Modelagem

Camila Variables

Full model

Table 1: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-10.621	6.430	-1.652	0.099
factor(ventilacao_mecanica)1	-0.382	2.894	-0.132	0.895
factor(causa_ira)1	-92.322	61468.754	-0.002	0.999
factor(causa_ira)2	3.897	5.735	0.679	0.497
sofa	2.360	1.089	2.166	0.030
una	0.021	0.019	1.145	0.252
fek	0.526	0.295	1.781	0.075
su	-0.061	0.075	-0.805	0.421
delta_scr	2.919	5.556	0.525	0.599
$factor(causa_ira)1:una$	-0.269	308.729	-0.001	0.999
factor(causa_ira)2:una	-0.206	0.114	-1.813	0.070
factor(causa_ira)1:fek	-12.819	5646.564	-0.002	0.998
factor(causa_ira)2:fek	1.206	1.001	1.204	0.229
factor(causa_ira)1:su	8.394	1641.004	0.005	0.996
factor(causa_ira)2:su	0.017	0.105	0.161	0.872
$factor(causa_ira)1:delta_scr$	392.063	153308.513	0.003	0.998
factor(causa_ira)2:delta_scr	18.417	28.332	0.650	0.516

Table 2: Model details

null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-9.092	52.183	85.024	18.183	34	51

Table 3: Confidence intervals

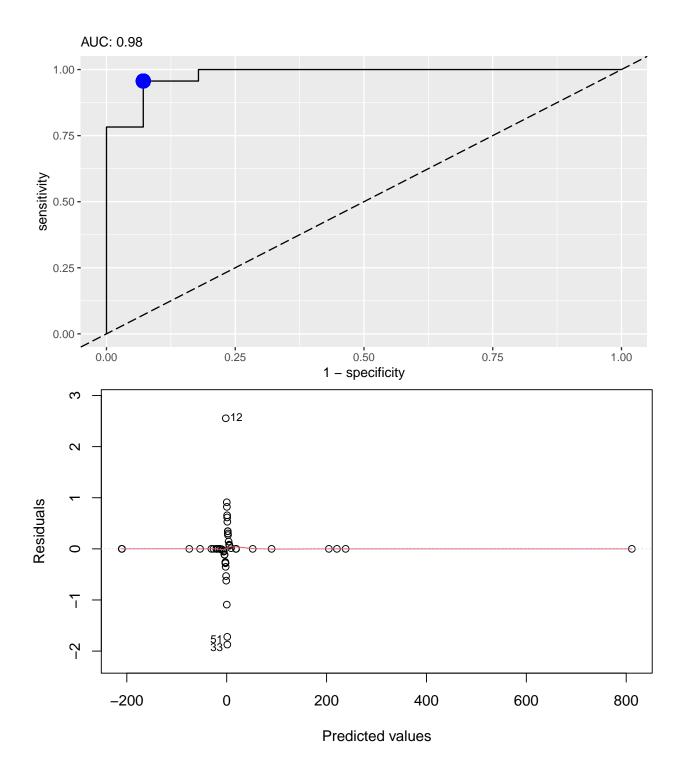
variável	2.5~%	97.5~%	estimativa
(Intercept)	0.000	7.251000e+00	0.0000000e+00
factor(ventilacao_mecanica)1	0.002	1.985240e + 02	6.830000e-01
factor(causa_ira)1	0.000	Inf	0.000000e+00
factor(causa_ira)2	0.001	3.751701e + 06	$4.925500e{+01}$
sofa	1.252	8.956800e+01	$1.058800e{+01}$
una	0.985	1.060000e+00	1.022000e+00
fek	0.949	3.016000e+00	1.691000e+00
su	0.812	1.091000e+00	9.410000e-01

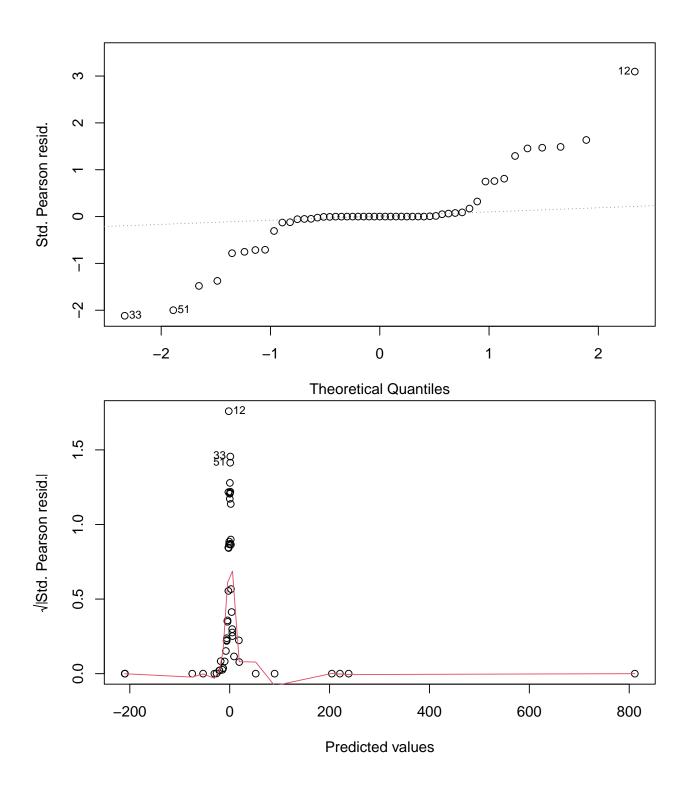
Table 3: Confidence intervals (continued)

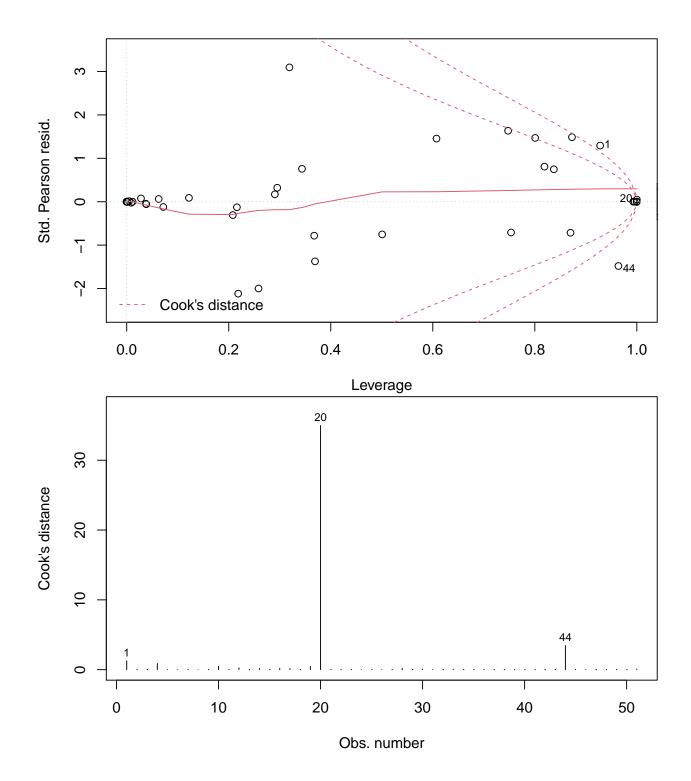
variável	2.5~%	97.5 %	estimativa
delta_scr	0.000	9.923566e + 05	1.852600e+01
$factor(causa_ira)1:una$	0.000	4.716896e + 262	7.640000e-01
factor(causa_ira)2:una	0.651	1.017000e+00	8.140000e-01
$factor(causa_ira)1:fek$	0.000	Inf	0.000000e+00
factor(causa_ira)2:fek	0.469	2.377400e+01	3.340000e+00
factor(causa_ira)1:su	0.000	Inf	4.418964e+03
factor(causa_ira)2:su	0.829	1.248000e+00	1.017000e+00
factor(causa_ira)1:delta_scr	0.000	Inf	1.866356e + 170
factor(causa_ira)2:delta_scr	0.000	1.303009e + 32	9.961903e + 07

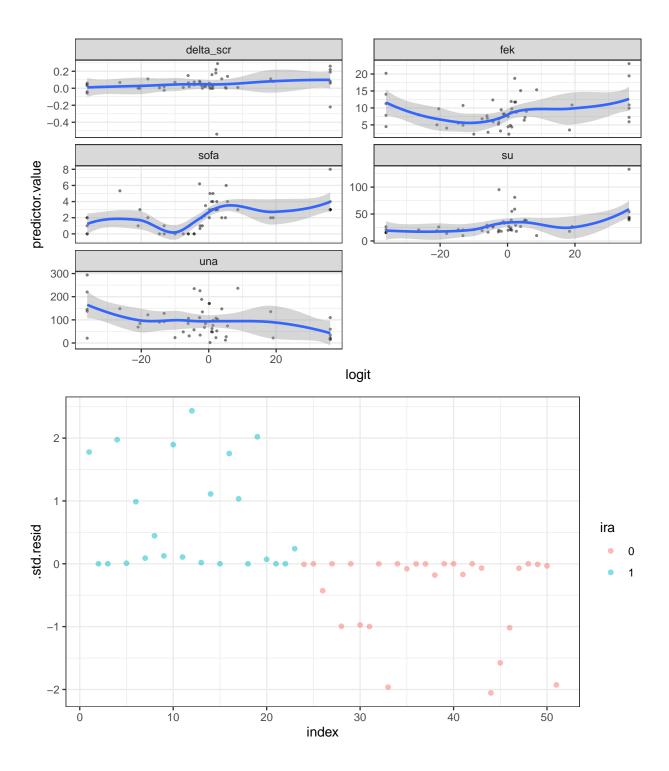
Table 4: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.545	0.929	0.957	0.071









Backwards

Table 5: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-9.783	5.608	-1.745	0.081
factor(causa_ira)1	-6099.387	243019.930	-0.025	0.980
factor(causa_ira)2	0.850	4.348	0.196	0.845
sofa	2.095	1.014	2.066	0.039
una	0.019	0.018	1.042	0.297
fek	0.486	0.281	1.725	0.084
su	-0.050	0.068	-0.732	0.464
factor(causa_ira)1:una	-4.596	182.631	-0.025	0.980
factor(causa_ira)2:una	-0.168	0.102	-1.650	0.099
$factor(causa_ira)1:fek$	-693.679	27534.184	-0.025	0.980
factor(causa_ira)2:fek	1.302	1.044	1.247	0.212
factor(causa_ira)1:su	509.186	20242.830	0.025	0.980
factor(causa_ira)2:su	0.022	0.101	0.219	0.827

Table 6: Model details

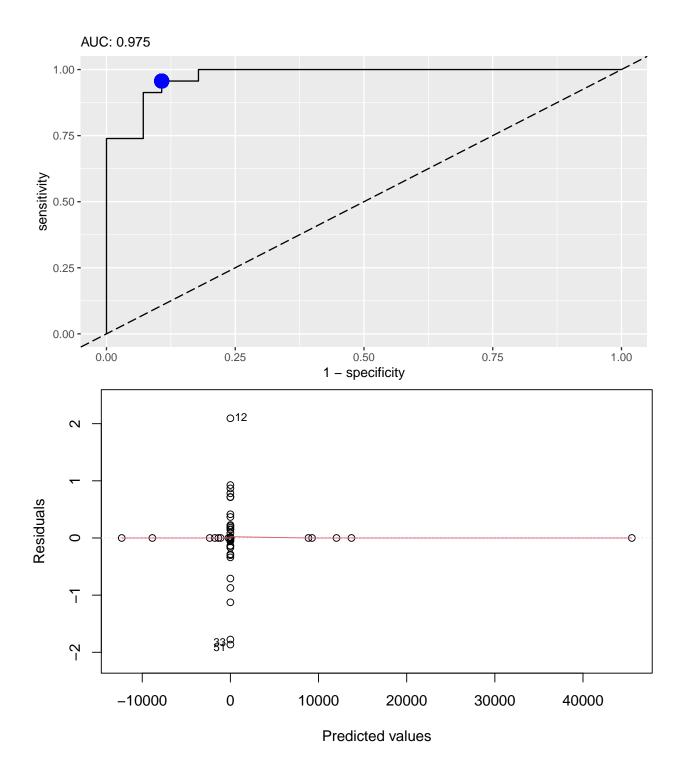
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-9.696	45.392	70.506	19.392	38	51

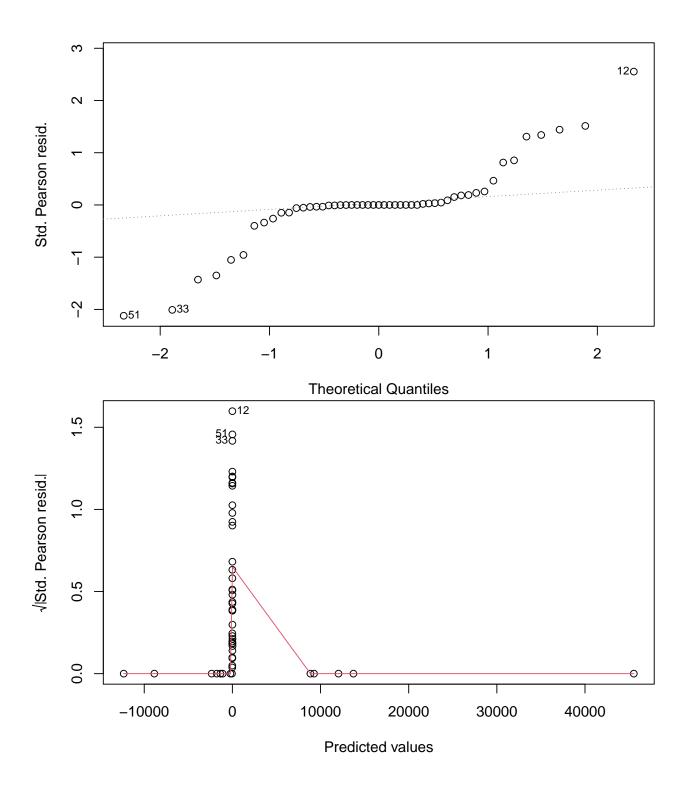
Table 7: Confidence intervals

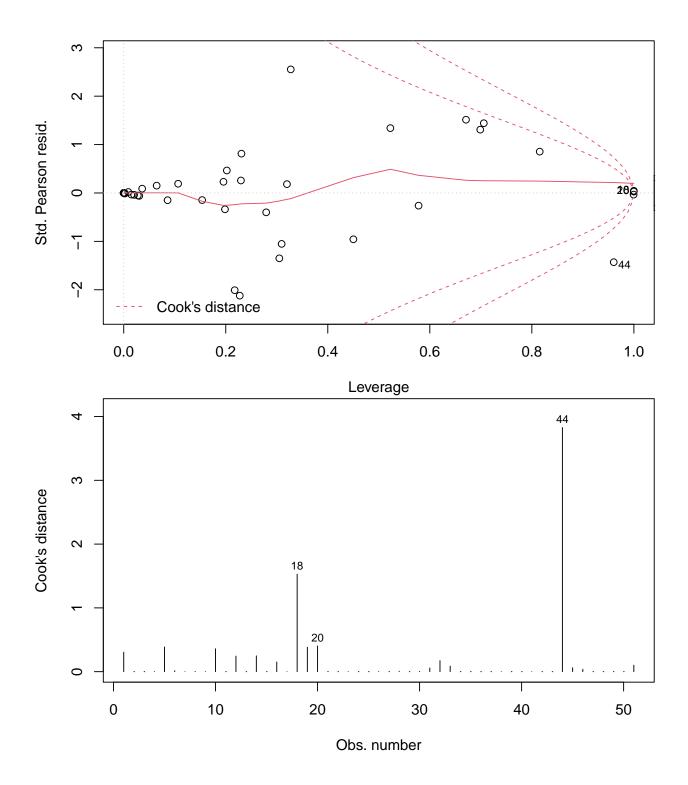
variável	2.5~%	97.5~%	estimativa
(Intercept)	0.000	3.346000e+00	0.000000e+00
factor(causa_ira)1	0.000	Inf	0.000000e+00
factor(causa_ira)2	0.000	1.174467e + 04	2.340000e+00
sofa	1.113	5.930000e+01	8.124000e+00
una	0.984	1.055000e+00	1.019000e+00
fek	0.936	2.821000e+00	1.625000e+00
su	0.833	1.087000e+00	9.520000e-01
factor(causa_ira)1:una	0.000	2.884853e + 153	1.000000e-02
factor(causa_ira)2:una	0.692	1.032000e+00	8.450000e-01
factor(causa_ira)1:fek	0.000	Inf	0.000000e+00
factor(causa_ira)2:fek	0.475	2.844200e+01	3.675000e+00
factor(causa_ira)1:su	0.000	Inf	1.370294e + 221
factor(causa_ira)2:su	0.839	1.245000e+00	1.022000e+00

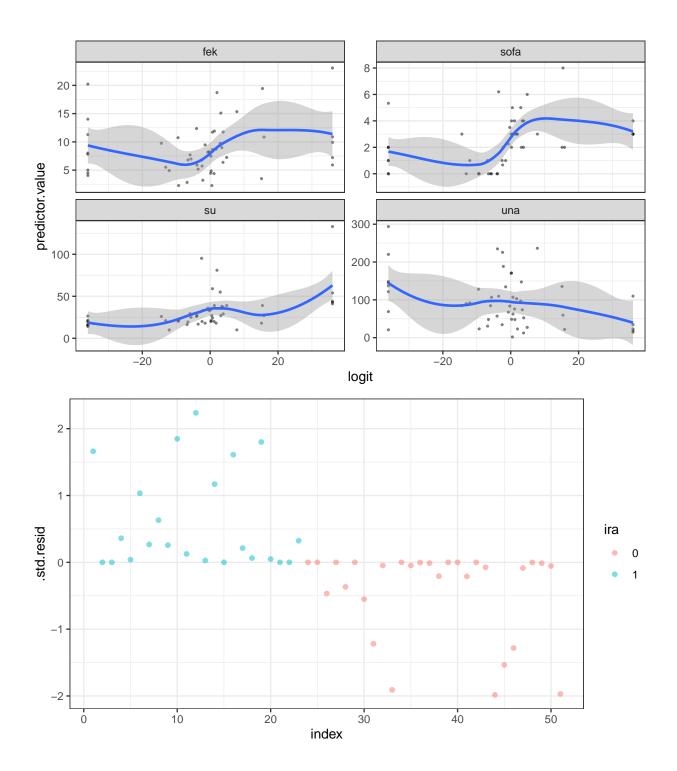
Table 8: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.486	0.893	0.957	0.107









Forwards

Table 9: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.897	0.878	-3.300	0.001
sofa	0.697	0.241	2.890	0.004
su	0.032	0.020	1.613	0.107

Table 10: Model details

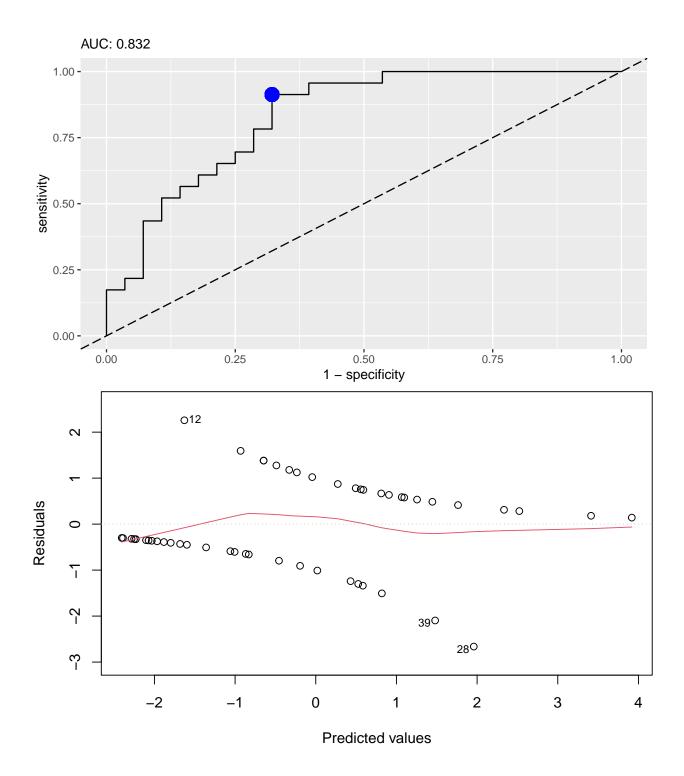
null.deviance	df.null	logLik	AIC	BIC	deviance	${\it df.} residual$	nobs
70.21	50	-25.613	57.226	63.021	51.226	48	51

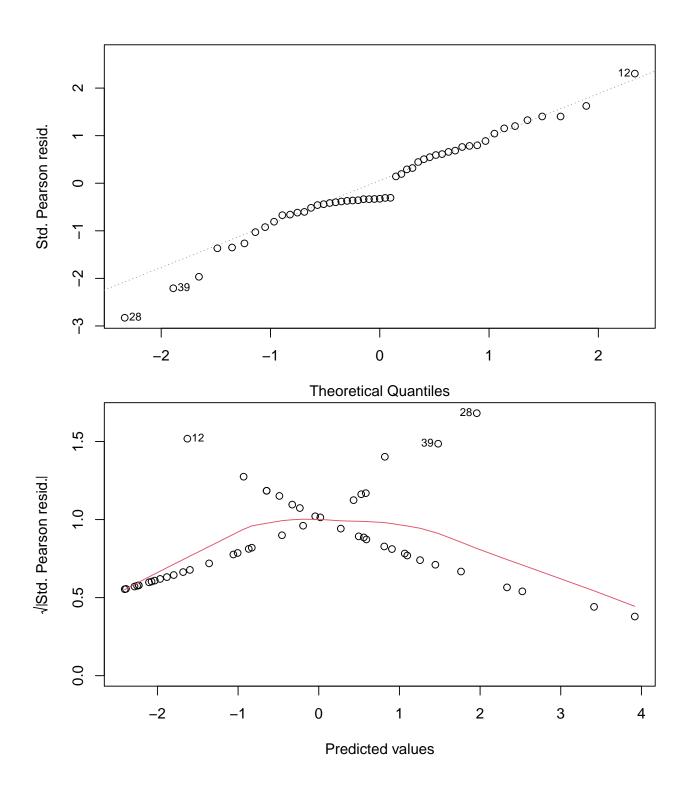
Table 11: Confidence intervals

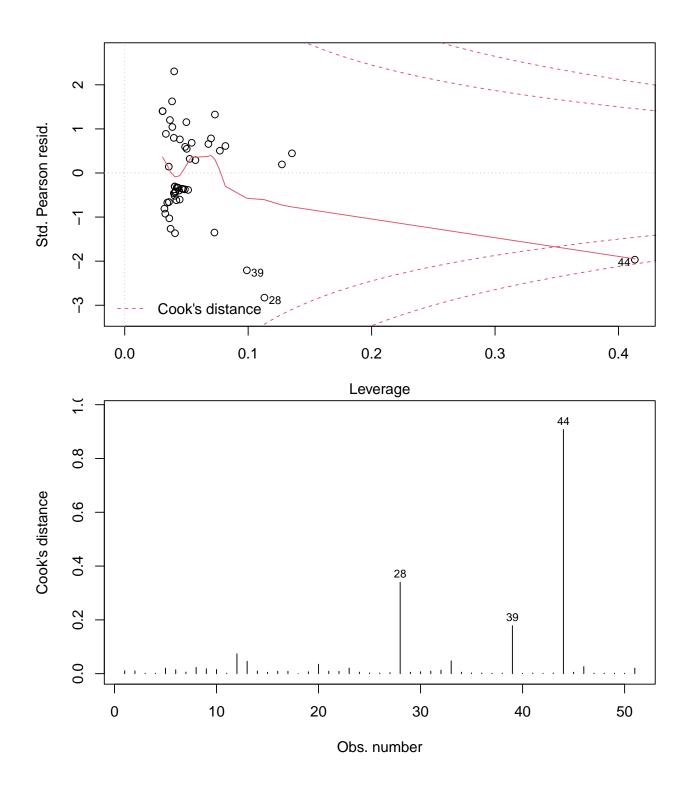
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.010	0.308	0.055
sofa	1.251	3.223	2.008
su	0.993	1.073	1.032

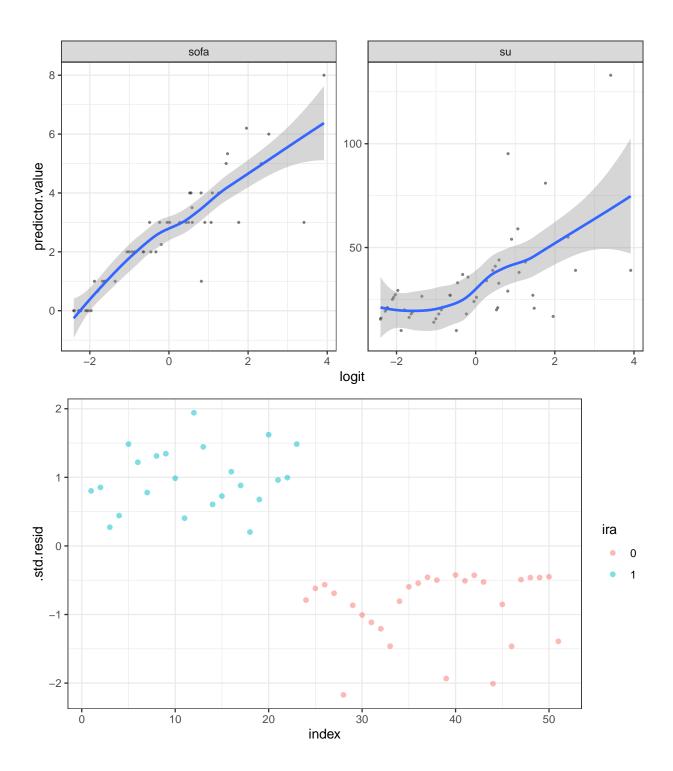
Table 12: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.324	0.679	0.913	0.321









Stepwise

Table 13: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.897	0.878	-3.300	0.001
sofa	0.697	0.241	2.890	0.004
su	0.032	0.020	1.613	0.107

Table 14: Model details

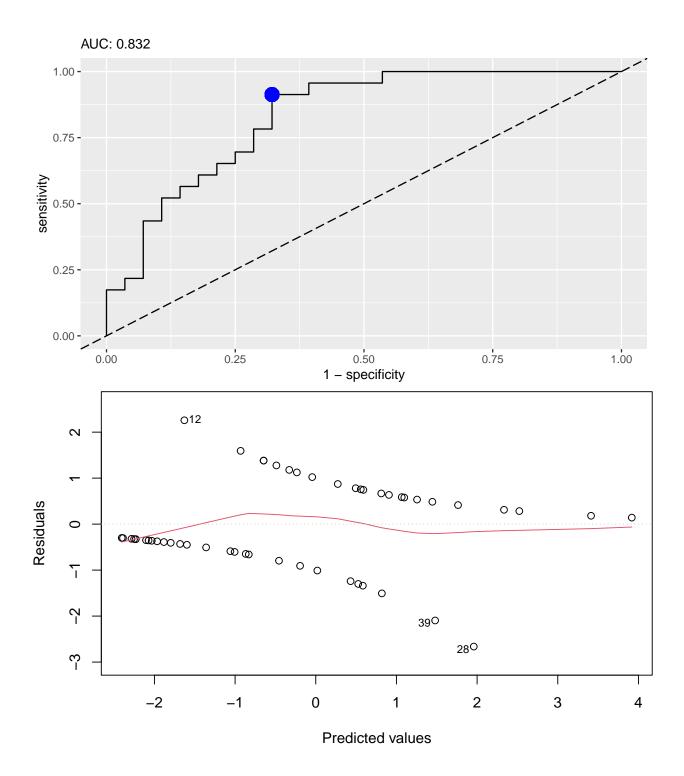
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-25.613	57.226	63.021	51.226	48	51

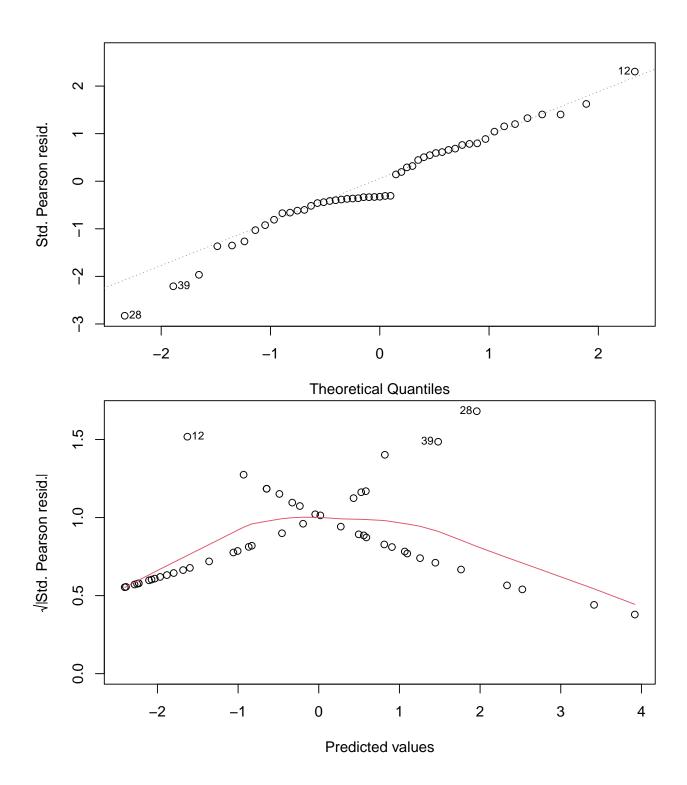
Table 15: Confidence intervals

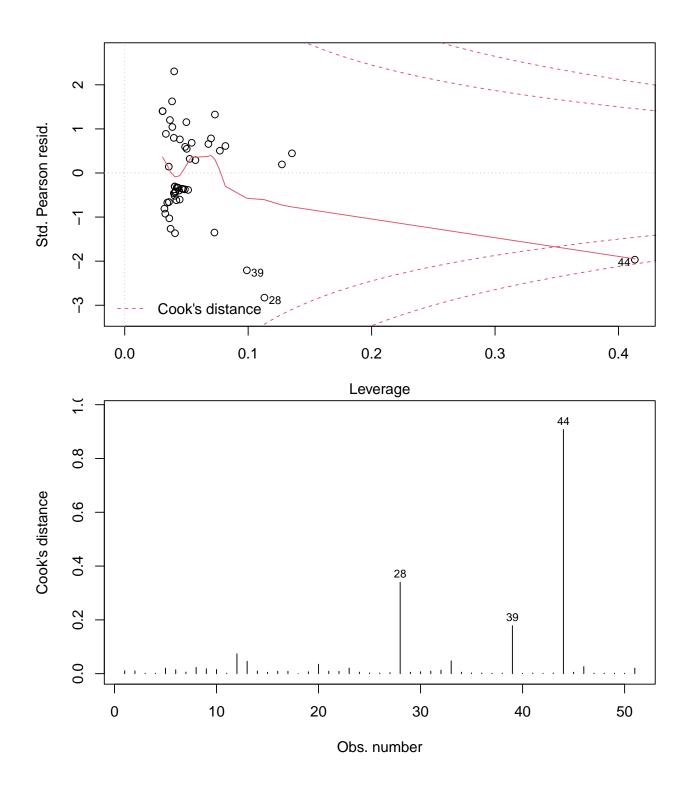
variável	2.5~%	97.5~%	estimativa
(Intercept)	0.010	0.308	0.055
sofa	1.251	3.223	2.008
su	0.993	1.073	1.032

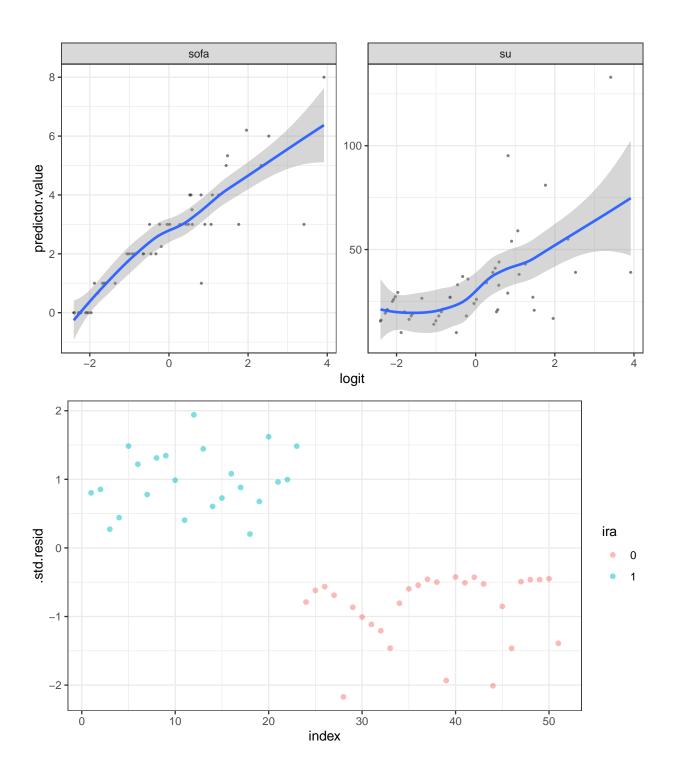
Table 16: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.324	0.679	0.913	0.321









Union model

Table 17: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.857	1.590	-1.797	0.072
causa_ira1	-0.720	0.893	-0.807	0.420
causa_ira2	-1.463	1.050	-1.393	0.164
sofa	0.762	0.254	3.003	0.003
una	-0.006	0.007	-0.968	0.333
fek	0.119	0.098	1.212	0.225
su	0.032	0.025	1.311	0.190

Table 18: Model details

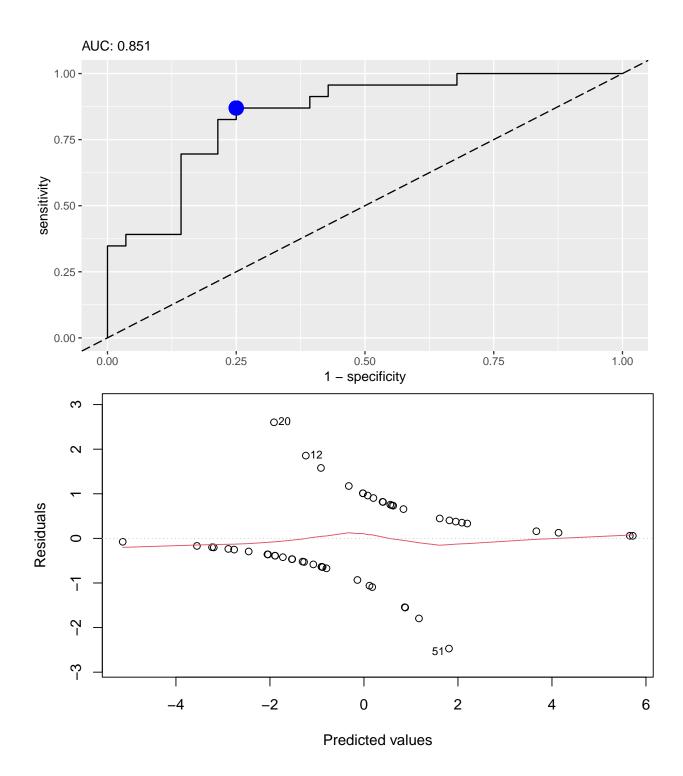
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-23.343	60.687	74.209	46.687	44	51

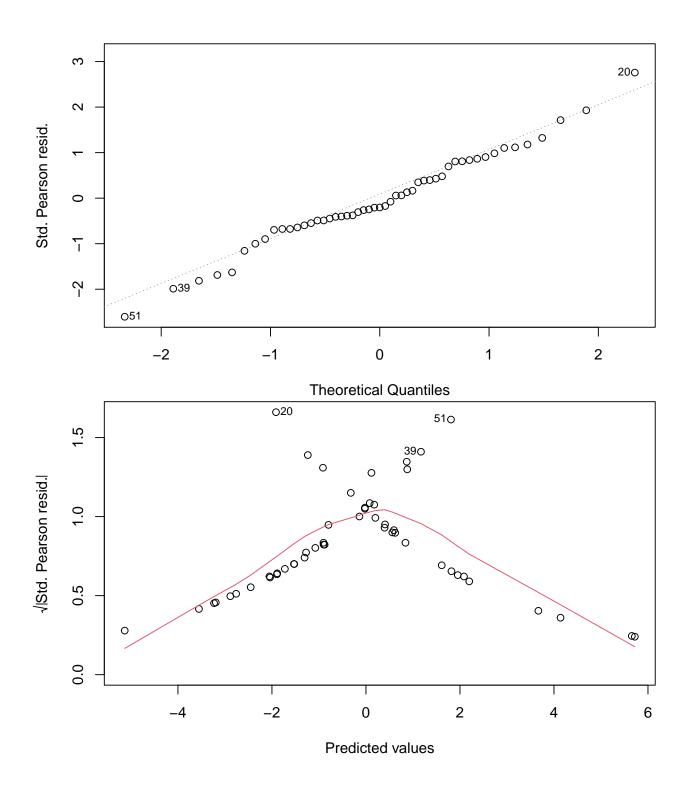
Table 19: Confidence intervals

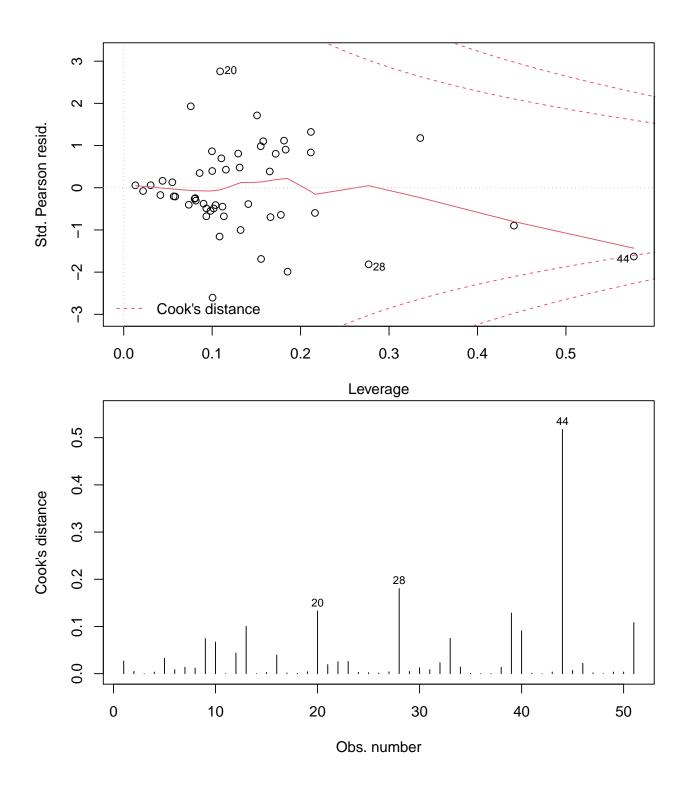
variável	2.5~%	97.5~%	estimativa
(Intercept)	0.003	1.296	0.057
causa_ira1	0.085	2.801	0.487
$causa_ira2$	0.030	1.814	0.232
sofa	1.303	3.521	2.142
una	0.981	1.007	0.994
fek	0.929	1.366	1.127
su	0.984	1.084	1.033

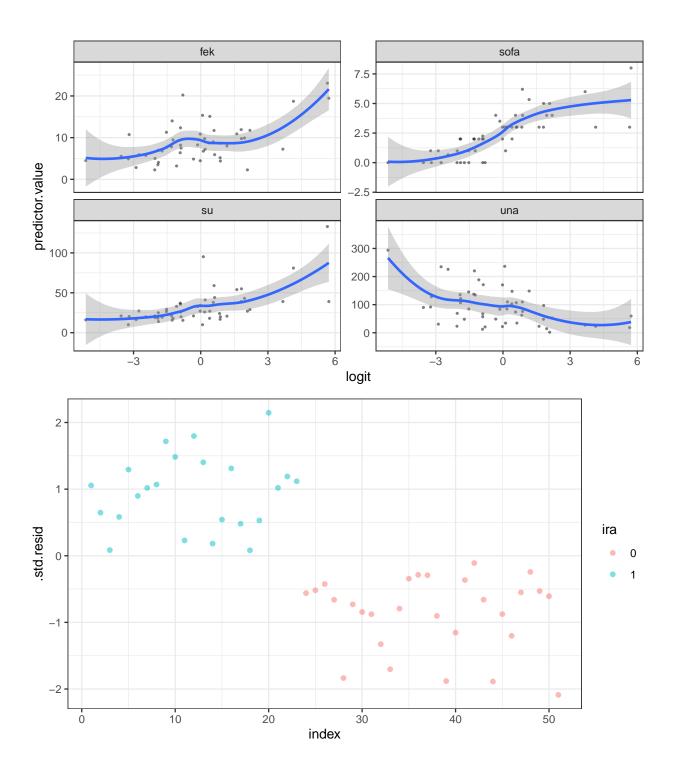
Table 20: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.365	0.75	0.87	0.25









Intersection model

Table 21: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.897	0.878	-3.300	0.001
sofa	0.697	0.241	2.890	0.004
su	0.032	0.020	1.613	0.107

Table 22: Model details

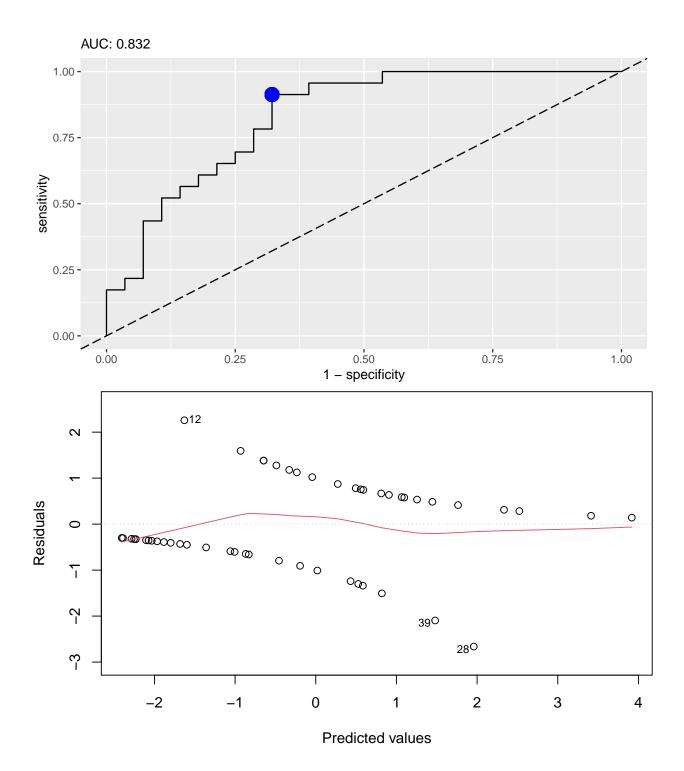
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-25.613	57.226	63.021	51.226	48	51

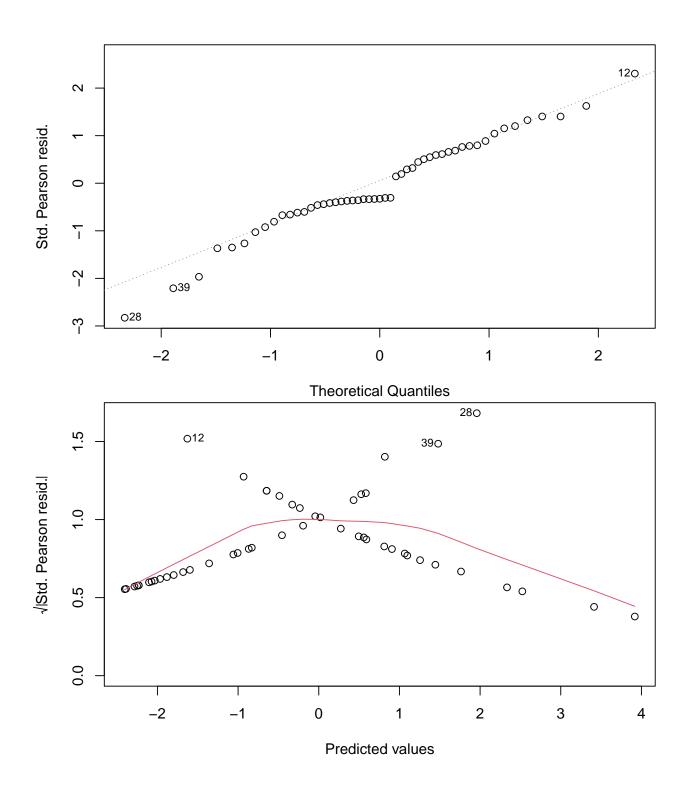
Table 23: Confidence intervals

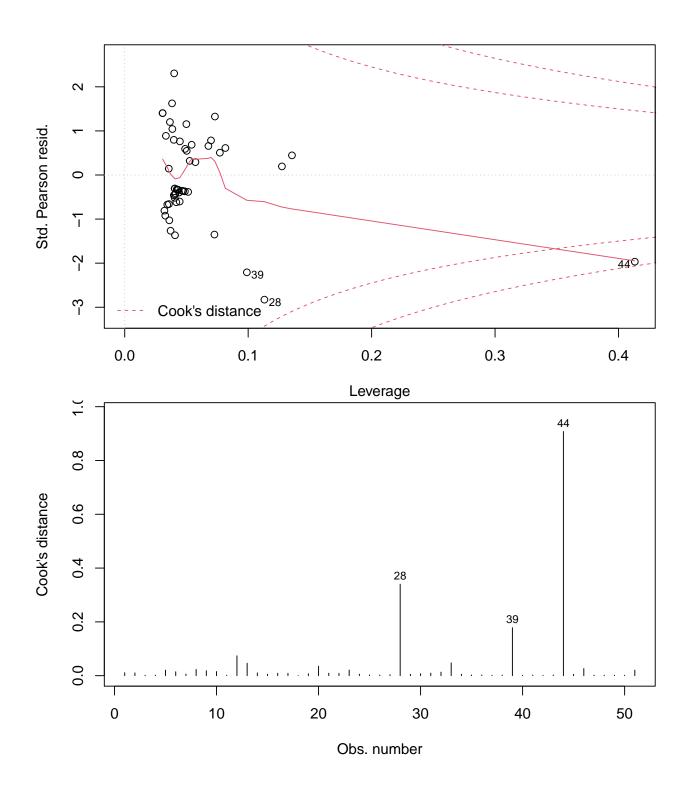
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.010	0.308	0.055
sofa	1.251	3.223	2.008
su	0.993	1.073	1.032

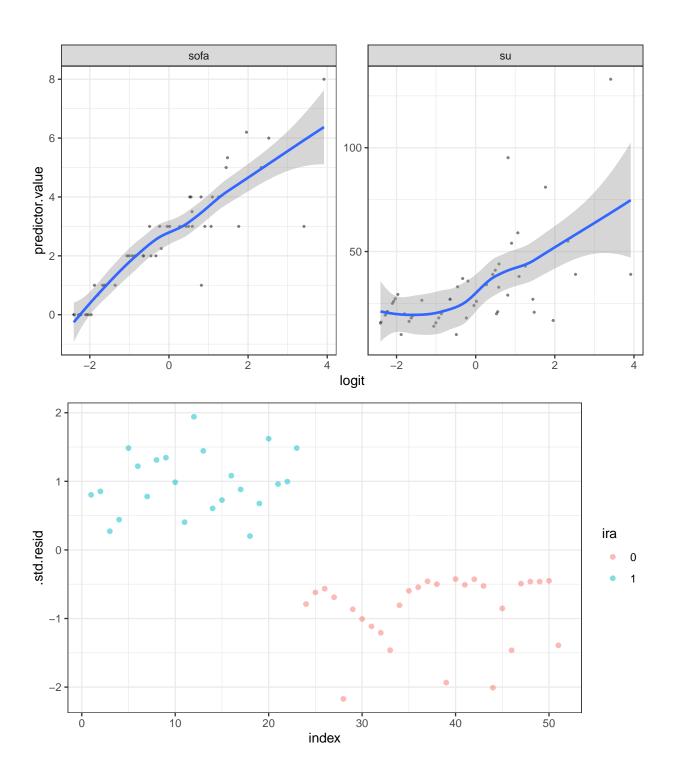
Table 24: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.324	0.679	0.913	0.321









Selected Variables

Full model

Table 25: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	1.119	10.814	0.104	0.918
factor(ventilacao_mecanica)1	1.333	1.422	0.937	0.349
factor(causa_ira)1	-1.778	1.357	-1.311	0.190
factor(causa_ira)2	-1.704	1.170	-1.456	0.145
sofa	0.557	0.306	1.819	0.069
su	0.025	0.033	0.772	0.440
saps3	0.016	0.033	0.479	0.632
fek	0.201	0.172	1.171	0.242
uu_su	-0.005	2.111	-0.002	0.998
una	-0.008	0.007	-1.089	0.276
sosm	-0.027	0.039	-0.706	0.480
$delta_scr$	3.698	3.687	1.003	0.316
$tempo_internacao_hospitalar$	0.021	0.020	1.009	0.313
score_clinico	0.264	0.359	0.736	0.462
dva_mcg_kg_min	-0.274	2.799	-0.098	0.922
uk	0.007	0.023	0.315	0.753

Table 26: Model details

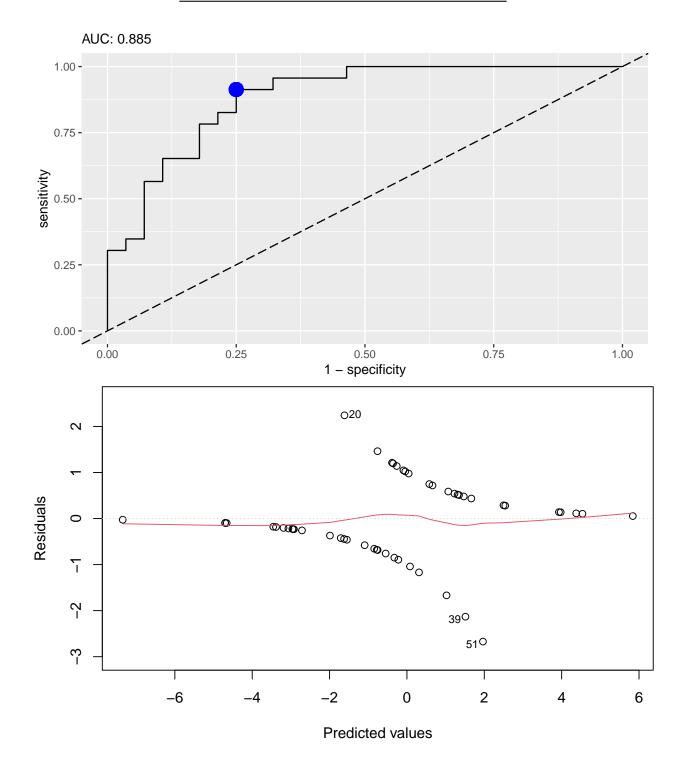
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-20.968	73.937	104.846	41.937	35	51

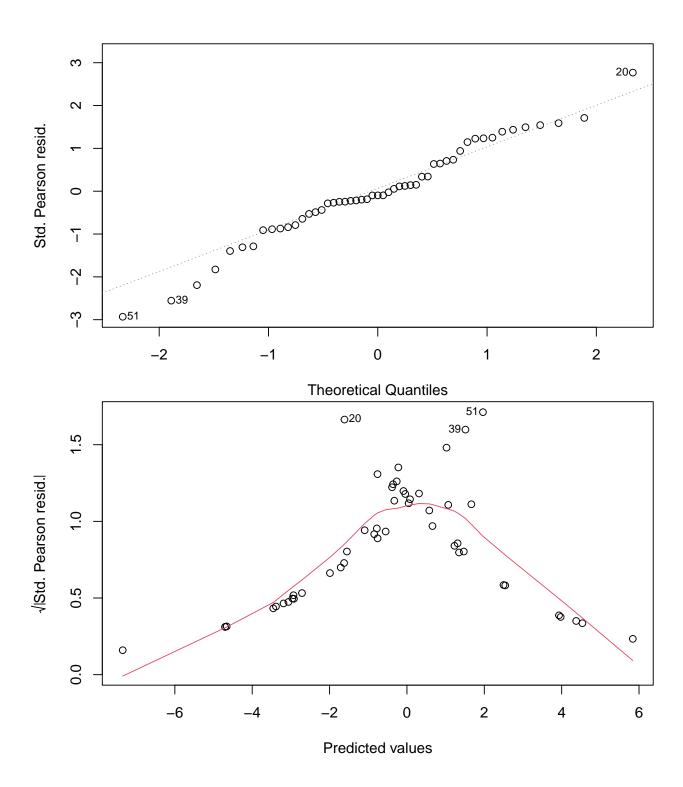
Table 27: Confidence intervals

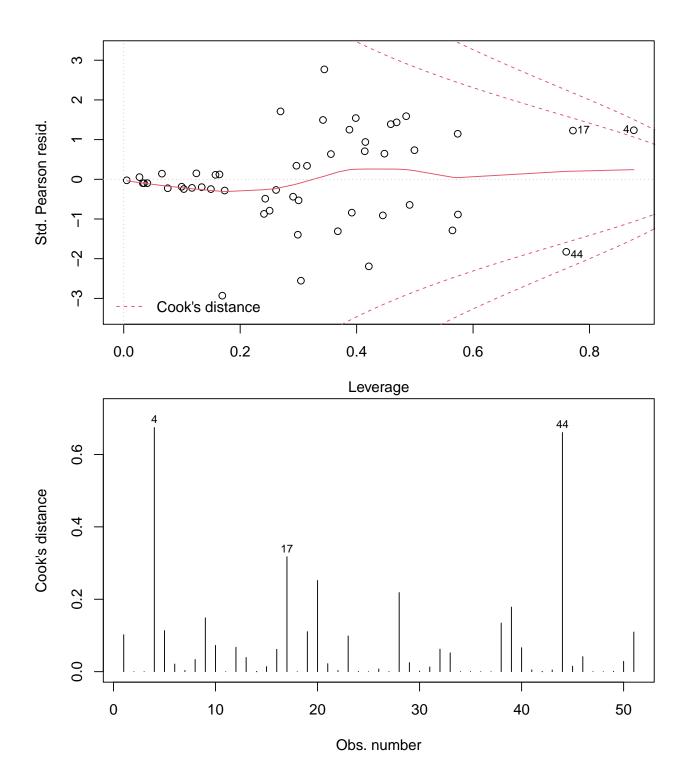
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.000	4.913535e+09	3.063
factor(ventilacao_mecanica)1	0.233	6.158600e+01	3.791
factor(causa_ira)1	0.012	2.414000e+00	0.169
factor(causa_ira)2	0.018	1.803000e+00	0.182
sofa	0.958	3.181000e+00	1.746
su	0.962	1.094000e+00	1.026
saps3	0.952	1.084000e+00	1.016
fek	0.873	1.713000e+00	1.223
uu_su	0.016	6.237100e+01	0.995
una	0.978	1.006000e+00	0.992
sosm	0.902	1.050000e+00	0.973
delta_scr	0.029	5.548104e+04	40.366
tempo_internacao_hospitalar	0.981	1.062000e+00	1.021
score_clinico	0.645	2.631000e+00	1.302
dva_mcg_kg_min	0.003	1.834730e + 02	0.760
uk	0.962	1.054000e+00	1.007

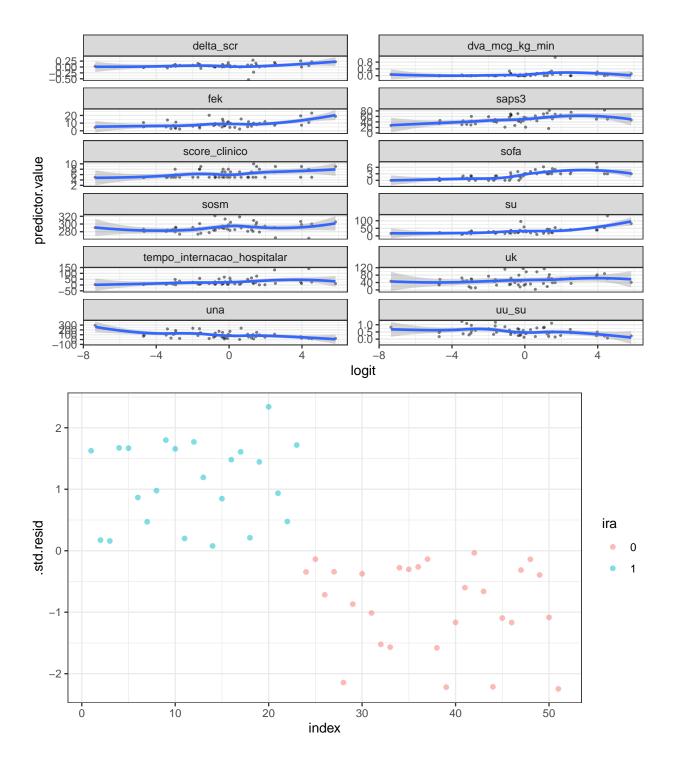
Table 28: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.385	0.75	0.913	0.25









Backwards

Table 29: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-3.291	1.061	-3.101	0.002
sofa	0.771	0.243	3.175	0.001
fek	0.139	0.081	1.708	0.088

Table 29: Model summary (continued)

term estimate std.error statistic p.value	term	estimate	$\operatorname{std.error}$	statistic	p.value
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Table 30: Model details

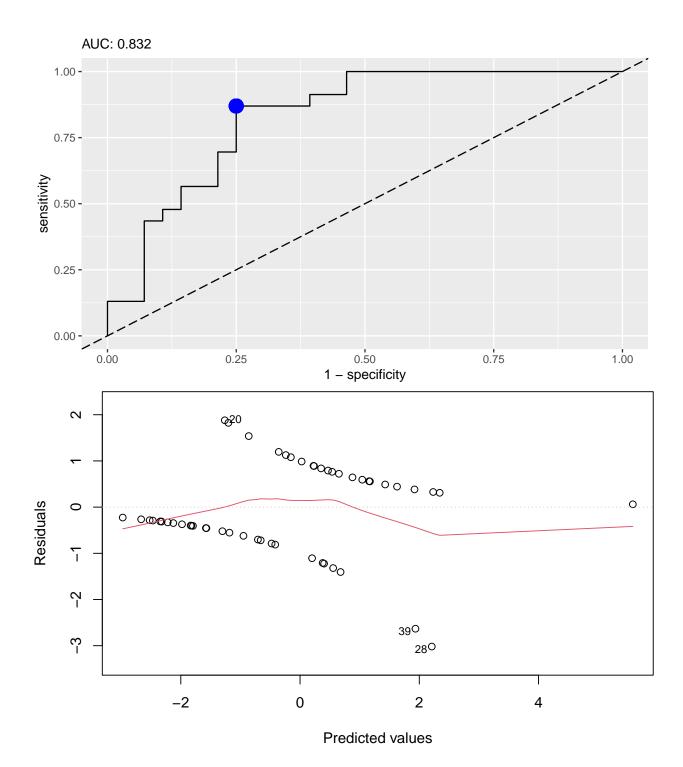
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-25.71	57.42	63.216	51.42	48	51

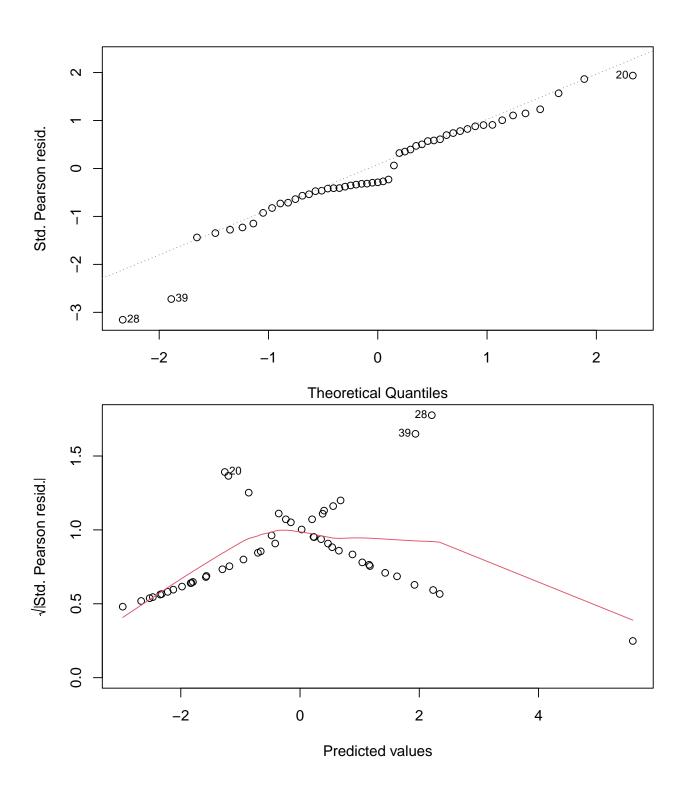
Table 31: Confidence intervals

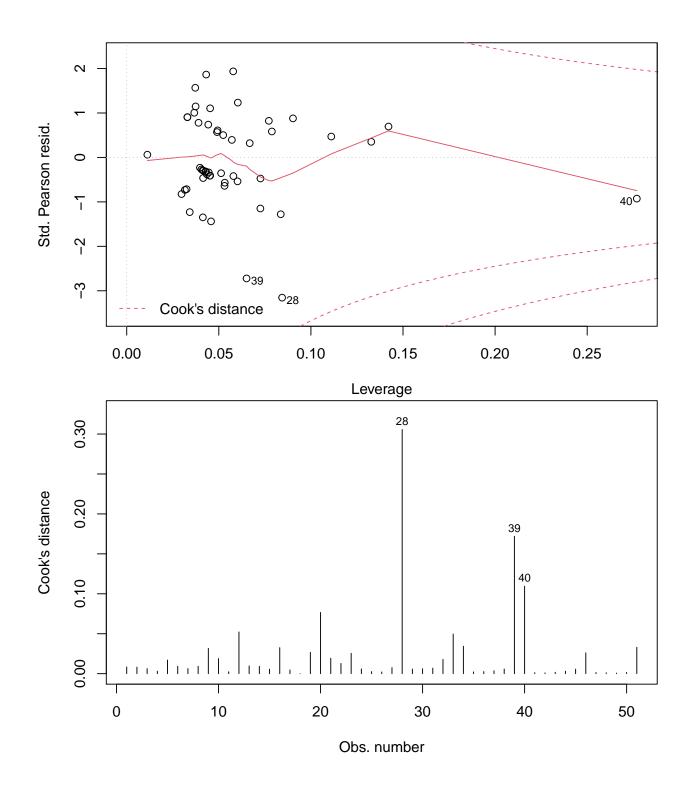
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.005	0.298	0.037
sofa	1.343	3.479	2.162
fek	0.980	1.348	1.149

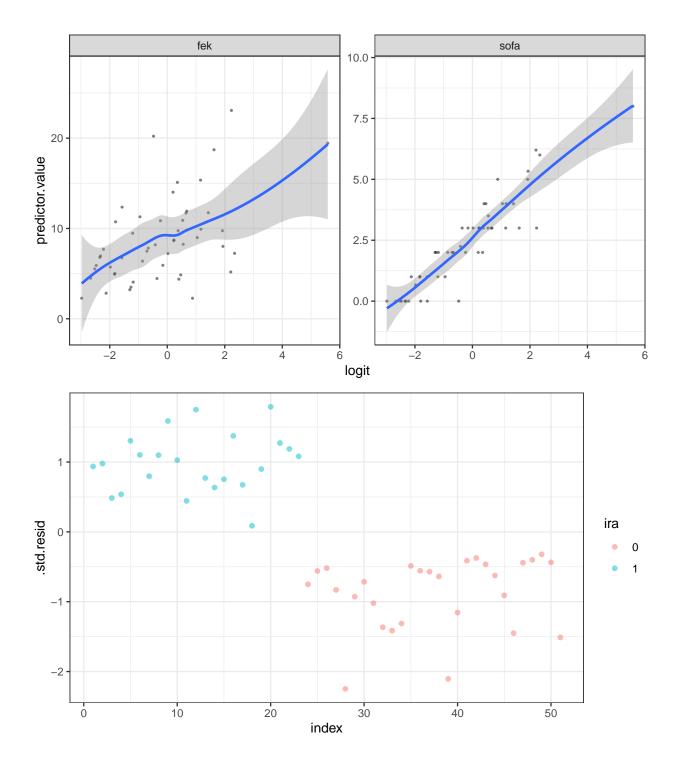
Table 32: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.404	0.75	0.87	0.25









Forwards

Table 33: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.897	0.878	-3.300	0.001
sofa	0.697	0.241	2.890	0.004
su	0.032	0.020	1.613	0.107

Table 33: Model summary (continued)

term estimate std.error statistic p.value	term	estimate	std.error	statistic	p.value
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Table 34: Model details

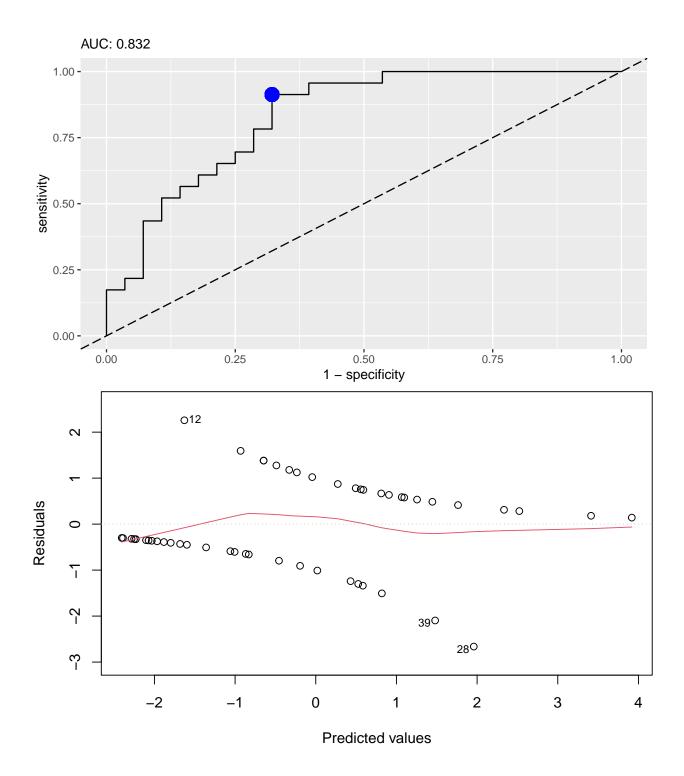
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-25.613	57.226	63.021	51.226	48	51

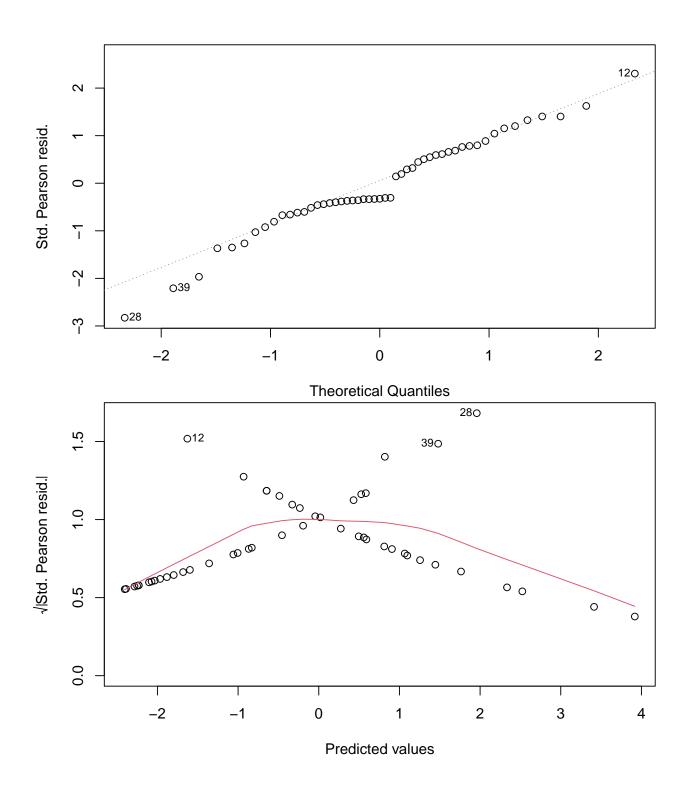
Table 35: Confidence intervals

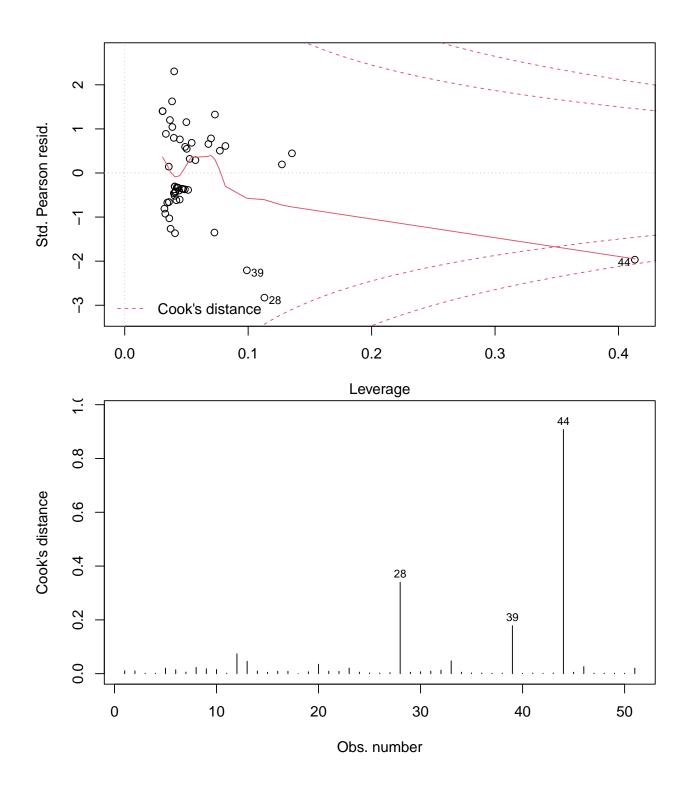
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.010	0.308	0.055
sofa	1.251	3.223	2.008
su	0.993	1.073	1.032

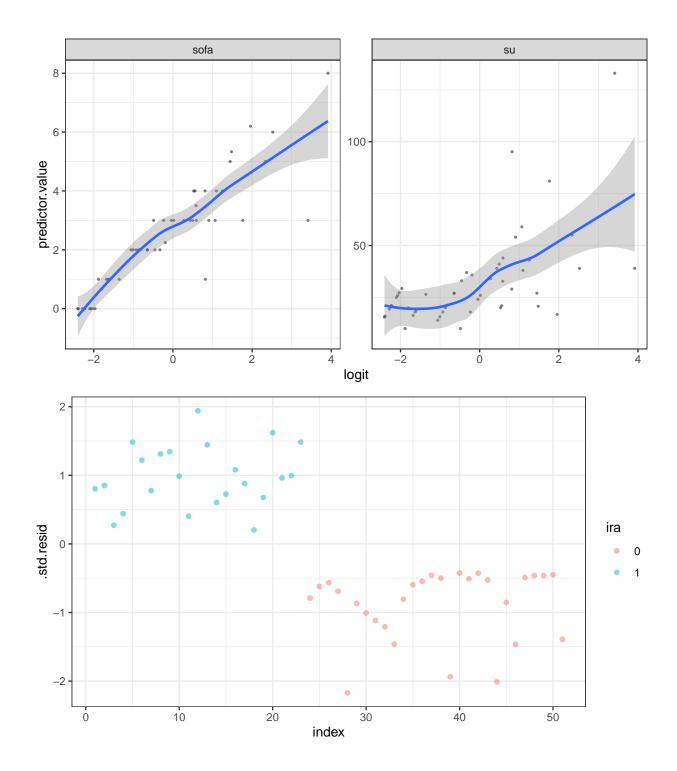
Table 36: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.324	0.679	0.913	0.321









Stepwise

Table 37: Model summary

term	estimate	$\operatorname{std.error}$	statistic	p.value
(Intercept)	-2.897	0.878	-3.300	0.001
sofa	0.697	0.241	2.890	0.004

Table 37: Model summary (continued)

term	estimate	std.error	statistic	p.value
su	0.032	0.020	1.613	0.107

Table 38: Model details

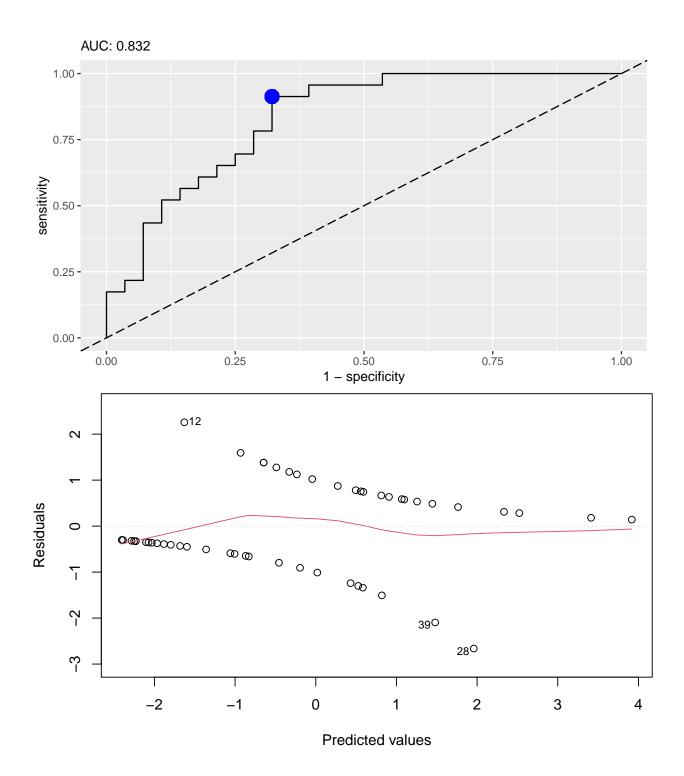
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-25.613	57.226	63.021	51.226	48	51

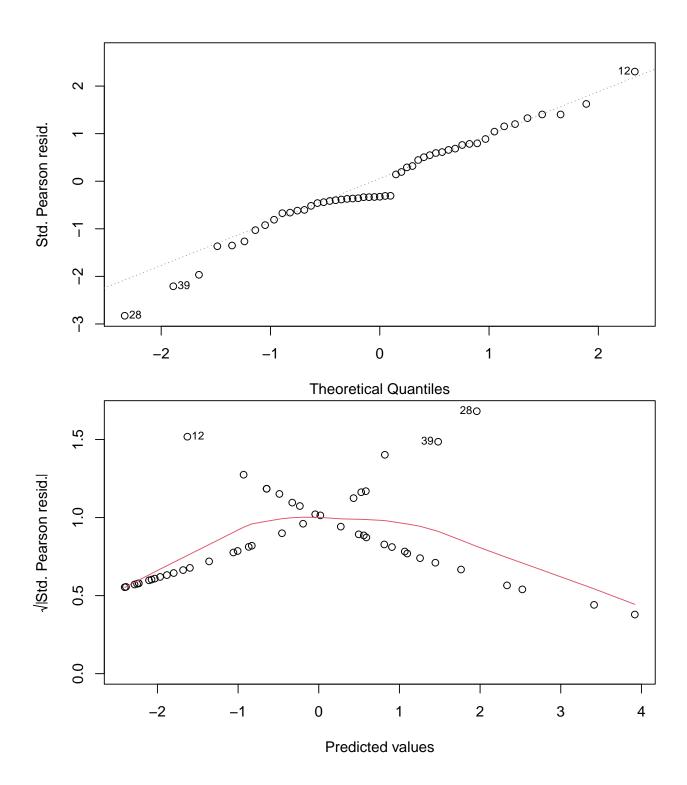
Table 39: Confidence intervals

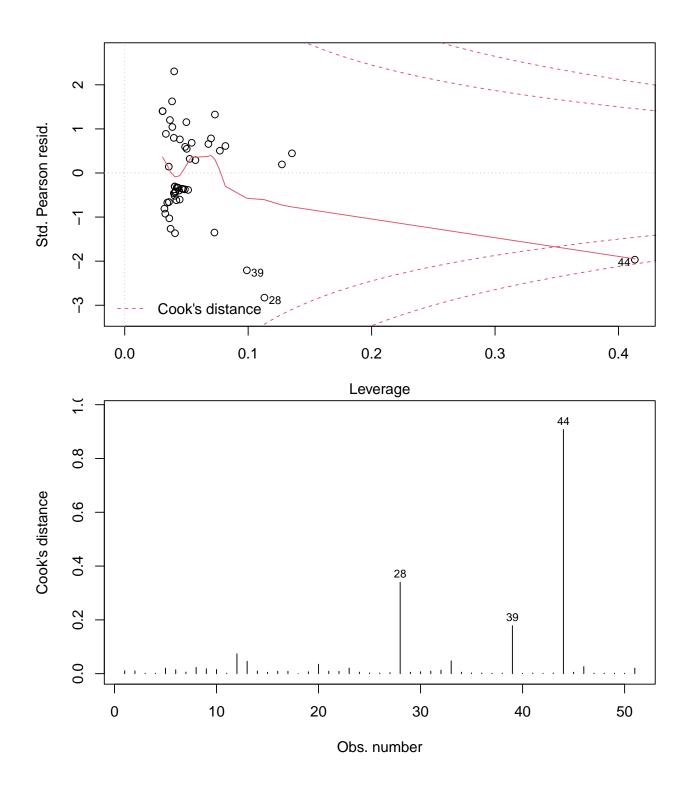
variável	2.5~%	97.5~%	estimativa
(Intercept)	0.010	0.308	0.055
sofa	1.251	3.223	2.008
su	0.993	1.073	1.032

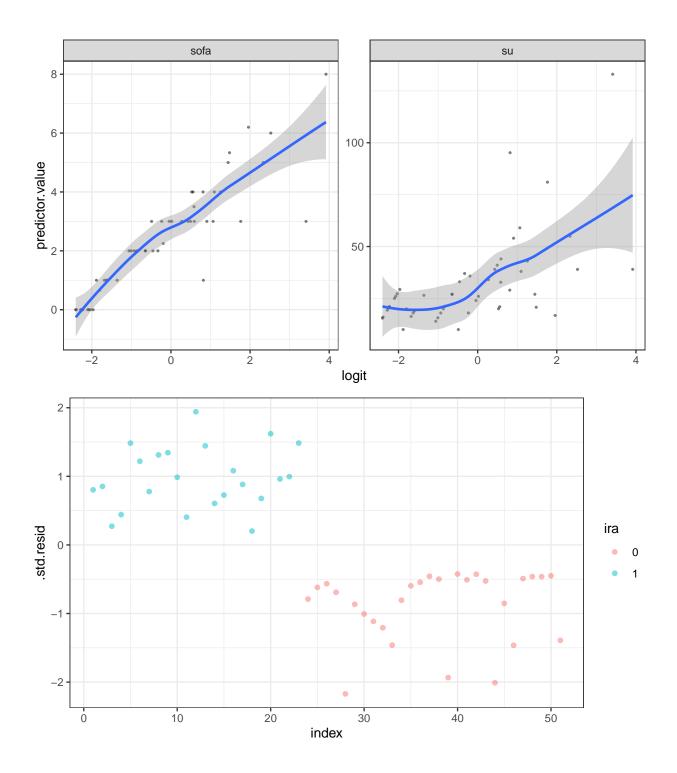
Table 40: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.324	0.679	0.913	0.321









Union model

Table 41: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-3.901	1.282	-3.042	0.002
sofa	0.725	0.245	2.955	0.003
fek	0.122	0.091	1.332	0.183

Table 41: Model summary (continued)

term	estimate	std.error	statistic	p.value
su	0.029	0.021	1.353	0.176

Table 42: Model details

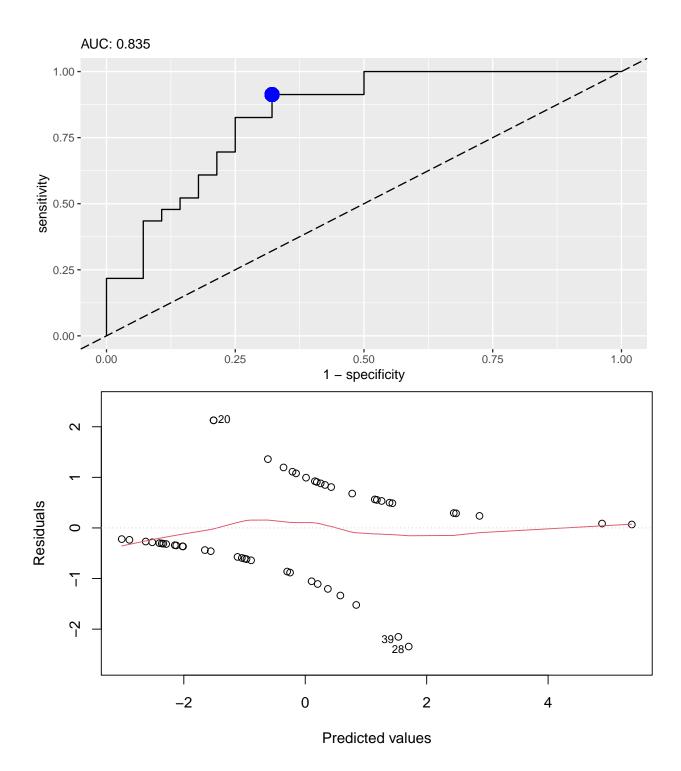
null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-24.711	57.422	65.149	49.422	47	51

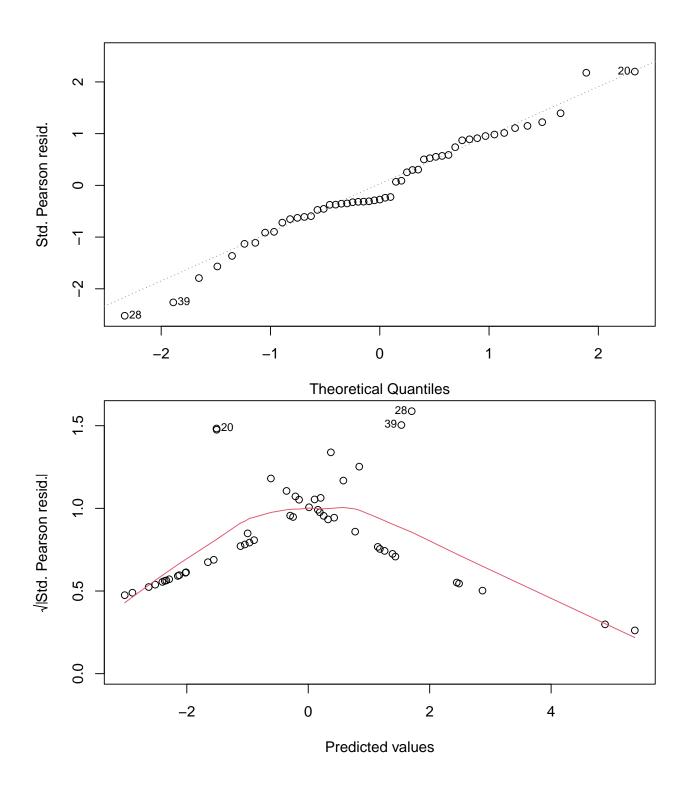
Table 43: Confidence intervals

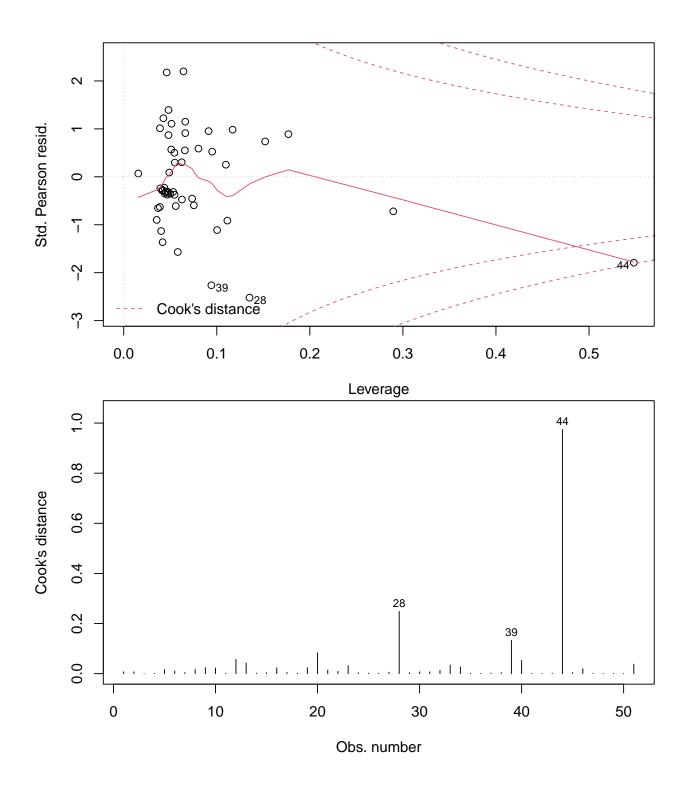
variável	2.5 %	97.5 %	estimativa
(Intercept)	0.002	0.250	0.020
sofa	1.276	3.338	2.064
fek	0.944	1.351	1.129
su	0.987	1.073	1.029

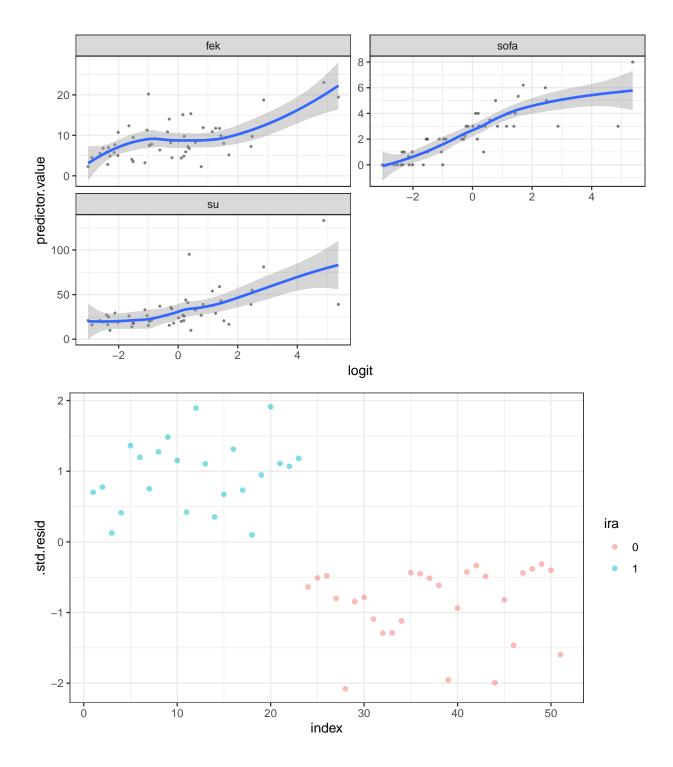
Table 44: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.321	0.679	0.913	0.321









Intersection model

Table 45: Model summary

term	estimate	std.error	statistic	p.value
(Intercept)	-2.038	0.666	-3.058	0.002
sofa	0.765	0.241	3.179	0.001

Table 46: Model details

null.deviance	df.null	logLik	AIC	BIC	deviance	df.residual	nobs
70.21	50	-27.34	58.68	62.543	54.68	49	51

Table 47: Confidence intervals

variável	2.5~%	97.5~%	estimativa
(Intercept) sofa	0.035 1.341	$0.481 \\ 3.446$	0.13 2.15

Table 48: Classifier metrics

	threshold	specificity	sensitivity	fpr
threshold	0.493	0.786	0.783	0.214

