
PRELIMINARY RESULTS FOR BRAZIL COVID-19 DATASET

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1 Basic Analytics

	0
N	92662
N_Hosp	84195
N_Death	31788
Female	39658
Male	52979
Race	26525
Schooling	7058
Acute Respiratory Distress Syndrome	22854
Contracted At Hospital	2374
Contact Birds Pigs	744
Fever	67553
Cough	70434
Throat	19587
Dyspnea	64220
Respiratory Discomfort	53370
SpO2 less 95\%	51025
Diarrhea	12502
Vomiting	7010
Other Symptoms	29366
Postpartum	403
Cardiovascular Disease	28978
Hematologic Disease	852
Down Syndrome	238
Liver Chronic Disease	773
Asthma	2544
Diabetes	21990
Neurological Disease	3457
Another Chronic Pneumopathy	3326
Immunosuppression	2745
Renal Chronic Disease	3717
Obesity	3313
Other Risks	22495
Antiviral Use	29747
Hospitalization	84195
ICU	27840
Ventilator	16963
Xray Torax Result	2409
Result Final	0
Evolution	35639
Public Hospital	30867
Region	0

Table 1: Number of observations with a specific observation

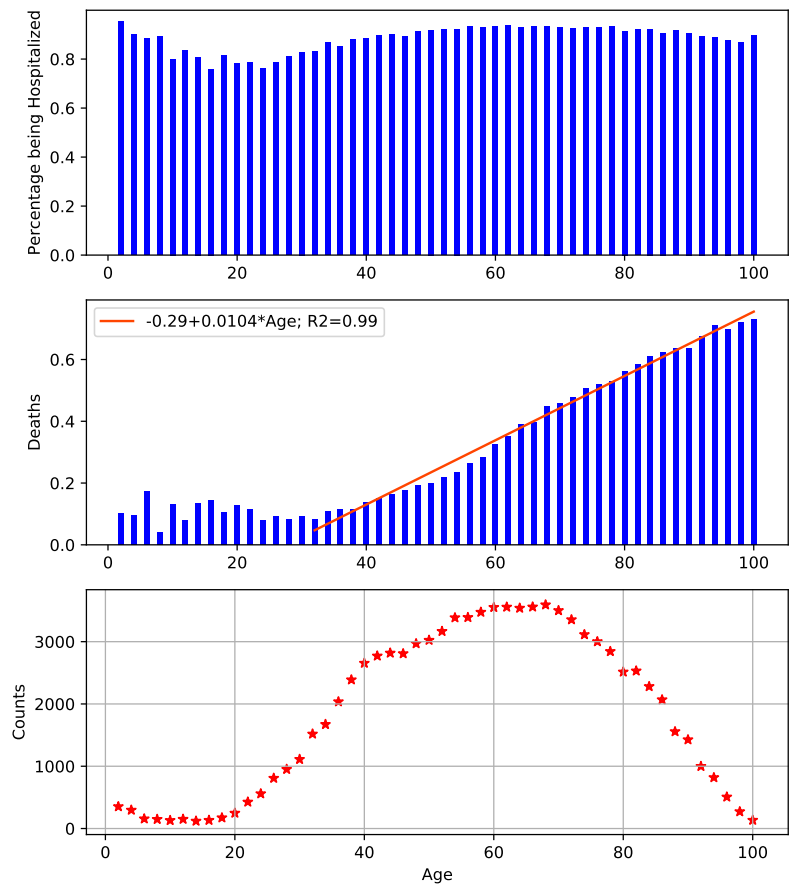


Figure 1: Distribution of hospitalization and deaths by age group

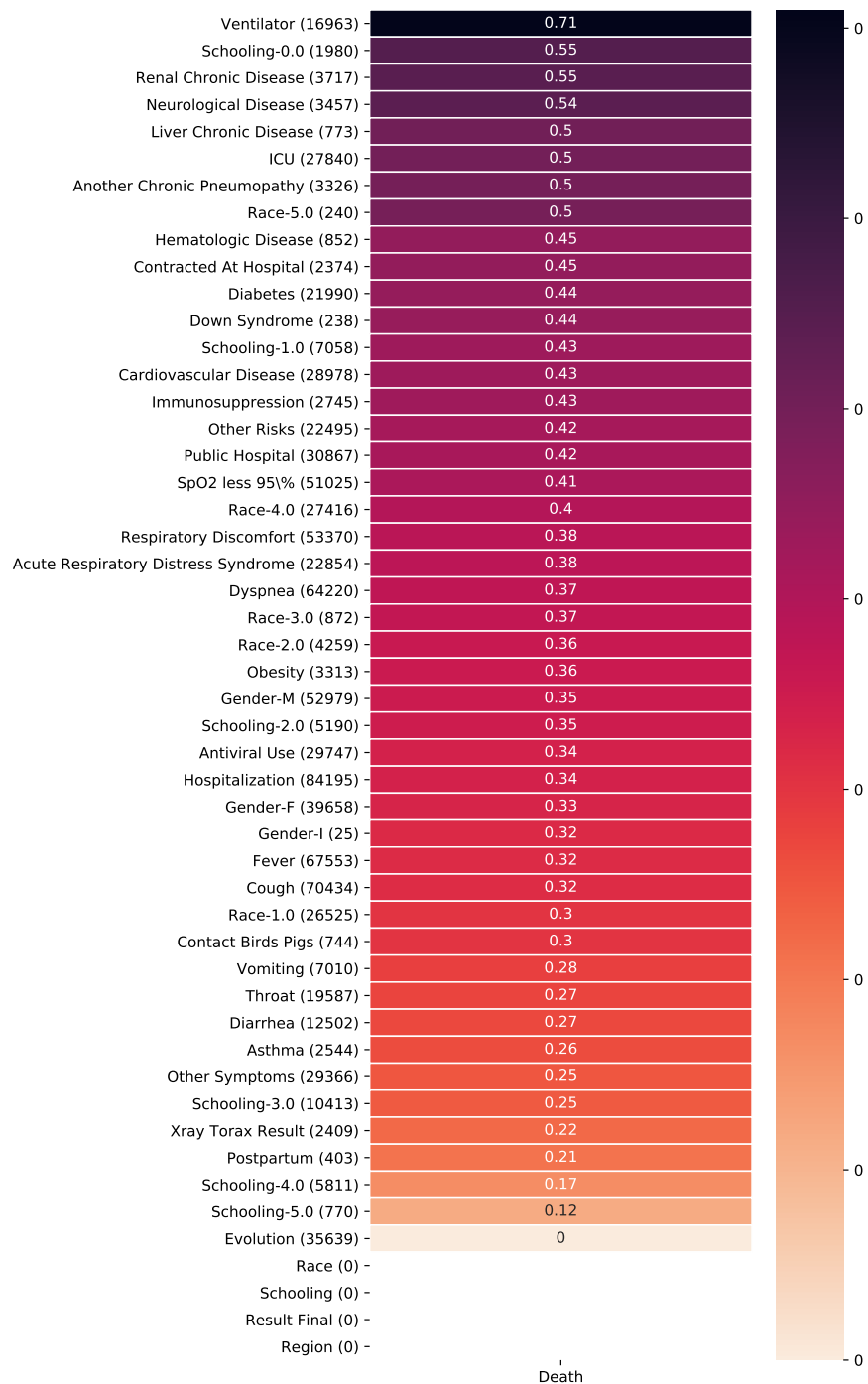


Figure 2: Share of hospitalized and deaths patients given characteristics

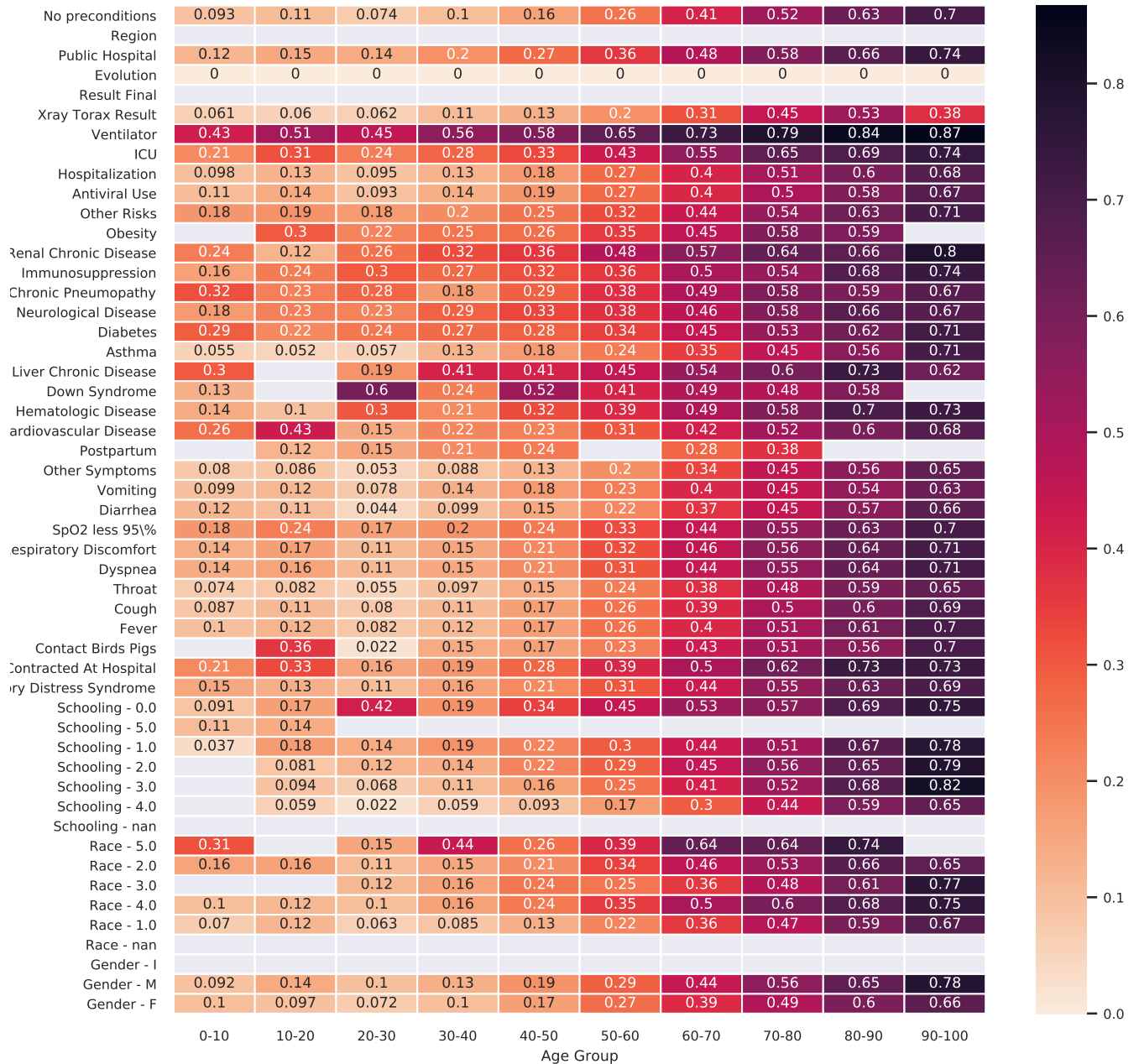
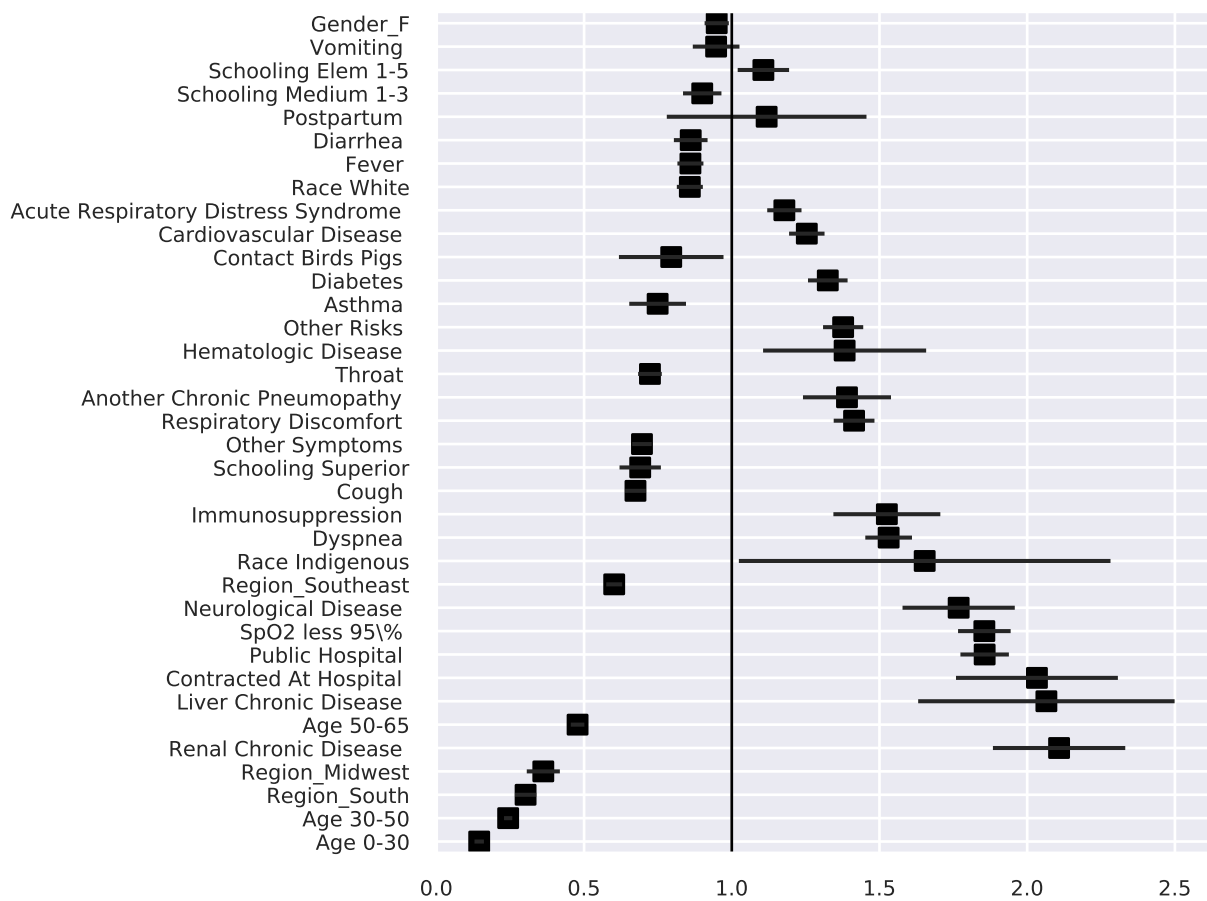


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

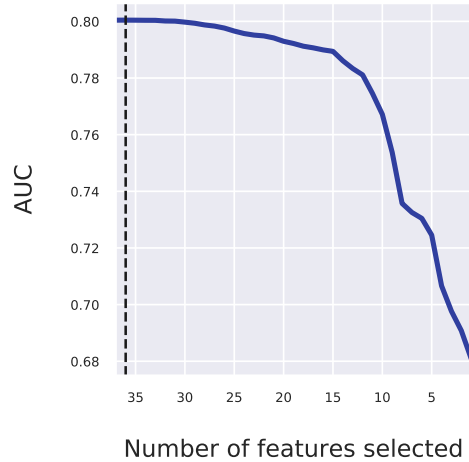
2 Results

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
Age 0-30	-1.928	-2.051	-1.805	0.145	0.129	0.164	0.481	0.154	0.000	0.000
0.438	0.116	0.016								
Age 30-50	-1.415	-1.474	-1.356	0.243	0.229	0.258	0.548	0.224	0.000	0.000
0.526	0.205	0.014								
Region_South	-1.197	-1.324	-1.070	0.302	0.266	0.343	0.473	0.233	0.000	0.000
0.593	0.251	0.036								
Region_Midwest	-1.016	-1.184	-0.848	0.362	0.306	0.428	0.465	0.304	0.000	0.000
0.639	0.311	0.056								
Renal Chronic Disease	0.746	0.633	0.858	2.108	1.884	2.360	0.450	0.705	0.000	0.000
1.311	2.003	0.224								
Age 50-65	-0.738	-0.788	-0.688	0.478	0.455	0.503	0.481	0.416	0.000	0.000
0.687	0.413	0.023								
Liver Chronic Disease	0.725	0.489	0.961	2.065	1.631	2.615	0.460	0.658	0.000	0.000
1.295	1.947	0.434								
Contracted At Hospital	0.710	0.565	0.855	2.033	1.759	2.351	0.457	0.647	0.000	0.000
1.265	1.867	0.274								
Public Hospital	0.618	0.573	0.663	1.856	1.774	1.942	0.405	0.557	0.000	0.000
1.216	1.659	0.082								
SpO2 less 95\%	0.618	0.569	0.667	1.855	1.766	1.949	0.344	0.542	0.000	0.000
1.240	1.750	0.089								
Neurological Disease	0.570	0.456	0.683	1.768	1.578	1.981	0.452	0.689	0.000	0.000
1.216	1.641	0.190								
Region_Southeast	-0.507	-0.554	-0.460	0.602	0.575	0.631	0.531	0.414	0.000	0.000
0.750	0.479	0.027								
Race Indigenous	0.503	0.023	0.982	1.653	1.024	2.669	0.461	0.660	0.001	0.040
1.160	1.440	0.629								
Dyspnea	0.426	0.373	0.479	1.531	1.452	1.614	0.375	0.494	0.000	0.000
1.100	1.281	0.079								
Immunosuppression	0.422	0.296	0.549	1.525	1.344	1.731	0.458	0.572	0.000	0.000
1.160	1.472	0.181								
Cough	-0.394	-0.448	-0.339	0.674	0.639	0.712	0.580	0.428	0.000	0.000
0.793	0.547	0.035								
Schooling Superior	-0.370	-0.478	-0.263	0.690	0.620	0.769	0.474	0.260	0.000	0.000
0.854	0.649	0.070								
Other Symptoms	-0.362	-0.411	-0.313	0.696	0.663	0.731	0.509	0.355	0.000	0.000
0.832	0.617	0.033								
Respiratory Discomfort	0.346	0.296	0.396	1.414	1.345	1.486	0.391	0.507	0.000	0.000
1.112	1.315	0.069								
Another Chronic Pneumopathy	0.329	0.216	0.442	1.390	1.241	1.556	0.454	0.637	0.000	0.000
1.123	1.340	0.149								
Throat	-0.324	-0.382	-0.267	0.723	0.683	0.766	0.482	0.386	0.000	0.000
0.884	0.723	0.040								
Hematologic Disease	0.323	0.101	0.546	1.382	1.106	1.726	0.460	0.597	0.000	0.004
1.112	1.316	0.276								
Other Risks	0.320	0.270	0.370	1.377	1.309	1.448	0.435	0.537	0.000	0.000
1.091	1.257	0.068								
Asthma	-0.289	-0.427	-0.152	0.749	0.653	0.859	0.465	0.357	0.000	0.000
0.903	0.770	0.096								
Diabetes	0.282	0.230	0.334	1.325	1.258	1.396	0.422	0.578	0.000	0.000
1.098	1.262	0.067								
Contact Birds Pigs	-0.230	-0.482	0.022	0.795	0.618	1.022	0.463	0.369	0.003	0.074
0.914	0.797	0.177								
Cardiovascular Disease	0.227	0.178	0.276	1.254	1.194	1.318	0.410	0.565	0.000	0.000
1.057	1.151	0.060								
Acute Respiratory Distress Syndrome	0.164	0.114	0.214	1.178	1.120	1.239	0.445	0.509	0.000	0.000
1.028	1.073	0.058								
Race White	-0.153	-0.206	-0.100	0.858	0.814	0.905	0.492	0.391	0.000	0.000
0.930	0.827	0.044								
Fever	-0.151	-0.203	-0.100	0.860	0.816	0.905	0.559	0.429	0.000	0.000
0.874	0.707	0.044								
Diarrhea	-0.150	-0.218	-0.081	0.861	0.804	0.922	0.474	0.385	0.000	0.000
0.937	0.843	0.057								
Postpartum	0.112	-0.249	0.473	1.118	0.780	1.605	0.463	0.293	0.000	0.543
1.003	1.016	0.338								
Schooling Medium 1-3	-0.105	-0.180	-0.030	0.900	0.835	0.971	0.476	0.344	0.000	0.006
0.948	0.873	0.065								
Schooling Elem 1-5	0.101	0.020	0.183	1.107	1.020	1.201	0.454	0.557	0.000	0.015
1.016	1.035	0.087								
Vomiting	-0.054	-0.142	0.033	0.947	0.868	1.034	0.468	0.390	0.000	0.223
0.977	0.946	0.079								
Gender_F	-0.053	-0.097	-0.009	0.949	0.908	0.991	0.471	0.450	0.000	0.019
0.931	0.826	0.041								

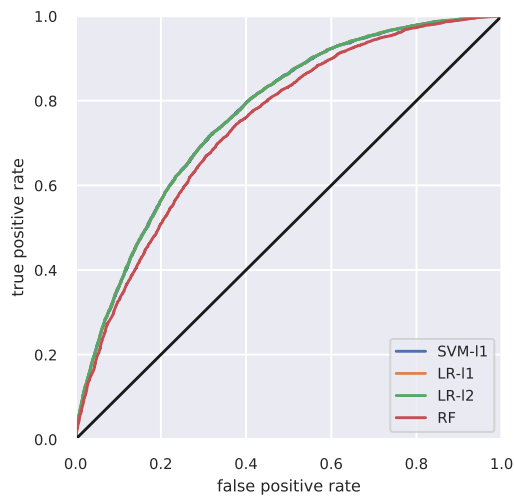


Recursive Feature Elimination:



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.699	0.698	0.699	0.682	0.703
F1w	0.699	0.698	0.699	0.682	0.703
AUC	0.768	0.768	0.768	0.744	0.774



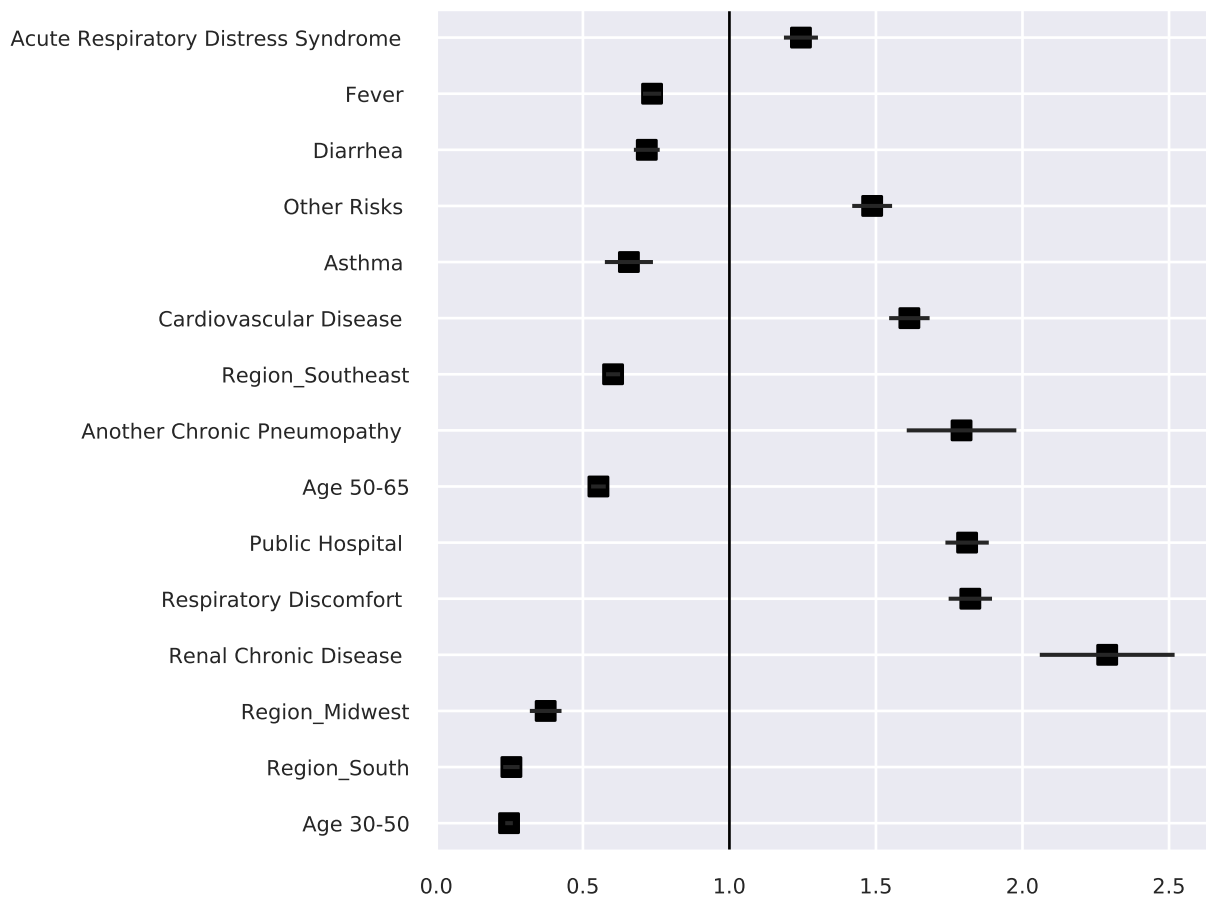
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.438	0.116
Age 30-50	0.526	0.205
Region_South	0.593	0.251
Region_Midwest	0.639	0.311
Age 50-65	0.687	0.413
Region_Southeast	0.750	0.479
Cough	0.793	0.547
Other Symptoms	0.832	0.617
Schooling Superior	0.854	0.649
Fever	0.874	0.707
Throat	0.884	0.723
Asthma	0.903	0.770
Contact Birds Pigs	0.914	0.797
Gender_F	0.931	0.826
Race White	0.930	0.827
Diarrhea	0.937	0.843
Schooling Medium 1-3	0.948	0.873
Vomiting	0.977	0.946
Postpartum	1.003	1.016
Schooling Elem 1-5	1.016	1.035
Acute Respiratory Distress Syndrome	1.028	1.073
Cardiovascular Disease	1.057	1.151
Other Risks	1.091	1.257
Diabetes	1.098	1.262
Dyspnea	1.100	1.281
Respiratory Discomfort	1.112	1.315
Hematologic Disease	1.112	1.316
Another Chronic Pneumopathy	1.123	1.340
Race Indigenous	1.160	1.440
Immunosuppression	1.160	1.472
Neurological Disease	1.216	1.641
Public Hospital	1.216	1.659
SpO2 less 95\%	1.240	1.750
Contracted At Hospital	1.265	1.867
Liver Chronic Disease	1.295	1.947
Renal Chronic Disease	1.311	2.003

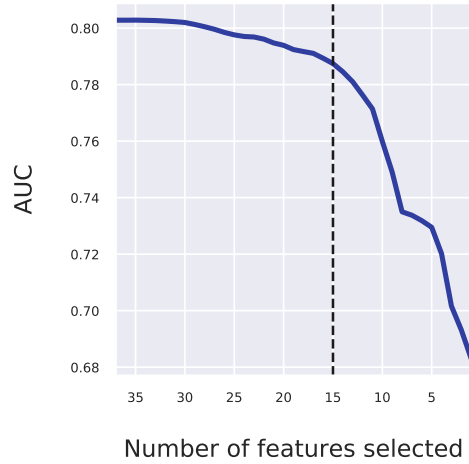


2.2 Mortality (previous) small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 30-50	-1.396	-1.450	-1.342	0.248	0.235	0.261	0.550	0.222	0.0	0.0
0.536	0.224	0.013								
Region.South	-1.363	-1.479	-1.246	0.256	0.228	0.288	0.475	0.226	0.0	0.0
0.545	0.218	0.028								
Region.Midwest	-0.985	-1.141	-0.829	0.373	0.319	0.437	0.466	0.324	0.0	0.0
0.634	0.330	0.054								
Renal Chronic Disease	0.828	0.722	0.934	2.289	2.059	2.544	0.452	0.691	0.0	0.0
1.388	2.220	0.230								
Respiratory Discomfort	0.600	0.559	0.642	1.822	1.748	1.900	0.391	0.509	0.0	0.0
1.225	1.636	0.074								
Public Hospital	0.594	0.552	0.636	1.811	1.737	1.889	0.409	0.554	0.0	0.0
1.232	1.653	0.074								
Age 50-65	-0.592	-0.639	-0.546	0.553	0.528	0.579	0.482	0.419	0.0	0.0
0.739	0.506	0.025								
Another Chronic Pneumopathy	0.583	0.473	0.694	1.792	1.605	2.001	0.455	0.651	0.0	0.0
1.252	1.729	0.187								
Region.Southeast	-0.507	-0.547	-0.466	0.603	0.579	0.627	0.532	0.415	0.0	0.0
0.753	0.510	0.024								
Cardiovascular Disease	0.479	0.435	0.523	1.614	1.545	1.687	0.410	0.568	0.0	0.0
1.184	1.491	0.069								
Asthma	-0.421	-0.553	-0.288	0.657	0.575	0.750	0.466	0.357	0.0	0.0
0.834	0.639	0.082								
Other Risks	0.397	0.350	0.443	1.487	1.419	1.558	0.436	0.541	0.0	0.0
1.139	1.367	0.068								
Diarrhea	-0.331	-0.394	-0.268	0.718	0.674	0.765	0.477	0.374	0.0	0.0
0.863	0.697	0.044								
Fever	-0.307	-0.350	-0.265	0.736	0.705	0.767	0.560	0.430	0.0	0.0
0.816	0.613	0.031								
Acute Respiratory Distress Syndrome	0.218	0.171	0.265	1.244	1.186	1.304	0.446	0.511	0.0	0.0
1.060	1.155	0.058								



Recursive Feature Elimination:

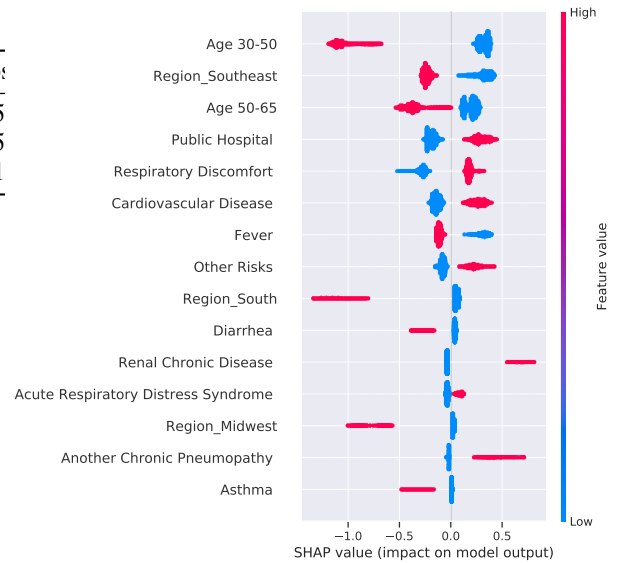
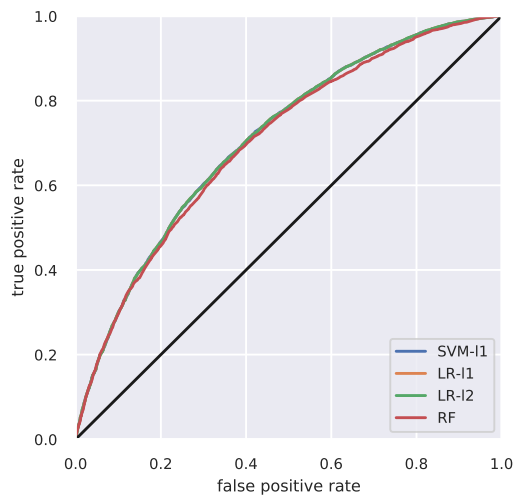


Coefficients:

	SVM-l1	LR-l1
Region_South	0.545	0.218
Age 30-50	0.536	0.224
Region_Midwest	0.634	0.330
Age 50-65	0.739	0.506
Region_Southeast	0.753	0.510
Fever	0.816	0.613
Asthma	0.834	0.639
Diarrhea	0.863	0.697
Acute Respiratory Distress Syndrome	1.060	1.155
Other Risks	1.139	1.367
Cardiovascular Disease	1.184	1.491
Respiratory Discomfort	1.225	1.636
Public Hospital	1.232	1.653
Another Chronic Pneumopathy	1.252	1.729
Renal Chronic Disease	1.388	2.220

Performance:

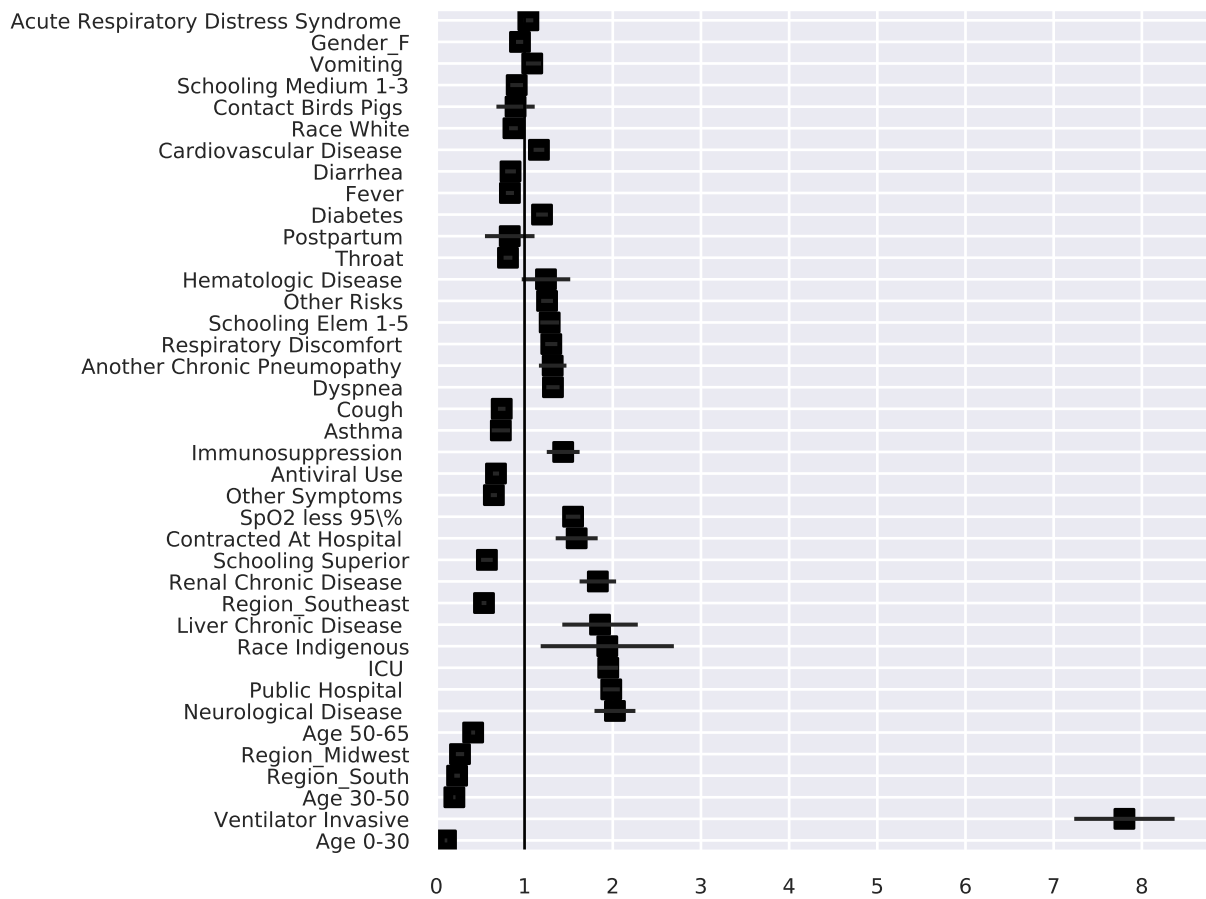
	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.654	0.654	0.654	0.648	0.65
F1w	0.653	0.654	0.654	0.648	0.65
AUC	0.711	0.711	0.711	0.704	0.71



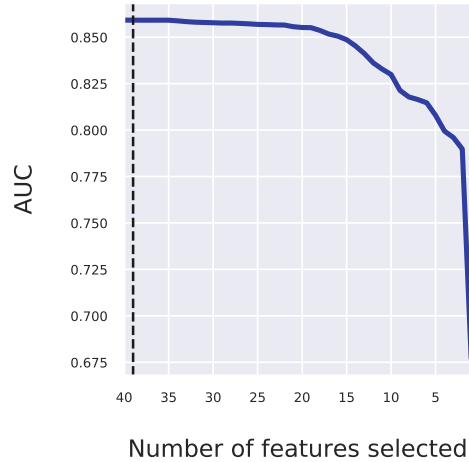
2.3 Mortality (advanced)

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
Age 0-30	-2.218	-2.359	-2.077	0.109	0.094	0.125	0.480	0.152	0.000	0.000
0.441	0.093	0.015								
Ventilator Invasive	2.054	1.979	2.130	7.802	7.233	8.416	0.348	0.855	0.000	0.000
2.108	7.999	0.569								
Age 30-50	-1.588	-1.654	-1.523	0.204	0.191	0.218	0.547	0.223	0.000	0.000
0.538	0.182	0.013								
Region.South	-1.449	-1.595	-1.303	0.235	0.203	0.272	0.472	0.229	0.000	0.000
0.580	0.209	0.032								
Region.Midwest	-1.317	-1.508	-1.127	0.268	0.221	0.324	0.465	0.302	0.000	0.000
0.608	0.243	0.047								
Age 50-65	-0.875	-0.930	-0.820	0.417	0.395	0.440	0.481	0.414	0.000	0.000
0.681	0.376	0.022								
Neurological Disease	0.705	0.584	0.827	2.025	1.793	2.286	0.450	0.703	0.000	0.000
1.290	1.927	0.232								
Public Hospital	0.684	0.634	0.735	1.983	1.886	2.085	0.405	0.555	0.000	0.000
1.245	1.813	0.097								
ICU	0.667	0.608	0.726	1.949	1.837	2.067	0.359	0.658	0.000	0.000
1.250	1.848	0.112								
Race Indigenous	0.662	0.168	1.155	1.938	1.183	3.175	0.461	0.686	0.000	0.009
1.244	1.676	0.755								
Liver Chronic Disease	0.619	0.356	0.881	1.856	1.428	2.414	0.460	0.631	0.000	0.000
1.238	1.799	0.428								
Region.Southeast	-0.616	-0.668	-0.565	0.540	0.513	0.569	0.529	0.414	0.000	0.000
0.752	0.461	0.027								
Renal Chronic Disease	0.605	0.485	0.725	1.831	1.624	2.065	0.450	0.691	0.000	0.000
1.242	1.768	0.207								
Schooling Superior	-0.557	-0.679	-0.434	0.573	0.507	0.648	0.474	0.247	0.000	0.000
0.825	0.549	0.066								
Contracted At Hospital	0.464	0.303	0.626	1.591	1.353	1.869	0.457	0.634	0.000	0.000
1.153	1.485	0.238								
SpO2 less 95\%	0.438	0.384	0.493	1.550	1.468	1.637	0.343	0.542	0.000	0.000
1.156	1.495	0.082								
Other Symptoms	-0.428	-0.482	-0.374	0.652	0.617	0.688	0.507	0.356	0.000	0.000
0.834	0.597	0.035								
Antiviral Use	-0.392	-0.444	-0.340	0.676	0.641	0.712	0.473	0.440	0.000	0.000
0.867	0.673	0.035								
Immunosuppression	0.363	0.225	0.502	1.438	1.252	1.652	0.458	0.560	0.000	0.000
1.128	1.397	0.186								
Asthma	-0.313	-0.466	-0.160	0.731	0.627	0.852	0.464	0.350	0.000	0.000
0.906	0.747	0.104								
Cough	-0.300	-0.360	-0.240	0.741	0.698	0.786	0.575	0.428	0.000	0.000
0.846	0.634	0.043								
Dyspnea	0.279	0.221	0.337	1.322	1.247	1.401	0.375	0.492	0.000	0.000
1.058	1.165	0.075								
Another Chronic Pneumopathy	0.277	0.151	0.402	1.319	1.163	1.494	0.454	0.632	0.000	0.000
1.103	1.294	0.156								
Respiratory Discomfort	0.265	0.210	0.320	1.303	1.234	1.377	0.388	0.508	0.000	0.000
1.081	1.237	0.069								
Schooling Elem 1-5	0.251	0.164	0.339	1.285	1.178	1.403	0.452	0.564	0.000	0.000
1.081	1.214	0.107								
Other Risks	0.227	0.172	0.283	1.255	1.188	1.327	0.434	0.539	0.000	0.000
1.059	1.177	0.067								
Hematologic Disease	0.218	-0.033	0.468	1.243	0.968	1.596	0.460	0.587	0.000	0.088
1.063	1.211	0.275								
Throat	-0.209	-0.271	-0.146	0.812	0.762	0.864	0.482	0.383	0.000	0.000
0.927	0.811	0.050								
Postpartum	-0.185	-0.595	0.226	0.832	0.551	1.254	0.462	0.286	0.000	0.379
0.917	0.838	0.281								
Diabetes	0.181	0.123	0.238	1.198	1.131	1.268	0.422	0.577	0.000	0.000
1.056	1.158	0.067								
Fever	-0.181	-0.238	-0.125	0.834	0.788	0.883	0.554	0.430	0.000	0.000
0.888	0.725	0.046								
Diarrhea	-0.174	-0.249	-0.098	0.841	0.780	0.907	0.474	0.379	0.000	0.000
0.937	0.831	0.061								
Cardiovascular Disease	0.151	0.097	0.205	1.163	1.102	1.227	0.408	0.565	0.000	0.000
1.031	1.093	0.061								
Race White	-0.135	-0.193	-0.077	0.874	0.824	0.926	0.490	0.392	0.000	0.000
0.946	0.851	0.050								
Contact Birds Pigs	-0.107	-0.384	0.170	0.898	0.681	1.185	0.462	0.375	0.008	0.449
0.967	0.913	0.217								
Schooling Medium 1-3	-0.094	-0.177	-0.010	0.911	0.838	0.990	0.475	0.344	0.000	0.028
0.956	0.888	0.073								
Vomiting	0.083	-0.013	0.179	1.087	0.987	1.196	0.466	0.398	0.000	0.090
1.024	1.075	0.100								
Gender_F	-0.054	-0.102	-0.005	0.948	0.903	0.995	0.468	0.451	0.003	0.029
0.946	0.855	0.045								

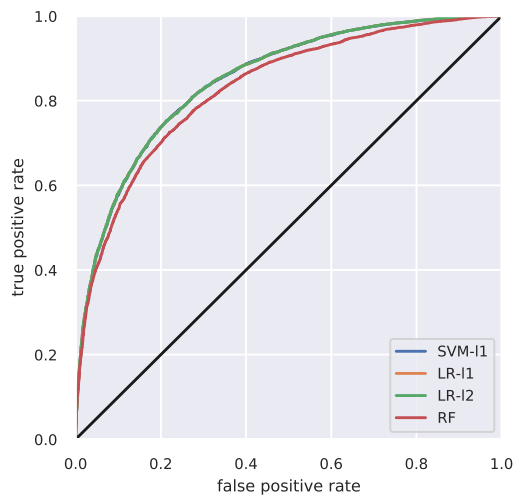


Recursive Feature Elimination:



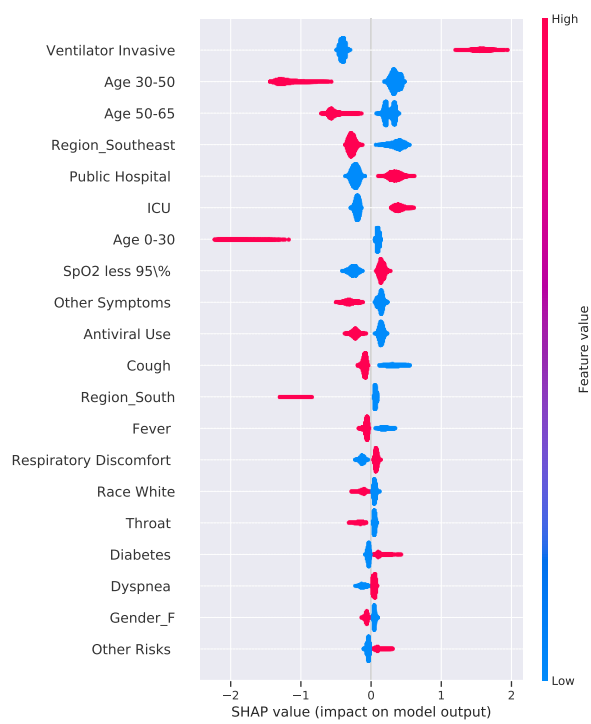
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.770	0.770	0.770	0.741	0.772
F1w	0.770	0.769	0.769	0.734	0.772
AUC	0.849	0.850	0.850	0.830	0.854



Coefficients:

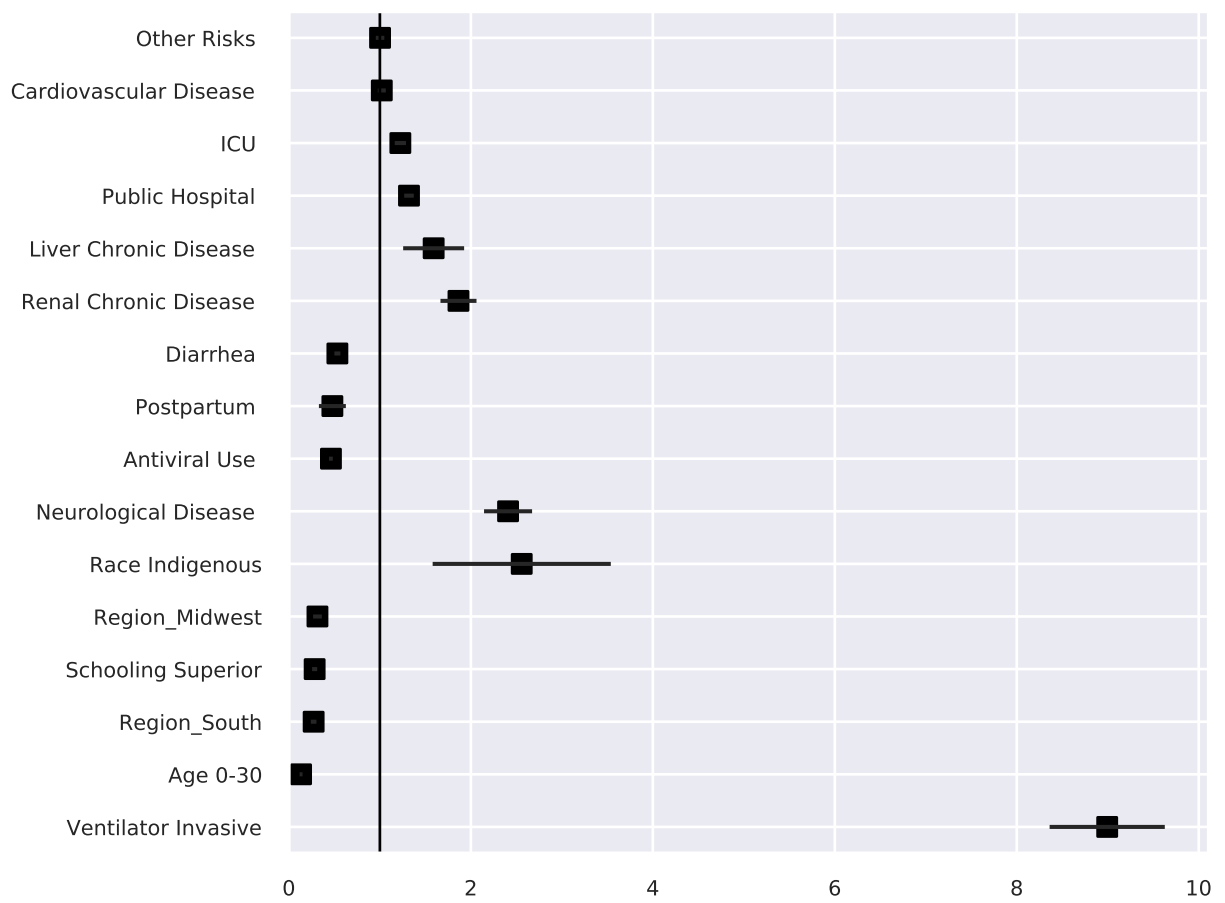
	SVM-l1	LR-l1
Age 0-30	0.441	0.093
Age 30-50	0.538	0.182
Region_South	0.580	0.209
Region_Midwest	0.608	0.243
Age 50-65	0.681	0.376
Region_Southeast	0.752	0.461
Schooling Superior	0.825	0.549
Other Symptoms	0.834	0.597
Cough	0.846	0.634
Antiviral Use	0.867	0.673
Fever	0.888	0.725
Asthma	0.906	0.747
Throat	0.927	0.811
Diarrhea	0.937	0.831
Postpartum	0.917	0.838
Race White	0.946	0.851
Gender_F	0.946	0.855
Schooling Medium 1-3	0.956	0.888
Contact Birds Pigs	0.967	0.913
Acute Respiratory Distress Syndrome	0.991	0.979
Vomiting	1.024	1.075
Cardiovascular Disease	1.031	1.093
Diabetes	1.056	1.158
Dyspnea	1.058	1.165
Other Risks	1.059	1.177
Hematologic Disease	1.063	1.211
Schooling Elem 1-5	1.081	1.214
Respiratory Discomfort	1.081	1.237
Another Chronic Pneumopathy	1.103	1.294
Immunosuppression	1.128	1.397
Contracted At Hospital	1.153	1.485
SpO2 less 95%	1.156	1.495
Race Indigenous	1.244	1.676
Renal Chronic Disease	1.242	1.768
Liver Chronic Disease	1.238	1.799
Public Hospital	1.245	1.813
ICU	1.250	1.848
Neurological Disease	1.290	1.927
Ventilator Invasive	2.108	7.999



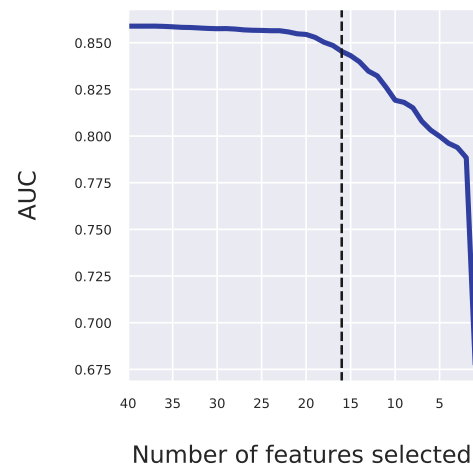
2.4 Mortality (advanced) small

Include variables: Antiviral, ICU, Ventilator

SVM-11	Coef LR-11	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Ventilator Invasive	2.197	2.124	2.270	8.994	8.361	9.676	0.349	0.857	0.0	0.000
2.322	8.872	0.633								
Age 0-30	-2.009	-2.134	-1.884	0.134	0.118	0.152	0.481	0.152	0.0	0.000
0.583	0.187	0.016								
Region_South	-1.303	-1.424	-1.182	0.272	0.241	0.307	0.473	0.235	0.0	0.000
0.703	0.350	0.031								
Schooling Superior	-1.262	-1.368	-1.156	0.283	0.255	0.315	0.475	0.250	0.0	0.000
0.724	0.391	0.028								
Region_Midwest	-1.158	-1.322	-0.994	0.314	0.266	0.370	0.465	0.326	0.0	0.000
0.692	0.365	0.048								
Race Indigenous	0.940	0.457	1.422	2.559	1.580	4.146	0.462	0.694	0.0	0.000
1.605	2.968	0.979								
Neurological Disease	0.879	0.763	0.995	2.409	2.145	2.705	0.452	0.697	0.0	0.000
1.544	2.878	0.264								
Antiviral Use	-0.773	-0.818	-0.728	0.462	0.441	0.483	0.475	0.441	0.0	0.000
0.831	0.616	0.021								
Postpartum	-0.738	-1.110	-0.365	0.478	0.330	0.694	0.463	0.286	0.0	0.000
0.825	0.618	0.148								
Diarrhea	-0.629	-0.693	-0.566	0.533	0.500	0.568	0.476	0.376	0.0	0.000
0.878	0.707	0.033								
Renal Chronic Disease	0.623	0.510	0.735	1.864	1.666	2.085	0.451	0.697	0.0	0.000
1.332	2.041	0.198								
Liver Chronic Disease	0.464	0.228	0.701	1.591	1.256	2.015	0.460	0.648	0.0	0.000
1.271	1.806	0.335								
Public Hospital	0.278	0.236	0.319	1.320	1.267	1.375	0.404	0.559	0.0	0.000
1.339	2.108	0.053								
ICU	0.203	0.151	0.255	1.225	1.163	1.290	0.360	0.660	0.0	0.000
1.241	1.732	0.062								
Cardiovascular Disease	0.020	-0.024	0.064	1.021	0.977	1.067	0.412	0.562	0.0	0.362
1.169	1.482	0.044								
Other Risks	0.002	-0.046	0.050	1.002	0.955	1.051	0.434	0.541	0.0	0.936
1.128	1.363	0.047								



Recursive Feature Elimination:

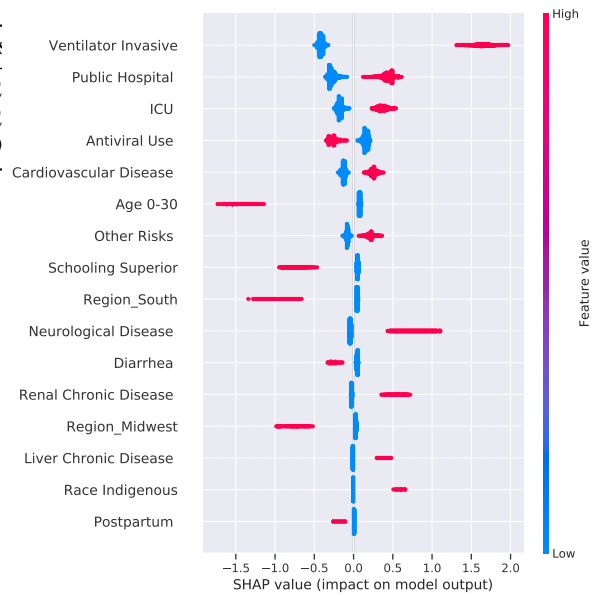
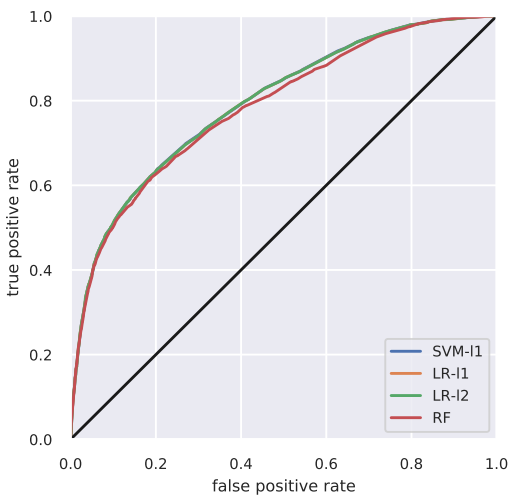


Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.583	0.187
Region_South	0.703	0.350
Region_Midwest	0.692	0.365
Schooling_Superior	0.724	0.391
Antiviral_Use	0.831	0.616
Postpartum	0.825	0.618
Diarrhea	0.878	0.707
Other_Risks	1.128	1.363
Cardiovascular_Disease	1.169	1.482
ICU	1.241	1.732
Liver_Chronic_Disease	1.271	1.806
Renal_Chronic_Disease	1.332	2.041
Public_Hospital	1.339	2.108
Neurological_Disease	1.544	2.878
Race_Indigenous	1.605	2.968
Ventilator_Invasive	2.322	8.872

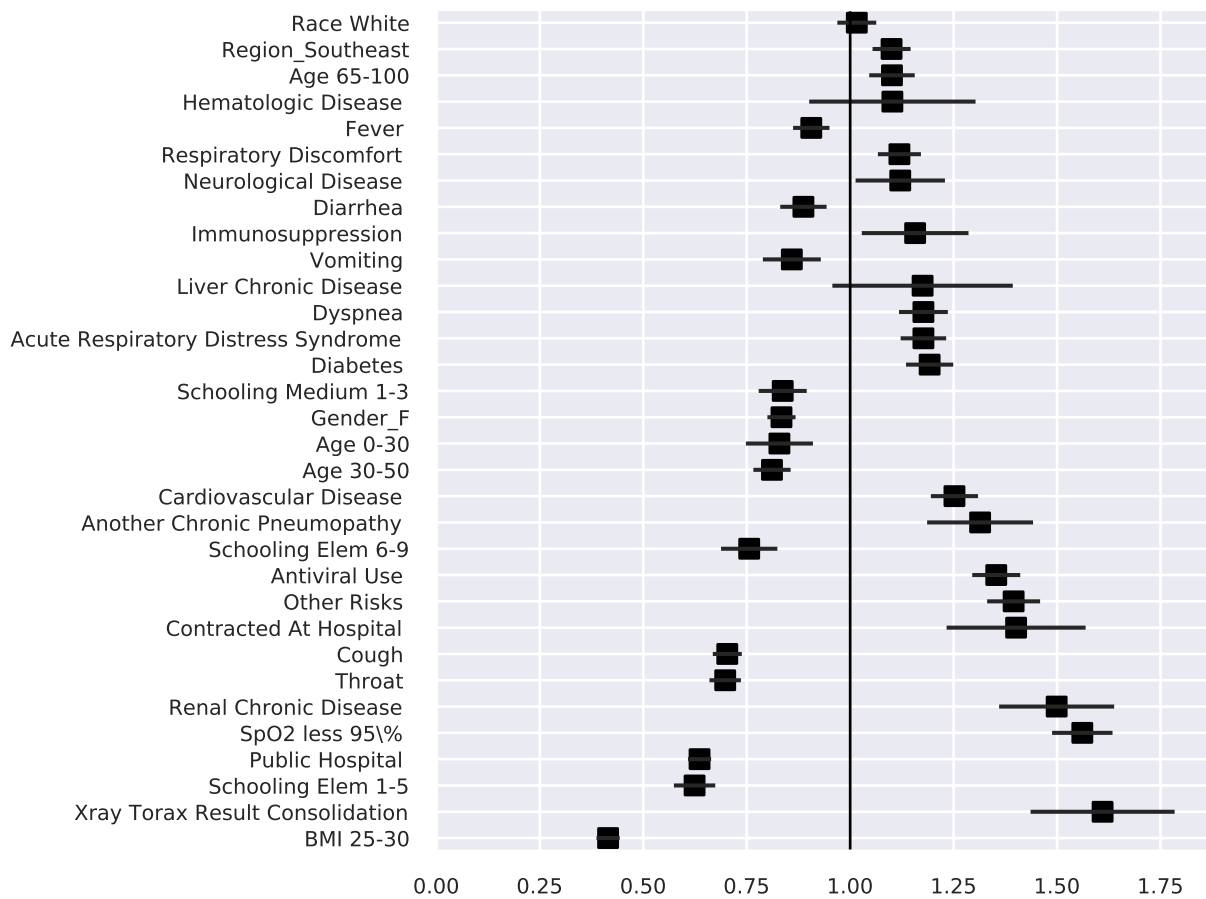
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.722	0.722	0.722	0.713	0.72
F1w	0.718	0.719	0.719	0.700	0.72
AUC	0.795	0.794	0.794	0.786	0.79

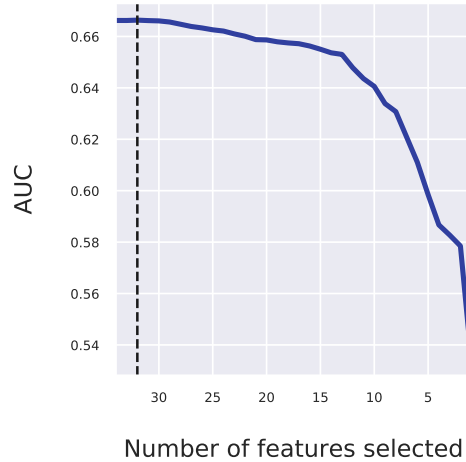


2.5 ICU

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
BMI 25-30	-0.880	-0.949	-0.811	0.415	0.387	0.445	0.485	0.335	0.000	0.000
0.782	0.577	0.028								
Xray Torax Result Consolidation	0.476	0.362	0.591	1.610	1.436	1.806	0.335	0.467	0.000	0.000
1.237	1.616	0.174								
Schooling Elem 1-5	-0.472	-0.554	-0.389	0.624	0.574	0.678	0.344	0.279	0.000	0.000
0.828	0.629	0.050								
Public Hospital	-0.453	-0.497	-0.408	0.636	0.608	0.665	0.368	0.292	0.000	0.000
0.835	0.646	0.028								
SpO2 less 95\%	0.445	0.398	0.493	1.561	1.488	1.637	0.260	0.394	0.000	0.000
1.206	1.580	0.073								
Renal Chronic Disease	0.405	0.307	0.502	1.499	1.360	1.652	0.332	0.487	0.000	0.000
1.205	1.505	0.139								
Throat	-0.360	-0.415	-0.304	0.698	0.660	0.738	0.358	0.269	0.000	0.000
0.870	0.697	0.038								
Cough	-0.352	-0.404	-0.300	0.703	0.668	0.741	0.397	0.323	0.000	0.000
0.871	0.724	0.035								
Contracted At Hospital	0.337	0.209	0.465	1.401	1.233	1.592	0.336	0.458	0.000	0.000
1.168	1.413	0.168								
Other Risks	0.333	0.286	0.380	1.395	1.331	1.462	0.312	0.416	0.000	0.000
1.161	1.413	0.064								
Antiviral Use	0.302	0.258	0.346	1.353	1.295	1.413	0.312	0.387	0.000	0.000
1.136	1.358	0.058								
Schooling Elem 6-9	-0.280	-0.373	-0.186	0.756	0.688	0.831	0.342	0.299	0.001	0.000
0.897	0.766	0.068								
Another Chronic Pneumopathy	0.273	0.170	0.376	1.314	1.186	1.457	0.334	0.468	0.000	0.000
1.137	1.316	0.128								
Cardiovascular Disease	0.225	0.178	0.272	1.252	1.195	1.312	0.303	0.412	0.000	0.000
1.109	1.270	0.057								
Age 30-50	-0.209	-0.267	-0.152	0.811	0.766	0.859	0.364	0.272	0.000	0.000
0.939	0.848	0.045								
Age 0-30	-0.188	-0.291	-0.085	0.829	0.748	0.918	0.345	0.245	0.000	0.000
0.955	0.868	0.081								
Gender_F	-0.181	-0.223	-0.139	0.834	0.800	0.870	0.349	0.326	0.000	0.000
0.935	0.851	0.034								
Schooling Medium 1-3	-0.178	-0.250	-0.107	0.837	0.779	0.898	0.345	0.296	0.000	0.000
0.937	0.849	0.058								
Diabetes	0.176	0.127	0.225	1.192	1.135	1.252	0.315	0.410	0.000	0.000
1.085	1.207	0.057								
Acute Respiratory Distress Syndrome	0.163	0.115	0.211	1.177	1.122	1.235	0.328	0.371	0.000	0.000
1.076	1.191	0.055								
Dyspnea	0.163	0.112	0.214	1.177	1.118	1.239	0.289	0.357	0.000	0.000
1.080	1.209	0.059								
Liver Chronic Disease	0.161	-0.044	0.366	1.175	0.957	1.442	0.338	0.417	0.011	0.124
1.075	1.179	0.218								
Vomiting	-0.152	-0.237	-0.068	0.859	0.789	0.934	0.343	0.291	0.000	0.000
0.944	0.864	0.070								
Immunosuppression	0.146	0.028	0.264	1.157	1.028	1.302	0.337	0.409	0.000	0.016
1.068	1.161	0.129								
Diarrhea	-0.120	-0.185	-0.055	0.887	0.831	0.947	0.345	0.302	0.000	0.000
0.956	0.895	0.056								
Neurological Disease	0.115	0.012	0.217	1.121	1.013	1.242	0.335	0.440	0.000	0.028
1.054	1.116	0.108								
Respiratory Discomfort	0.112	0.065	0.160	1.119	1.067	1.173	0.303	0.362	0.000	0.000
1.055	1.132	0.052								
Fever	-0.099	-0.148	-0.049	0.906	0.862	0.952	0.371	0.328	0.000	0.000
0.970	0.933	0.044								
Hematologic Disease	0.097	-0.104	0.299	1.102	0.901	1.348	0.339	0.406	0.035	0.344
1.042	1.091	0.201								
Age 65-100	0.096	0.045	0.147	1.101	1.046	1.159	0.300	0.394	0.000	0.000
1.057	1.134	0.055								
Region_Southeast	0.096	0.052	0.139	1.100	1.054	1.149	0.313	0.358	0.000	0.000
1.052	1.134	0.046								
Race White	0.016	-0.032	0.063	1.016	0.969	1.065	0.332	0.356	0.000	0.517
1.011	1.025	0.047								

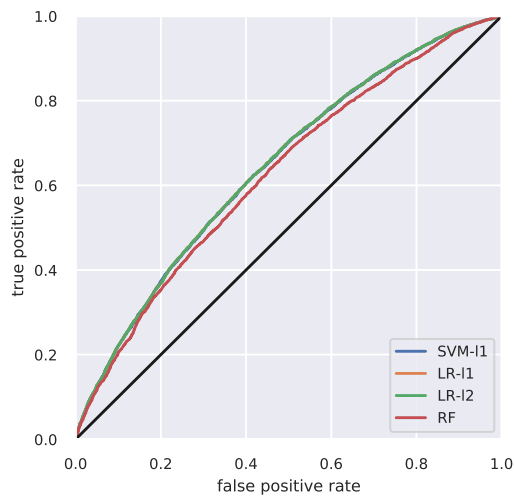


Recursive Feature Elimination:



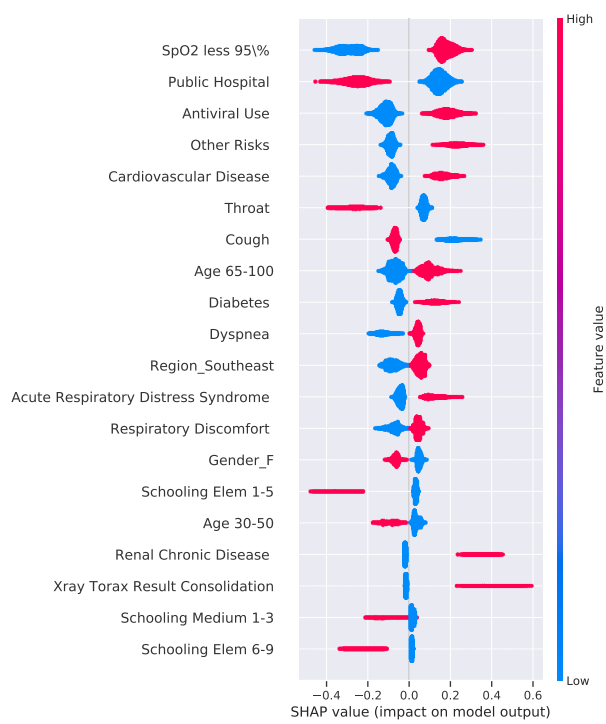
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.650	0.650	0.650	0.632	0.652
F1w	0.600	0.600	0.600	0.490	0.600
AUC	0.644	0.645	0.645	0.627	0.649



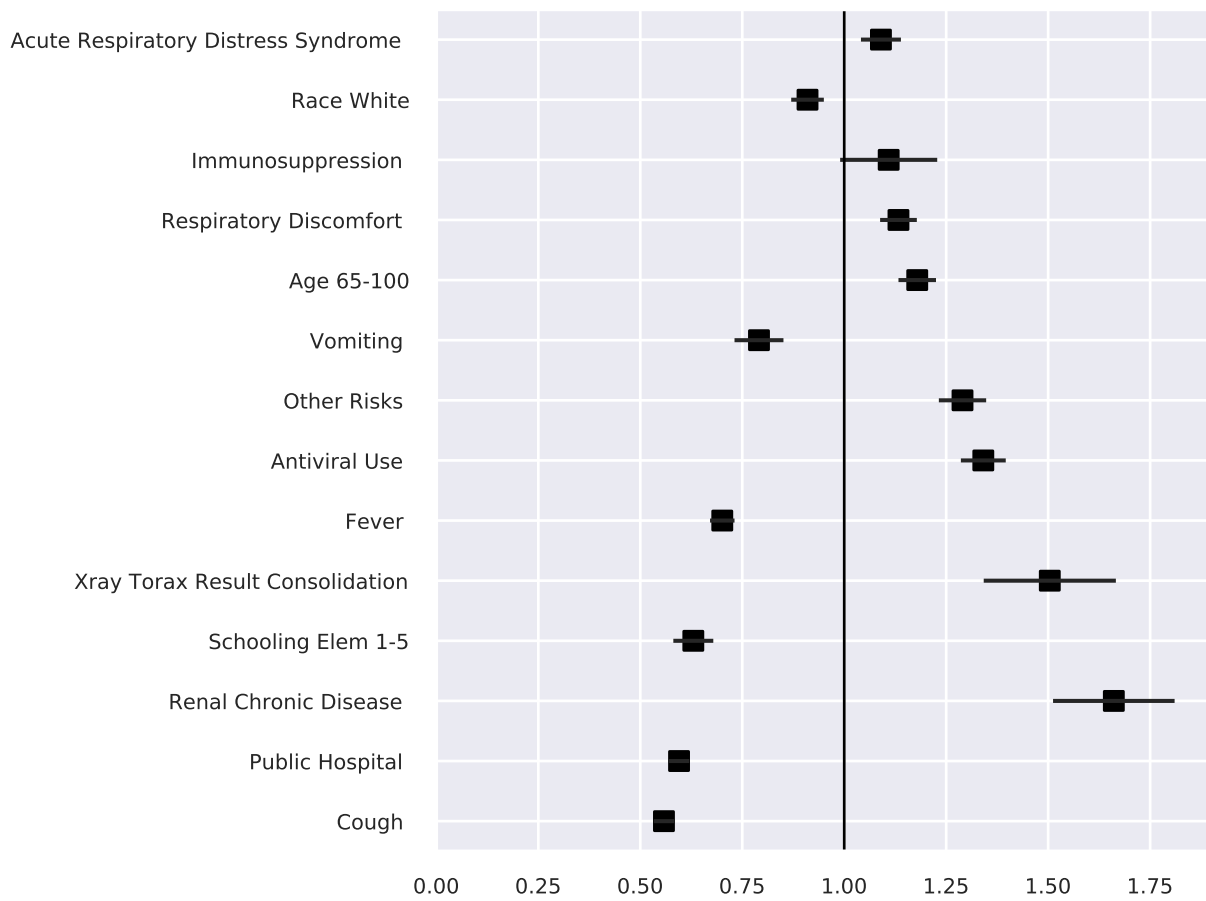
Coefficients:

	SVM-l1	LR-l1
BMI 25-30	0.782	0.577
Schooling Elem 1-5	0.828	0.629
Public Hospital	0.835	0.646
Throat	0.870	0.697
Cough	0.871	0.724
Schooling Elem 6-9	0.897	0.766
Age 30-50	0.939	0.848
Schooling Medium 1-3	0.937	0.849
Gender_F	0.935	0.851
Vomiting	0.944	0.864
Age 0-30	0.955	0.868
Diarrhea	0.956	0.895
Fever	0.970	0.933
Race White	1.011	1.025
Hematologic Disease	1.042	1.091
Neurological Disease	1.054	1.116
Respiratory Discomfort	1.055	1.132
Age 65-100	1.057	1.134
Region_Southeast	1.052	1.134
Immunosuppression	1.068	1.161
Liver Chronic Disease	1.075	1.179
Acute Respiratory Distress Syndrome	1.076	1.191
Diabetes	1.085	1.207
Dyspnea	1.080	1.209
Cardiovascular Disease	1.109	1.270
Another Chronic Pneumopathy	1.137	1.316
Antiviral Use	1.136	1.358
Contracted At Hospital	1.168	1.413
Other Risks	1.161	1.413
Renal Chronic Disease	1.205	1.505
SpO2 less 95\%	1.206	1.580
Xray Torax Result Consolidation	1.237	1.616

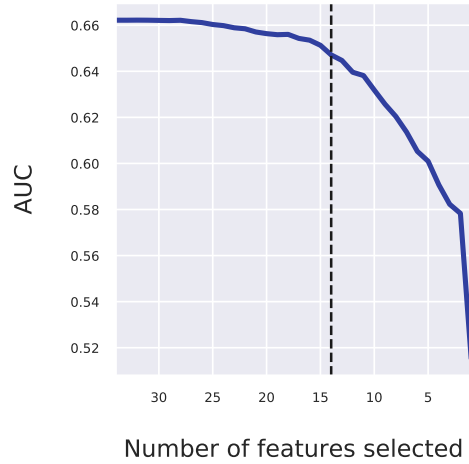


2.6 ICU small

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.584	-0.629	-0.538	0.558	0.533	0.584	0.397	0.322	0.000	0.000
0.870	0.729	0.025								
Public Hospital	-0.519	-0.561	-0.477	0.595	0.570	0.621	0.367	0.292	0.000	0.000
0.847	0.678	0.025								
Renal Chronic Disease	0.507	0.413	0.602	1.661	1.512	1.825	0.332	0.488	0.000	0.000
1.306	1.779	0.149								
Schooling Elem 1-5	-0.462	-0.543	-0.380	0.630	0.581	0.684	0.345	0.268	0.000	0.000
0.830	0.637	0.049								
Xray Torax Result Consolidation	0.408	0.294	0.522	1.504	1.342	1.686	0.335	0.455	0.000	0.000
1.235	1.585	0.162								
Fever	-0.355	-0.399	-0.311	0.701	0.671	0.733	0.372	0.328	0.000	0.000
0.954	0.896	0.030								
Antiviral Use	0.294	0.251	0.336	1.341	1.286	1.400	0.312	0.386	0.000	0.000
1.164	1.416	0.055								
Other Risks	0.254	0.209	0.300	1.290	1.232	1.349	0.313	0.412	0.000	0.000
1.176	1.438	0.058								
Vomiting	-0.234	-0.314	-0.154	0.791	0.731	0.857	0.342	0.304	0.000	0.000
0.937	0.856	0.060								
Age 65-100	0.165	0.125	0.204	1.179	1.133	1.227	0.302	0.390	0.000	0.000
1.159	1.401	0.046								
Respiratory Discomfort	0.125	0.084	0.166	1.133	1.088	1.180	0.306	0.360	0.000	0.000
1.126	1.319	0.045								
Immunosuppression	0.104	-0.010	0.218	1.109	0.990	1.244	0.336	0.416	0.000	0.075
1.090	1.207	0.119								
Race White	-0.095	-0.139	-0.051	0.910	0.870	0.951	0.333	0.353	0.001	0.000
1.014	1.032	0.040								
Acute Respiratory Distress Syndrome	0.086	0.040	0.132	1.090	1.041	1.141	0.329	0.367	0.000	0.000
1.075	1.180	0.049								



Recursive Feature Elimination:

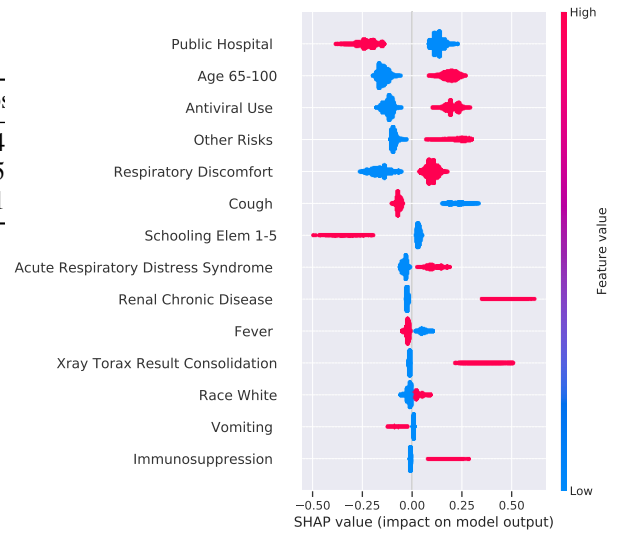
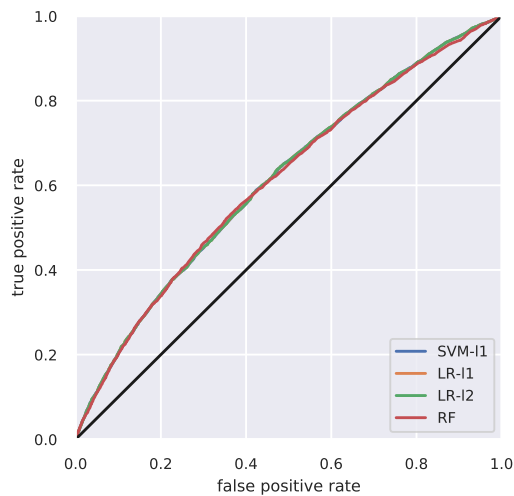


Coefficients:

	SVM-l1	LR-l1
Schooling Elem 1-5	0.830	0.637
Public Hospital	0.847	0.678
Cough	0.870	0.729
Vomiting	0.937	0.856
Fever	0.954	0.896
Race White	1.014	1.032
Acute Respiratory Distress Syndrome	1.075	1.180
Immunosuppression	1.090	1.207
Respiratory Discomfort	1.126	1.319
Age 65-100	1.159	1.401
Antiviral Use	1.164	1.416
Other Risks	1.176	1.438
Xray Torax Result Consolidation	1.235	1.585
Renal Chronic Disease	1.306	1.779

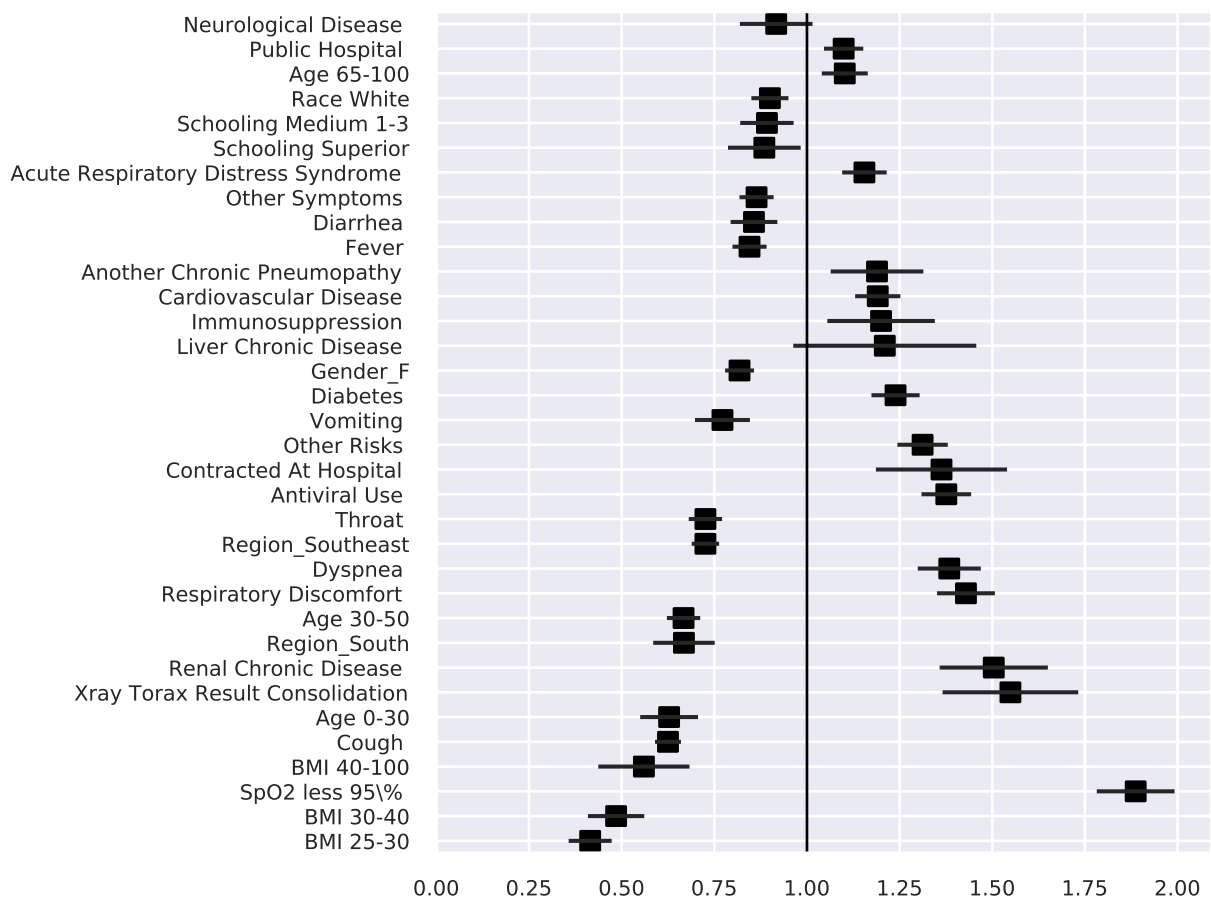
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.640	0.641	0.641	0.630	0.64
F1w	0.561	0.561	0.561	0.488	0.55
AUC	0.613	0.614	0.614	0.612	0.61

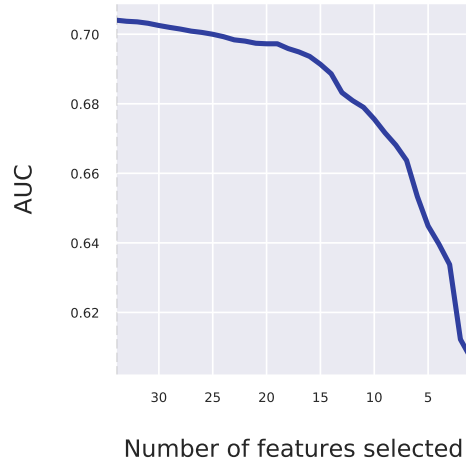


2.7 Ventilator

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
BMI 25-30	-0.878	-1.030	-0.727	0.415	0.357	0.483	0.344	0.221	0.000	0.000
0.795	0.535	0.058								
BMI 30-40	-0.724	-0.893	-0.555	0.485	0.409	0.574	0.304	0.223	0.005	0.000
1.091	1.233	0.076								
SpO2 less 95\%	0.635	0.578	0.692	1.887	1.782	1.997	0.133	0.287	0.000	0.000
1.219	1.927	0.105								
BMI 40-100	-0.581	-0.828	-0.334	0.560	0.437	0.716	0.223	0.368	0.000	0.000
1.099	1.268	0.123								
Cough	-0.470	-0.528	-0.412	0.625	0.590	0.663	0.276	0.209	0.000	0.000
0.860	0.645	0.035								
Age 0-30	-0.465	-0.598	-0.331	0.628	0.550	0.718	0.231	0.121	0.000	0.000
0.908	0.664	0.078								
Xray Torax Result Consolidation	0.438	0.312	0.564	1.549	1.366	1.757	0.221	0.319	0.000	0.000
1.172	1.542	0.183								
Renal Chronic Disease	0.408	0.306	0.509	1.504	1.358	1.664	0.218	0.357	0.000	0.000
1.178	1.518	0.146								
Region.South	-0.404	-0.537	-0.270	0.668	0.585	0.763	0.227	0.174	0.000	0.000
0.895	0.696	0.083								
Age 30-50	-0.404	-0.475	-0.334	0.667	0.622	0.716	0.253	0.145	0.000	0.000
0.909	0.701	0.045								
Respiratory Discomfort	0.357	0.301	0.413	1.429	1.351	1.512	0.157	0.267	0.000	0.000
1.130	1.449	0.078								
Dyspnea	0.325	0.262	0.388	1.384	1.299	1.474	0.145	0.253	0.000	0.000
1.112	1.439	0.085								
Region.Southeast	-0.320	-0.372	-0.268	0.726	0.689	0.765	0.249	0.207	0.000	0.000
0.911	0.754	0.037								
Throat	-0.320	-0.384	-0.255	0.726	0.681	0.775	0.236	0.182	0.000	0.000
0.906	0.728	0.045								
Antiviral Use	0.319	0.269	0.369	1.376	1.309	1.446	0.200	0.266	0.000	0.000
1.111	1.379	0.067								
Contracted At Hospital	0.309	0.170	0.449	1.363	1.186	1.566	0.222	0.315	0.000	0.000
1.126	1.374	0.177								
Other Risks	0.271	0.218	0.325	1.312	1.244	1.383	0.205	0.280	0.000	0.000
1.103	1.333	0.068								
Vomiting	-0.258	-0.360	-0.157	0.772	0.698	0.855	0.229	0.171	0.000	0.000
0.925	0.779	0.074								
Diabetes	0.215	0.160	0.269	1.239	1.174	1.309	0.200	0.295	0.000	0.000
1.086	1.260	0.065								
Gender.F	-0.201	-0.250	-0.152	0.818	0.779	0.859	0.234	0.211	0.000	0.000
0.944	0.837	0.039								
Liver Chronic Disease	0.191	-0.038	0.420	1.210	0.963	1.521	0.223	0.307	0.008	0.102
1.076	1.207	0.247								
Immunosuppression	0.182	0.054	0.311	1.200	1.055	1.364	0.222	0.278	0.001	0.005
1.062	1.203	0.145								
Cardiovascular Disease	0.175	0.122	0.228	1.191	1.130	1.256	0.195	0.281	0.000	0.000
1.064	1.207	0.061								
Another Chronic Pneumopathy	0.173	0.062	0.285	1.189	1.064	1.329	0.220	0.318	0.000	0.002
1.072	1.186	0.125								
Fever	-0.168	-0.225	-0.112	0.845	0.799	0.894	0.255	0.214	0.000	0.000
0.951	0.871	0.046								
Diarrhea	-0.154	-0.231	-0.077	0.857	0.794	0.926	0.230	0.186	0.000	0.000
0.954	0.859	0.063								
Other Symptoms	-0.146	-0.201	-0.092	0.864	0.818	0.912	0.237	0.195	0.000	0.000
0.964	0.887	0.046								
Acute Respiratory Distress Syndrome	0.144	0.091	0.198	1.155	1.095	1.219	0.212	0.260	0.000	0.000
1.055	1.171	0.060								
Schooling Superior	-0.122	-0.239	-0.004	0.885	0.787	0.996	0.228	0.163	0.000	0.042
0.978	0.903	0.098								
Schooling Medium 1-3	-0.115	-0.199	-0.031	0.892	0.820	0.970	0.229	0.186	0.000	0.007
0.971	0.907	0.072								
Race White	-0.105	-0.163	-0.048	0.900	0.850	0.953	0.233	0.205	0.000	0.000
0.969	0.906	0.050								
Age 65-100	0.097	0.039	0.154	1.102	1.040	1.167	0.182	0.283	0.000	0.001
1.049	1.140	0.062								
Public Hospital	0.094	0.045	0.144	1.099	1.046	1.155	0.206	0.255	0.000	0.000
1.035	1.117	0.053								
Neurological Disease	-0.086	-0.200	0.028	0.917	0.819	1.028	0.222	0.267	0.002	0.138
0.964	0.914	0.098								

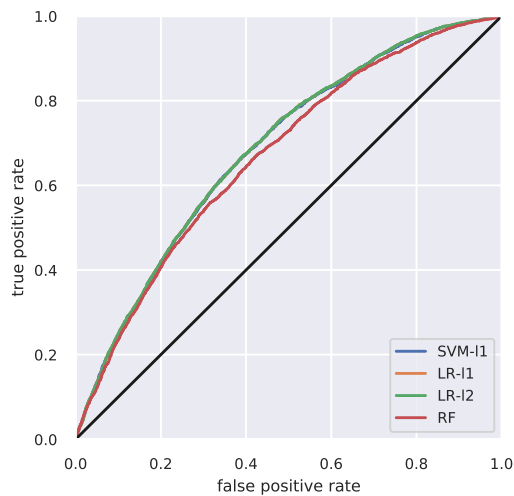


Recursive Feature Elimination:



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.750	0.751	0.751	0.750	0.750
F1w	0.674	0.673	0.674	0.643	0.670
AUC	0.685	0.686	0.686	0.669	0.691



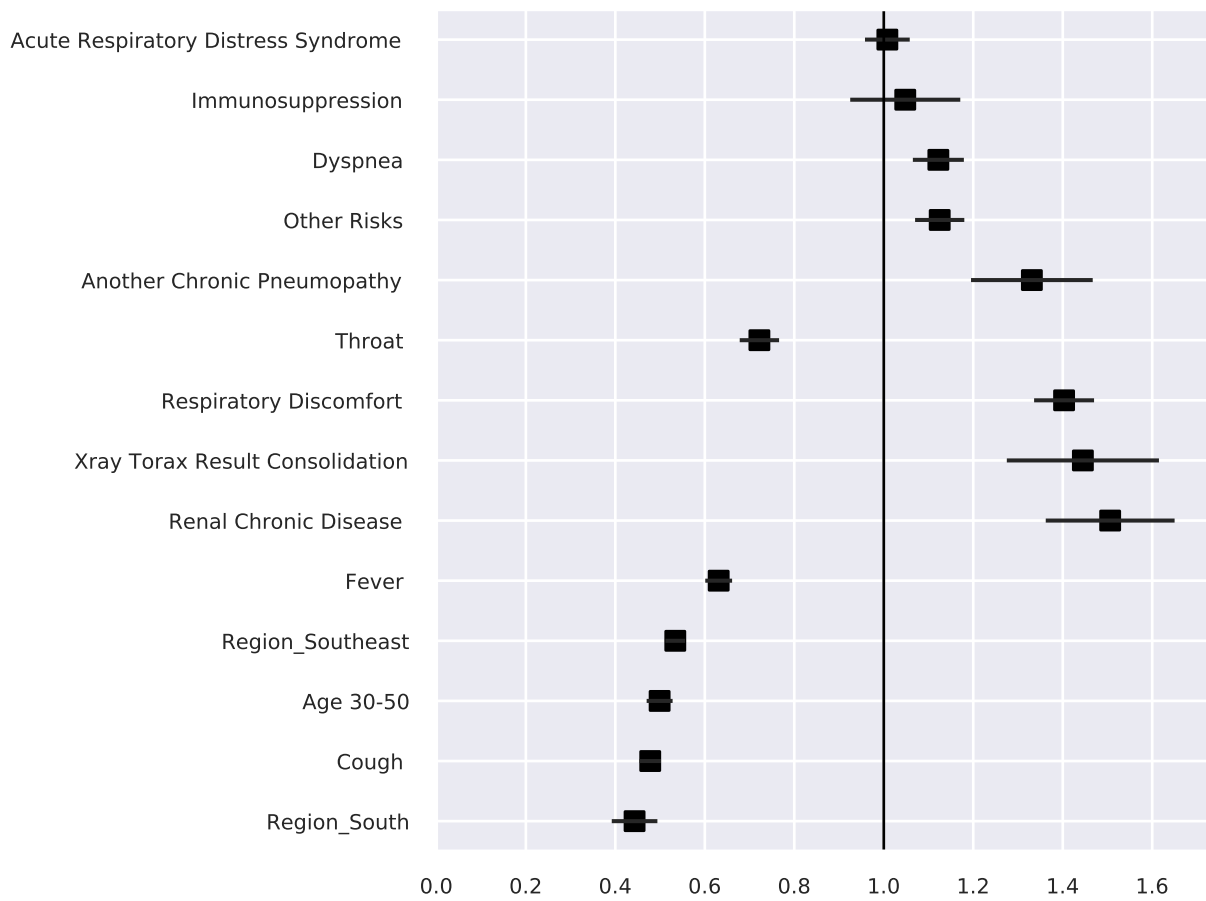
Coefficients:

	SVM-l1	LR-l1
BMI 25-30	0.795	0.535
Cough	0.860	0.645
Age 0-30	0.908	0.664
Region_South	0.895	0.696
Age 30-50	0.909	0.701
Throat	0.906	0.728
Region_Southeast	0.911	0.754
Vomiting	0.925	0.779
Gender_F	0.944	0.837
Diarrhea	0.954	0.859
Fever	0.951	0.871
Other Symptoms	0.964	0.887
Schooling Superior	0.978	0.903
Race White	0.969	0.906
Schooling Medium 1-3	0.971	0.907
Neurological Disease	0.964	0.914
Public Hospital	1.035	1.117
Age 65-100	1.049	1.140
Acute Respiratory Distress Syndrome	1.055	1.171
Another Chronic Pneumopathy	1.072	1.186
Immunosuppression	1.062	1.203
Cardiovascular Disease	1.064	1.207
Liver Chronic Disease	1.076	1.207
BMI 30-40	1.091	1.233
Diabetes	1.086	1.260
BMI 40-100	1.099	1.268
Other Risks	1.103	1.333
Contracted At Hospital	1.126	1.374
Antiviral Use	1.111	1.379
Dyspnea	1.112	1.439
Respiratory Discomfort	1.130	1.449
Renal Chronic Disease	1.178	1.518
Xray Torax Result Consolidation	1.172	1.542
SpO2 less 95\%	1.219	1.927

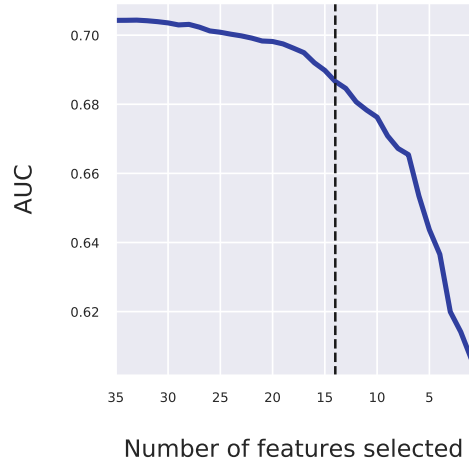


2.8 Ventilator small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Region.South	-0.813	-0.936	-0.690	0.443	0.392	0.502	0.228	0.172	0.0	0.000
0.869	0.640	0.051								
Cough	-0.739	-0.790	-0.687	0.478	0.454	0.503	0.280	0.209	0.0	0.000
0.864	0.659	0.024								
Age 30-50	-0.696	-0.754	-0.638	0.499	0.470	0.528	0.254	0.147	0.0	0.000
0.853	0.583	0.029								
Region.Southeast	-0.627	-0.670	-0.585	0.534	0.512	0.557	0.246	0.211	0.0	0.000
0.935	0.818	0.022								
Fever	-0.460	-0.509	-0.410	0.631	0.601	0.664	0.257	0.215	0.0	0.000
0.961	0.895	0.030								
Renal Chronic Disease	0.409	0.309	0.509	1.506	1.362	1.664	0.219	0.359	0.0	0.000
1.248	1.756	0.144								
Xray Torax Result Consolidation	0.368	0.243	0.493	1.445	1.275	1.638	0.222	0.314	0.0	0.000
1.177	1.544	0.170								
Respiratory Discomfort	0.339	0.289	0.388	1.403	1.336	1.474	0.158	0.268	0.0	0.000
1.209	1.796	0.067								
Throat	-0.326	-0.388	-0.263	0.722	0.678	0.769	0.237	0.180	0.0	0.000
0.898	0.714	0.044								
Another Chronic Pneumopathy	0.286	0.178	0.394	1.331	1.195	1.483	0.221	0.337	0.0	0.000
1.154	1.424	0.136								
Other Risks	0.118	0.068	0.168	1.125	1.070	1.183	0.205	0.284	0.0	0.000
1.128	1.409	0.055								
Dyspnea	0.115	0.063	0.167	1.122	1.065	1.182	0.147	0.254	0.0	0.000
1.188	1.766	0.057								
Immunosuppression	0.047	-0.078	0.171	1.048	0.925	1.187	0.223	0.281	0.0	0.465
1.048	1.143	0.123								
Acute Respiratory Distress Syndrome	0.008	-0.043	0.060	1.008	0.958	1.062	0.213	0.261	0.0	0.748
1.068	1.209	0.050								



Recursive Feature Elimination:

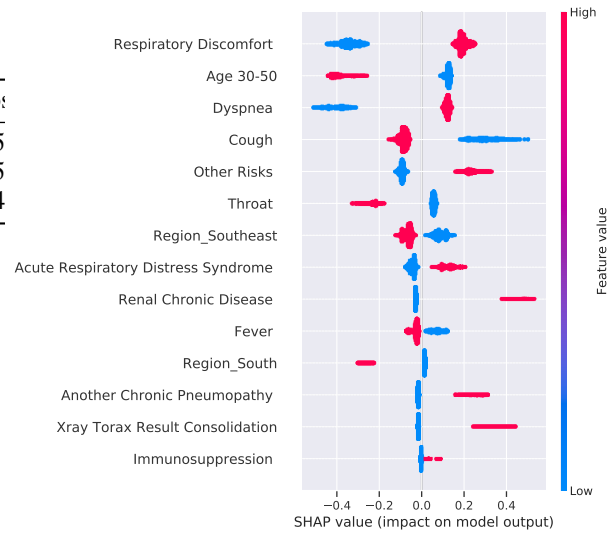
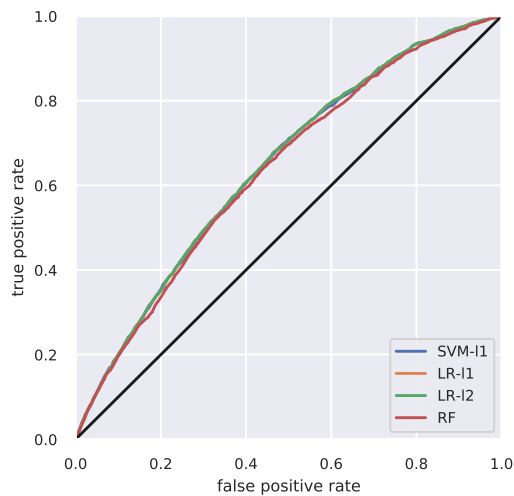


Coefficients:

	SVM-l1	LR-l1
Age 30-50	0.853	0.583
Region_South	0.869	0.640
Cough	0.864	0.659
Throat	0.898	0.714
Region_Southeast	0.935	0.818
Fever	0.961	0.895
Immunosuppression	1.048	1.143
Acute Respiratory Distress Syndrome	1.068	1.209
Other Risks	1.128	1.409
Another Chronic Pneumopathy	1.154	1.424
Xray Torax Result Consolidation	1.177	1.544
Renal Chronic Disease	1.248	1.756
Dyspnea	1.188	1.766
Respiratory Discomfort	1.209	1.796

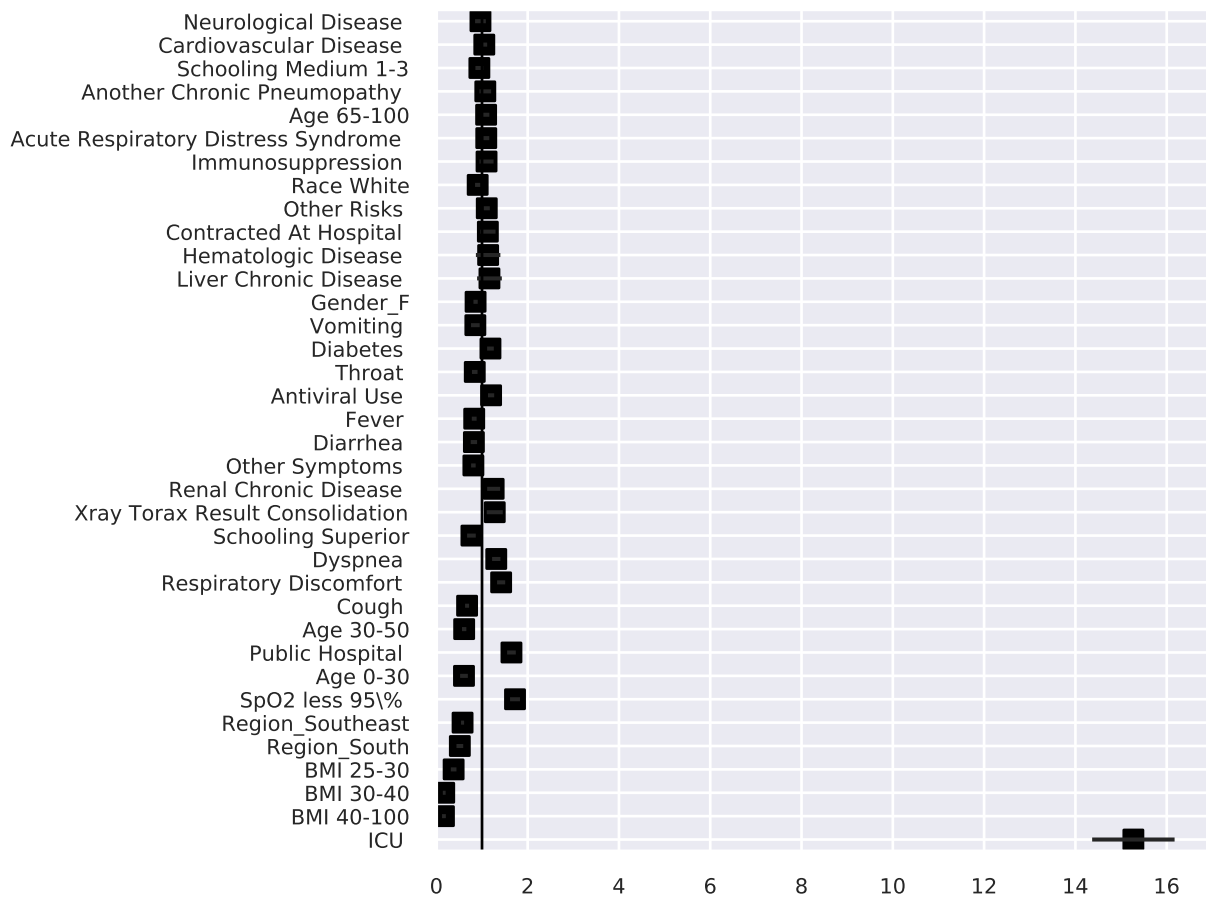
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.752	0.752	0.752	0.754	0.75
F1w	0.663	0.659	0.659	0.648	0.65
AUC	0.643	0.644	0.644	0.635	0.64

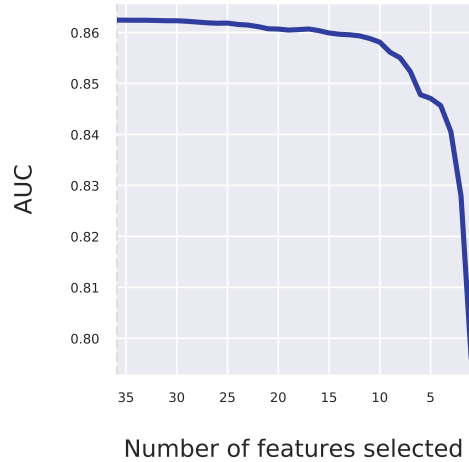


2.9 Ventilator with ICU

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
ICU	2.726	2.665	2.787	15.270	14.367	16.229	0.068	0.526	0.000	0.000
2.497	15.932	0.903								
BMI 40-100	-1.795	-2.089	-1.502	0.166	0.124	0.223	0.224	0.326	0.001	0.000
0.995	1.000	0.042								
BMI 30-40	-1.761	-1.962	-1.560	0.172	0.141	0.210	0.289	0.224	0.039	0.000
1.087	1.256	0.031								
BMI 25-30	-0.973	-1.151	-0.795	0.378	0.316	0.451	0.332	0.222	0.000	0.000
0.863	0.652	0.062								
Region_South	-0.666	-0.822	-0.510	0.514	0.440	0.600	0.227	0.172	0.000	0.000
0.846	0.556	0.074								
Region_Southeast	-0.554	-0.616	-0.493	0.574	0.540	0.611	0.248	0.209	0.000	0.000
0.863	0.615	0.034								
SpO2 less 95\%	0.544	0.479	0.610	1.723	1.614	1.840	0.132	0.288	0.000	0.000
1.180	1.787	0.109								
Age 0-30	-0.502	-0.654	-0.350	0.605	0.520	0.705	0.231	0.124	0.000	0.000
0.901	0.684	0.085								
Public Hospital	0.498	0.438	0.557	1.645	1.550	1.746	0.204	0.258	0.000	0.000
1.170	1.711	0.095								
Age 30-50	-0.495	-0.578	-0.413	0.609	0.561	0.662	0.256	0.139	0.000	0.000
0.889	0.671	0.048								
Cough	-0.396	-0.464	-0.327	0.673	0.629	0.721	0.278	0.209	0.000	0.000
0.896	0.717	0.044								
Respiratory Discomfort	0.350	0.285	0.415	1.419	1.330	1.514	0.159	0.266	0.000	0.000
1.128	1.457	0.089								
Dyspnea	0.272	0.199	0.344	1.312	1.221	1.410	0.147	0.253	0.000	0.000
1.106	1.408	0.091								
Schooling Superior	-0.264	-0.396	-0.133	0.768	0.673	0.875	0.228	0.171	0.000	0.000
0.918	0.798	0.095								
Xray Torax Result Consolidation	0.246	0.098	0.393	1.279	1.103	1.482	0.222	0.316	0.000	0.001
1.088	1.289	0.176								
Renal Chronic Disease	0.227	0.107	0.348	1.255	1.113	1.416	0.218	0.359	0.000	0.000
1.089	1.282	0.142								
Other Symptoms	-0.210	-0.273	-0.147	0.811	0.761	0.863	0.238	0.194	0.000	0.000
0.949	0.850	0.050								
Diarrhea	-0.196	-0.285	-0.107	0.822	0.752	0.899	0.232	0.179	0.000	0.000
0.946	0.831	0.070								
Fever	-0.187	-0.254	-0.121	0.829	0.776	0.886	0.255	0.214	0.000	0.000
0.957	0.880	0.053								
Antiviral Use	0.182	0.123	0.240	1.199	1.131	1.271	0.200	0.268	0.000	0.000
1.066	1.206	0.068								
Throat	-0.173	-0.248	-0.098	0.841	0.780	0.907	0.236	0.180	0.000	0.000
0.953	0.847	0.061								
Diabetes	0.169	0.106	0.233	1.185	1.112	1.263	0.201	0.294	0.000	0.000
1.065	1.228	0.073								
Vomiting	-0.158	-0.276	-0.040	0.854	0.759	0.961	0.229	0.175	0.000	0.009
0.961	0.870	0.095								
Gender_F	-0.152	-0.208	-0.095	0.859	0.812	0.910	0.234	0.212	0.000	0.000
0.967	0.896	0.047								
Liver Chronic Disease	0.151	-0.115	0.416	1.163	0.892	1.515	0.224	0.326	0.001	0.266
1.057	1.192	0.271								
Hematologic Disease	0.126	-0.143	0.395	1.134	0.866	1.485	0.224	0.301	0.014	0.359
1.051	1.127	0.268								
Contracted At Hospital	0.121	-0.041	0.282	1.128	0.960	1.326	0.222	0.323	0.000	0.143
1.053	1.145	0.168								
Other Risks	0.099	0.037	0.160	1.104	1.037	1.174	0.204	0.282	0.000	0.002
1.042	1.134	0.067								
Race White	-0.099	-0.166	-0.033	0.905	0.847	0.968	0.232	0.208	0.000	0.004
0.975	0.913	0.058								
Immunosuppression	0.095	-0.056	0.245	1.099	0.945	1.278	0.223	0.285	0.000	0.219
1.035	1.108	0.154								
Acute Respiratory Distress Syndrome	0.089	0.027	0.151	1.093	1.027	1.163	0.212	0.262	0.000	0.005
1.032	1.122	0.066								
Age 65-100	0.086	0.019	0.153	1.090	1.019	1.165	0.180	0.287	0.000	0.012
1.041	1.167	0.071								
Another Chronic Pneumopathy	0.069	-0.057	0.196	1.072	0.944	1.216	0.220	0.324	0.000	0.282
1.025	1.061	0.128								
Schooling Medium 1-3	-0.060	-0.157	0.038	0.942	0.855	1.038	0.229	0.190	0.000	0.230
0.997	0.971	0.087								
Cardiovascular Disease	0.049	-0.013	0.111	1.050	0.987	1.117	0.196	0.282	0.000	0.123
1.027	1.077	0.063								
Neurological Disease	-0.035	-0.164	0.094	0.966	0.848	1.099	0.222	0.282	0.000	0.595
0.978	0.960	0.118								

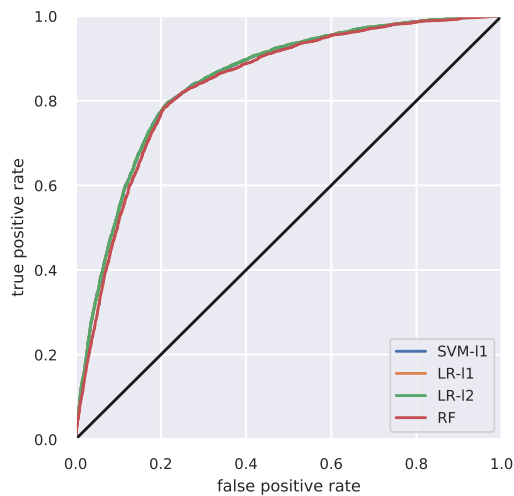


Recursive Feature Elimination:



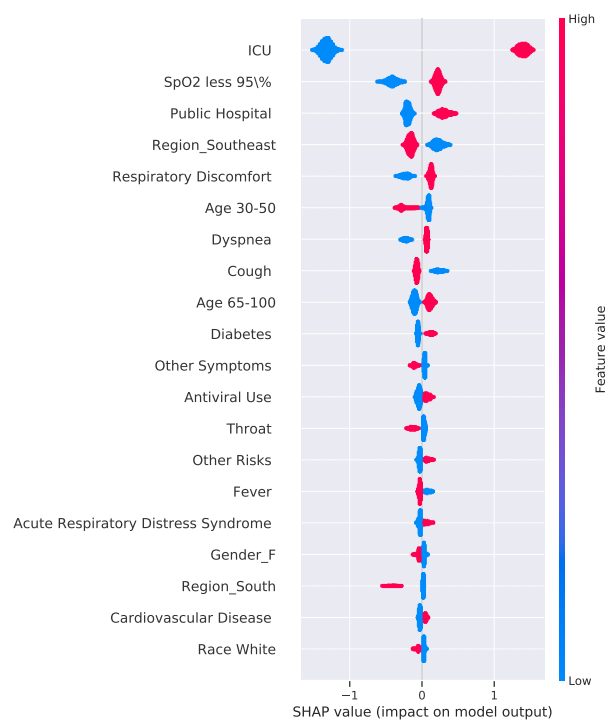
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.811	0.812	0.813	0.756	0.815
F1w	0.807	0.808	0.808	0.651	0.810
AUC	0.848	0.848	0.848	0.839	0.851



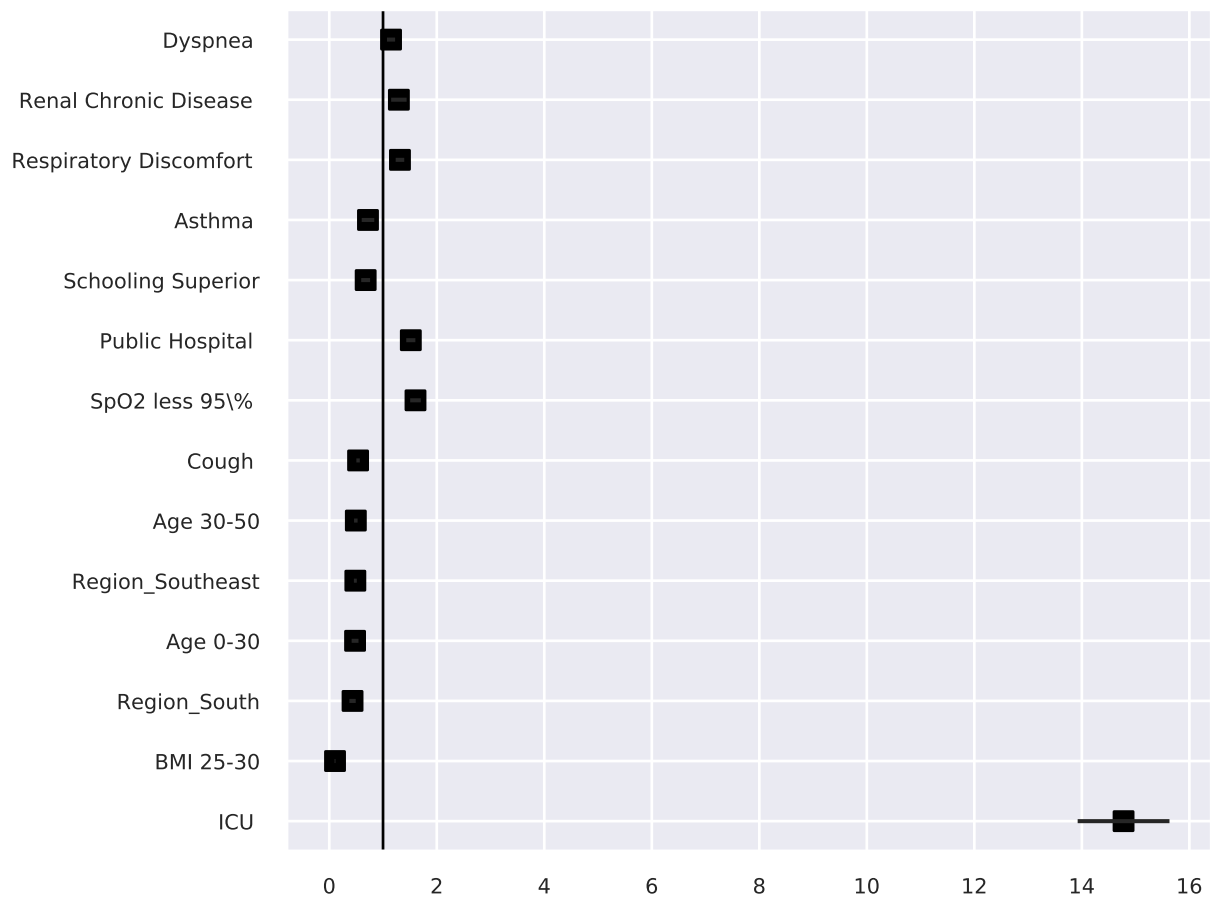
Coefficients:

	SVM-l1	LR-l1
Region_South	0.846	0.556
Region_Southeast	0.863	0.615
BMI 25-30	0.863	0.652
Age 30-50	0.889	0.671
Age 0-30	0.901	0.684
Cough	0.896	0.717
Schooling Superior	0.918	0.798
Diarrhea	0.946	0.831
Throat	0.953	0.847
Other Symptoms	0.949	0.850
Vomiting	0.961	0.870
Fever	0.957	0.880
Gender_F	0.967	0.896
Race White	0.975	0.913
Neurological Disease	0.978	0.960
Schooling Medium 1-3	0.997	0.971
BMI 40-100	0.995	1.000
Another Chronic Pneumopathy	1.025	1.061
Cardiovascular Disease	1.027	1.077
Immunosuppression	1.035	1.108
Acute Respiratory Distress Syndrome	1.032	1.122
Hematologic Disease	1.051	1.127
Other Risks	1.042	1.134
Contracted At Hospital	1.053	1.145
Age 65-100	1.041	1.167
Liver Chronic Disease	1.057	1.192
Antiviral Use	1.066	1.206
Diabetes	1.065	1.228
BMI 30-40	1.087	1.256
Renal Chronic Disease	1.089	1.282
Xray Torax Result Consolidation	1.088	1.289
Dyspnea	1.106	1.408
Respiratory Discomfort	1.128	1.457
Public Hospital	1.170	1.711
SpO2 less 95\%	1.180	1.787
ICU	2.497	15.932

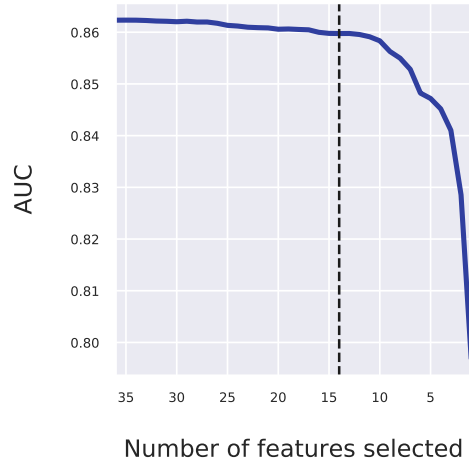


2.10 Ventilator with ICU small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
ICU	2.693	2.633	2.753	14.776	13.922	15.682	0.067	0.527	0.000	0.0
2.544	17.069	0.854								
BMI 25-30	-2.239	-2.320	-2.158	0.107	0.098	0.116	0.329	0.221	0.000	0.0
0.897	0.719	0.009								
Region_South	-0.837	-0.984	-0.691	0.433	0.374	0.501	0.227	0.175	0.000	0.0
0.841	0.533	0.059								
Age 0-30	-0.735	-0.877	-0.592	0.480	0.416	0.553	0.230	0.128	0.000	0.0
0.858	0.569	0.064								
Region_Southeast	-0.725	-0.781	-0.668	0.485	0.458	0.513	0.248	0.208	0.000	0.0
0.859	0.597	0.027								
Age 30-50	-0.704	-0.774	-0.635	0.494	0.461	0.530	0.254	0.143	0.000	0.0
0.852	0.574	0.033								
Cough	-0.624	-0.685	-0.563	0.536	0.504	0.570	0.279	0.209	0.000	0.0
0.883	0.676	0.032								
SpO2 less 95\%	0.472	0.409	0.536	1.604	1.505	1.709	0.133	0.287	0.000	0.0
1.181	1.808	0.099								
Public Hospital	0.417	0.359	0.474	1.517	1.432	1.607	0.206	0.256	0.000	0.0
1.174	1.744	0.085								
Schooling Superior	-0.390	-0.521	-0.260	0.677	0.594	0.771	0.228	0.173	0.000	0.0
0.905	0.751	0.083								
Asthma	-0.328	-0.506	-0.151	0.720	0.603	0.860	0.226	0.186	0.045	0.0
0.925	0.798	0.117								
Respiratory Discomfort	0.274	0.211	0.337	1.315	1.235	1.400	0.162	0.265	0.000	0.0
1.125	1.450	0.080								
Renal Chronic Disease	0.259	0.141	0.376	1.295	1.151	1.457	0.218	0.365	0.000	0.0
1.123	1.407	0.144								
Dyspnea	0.139	0.070	0.208	1.149	1.073	1.231	0.147	0.252	0.000	0.0
1.118	1.448	0.076								



Recursive Feature Elimination:



Coefficients:

	SVM-l1	LR-l1
Region_South	0.841	0.533
Age 0-30	0.858	0.569
Age 30-50	0.852	0.574
Region_Southeast	0.859	0.597
Cough	0.883	0.676
BMI 25-30	0.897	0.719
Schooling Superior	0.905	0.751
Asthma	0.925	0.798
Renal Chronic Disease	1.123	1.407
Dyspnea	1.118	1.448
Respiratory Discomfort	1.125	1.450
Public Hospital	1.174	1.744
SpO2 less 95\%	1.181	1.808
ICU	2.544	17.069

Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.810	0.809	0.809	0.765	0.81
F1w	0.807	0.806	0.806	0.683	0.80
AUC	0.842	0.843	0.843	0.839	0.84

