
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

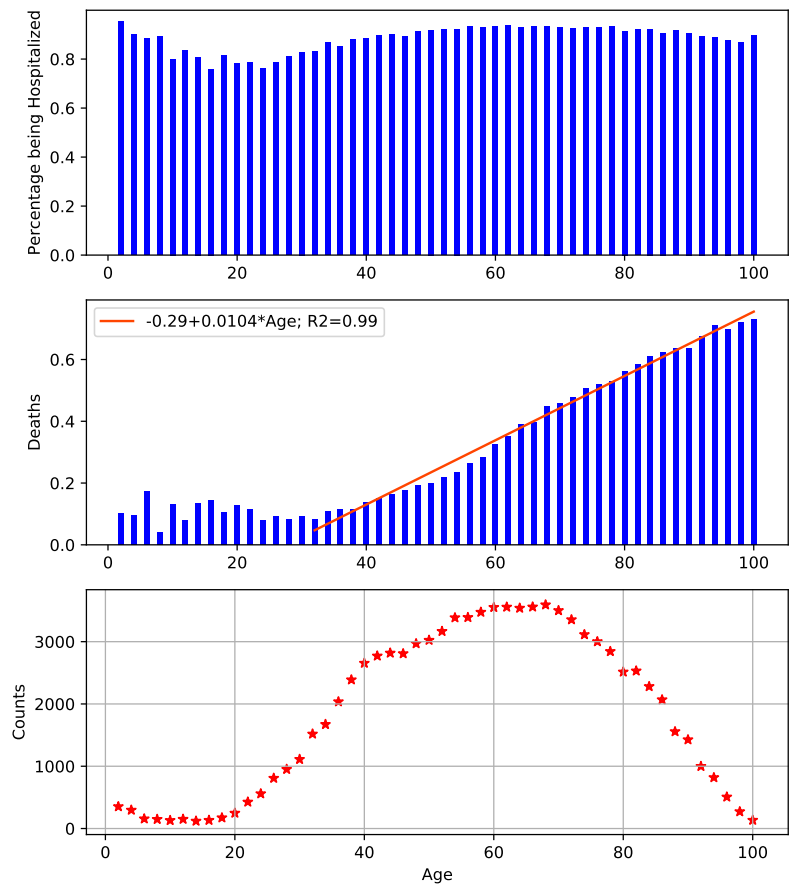


Figure 1: Distribution of hospitalization and deaths by age group

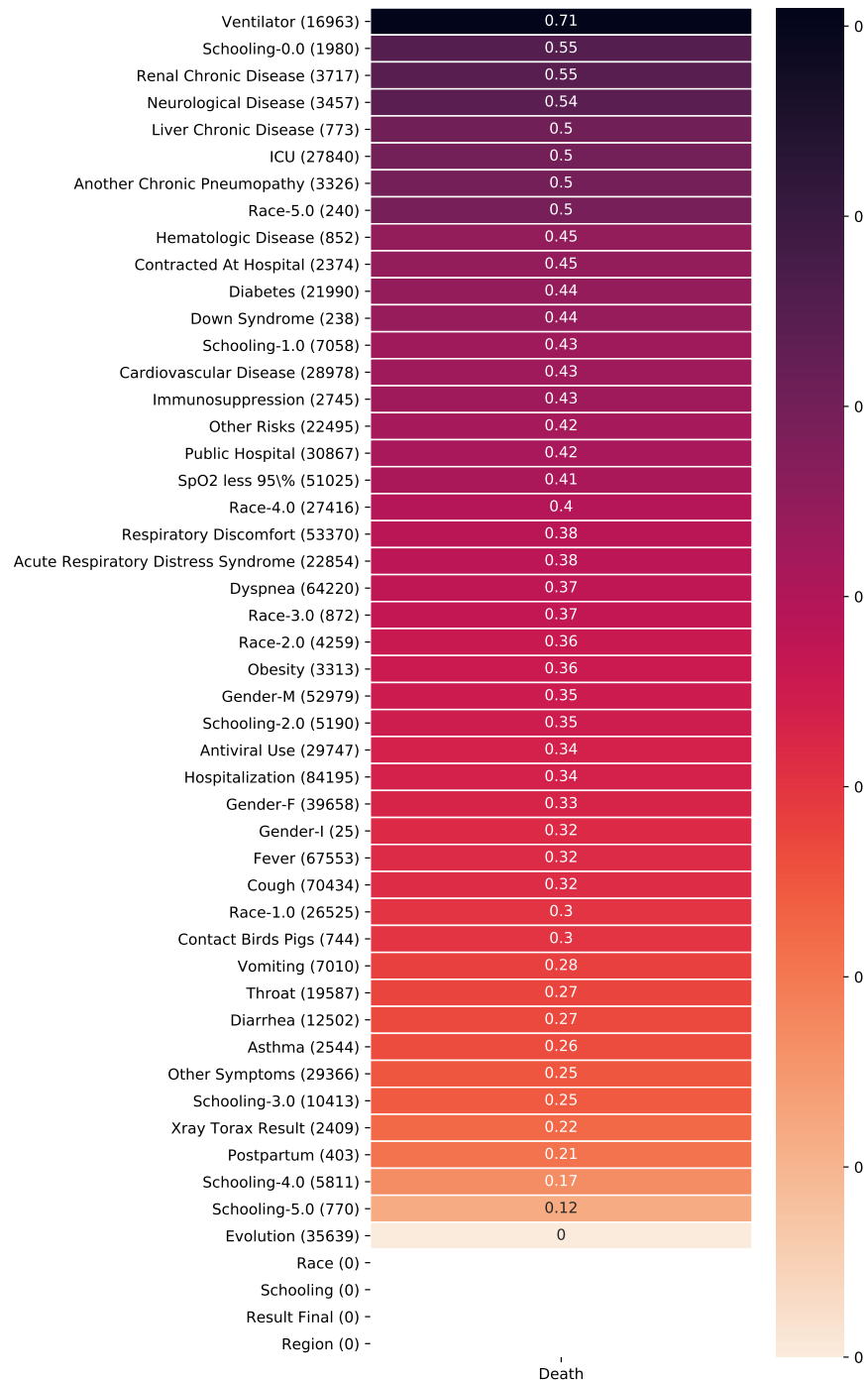


Figure 2: Share of hospitalized and deaths patients given characteristics

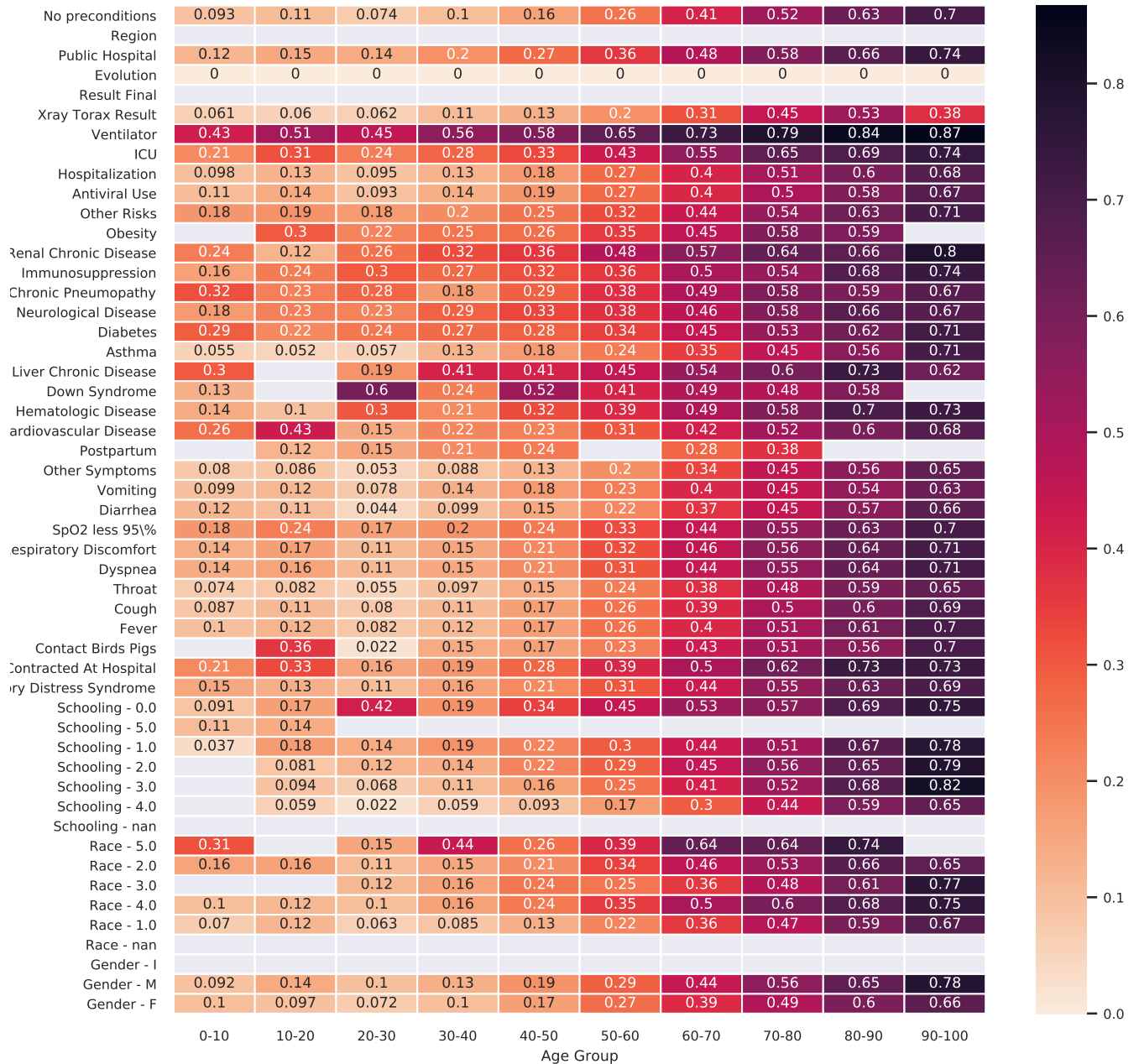
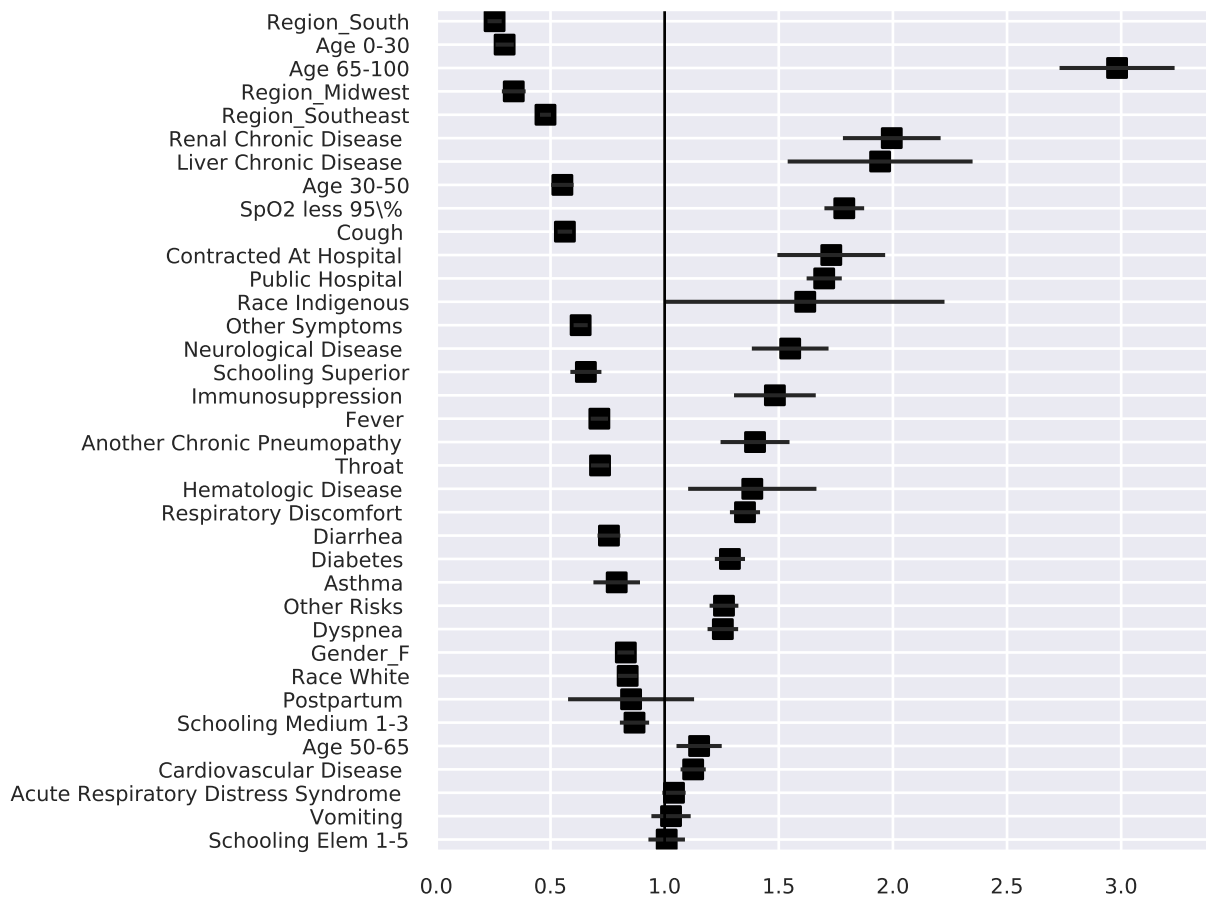


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

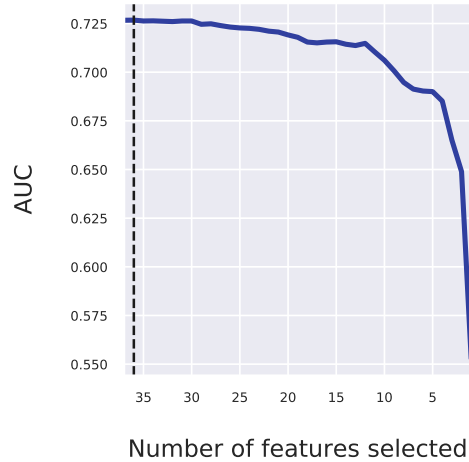
2 Results

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
Region.South	-1.366	-1.495	-1.238	0.255	0.224	0.290	0.474	0.235	0.000	0.000
0.600	0.259	0.031								
Age 0-30	-1.207	-1.349	-1.064	0.299	0.259	0.345	0.481	0.149	0.000	0.000
0.457	0.196	0.040								
Age 65-100	1.093	1.004	1.181	2.982	2.730	3.258	0.316	0.684	0.000	0.000
1.110	1.932	0.252								
Region.Midwest	-1.082	-1.250	-0.915	0.339	0.287	0.400	0.465	0.328	0.000	0.000
0.662	0.348	0.052								
Region.Southeast	-0.739	-0.789	-0.688	0.478	0.454	0.502	0.531	0.414	0.000	0.000
0.750	0.478	0.024								
Renal Chronic Disease	0.691	0.577	0.804	1.995	1.781	2.235	0.451	0.700	0.000	0.000
1.305	1.974	0.214								
Liver Chronic Disease	0.665	0.431	0.899	1.944	1.539	2.457	0.460	0.654	0.000	0.000
1.290	1.856	0.405								
Age 30-50	-0.594	-0.687	-0.500	0.552	0.503	0.606	0.545	0.230	0.000	0.000
0.555	0.358	0.049								
SpO2 less 95\%	0.581	0.530	0.631	1.787	1.700	1.879	0.344	0.543	0.000	0.000
1.247	1.784	0.087								
Cough	-0.575	-0.633	-0.518	0.563	0.531	0.596	0.578	0.429	0.000	0.000
0.803	0.562	0.032								
Contracted At Hospital	0.548	0.402	0.695	1.730	1.494	2.004	0.458	0.637	0.000	0.000
1.228	1.696	0.236								
Public Hospital	0.530	0.484	0.577	1.699	1.622	1.780	0.403	0.559	0.000	0.000
1.225	1.692	0.077								
Race Indigenous	0.480	0.006	0.954	1.616	1.006	2.595	0.462	0.653	0.001	0.047
1.174	1.310	0.610								
Other Symptoms	-0.459	-0.509	-0.409	0.632	0.601	0.664	0.509	0.358	0.000	0.000
0.841	0.632	0.031								
Neurological Disease	0.438	0.323	0.553	1.550	1.382	1.738	0.453	0.681	0.000	0.000
1.184	1.532	0.168								
Schooling Superior	-0.424	-0.532	-0.315	0.655	0.587	0.730	0.475	0.257	0.000	0.000
0.862	0.660	0.068								
Immunosuppression	0.394	0.266	0.523	1.483	1.304	1.687	0.459	0.567	0.000	0.000
1.162	1.468	0.179								
Fever	-0.337	-0.392	-0.283	0.714	0.676	0.753	0.559	0.429	0.000	0.000
0.876	0.712	0.038								
Another Chronic Pneumopathy	0.334	0.219	0.449	1.396	1.245	1.566	0.455	0.644	0.000	0.000
1.138	1.379	0.151								
Throat	-0.333	-0.390	-0.275	0.717	0.677	0.760	0.483	0.385	0.000	0.000
0.882	0.719	0.040								
Hematologic Disease	0.325	0.098	0.552	1.384	1.103	1.736	0.461	0.590	0.000	0.005
1.127	1.328	0.281								
Respiratory Discomfort	0.302	0.251	0.353	1.352	1.286	1.423	0.389	0.509	0.000	0.000
1.123	1.348	0.066								
Diarrhea	-0.279	-0.348	-0.210	0.756	0.706	0.811	0.476	0.373	0.000	0.000
0.900	0.760	0.050								
Diabetes	0.251	0.199	0.304	1.286	1.220	1.355	0.422	0.581	0.000	0.000
1.104	1.284	0.066								
Asthma	-0.235	-0.374	-0.096	0.790	0.688	0.908	0.465	0.358	0.000	0.001
0.917	0.805	0.102								
Other Risks	0.231	0.180	0.282	1.260	1.197	1.326	0.436	0.537	0.000	0.000
1.090	1.255	0.063								
Dyspnea	0.227	0.172	0.282	1.255	1.188	1.326	0.378	0.493	0.000	0.000
1.089	1.247	0.067								
Gender_F	-0.186	-0.232	-0.141	0.830	0.793	0.869	0.471	0.451	0.001	0.000
0.932	0.828	0.037								
Race White	-0.176	-0.230	-0.123	0.838	0.795	0.884	0.492	0.393	0.000	0.000
0.935	0.838	0.043								
Postpartum	-0.159	-0.550	0.231	0.853	0.577	1.260	0.463	0.254	0.000	0.425
0.936	0.972	0.276								
Schooling Medium 1-3	-0.141	-0.218	-0.065	0.868	0.804	0.937	0.477	0.342	0.000	0.000
0.948	0.871	0.064								
Age 50-65	0.141	0.051	0.231	1.151	1.052	1.260	0.475	0.429	0.000	0.002
0.736	0.747	0.099								
Cardiovascular Disease	0.118	0.068	0.168	1.125	1.070	1.183	0.412	0.563	0.000	0.000
1.045	1.123	0.055								
Acute Respiratory Distress Syndrome	0.041	-0.011	0.092	1.041	0.990	1.096	0.447	0.505	0.000	0.119
1.014	1.037	0.051								
Vomiting	0.028	-0.060	0.116	1.028	0.942	1.123	0.467	0.401	0.000	0.536
1.007	1.019	0.086								
Schooling Elem 1-5	0.009	-0.073	0.092	1.009	0.929	1.096	0.454	0.559	0.000	0.825
1.005	1.005	0.080								

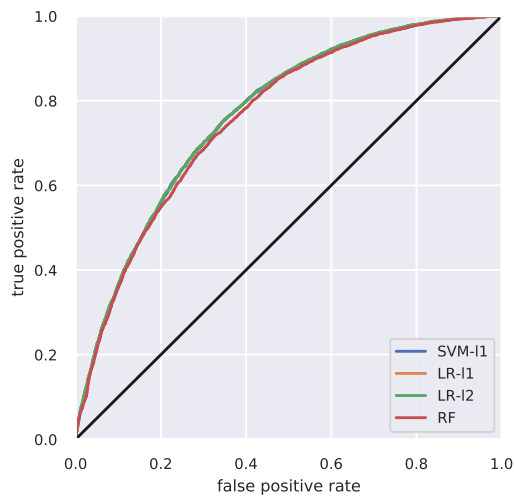


Recursive Feature Elimination:



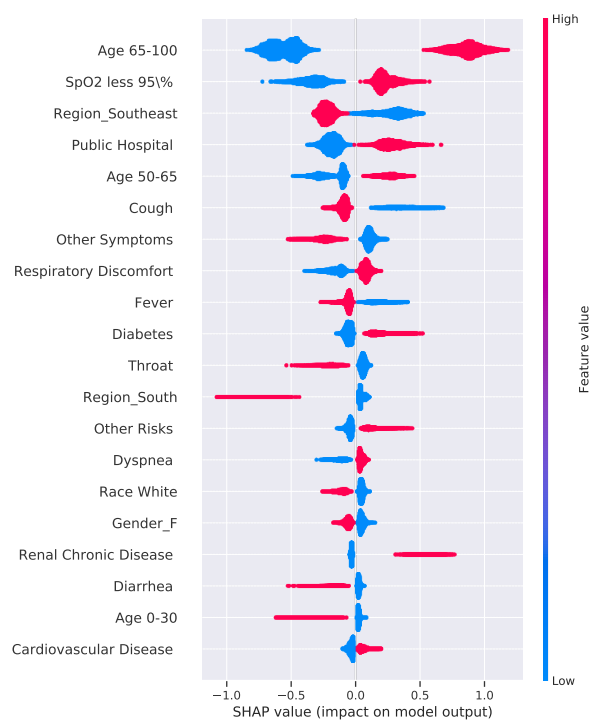
Performance:

	SVM-I1	LR-I1	LR-I2	RF	XGBoost
Accuracy	0.700	0.70	0.700	0.693	0.70
F1w	0.700	0.70	0.699	0.693	0.70
AUC	0.769	0.77	0.770	0.762	0.77



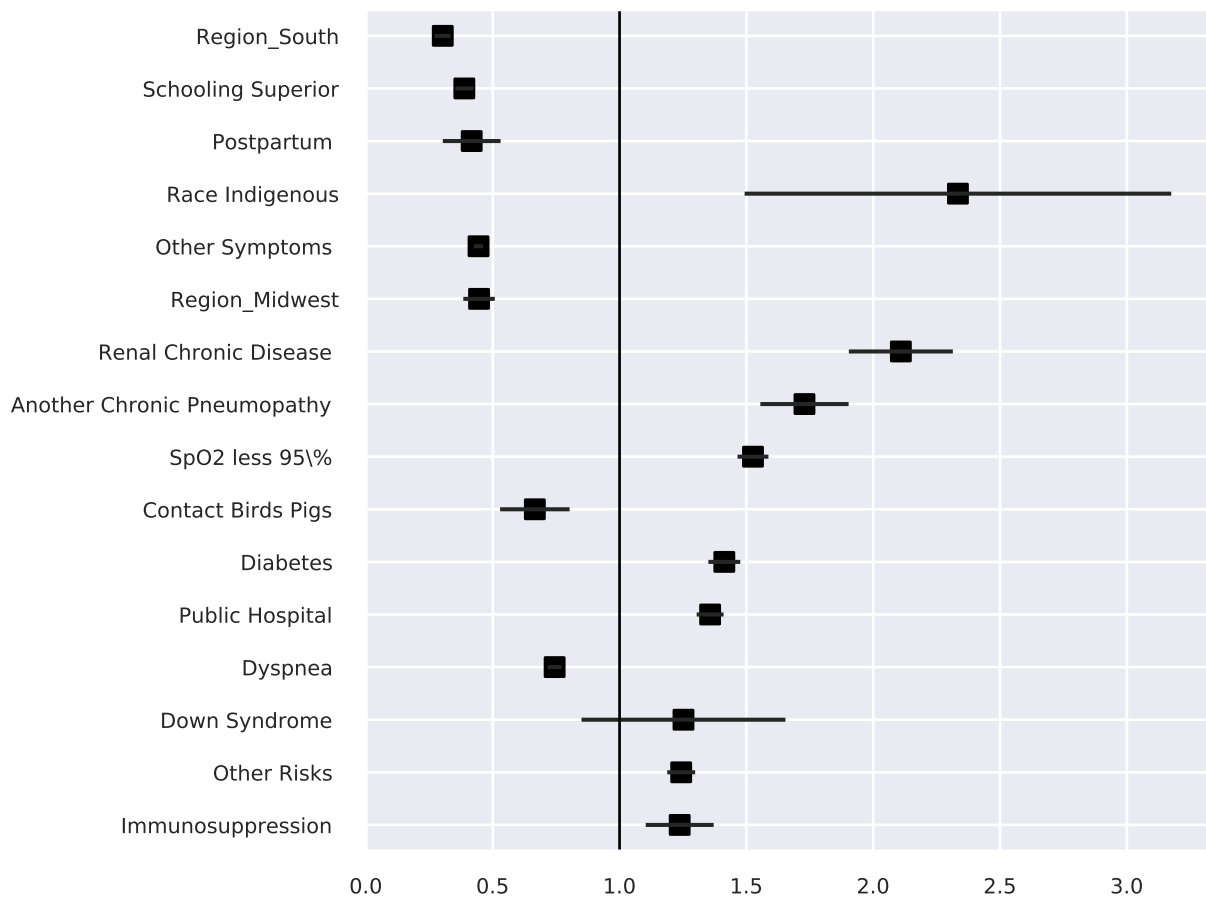
Coefficients:

	SVM-I1	LR-I1
Age 0-30	0.457	0.196
Region_South	0.600	0.259
Region_Midwest	0.662	0.348
Age 30-50	0.555	0.358
Region_Southeast	0.750	0.478
Cough	0.803	0.562
Other Symptoms	0.841	0.632
Schooling Superior	0.862	0.660
Fever	0.876	0.712
Throat	0.882	0.719
Age 50-65	0.736	0.747
Diarrhea	0.900	0.760
Asthma	0.917	0.805
Gender_F	0.932	0.828
Race White	0.935	0.838
Schooling Medium 1-3	0.948	0.871
Postpartum	0.936	0.972
Schooling Elem 1-5	1.005	1.005
Vomiting	1.007	1.019
Acute Respiratory Distress Syndrome	1.014	1.037
Cardiovascular Disease	1.045	1.123
Dyspnea	1.089	1.247
Other Risks	1.090	1.255
Diabetes	1.104	1.284
Race Indigenous	1.174	1.310
Hematologic Disease	1.127	1.328
Respiratory Discomfort	1.123	1.348
Another Chronic Pneumopathy	1.138	1.379
Immunosuppression	1.162	1.468
Neurological Disease	1.184	1.532
Public Hospital	1.225	1.692
Contracted At Hospital	1.228	1.696
SpO2 less 95\%	1.247	1.784
Liver Chronic Disease	1.290	1.856
Age 65-100	1.110	1.932
Renal Chronic Disease	1.305	1.974

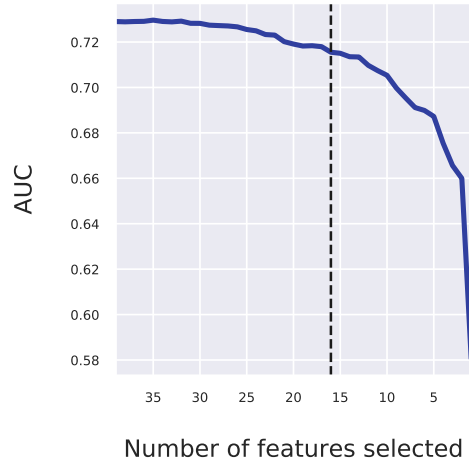


2.2 Mortality (previous) small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Region_South	-1.194	-1.306	-1.083	0.303	0.271	0.339	0.477	0.224	0.000	0.000
0.661	0.350	0.032								
Schooling Superior	-0.947	-1.044	-0.851	0.388	0.352	0.427	0.478	0.258	0.000	0.000
0.743	0.475	0.036								
Postpartum	-0.875	-1.195	-0.556	0.417	0.303	0.573	0.466	0.279	0.000	0.000
0.769	0.532	0.114								
Race Indigenous	0.847	0.401	1.294	2.334	1.493	3.646	0.465	0.709	0.000	0.000
1.467	2.436	0.841								
Other Symptoms	-0.811	-0.853	-0.769	0.444	0.426	0.464	0.513	0.357	0.000	0.000
0.778	0.564	0.018								
Region_Midwest	-0.808	-0.957	-0.660	0.446	0.384	0.517	0.468	0.320	0.000	0.000
0.731	0.482	0.062								
Renal Chronic Disease	0.746	0.644	0.849	2.109	1.904	2.337	0.454	0.695	0.000	0.000
1.434	2.329	0.205								
Another Chronic Pneumopathy	0.548	0.441	0.654	1.729	1.555	1.923	0.458	0.636	0.000	0.000
1.296	1.814	0.174								
SpO2 less 95\%	0.423	0.382	0.463	1.526	1.465	1.589	0.344	0.548	0.000	0.000
1.352	1.950	0.061								
Contact Birds Pigs	-0.407	-0.636	-0.177	0.666	0.529	0.837	0.466	0.360	0.001	0.001
0.889	0.754	0.137								
Diabetes	0.346	0.300	0.392	1.413	1.350	1.480	0.426	0.580	0.000	0.000
1.241	1.616	0.063								
Public Hospital	0.305	0.265	0.345	1.357	1.304	1.413	0.409	0.559	0.000	0.000
1.260	1.667	0.053								
Dyspnea	-0.295	-0.335	-0.256	0.744	0.716	0.774	0.374	0.498	0.000	0.000
1.087	1.209	0.028								
Down Syndrome	0.225	-0.162	0.612	1.252	0.850	1.844	0.465	0.603	0.024	0.255
1.130	1.319	0.402								
Other Risks	0.217	0.172	0.263	1.243	1.188	1.301	0.440	0.537	0.000	0.000
1.176	1.444	0.055								
Immunosuppression	0.213	0.098	0.328	1.237	1.103	1.388	0.462	0.572	0.000	0.000
1.153	1.382	0.134								



Recursive Feature Elimination:

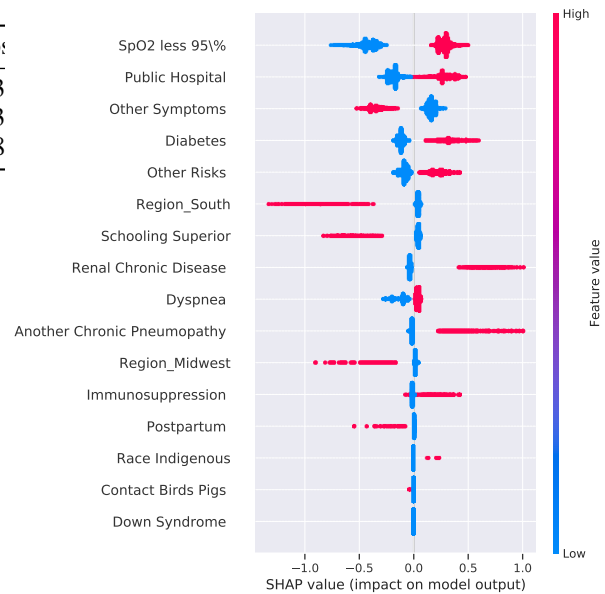
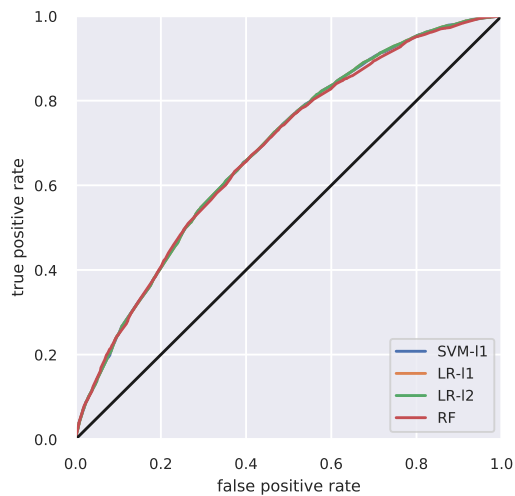


Coefficients:

	SVM-l1	LR-l1
Region_South	0.661	0.350
Schooling Superior	0.743	0.475
Region_Midwest	0.731	0.482
Postpartum	0.769	0.532
Other Symptoms	0.778	0.564
Contact Birds Pigs	0.889	0.754
Dyspnea	1.087	1.209
Down Syndrome	1.130	1.319
Immunosuppression	1.153	1.382
Other Risks	1.176	1.444
Diabetes	1.241	1.616
Public Hospital	1.260	1.667
Another Chronic Pneumopathy	1.296	1.814
SpO2 less 95\%	1.352	1.950
Renal Chronic Disease	1.434	2.329
Race Indigenous	1.467	2.436

Performance:

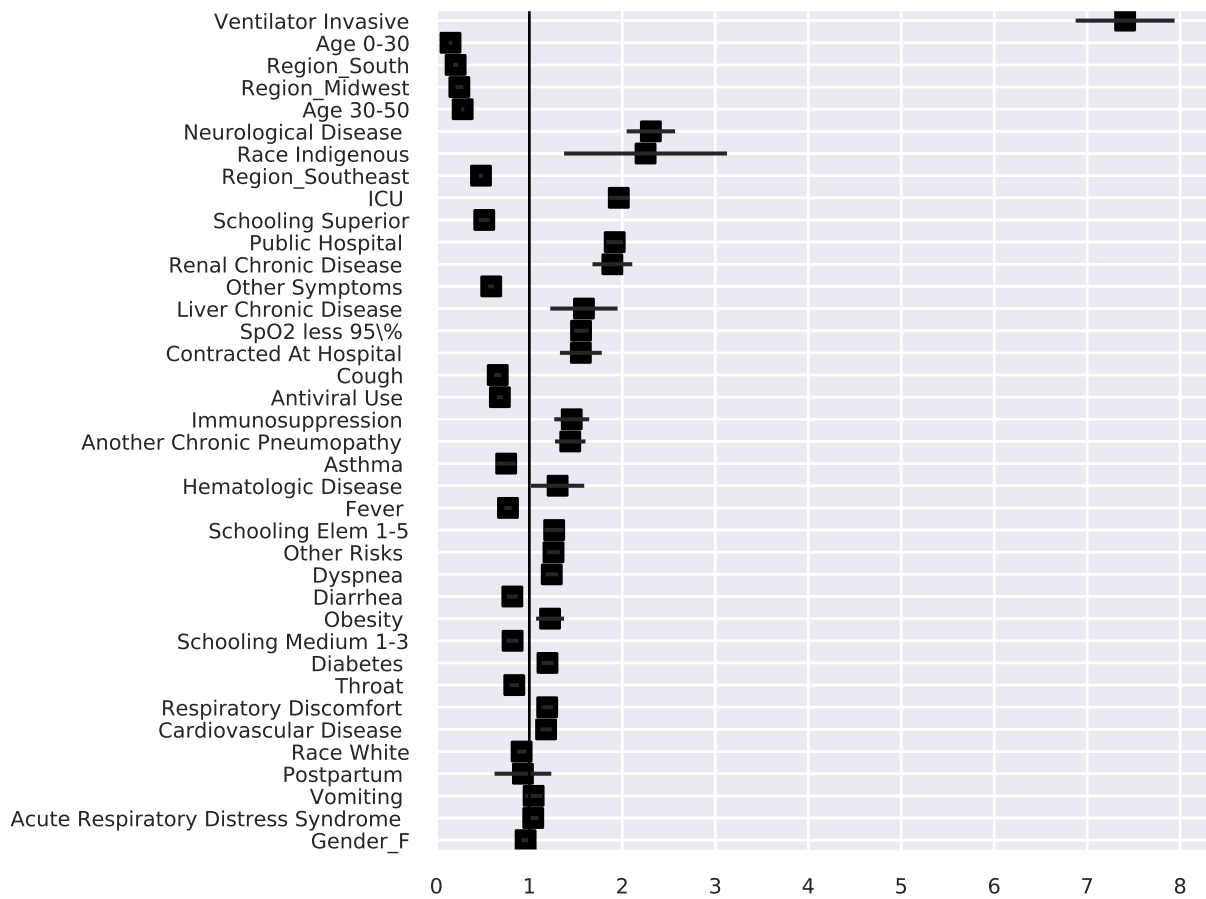
	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.633	0.633	0.633	0.627	0.63
F1w	0.630	0.630	0.630	0.627	0.63
AUC	0.682	0.682	0.682	0.680	0.68



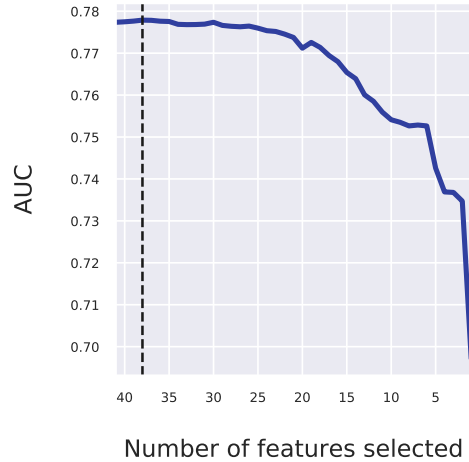
2.3 Mortality (advanced)

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
Ventilator Invasive	2.003	1.928	2.077	7.408	6.876	7.982	0.350	0.858	0.000	0.000
2.064	7.342	0.532								
Age 0-30	-1.885	-2.023	-1.747	0.152	0.132	0.174	0.483	0.156	0.000	0.000
0.520	0.153	0.020								
Region.South	-1.577	-1.720	-1.435	0.207	0.179	0.238	0.476	0.230	0.000	0.000
0.559	0.210	0.028								
Region.Midwest	-1.399	-1.587	-1.210	0.247	0.204	0.298	0.468	0.324	0.000	0.000
0.595	0.268	0.043								
Age 30-50	-1.261	-1.323	-1.199	0.283	0.266	0.301	0.547	0.231	0.000	0.000
0.632	0.275	0.017								
Neurological Disease	0.836	0.717	0.956	2.307	2.047	2.600	0.455	0.692	0.000	0.000
1.378	2.177	0.260								
Race Indigenous	0.811	0.318	1.304	2.250	1.374	3.683	0.464	0.705	0.000	0.001
1.337	1.053	0.876								
Region.Southeast	-0.734	-0.784	-0.683	0.480	0.457	0.505	0.533	0.417	0.000	0.000
0.734	0.451	0.023								
ICU	0.674	0.616	0.732	1.962	1.851	2.079	0.360	0.665	0.000	0.000
1.271	1.887	0.111								
Schooling Superior	-0.664	-0.785	-0.544	0.515	0.456	0.581	0.478	0.250	0.000	0.000
0.794	0.523	0.059								
Public Hospital	0.651	0.602	0.701	1.918	1.826	2.015	0.407	0.561	0.000	0.000
1.252	1.815	0.092								
Renal Chronic Disease	0.638	0.518	0.758	1.893	1.679	2.135	0.454	0.700	0.000	0.000
1.270	1.812	0.214								
Other Symptoms	-0.528	-0.582	-0.475	0.590	0.559	0.622	0.511	0.361	0.000	0.000
0.814	0.569	0.031								
Liver Chronic Disease	0.462	0.203	0.721	1.587	1.225	2.056	0.463	0.651	0.000	0.000
1.176	1.298	0.362								
SpO2 less 95\%	0.442	0.389	0.496	1.556	1.475	1.642	0.346	0.546	0.000	0.000
1.167	1.524	0.081								
Contracted At Hospital	0.441	0.284	0.597	1.554	1.329	1.817	0.460	0.646	0.000	0.000
1.161	1.404	0.225								
Cough	-0.415	-0.474	-0.357	0.660	0.623	0.700	0.577	0.432	0.000	0.000
0.830	0.613	0.037								
Antiviral Use	-0.381	-0.433	-0.330	0.683	0.649	0.719	0.477	0.443	0.000	0.000
0.867	0.690	0.034								
Immunosuppression	0.376	0.237	0.514	1.456	1.268	1.672	0.461	0.570	0.000	0.000
1.138	1.377	0.188								
Another Chronic Pneumopathy	0.365	0.244	0.486	1.440	1.276	1.626	0.457	0.642	0.000	0.000
1.147	1.365	0.164								
Asthma	-0.286	-0.436	-0.135	0.751	0.647	0.873	0.468	0.362	0.000	0.000
0.910	0.819	0.104								
Hematologic Disease	0.266	0.018	0.513	1.304	1.018	1.671	0.463	0.590	0.000	0.036
1.093	1.096	0.286								
Fever	-0.261	-0.316	-0.206	0.770	0.729	0.814	0.555	0.434	0.000	0.000
0.882	0.720	0.041								
Schooling Elem 1-5	0.237	0.150	0.323	1.267	1.162	1.381	0.457	0.558	0.000	0.000
1.086	1.210	0.105								
Other Risks	0.231	0.177	0.286	1.260	1.193	1.331	0.437	0.544	0.000	0.000
1.075	1.216	0.067								
Dyspnea	0.216	0.159	0.273	1.241	1.173	1.314	0.376	0.497	0.000	0.000
1.059	1.150	0.068								
Diarrhea	-0.203	-0.277	-0.129	0.817	0.758	0.879	0.478	0.379	0.000	0.000
0.927	0.827	0.059								
Obesity	0.202	0.071	0.333	1.223	1.073	1.395	0.463	0.504	0.013	0.003
1.082	1.179	0.150								
Schooling Medium 1-3	-0.198	-0.280	-0.116	0.820	0.756	0.891	0.479	0.348	0.000	0.000
0.923	0.819	0.064								
Diabetes	0.178	0.122	0.234	1.195	1.130	1.264	0.425	0.580	0.000	0.000
1.061	1.169	0.065								
Throat	-0.177	-0.238	-0.115	0.838	0.788	0.891	0.485	0.388	0.000	0.000
0.936	0.847	0.050								
Respiratory Discomfort	0.176	0.122	0.229	1.192	1.130	1.258	0.395	0.509	0.000	0.000
1.058	1.154	0.062								
Cardiovascular Disease	0.165	0.112	0.218	1.180	1.119	1.244	0.414	0.565	0.000	0.000
1.052	1.148	0.061								
Race White	-0.087	-0.144	-0.030	0.917	0.866	0.970	0.492	0.400	0.000	0.003
0.968	0.907	0.051								
Postpartum	-0.072	-0.468	0.325	0.931	0.626	1.384	0.465	0.306	0.000	0.722
0.962	1.000	0.305								
Vomiting	0.045	-0.049	0.139	1.046	0.952	1.149	0.470	0.400	0.000	0.348
1.015	1.004	0.094								
Acute Respiratory Distress Syndrome	0.042	-0.013	0.096	1.042	0.987	1.101	0.448	0.512	0.000	0.133
1.001	1.004	0.055								
Gender_F	-0.041	-0.088	0.007	0.960	0.916	1.007	0.472	0.454	0.003	0.092
0.967	0.919	0.044								

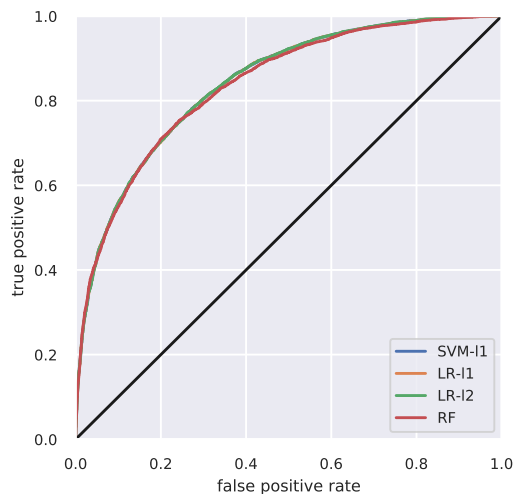


Recursive Feature Elimination:



Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.755	0.755	0.755	0.756	0.758
F1w	0.755	0.754	0.754	0.754	0.757
AUC	0.841	0.841	0.841	0.837	0.841



Coefficients:

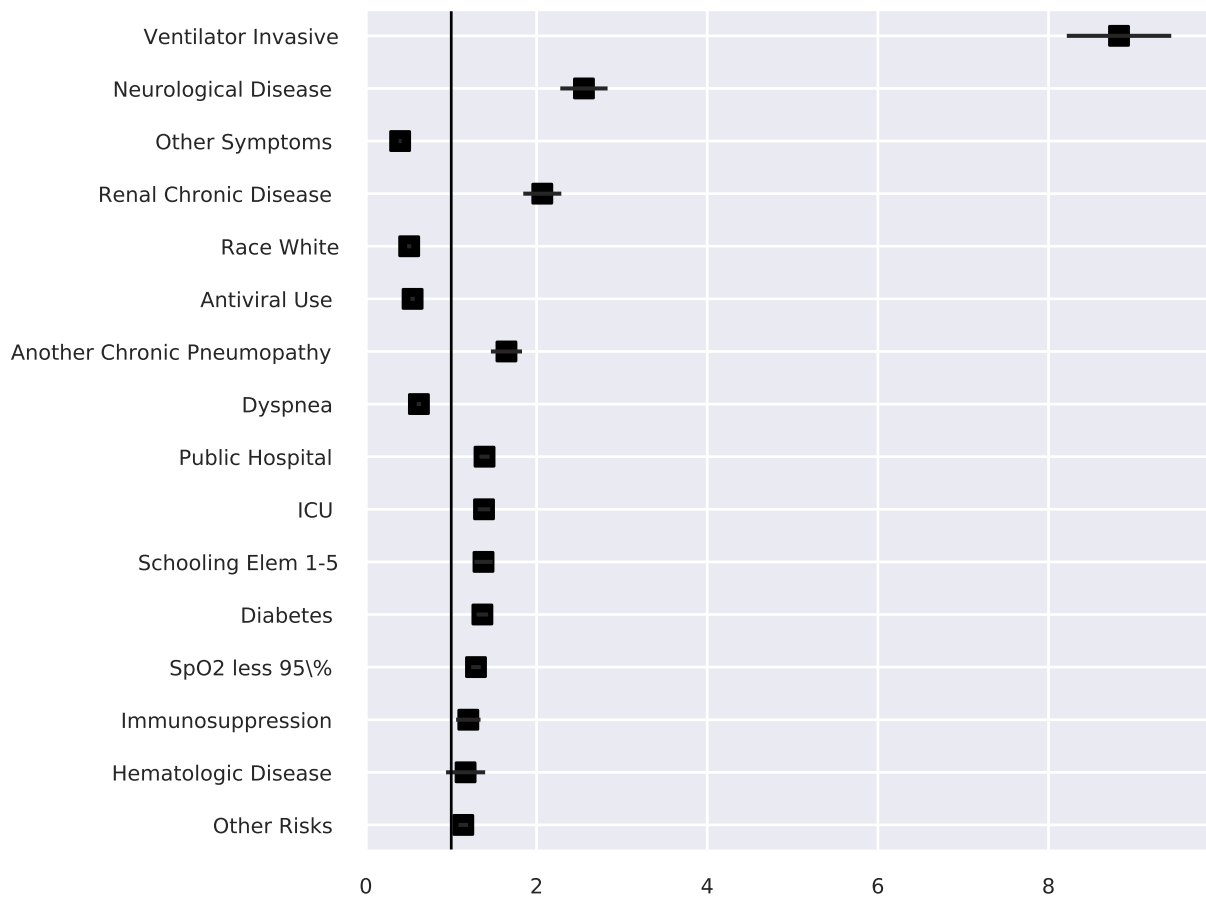
	SVM-l1	LR-l1
Age 0-30	0.520	0.153
Region_South	0.559	0.210
Region_Midwest	0.595	0.268
Age 30-50	0.632	0.275
Region_Southeast	0.734	0.451
Schooling Superior	0.794	0.523
Other Symptoms	0.814	0.569
Cough	0.830	0.613
Antiviral Use	0.867	0.690
Fever	0.882	0.720
Asthma	0.910	0.819
Schooling Medium 1-3	0.923	0.819
Diarrhea	0.927	0.827
Throat	0.936	0.847
Race White	0.968	0.907
Gender_F	0.967	0.919
Postpartum	0.962	1.000
Acute Respiratory Distress Syndrome	1.001	1.004
Vomiting	1.015	1.004
Race Indigenous	1.337	1.053
Hematologic Disease	1.093	1.096
Cardiovascular Disease	1.052	1.148
Dyspnea	1.059	1.150
Respiratory Discomfort	1.058	1.154
Diabetes	1.061	1.169
Obesity	1.082	1.179
Schooling Elem 1-5	1.086	1.210
Other Risks	1.075	1.216
Liver Chronic Disease	1.176	1.298
Another Chronic Pneumopathy	1.147	1.365
Immunosuppression	1.138	1.377
Contracted At Hospital	1.161	1.404
SpO2 less 95\%	1.167	1.524
Renal Chronic Disease	1.270	1.812
Public Hospital	1.252	1.815
ICU	1.271	1.887
Neurological Disease	1.378	2.177
Ventilator Invasive	2.064	7.342



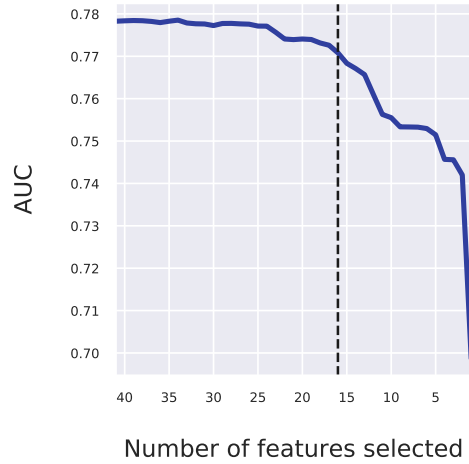
2.4 Mortality (advanced) small

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	2.178	2.106	2.250	8.826	8.214	9.484	0.347	0.859	0.0	0.000
2.256	8.050	0.612								
Neurological Disease	0.938	0.823	1.053	2.555	2.278	2.866	0.451	0.698	0.0	0.000
1.533	2.857	0.277								
Other Symptoms	-0.913	-0.960	-0.867	0.401	0.383	0.420	0.508	0.358	0.0	0.000
0.796	0.540	0.018								
Renal Chronic Disease	0.726	0.612	0.840	2.067	1.844	2.317	0.450	0.711	0.0	0.000
1.390	2.279	0.223								
Race White	-0.679	-0.727	-0.632	0.507	0.483	0.532	0.491	0.392	0.0	0.000
0.851	0.647	0.024								
Antiviral Use	-0.603	-0.650	-0.556	0.547	0.522	0.573	0.474	0.440	0.0	0.000
0.831	0.612	0.025								
Another Chronic Pneumopathy	0.499	0.382	0.615	1.647	1.465	1.850	0.454	0.642	0.0	0.000
1.216	1.660	0.182								
Dyspnea	-0.476	-0.520	-0.432	0.621	0.595	0.649	0.372	0.495	0.0	0.000
1.036	1.095	0.026								
Public Hospital	0.329	0.285	0.373	1.390	1.330	1.453	0.404	0.557	0.0	0.000
1.273	1.863	0.060								
ICU	0.325	0.272	0.378	1.384	1.312	1.459	0.359	0.660	0.0	0.000
1.239	1.730	0.072								
Schooling Elem 1-5	0.321	0.240	0.401	1.378	1.271	1.494	0.454	0.554	0.0	0.000
1.190	1.539	0.107								
Diabetes	0.311	0.260	0.362	1.365	1.297	1.436	0.422	0.579	0.0	0.000
1.193	1.567	0.068								
SpO2 less 95\%	0.254	0.209	0.300	1.290	1.233	1.350	0.340	0.545	0.0	0.000
1.222	1.676	0.057								
Immunosuppression	0.182	0.055	0.309	1.200	1.057	1.362	0.458	0.568	0.0	0.005
1.118	1.342	0.143								
Hematologic Disease	0.156	-0.063	0.374	1.168	0.939	1.453	0.460	0.579	0.0	0.162
1.112	1.294	0.229								
Other Risks	0.132	0.082	0.183	1.141	1.085	1.200	0.436	0.536	0.0	0.000
1.118	1.331	0.056								



Recursive Feature Elimination:

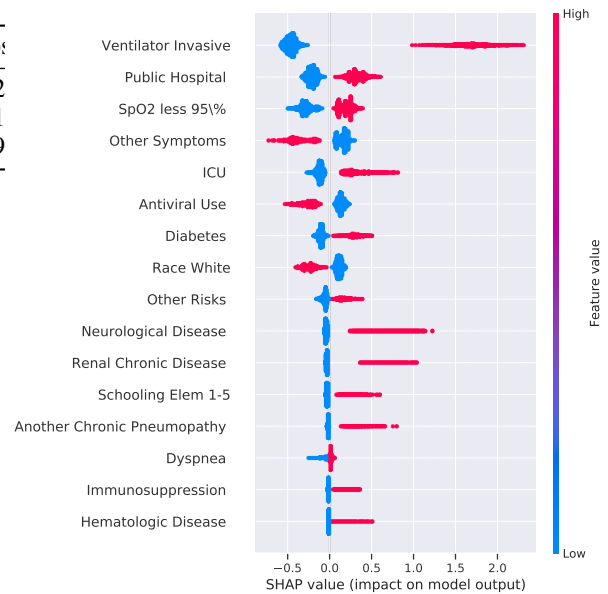
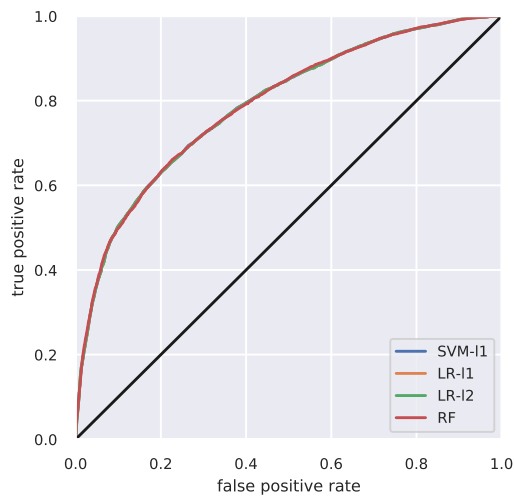


Coefficients:

	SVM-l1	LR-l1
Other Symptoms	0.796	0.540
Antiviral Use	0.831	0.612
Race White	0.851	0.647
Dyspnea	1.036	1.095
Hematologic Disease	1.112	1.294
Other Risks	1.118	1.331
Immunosuppression	1.118	1.342
Schooling Elem 1-5	1.190	1.539
Diabetes	1.193	1.567
Another Chronic Pneumopathy	1.216	1.660
SpO2 less 95\%	1.222	1.676
ICU	1.239	1.730
Public Hospital	1.273	1.863
Renal Chronic Disease	1.390	2.279
Neurological Disease	1.533	2.857
Ventilator Invasive	2.256	8.050

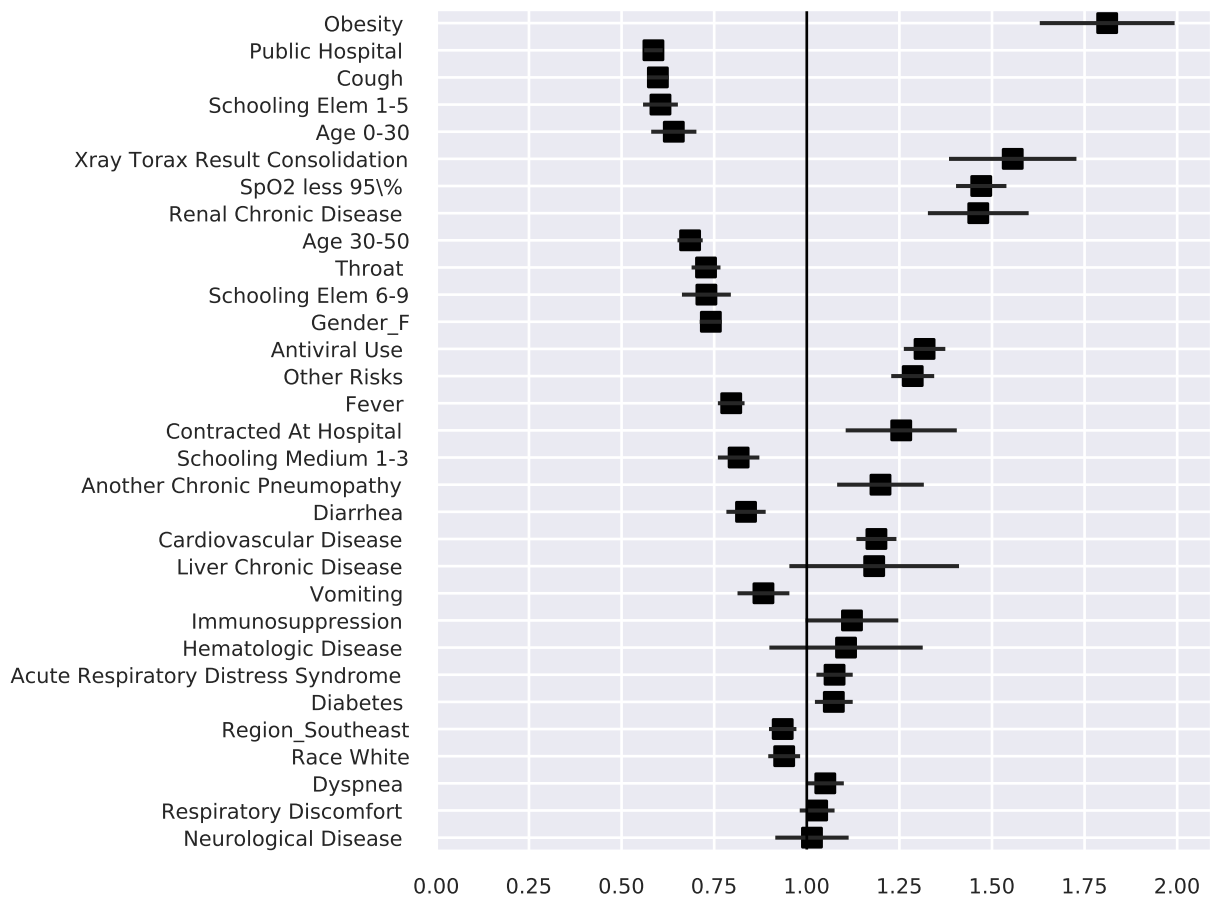
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.719	0.718	0.718	0.719	0.72
F1w	0.715	0.715	0.715	0.716	0.71
AUC	0.790	0.789	0.789	0.790	0.79

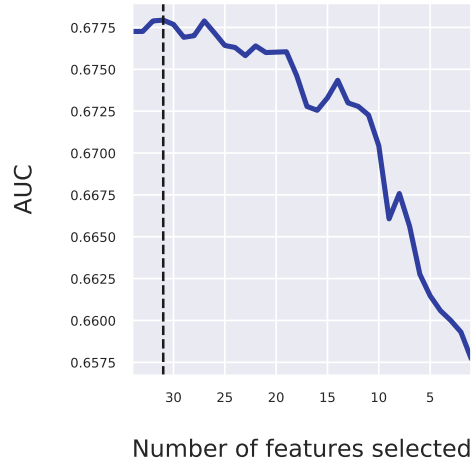


2.5 ICU

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Obesity	0.594	0.488	0.699	1.811	1.629	2.013	0.337	0.486	0.000	0.000
1.276	1.727	0.182								
Public Hospital	-0.534	-0.577	-0.490	0.586	0.561	0.613	0.371	0.295	0.000	0.000
0.836	0.651	0.025								
Cough	-0.515	-0.564	-0.466	0.598	0.569	0.628	0.400	0.326	0.000	0.000
0.865	0.714	0.029								
Schooling Elem 1-5	-0.502	-0.584	-0.420	0.605	0.558	0.657	0.348	0.281	0.000	0.000
0.834	0.641	0.047								
Age 0-30	-0.445	-0.544	-0.345	0.641	0.580	0.708	0.348	0.244	0.000	0.000
0.906	0.765	0.061								
Xray Torax Result Consolidation	0.442	0.325	0.559	1.556	1.384	1.748	0.338	0.471	0.000	0.000
1.237	1.609	0.172								
SpO2 less 95\%	0.386	0.339	0.433	1.471	1.403	1.542	0.264	0.396	0.000	0.000
1.206	1.573	0.068								
Renal Chronic Disease	0.380	0.283	0.478	1.463	1.327	1.612	0.335	0.488	0.000	0.000
1.212	1.526	0.136								
Age 30-50	-0.378	-0.429	-0.327	0.685	0.651	0.721	0.365	0.277	0.000	0.000
0.906	0.781	0.034								
Throat	-0.318	-0.373	-0.263	0.728	0.689	0.768	0.360	0.277	0.000	0.000
0.879	0.718	0.039								
Schooling Elem 6-9	-0.317	-0.412	-0.222	0.729	0.663	0.801	0.345	0.300	0.000	0.000
0.895	0.763	0.066								
Gender_F	-0.300	-0.341	-0.259	0.741	0.711	0.772	0.354	0.326	0.000	0.000
0.929	0.838	0.030								
Antiviral Use	0.276	0.232	0.320	1.318	1.262	1.377	0.315	0.390	0.000	0.000
1.132	1.343	0.056								
Other Risks	0.252	0.205	0.298	1.286	1.228	1.347	0.316	0.417	0.000	0.000
1.163	1.415	0.058								
Fever	-0.228	-0.275	-0.181	0.796	0.760	0.834	0.370	0.333	0.000	0.000
0.981	0.960	0.036								
Contracted At Hospital	0.227	0.100	0.355	1.255	1.105	1.425	0.339	0.446	0.000	0.000
1.147	1.359	0.150								
Schooling Medium 1-3	-0.203	-0.274	-0.132	0.816	0.760	0.876	0.347	0.301	0.000	0.000
0.936	0.851	0.056								
Another Chronic Pneumopathy	0.182	0.079	0.285	1.199	1.082	1.329	0.338	0.451	0.000	0.001
1.101	1.229	0.117								
Diarrhea	-0.179	-0.244	-0.114	0.836	0.783	0.892	0.349	0.300	0.000	0.000
0.942	0.863	0.053								
Cardiovascular Disease	0.172	0.126	0.218	1.188	1.134	1.243	0.306	0.413	0.000	0.000
1.117	1.288	0.054								
Liver Chronic Disease	0.167	-0.048	0.381	1.182	0.953	1.464	0.341	0.438	0.002	0.127
1.097	1.235	0.229								
Vomiting	-0.124	-0.207	-0.041	0.883	0.813	0.960	0.346	0.300	0.000	0.004
0.960	0.904	0.070								
Immunosuppression	0.115	-0.003	0.233	1.122	0.997	1.263	0.340	0.412	0.000	0.056
1.071	1.168	0.125								
Hematologic Disease	0.101	-0.107	0.308	1.106	0.899	1.361	0.342	0.414	0.026	0.343
1.058	1.138	0.207								
Acute Respiratory Distress Syndrome	0.072	0.025	0.119	1.075	1.026	1.127	0.332	0.371	0.000	0.003
1.067	1.169	0.049								
Diabetes	0.070	0.021	0.120	1.073	1.022	1.127	0.321	0.405	0.000	0.005
1.058	1.137	0.051								
Region_Southeast	-0.067	-0.108	-0.027	0.935	0.898	0.974	0.317	0.360	0.000	0.001
1.050	1.127	0.037								
Race White	-0.063	-0.110	-0.016	0.939	0.896	0.984	0.337	0.355	0.009	0.009
0.997	0.991	0.043								
Dyspnea	0.049	0.000	0.098	1.050	1.000	1.103	0.288	0.362	0.000	0.050
1.092	1.242	0.050								
Respiratory Discomfort	0.028	-0.019	0.074	1.028	0.981	1.077	0.309	0.364	0.000	0.243
1.043	1.100	0.047								
Neurological Disease	0.014	-0.089	0.116	1.014	0.915	1.123	0.339	0.424	0.000	0.795
1.026	1.053	0.099								

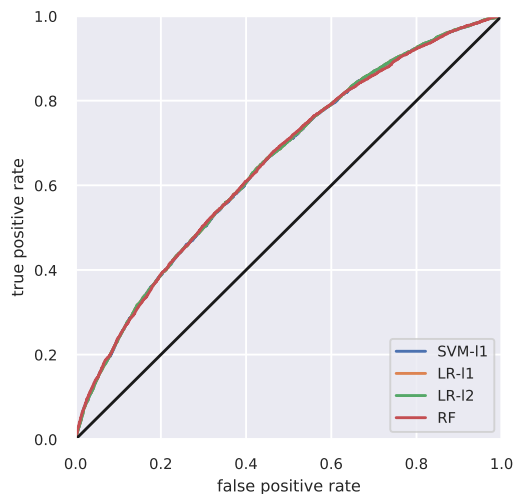


Recursive Feature Elimination:



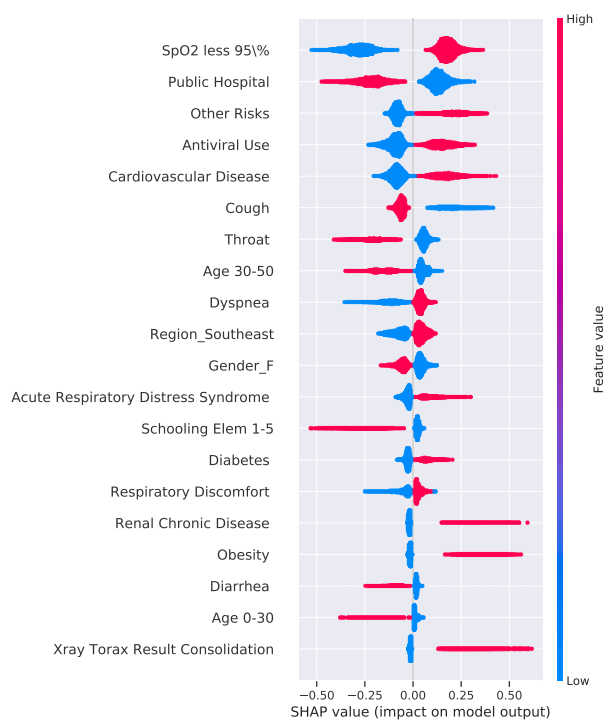
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.658	0.658	0.658	0.655	0.656
F1w	0.607	0.608	0.608	0.571	0.599
AUC	0.653	0.653	0.653	0.653	0.652



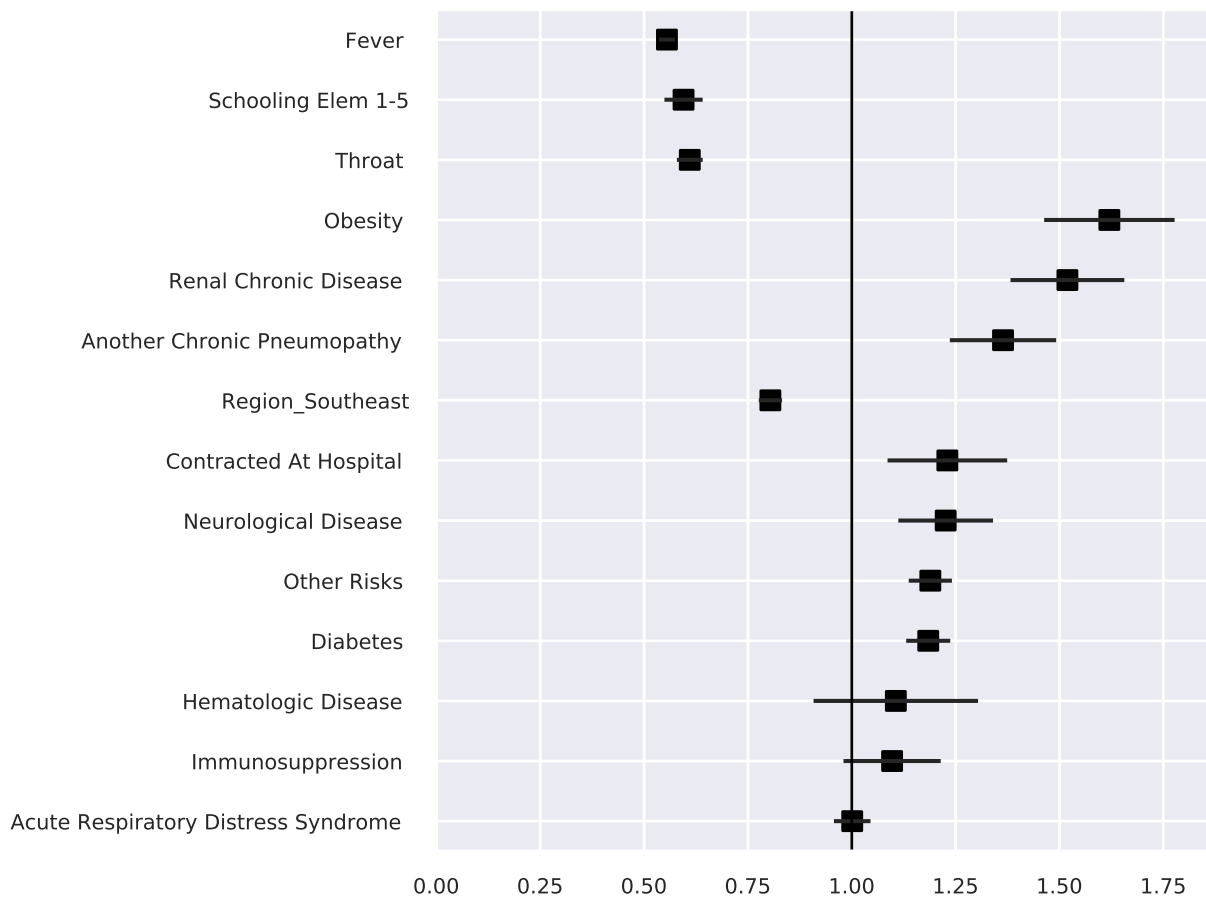
Coefficients:

	SVM-l1	LR-l1
Schooling Elem 1-5	0.834	0.641
Public Hospital	0.836	0.651
Cough	0.865	0.714
Throat	0.879	0.718
Schooling Elem 6-9	0.895	0.763
Age 0-30	0.906	0.765
Age 30-50	0.906	0.781
Gender_F	0.929	0.838
Schooling Medium 1-3	0.936	0.851
Diarrhea	0.942	0.863
Vomiting	0.960	0.904
Fever	0.981	0.960
Race White	0.997	0.991
Neurological Disease	1.026	1.053
Respiratory Discomfort	1.043	1.100
Region_Southeast	1.050	1.127
Diabetes	1.058	1.137
Hematologic Disease	1.058	1.138
Immunosuppression	1.071	1.168
Acute Respiratory Distress Syndrome	1.067	1.169
Another Chronic Pneumopathy	1.101	1.229
Liver Chronic Disease	1.097	1.235
Dyspnea	1.092	1.242
Cardiovascular Disease	1.117	1.288
Antiviral Use	1.132	1.343
Contracted At Hospital	1.147	1.359
Other Risks	1.163	1.415
Renal Chronic Disease	1.212	1.526
SpO2 less 95\%	1.206	1.573
Xray Torax Result Consolidation	1.237	1.609
Obesity	1.276	1.727

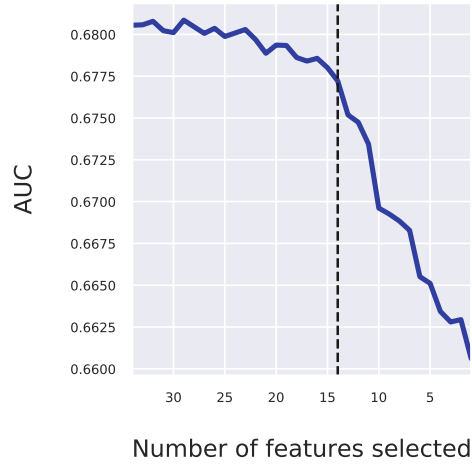


2.6 ICU small

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Fever	-0.589	-0.624	-0.553	0.555	0.536	0.575	0.368	0.330	0.000	0.000
0.967	0.928	0.019								
Schooling Elem 1-5	-0.520	-0.599	-0.440	0.595	0.549	0.644	0.345	0.278	0.000	0.000
0.854	0.684	0.046								
Throat	-0.495	-0.547	-0.442	0.610	0.579	0.643	0.359	0.265	0.000	0.000
0.854	0.681	0.031								
Obesity	0.483	0.380	0.585	1.620	1.463	1.795	0.334	0.475	0.000	0.000
1.286	1.718	0.157								
Renal Chronic Disease	0.418	0.324	0.512	1.519	1.382	1.669	0.332	0.489	0.000	0.000
1.267	1.658	0.137								
Another Chronic Pneumopathy	0.311	0.212	0.409	1.364	1.236	1.506	0.334	0.461	0.000	0.000
1.213	1.517	0.128								
Region.Southeast	-0.219	-0.254	-0.184	0.804	0.776	0.832	0.314	0.357	0.000	0.000
1.077	1.188	0.028								
Contracted At Hospital	0.207	0.082	0.332	1.230	1.086	1.394	0.336	0.464	0.000	0.001
1.177	1.417	0.144								
Neurological Disease	0.204	0.106	0.302	1.226	1.112	1.352	0.336	0.426	0.000	0.000
1.137	1.325	0.114								
Other Risks	0.173	0.129	0.218	1.189	1.137	1.243	0.314	0.412	0.000	0.000
1.175	1.432	0.052								
Diabetes	0.168	0.123	0.214	1.184	1.131	1.238	0.316	0.409	0.000	0.000
1.160	1.394	0.053								
Hematologic Disease	0.101	-0.096	0.298	1.106	0.908	1.348	0.339	0.418	0.008	0.315
1.076	1.174	0.198								
Immunosuppression	0.093	-0.021	0.206	1.097	0.980	1.229	0.337	0.424	0.000	0.109
1.085	1.195	0.117								
Acute Respiratory Distress Syndrome	0.001	-0.044	0.046	1.001	0.957	1.047	0.329	0.368	0.000	0.954
1.092	1.224	0.044								



Recursive Feature Elimination:

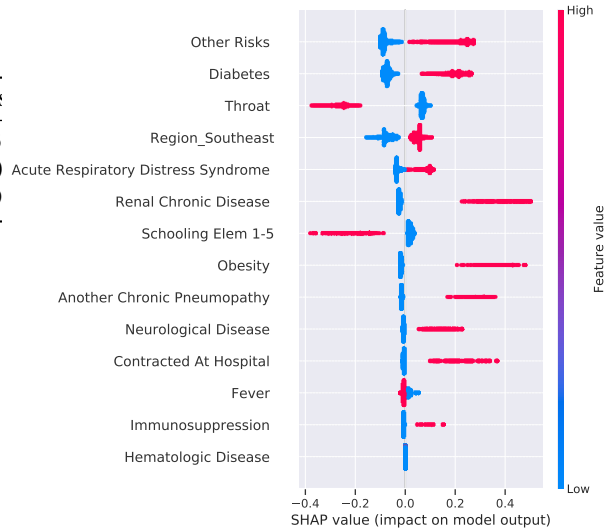
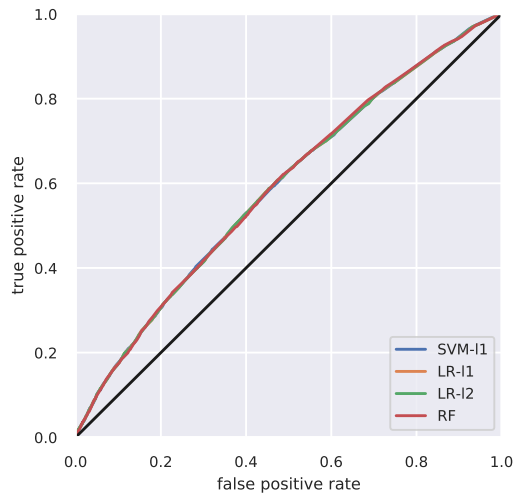


Coefficients:

	SVM-l1	LR-l1
Throat	0.854	0.681
Schooling Elem 1-5	0.854	0.684
Fever	0.967	0.928
Hematologic Disease	1.076	1.174
Region_Southeast	1.077	1.188
Immunosuppression	1.085	1.195
Acute Respiratory Distress Syndrome	1.092	1.224
Neurological Disease	1.137	1.325
Diabetes	1.160	1.394
Contracted At Hospital	1.177	1.417
Other Risks	1.175	1.432
Another Chronic Pneumopathy	1.213	1.517
Renal Chronic Disease	1.267	1.658
Obesity	1.286	1.718

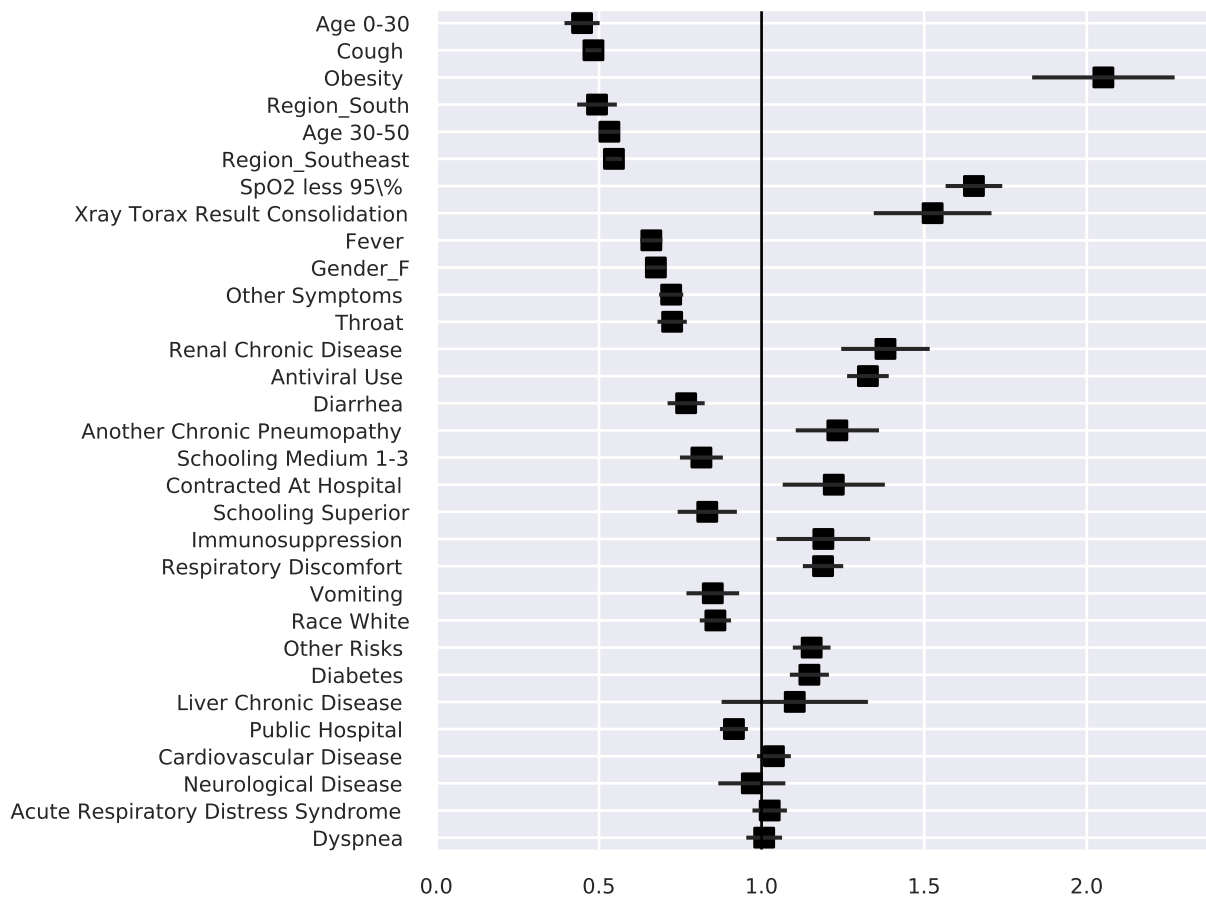
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.636	0.635	0.635	0.632	0.63
F1w	0.546	0.545	0.542	0.505	0.50
AUC	0.591	0.591	0.591	0.592	0.59

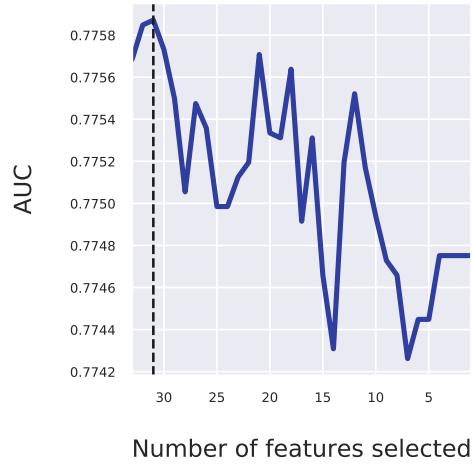


2.7 Ventilator

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Age 0-30	-0.803	-0.931	-0.675	0.448	0.394	0.509	0.231	0.124	0.000	0.000
0.878	0.611	0.054								
Cough	-0.727	-0.781	-0.673	0.483	0.458	0.510	0.279	0.210	0.000	0.000
0.857	0.642	0.025								
Obesity	0.718	0.605	0.831	2.051	1.832	2.295	0.221	0.344	0.000	0.000
1.248	1.825	0.219								
Region.South	-0.706	-0.837	-0.574	0.494	0.433	0.563	0.228	0.165	0.000	0.000
0.876	0.660	0.061								
Age 30-50	-0.632	-0.694	-0.570	0.532	0.500	0.566	0.253	0.148	0.000	0.000
0.884	0.650	0.032								
Region.Southeast	-0.605	-0.652	-0.557	0.546	0.521	0.573	0.245	0.212	0.000	0.000
0.918	0.776	0.025								
SpO2 less 95\%	0.503	0.448	0.557	1.653	1.566	1.746	0.133	0.288	0.000	0.000
1.224	1.954	0.087								
Xray Torax Result Consolidation	0.423	0.296	0.549	1.526	1.345	1.732	0.222	0.321	0.000	0.000
1.186	1.579	0.181								
Fever	-0.414	-0.466	-0.362	0.661	0.627	0.697	0.253	0.216	0.000	0.000
0.960	0.895	0.034								
Gender_F	-0.393	-0.440	-0.346	0.675	0.644	0.707	0.235	0.212	0.000	0.000
0.947	0.845	0.031								
Other Symptoms	-0.325	-0.378	-0.272	0.722	0.685	0.762	0.238	0.197	0.000	0.000
0.965	0.893	0.037								
Throat	-0.322	-0.386	-0.258	0.725	0.680	0.773	0.237	0.180	0.000	0.000
0.901	0.714	0.045								
Renal Chronic Disease	0.322	0.219	0.426	1.381	1.245	1.531	0.219	0.355	0.000	0.000
1.170	1.485	0.136								
Antiviral Use	0.283	0.233	0.332	1.327	1.263	1.394	0.202	0.265	0.000	0.000
1.103	1.348	0.064								
Diarrhea	-0.264	-0.342	-0.187	0.768	0.711	0.829	0.232	0.179	0.000	0.000
0.931	0.797	0.057								
Another Chronic Pneumopathy	0.210	0.099	0.320	1.233	1.105	1.377	0.221	0.330	0.000	0.000
1.104	1.272	0.128								
Schooling Medium 1-3	-0.204	-0.289	-0.120	0.815	0.749	0.887	0.230	0.181	0.000	0.000
0.960	0.879	0.066								
Contracted At Hospital	0.201	0.063	0.338	1.222	1.065	1.402	0.223	0.324	0.000	0.004
1.139	1.398	0.157								
Schooling Superior	-0.183	-0.299	-0.067	0.833	0.742	0.936	0.228	0.175	0.000	0.002
0.986	0.949	0.091								
Immunosuppression	0.174	0.045	0.303	1.190	1.046	1.354	0.223	0.290	0.000	0.008
1.086	1.258	0.144								
Respiratory Discomfort	0.173	0.120	0.227	1.189	1.127	1.255	0.161	0.266	0.000	0.000
1.118	1.395	0.062								
Vomiting	-0.163	-0.263	-0.063	0.850	0.769	0.939	0.229	0.181	0.000	0.001
0.955	0.869	0.081								
Race White	-0.154	-0.211	-0.097	0.858	0.810	0.908	0.233	0.206	0.000	0.000
0.971	0.907	0.048								
Other Risks	0.144	0.092	0.196	1.154	1.096	1.216	0.205	0.282	0.000	0.000
1.108	1.352	0.058								
Diabetes	0.137	0.083	0.191	1.147	1.087	1.211	0.201	0.297	0.000	0.000
1.089	1.267	0.060								
Liver Chronic Disease	0.097	-0.131	0.325	1.102	0.877	1.384	0.225	0.298	0.024	0.405
1.061	1.118	0.225								
Public Hospital	-0.089	-0.136	-0.041	0.915	0.872	0.960	0.206	0.257	0.000	0.000
1.043	1.141	0.043								
Cardiovascular Disease	0.037	-0.014	0.089	1.038	0.986	1.093	0.197	0.281	0.000	0.156
1.060	1.192	0.052								
Neurological Disease	-0.031	-0.143	0.081	0.970	0.867	1.085	0.223	0.281	0.000	0.591
1.011	1.030	0.103								
Acute Respiratory Distress Syndrome	0.025	-0.028	0.077	1.025	0.972	1.080	0.212	0.263	0.000	0.358
1.063	1.193	0.053								
Dyspnea	0.008	-0.048	0.064	1.008	0.953	1.066	0.148	0.254	0.000	0.780
1.112	1.433	0.055								

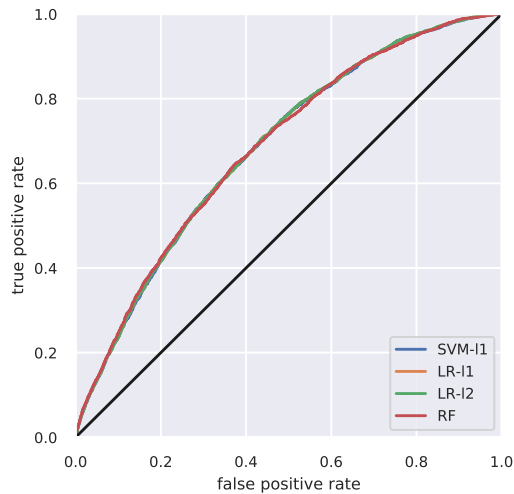


Recursive Feature Elimination:



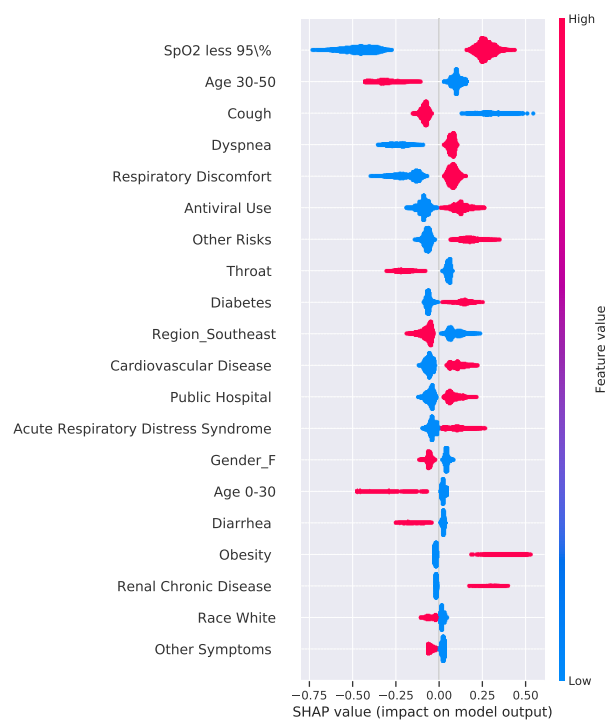
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.751	0.752	0.753	0.751	0.755
F1w	0.677	0.676	0.676	0.647	0.665
AUC	0.684	0.685	0.685	0.685	0.690



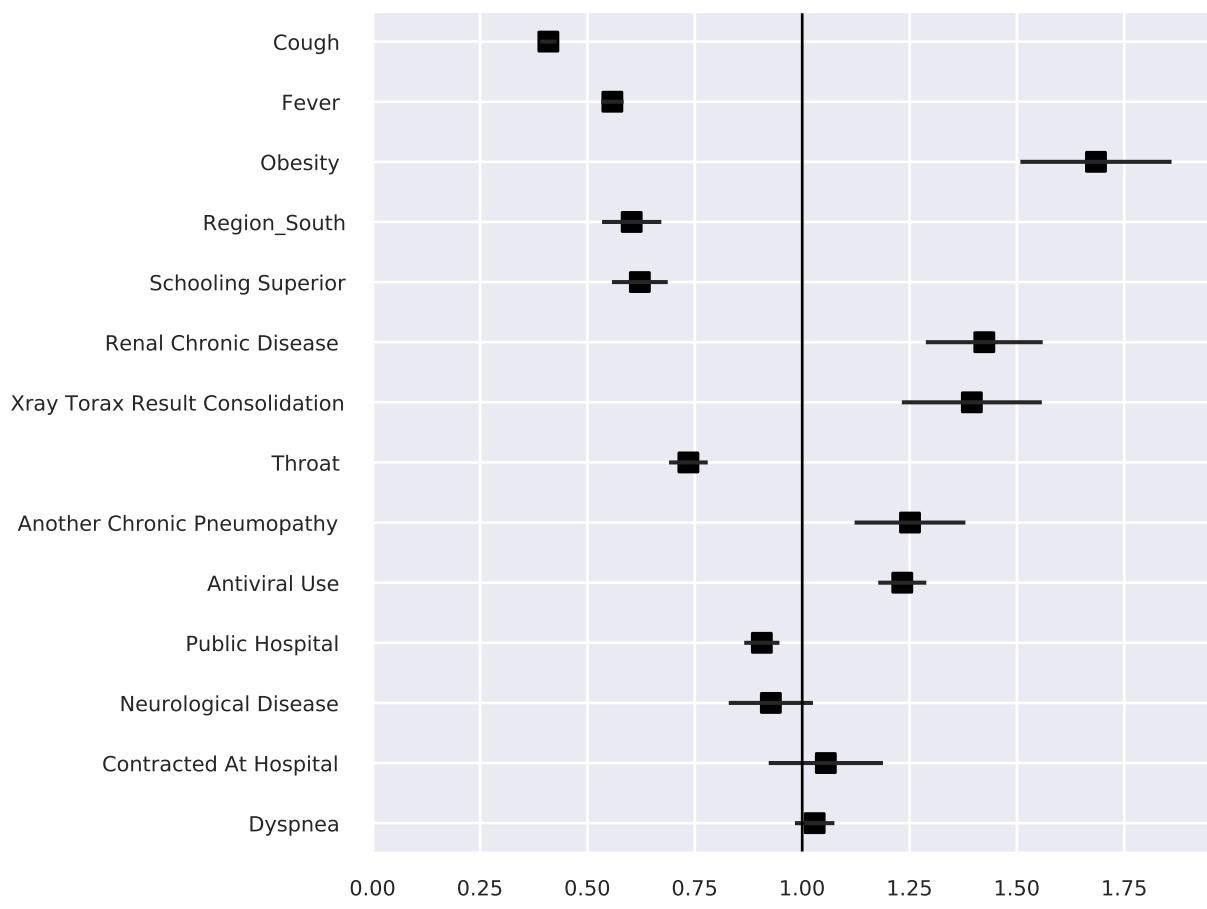
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.878	0.611
Cough	0.857	0.642
Age 30-50	0.884	0.650
Region_South	0.876	0.660
Throat	0.901	0.714
Region_Southeast	0.918	0.776
Diarrhea	0.931	0.797
Gender_F	0.947	0.845
Vomiting	0.955	0.869
Schooling Medium 1-3	0.960	0.879
Other Symptoms	0.965	0.893
Fever	0.960	0.895
Race White	0.971	0.907
Schooling Superior	0.986	0.949
Neurological Disease	1.011	1.030
Liver Chronic Disease	1.061	1.118
Public Hospital	1.043	1.141
Cardiovascular Disease	1.060	1.192
Acute Respiratory Distress Syndrome	1.063	1.193
Immunosuppression	1.086	1.258
Diabetes	1.089	1.267
Another Chronic Pneumopathy	1.104	1.272
Antiviral Use	1.103	1.348
Other Risks	1.108	1.352
Respiratory Discomfort	1.118	1.395
Contracted At Hospital	1.139	1.398
Dyspnea	1.112	1.433
Renal Chronic Disease	1.170	1.485
Xray Torax Result Consolidation	1.186	1.579
Obesity	1.248	1.825
SpO2 less 95\%	1.224	1.954

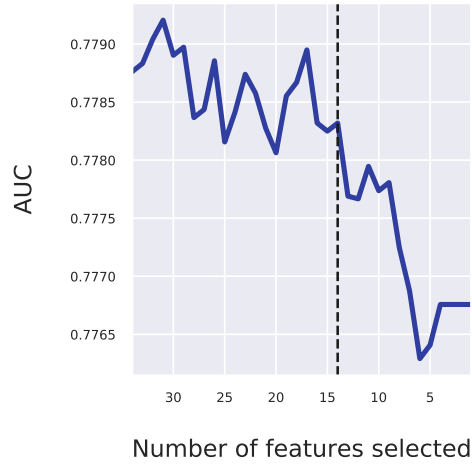


2.8 Ventilator small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.893	-0.941	-0.844	0.409	0.390	0.430	0.276	0.208	0.000	0.000
0.860	0.652	0.019								
Fever	-0.584	-0.631	-0.537	0.558	0.532	0.584	0.251	0.214	0.000	0.000
0.962	0.897	0.026								
Obesity	0.521	0.411	0.632	1.684	1.508	1.881	0.219	0.342	0.000	0.000
1.256	1.741	0.176								
Region_South	-0.506	-0.628	-0.384	0.603	0.534	0.681	0.225	0.177	0.000	0.000
0.912	0.776	0.069								
Schooling Superior	-0.475	-0.586	-0.365	0.622	0.557	0.694	0.226	0.173	0.000	0.000
0.948	0.857	0.065								
Renal Chronic Disease	0.354	0.253	0.454	1.424	1.288	1.574	0.217	0.355	0.000	0.000
1.255	1.739	0.136								
Xray Torax Result Consolidation	0.333	0.209	0.457	1.395	1.232	1.579	0.220	0.316	0.000	0.000
1.191	1.522	0.163								
Throat	-0.309	-0.370	-0.247	0.735	0.690	0.781	0.235	0.177	0.000	0.000
0.904	0.732	0.045								
Another Chronic Pneumopathy	0.224	0.115	0.332	1.251	1.122	1.394	0.219	0.318	0.000	0.000
1.152	1.397	0.129								
Antiviral Use	0.210	0.163	0.256	1.233	1.177	1.292	0.199	0.266	0.000	0.000
1.137	1.445	0.056								
Public Hospital	-0.099	-0.144	-0.054	0.906	0.865	0.948	0.205	0.254	0.000	0.000
1.071	1.218	0.041								
Neurological Disease	-0.076	-0.187	0.036	0.927	0.829	1.036	0.221	0.269	0.001	0.183
1.056	1.131	0.098								
Contracted At Hospital	0.054	-0.081	0.189	1.055	0.922	1.208	0.221	0.314	0.000	0.434
1.166	1.437	0.133								
Dyspnea	0.028	-0.018	0.074	1.029	0.983	1.077	0.147	0.251	0.000	0.227
1.239	2.004	0.046								

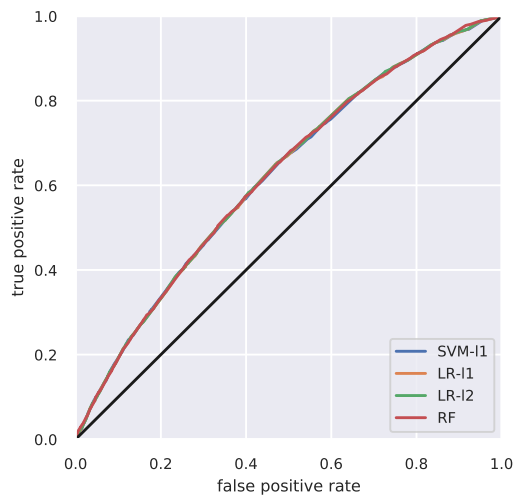


Recursive Feature Elimination:



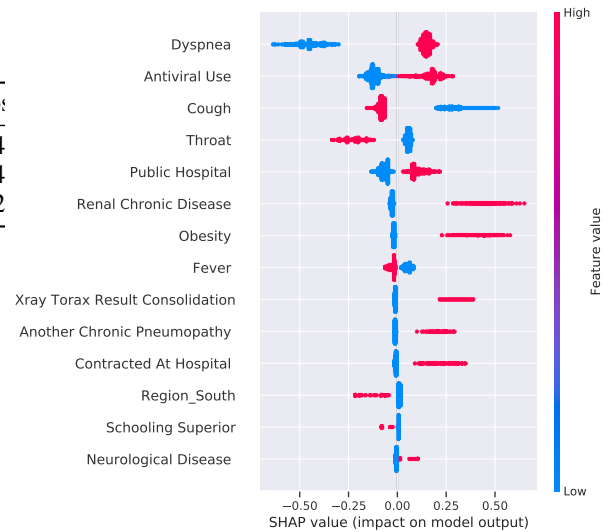
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.745	0.745	0.745	0.747	0.74
F1w	0.646	0.642	0.645	0.648	0.64
AUC	0.623	0.624	0.624	0.624	0.62



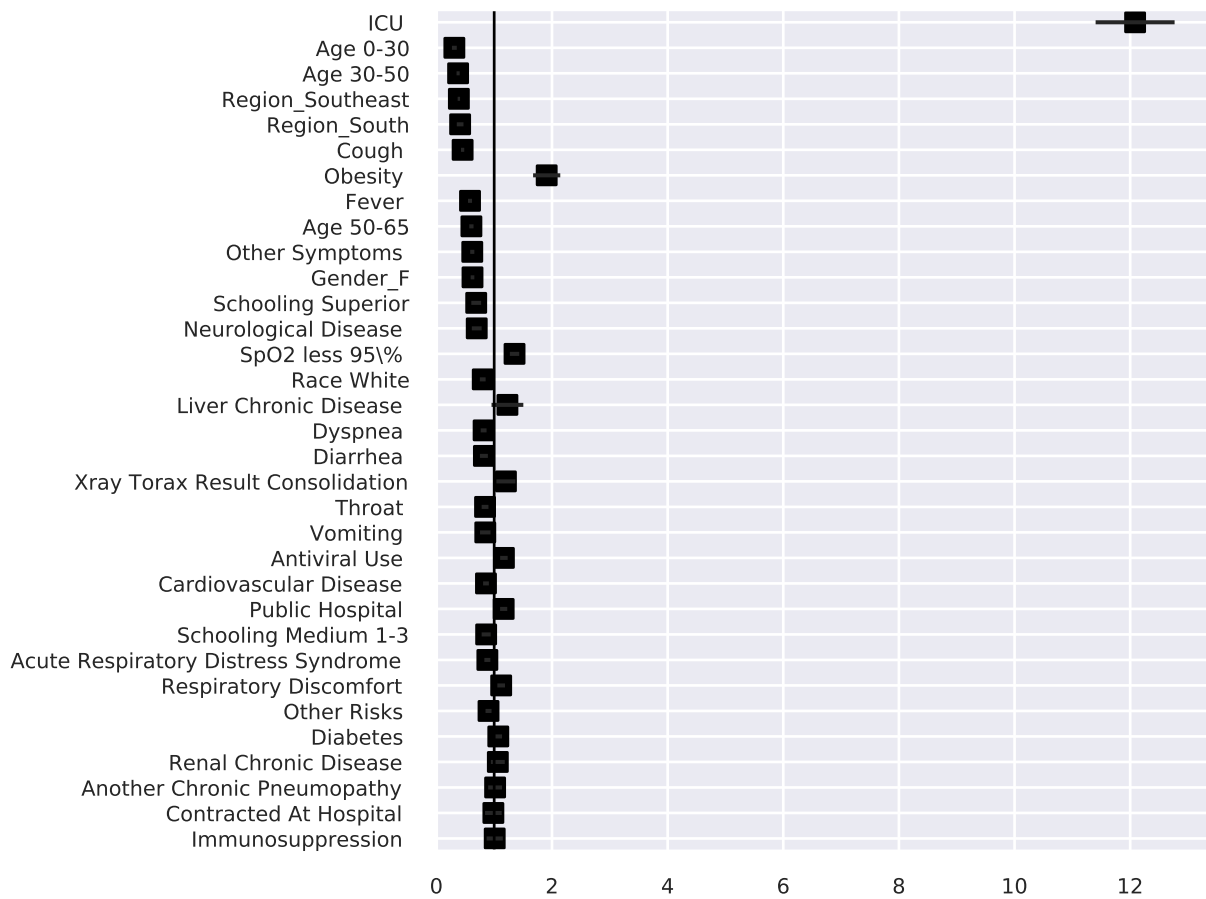
Coefficients:

	SVM-l1	LR-l1
Cough	0.860	0.652
Throat	0.904	0.732
Region_South	0.912	0.776
Schooling Superior	0.948	0.857
Fever	0.962	0.897
Neurological Disease	1.056	1.131
Public Hospital	1.071	1.218
Another Chronic Pneumopathy	1.152	1.397
Contracted At Hospital	1.166	1.437
Antiviral Use	1.137	1.445
Xray Torax Result Consolidation	1.191	1.522
Renal Chronic Disease	1.255	1.739
Obesity	1.256	1.741
Dyspnea	1.239	2.004

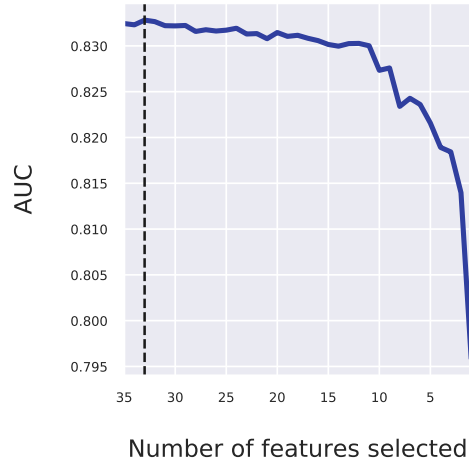


2.9 Ventilator with ICU

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
ICU	2.492	2.434	2.550	12.085	11.402	12.810	0.067	0.529	0.000	0.000
2.519	16.231	0.683								
Age 0-30	-1.168	-1.313	-1.023	0.311	0.269	0.360	0.230	0.123	0.000	0.000
0.857	0.610	0.042								
Age 30-50	-0.978	-1.053	-0.903	0.376	0.349	0.405	0.252	0.145	0.000	0.000
0.864	0.611	0.027								
Region_Southeast	-0.944	-1.001	-0.887	0.389	0.368	0.412	0.246	0.209	0.000	0.000
0.872	0.648	0.021								
Region_South	-0.889	-1.040	-0.738	0.411	0.353	0.478	0.227	0.175	0.000	0.000
0.859	0.625	0.058								
Cough	-0.790	-0.853	-0.728	0.454	0.426	0.483	0.277	0.209	0.000	0.000
0.896	0.717	0.028								
Obesity	0.646	0.515	0.777	1.908	1.673	2.176	0.220	0.343	0.000	0.000
1.154	1.449	0.235								
Fever	-0.542	-0.602	-0.481	0.582	0.547	0.618	0.251	0.215	0.000	0.000
0.972	0.930	0.035								
Age 50-65	-0.500	-0.563	-0.437	0.606	0.569	0.646	0.220	0.235	0.041	0.000
0.972	0.915	0.037								
Other Symptoms	-0.476	-0.536	-0.415	0.621	0.585	0.660	0.238	0.194	0.000	0.000
0.945	0.847	0.036								
Gender_F	-0.469	-0.523	-0.416	0.625	0.593	0.660	0.233	0.212	0.000	0.000
0.970	0.915	0.032								
Schooling Superior	-0.373	-0.504	-0.242	0.689	0.604	0.785	0.227	0.173	0.000	0.000
0.920	0.835	0.085								
Neurological Disease	-0.360	-0.490	-0.229	0.698	0.613	0.795	0.222	0.266	0.004	0.000
0.951	0.937	0.085								
SpO2 less 95\%	0.302	0.240	0.364	1.352	1.271	1.439	0.134	0.286	0.000	0.000
1.164	1.707	0.081								
Race White	-0.220	-0.285	-0.155	0.802	0.752	0.856	0.232	0.205	0.000	0.000
0.965	0.886	0.050								
Liver Chronic Disease	0.207	-0.048	0.461	1.229	0.954	1.585	0.223	0.317	0.001	0.111
1.082	1.093	0.275								
Dyspnea	-0.202	-0.266	-0.137	0.817	0.766	0.872	0.147	0.252	0.000	0.000
1.111	1.405	0.051								
Diarrhea	-0.197	-0.284	-0.110	0.822	0.753	0.896	0.231	0.183	0.000	0.000
0.959	0.879	0.069								
Xray Torax Result Consolidation	0.184	0.037	0.331	1.203	1.038	1.393	0.221	0.319	0.000	0.014
1.082	1.190	0.165								
Throat	-0.172	-0.245	-0.099	0.842	0.783	0.906	0.236	0.180	0.000	0.000
0.949	0.849	0.059								
Vomiting	-0.168	-0.281	-0.054	0.846	0.755	0.948	0.228	0.178	0.000	0.004
0.963	0.901	0.091								
Antiviral Use	0.155	0.098	0.212	1.168	1.103	1.236	0.200	0.266	0.000	0.000
1.056	1.152	0.065								
Cardiovascular Disease	-0.153	-0.213	-0.093	0.858	0.808	0.911	0.194	0.284	0.000	0.000
1.032	1.099	0.050								
Public Hospital	0.152	0.097	0.207	1.164	1.102	1.230	0.202	0.260	0.000	0.000
1.180	1.763	0.062								
Schooling Medium 1-3	-0.150	-0.245	-0.055	0.861	0.783	0.947	0.229	0.186	0.000	0.002
0.979	0.930	0.078								
Acute Respiratory Distress Syndrome	-0.125	-0.186	-0.065	0.882	0.830	0.937	0.211	0.263	0.000	0.000
1.036	1.124	0.052								
Respiratory Discomfort	0.114	0.053	0.176	1.121	1.055	1.192	0.160	0.265	0.000	0.000
1.123	1.426	0.066								
Other Risks	-0.103	-0.163	-0.043	0.902	0.850	0.958	0.204	0.281	0.000	0.001
1.049	1.153	0.052								
Diabetes	0.068	0.006	0.131	1.071	1.006	1.140	0.200	0.296	0.000	0.031
1.067	1.234	0.065								
Renal Chronic Disease	0.061	-0.058	0.180	1.063	0.943	1.197	0.218	0.351	0.000	0.318
1.054	1.133	0.120								
Another Chronic Pneumopathy	0.016	-0.110	0.142	1.016	0.896	1.153	0.220	0.331	0.000	0.804
1.037	1.070	0.120								
Contracted At Hospital	-0.014	-0.172	0.144	0.986	0.842	1.155	0.222	0.318	0.000	0.863
1.075	1.138	0.144								
Immunosuppression	0.009	-0.140	0.157	1.009	0.869	1.170	0.223	0.266	0.012	0.911
1.030	1.031	0.140								

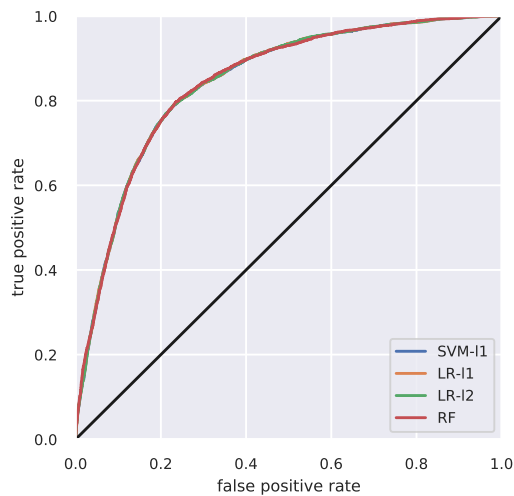


Recursive Feature Elimination:



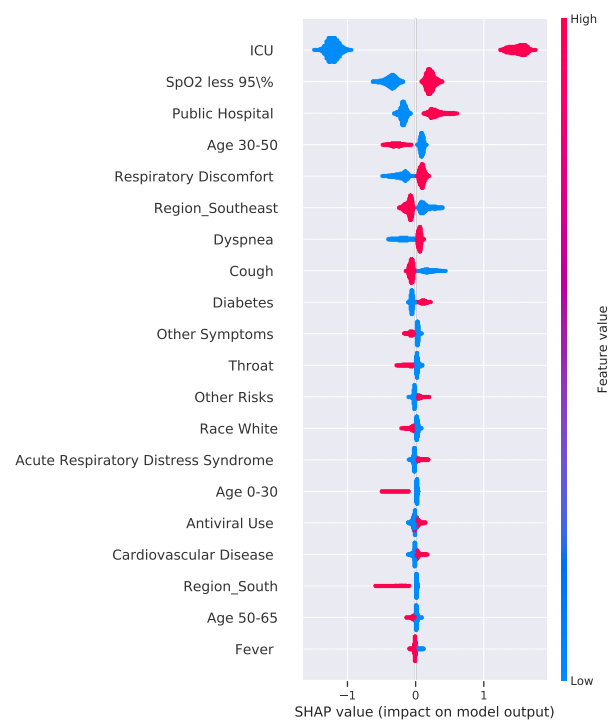
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.810	0.809	0.809	0.805	0.808
F1w	0.807	0.805	0.805	0.792	0.806
AUC	0.844	0.844	0.844	0.844	0.846



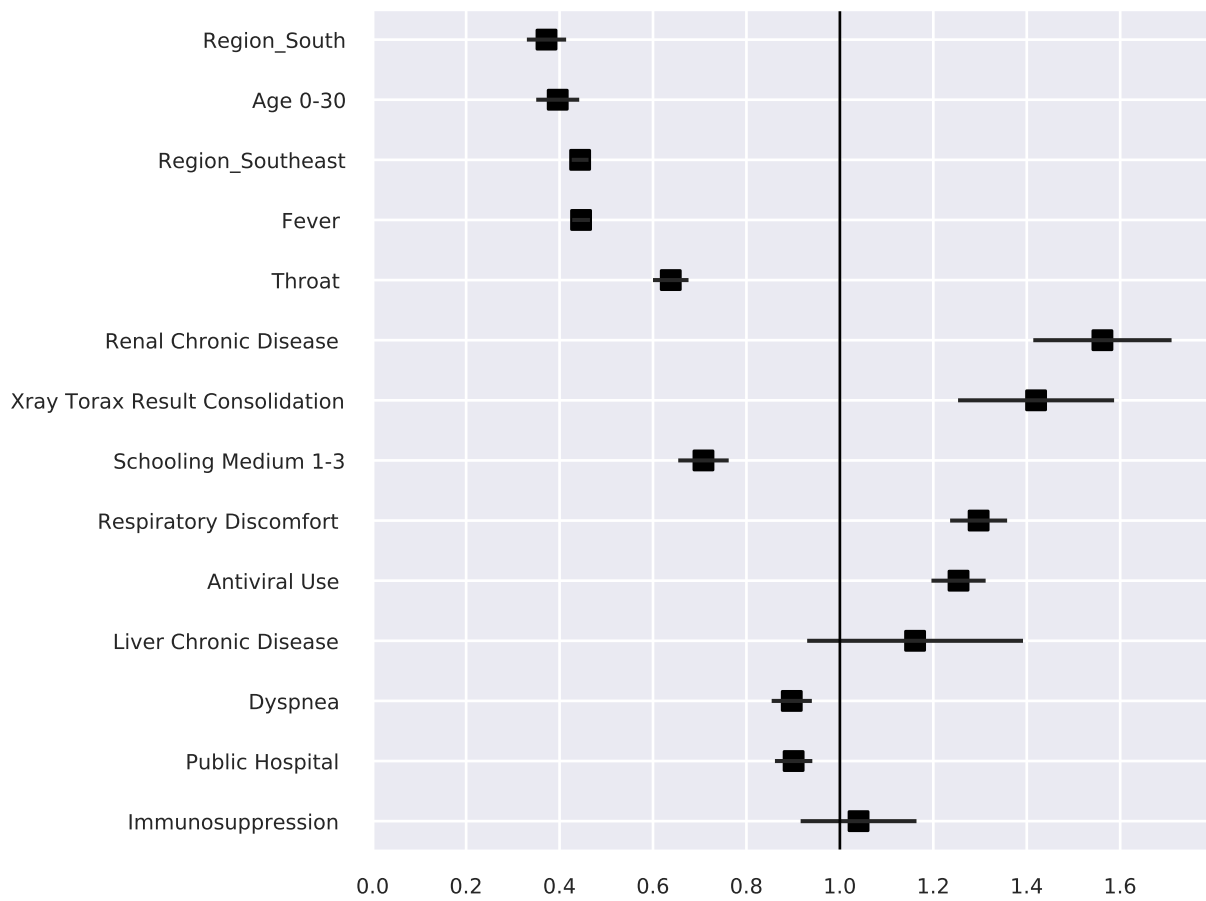
Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.857	0.610
Age 30-50	0.864	0.611
Region_South	0.859	0.625
Region_Southeast	0.872	0.648
Cough	0.896	0.717
Schooling Superior	0.920	0.835
Other Symptoms	0.945	0.847
Throat	0.949	0.849
Diarrhea	0.959	0.879
Race White	0.965	0.886
Vomiting	0.963	0.901
Age 50-65	0.972	0.915
Gender_F	0.970	0.915
Schooling Medium 1-3	0.979	0.930
Fever	0.972	0.930
Neurological Disease	0.951	0.937
Immunosuppression	1.030	1.031
Another Chronic Pneumopathy	1.037	1.070
Liver Chronic Disease	1.082	1.093
Cardiovascular Disease	1.032	1.099
Acute Respiratory Distress Syndrome	1.036	1.124
Renal Chronic Disease	1.054	1.133
Contracted At Hospital	1.075	1.138
Antiviral Use	1.056	1.152
Other Risks	1.049	1.153
Xray Torax Result Consolidation	1.082	1.190
Diabetes	1.067	1.234
Dyspnea	1.111	1.405
Respiratory Discomfort	1.123	1.426
Obesity	1.154	1.449
SpO2 less 95%	1.164	1.707
Public Hospital	1.180	1.763
ICU	2.519	16.231

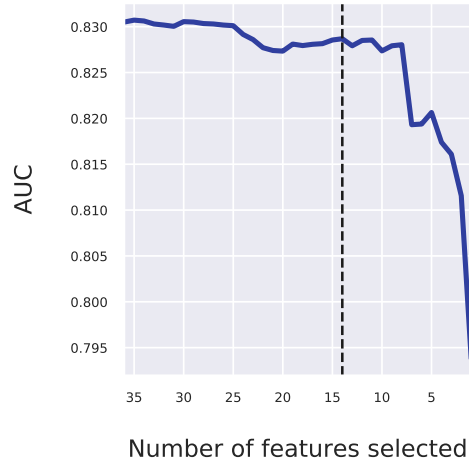


2.10 Ventilator with ICU small

SVM-l1	Coef LR-l1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Region.South	-0.989	-1.110	-0.867	0.372	0.330	0.420	0.229	0.173	0.000	0.000
0.850	0.637	0.042								
Age 0-30	-0.926	-1.051	-0.800	0.396	0.350	0.449	0.233	0.123	0.000	0.000
0.831	0.530	0.046								
Region.Southeast	-0.811	-0.852	-0.770	0.444	0.426	0.463	0.252	0.208	0.000	0.000
0.904	0.752	0.018								
Fever	-0.807	-0.852	-0.763	0.446	0.427	0.466	0.257	0.216	0.000	0.000
0.904	0.754	0.019								
Throat	-0.450	-0.511	-0.389	0.638	0.600	0.678	0.237	0.184	0.000	0.000
0.874	0.667	0.038								
Renal Chronic Disease	0.446	0.346	0.546	1.562	1.414	1.726	0.220	0.356	0.000	0.000
1.268	1.791	0.148								
Xray Torax Result Consolidation	0.351	0.226	0.476	1.420	1.253	1.609	0.223	0.318	0.000	0.000
1.185	1.491	0.167								
Schooling Medium 1-3	-0.346	-0.425	-0.266	0.708	0.654	0.766	0.231	0.189	0.000	0.000
0.935	0.824	0.054								
Respiratory Discomfort	0.260	0.212	0.308	1.297	1.236	1.361	0.160	0.268	0.000	0.000
1.199	1.741	0.061								
Antiviral Use	0.226	0.179	0.273	1.254	1.196	1.314	0.203	0.266	0.000	0.000
1.122	1.390	0.058								
Liver Chronic Disease	0.149	-0.073	0.372	1.161	0.930	1.451	0.226	0.307	0.009	0.188
1.119	1.155	0.231								
Dyspnea	-0.109	-0.158	-0.060	0.897	0.854	0.942	0.150	0.254	0.000	0.000
1.150	1.584	0.043								
Public Hospital	-0.104	-0.150	-0.059	0.901	0.861	0.943	0.206	0.260	0.000	0.000
1.062	1.188	0.040								
Immunosuppression	0.039	-0.087	0.165	1.040	0.916	1.179	0.225	0.275	0.003	0.546
1.071	1.161	0.124								



Recursive Feature Elimination:



Coefficients:

	SVM-l1	LR-l1
Age 0-30	0.831	0.530
Region_South	0.850	0.637
Throat	0.874	0.667
Region_Southeast	0.904	0.752
Fever	0.904	0.754
Schooling Medium 1-3	0.935	0.824
Liver Chronic Disease	1.119	1.155
Immunosuppression	1.071	1.161
Public Hospital	1.062	1.188
Antiviral Use	1.122	1.390
Xray Torax Result Consolidation	1.185	1.491
Dyspnea	1.150	1.584
Respiratory Discomfort	1.199	1.741
Renal Chronic Disease	1.268	1.791

Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.758	0.759	0.759	0.759	0.75
F1w	0.662	0.660	0.661	0.656	0.65
AUC	0.641	0.641	0.641	0.640	0.64

