with ICU

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.805	-1.017	-0.593	0.447	0.362	0.552	0.269	0.197	0.036	0.000
0.879	0.692	0.085								
Fever	-0.740	-0.942	-0.539	0.477	0.390	0.584	0.270	0.193	0.014	0.000
0.888	0.716	0.087								
Throat	-0.433	-0.717	-0.150	0.648	0.488	0.861	0.230	0.151	0.019	0.003
0.878	0.649	0.160								
Dyspnea	0.080	-0.118	0.278	1.083	0.889	1.320	0.159	0.234	0.012	0.428
1.212	1.850	0.194								

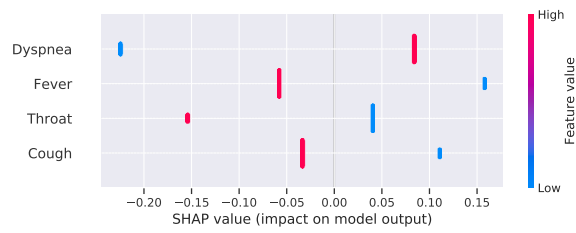


Recursive Feature Elimination:



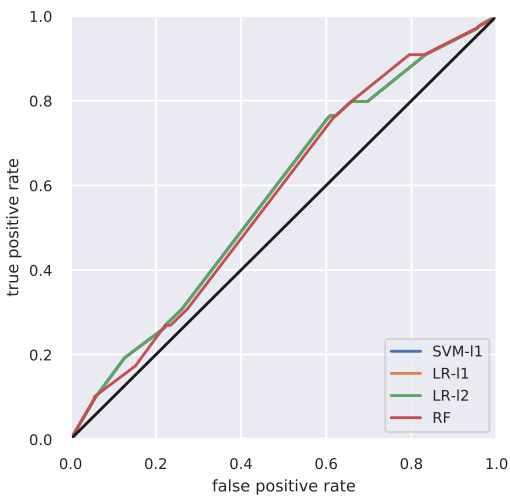
Coefficients:

	SVM-l1	LR-l1
Throat	0.878	0.649
Cough	0.879	0.692
Fever	0.888	0.716
Dyspnea	1.212	1.850



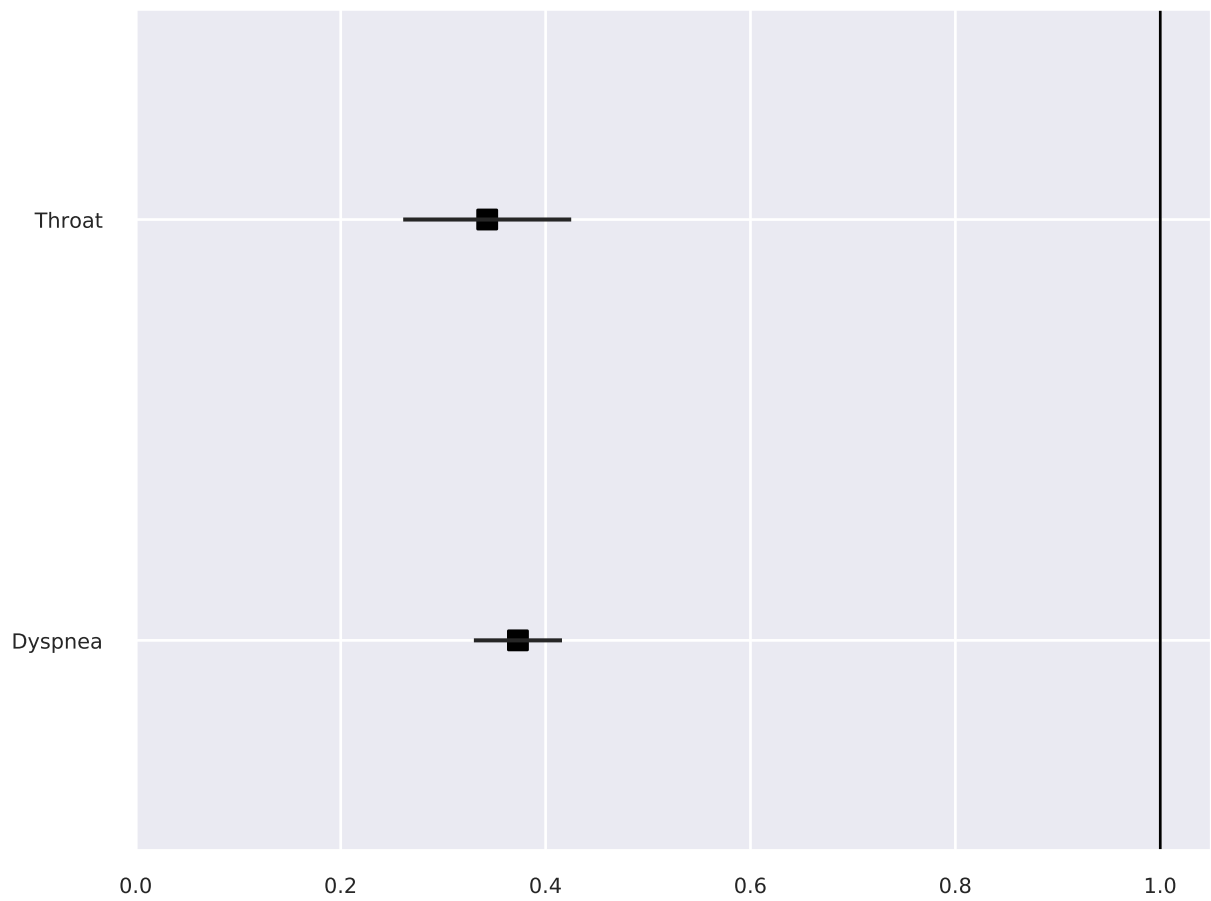
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.774	0.774	0.774	0.774	0.774
F1w	0.675	0.675	0.675	0.675	0.675
AUC	0.577	0.577	0.577	0.572	0.566

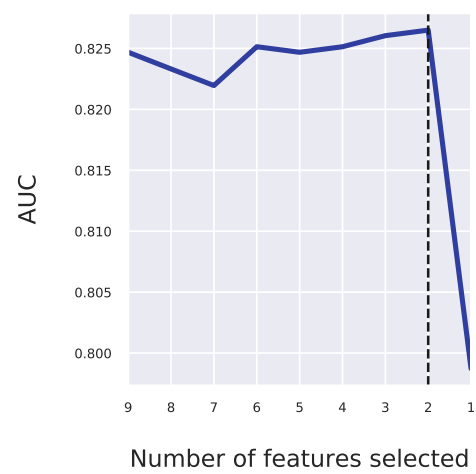


2.10 Ventilator with ICU small

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Throat	-1.070	-1.343	-0.798	0.343	0.261	0.450	0.229	0.144	0.009	0.0
0.833	0.546	0.082								
Dyspnea	-0.985	-1.108	-0.863	0.373	0.330	0.422	0.144	0.235	0.001	0.0
1.210	1.878	0.043								

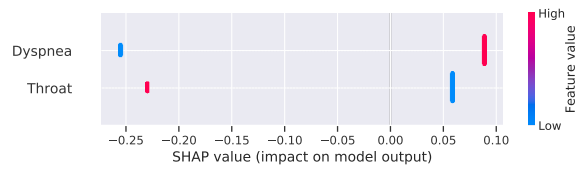


Recursive Feature Elimination:



Coefficients:

	SVM-l1	LR-l1
Throat	0.833	0.546
Dyspnea	1.210	1.878



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.768	0.768	0.768	0.768	0.768
F1w	0.667	0.667	0.667	0.667	0.667
AUC	0.556	0.556	0.556	0.556	0.556

