
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

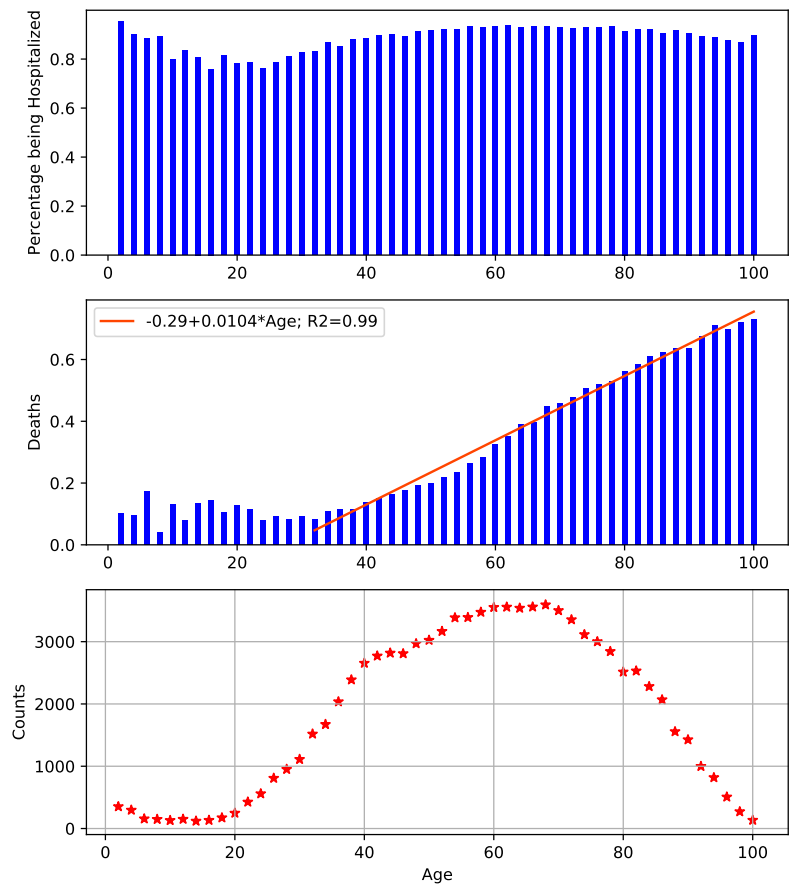


Figure 1: Distribution of hospitalization and deaths by age group

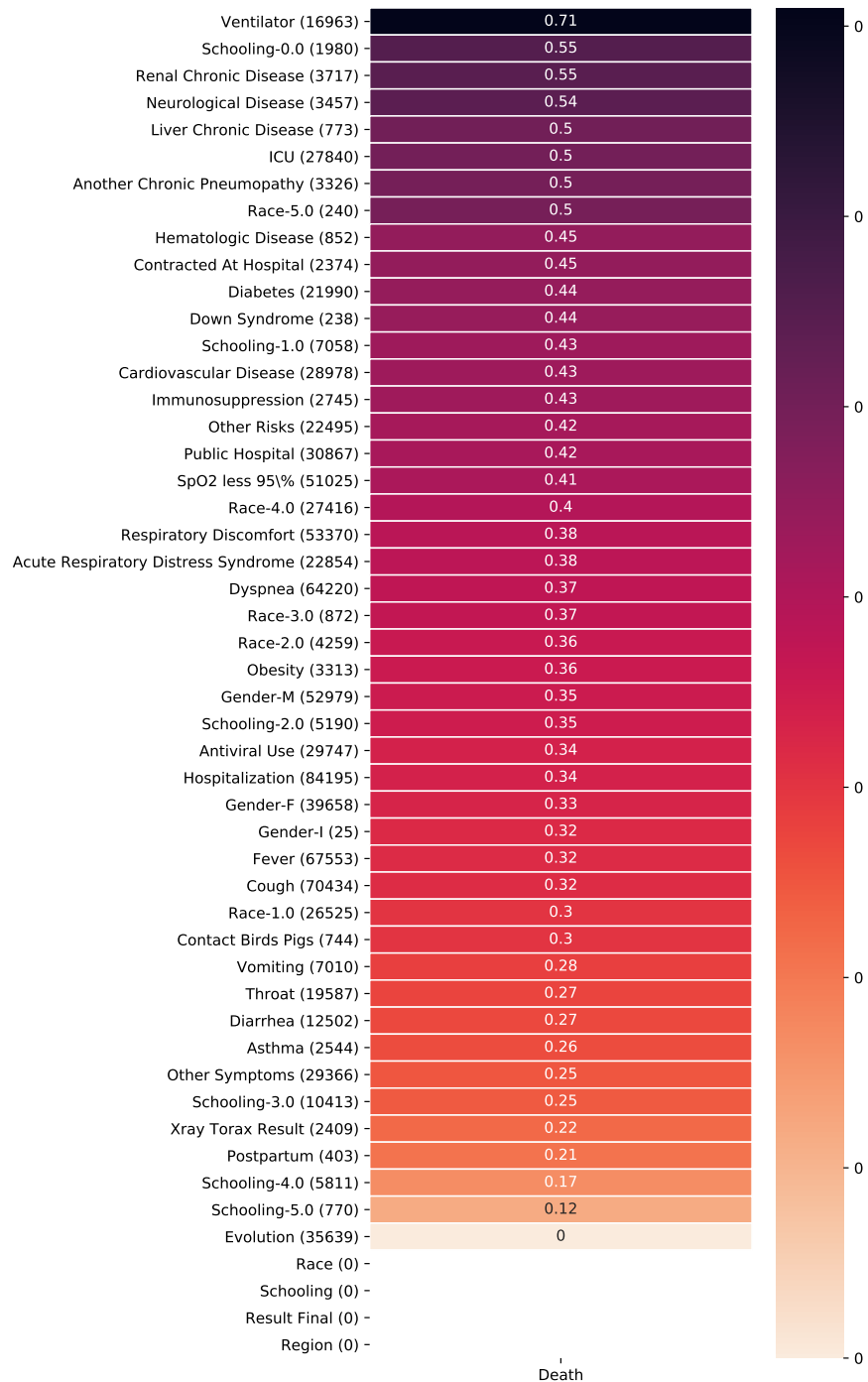


Figure 2: Share of hospitalized and deaths patients given characteristics

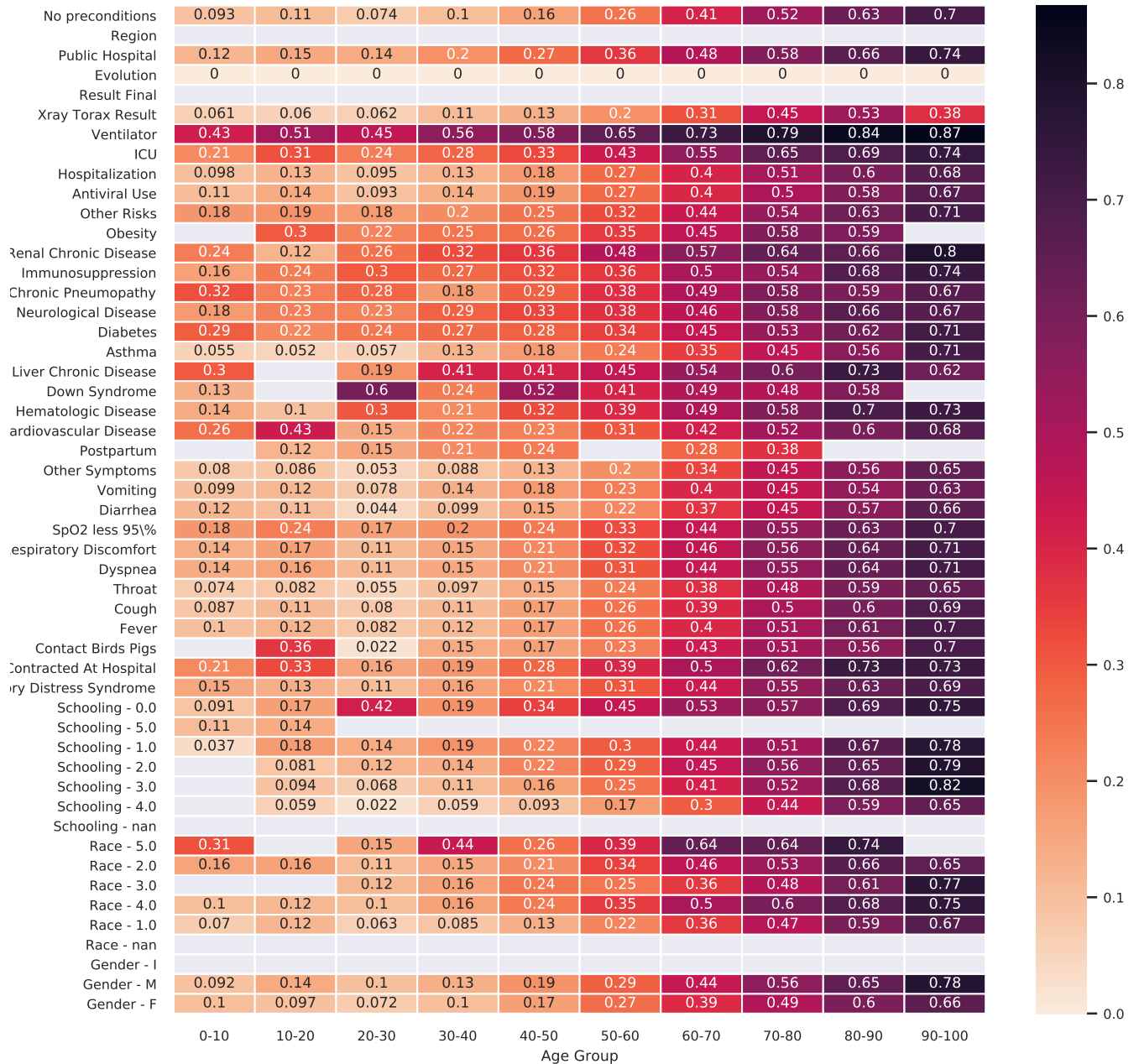
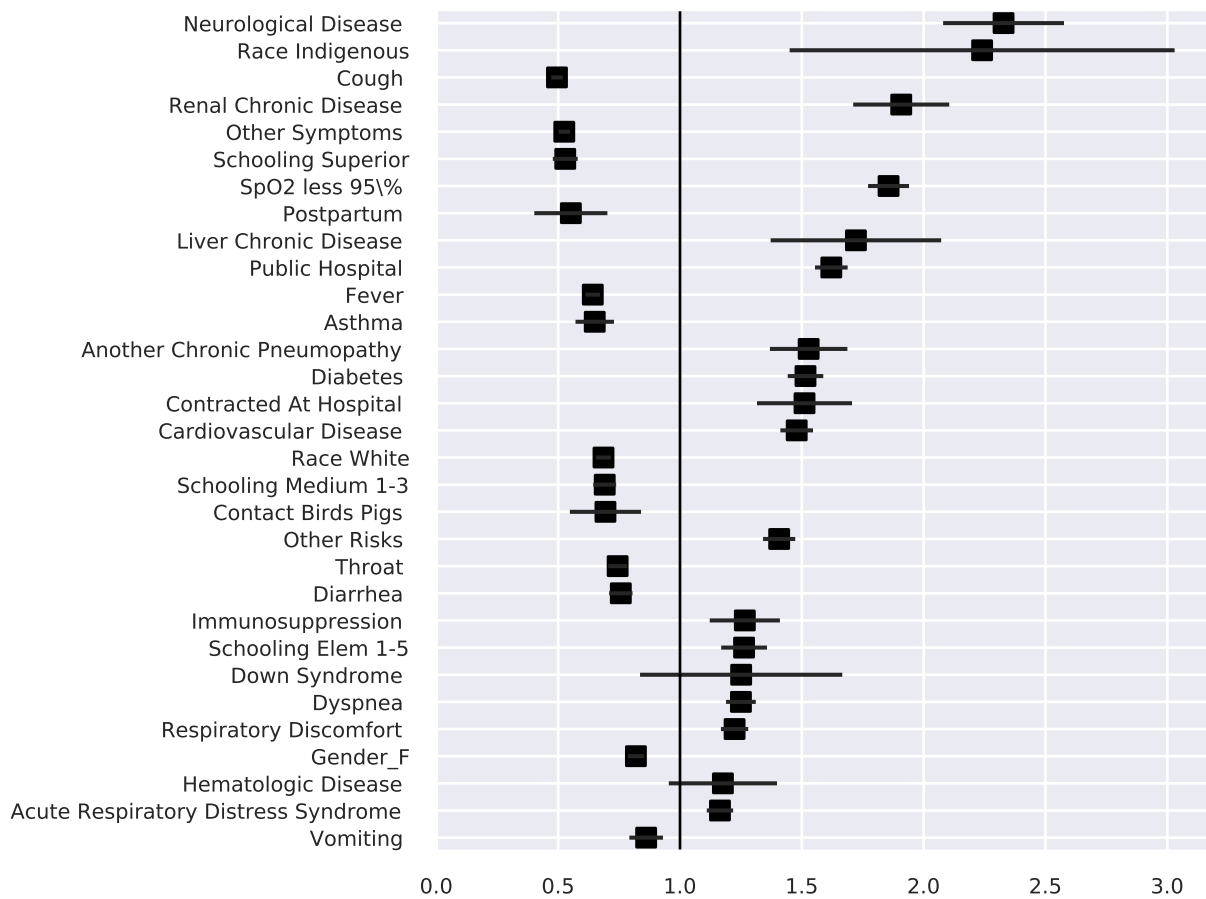


Figure 3: Share of hospitalized and deaths patients given characteristics and age group

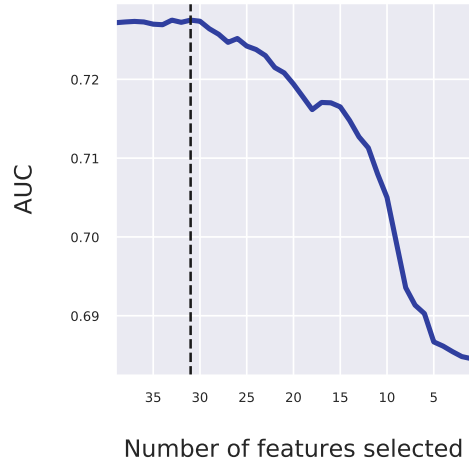
2 Results

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
Neurological Disease	0.845	0.732	0.958	2.328	2.080	2.606	0.455	0.700	0.000	0.000
1.428	2.328	0.248								
Race Indigenous	0.806	0.371	1.241	2.240	1.450	3.460	0.464	0.663	0.001	0.000
1.411	1.908	0.790								
Cough	-0.702	-0.753	-0.652	0.495	0.471	0.521	0.585	0.430	0.000	0.000
0.764	0.526	0.024								
Renal Chronic Disease	0.646	0.537	0.755	1.908	1.711	2.128	0.454	0.699	0.000	0.000
1.309	1.918	0.197								
Other Symptoms	-0.645	-0.690	-0.599	0.525	0.501	0.549	0.513	0.355	0.000	0.000
0.776	0.545	0.024								
Schooling Superior	-0.636	-0.738	-0.534	0.529	0.478	0.586	0.477	0.259	0.000	0.000
0.791	0.544	0.051								
SpO2 less 95\%	0.618	0.572	0.665	1.856	1.772	1.944	0.344	0.547	0.000	0.000
1.310	1.887	0.084								
Postpartum	-0.594	-0.912	-0.276	0.552	0.402	0.758	0.465	0.299	0.000	0.000
0.798	0.621	0.150								
Liver Chronic Disease	0.543	0.316	0.771	1.722	1.372	2.161	0.463	0.664	0.000	0.000
1.252	1.677	0.350								
Public Hospital	0.483	0.441	0.526	1.621	1.554	1.692	0.407	0.560	0.000	0.000
1.245	1.665	0.067								
Fever	-0.443	-0.491	-0.396	0.642	0.612	0.673	0.558	0.432	0.000	0.000
0.848	0.678	0.030								
Asthma	-0.430	-0.560	-0.301	0.650	0.571	0.740	0.468	0.363	0.000	0.000
0.838	0.662	0.079								
Another Chronic Pneumopathy	0.424	0.314	0.533	1.528	1.369	1.704	0.458	0.629	0.000	0.000
1.197	1.522	0.159								
Diabetes	0.416	0.366	0.466	1.515	1.442	1.593	0.424	0.585	0.000	0.000
1.198	1.526	0.073								
Contracted At Hospital	0.413	0.274	0.551	1.511	1.316	1.735	0.460	0.641	0.000	0.000
1.192	1.528	0.195								
Cardiovascular Disease	0.391	0.345	0.437	1.479	1.412	1.548	0.413	0.567	0.000	0.000
1.191	1.504	0.067								
Race White	-0.377	-0.424	-0.330	0.686	0.655	0.719	0.493	0.398	0.000	0.000
0.864	0.703	0.031								
Schooling Medium 1-3	-0.370	-0.440	-0.300	0.691	0.644	0.741	0.478	0.353	0.000	0.000
0.863	0.703	0.047								
Contact Birds Pigs	-0.366	-0.602	-0.129	0.694	0.548	0.879	0.465	0.387	0.025	0.002
0.861	0.737	0.146								
Other Risks	0.341	0.294	0.389	1.407	1.341	1.476	0.438	0.540	0.000	0.000
1.164	1.434	0.066								
Throat	-0.296	-0.349	-0.242	0.744	0.705	0.785	0.485	0.385	0.000	0.000
0.882	0.743	0.039								
Diarrhea	-0.278	-0.343	-0.213	0.757	0.709	0.808	0.478	0.375	0.000	0.000
0.892	0.762	0.048								
Immunosuppression	0.236	0.115	0.357	1.266	1.122	1.429	0.461	0.566	0.000	0.000
1.108	1.274	0.144								
Schooling Elem 1-5	0.234	0.156	0.312	1.263	1.169	1.366	0.456	0.560	0.000	0.000
1.110	1.268	0.094								
Down Syndrome	0.224	-0.179	0.627	1.251	0.836	1.872	0.464	0.593	0.040	0.275
1.097	1.097	0.415								
Dyspnea	0.223	0.173	0.272	1.250	1.189	1.313	0.375	0.497	0.000	0.000
1.115	1.305	0.061								
Respiratory Discomfort	0.202	0.155	0.249	1.224	1.168	1.283	0.395	0.509	0.000	0.000
1.100	1.246	0.056								
Gender_F	-0.200	-0.241	-0.159	0.819	0.786	0.853	0.476	0.449	0.000	0.000
0.935	0.850	0.033								
Hematologic Disease	0.163	-0.047	0.372	1.176	0.954	1.451	0.463	0.585	0.000	0.128
1.078	1.153	0.222								
Acute Respiratory Distress Syndrome	0.152	0.105	0.200	1.164	1.110	1.221	0.450	0.506	0.000	0.000
1.074	1.180	0.054								
Vomiting	-0.149	-0.233	-0.065	0.861	0.792	0.937	0.470	0.393	0.000	0.000
0.941	0.872	0.069								

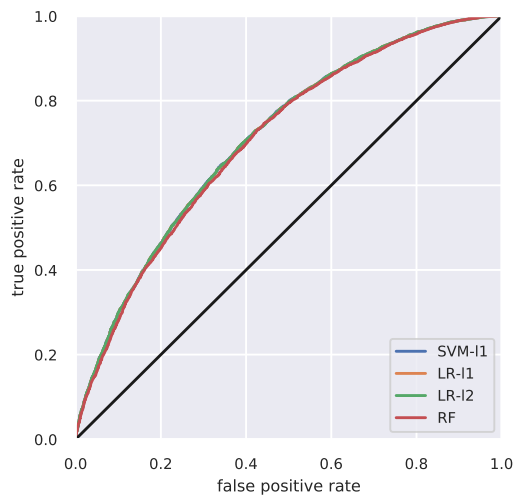


Recursive Feature Elimination:



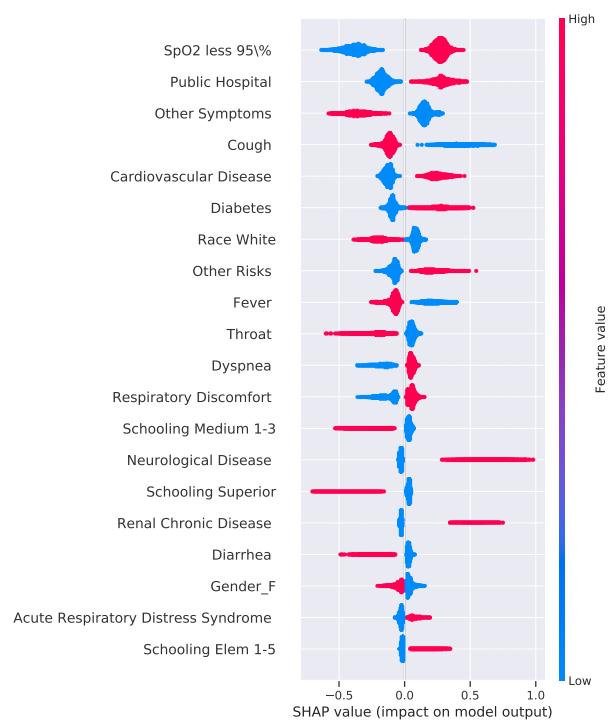
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.653	0.652	0.652	0.647	0.650
F1w	0.652	0.651	0.652	0.647	0.650
AUC	0.712	0.712	0.712	0.707	0.712



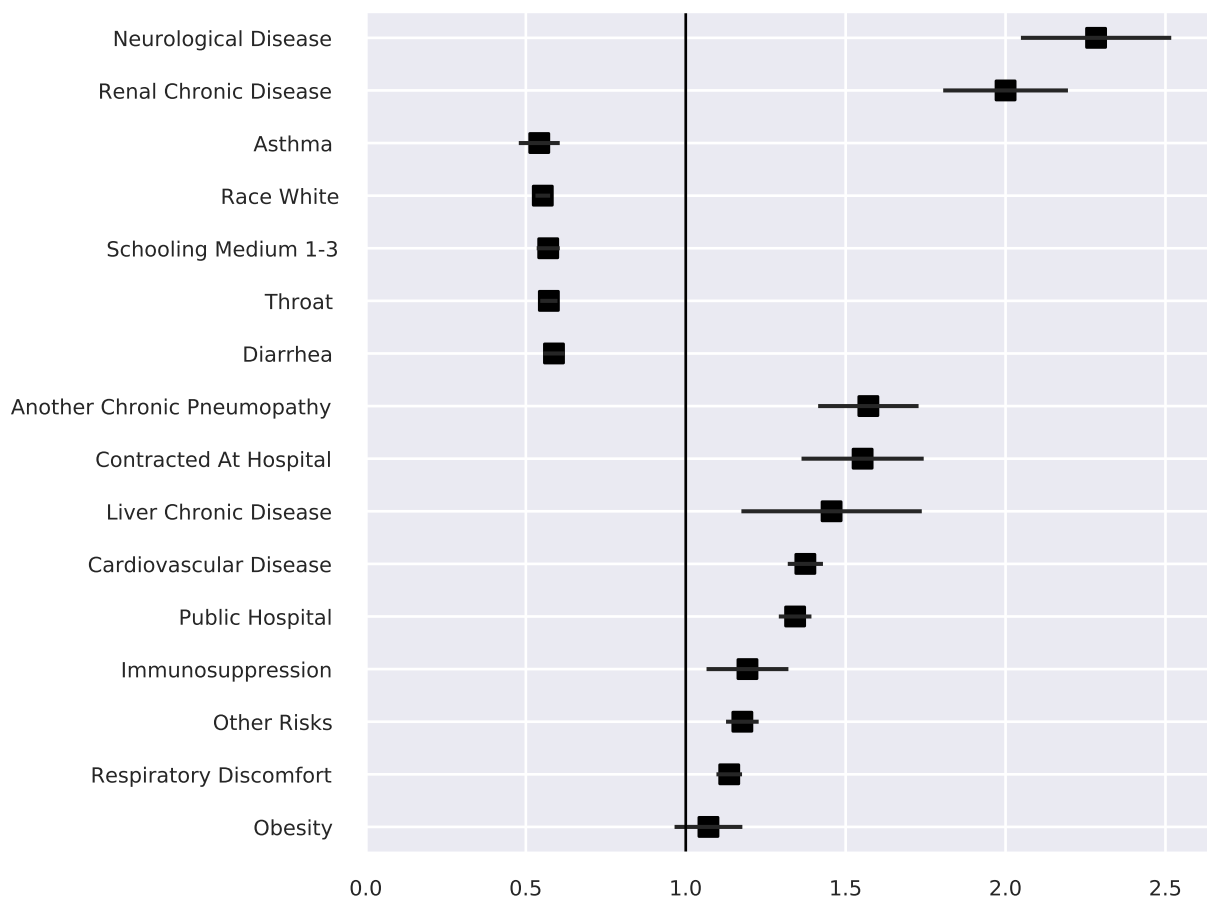
Coefficients:

	SVM-l1	LR-l1
Cough	0.764	0.526
Schooling Superior	0.791	0.544
Other Symptoms	0.776	0.545
Postpartum	0.798	0.621
Asthma	0.838	0.662
Fever	0.848	0.678
Schooling Medium 1-3	0.863	0.703
Race White	0.864	0.703
Contact Birds Pigs	0.861	0.737
Throat	0.882	0.743
Diarrhea	0.892	0.762
Gender_F	0.935	0.850
Vomiting	0.941	0.872
Down Syndrome	1.097	1.097
Hematologic Disease	1.078	1.153
Acute Respiratory Distress Syndrome	1.074	1.180
Respiratory Discomfort	1.100	1.246
Schooling Elem 1-5	1.110	1.268
Immunosuppression	1.108	1.274
Dyspnea	1.115	1.305
Other Risks	1.164	1.434
Cardiovascular Disease	1.191	1.504
Another Chronic Pneumopathy	1.197	1.522
Diabetes	1.198	1.526
Contracted At Hospital	1.192	1.528
Public Hospital	1.245	1.665
Liver Chronic Disease	1.252	1.677
SpO2 less 95\%	1.310	1.887
Race Indigenous	1.411	1.908
Renal Chronic Disease	1.309	1.918
Neurological Disease	1.428	2.328

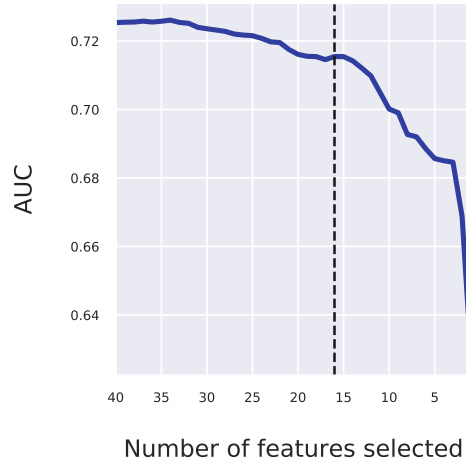


2.2 Mortality (previous) small

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Neurological Disease	0.826	0.717	0.934	2.283	2.048	2.545	0.452	0.705	0.000	0.000
1.500	2.546	0.235								
Renal Chronic Disease	0.693	0.590	0.796	2.000	1.805	2.216	0.451	0.697	0.000	0.000
1.398	2.171	0.195								
Asthma	-0.613	-0.738	-0.489	0.542	0.478	0.613	0.465	0.364	0.000	0.000
0.806	0.610	0.064								
Race White	-0.592	-0.635	-0.550	0.553	0.530	0.577	0.491	0.394	0.000	0.000
0.849	0.689	0.023								
Schooling Medium 1-3	-0.562	-0.628	-0.496	0.570	0.534	0.609	0.477	0.344	0.000	0.000
0.827	0.643	0.036								
Throat	-0.558	-0.608	-0.509	0.572	0.545	0.601	0.483	0.381	0.000	0.000
0.832	0.661	0.027								
Diarrhea	-0.531	-0.590	-0.472	0.588	0.554	0.624	0.476	0.372	0.000	0.000
0.840	0.672	0.034								
Another Chronic Pneumopathy	0.451	0.346	0.556	1.571	1.414	1.745	0.455	0.632	0.000	0.000
1.258	1.684	0.157								
Contracted At Hospital	0.440	0.309	0.572	1.553	1.362	1.771	0.457	0.646	0.000	0.000
1.268	1.733	0.191								
Liver Chronic Disease	0.376	0.160	0.592	1.456	1.174	1.807	0.461	0.625	0.000	0.001
1.207	1.548	0.282								
Cardiovascular Disease	0.318	0.277	0.358	1.374	1.319	1.431	0.410	0.565	0.000	0.000
1.288	1.741	0.055								
Public Hospital	0.294	0.256	0.332	1.342	1.291	1.394	0.405	0.558	0.000	0.000
1.304	1.787	0.051								
Immunosuppression	0.177	0.063	0.290	1.193	1.065	1.337	0.459	0.568	0.000	0.002
1.141	1.347	0.128								
Other Risks	0.163	0.119	0.207	1.177	1.126	1.229	0.436	0.538	0.000	0.000
1.194	1.482	0.051								
Respiratory Discomfort	0.127	0.092	0.163	1.136	1.096	1.177	0.390	0.508	0.000	0.000
1.259	1.672	0.040								
Obesity	0.069	-0.036	0.173	1.071	0.965	1.189	0.461	0.504	0.006	0.198
1.067	1.158	0.106								



Recursive Feature Elimination:

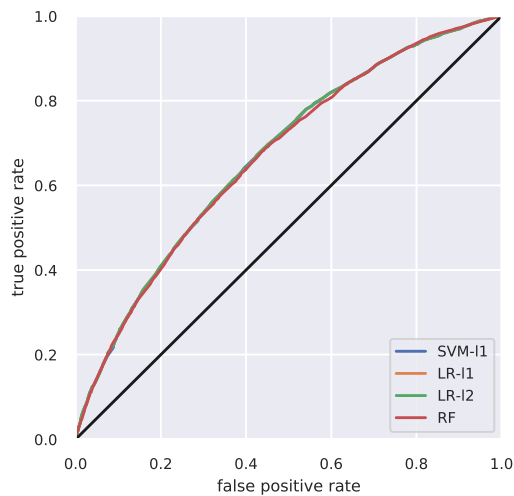


Coefficients:

	SVM-l1	LR-l1
Asthma	0.806	0.610
Schooling Medium 1-3	0.827	0.643
Throat	0.832	0.661
Diarrhea	0.840	0.672
Race White	0.849	0.689
Obesity	1.067	1.158
Immunosuppression	1.141	1.347
Other Risks	1.194	1.482
Liver Chronic Disease	1.207	1.548
Respiratory Discomfort	1.259	1.672
Another Chronic Pneumopathy	1.258	1.684
Contracted At Hospital	1.268	1.733
Cardiovascular Disease	1.288	1.741
Public Hospital	1.304	1.787
Renal Chronic Disease	1.398	2.171
Neurological Disease	1.500	2.546

Performance:

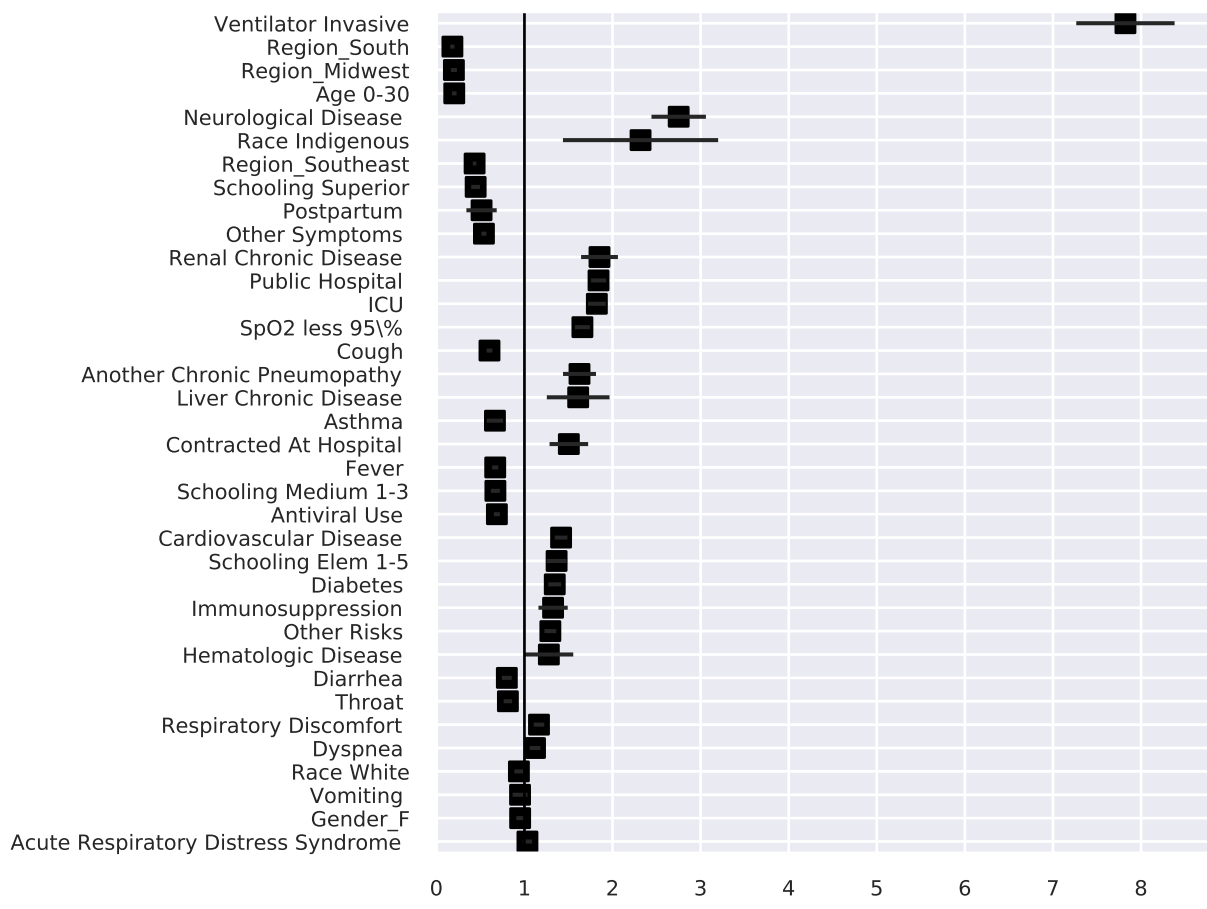
	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.623	0.624	0.624	0.622	0.62
F1w	0.620	0.620	0.620	0.621	0.62
AUC	0.671	0.671	0.671	0.668	0.67



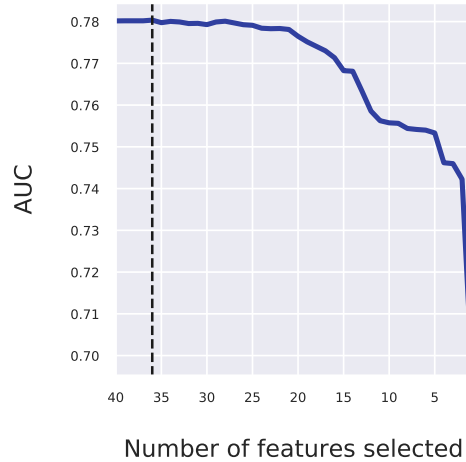
2.3 Mortality (advanced)

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	2.057	1.983	2.131	7.823	7.265	8.423	0.348	0.860	0.000	0.000
2.145	7.838	0.558								
Region.South	-1.704	-1.846	-1.561	0.182	0.158	0.210	0.476	0.225	0.000	0.000
0.549	0.180	0.024								
Region.Midwest	-1.614	-1.800	-1.428	0.199	0.165	0.240	0.468	0.309	0.000	0.000
0.555	0.197	0.034								
Age 0-30	-1.595	-1.734	-1.456	0.203	0.177	0.233	0.484	0.147	0.000	0.000
0.597	0.201	0.026								
Neurological Disease	1.012	0.893	1.131	2.751	2.442	3.098	0.454	0.705	0.000	0.000
1.484	2.741	0.309								
Race Indigenous	0.841	0.363	1.319	2.318	1.437	3.740	0.464	0.686	0.000	0.001
1.369	2.241	0.881								
Region.Southeast	-0.834	-0.883	-0.785	0.434	0.414	0.456	0.534	0.416	0.000	0.000
0.720	0.426	0.020								
Schooling Superior	-0.808	-0.926	-0.689	0.446	0.396	0.502	0.477	0.254	0.000	0.000
0.761	0.443	0.050								
Postpartum	-0.667	-1.077	-0.256	0.513	0.341	0.774	0.465	0.263	0.000	0.001
0.787	0.518	0.172								
Other Symptoms	-0.617	-0.669	-0.565	0.540	0.512	0.569	0.512	0.356	0.000	0.000
0.797	0.533	0.028								
Renal Chronic Disease	0.616	0.496	0.736	1.852	1.643	2.089	0.453	0.698	0.000	0.000
1.265	1.844	0.209								
Public Hospital	0.610	0.562	0.659	1.841	1.754	1.932	0.407	0.560	0.000	0.000
1.256	1.819	0.087								
ICU	0.600	0.543	0.657	1.822	1.721	1.930	0.360	0.665	0.000	0.000
1.252	1.809	0.101								
SpO2 less 95\%	0.506	0.453	0.558	1.658	1.573	1.747	0.344	0.547	0.000	0.000
1.205	1.651	0.085								
Cough	-0.505	-0.562	-0.448	0.603	0.570	0.639	0.578	0.431	0.000	0.000
0.821	0.591	0.033								
Another Chronic Pneumopathy	0.486	0.363	0.608	1.625	1.438	1.837	0.457	0.638	0.000	0.000
1.201	1.622	0.187								
Liver Chronic Disease	0.476	0.226	0.727	1.610	1.254	2.068	0.463	0.636	0.000	0.000
1.194	1.594	0.356								
Asthma	-0.409	-0.558	-0.259	0.665	0.572	0.772	0.468	0.345	0.000	0.000
0.868	0.667	0.093								
Contracted At Hospital	0.408	0.251	0.566	1.504	1.285	1.761	0.460	0.642	0.000	0.000
1.161	1.487	0.219								
Fever	-0.403	-0.457	-0.349	0.668	0.633	0.705	0.559	0.432	0.000	0.000
0.853	0.655	0.035								
Schooling Medium 1-3	-0.400	-0.480	-0.320	0.670	0.619	0.726	0.479	0.346	0.000	0.000
0.863	0.667	0.051								
Antiviral Use	-0.376	-0.426	-0.325	0.687	0.653	0.722	0.476	0.445	0.000	0.000
0.869	0.687	0.034								
Cardiovascular Disease	0.348	0.296	0.399	1.416	1.344	1.491	0.413	0.567	0.000	0.000
1.138	1.409	0.072								
Schooling Elem 1-5	0.311	0.225	0.397	1.365	1.252	1.487	0.456	0.561	0.000	0.000
1.129	1.357	0.113								
Diabetes	0.295	0.240	0.351	1.344	1.271	1.420	0.424	0.583	0.000	0.000
1.118	1.339	0.073								
Immunosuppression	0.282	0.147	0.416	1.325	1.159	1.516	0.461	0.558	0.000	0.000
1.107	1.319	0.166								
Other Risks	0.258	0.204	0.312	1.294	1.226	1.366	0.438	0.538	0.000	0.000
1.096	1.285	0.068								
Hematologic Disease	0.245	-0.000	0.490	1.277	1.000	1.632	0.463	0.579	0.000	0.050
1.093	1.267	0.277								
Diarrhea	-0.223	-0.296	-0.150	0.800	0.744	0.861	0.478	0.375	0.000	0.000
0.921	0.799	0.056								
Throat	-0.208	-0.269	-0.148	0.812	0.764	0.862	0.485	0.384	0.000	0.000
0.926	0.812	0.048								
Respiratory Discomfort	0.153	0.100	0.205	1.165	1.105	1.228	0.393	0.510	0.000	0.000
1.057	1.156	0.060								
Dyspnea	0.113	0.058	0.169	1.120	1.059	1.184	0.376	0.497	0.000	0.000
1.037	1.101	0.061								
Race White	-0.065	-0.121	-0.009	0.937	0.886	0.991	0.493	0.396	0.000	0.024
0.979	0.935	0.051								
Vomiting	-0.052	-0.145	0.041	0.950	0.865	1.042	0.471	0.385	0.000	0.277
0.981	0.949	0.085								
Gender_F	-0.051	-0.097	-0.004	0.951	0.907	0.996	0.473	0.453	0.001	0.032
0.979	0.939	0.044								
Acute Respiratory Distress Syndrome	0.034	-0.020	0.087	1.034	0.981	1.091	0.448	0.511	0.000	0.216
1.007	1.026	0.053								

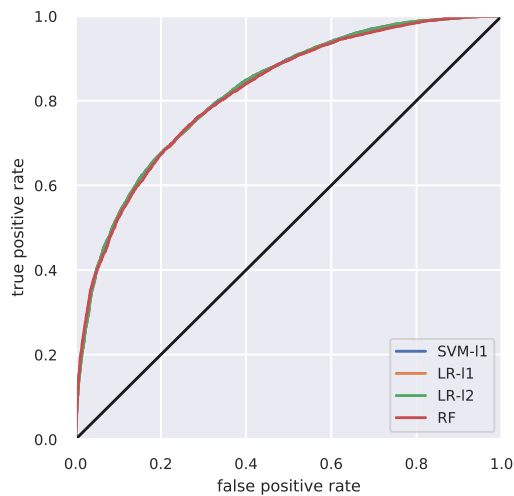


Recursive Feature Elimination:



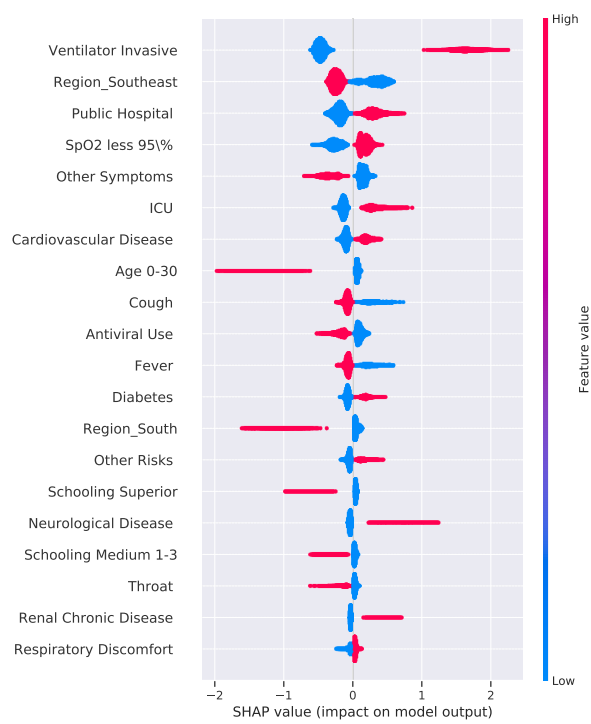
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.741	0.741	0.741	0.735	0.743
F1w	0.739	0.740	0.740	0.731	0.742
AUC	0.823	0.822	0.823	0.820	0.826



Coefficients:

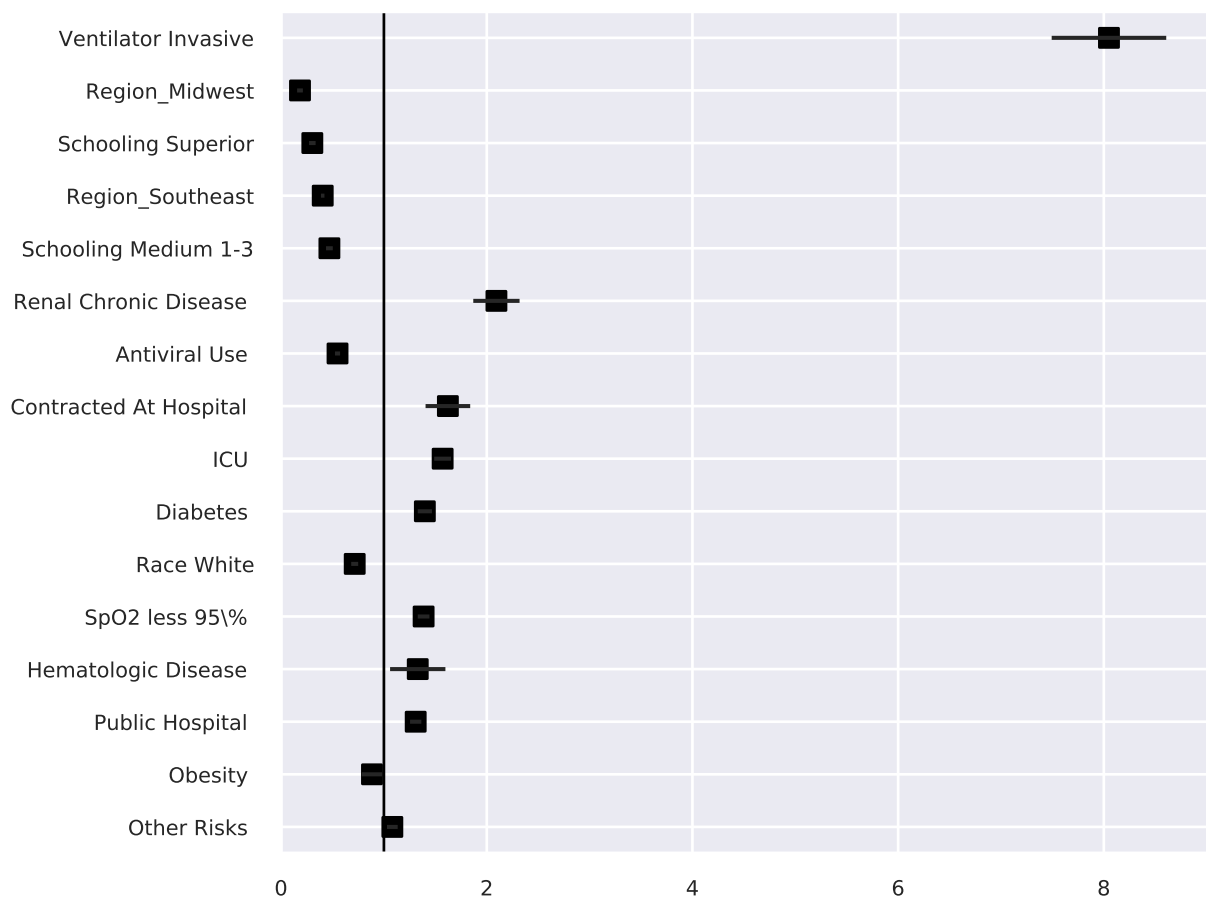
	SVM-l1	LR-l1
Region_South	0.549	0.180
Region_Midwest	0.555	0.197
Age 0-30	0.597	0.201
Region_Southeast	0.720	0.426
Schooling Superior	0.761	0.443
Postpartum	0.787	0.518
Other Symptoms	0.797	0.533
Cough	0.821	0.591
Fever	0.853	0.655
Asthma	0.868	0.667
Schooling Medium 1-3	0.863	0.667
Antiviral Use	0.869	0.687
Diarrhea	0.921	0.799
Throat	0.926	0.812
Race White	0.979	0.935
Gender_F	0.979	0.939
Vomiting	0.981	0.949
Acute Respiratory Distress Syndrome	1.007	1.026
Dyspnea	1.037	1.101
Respiratory Discomfort	1.057	1.156
Hematologic Disease	1.093	1.267
Other Risks	1.096	1.285
Immunosuppression	1.107	1.319
Diabetes	1.118	1.339
Schooling Elem 1-5	1.129	1.357
Cardiovascular Disease	1.138	1.409
Contracted At Hospital	1.161	1.487
Liver Chronic Disease	1.194	1.594
Another Chronic Pneumopathy	1.201	1.622
SpO2 less 95\%	1.205	1.651
ICU	1.252	1.809
Public Hospital	1.256	1.819
Renal Chronic Disease	1.265	1.844
Race Indigenous	1.369	2.241
Neurological Disease	1.484	2.741
Ventilator Invasive	2.145	7.838



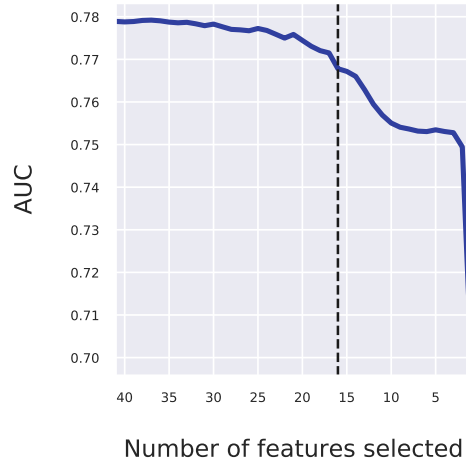
2.4 Mortality (advanced) small

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	2.086	2.014	2.157	8.050	7.493	8.648	0.346	0.859	0.000	0.000
2.217	7.782	0.557								
Region_Midwest	-1.691	-1.861	-1.522	0.184	0.156	0.218	0.465	0.312	0.000	0.000
0.606	0.253	0.028								
Schooling Superior	-1.192	-1.300	-1.083	0.304	0.272	0.338	0.474	0.253	0.000	0.000
0.717	0.374	0.032								
Region_Southeast	-0.905	-0.946	-0.864	0.405	0.388	0.422	0.531	0.413	0.000	0.000
0.804	0.572	0.017								
Schooling Medium 1-3	-0.754	-0.828	-0.680	0.470	0.437	0.507	0.476	0.343	0.000	0.000
0.809	0.561	0.033								
Renal Chronic Disease	0.739	0.625	0.853	2.094	1.869	2.347	0.450	0.700	0.000	0.000
1.373	2.210	0.225								
Antiviral Use	-0.599	-0.646	-0.553	0.549	0.524	0.575	0.473	0.442	0.000	0.000
0.836	0.627	0.025								
Contracted At Hospital	0.484	0.340	0.628	1.622	1.405	1.874	0.457	0.647	0.000	0.000
1.274	1.836	0.217								
ICU	0.451	0.398	0.505	1.571	1.489	1.657	0.357	0.662	0.000	0.000
1.268	1.829	0.082								
Diabetes	0.335	0.284	0.386	1.398	1.329	1.471	0.420	0.582	0.000	0.000
1.204	1.598	0.069								
Race White	-0.333	-0.383	-0.284	0.716	0.682	0.753	0.490	0.396	0.000	0.000
0.926	0.811	0.034								
SpO2 less 95\%	0.327	0.284	0.369	1.386	1.329	1.446	0.341	0.544	0.000	0.000
1.276	1.872	0.057								
Hematologic Disease	0.284	0.058	0.510	1.329	1.060	1.666	0.460	0.590	0.000	0.014
1.152	1.411	0.269								
Public Hospital	0.269	0.226	0.313	1.309	1.254	1.367	0.406	0.554	0.000	0.000
1.249	1.758	0.055								
Obesity	-0.123	-0.243	-0.003	0.884	0.784	0.997	0.460	0.498	0.023	0.045
0.957	0.890	0.100								
Other Risks	0.079	0.029	0.129	1.082	1.030	1.138	0.435	0.537	0.000	0.002
1.096	1.267	0.052								



Recursive Feature Elimination:

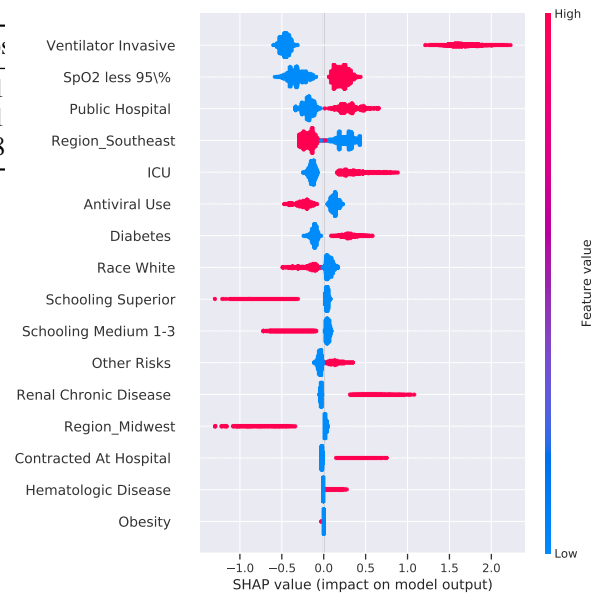
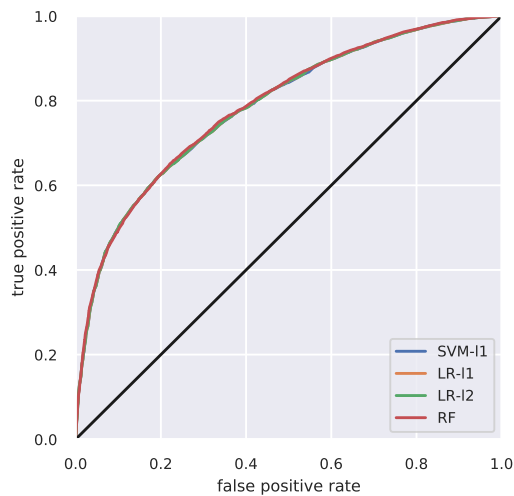


Coefficients:

	SVM-l1	LR-l1
Region_Midwest	0.606	0.253
Schooling Superior	0.717	0.374
Schooling Medium 1-3	0.809	0.561
Region_Southeast	0.804	0.572
Antiviral Use	0.836	0.627
Race White	0.926	0.811
Obesity	0.957	0.890
Other Risks	1.096	1.267
Hematologic Disease	1.152	1.411
Diabetes	1.204	1.598
Public Hospital	1.249	1.758
ICU	1.268	1.829
Contracted At Hospital	1.274	1.836
SpO2 less 95\%	1.276	1.872
Renal Chronic Disease	1.373	2.210
Ventilator Invasive	2.217	7.782

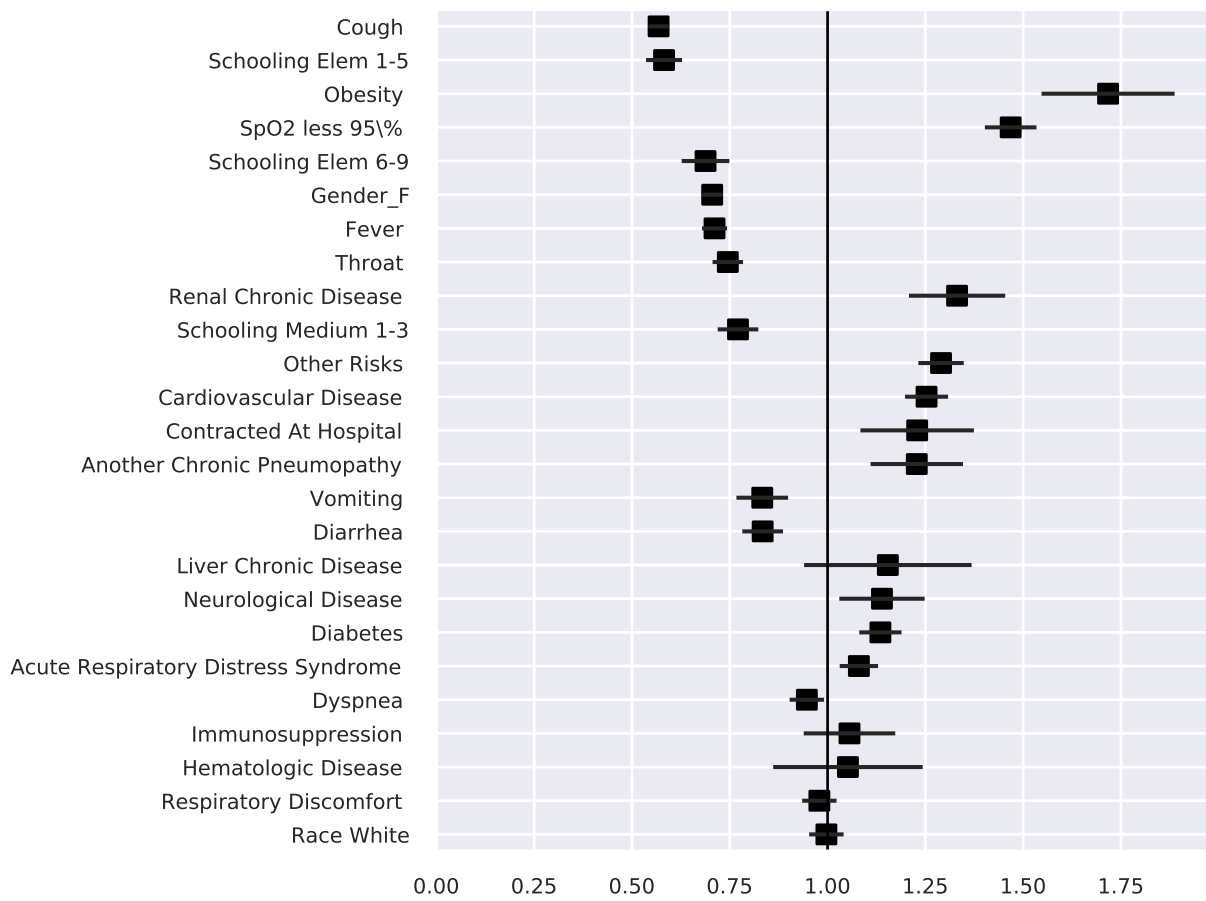
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.716	0.716	0.717	0.717	0.71
F1w	0.712	0.712	0.713	0.713	0.71
AUC	0.786	0.786	0.786	0.788	0.78

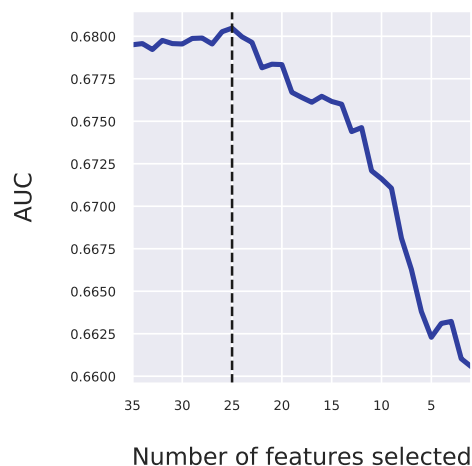


2.5 ICU

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.565	-0.612	-0.518	0.568	0.542	0.596	0.395	0.323	0.000	0.000
0.877	0.741	0.026								
Schooling Elem 1-5	-0.541	-0.623	-0.460	0.582	0.536	0.631	0.345	0.276	0.000	0.000
0.816	0.613	0.046								
Obesity	0.541	0.436	0.645	1.717	1.547	1.907	0.334	0.483	0.000	0.000
1.273	1.694	0.170								
SpO2 less 95\%	0.384	0.338	0.429	1.468	1.402	1.536	0.262	0.393	0.000	0.000
1.226	1.632	0.066								
Schooling Elem 6-9	-0.374	-0.467	-0.282	0.688	0.627	0.755	0.342	0.300	0.001	0.000
0.878	0.733	0.061								
Gender_F	-0.349	-0.389	-0.309	0.705	0.678	0.734	0.351	0.324	0.000	0.000
0.934	0.851	0.027								
Fever	-0.341	-0.387	-0.296	0.711	0.679	0.744	0.370	0.329	0.000	0.000
0.970	0.934	0.032								
Throat	-0.294	-0.348	-0.240	0.745	0.706	0.786	0.357	0.273	0.000	0.000
0.878	0.724	0.039								
Renal Chronic Disease	0.286	0.189	0.383	1.331	1.208	1.467	0.333	0.474	0.000	0.000
1.173	1.411	0.123								
Schooling Medium 1-3	-0.261	-0.330	-0.191	0.771	0.719	0.826	0.344	0.304	0.000	0.000
0.929	0.836	0.052								
Other Risks	0.254	0.209	0.300	1.290	1.232	1.350	0.314	0.413	0.000	0.000
1.180	1.459	0.058								
Cardiovascular Disease	0.225	0.180	0.270	1.253	1.198	1.310	0.304	0.409	0.000	0.000
1.148	1.374	0.055								
Contracted At Hospital	0.206	0.080	0.332	1.229	1.084	1.393	0.336	0.462	0.000	0.001
1.162	1.388	0.145								
Another Chronic Pneumopathy	0.205	0.104	0.307	1.228	1.110	1.359	0.335	0.449	0.000	0.000
1.118	1.271	0.118								
Vomiting	-0.182	-0.265	-0.099	0.833	0.767	0.906	0.343	0.297	0.000	0.000
0.951	0.882	0.066								
Diarrhea	-0.182	-0.246	-0.118	0.834	0.782	0.889	0.346	0.298	0.000	0.000
0.945	0.871	0.052								
Liver Chronic Disease	0.143	-0.062	0.348	1.154	0.940	1.416	0.339	0.432	0.002	0.171
1.093	1.225	0.214								
Neurological Disease	0.130	0.030	0.230	1.139	1.030	1.258	0.336	0.429	0.000	0.011
1.077	1.177	0.109								
Diabetes	0.127	0.078	0.175	1.135	1.081	1.191	0.317	0.405	0.000	0.000
1.082	1.196	0.054								
Acute Respiratory Distress Syndrome	0.077	0.030	0.123	1.080	1.031	1.131	0.328	0.372	0.000	0.001
1.071	1.176	0.049								
Dyspnea	-0.055	-0.102	-0.007	0.947	0.903	0.993	0.287	0.358	0.000	0.024
1.078	1.203	0.044								
Immunosuppression	0.054	-0.063	0.171	1.056	0.939	1.187	0.337	0.402	0.000	0.363
1.057	1.136	0.117								
Hematologic Disease	0.051	-0.150	0.252	1.052	0.861	1.287	0.339	0.406	0.038	0.618
1.049	1.112	0.191								
Respiratory Discomfort	-0.021	-0.067	0.025	0.979	0.935	1.025	0.308	0.360	0.000	0.366
1.033	1.074	0.044								
Race White	-0.003	-0.048	0.042	0.997	0.953	1.043	0.334	0.353	0.003	0.894
1.049	1.117	0.044								



Recursive Feature Elimination:

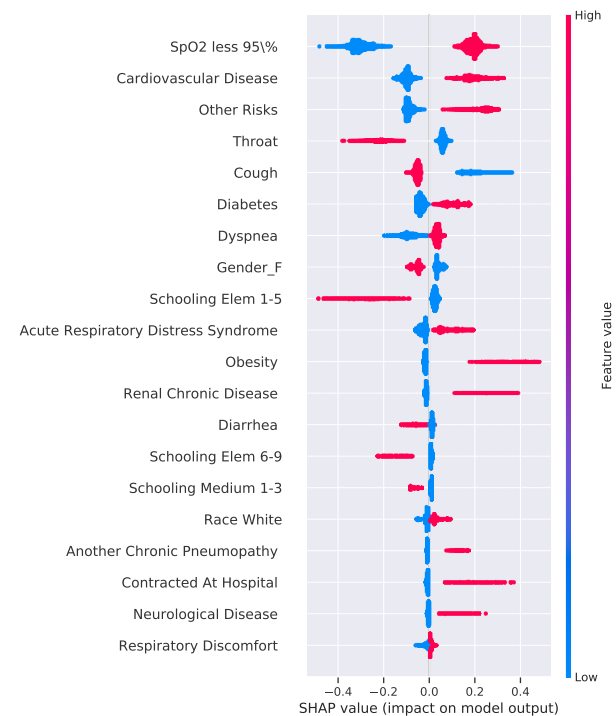
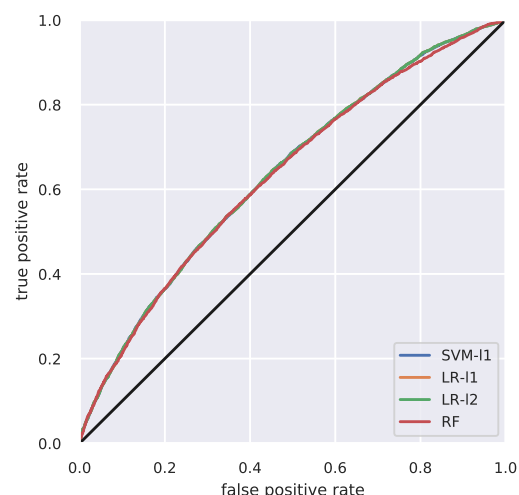


Performance:

	SVM-I1	LR-I1	LR-I2	RF	XGBoost
Accuracy	0.648	0.647	0.647	0.647	0.645
F1w	0.585	0.584	0.584	0.560	0.561
AUC	0.636	0.637	0.637	0.633	0.634

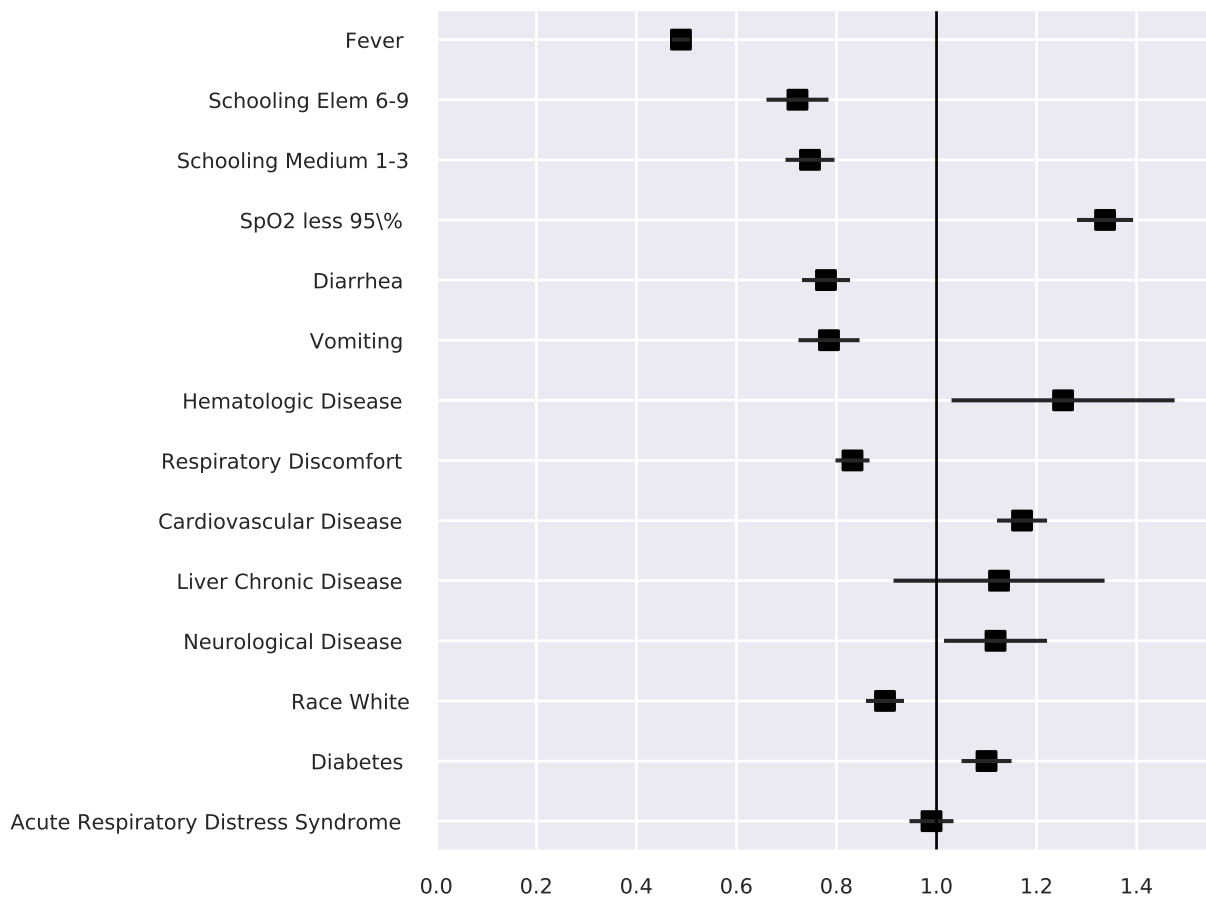
Coefficients:

	SVM-I1	LR-I1
Schooling Elem 1-5	0.816	0.613
Throat	0.878	0.724
Schooling Elem 6-9	0.878	0.733
Cough	0.877	0.741
Schooling Medium 1-3	0.929	0.836
Gender_F	0.934	0.851
Diarrhea	0.945	0.871
Vomiting	0.951	0.882
Fever	0.970	0.934
Respiratory Discomfort	1.033	1.074
Hematologic Disease	1.049	1.112
Race White	1.049	1.117
Immunosuppression	1.057	1.136
Acute Respiratory Distress Syndrome	1.071	1.176
Neurological Disease	1.077	1.177
Diabetes	1.082	1.196
Dyspnea	1.078	1.203
Liver Chronic Disease	1.093	1.225
Another Chronic Pneumopathy	1.118	1.271
Cardiovascular Disease	1.148	1.374
Contracted At Hospital	1.162	1.388
Renal Chronic Disease	1.173	1.411
Other Risks	1.180	1.459
SpO2 less 95\%	1.226	1.632
Obesity	1.273	1.694

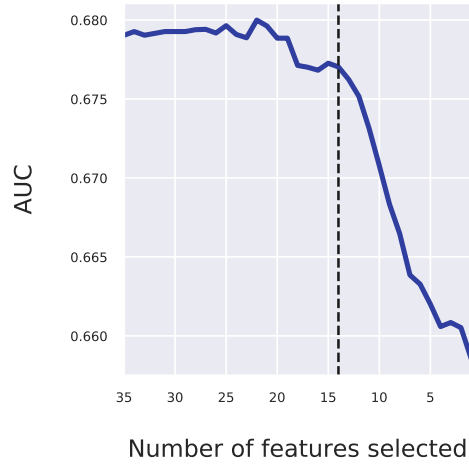


2.6 ICU small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Fever	-0.716	-0.753	-0.679	0.489	0.471	0.507	0.371	0.331	0.000	0.000
0.920	0.831	0.018								
Schooling Elem 6-9	-0.325	-0.416	-0.235	0.722	0.660	0.791	0.343	0.312	0.022	0.000
0.914	0.837	0.062								
Schooling Medium 1-3	-0.292	-0.360	-0.224	0.747	0.698	0.799	0.346	0.301	0.000	0.000
0.927	0.848	0.049								
SpO2 less 95\%	0.290	0.248	0.333	1.337	1.281	1.395	0.262	0.396	0.000	0.000
1.260	1.710	0.056								
Diarrhea	-0.250	-0.313	-0.187	0.779	0.731	0.829	0.347	0.303	0.000	0.000
0.934	0.859	0.048								
Vomiting	-0.242	-0.323	-0.160	0.785	0.724	0.852	0.345	0.300	0.000	0.000
0.937	0.872	0.061								
Hematologic Disease	0.225	0.029	0.421	1.253	1.030	1.524	0.340	0.440	0.000	0.024
1.176	1.272	0.223								
Respiratory Discomfort	-0.183	-0.226	-0.141	0.832	0.798	0.868	0.307	0.364	0.000	0.000
1.028	1.058	0.034								
Cardiovascular Disease	0.158	0.114	0.201	1.171	1.121	1.222	0.305	0.413	0.000	0.000
1.159	1.387	0.050								
Liver Chronic Disease	0.118	-0.090	0.326	1.125	0.914	1.385	0.341	0.418	0.021	0.267
1.111	1.109	0.211								
Neurological Disease	0.112	0.014	0.209	1.118	1.015	1.233	0.338	0.424	0.000	0.024
1.090	1.173	0.103								
Race White	-0.108	-0.151	-0.065	0.897	0.859	0.937	0.335	0.356	0.001	0.000
1.042	1.089	0.038								
Diabetes	0.095	0.048	0.142	1.100	1.050	1.153	0.319	0.408	0.000	0.000
1.108	1.250	0.050								
Acute Respiratory Distress Syndrome	-0.010	-0.056	0.035	0.990	0.946	1.035	0.331	0.372	0.000	0.649
1.067	1.152	0.044								



Recursive Feature Elimination:

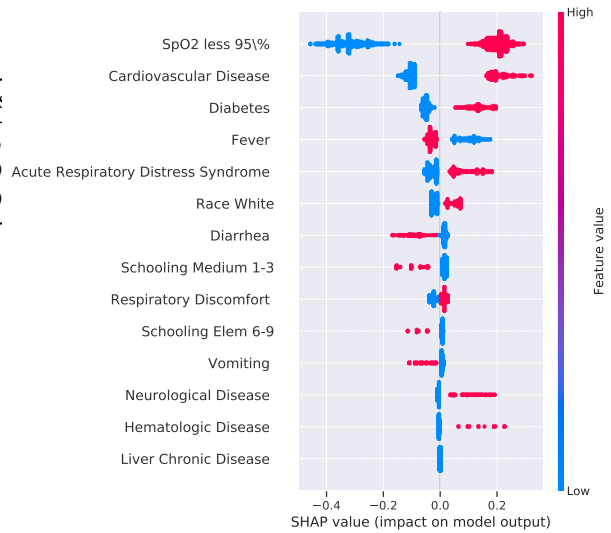
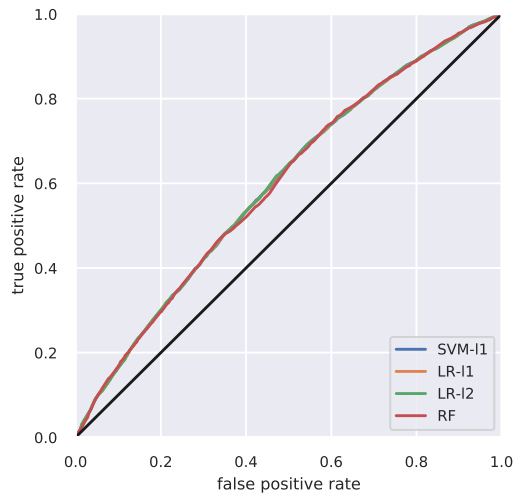


Coefficients:

	SVM-l1	LR-l1
Fever	0.920	0.831
Schooling Elem 6-9	0.914	0.837
Schooling Medium 1-3	0.927	0.848
Diarrhea	0.934	0.859
Vomiting	0.937	0.872
Respiratory Discomfort	1.028	1.058
Race White	1.042	1.089
Liver Chronic Disease	1.111	1.109
Acute Respiratory Distress Syndrome	1.067	1.152
Neurological Disease	1.090	1.173
Diabetes	1.108	1.250
Hematologic Disease	1.176	1.272
Cardiovascular Disease	1.159	1.387
SpO2 less 95\%	1.260	1.710

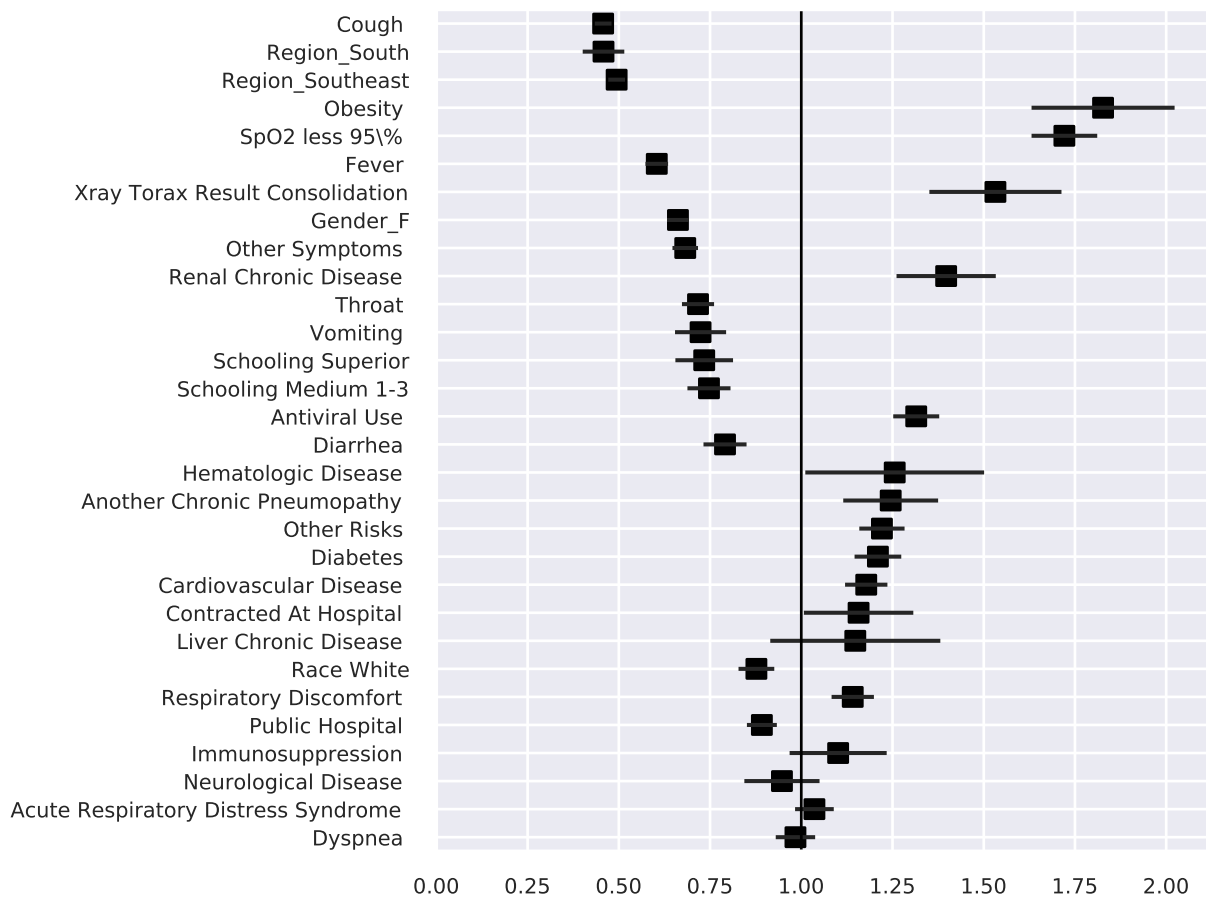
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.636	0.636	0.636	0.634	0.63
F1w	0.532	0.530	0.532	0.499	0.49
AUC	0.598	0.598	0.598	0.597	0.59

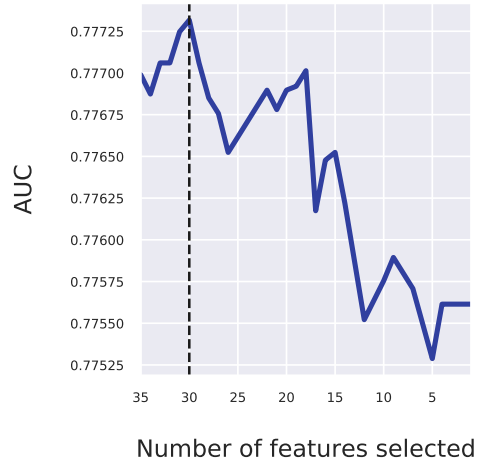


2.7 Ventilator

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Cough	-0.782	-0.836	-0.729	0.457	0.434	0.483	0.278	0.209	0.000	0.000
0.853	0.634	0.023								
Region_South	-0.781	-0.913	-0.650	0.458	0.401	0.522	0.227	0.170	0.000	0.000
0.869	0.669	0.057								
Region_Southeast	-0.706	-0.753	-0.659	0.494	0.471	0.518	0.249	0.208	0.000	0.000
0.902	0.742	0.023								
Obesity	0.603	0.489	0.717	1.827	1.631	2.048	0.220	0.342	0.000	0.000
1.213	1.604	0.196								
SpO2 less 95\%	0.543	0.489	0.597	1.721	1.631	1.817	0.133	0.287	0.000	0.000
1.236	2.014	0.090								
Fever	-0.505	-0.556	-0.453	0.604	0.573	0.635	0.254	0.214	0.000	0.000
0.946	0.861	0.031								
Xray Torax Result Consolidation	0.427	0.301	0.552	1.532	1.351	1.737	0.221	0.326	0.000	0.000
1.194	1.543	0.181								
Gender_F	-0.413	-0.459	-0.366	0.662	0.632	0.693	0.233	0.212	0.000	0.000
0.949	0.856	0.030								
Other Symptoms	-0.383	-0.436	-0.331	0.682	0.647	0.718	0.236	0.197	0.000	0.000
0.962	0.886	0.035								
Renal Chronic Disease	0.334	0.232	0.437	1.397	1.261	1.548	0.218	0.357	0.000	0.000
1.178	1.491	0.136								
Throat	-0.332	-0.396	-0.268	0.717	0.673	0.765	0.237	0.178	0.000	0.000
0.898	0.712	0.044								
Vomiting	-0.323	-0.425	-0.221	0.724	0.654	0.802	0.229	0.167	0.000	0.000
0.916	0.773	0.070								
Schooling Superior	-0.309	-0.423	-0.194	0.734	0.655	0.823	0.228	0.170	0.000	0.000
0.967	0.906	0.079								
Schooling Medium 1-3	-0.292	-0.375	-0.209	0.747	0.688	0.811	0.229	0.185	0.000	0.000
0.949	0.855	0.059								
Antiviral Use	0.274	0.225	0.323	1.315	1.252	1.382	0.202	0.263	0.000	0.000
1.101	1.330	0.063								
Diarrhea	-0.235	-0.312	-0.158	0.791	0.732	0.854	0.231	0.181	0.000	0.000
0.941	0.831	0.059								
Hematologic Disease	0.228	0.011	0.445	1.256	1.011	1.560	0.223	0.312	0.002	0.039
1.107	1.158	0.245								
Another Chronic Pneumopathy	0.219	0.109	0.330	1.245	1.115	1.391	0.220	0.322	0.000	0.000
1.098	1.237	0.130								
Other Risks	0.200	0.147	0.252	1.221	1.159	1.286	0.204	0.284	0.000	0.000
1.128	1.420	0.062								
Diabetes	0.191	0.137	0.245	1.210	1.146	1.277	0.200	0.295	0.000	0.000
1.099	1.304	0.064								
Cardiovascular Disease	0.164	0.113	0.215	1.178	1.120	1.240	0.196	0.281	0.000	0.000
1.094	1.314	0.058								
Contracted At Hospital	0.146	0.007	0.284	1.157	1.007	1.329	0.222	0.325	0.000	0.039
1.127	1.310	0.150								
Liver Chronic Disease	0.138	-0.088	0.364	1.148	0.915	1.440	0.224	0.308	0.007	0.232
1.078	1.063	0.233								
Race White	-0.132	-0.189	-0.075	0.877	0.828	0.928	0.233	0.205	0.000	0.000
0.977	0.929	0.049								
Respiratory Discomfort	0.132	0.079	0.185	1.141	1.083	1.204	0.162	0.265	0.000	0.000
1.111	1.366	0.058								
Public Hospital	-0.114	-0.162	-0.067	0.892	0.851	0.935	0.205	0.257	0.000	0.000
1.042	1.138	0.041								
Immunosuppression	0.096	-0.033	0.226	1.101	0.968	1.253	0.222	0.288	0.000	0.144
1.062	1.158	0.133								
Neurological Disease	-0.054	-0.169	0.061	0.947	0.844	1.063	0.222	0.272	0.001	0.355
0.999	1.000	0.103								
Acute Respiratory Distress Syndrome	0.035	-0.017	0.088	1.036	0.983	1.092	0.210	0.265	0.000	0.187
1.070	1.214	0.053								
Dyspnea	-0.016	-0.072	0.040	0.984	0.930	1.040	0.145	0.254	0.000	0.566
1.117	1.454	0.054								

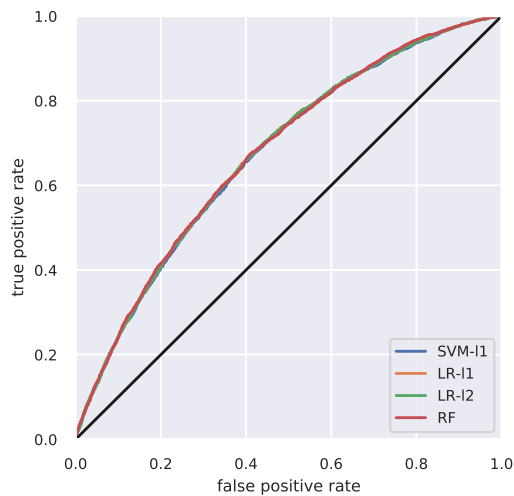


Recursive Feature Elimination:



Performance:

	SVM-I1	LR-I1	LR-I2	RF	XGBoost
Accuracy	0.751	0.752	0.752	0.753	0.753
F1w	0.675	0.672	0.674	0.651	0.666
AUC	0.673	0.675	0.675	0.676	0.678



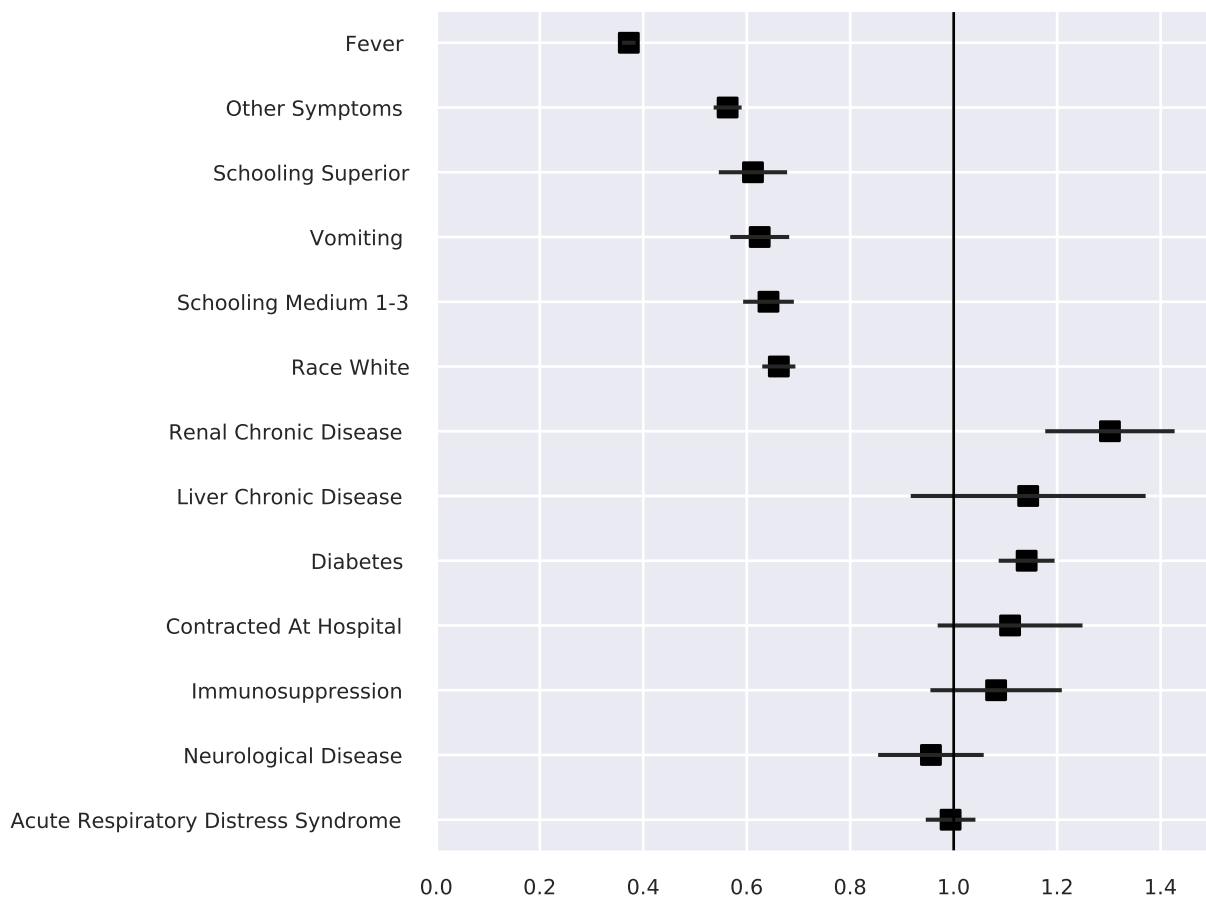
Coefficients:

	SVM-I1	LR-I1
Cough	0.853	0.634
Region_South	0.869	0.669
Throat	0.898	0.712
Region_Southeast	0.902	0.742
Vomiting	0.916	0.773
Diarrhea	0.941	0.831
Schooling Medium 1-3	0.949	0.855
Gender_F	0.949	0.856
Fever	0.946	0.861
Other Symptoms	0.962	0.886
Schooling Superior	0.967	0.906
Race White	0.977	0.929
Neurological Disease	0.999	1.000
Liver Chronic Disease	1.078	1.063
Public Hospital	1.042	1.138
Immunosuppression	1.062	1.158
Hematologic Disease	1.107	1.158
Acute Respiratory Distress Syndrome	1.070	1.214
Another Chronic Pneumopathy	1.098	1.237
Diabetes	1.099	1.304
Contracted At Hospital	1.127	1.310
Cardiovascular Disease	1.094	1.314
Antiviral Use	1.101	1.330
Respiratory Discomfort	1.111	1.366
Other Risks	1.128	1.420
Dyspnea	1.117	1.454
Renal Chronic Disease	1.178	1.491
Xray Torax Result Consolidation	1.194	1.543
Obesity	1.213	1.604
SpO2 less 95\%	1.236	2.014

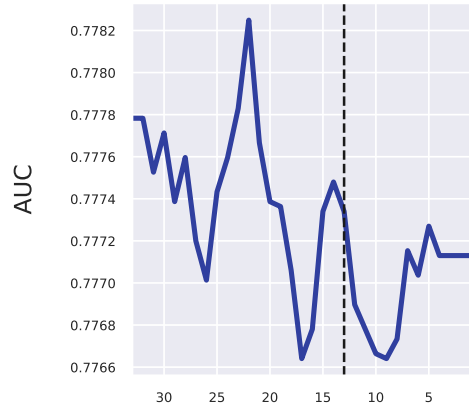


2.8 Ventilator small

SVM-II	Coef LR-II	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
Fever	-0.989	-1.025	-0.954	0.372	0.359	0.385	0.252	0.213	0.000	0.000
0.934	0.826	0.013								
Other Symptoms	-0.574	-0.623	-0.526	0.563	0.536	0.591	0.235	0.194	0.000	0.000
0.931	0.810	0.027								
Schooling Superior	-0.491	-0.606	-0.376	0.612	0.546	0.686	0.227	0.161	0.000	0.000
0.900	0.728	0.066								
Vomiting	-0.470	-0.566	-0.374	0.625	0.568	0.688	0.227	0.175	0.000	0.000
0.911	0.762	0.057								
Schooling Medium 1-3	-0.443	-0.523	-0.363	0.642	0.593	0.696	0.228	0.179	0.000	0.000
0.923	0.789	0.049								
Race White	-0.412	-0.462	-0.363	0.662	0.630	0.696	0.230	0.207	0.000	0.000
0.974	0.926	0.032								
Renal Chronic Disease	0.264	0.163	0.365	1.302	1.177	1.440	0.217	0.339	0.000	0.000
1.198	1.540	0.125								
Liver Chronic Disease	0.134	-0.087	0.356	1.144	0.917	1.427	0.222	0.309	0.005	0.234
1.117	1.154	0.227								
Diabetes	0.132	0.083	0.181	1.141	1.087	1.198	0.200	0.291	0.000	0.000
1.180	1.572	0.054								
Contracted At Hospital	0.104	-0.032	0.239	1.109	0.969	1.270	0.220	0.316	0.000	0.134
1.142	1.339	0.140								
Immunosuppression	0.078	-0.046	0.203	1.082	0.955	1.225	0.221	0.290	0.000	0.216
1.116	1.302	0.127								
Neurological Disease	-0.045	-0.158	0.067	0.956	0.854	1.070	0.221	0.265	0.004	0.432
1.058	1.133	0.102								
Acute Respiratory Distress Syndrome	-0.006	-0.056	0.043	0.994	0.946	1.044	0.209	0.263	0.000	0.805
1.109	1.333	0.048								



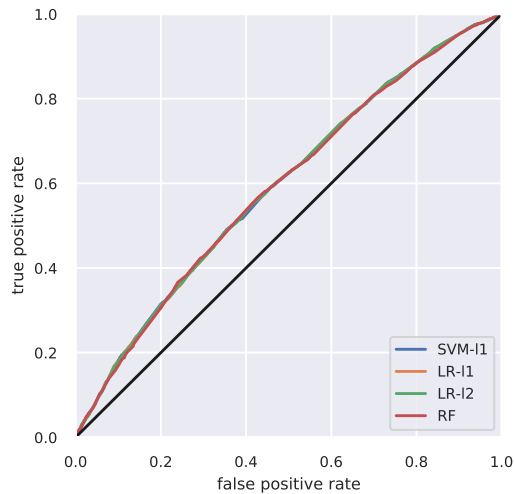
Recursive Feature Elimination:



Number of features selected

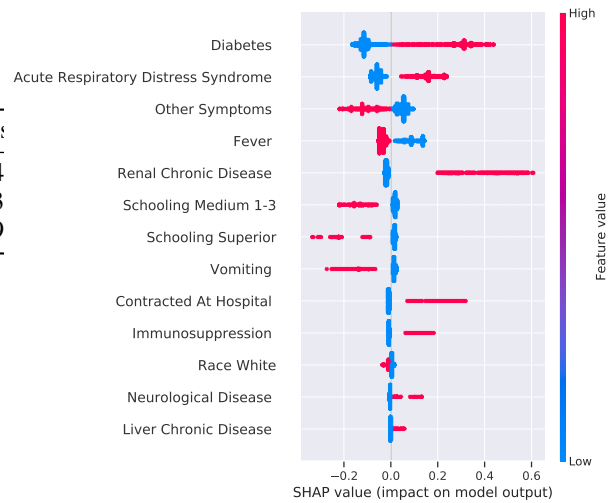
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.746	0.746	0.746	0.746	0.74
F1w	0.639	0.638	0.638	0.638	0.63
AUC	0.594	0.595	0.594	0.593	0.59



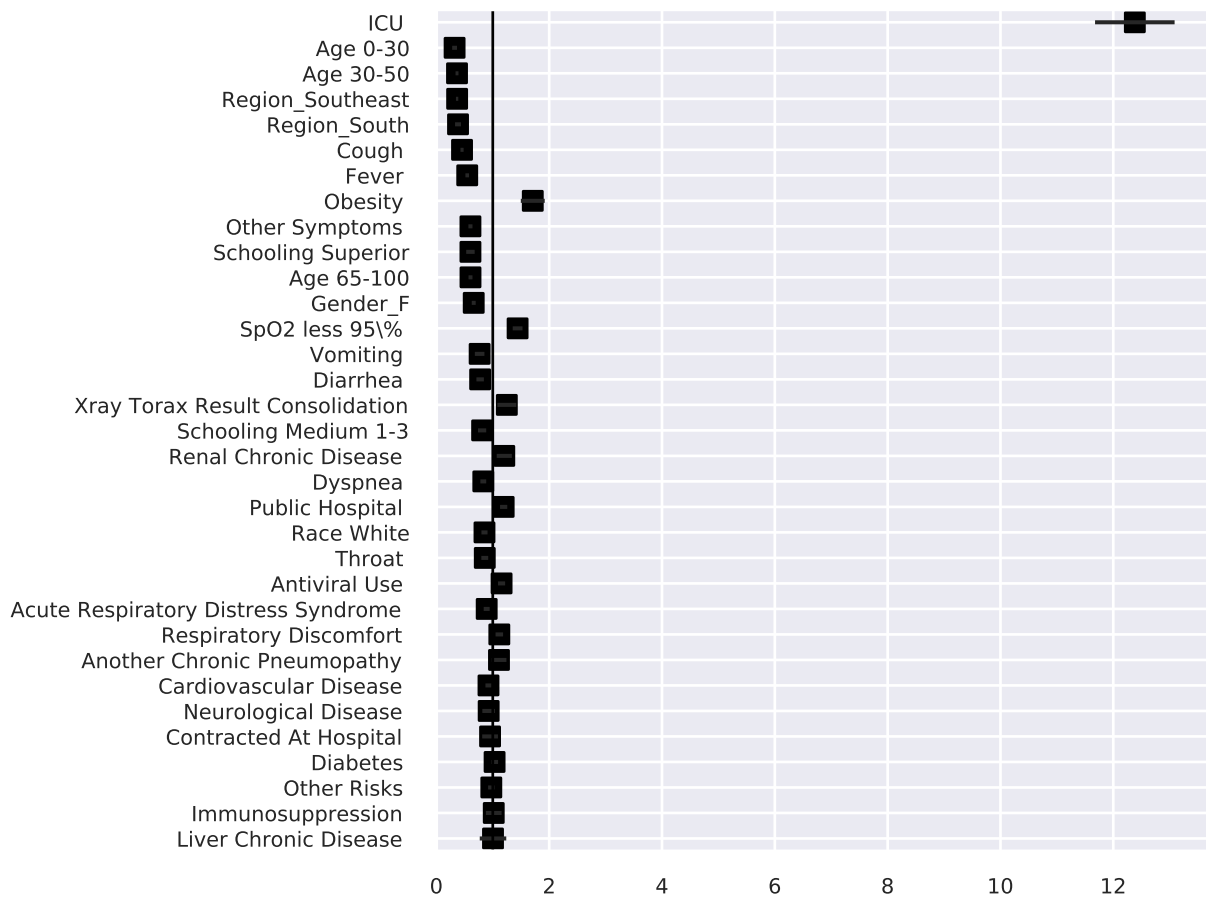
Coefficients:

	SVM-l1	LR-l1
Schooling Superior	0.900	0.728
Vomiting	0.911	0.762
Schooling Medium 1-3	0.923	0.789
Other Symptoms	0.931	0.810
Fever	0.934	0.826
Race White	0.974	0.926
Neurological Disease	1.058	1.133
Liver Chronic Disease	1.117	1.154
Immunosuppression	1.116	1.302
Acute Respiratory Distress Syndrome	1.109	1.333
Contracted At Hospital	1.142	1.339
Renal Chronic Disease	1.198	1.540
Diabetes	1.180	1.572

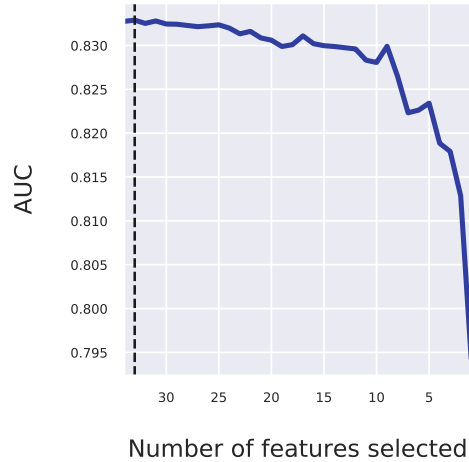


2.9 Ventilator with ICU

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
ICU	2.516	2.458	2.575	12.382	11.677	13.129	0.066	0.526	0.000	0.000
2.516	16.287	0.705								
Age 0-30	-1.129	-1.273	-0.984	0.323	0.280	0.374	0.230	0.127	0.000	0.000
0.897	0.712	0.043								
Age 30-50	-1.004	-1.080	-0.928	0.366	0.340	0.395	0.252	0.144	0.000	0.000
0.889	0.681	0.026								
Region_Southeast	-1.001	-1.058	-0.944	0.368	0.347	0.389	0.248	0.207	0.000	0.000
0.860	0.624	0.021								
Region_South	-0.956	-1.107	-0.806	0.384	0.331	0.447	0.226	0.172	0.000	0.000
0.850	0.610	0.053								
Cough	-0.788	-0.851	-0.726	0.455	0.427	0.484	0.277	0.208	0.000	0.000
0.904	0.740	0.028								
Fever	-0.603	-0.663	-0.542	0.547	0.515	0.581	0.256	0.213	0.000	0.000
0.954	0.878	0.032								
Obesity	0.536	0.403	0.668	1.709	1.497	1.951	0.220	0.335	0.000	0.000
1.145	1.419	0.212								
Other Symptoms	-0.505	-0.565	-0.445	0.604	0.568	0.641	0.238	0.193	0.000	0.000
0.943	0.844	0.036								
Schooling Superior	-0.504	-0.637	-0.372	0.604	0.529	0.689	0.227	0.168	0.000	0.000
0.904	0.800	0.075								
Age 65-100	-0.503	-0.562	-0.443	0.605	0.570	0.642	0.184	0.284	0.000	0.000
1.028	1.122	0.035								
Gender_F	-0.412	-0.466	-0.358	0.662	0.627	0.699	0.233	0.211	0.000	0.000
0.967	0.907	0.035								
SpO2 less 95\%	0.365	0.302	0.427	1.440	1.353	1.533	0.133	0.286	0.000	0.000
1.172	1.732	0.087								
Vomiting	-0.266	-0.382	-0.149	0.767	0.682	0.861	0.228	0.168	0.000	0.000
0.941	0.843	0.085								
Diarrhea	-0.254	-0.343	-0.166	0.776	0.710	0.847	0.232	0.173	0.000	0.000
0.944	0.835	0.066								
Xray Torax Result Consolidation	0.222	0.078	0.367	1.249	1.081	1.443	0.221	0.323	0.000	0.003
1.095	1.237	0.168								
Schooling Medium 1-3	-0.210	-0.304	-0.115	0.811	0.738	0.891	0.228	0.188	0.000	0.000
0.991	0.972	0.073								
Renal Chronic Disease	0.186	0.067	0.304	1.204	1.070	1.356	0.217	0.359	0.000	0.002
1.094	1.270	0.134								
Dyspnea	-0.184	-0.249	-0.119	0.832	0.780	0.888	0.145	0.252	0.000	0.000
1.112	1.412	0.052								
Public Hospital	0.176	0.121	0.231	1.193	1.129	1.260	0.203	0.259	0.000	0.000
1.184	1.779	0.064								
Race White	-0.159	-0.224	-0.094	0.853	0.799	0.911	0.232	0.205	0.000	0.000
0.968	0.891	0.054								
Throat	-0.153	-0.226	-0.080	0.858	0.797	0.923	0.236	0.178	0.000	0.000
0.958	0.863	0.061								
Antiviral Use	0.145	0.088	0.202	1.156	1.093	1.224	0.200	0.265	0.000	0.000
1.060	1.166	0.063								
Acute Respiratory Distress Syndrome	-0.115	-0.175	-0.054	0.892	0.839	0.947	0.211	0.260	0.000	0.000
1.027	1.100	0.053								
Respiratory Discomfort	0.110	0.048	0.171	1.116	1.049	1.187	0.161	0.263	0.000	0.000
1.114	1.391	0.067								
Another Chronic Pneumopathy	0.104	-0.022	0.231	1.110	0.978	1.259	0.219	0.329	0.000	0.107
1.036	1.058	0.132								
Cardiovascular Disease	-0.079	-0.139	-0.018	0.924	0.870	0.982	0.196	0.280	0.000	0.011
1.021	1.057	0.054								
Neurological Disease	-0.076	-0.205	0.054	0.927	0.815	1.055	0.222	0.275	0.000	0.251
0.975	1.000	0.112								
Contracted At Hospital	-0.049	-0.208	0.111	0.952	0.812	1.117	0.221	0.317	0.000	0.549
1.069	1.120	0.140								
Diabetes	0.032	-0.031	0.094	1.032	0.970	1.099	0.200	0.295	0.000	0.317
1.058	1.203	0.062								
Other Risks	-0.026	-0.087	0.034	0.974	0.917	1.035	0.203	0.283	0.000	0.391
1.055	1.170	0.057								
Immunosuppression	0.017	-0.130	0.164	1.017	0.878	1.178	0.222	0.286	0.000	0.824
1.037	1.059	0.139								
Liver Chronic Disease	0.004	-0.262	0.270	1.004	0.769	1.310	0.223	0.313	0.004	0.977
1.042	1.000	0.235								

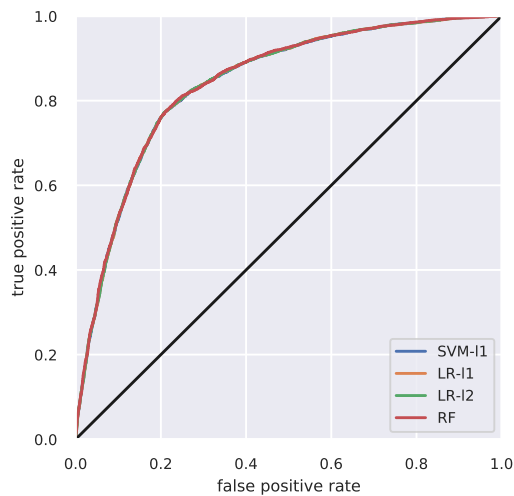


Recursive Feature Elimination:



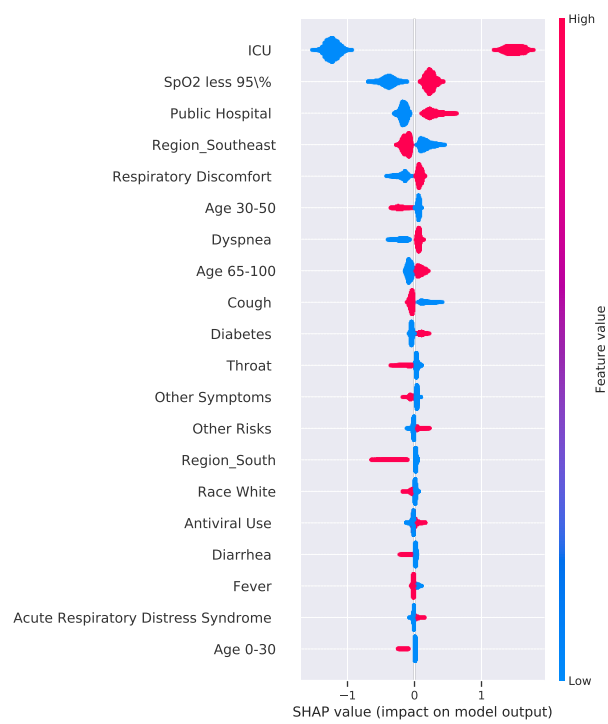
Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.806	0.807	0.807	0.805	0.807
F1w	0.801	0.802	0.801	0.791	0.803
AUC	0.841	0.841	0.841	0.842	0.843



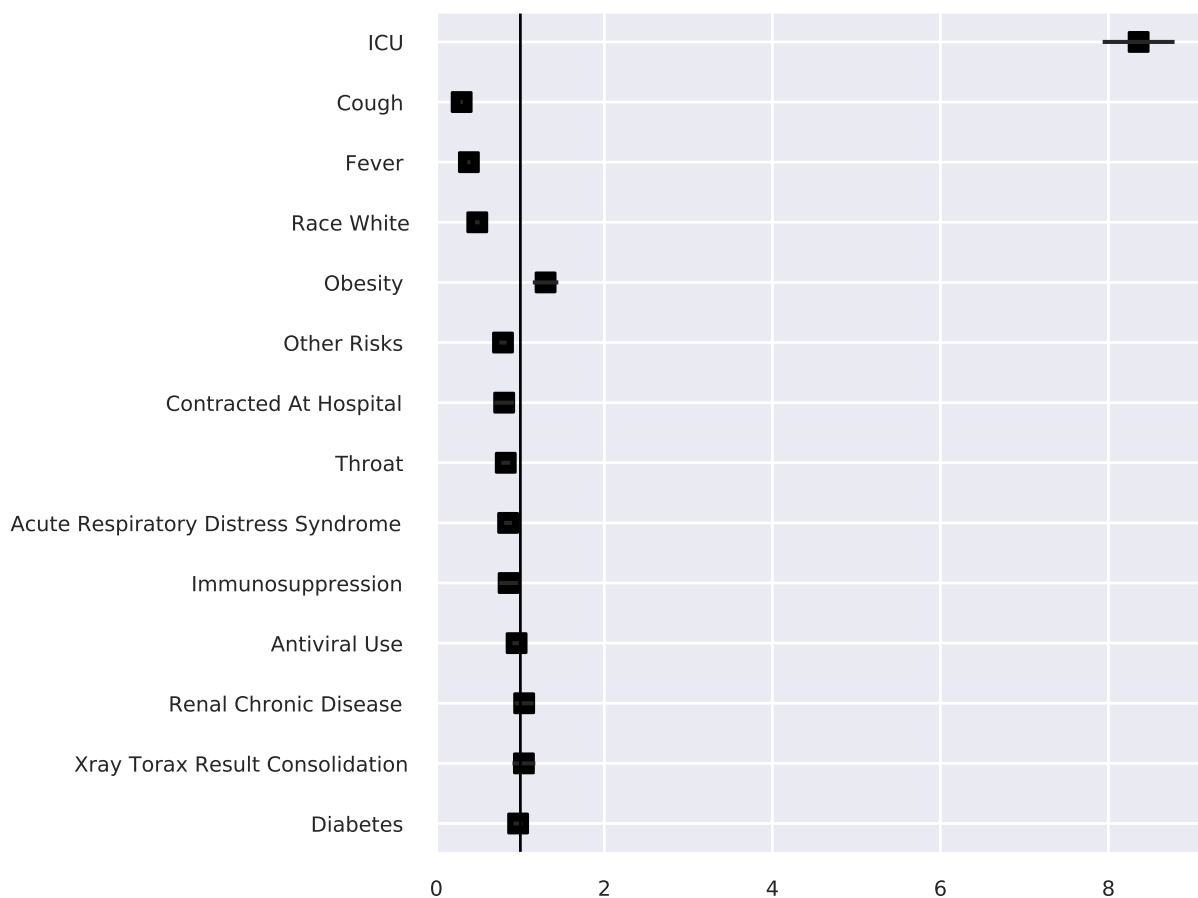
Coefficients:

	SVM-l1	LR-l1
Region_South	0.850	0.610
Region_Southeast	0.860	0.624
Age 30-50	0.889	0.681
Age 0-30	0.897	0.712
Cough	0.904	0.740
Schooling Superior	0.904	0.800
Diarrhea	0.944	0.835
Vomiting	0.941	0.843
Other Symptoms	0.943	0.844
Throat	0.958	0.863
Fever	0.954	0.878
Race White	0.968	0.891
Gender_F	0.967	0.907
Schooling Medium 1-3	0.991	0.972
Neurological Disease	0.975	1.000
Liver Chronic Disease	1.042	1.000
Cardiovascular Disease	1.021	1.057
Another Chronic Pneumopathy	1.036	1.058
Immunosuppression	1.037	1.059
Acute Respiratory Distress Syndrome	1.027	1.100
Contracted At Hospital	1.069	1.120
Age 65-100	1.028	1.122
Antiviral Use	1.060	1.166
Other Risks	1.055	1.170
Diabetes	1.058	1.203
Xray Torax Result Consolidation	1.095	1.237
Renal Chronic Disease	1.094	1.270
Respiratory Discomfort	1.114	1.391
Dyspnea	1.112	1.412
Obesity	1.145	1.419
SpO2 less 95%	1.172	1.732
Public Hospital	1.184	1.779
ICU	2.516	16.287

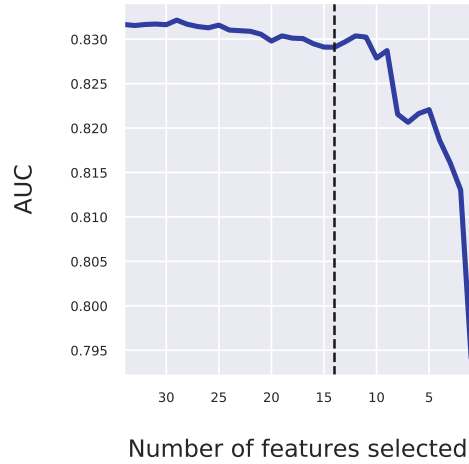


2.10 Ventilator with ICU small

SVM-I1	Coef LR-I1	2.5 err	97.5	Odds Ratio	2.5	97.5	Avg-0	Avg-1	KS-pv	pvalue
ICU	2.123	2.071	2.176	8.359	7.931	8.810	0.067	0.526	0.0	0.000
2.433	14.547	0.428								
Cough	-1.201	-1.253	-1.148	0.301	0.286	0.317	0.278	0.208	0.0	0.000
0.932	0.777	0.015								
Fever	-0.950	-1.002	-0.899	0.387	0.367	0.407	0.252	0.214	0.0	0.000
0.977	0.919	0.020								
Race White	-0.720	-0.776	-0.663	0.487	0.460	0.515	0.233	0.204	0.0	0.000
0.927	0.743	0.027								
Obesity	0.262	0.138	0.386	1.300	1.148	1.471	0.220	0.340	0.0	0.000
1.112	1.415	0.152								
Other Risks	-0.232	-0.288	-0.175	0.793	0.750	0.839	0.203	0.284	0.0	0.000
1.055	1.217	0.043								
Contracted At Hospital	-0.215	-0.369	-0.060	0.807	0.691	0.942	0.222	0.318	0.0	0.006
1.064	1.232	0.116								
Throat	-0.191	-0.258	-0.123	0.826	0.772	0.884	0.236	0.179	0.0	0.000
0.978	0.903	0.054								
Acute Respiratory Distress Syndrome	-0.158	-0.215	-0.101	0.854	0.807	0.904	0.211	0.260	0.0	0.000
1.059	1.243	0.047								
Immunosuppression	-0.151	-0.293	-0.009	0.860	0.746	0.991	0.222	0.288	0.0	0.037
1.040	1.161	0.114								
Antiviral Use	-0.046	-0.098	0.006	0.955	0.906	1.006	0.202	0.262	0.0	0.086
1.062	1.263	0.049								
Renal Chronic Disease	0.044	-0.070	0.159	1.045	0.932	1.172	0.218	0.360	0.0	0.449
1.101	1.352	0.113								
Xray Torax Result Consolidation	0.041	-0.099	0.181	1.042	0.906	1.198	0.221	0.316	0.0	0.567
1.066	1.240	0.136								
Diabetes	-0.027	-0.084	0.029	0.973	0.920	1.030	0.200	0.295	0.0	0.342
1.102	1.433	0.053								



Recursive Feature Elimination:



Coefficients:

	SVM-l1	LR-l1
Race White	0.927	0.743
Cough	0.932	0.777
Throat	0.978	0.903
Fever	0.977	0.919
Immunosuppression	1.040	1.161
Other Risks	1.055	1.217
Contracted At Hospital	1.064	1.232
Xray Torax Result Consolidation	1.066	1.240
Acute Respiratory Distress Syndrome	1.059	1.243
Antiviral Use	1.062	1.263
Renal Chronic Disease	1.101	1.352
Obesity	1.112	1.415
Diabetes	1.102	1.433
ICU	2.433	14.547

Performance:

	SVM-l1	LR-l1	LR-l2	RF	XGBoost
Accuracy	0.784	0.787	0.787	0.786	0.78
F1w	0.783	0.784	0.784	0.773	0.78
AUC	0.806	0.806	0.806	0.807	0.80

