

Modelagem

Carregando bibliotecas

Carregando os dados

Funções auxiliares

Ajustes com o paciente 34

```
selected_models = model_selection(df,
                                  selected_numerical_columns,
                                  selected_categorical_columns,
                                  target,
                                  include_interaction = T)
```

Modelo completo

Table 1: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-785,742	1,315643e+07	0,000	1,000
factor(causa_ira)1	-2243,781	1,117302e+07	0,000	1,000
factor(causa_ira)2	-134,263	1,524051e+08	0,000	1,000
factor(ventilacao_mecanica)1	-98,466	2,011507e+05	0,000	1,000
sofa	38,049	1,152471e+05	0,000	1,000
su	-2,728	1,619972e+04	0,000	1,000
fek	13,459	2,586016e+04	0,001	1,000
uu_su	-110,843	3,712672e+05	0,000	1,000
una	0,863	2,633032e+03	0,000	1,000
scr_basal	-246,998	6,428928e+05	0,000	1,000
sosm	2,811	4,520543e+04	0,000	1,000
delta_scr	-282,057	9,816395e+05	0,000	1,000
tempo_internacao_hospitalar	1,306	3,918359e+03	0,000	1,000
score_clinico	3,794	2,214970e+04	0,000	1,000
dva_mcg_kg_min	362,194	2,512254e+06	0,000	1,000
uk	-0,281	7,680443e+03	0,000	1,000
factor(causa_ira)1:su	12,172	1,408975e+04	0,001	0,999
factor(causa_ira)2:su	-0,502	5,134335e+05	0,000	1,000
factor(causa_ira)1:fek	-7,965	1,770084e+04	0,000	1,000
factor(causa_ira)2:fek	-7,519	4,024667e+06	0,000	1,000
factor(causa_ira)1:uu_su	461,845	3,723590e+05	0,001	0,999
factor(causa_ira)2:uu_su	4,067	4,110438e+07	0,000	1,000
factor(causa_ira)1:una	0,979	3,095771e+03	0,000	1,000

Table 1: Resumo do modelo (*continued*)

Termo	Estimativa	Erro padrão	Estatística	p-valor
factor(causa_ira)2:una	-5,650	9,352664e+04	0,000	1,000
factor(causa_ira)1:scr_basal	1335,536	2,248569e+06	0,001	1,000
factor(causa_ira)2:scr_basal	239,003	1,216677e+07	0,000	1,000
factor(causa_ira)1:sosm	2,011	4,049388e+04	0,000	1,000
factor(causa_ira)2:sosm	0,396	5,850749e+05	0,000	1,000
factor(causa_ira)1:delta_scr	264,229	2,625251e+06	0,000	1,000
factor(causa_ira)2:delta_scr	2230,195	3,430341e+08	0,000	1,000
factor(causa_ira)1:uk	1,976	1,347882e+04	0,000	1,000
factor(causa_ira)2:uk	5,774	1,069760e+06	0,000	1,000

Table 2: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
64	0	20	52

Table 3: Intervalo de confiança para a razão de chances

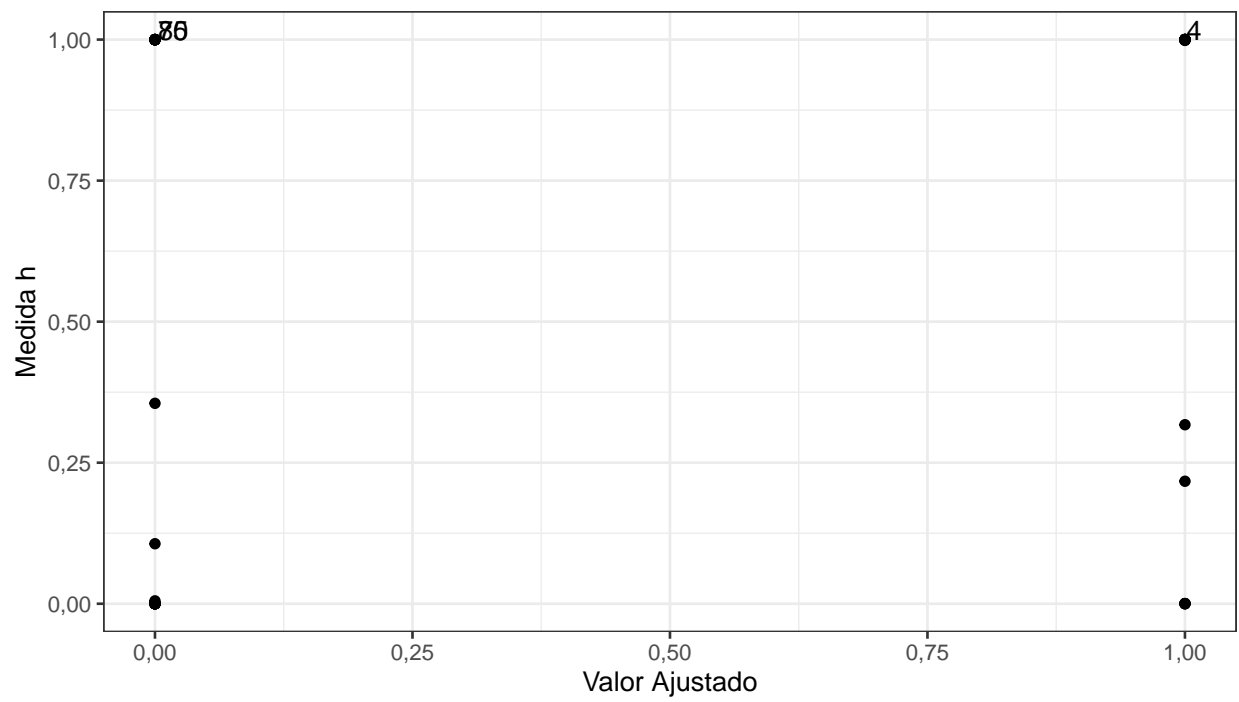
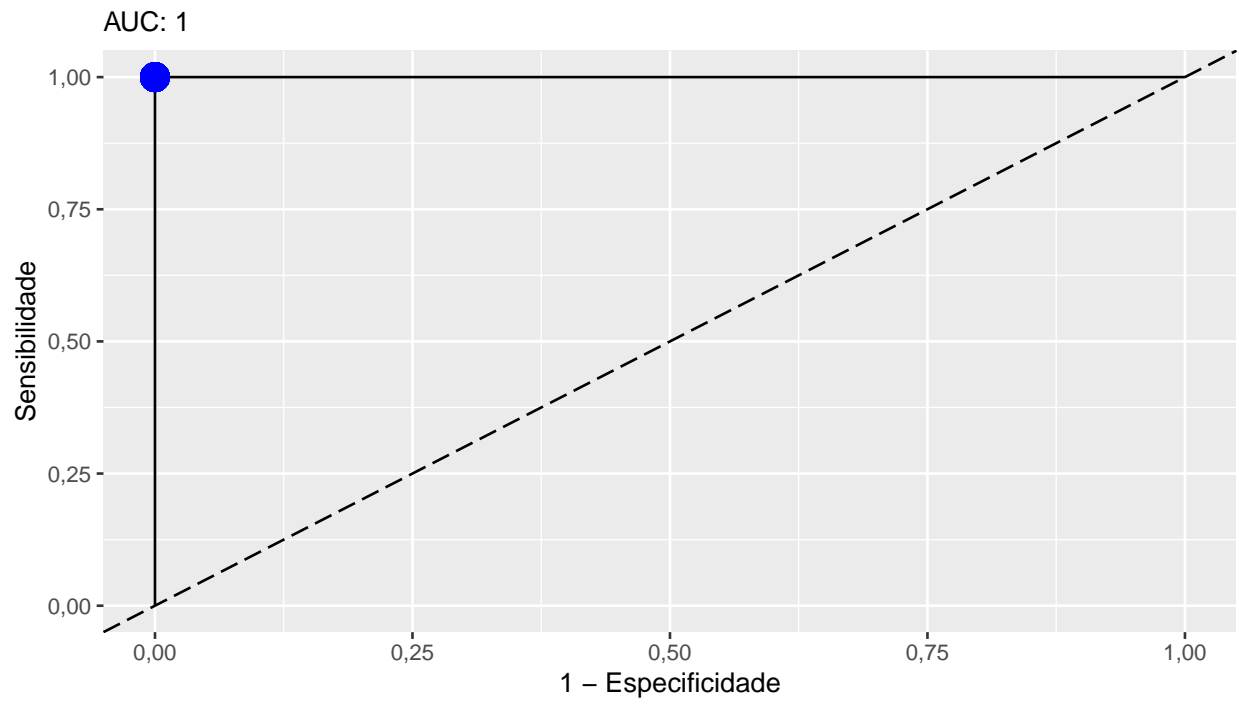
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,000000e+00	0	Inf
factor(causa_ira)1	0,000000e+00	0	Inf
factor(causa_ira)2	0,000000e+00	0	Inf
factor(ventilacao_mecanica)1	0,000000e+00	0	Inf
sofa	3,344070e+16	0	Inf
su	6,500000e-02	0	5,974035e+247
fek	7,004351e+05	0	Inf
uu_su	0,000000e+00	0	Inf
una	2,371000e+00	0	4,074236e+41
scr_basal	0,000000e+00	0	Inf
sosm	1,662200e+01	0	Inf
delta_scr	0,000000e+00	0	Inf
tempo_internacao_hospitalar	3,691000e+00	0	1,345656e+59
score_clinico	4,442500e+01	0	Inf
dva_mcg_kg_min	1,990238e+157	0	Inf
uk	7,550000e-01	0	3,261006e+121
factor(causa_ira)1:su	1,932071e+05	0	2,666951e+228
factor(causa_ira)2:su	6,050000e-01	0	Inf
factor(causa_ira)1:fek	0,000000e+00	0	1,192998e+246
factor(causa_ira)2:fek	1,000000e-03	0	Inf
factor(causa_ira)1:uu_su	3,771909e+200	0	Inf
factor(causa_ira)2:uu_su	5,839300e+01	0	Inf
factor(causa_ira)1:una	2,661000e+00	0	8,078648e+45
factor(causa_ira)2:una	4,000000e-03	0	Inf
factor(causa_ira)1:scr_basal	Inf	0	Inf
factor(causa_ira)2:scr_basal	6,277743e+103	0	Inf

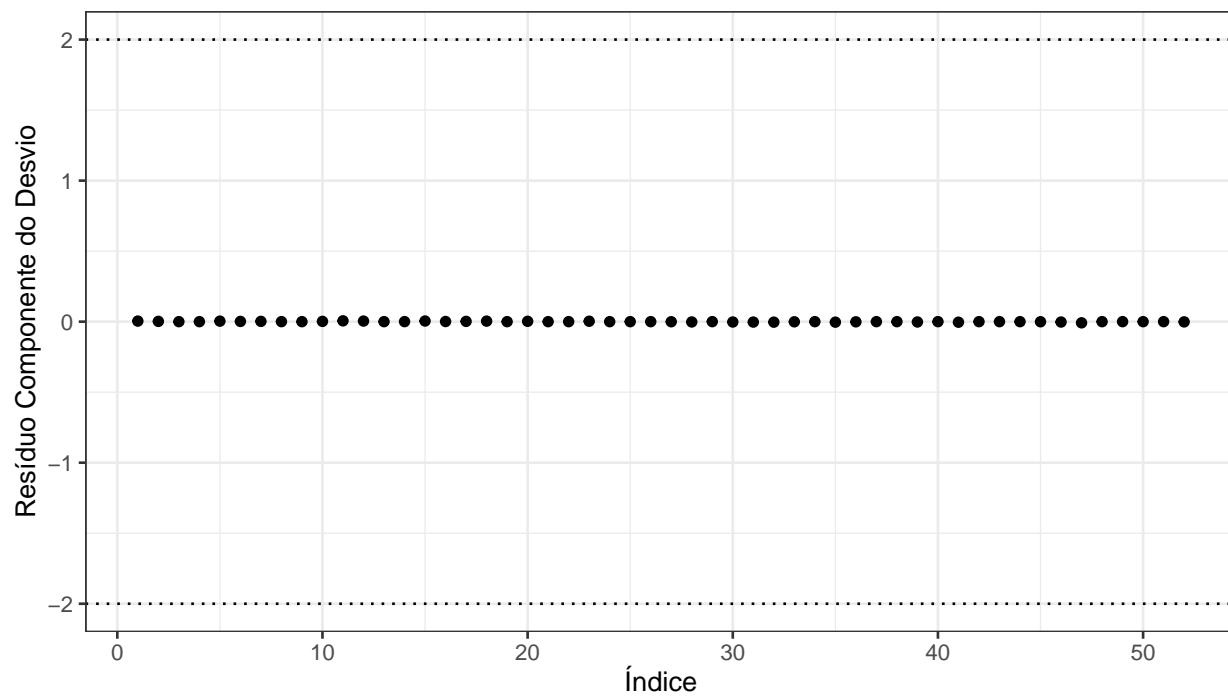
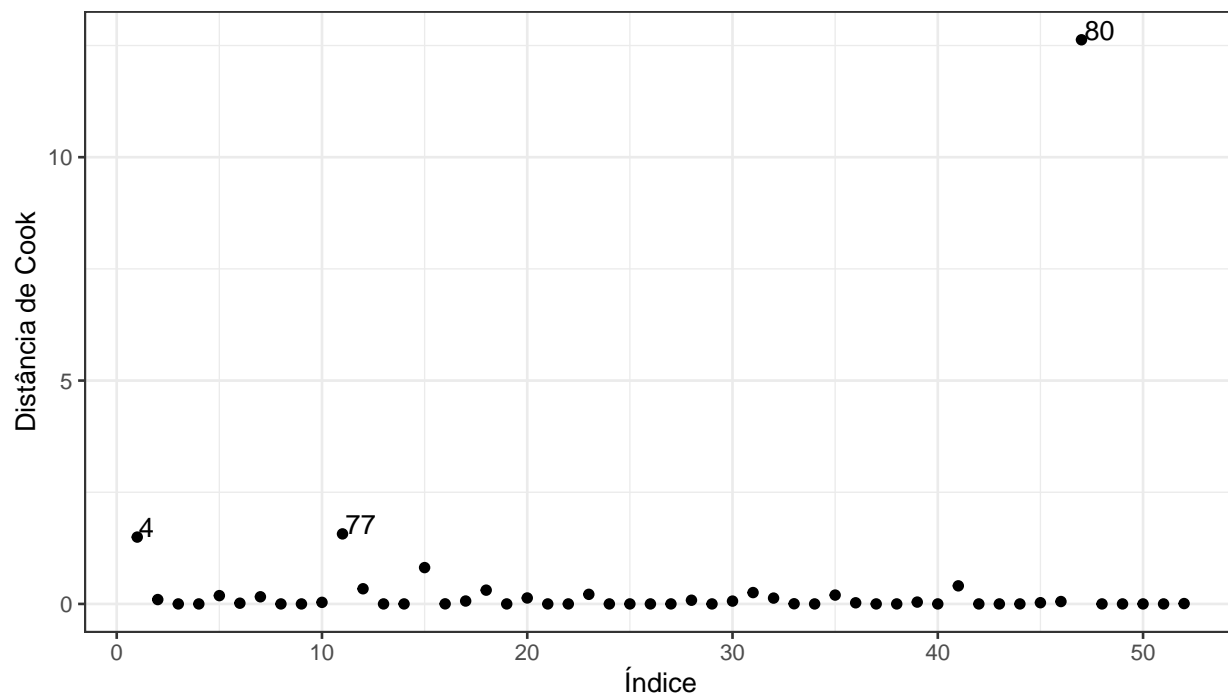
Table 3: Intervalo de confiança para a razão de chances (*continued*)

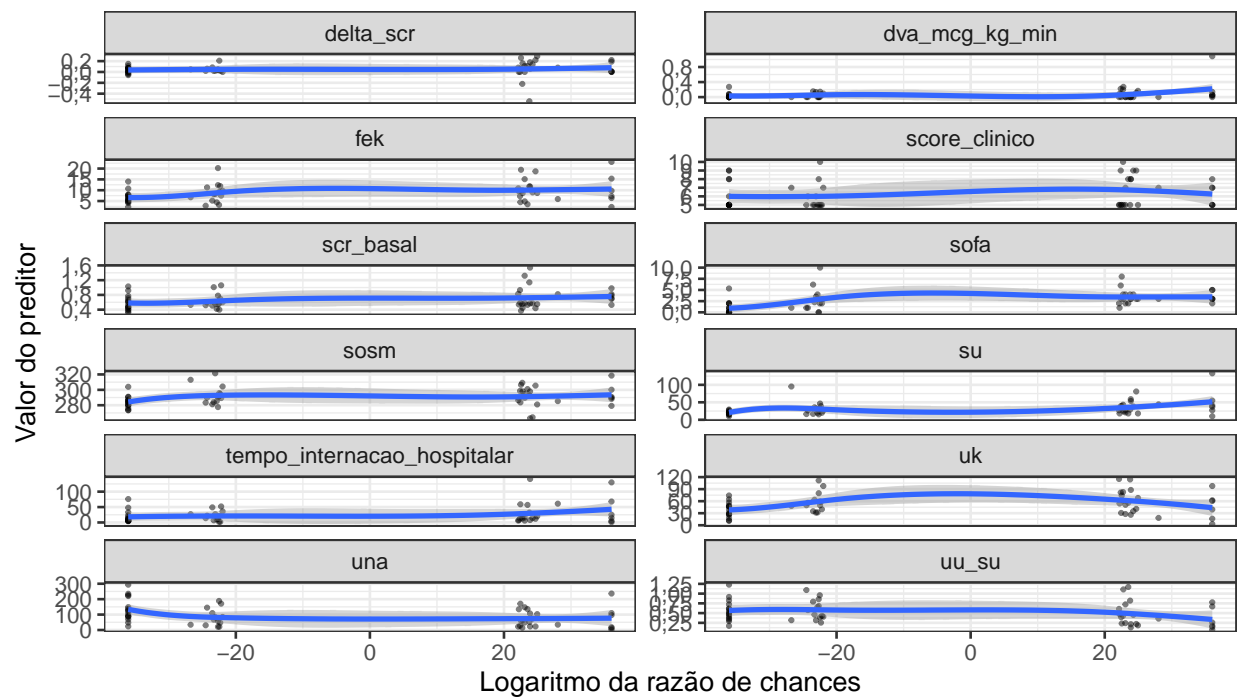
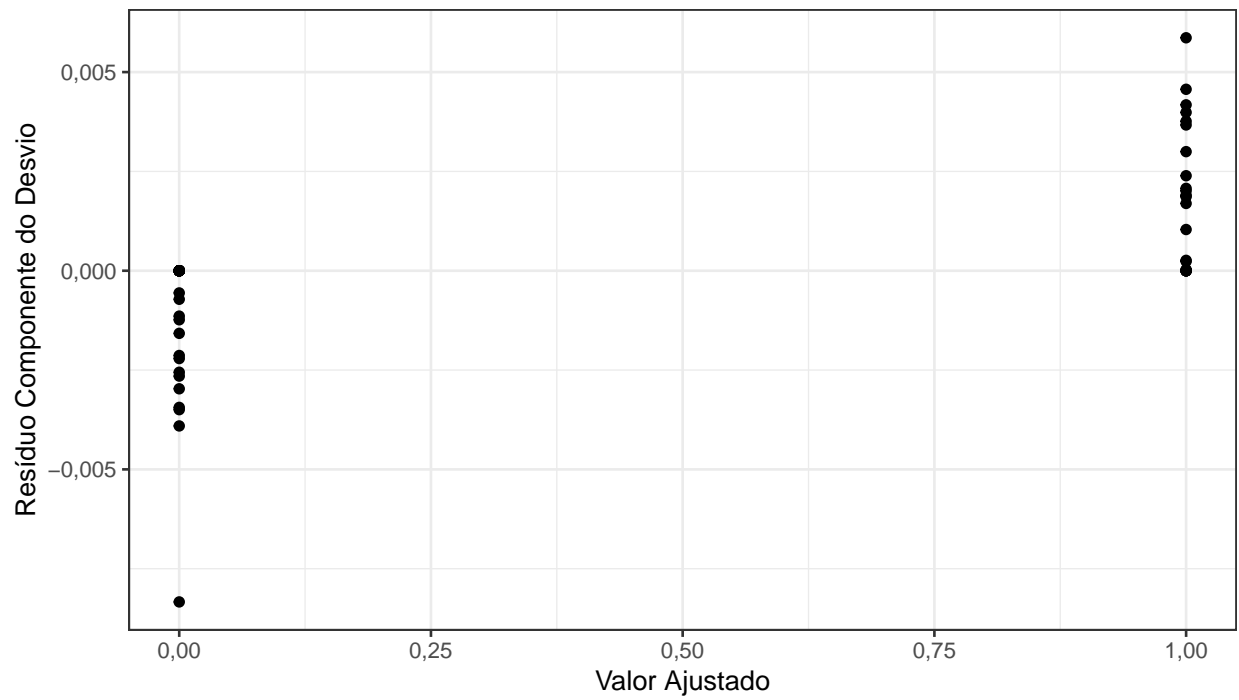
Variável	Estimativa	2,5 %	97,5 %
factor(causa_ira)1:sosm	7,470000e+00	0	Inf
factor(causa_ira)2:sosm	1,486000e+00	0	Inf
factor(causa_ira)1:delta_scr	5,664401e+114	0	Inf
factor(causa_ira)2:delta_scr	Inf	0	Inf
factor(causa_ira)1:uk	7,211000e+00	0	2,102645e+214
factor(causa_ira)2:uk	3,219590e+02	0	Inf

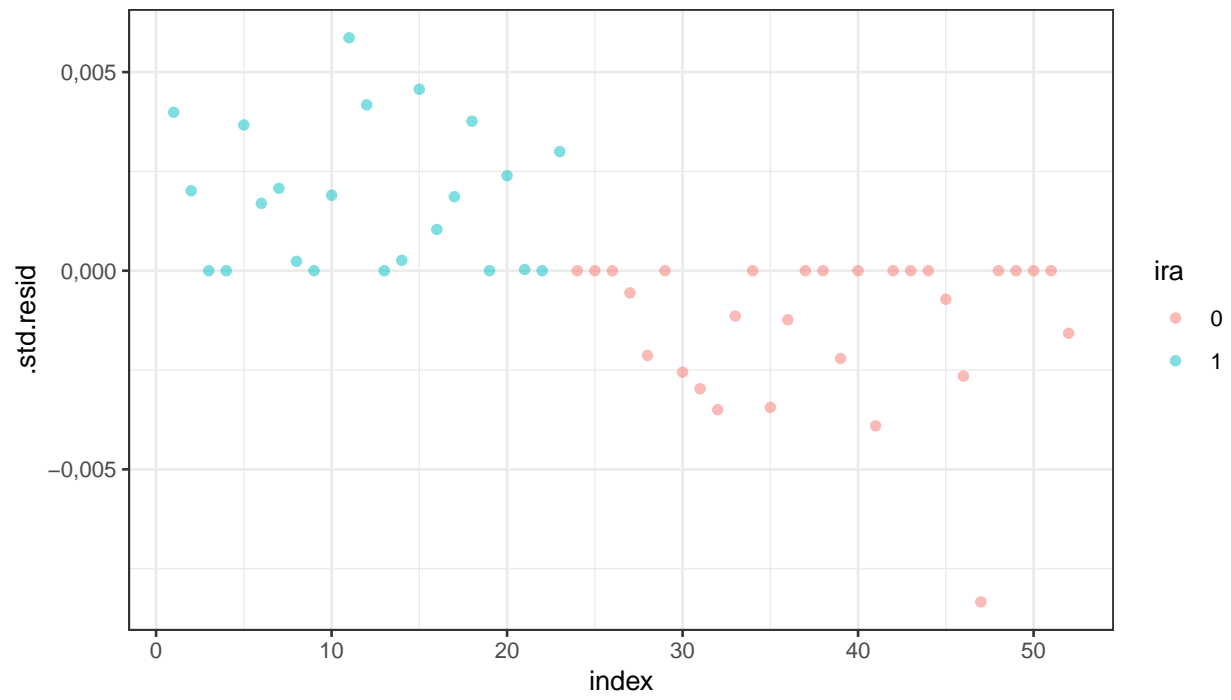
Table 4: VIF

Variável	GVIF	Df	$\text{GVIF}^{1/(2 \cdot \text{Df})}$
factor(causa_ira)	5,891216e+12	2	1557,942
factor(ventilacao_mecanica)	6,918500e+01	1	8,318
sofa	7,133560e+02	1	26,709
su	2,776180e+02	1	16,662
fek	1,156010e+02	1	10,752
uu_su	7,932600e+01	1	8,906
una	2,009370e+02	1	14,175
scr_basal	2,334510e+02	1	15,279
sosm	1,975115e+03	1	44,442
delta_scr	1,170560e+02	1	10,819
tempo_internacao_hospitalar	6,726200e+01	1	8,201
score_clinico	1,409600e+01	1	3,754
dva_mcg_kg_min	3,662300e+02	1	19,137
uk	4,018540e+02	1	20,046
factor(causa_ira):su	1,497979e+08	2	110,631
factor(causa_ira):fek	1,083410e+08	2	102,023
factor(causa_ira):uu_su	6,034216e+07	2	88,136
factor(causa_ira):una	5,025536e+06	2	47,347
factor(causa_ira):scr_basal	4,070557e+08	2	142,041
factor(causa_ira):sosm	8,605994e+12	2	1712,775
factor(causa_ira):delta_scr	3,596276e+08	2	137,709
factor(causa_ira):uk	7,522122e+09	2	294,500









Backward

Table 5: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5021,288	1397360,452	-0,004	0,997
factor(causa_ira)1	-3961,209	1309601,454	-0,003	0,998
factor(causa_ira)2	4756,624	1612210,154	0,003	0,998
sofa	93,866	20407,328	0,005	0,996
su	-7,190	2270,678	-0,003	0,997
fek	42,610	11039,164	0,004	0,997
uu_su	30,178	54970,457	0,001	1,000
una	1,814	422,902	0,004	0,997
scr_basal	-517,607	134619,537	-0,004	0,997
sosm	16,140	4741,801	0,003	0,997
tempo_internacao_hospitalar	3,740	1437,920	0,003	0,998
factor(causa_ira)1:su	36,509	9448,393	0,004	0,997
factor(causa_ira)2:su	6,672	2953,814	0,002	0,998
factor(causa_ira)1:uu_su	793,582	245630,583	0,003	0,997
factor(causa_ira)2:uu_su	-98,770	207265,655	0,000	1,000
factor(causa_ira)1:una	3,225	986,186	0,003	0,997
factor(causa_ira)2:una	-8,582	2438,773	-0,004	0,997
factor(causa_ira)1:scr_basal	3932,794	806904,680	0,005	0,996
factor(causa_ira)2:scr_basal	693,651	188459,112	0,004	0,997
factor(causa_ira)1:sosm	-1,286	2850,856	0,000	1,000
factor(causa_ira)2:sosm	-16,243	5351,244	-0,003	0,998

Table 6: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
42	0	31	52

Table 7: Intervalo de confiança para a razão de chances

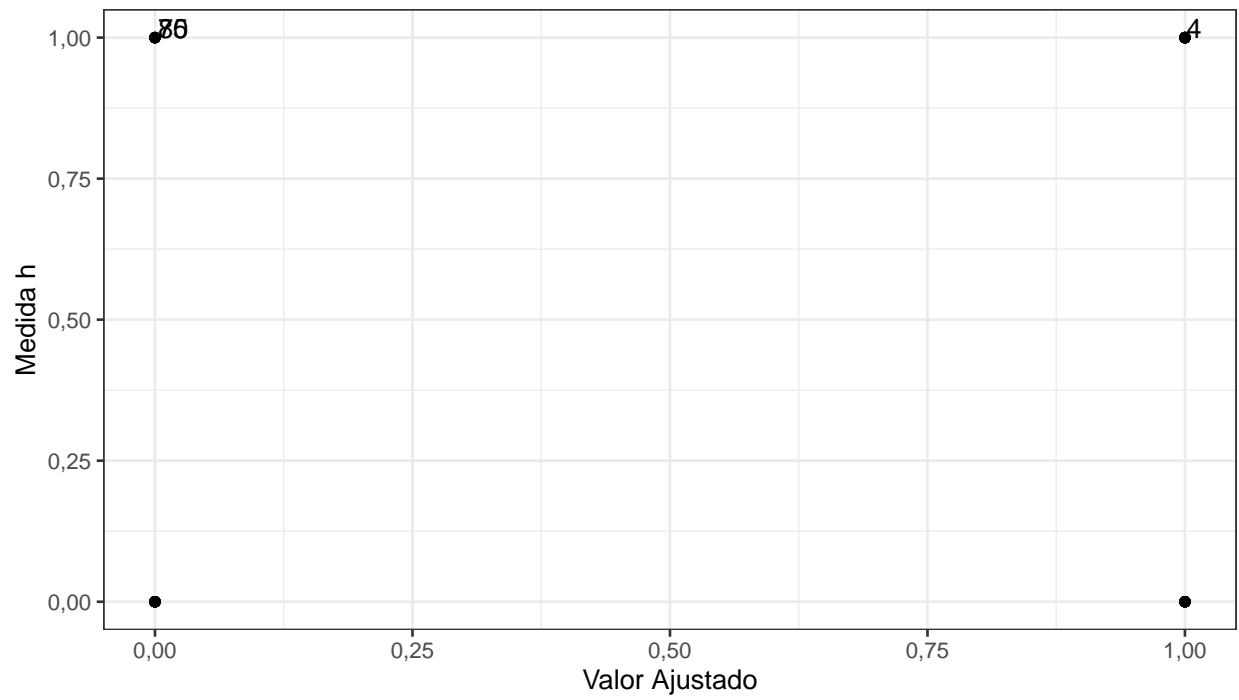
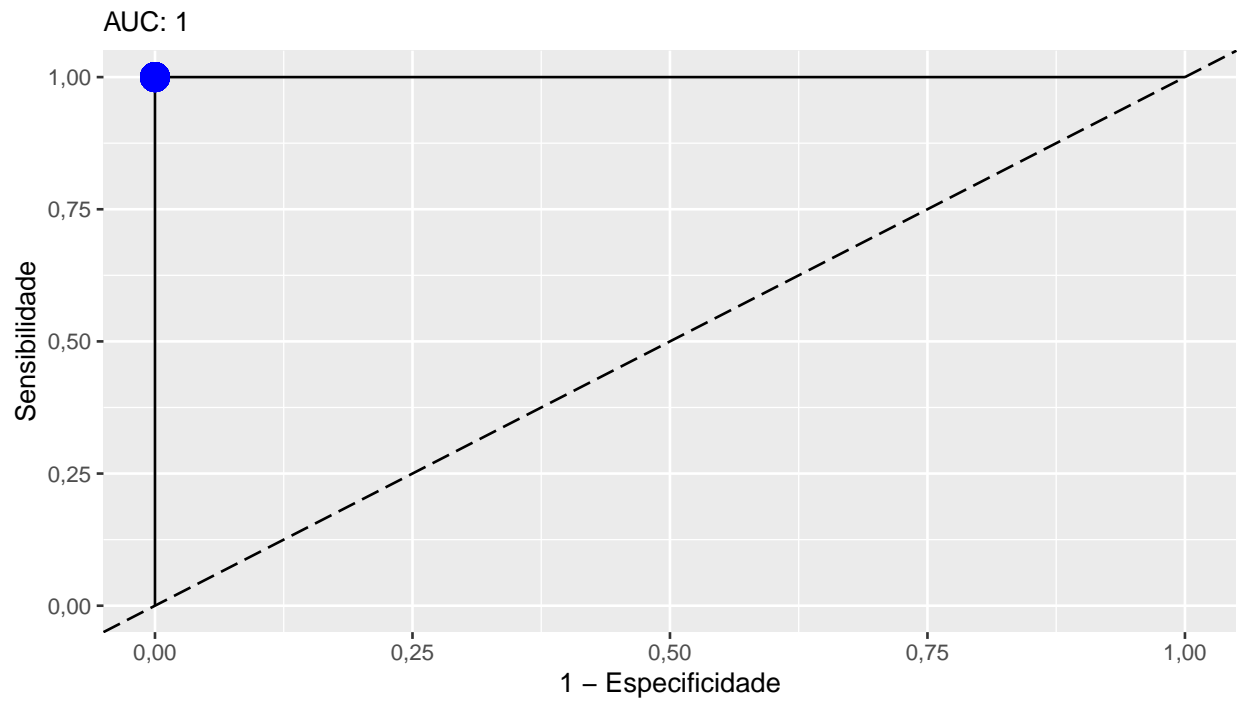
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,000000e+00	0	Inf
factor(causa_ira)1	0,000000e+00	0	Inf
factor(causa_ira)2	Inf	0	Inf
sofa	5,825345e+40	0	Inf
su	1,000000e-03	0	6,892404e+32
fek	3,202444e+18	0	6,317888e+171
uu_su	1,277316e+13	0	Inf
una	6,135000e+00	0	1,171864e+07
scr_basal	0,000000e+00	0	Inf
sosm	1,022449e+07	0	1,545426e+79
tempo_internacao_hospitalar	4,209400e+01	0	9,644370e+20
factor(causa_ira)1:su	7,174357e+15	0	2,088256e+160
factor(causa_ira)2:su	7,903170e+02	0	1,559393e+44

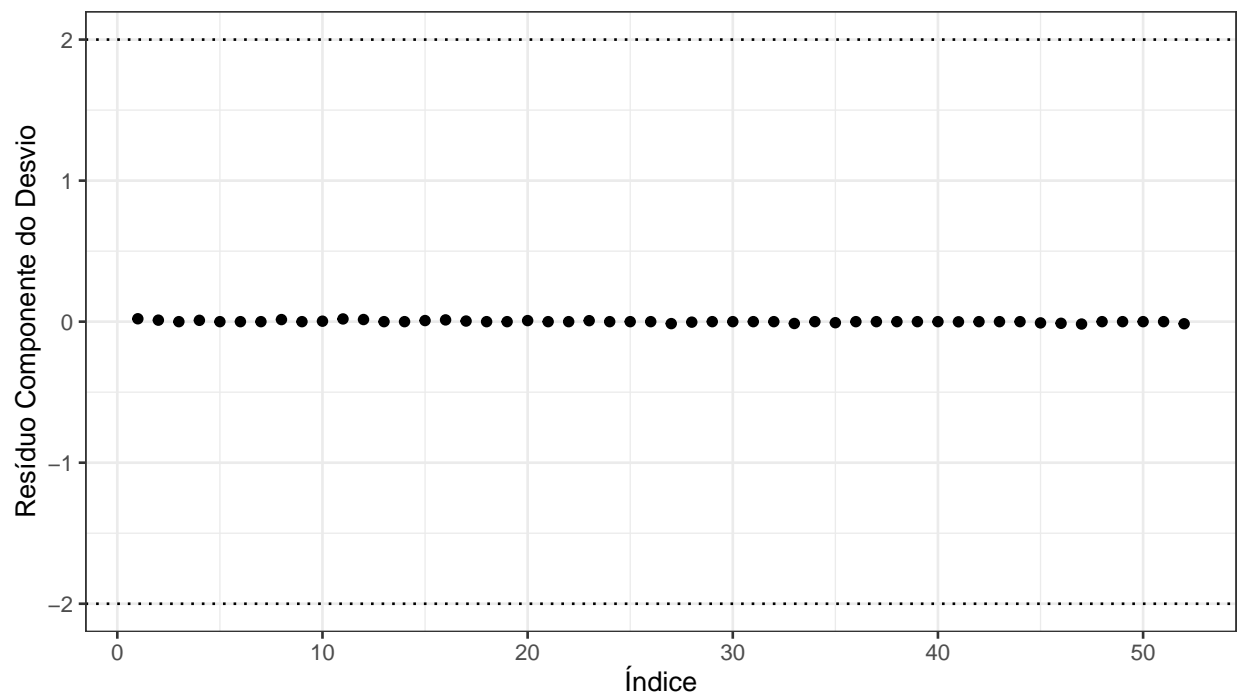
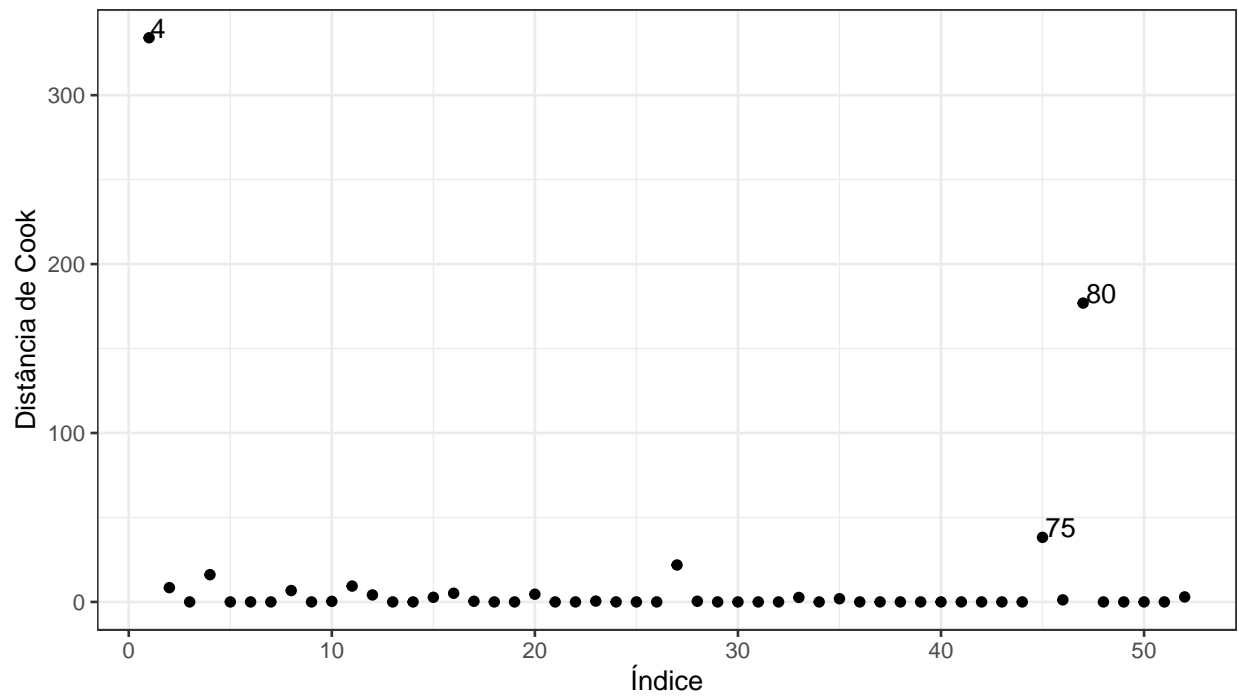
Table 7: Intervalo de confiança para a razão de chances (*continued*)

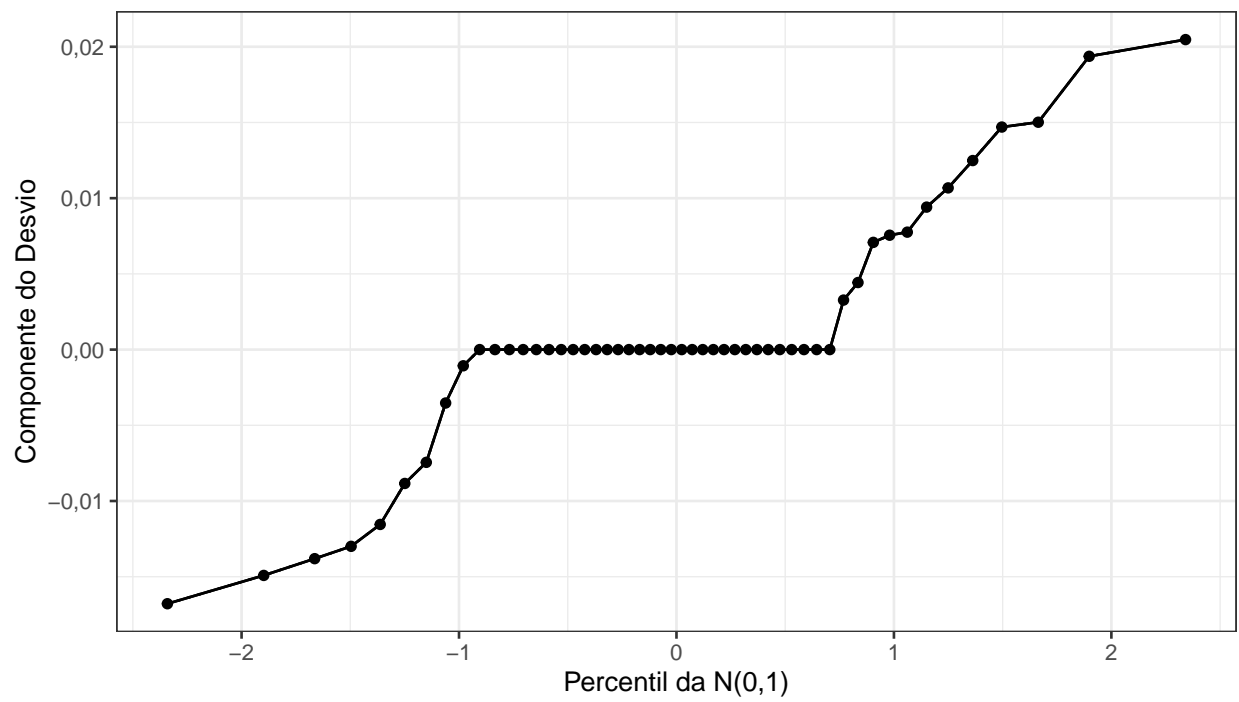
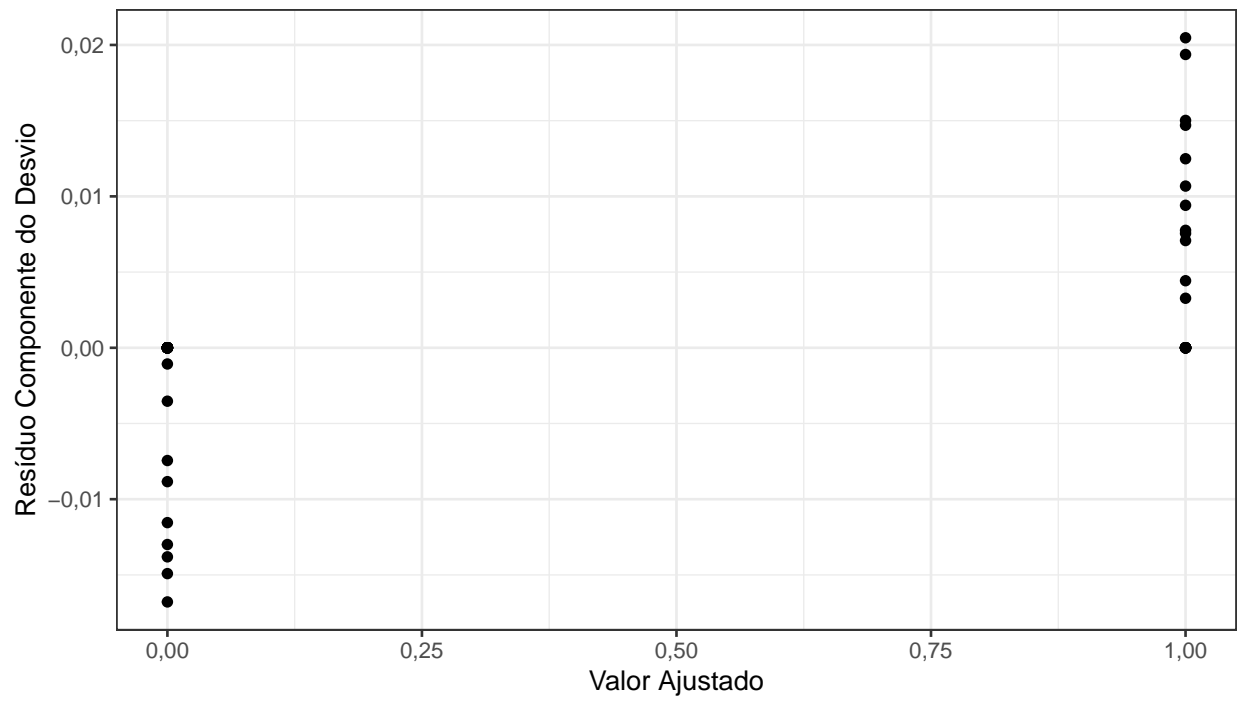
Variável	Estimativa	2,5 %	97,5 %
factor(causa_ira)1:uu_su	Inf	0	Inf
factor(causa_ira)2:uu_su	0,000000e+00	0	Inf
factor(causa_ira)1:una	2,515200e+01	0	1,045712e+16
factor(causa_ira)2:una	0,000000e+00	0	1,498726e+36
factor(causa_ira)1:scr_basal	Inf	0	Inf
factor(causa_ira)2:scr_basal	1,773145e+301	0	Inf
factor(causa_ira)1:sosm	2,760000e-01	0	1,848017e+40
factor(causa_ira)2:sosm	0,000000e+00	0	1,072813e+67

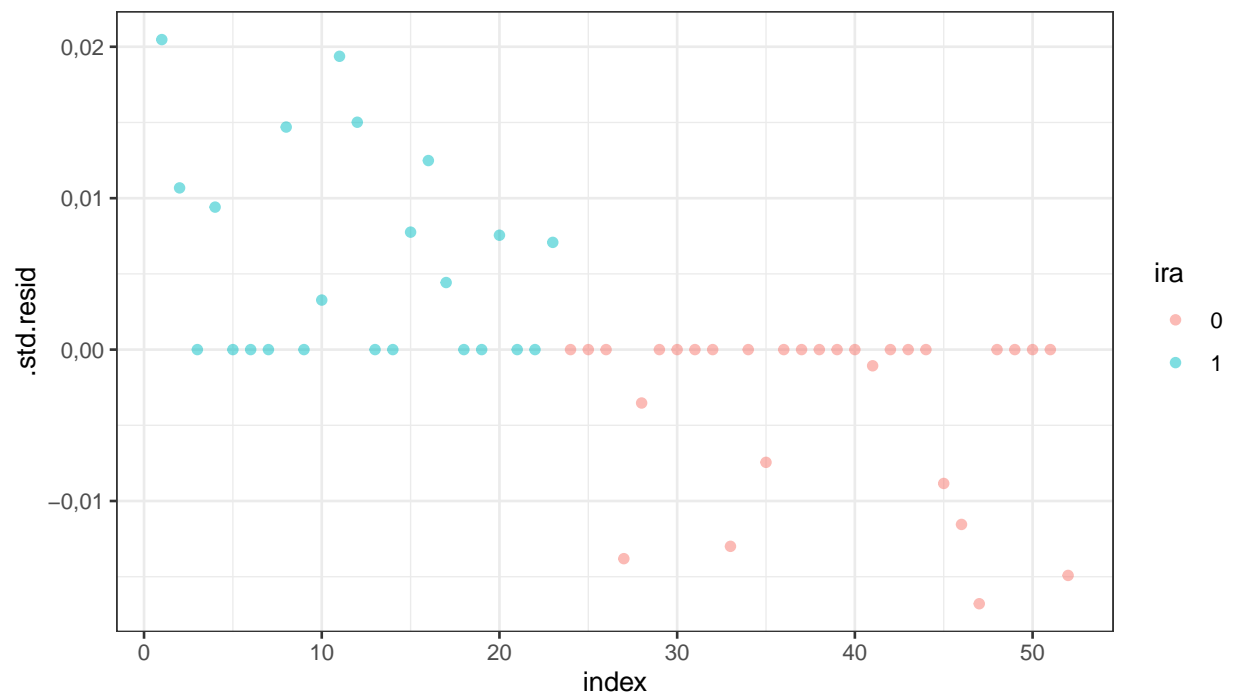
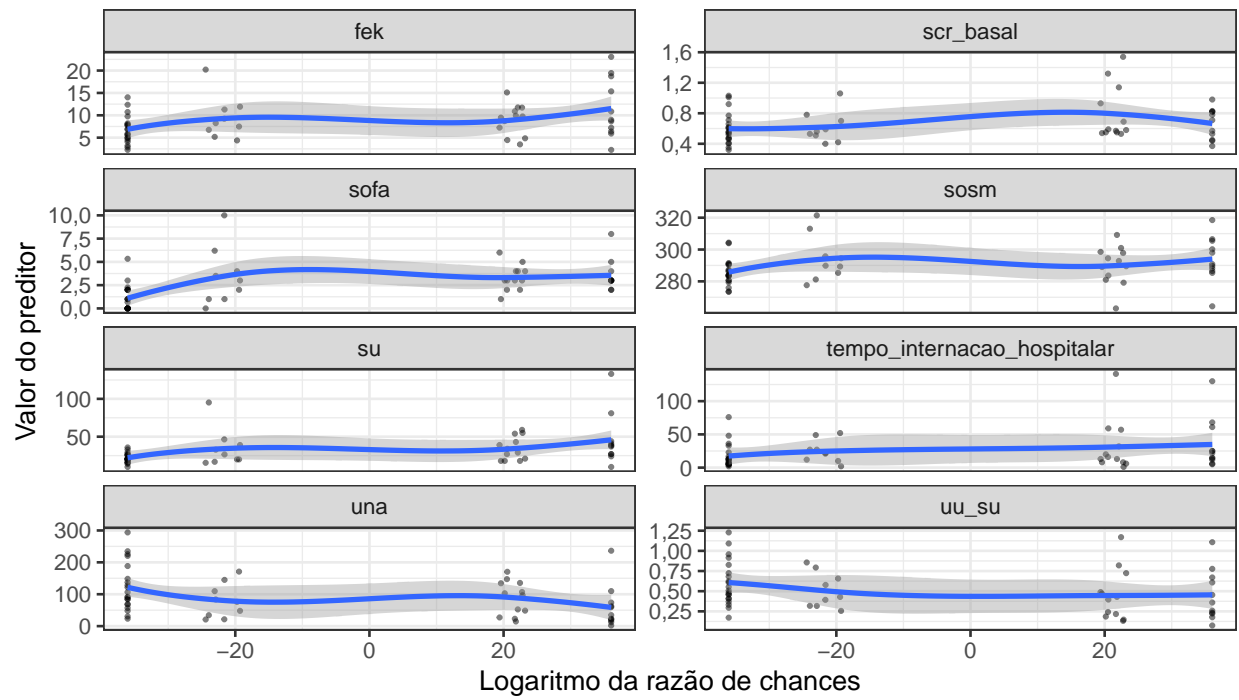
Table 8: VIF

Variável	GVIF	Df	$\widehat{GVIF}(1/(2*Df))$
factor(causa_ira)	30142884,165	2	74,096
sofa	86,344	1	9,292
su	38,845	1	6,233
fek	66,392	1	8,148
uu_su	5,240	1	2,289
una	35,015	1	5,917
scr_basal	80,863	1	8,992
sosm	74,586	1	8,636
tempo_internacao_hospitalar	77,462	1	8,801
factor(causa_ira):su	19875,807	2	11,874
factor(causa_ira):uu_su	1152,515	2	5,827
factor(causa_ira):una	1906,262	2	6,608
factor(causa_ira):scr_basal	19520,610	2	11,820
factor(causa_ira):sosm	10109447,788	2	56,387









Forward

Table 9: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-4,425	1,435	-3,085	0,002
sofa	0,463	0,191	2,421	0,015
scr_basal	3,188	1,595	1,999	0,046
su	0,028	0,018	1,558	0,119

Table 10: Detalhes do modelo

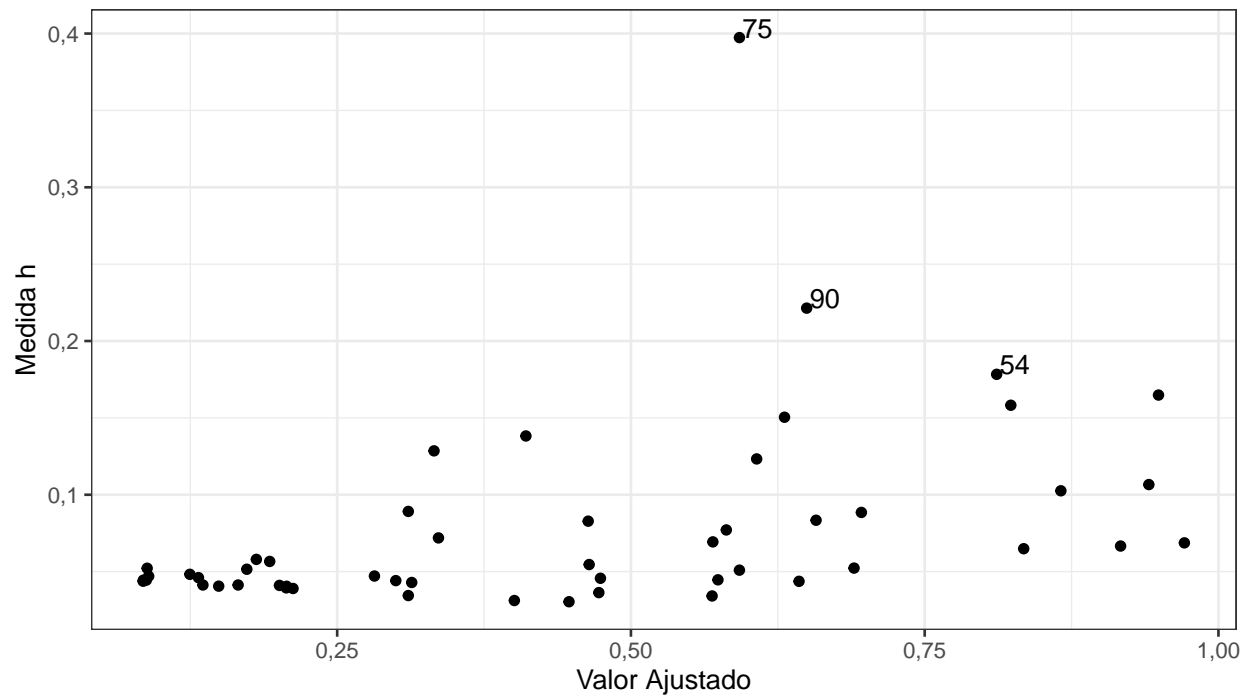
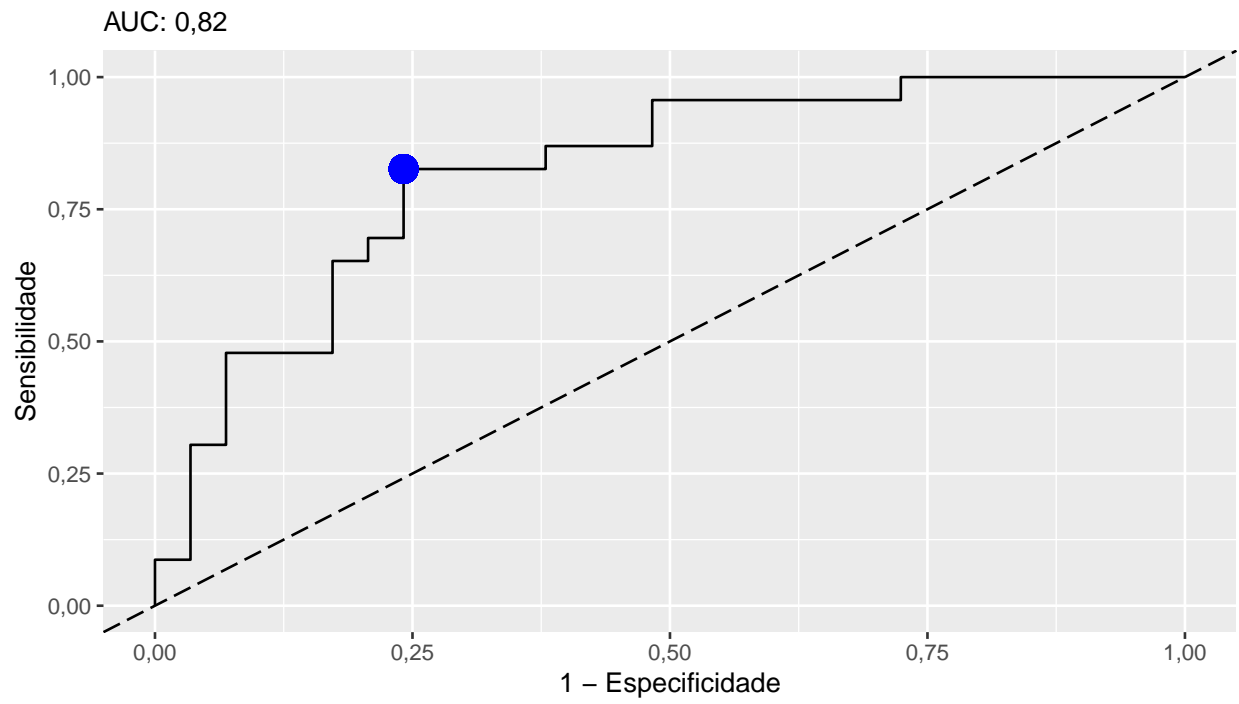
AIC	deviance	Graus de liberdade do resíduo	Número de observações
62,681	54,681	48	52

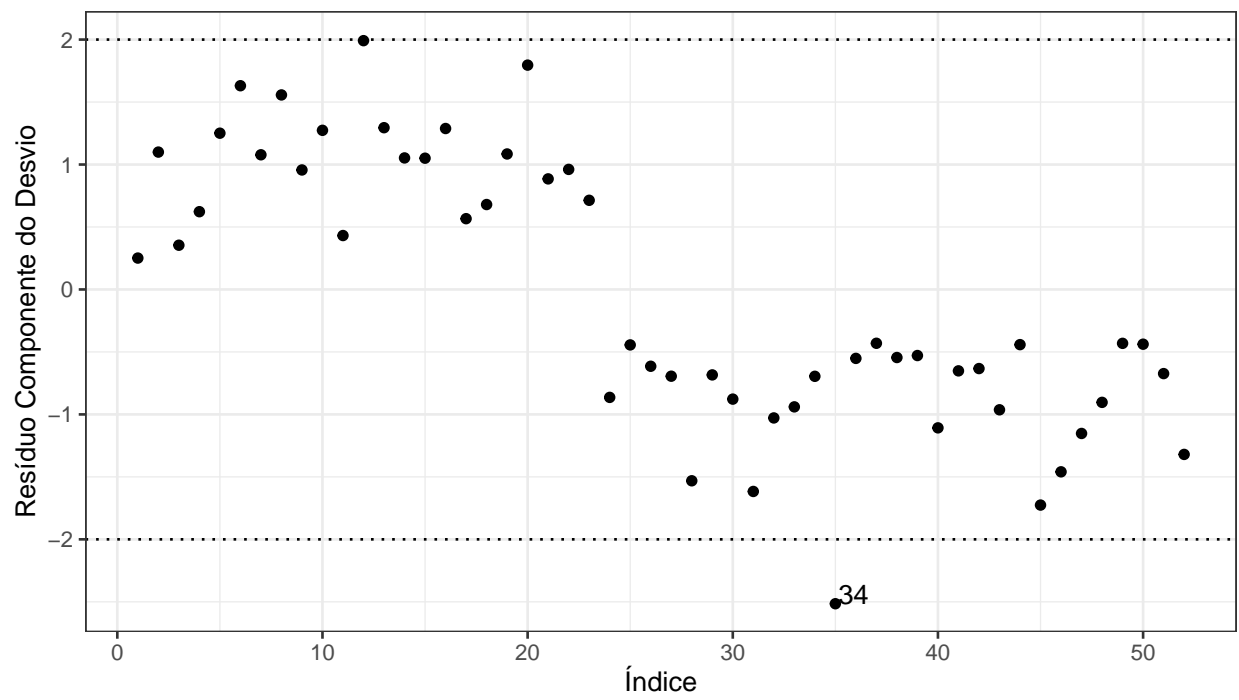
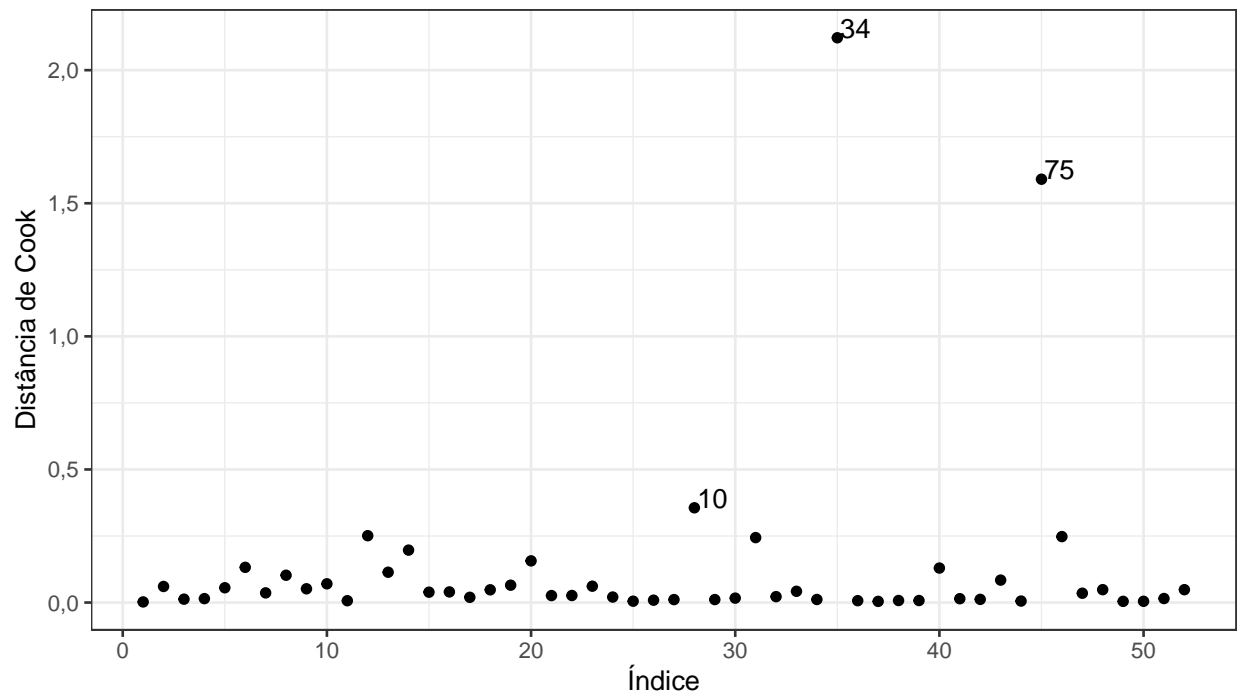
Table 11: Intervalo de confiança para a razão de chances

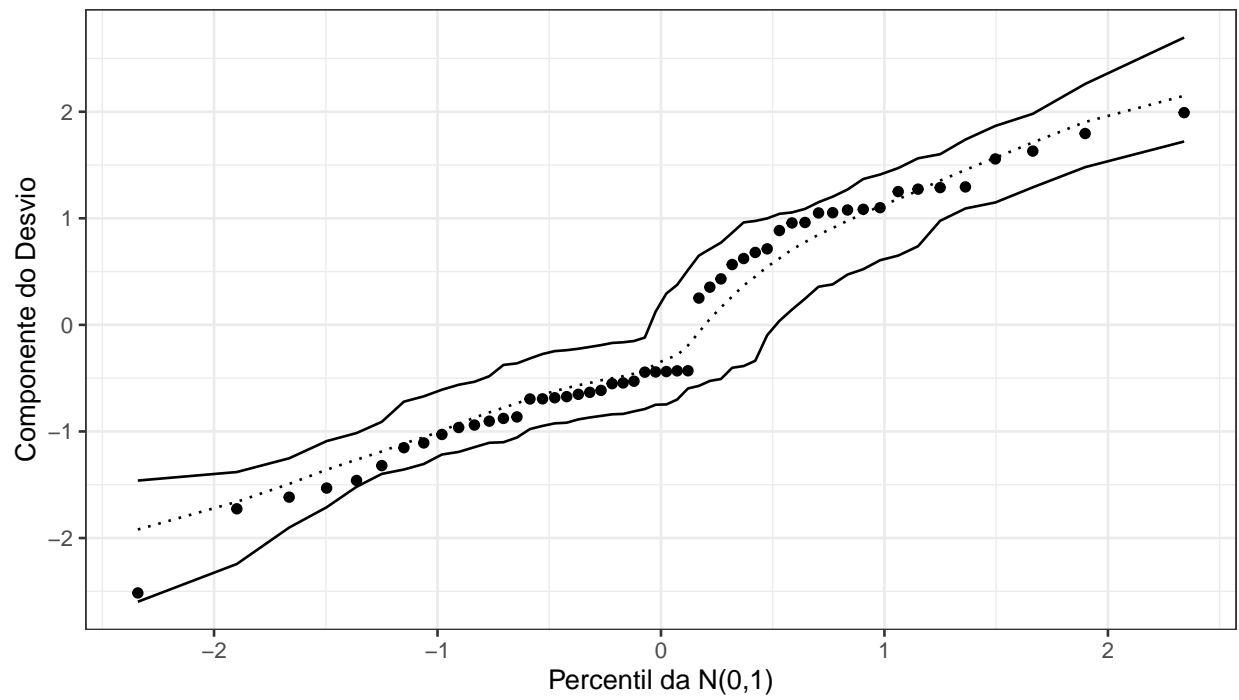
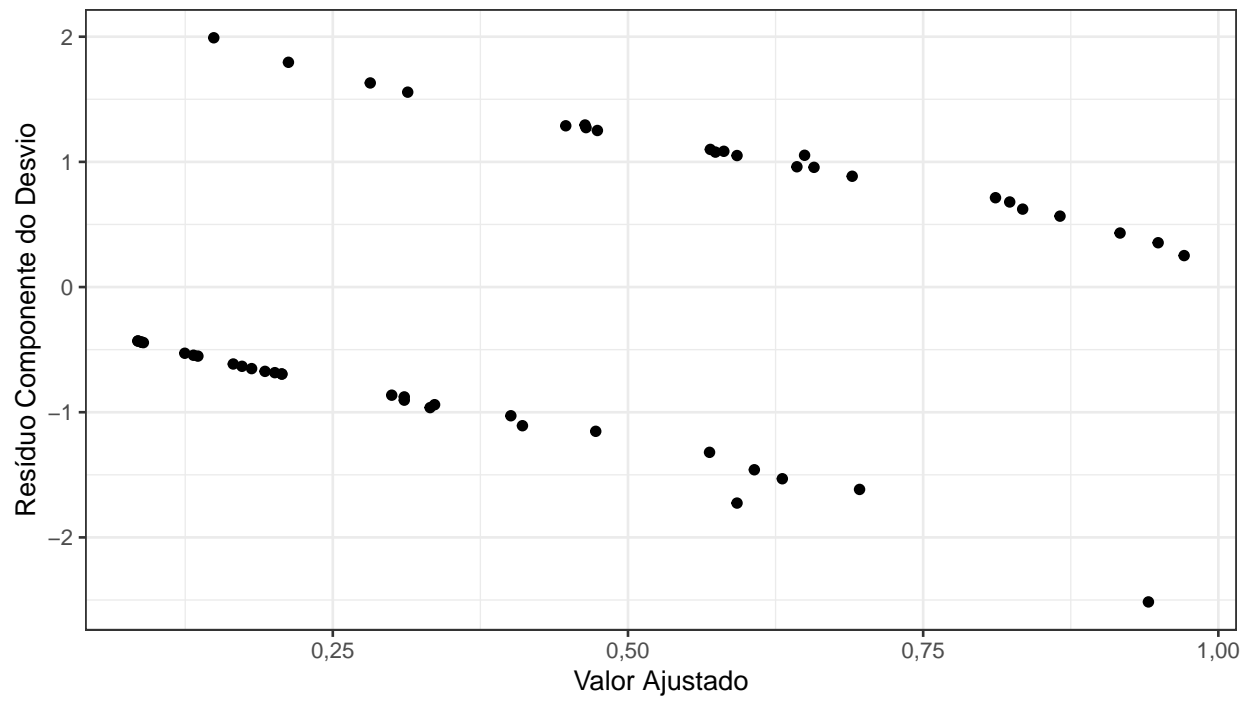
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,012	0,000	0,146
sofa	1,588	1,130	2,422
scr_basal	24,231	1,420	818,885
su	1,028	0,996	1,071

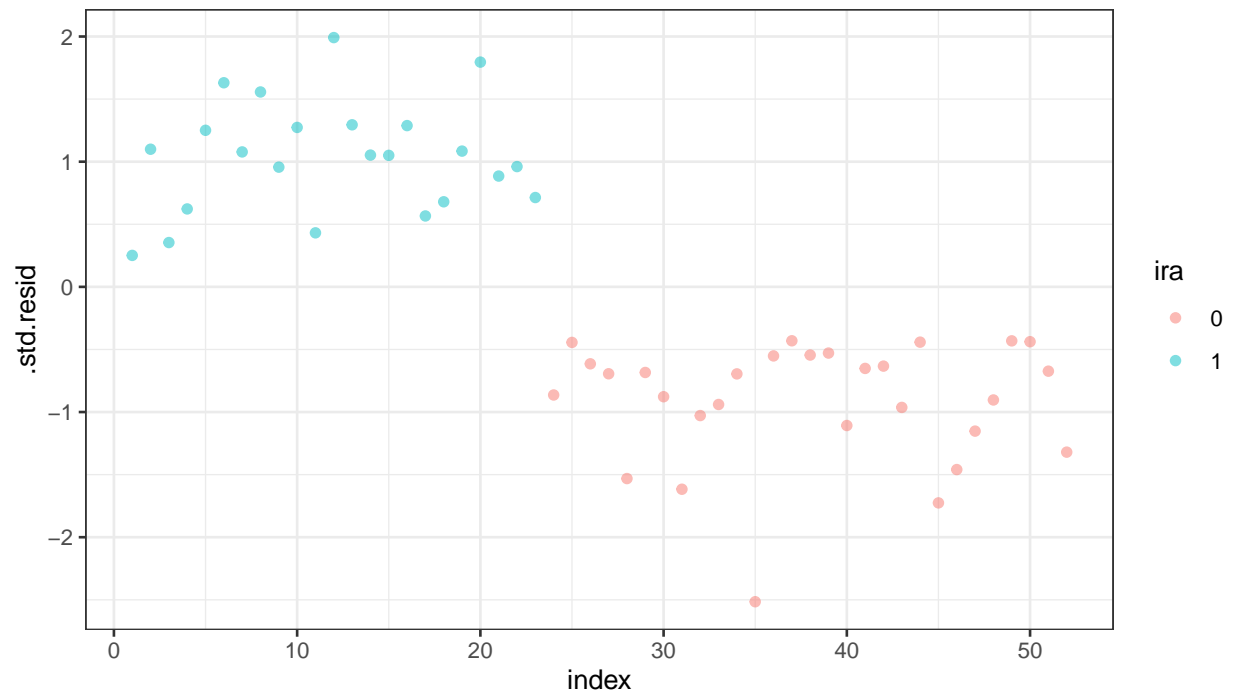
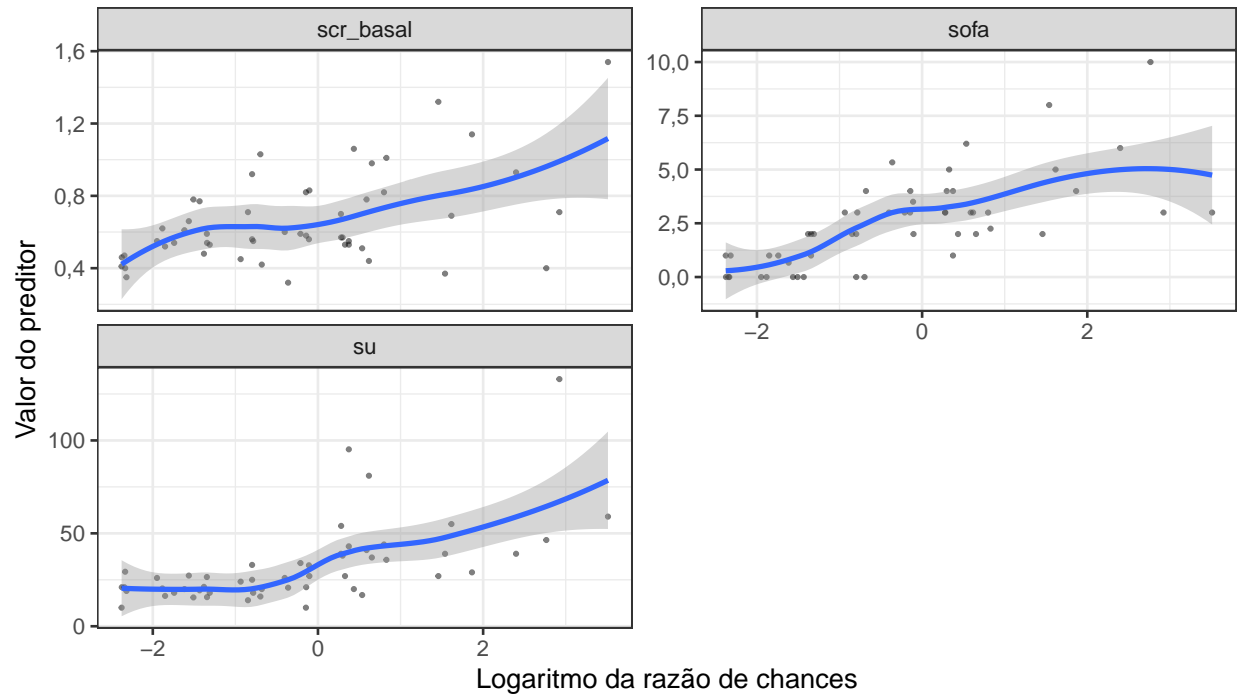
Table 12: VIF

Variável	value
sofa	1,103
scr_basal	1,092
su	1,017









Stepwise

Table 13: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-4,425	1,435	-3,085	0,002
sofa	0,463	0,191	2,421	0,015
scr_basal	3,188	1,595	1,999	0,046
su	0,028	0,018	1,558	0,119

Table 14: Detalhes do modelo

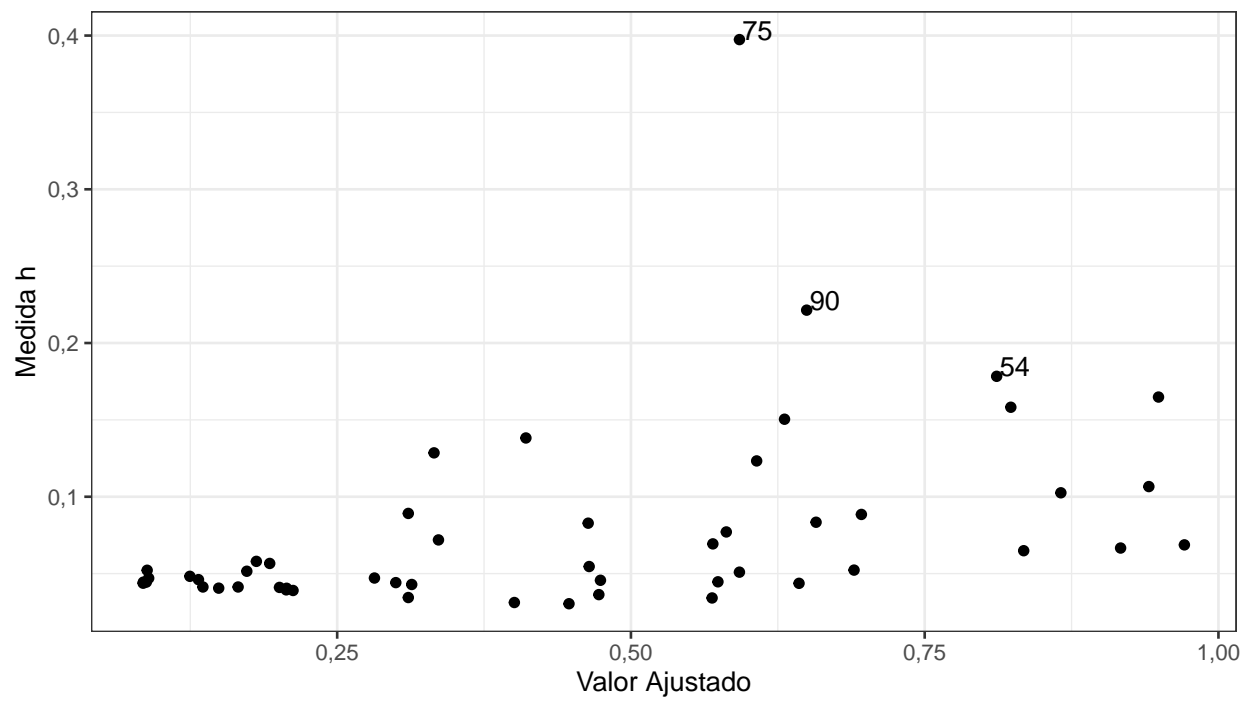
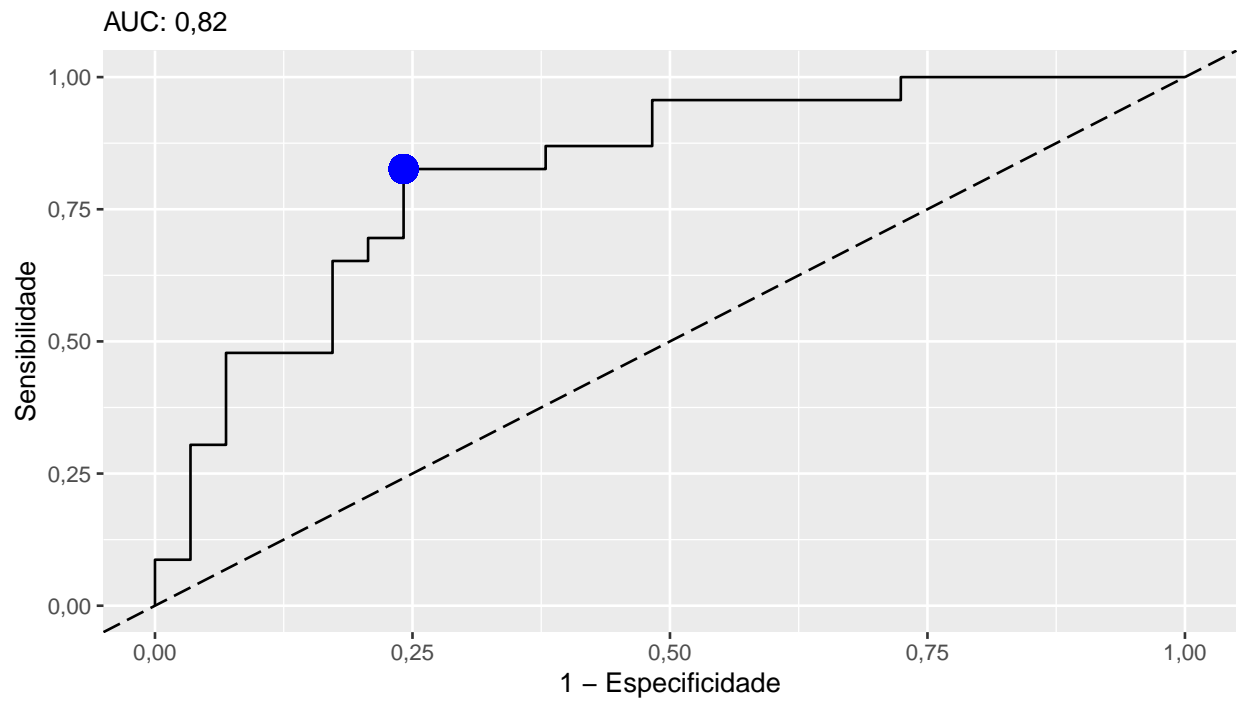
AIC	deviance	Graus de liberdade do resíduo	Número de observações
62,681	54,681	48	52

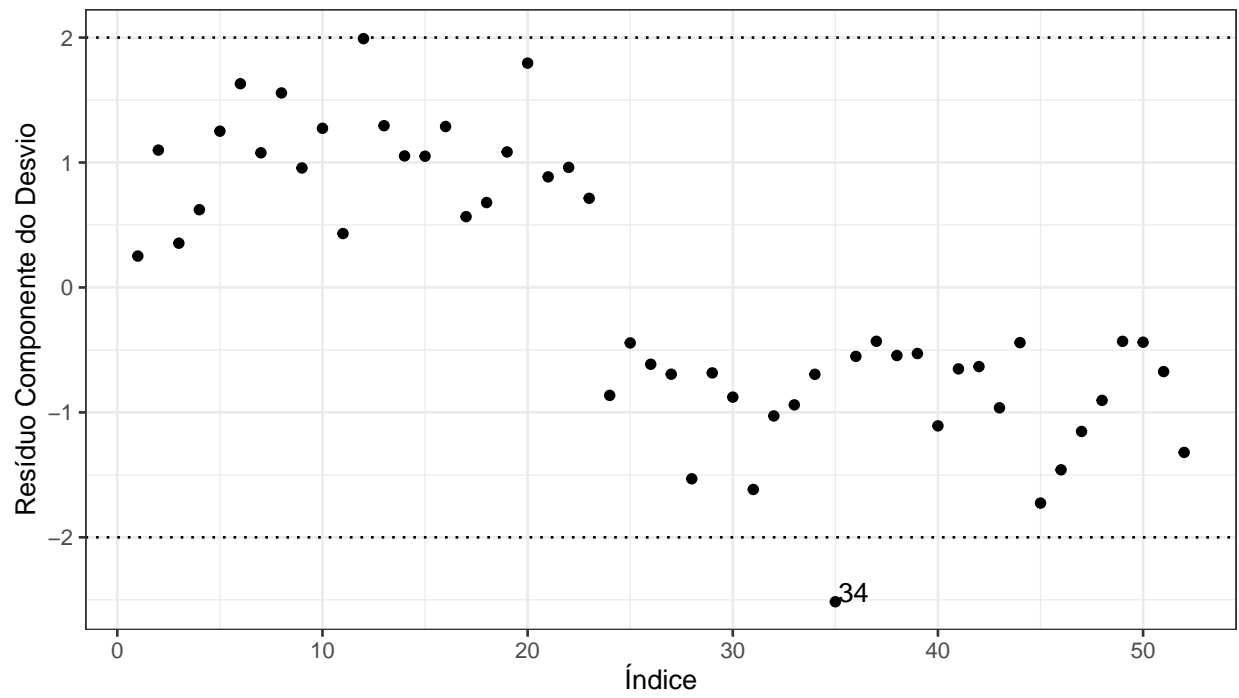
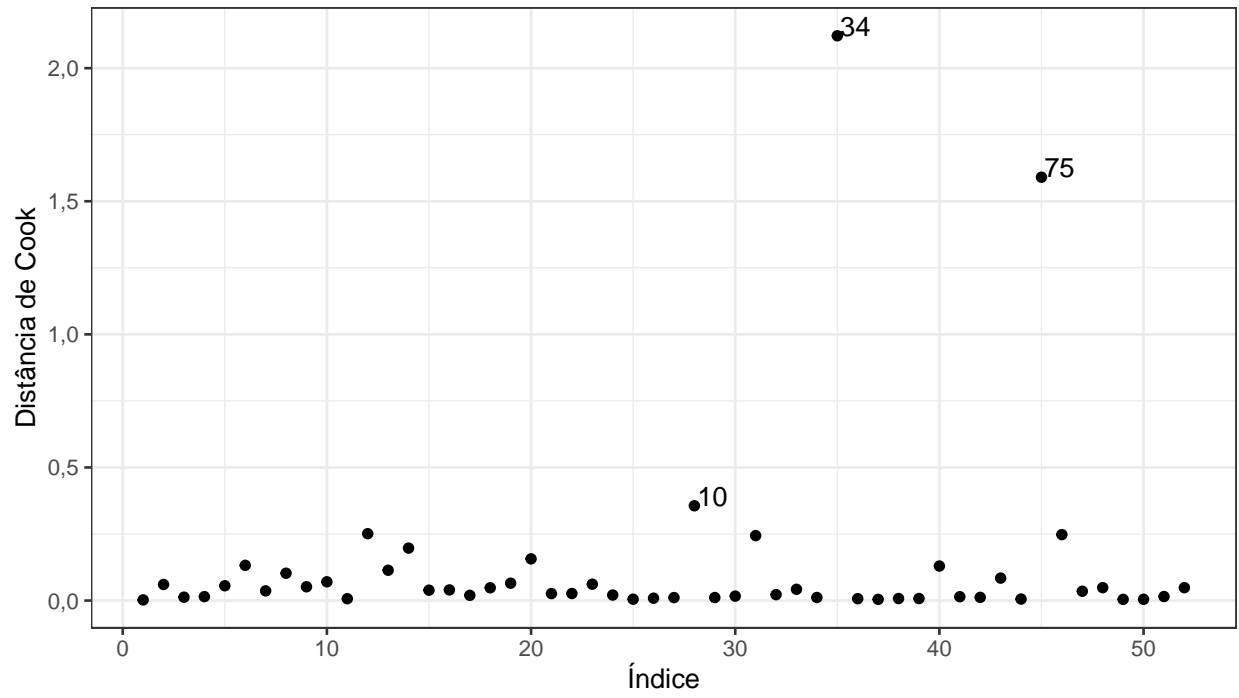
Table 15: Intervalo de confiança para a razão de chances

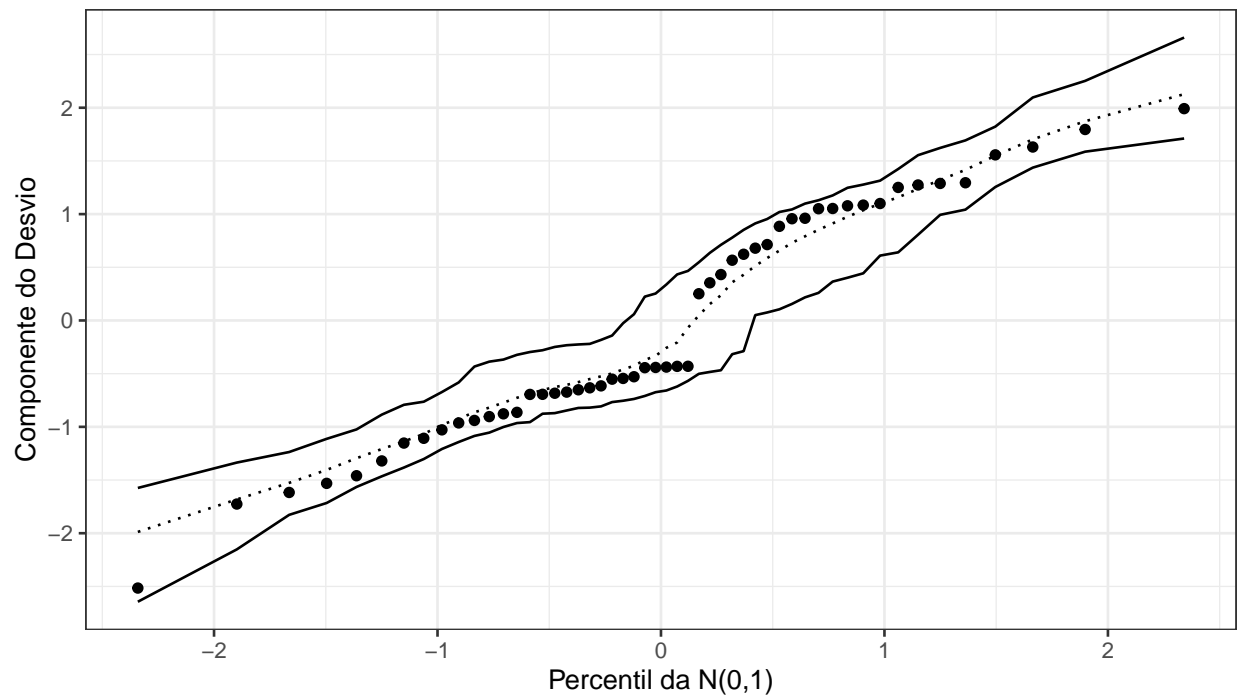
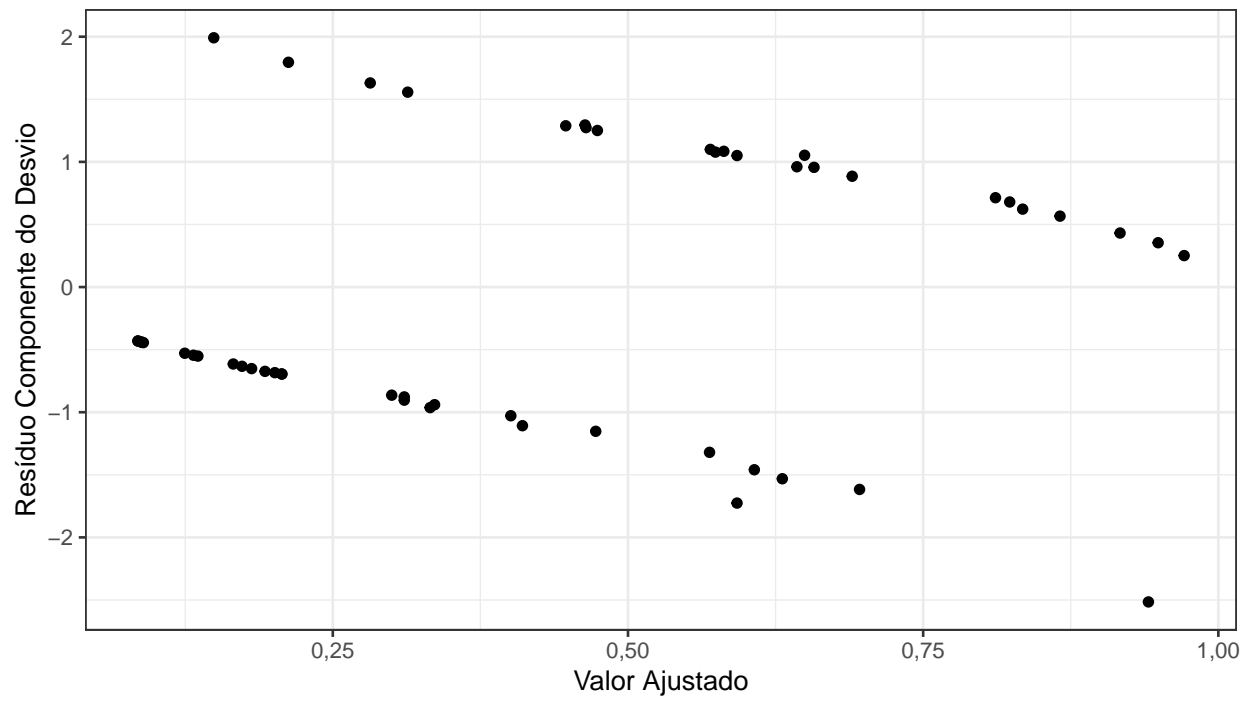
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,012	0,000	0,146
sofa	1,588	1,130	2,422
scr_basal	24,231	1,420	818,885
su	1,028	0,996	1,071

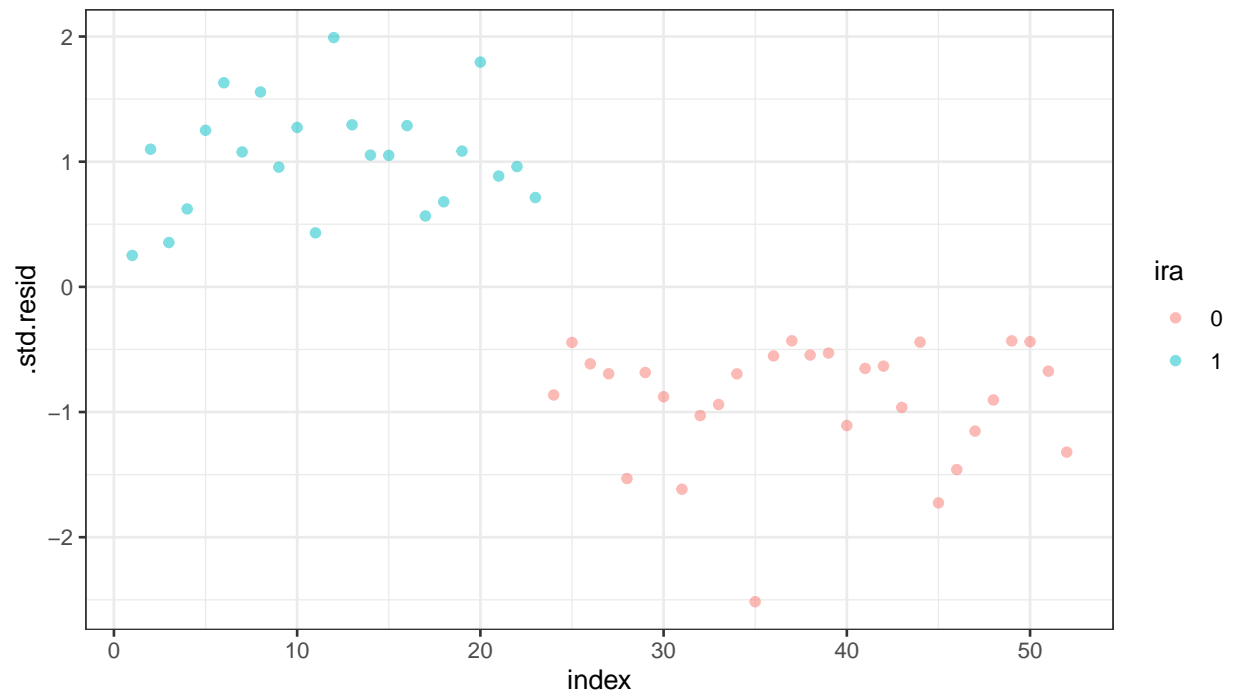
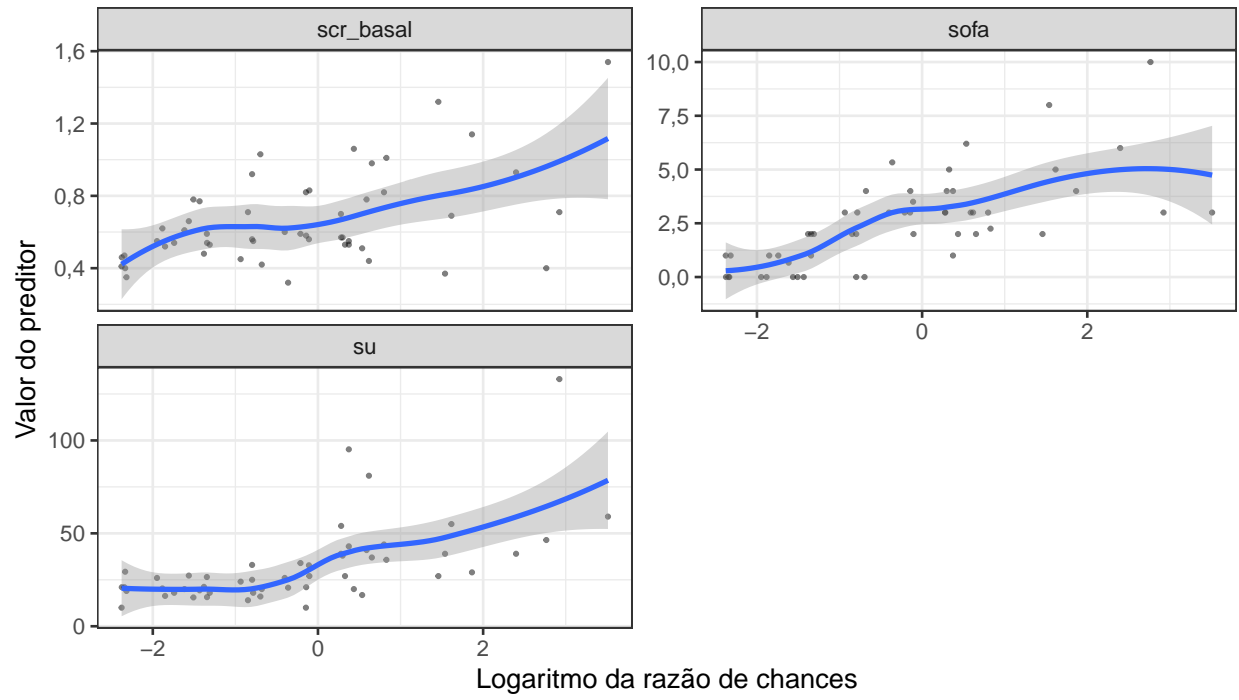
Table 16: VIF

Variável	value
sofa	1,103
scr_basal	1,092
su	1,017









Modelo união

Table 17: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5047,530	1499528,763	-0,003	0,997
causa_ira1	-4130,444	2948934,019	-0,001	0,999
causa_ira2	5007,569	2652049,835	0,002	0,998
sofa	94,425	21580,250	0,004	0,997
su	-7,221	2414,970	-0,003	0,998
fek	42,857	11638,427	0,004	0,997
uu_su	30,607	57233,399	0,001	1,000
una	1,828	457,278	0,004	0,997
scr_basal	-520,374	143962,689	-0,004	0,997
sosm	16,221	5101,945	0,003	0,997
tempo_internacao_hospitalar	3,752	1537,556	0,002	0,998
su:factor(causa_ira)1	37,795	21556,567	0,002	0,999
su:factor(causa_ira)2	6,434	3859,947	0,002	0,999
fek:factor(causa_ira)1	-17,088	39422,025	0,000	1,000
fek:factor(causa_ira)2	-24,638	88844,500	0,000	1,000
uu_su:factor(causa_ira)1	594,480	405510,275	0,001	0,999
uu_su:factor(causa_ira)2	-285,234	937665,721	0,000	1,000
una:factor(causa_ira)1	3,901	4547,936	0,001	0,999
una:factor(causa_ira)2	-8,257	2552,386	-0,003	0,997
scr_basal:factor(causa_ira)1	4047,365	936601,435	0,004	0,997
scr_basal:factor(causa_ira)2	747,127	261754,008	0,003	0,998
sosm:factor(causa_ira)1	-0,334	7010,308	0,000	1,000
sosm:factor(causa_ira)2	-16,372	6567,031	-0,002	0,998

Table 18: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
46	0	29	52

Table 19: Intervalo de confiança para a razão de chances

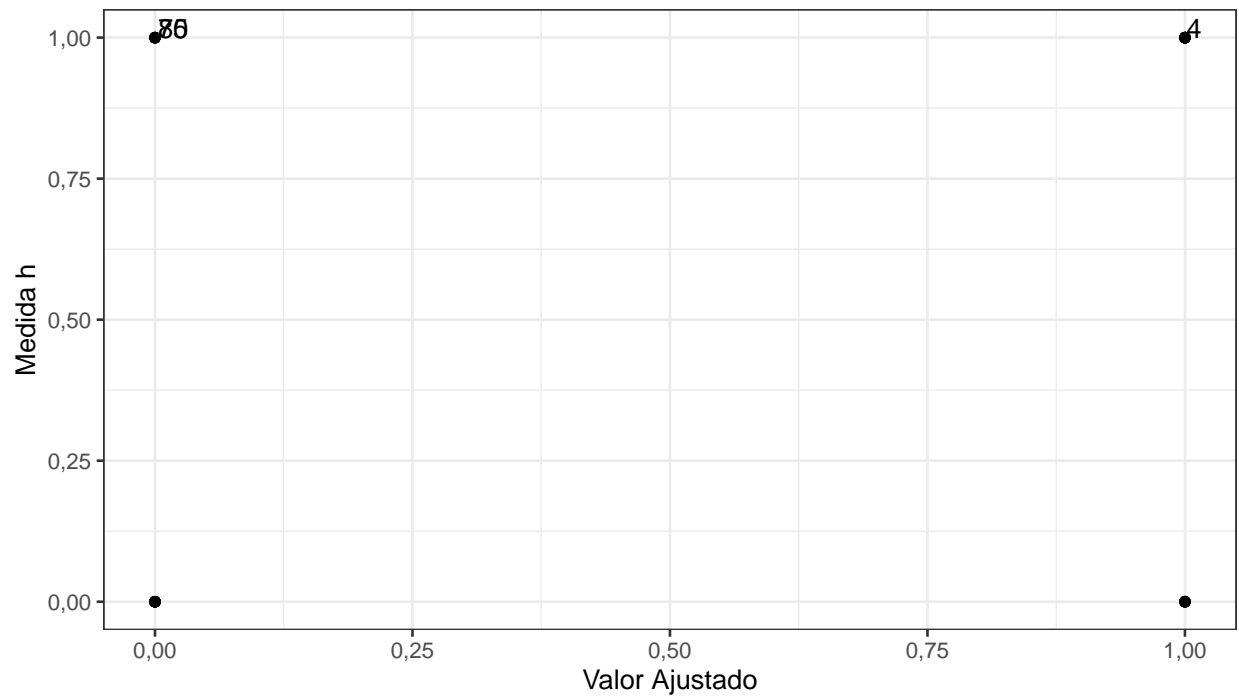
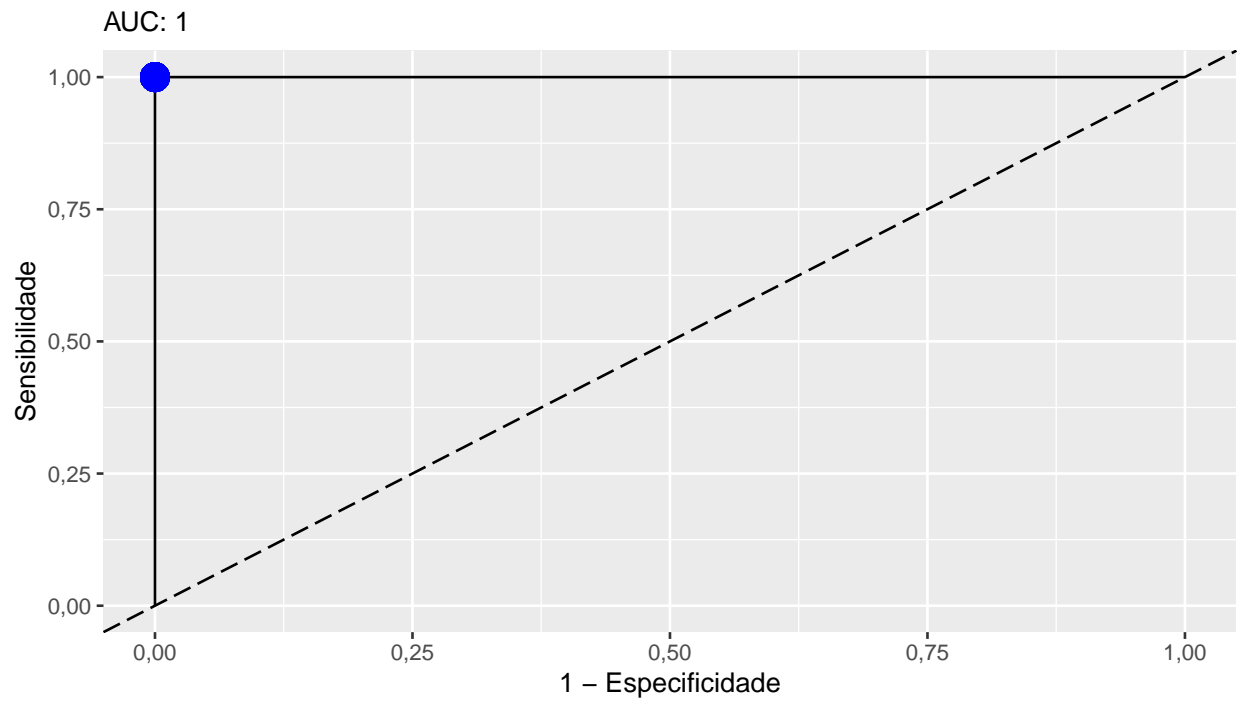
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,000000e+00	0	Inf
causa_ira1	0,000000e+00	0	Inf
causa_ira2	Inf	0	Inf
sofa	1,019326e+41	0	Inf
su	1,000000e-03	0	1,288554e+35
fek	4,097330e+18	0	1,007160e+183
uu_su	1,960504e+13	0	Inf
una	6,219000e+00	0	8,043958e+07
scr_basal	0,000000e+00	0	Inf
sosm	1,108897e+07	0	1,277820e+80
tempo_internacao_hospitalar	4,261300e+01	0	6,077392e+21

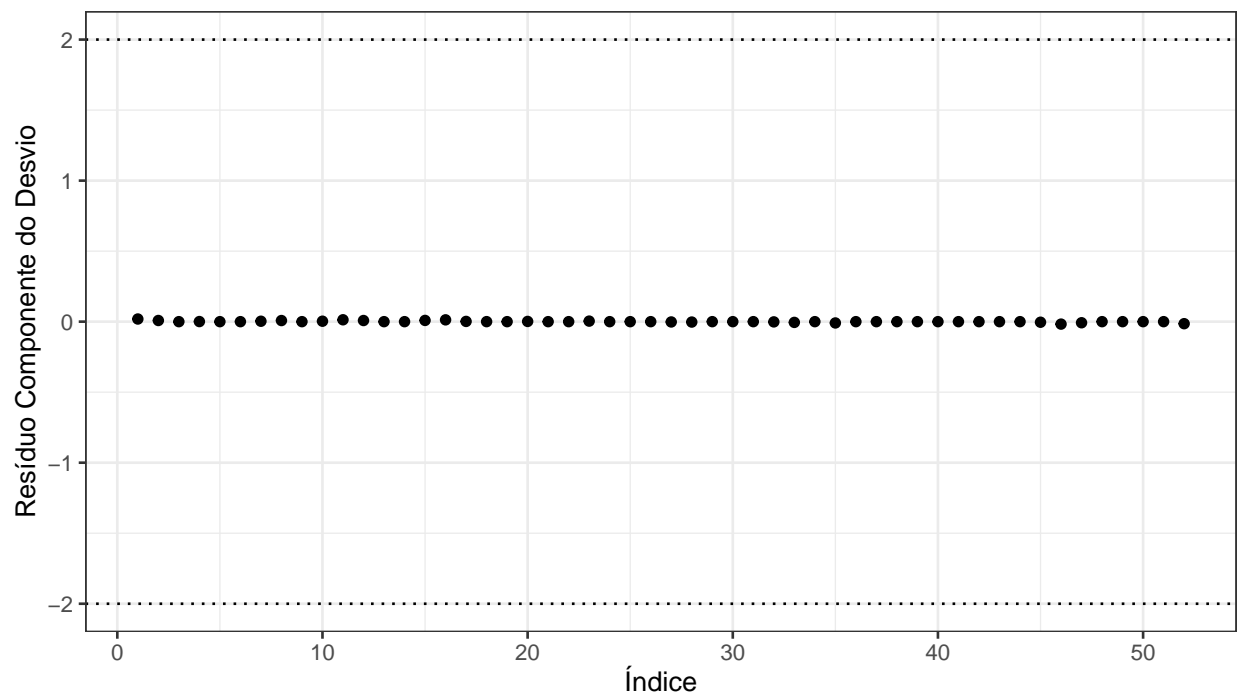
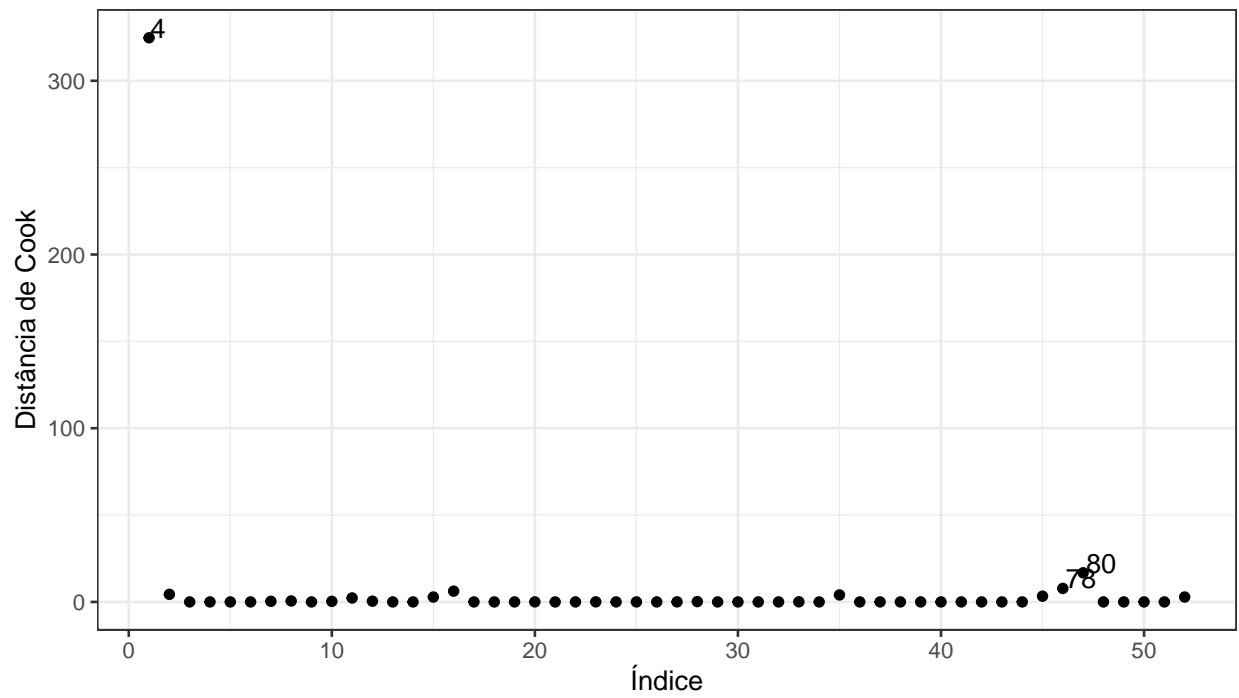
Table 19: Intervalo de confiança para a razão de chances (*continued*)

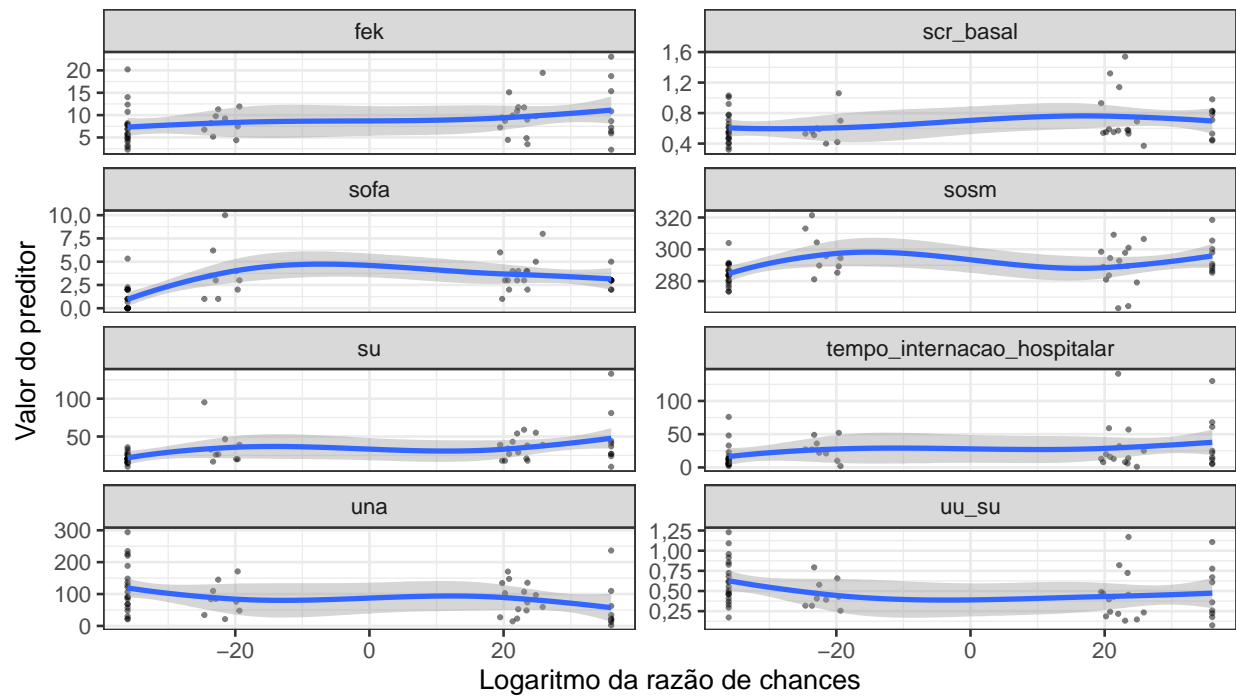
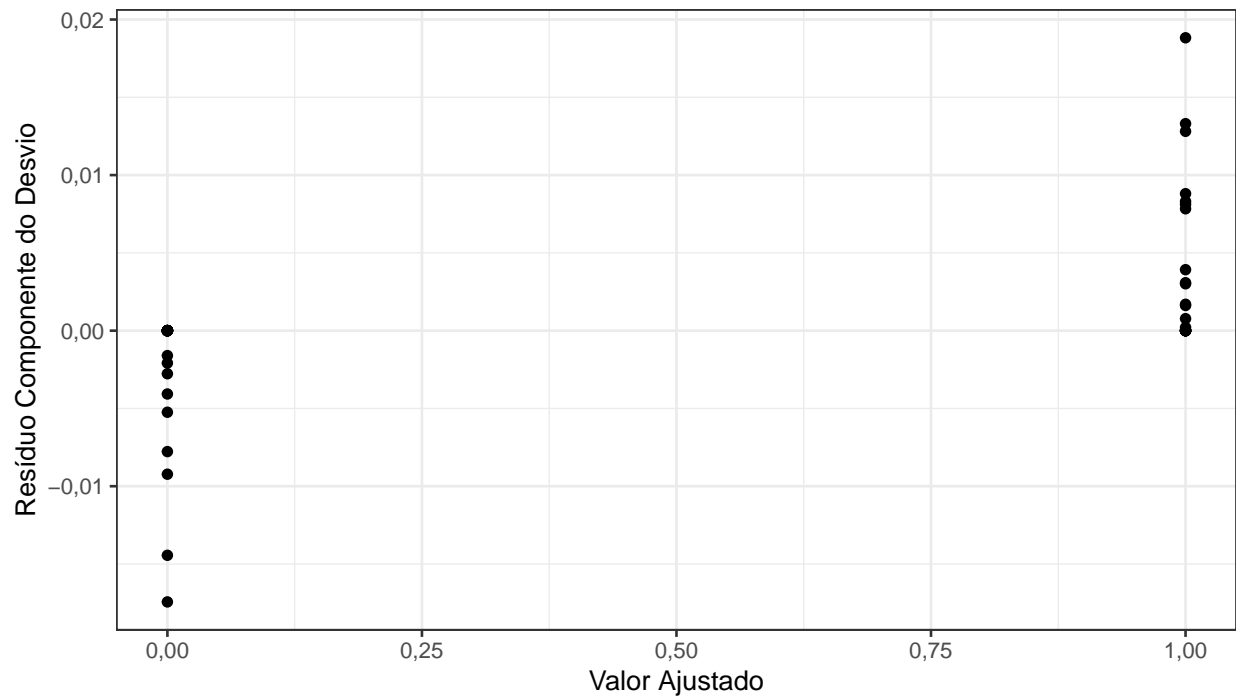
Variável	Estimativa	2,5 %	97,5 %
su:factor(causa_ira)1	2,595522e+16	0	Inf
su:factor(causa_ira)2	6,229310e+02	0	1,753208e+63
fek:factor(causa_ira)1	0,000000e+00	0	Inf
fek:factor(causa_ira)2	0,000000e+00	0	Inf
uu_su:factor(causa_ira)1	1,510949e+258	0	Inf
uu_su:factor(causa_ira)2	0,000000e+00	0	Inf
una:factor(causa_ira)1	4,947100e+01	0	2,335278e+70
una:factor(causa_ira)2	0,000000e+00	0	3,778125e+30
scr_basal:factor(causa_ira)1	Inf	0	Inf
scr_basal:factor(causa_ira)2	Inf	0	Inf
sosm:factor(causa_ira)1	7,160000e-01	0	3,897498e+107
sosm:factor(causa_ira)2	0,000000e+00	0	6,505352e+93

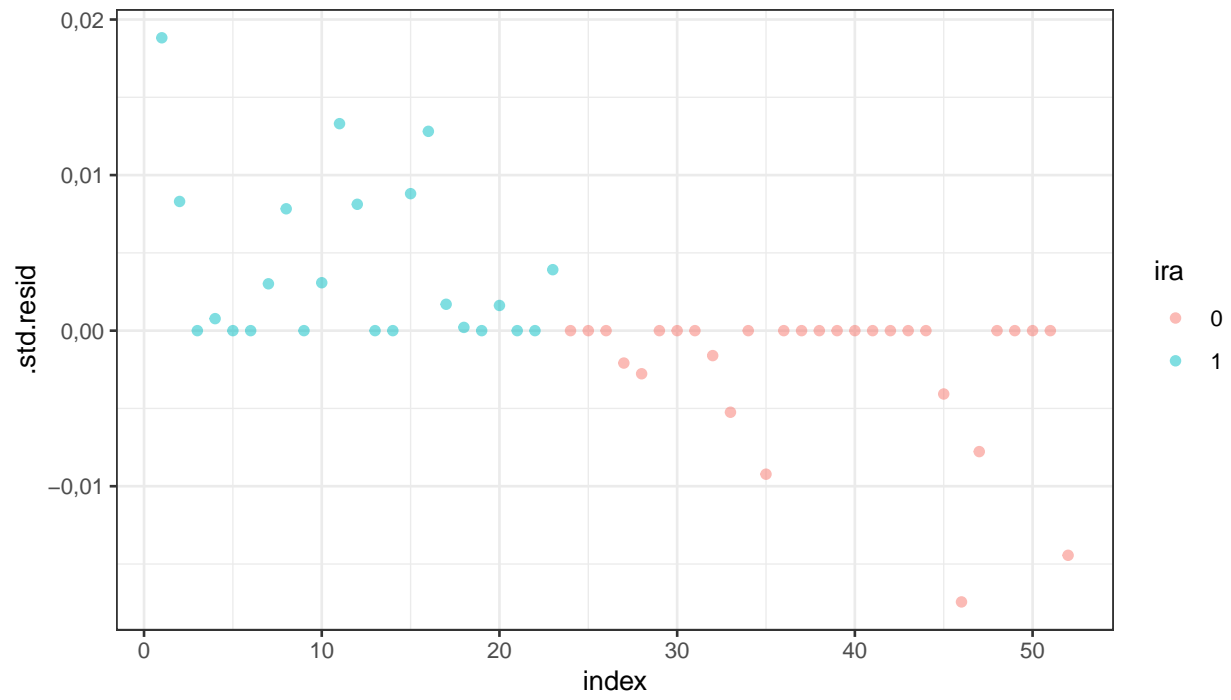
Table 20: VIF

Variável	GVIF	Df	$\widehat{GVIF}(1/(2*Df))$
causa_ira	2,205117e+08	2	121,859
sofa	8,778500e+01	1	9,369
su	3,701300e+01	1	6,084
fek	6,088800e+01	1	7,803
uu_su	4,403000e+00	1	2,098
una	3,594900e+01	1	5,996
scr_basal	7,722900e+01	1	8,788
sosm	7,910200e+01	1	8,894
tempo_internacao_hospitalar	7,050800e+01	1	8,397
su:factor(causa_ira)	9,796790e+04	2	17,692
fek:factor(causa_ira)	3,604553e+05	2	24,503
uu_su:factor(causa_ira)	3,415794e+04	2	13,595
una:factor(causa_ira)	1,450137e+04	2	10,974
scr_basal:factor(causa_ira)	3,411450e+04	2	13,590
sosm:factor(causa_ira)	6,143192e+07	2	88,532









Modelo intersecção

Table 21: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-4,425	1,435	-3,085	0,002
sofa	0,463	0,191	2,421	0,015
su	0,028	0,018	1,558	0,119
scr_basal	3,188	1,595	1,999	0,046

Table 22: Detalhes do modelo

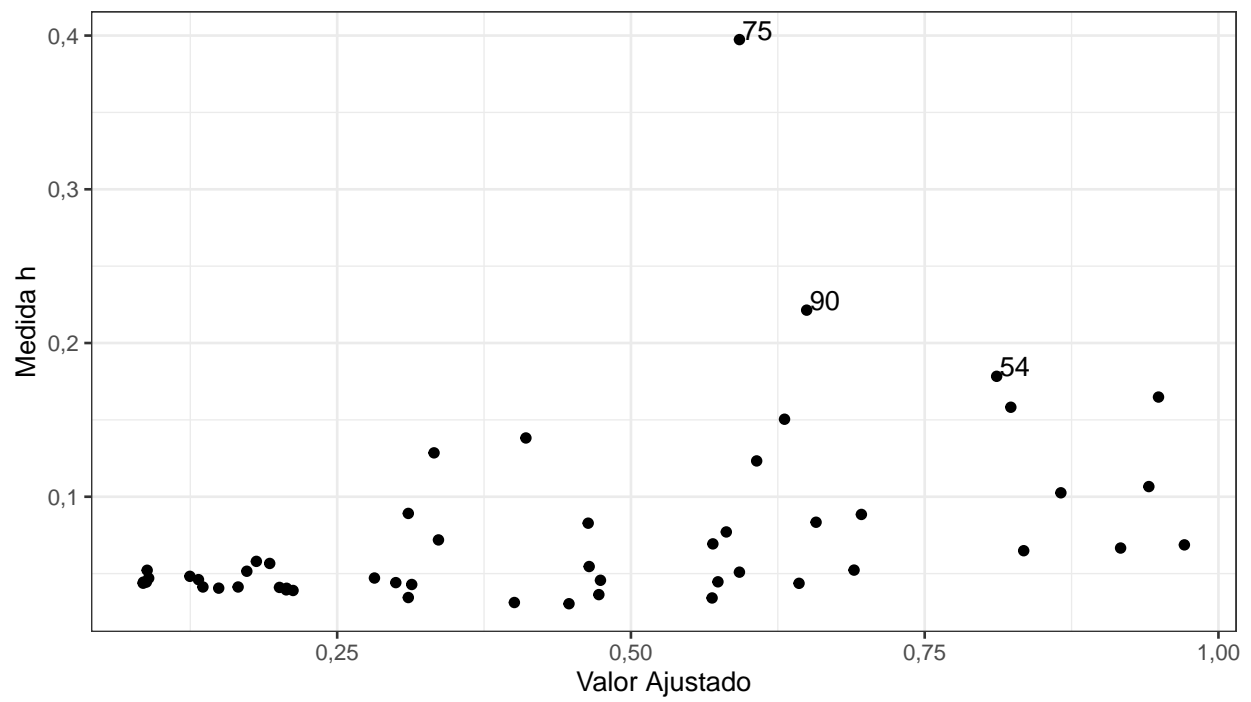
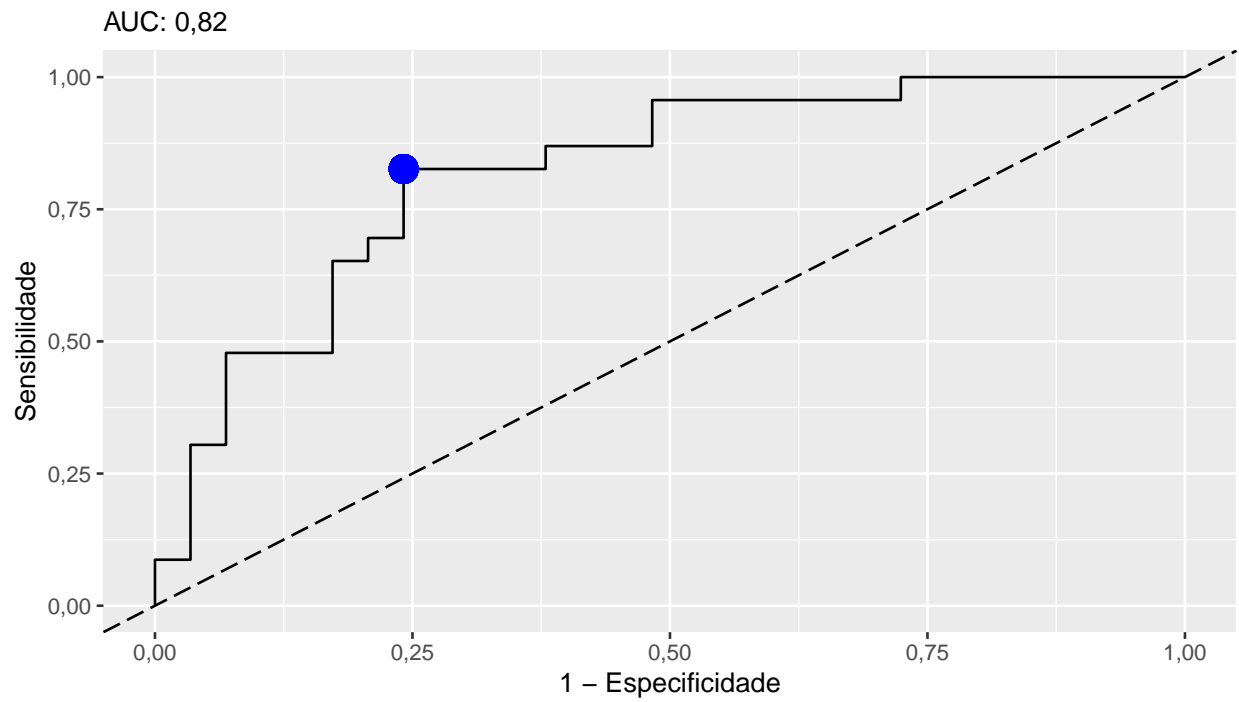
AIC	deviance	Graus de liberdade do resíduo	Número de observações
62,681	54,681	48	52

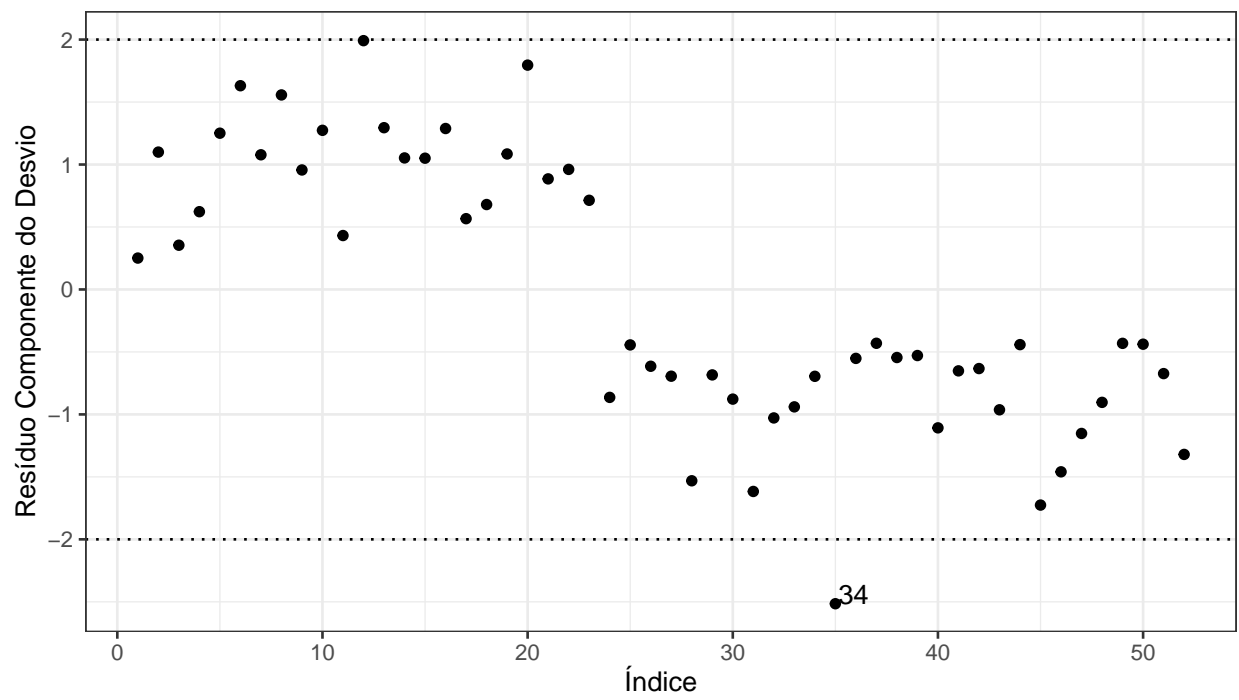
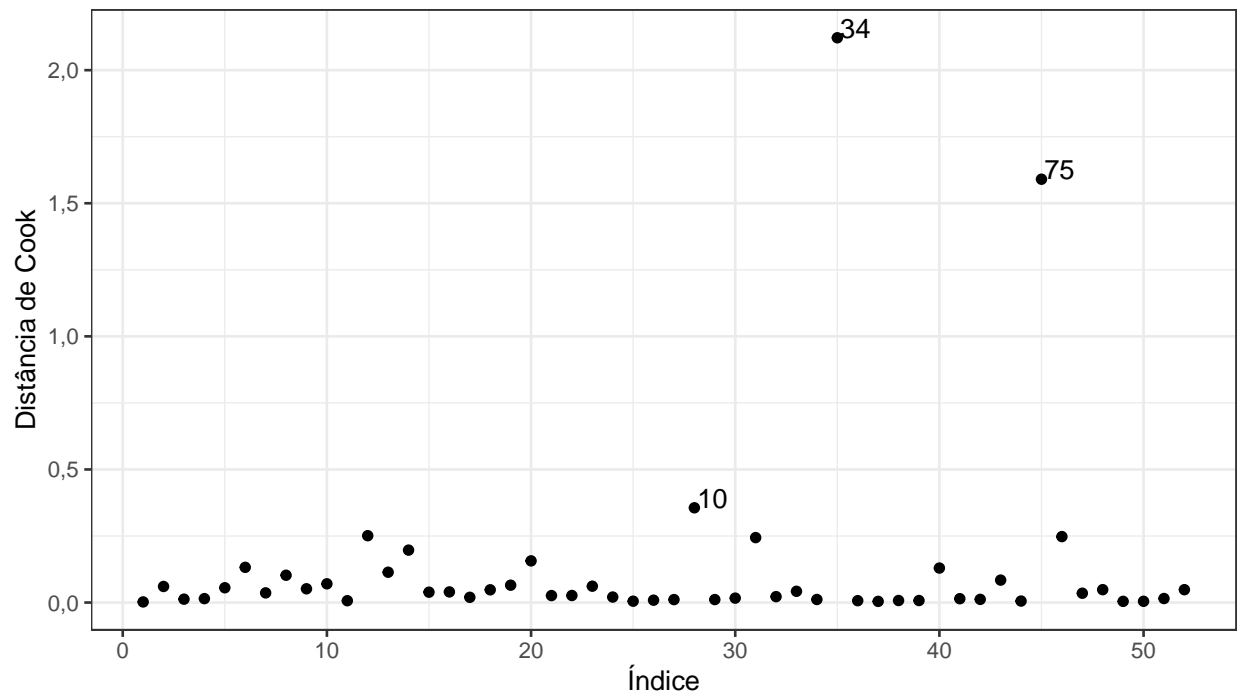
Table 23: Intervalo de confiança para a razão de chances

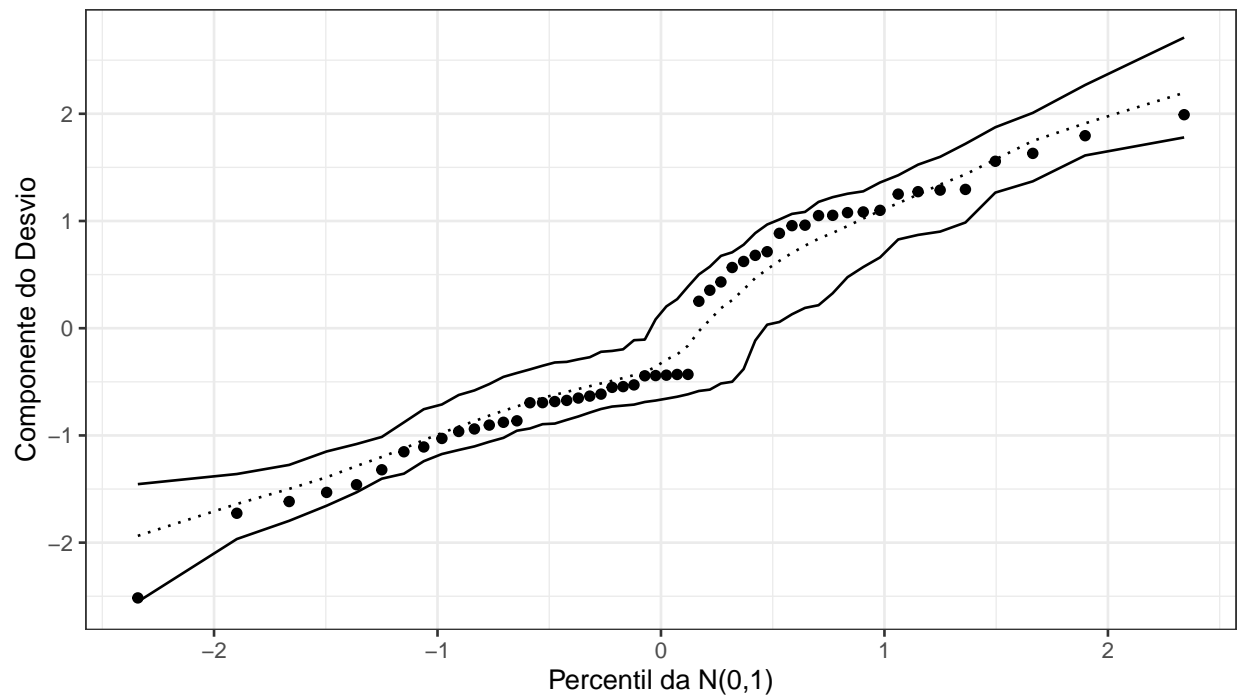
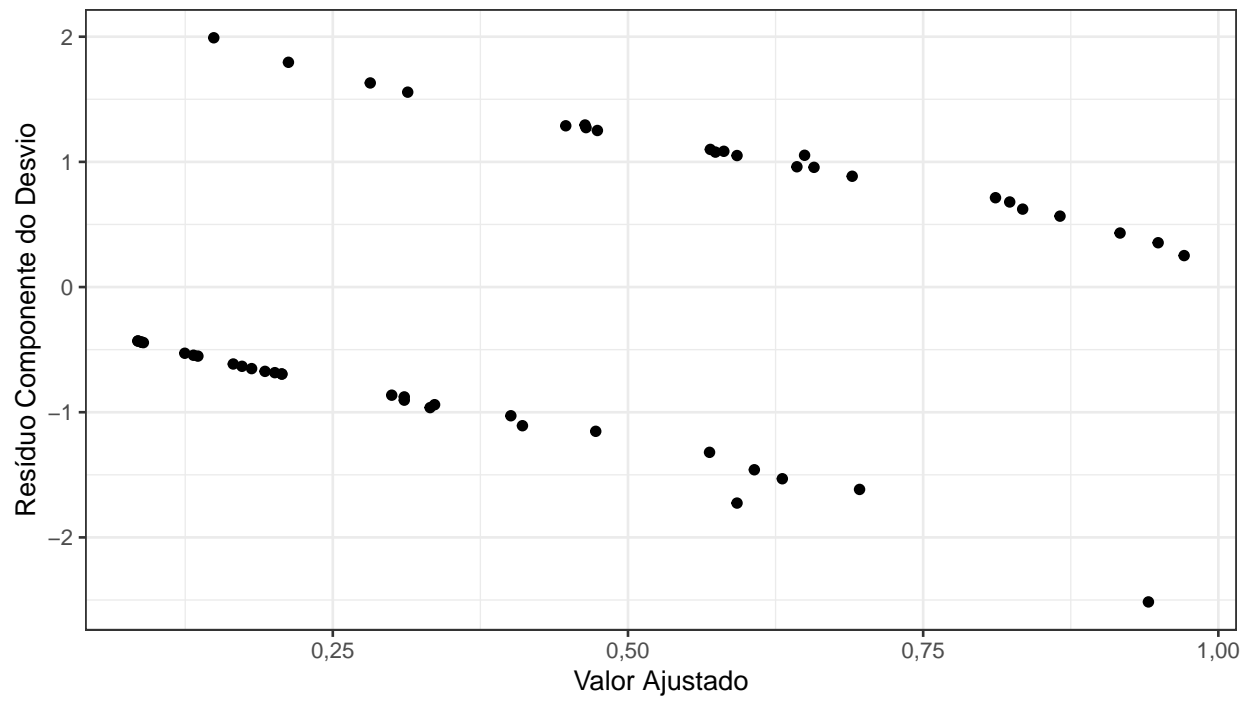
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,012	0,000	0,146
sofa	1,588	1,130	2,422
su	1,028	0,996	1,071
scr_basal	24,231	1,420	818,885

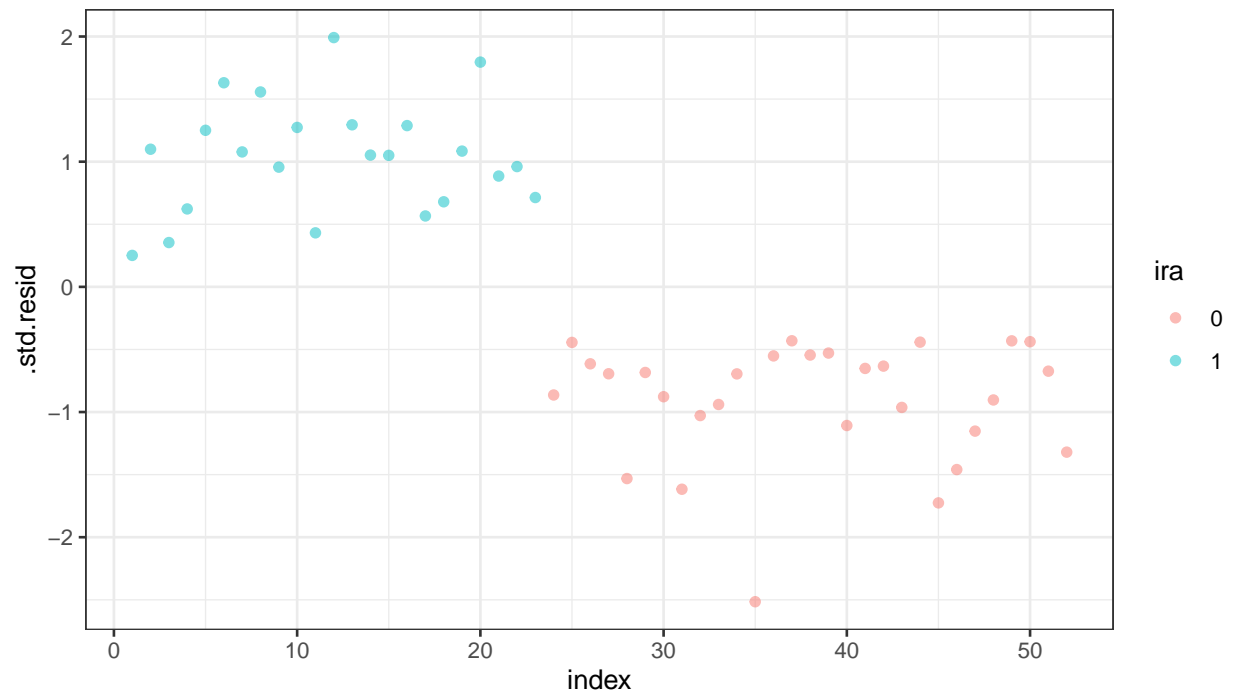
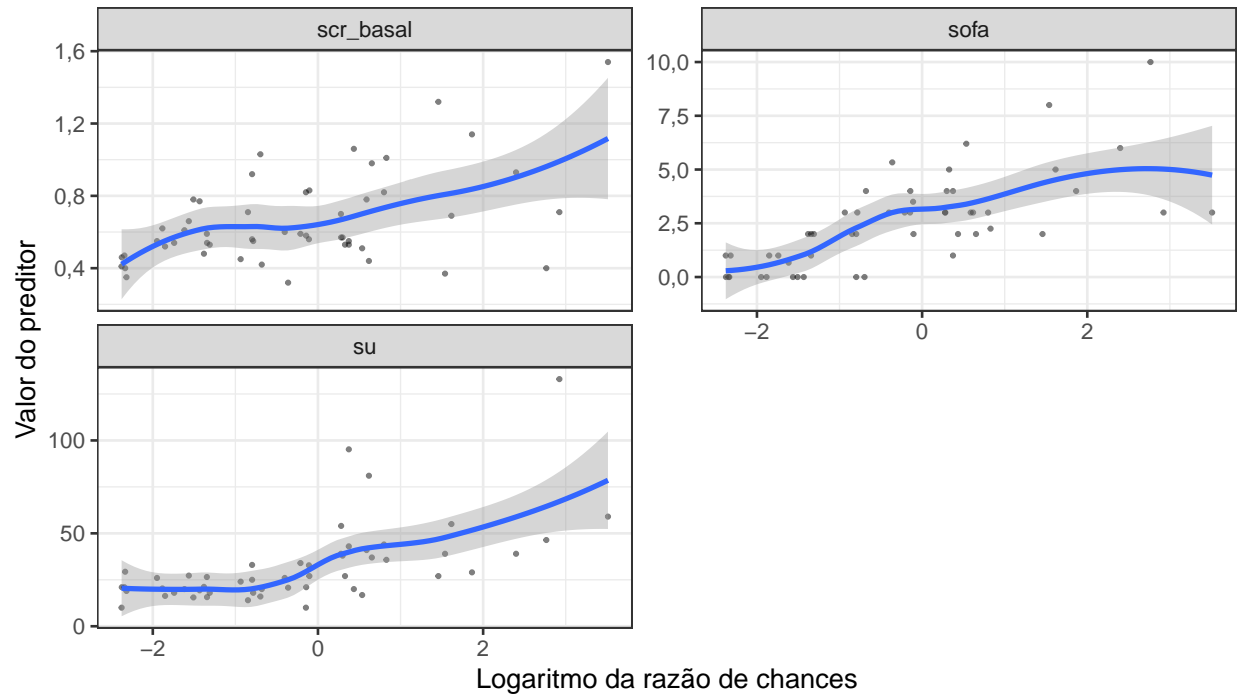
Table 24: VIF

Variável	value
sofa	1,103
su	1,017
scr_basal	1,092









Removendo paciente 34

```
df_35 = df %>%
  select(numero, d_ira, sofa, scr_basal, una, su, scr) %>%
  mutate(row_number = row_number()) %>%
  filter(row_number == 35)

transpose_df(df_35) %>%
  niceFormatting(caption = "Paciente 34")
```

Table 25: Paciente 34

rowname	1
numero	34
d_ira	0
sofa	10
scr_basal	0,4
una	21,38
su	46,4
scr	0,608
row_number	35

```
df = df %>%
  mutate(row_number = row_number()) %>%
  filter(row_number != 35)
```

Ajustes sem o paciente 34

```
selected_models = model_selection(df,
  selected_numerical_columns,
  selected_categorical_columns,
  target,
  include_interaction = T)
```

Modelo completo

Table 26: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-1011,204	3,227714e+06	0,000	1,000
factor(causa_ira)1	960,825	8,284953e+06	0,000	1,000
factor(causa_ira)2	983,781	1,521697e+08	0,000	1,000
factor(ventilacao_mecanica)1	-62,809	1,089003e+05	-0,001	1,000
sofa	43,026	5,255467e+04	0,001	0,999
su	-2,661	4,912817e+03	-0,001	1,000
fek	17,127	1,918355e+04	0,001	0,999
uu_su	-73,312	1,196288e+05	-0,001	1,000
una	1,109	1,247070e+03	0,001	0,999
scr_basal	-249,287	2,496818e+05	-0,001	0,999

Table 26: Resumo do modelo (*continued*)

Termo	Estimativa	Erro padrão	Estatística	p-valor
sosm	3,075	1,030104e+04	0,000	1,000
delta_scr	-204,579	5,568789e+05	0,000	1,000
tempo_internacao_hospitalar	1,089	1,620343e+03	0,001	0,999
score_clinico	9,083	2,140948e+04	0,000	1,000
dva_mcg_kg_min	206,959	1,016766e+06	0,000	1,000
uk	-0,031	3,470541e+03	0,000	1,000
factor(causa_ira)1:su	4,356	8,143747e+03	0,001	1,000
factor(causa_ira)2:su	6,790	5,116522e+05	0,000	1,000
factor(causa_ira)1:fek	-22,748	3,878526e+04	-0,001	1,000
factor(causa_ira)2:fek	65,174	3,994632e+06	0,000	1,000
factor(causa_ira)1:uu_su	251,955	3,559533e+05	0,001	0,999
factor(causa_ira)2:uu_su	777,831	4,078322e+07	0,000	1,000
factor(causa_ira)1:una	-1,046	4,524884e+03	0,000	1,000
factor(causa_ira)2:una	-3,982	9,343160e+04	0,000	1,000
factor(causa_ira)1:scr_basal	602,141	2,310511e+06	0,000	1,000
factor(causa_ira)2:scr_basal	377,154	1,214728e+07	0,000	1,000
factor(causa_ira)1:sosm	-4,964	2,459219e+04	0,000	1,000
factor(causa_ira)2:sosm	-5,539	5,830587e+05	0,000	1,000
factor(causa_ira)1:delta_scr	160,147	1,305315e+06	0,000	1,000
factor(causa_ira)2:delta_scr	-2232,326	3,427127e+08	0,000	1,000
factor(causa_ira)1:uk	1,389	5,915531e+03	0,000	1,000
factor(causa_ira)2:uk	-6,764	1,069241e+06	0,000	1,000

Table 27: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
64	0	19	51

Table 28: Intervalo de confiança para a razão de chances

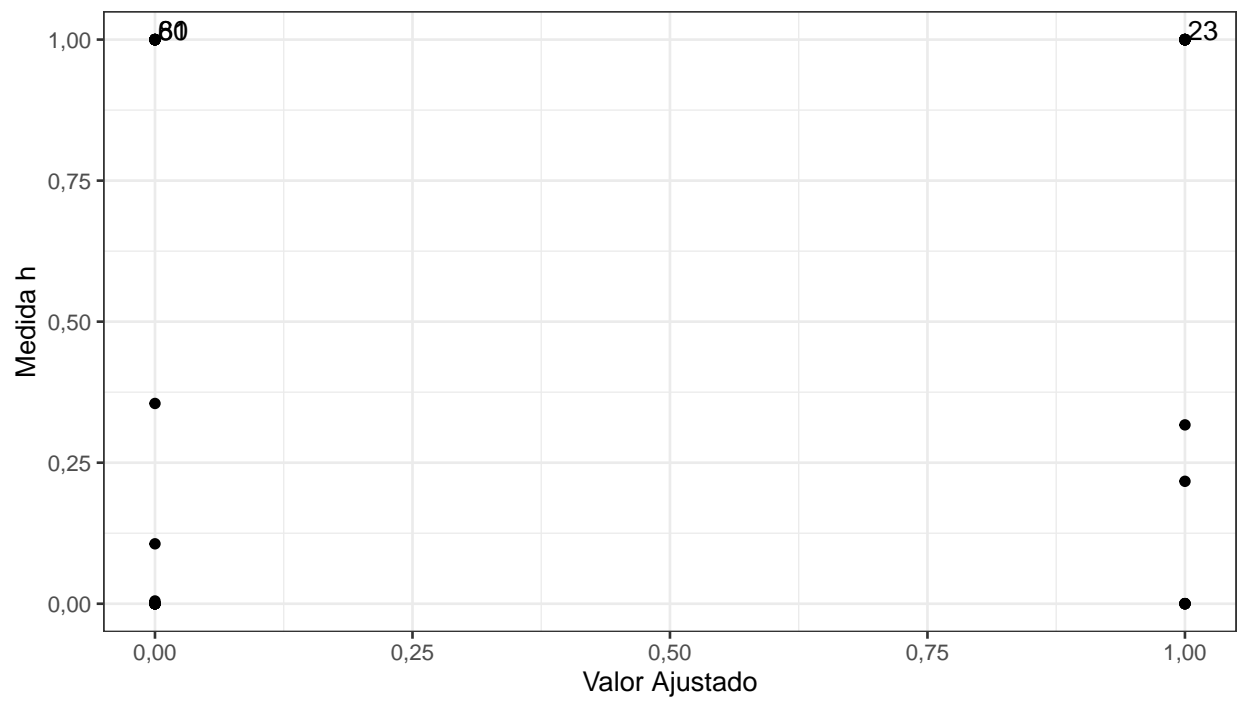
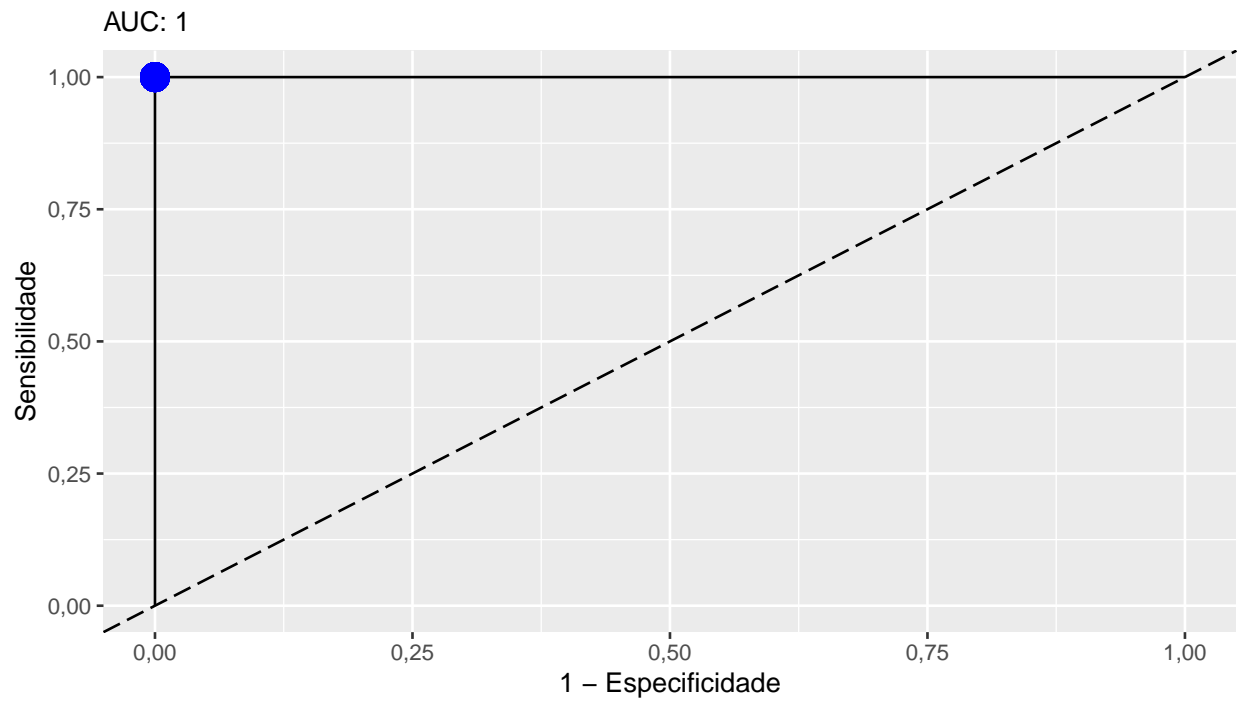
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,000000e+00	0	Inf
factor(causa_ira)1	Inf	0	Inf
factor(causa_ira)2	Inf	0	Inf
factor(ventilacao_mecanica)1	0,000000e+00	0	Inf
sofa	4,850091e+18	0	Inf
su	7,000000e-02	0	3,100268e+89
fek	2,741268e+07	0	Inf
uu_su	0,000000e+00	0	Inf
una	3,030000e+00	0	3,099942e+23
scr_basal	0,000000e+00	0	Inf
sosm	2,164600e+01	0	3,761361e+195
delta_scr	0,000000e+00	0	Inf
tempo_internacao_hospitalar	2,971000e+00	0	1,998494e+29

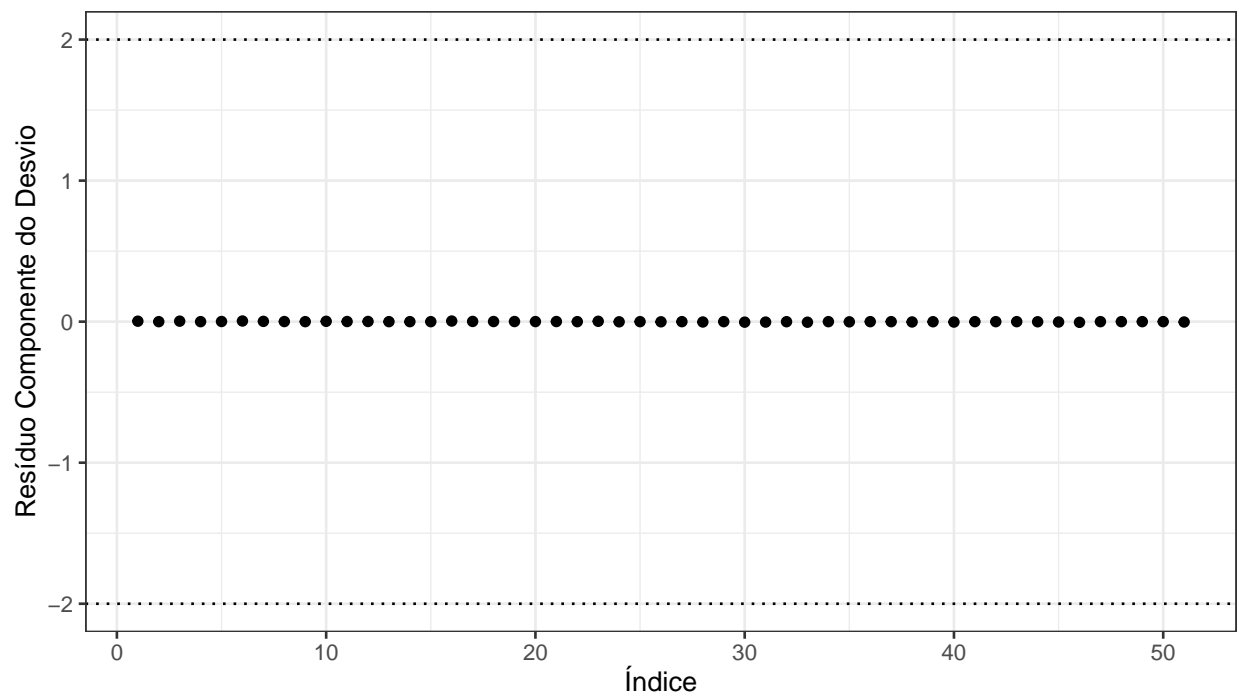
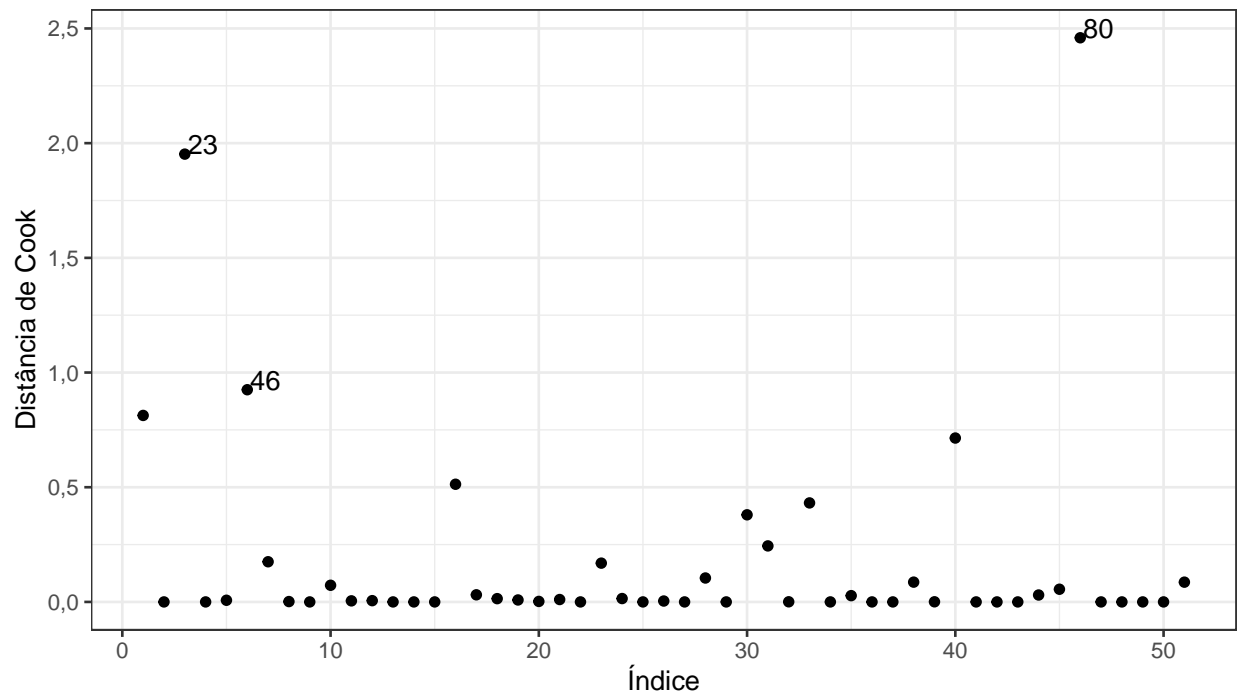
Table 28: Intervalo de confiança para a razão de chances (*continued*)

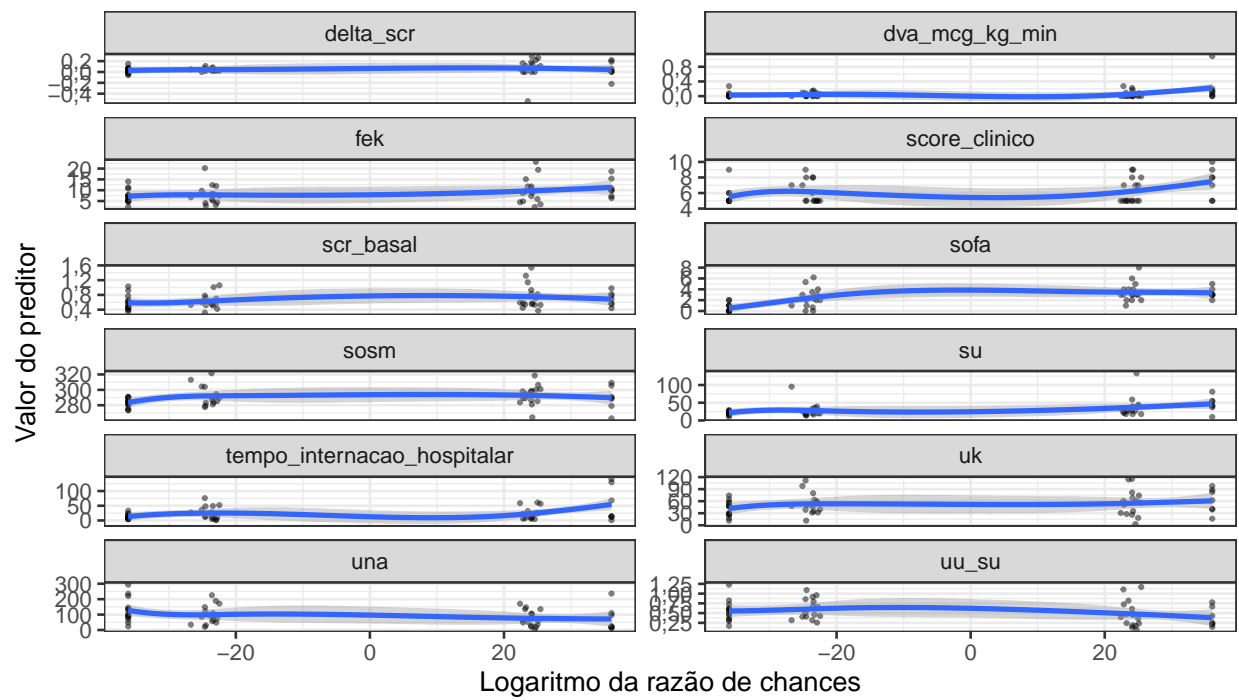
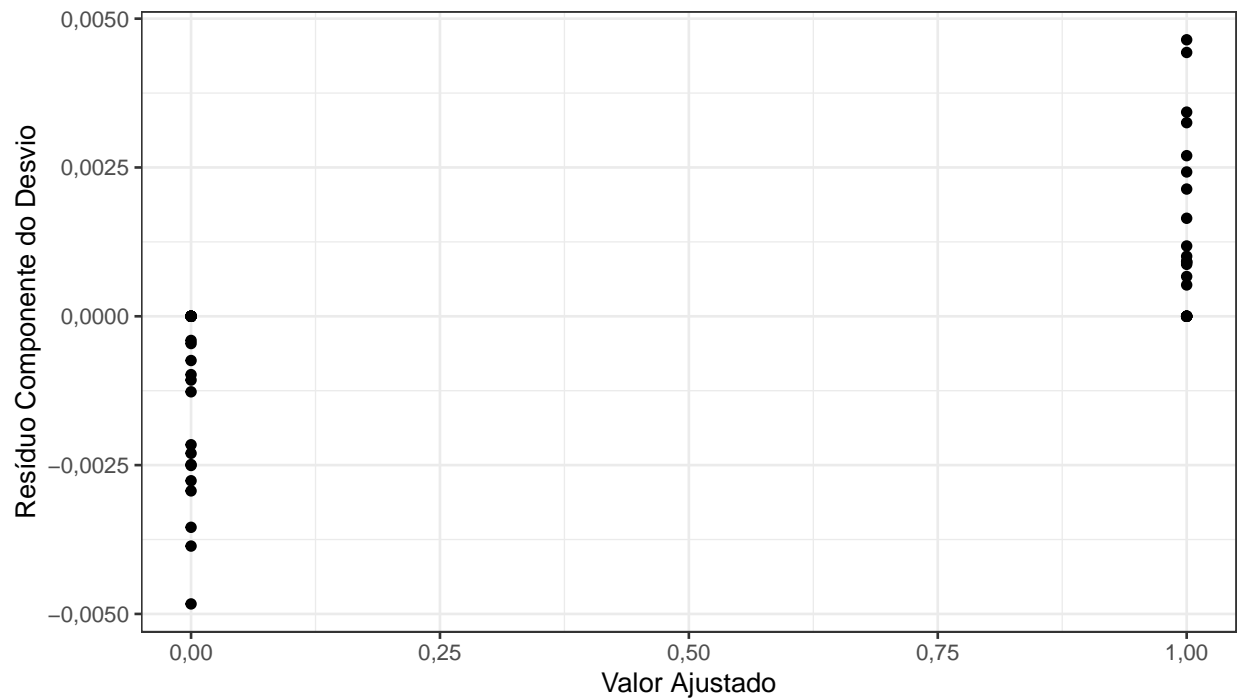
Variável	Estimativa	2,5 %	97,5 %
score_clinico	8,802999e+03	0	Inf
dva_mcg_kg_min	7,603101e+89	0	Inf
uk	9,700000e-01	0	1,052281e+64
factor(causa_ira)1:su	7,791500e+01	0	5,999787e+146
factor(causa_ira)2:su	8,886070e+02	0	Inf
factor(causa_ira)1:fek	0,000000e+00	0	Inf
factor(causa_ira)2:fek	2,016381e+28	0	Inf
factor(causa_ira)1:uu_su	2,646518e+109	0	Inf
factor(causa_ira)2:uu_su	Inf	0	Inf
factor(causa_ira)1:una	3,510000e-01	0	4,622066e+79
factor(causa_ira)2:una	1,900000e-02	0	Inf
factor(causa_ira)1:scr_basal	3,209721e+261	0	Inf
factor(causa_ira)2:scr_basal	6,249595e+163	0	Inf
factor(causa_ira)1:sosm	7,000000e-03	0	Inf
factor(causa_ira)2:sosm	4,000000e-03	0	Inf
factor(causa_ira)1:delta_scr	3,557454e+69	0	Inf
factor(causa_ira)2:delta_scr	0,000000e+00	0	Inf
factor(causa_ira)1:uk	4,009000e+00	0	8,525031e+103
factor(causa_ira)2:uk	1,000000e-03	0	Inf

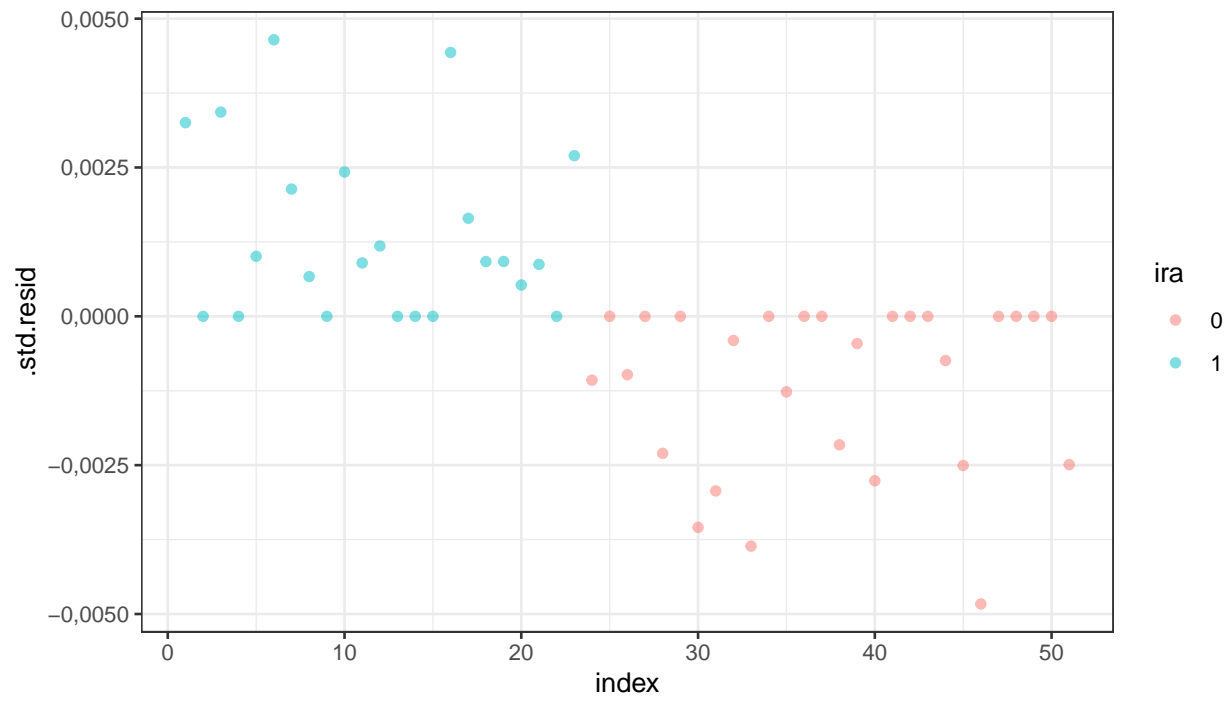
Table 29: VIF

Variável	GVIF	Df	$\widehat{GVIF}(1/(2*Df))$
factor(causa_ira)	5,428417e+11	2	858,358
factor(ventilacao_mecanica)	9,192000e+00	1	3,032
sofa	2,862800e+01	1	5,351
su	2,267800e+01	1	4,762
fek	2,790500e+01	1	5,283
uu_su	5,396000e+00	1	2,323
una	2,608500e+01	1	5,107
scr_basal	2,337600e+01	1	4,835
sosm	4,369300e+01	1	6,610
delta_scr	2,305200e+01	1	4,801
tempo_internacao_hospitalar	5,725000e+00	1	2,393
score_clinico	3,568000e+00	1	1,889
dva_mcg_kg_min	3,271800e+01	1	5,720
uk	3,224300e+01	1	5,678
factor(causa_ira):su	1,718779e+07	2	64,388
factor(causa_ira):fek	8,210370e+07	2	95,190
factor(causa_ira):uu_su	1,004676e+07	2	56,300
factor(causa_ira):una	2,665888e+06	2	40,407
factor(causa_ira):scr_basal	8,221668e+07	2	95,223
factor(causa_ira):sosm	5,050782e+11	2	843,023
factor(causa_ira):delta_scr	7,146442e+06	2	51,704
factor(causa_ira):uk	1,978442e+08	2	118,599









Backward

Table 30: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	4430,993	282107,186	0,016	0,987
factor(causa_ira)1	-6520,682	438557,261	-0,015	0,988
factor(causa_ira)2	1430,971	93443,881	0,015	0,988
sofa	508,507	31061,655	0,016	0,987
su	-27,277	1677,775	-0,016	0,987
fek	111,195	6844,679	0,016	0,987
uu_su	-1165,740	71606,161	-0,016	0,987
una	7,632	467,146	0,016	0,987
scr_basal	-737,084	46433,256	-0,016	0,987
sosm	-26,114	1623,545	-0,016	0,987
delta_scr	-975,800	60568,156	-0,016	0,987
score_clinico	310,827	19159,811	0,016	0,987
dva_mcg_kg_min	4706,250	288494,178	0,016	0,987
factor(causa_ira)1:su	167,294	11369,293	0,015	0,988
factor(causa_ira)2:su	35,567	2194,922	0,016	0,987
factor(causa_ira)1:uu_su	6101,900	392013,454	0,016	0,988
factor(causa_ira)2:uu_su	-1272,498	82780,120	-0,015	0,988
factor(causa_ira)1:una	-20,314	1299,951	-0,016	0,988
factor(causa_ira)2:una	-28,534	1749,012	-0,016	0,987

Table 31: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
38	0	32	51

Table 32: Intervalo de confiança para a razão de chances

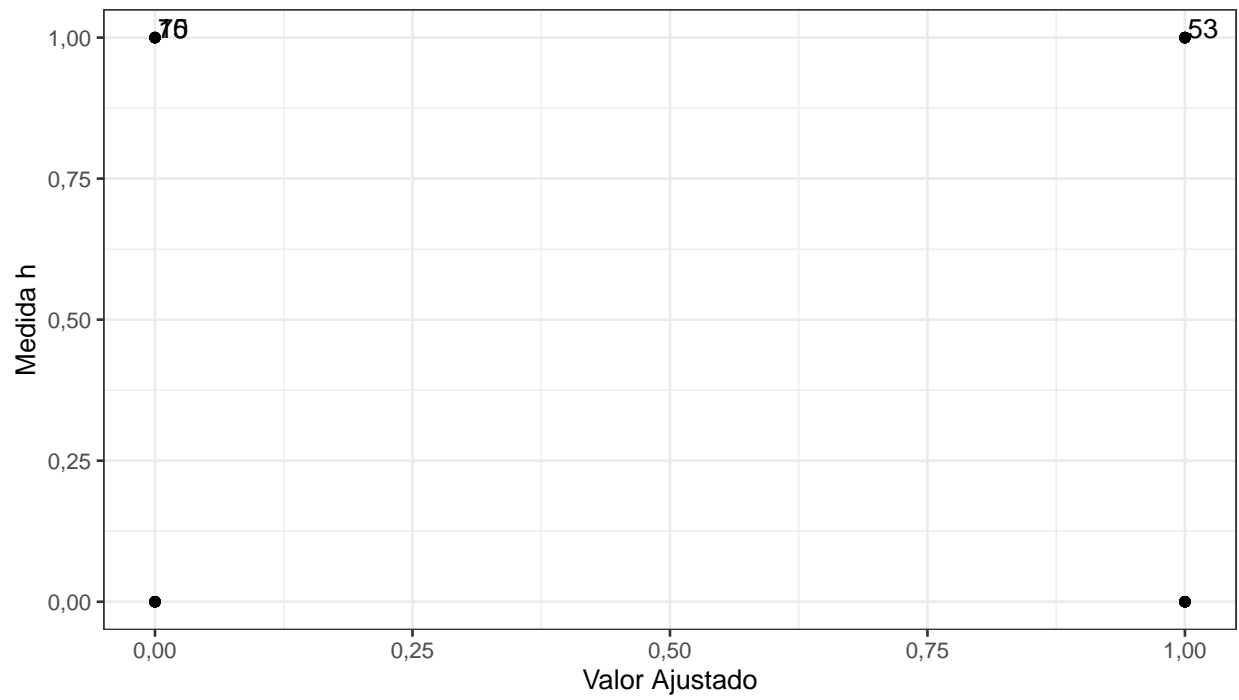
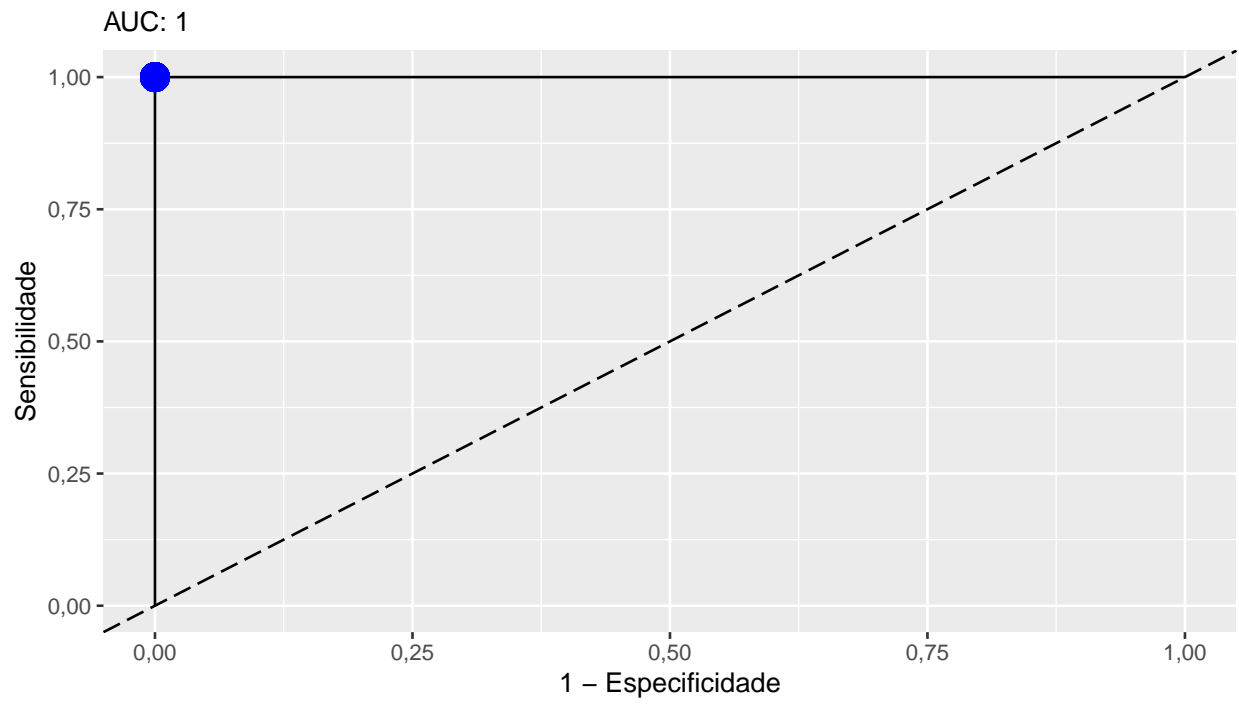
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	Inf	0	Inf
factor(causa_ira)1	0,000000e+00	0	Inf
factor(causa_ira)2	Inf	0	Inf
sofa	6,950011e+220	0	Inf
su	0,000000e+00	0	5,197087e+87
fek	1,956759e+48	0	Inf
uu_su	0,000000e+00	0	Inf
una	2,064123e+03	974240624	1,695932e+125
scr_basal	0,000000e+00	0	Inf
sosm	0,000000e+00	0	5,580674e+74
delta_scr	0,000000e+00	0	Inf
score_clinico	9,785078e+134	0	Inf
dva_mcg_kg_min	Inf	0	Inf
factor(causa_ira)1:su	4,518071e+72	0	Inf
factor(causa_ira)2:su	2,794751e+15	0	Inf

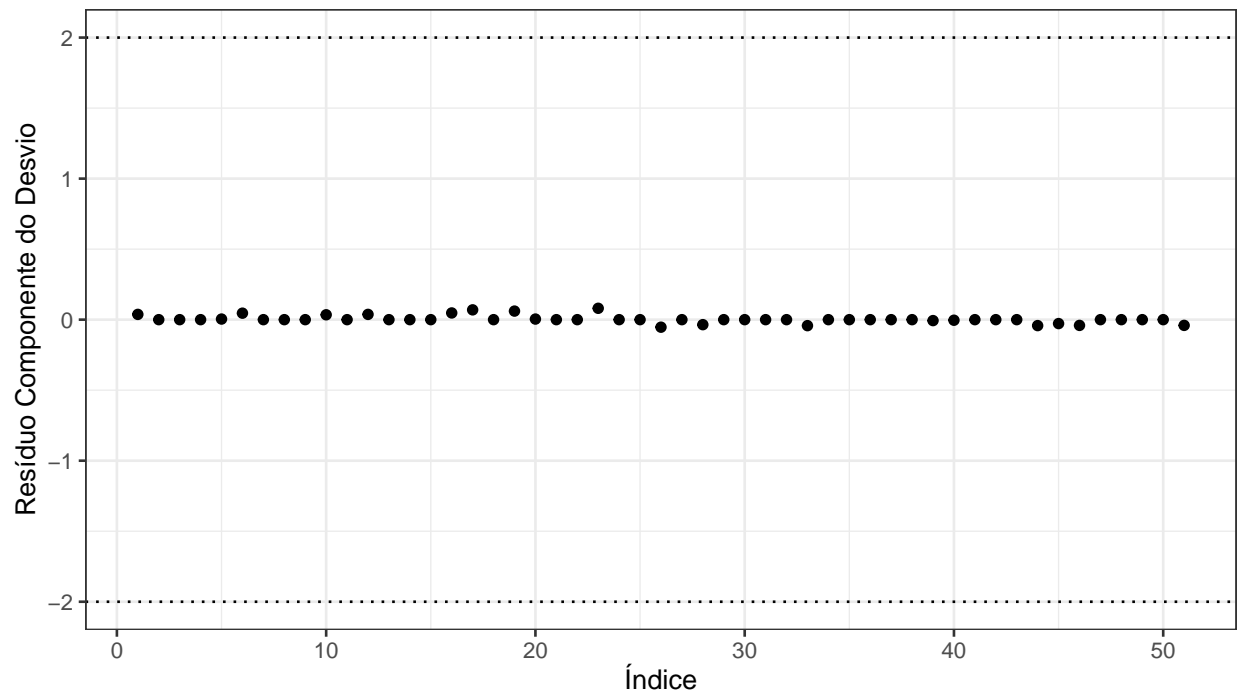
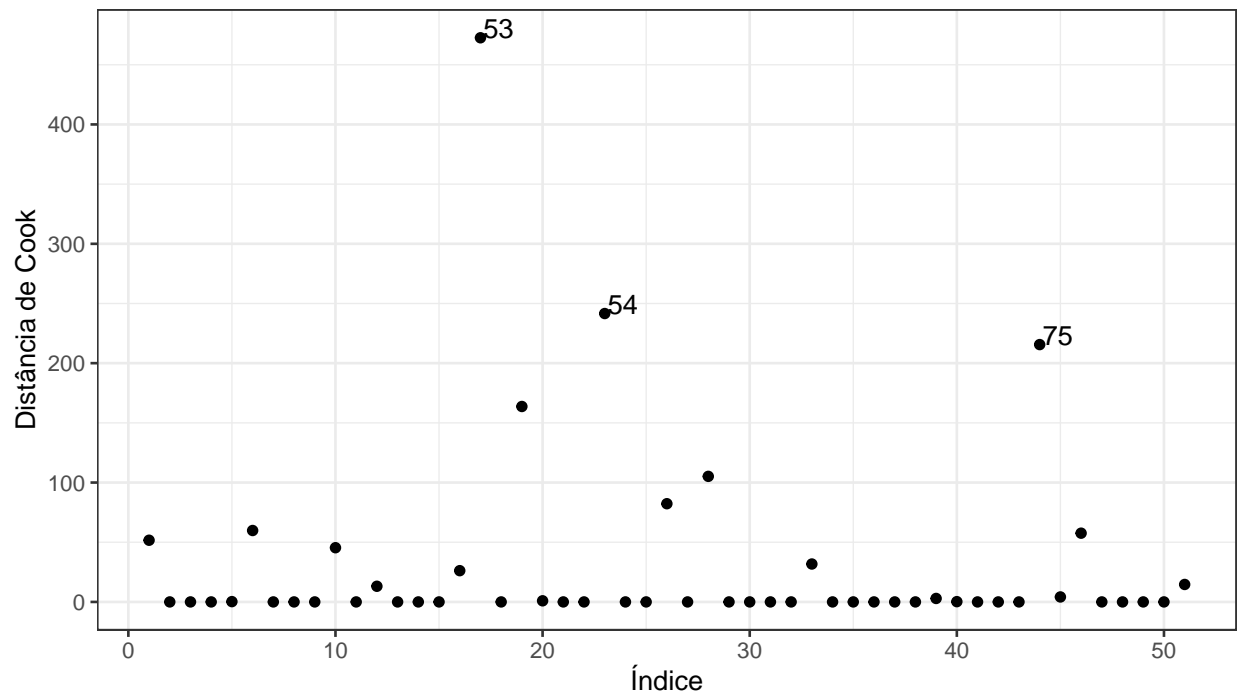
Table 32: Intervalo de confiança para a razão de chances (*continued*)

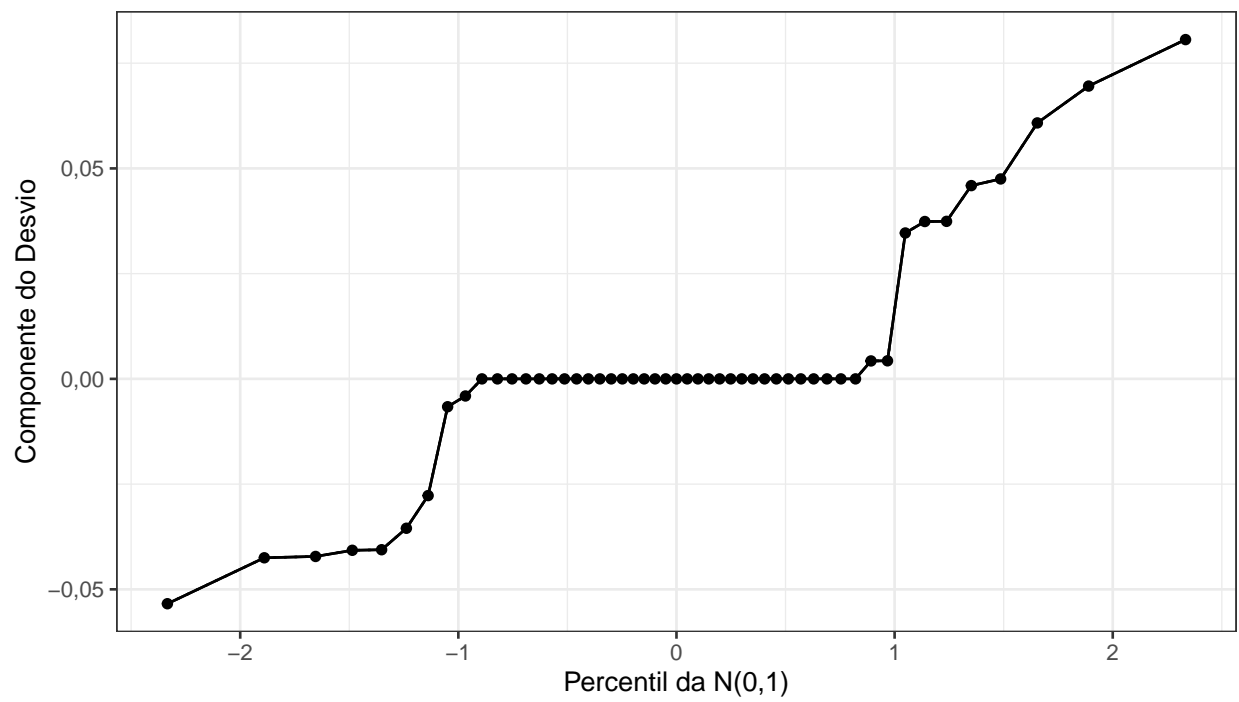
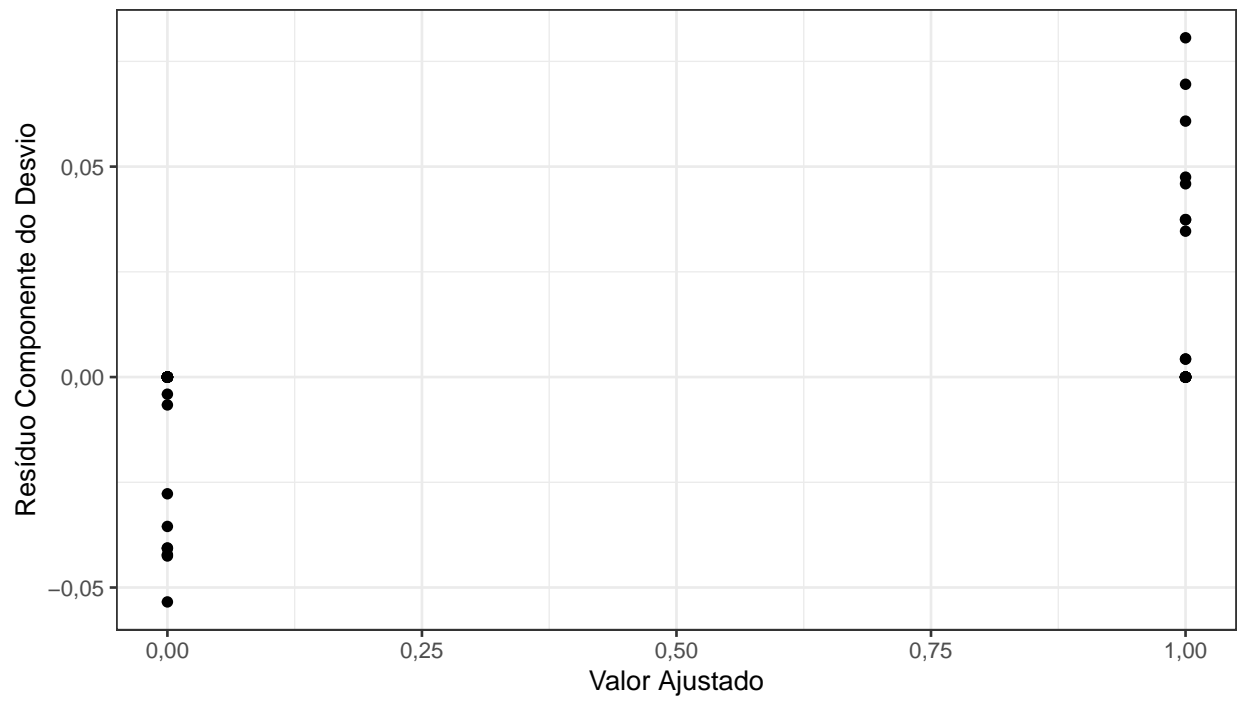
Variável	Estimativa	2,5 %	97,5 %
factor(causa_ira)1:uu_su	Inf	0	Inf
factor(causa_ira)2:uu_su	0,000000e+00	0	Inf
factor(causa_ira)1:una	0,000000e+00	0	1,383810e+15
factor(causa_ira)2:una	0,000000e+00	0	1,405384e+78

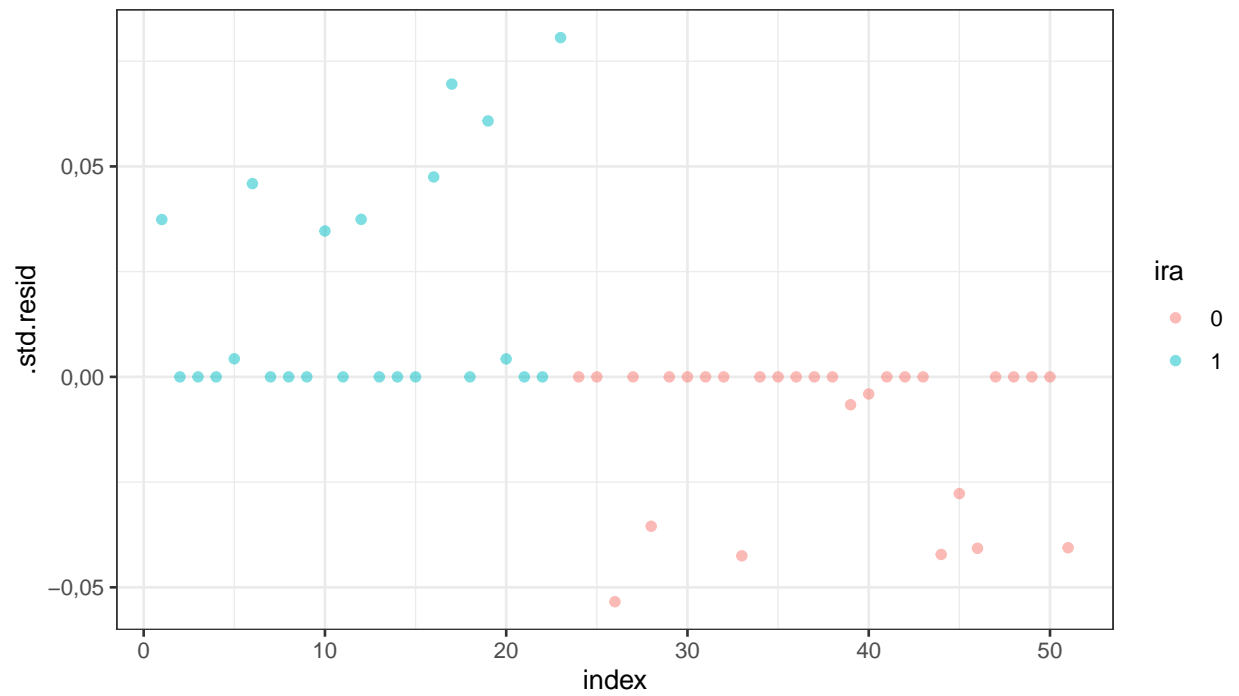
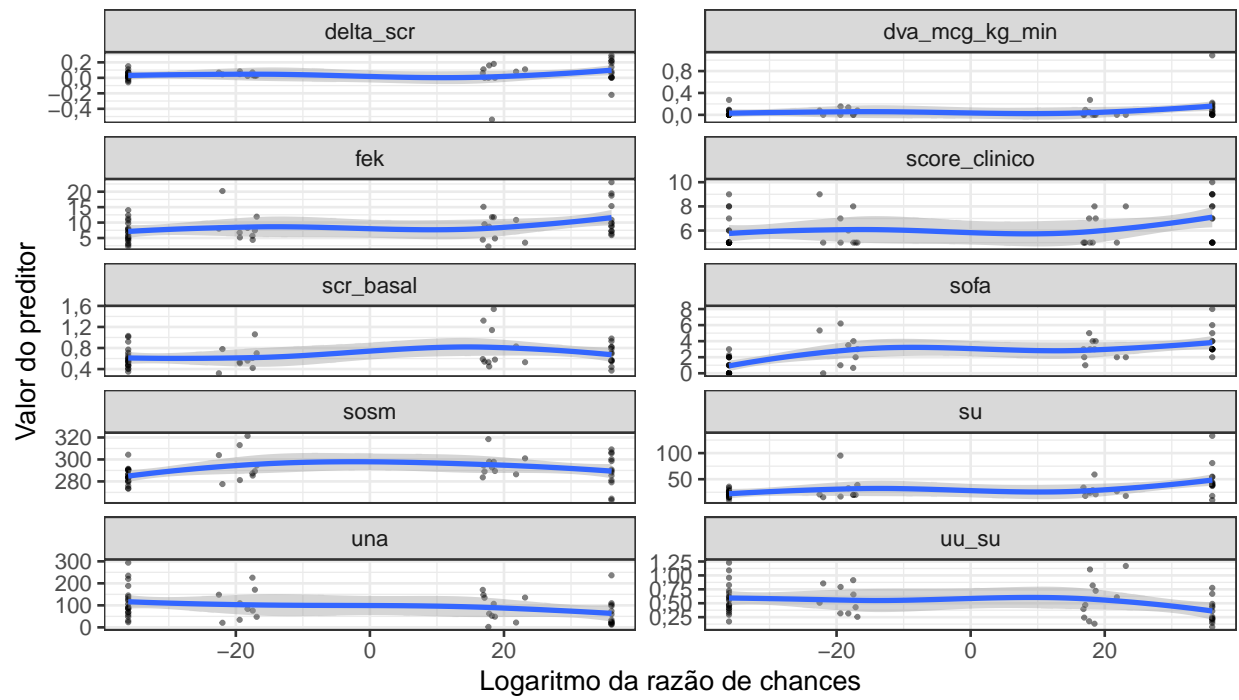
Table 33: VIF

Variável	GVIF	Df	$\sqrt{\text{GVIF}/(2 \cdot \text{Df})}$
factor(causa_ira)	110696,927	2	18,240
sofa	1352,579	1	36,777
su	335,013	1	18,303
fek	658,877	1	25,669
uu_su	331,760	1	18,214
una	779,393	1	27,918
scr_basal	207,523	1	14,406
sosm	243,109	1	15,592
delta_scr	49,728	1	7,052
score_clinico	359,507	1	18,961
dva_mcg_kg_min	361,424	1	19,011
factor(causa_ira):su	36236,246	2	13,797
factor(causa_ira):uu_su	6242,713	2	8,889
factor(causa_ira):una	4888,431	2	8,362









Forward

Table 34: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5,313	1,691	-3,141	0,002
sofa	0,788	0,259	3,046	0,002
scr_basal	3,280	1,748	1,877	0,061
su	0,031	0,019	1,604	0,109

Table 35: Detalhes do modelo

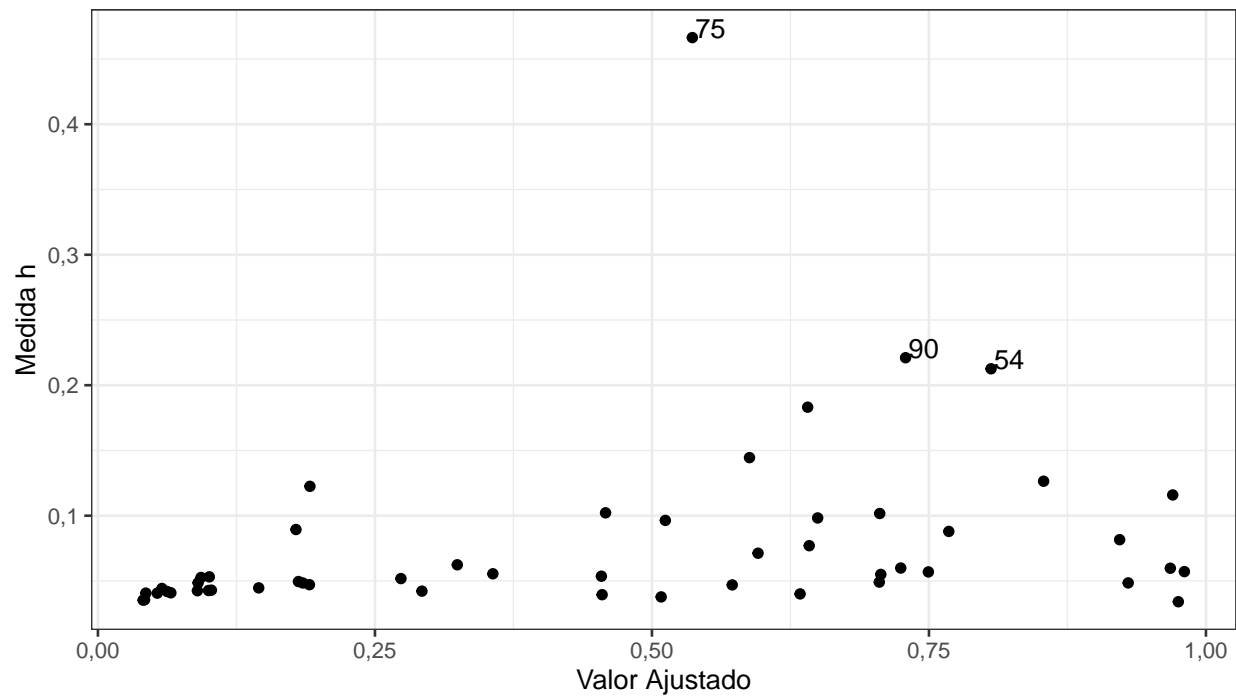
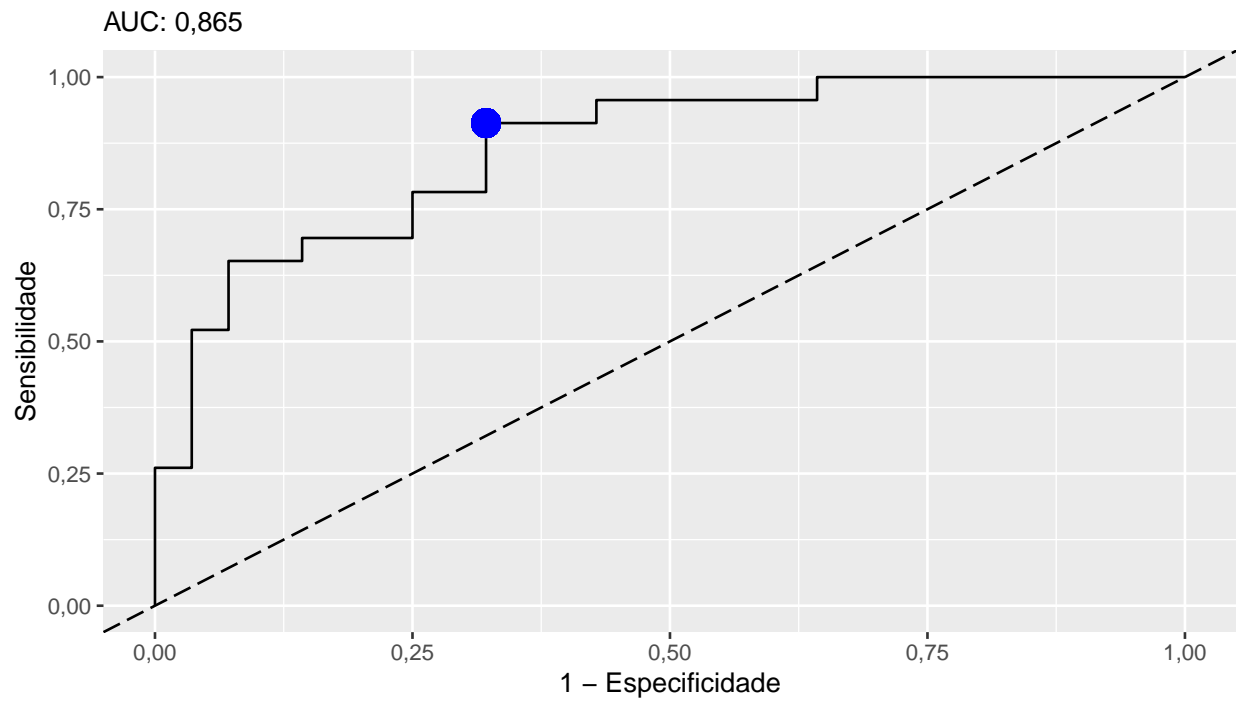
AIC	deviance	Graus de liberdade do resíduo	Número de observações
54,837	46,837	47	51

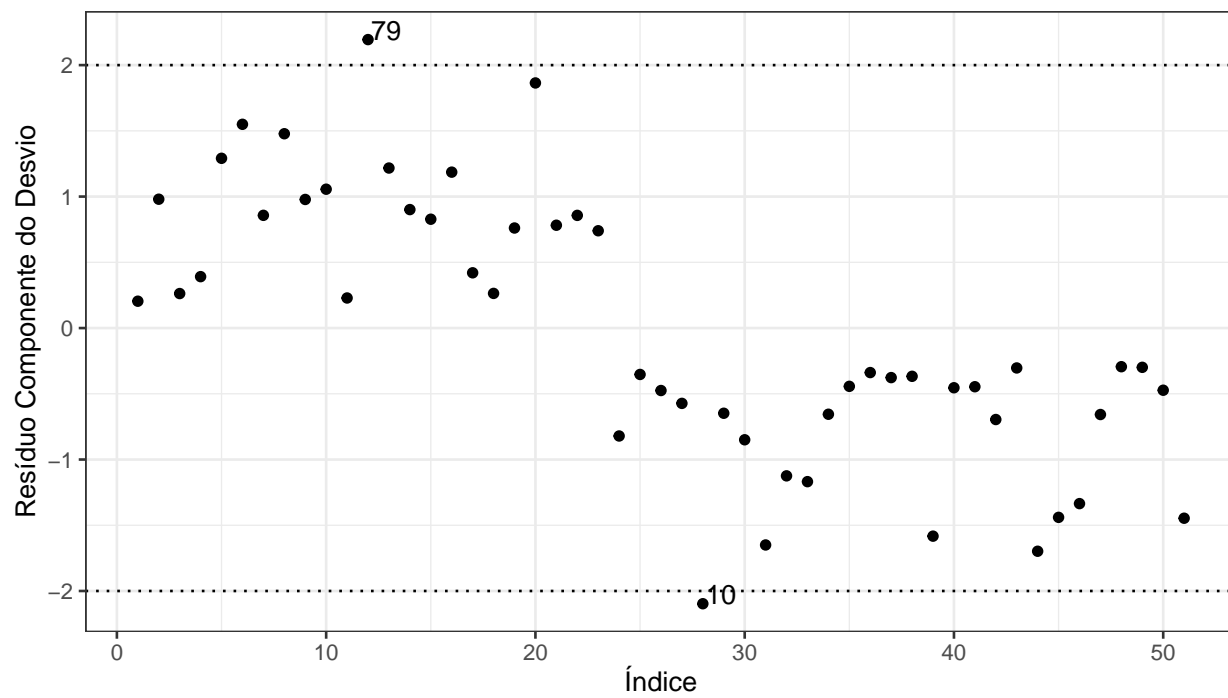
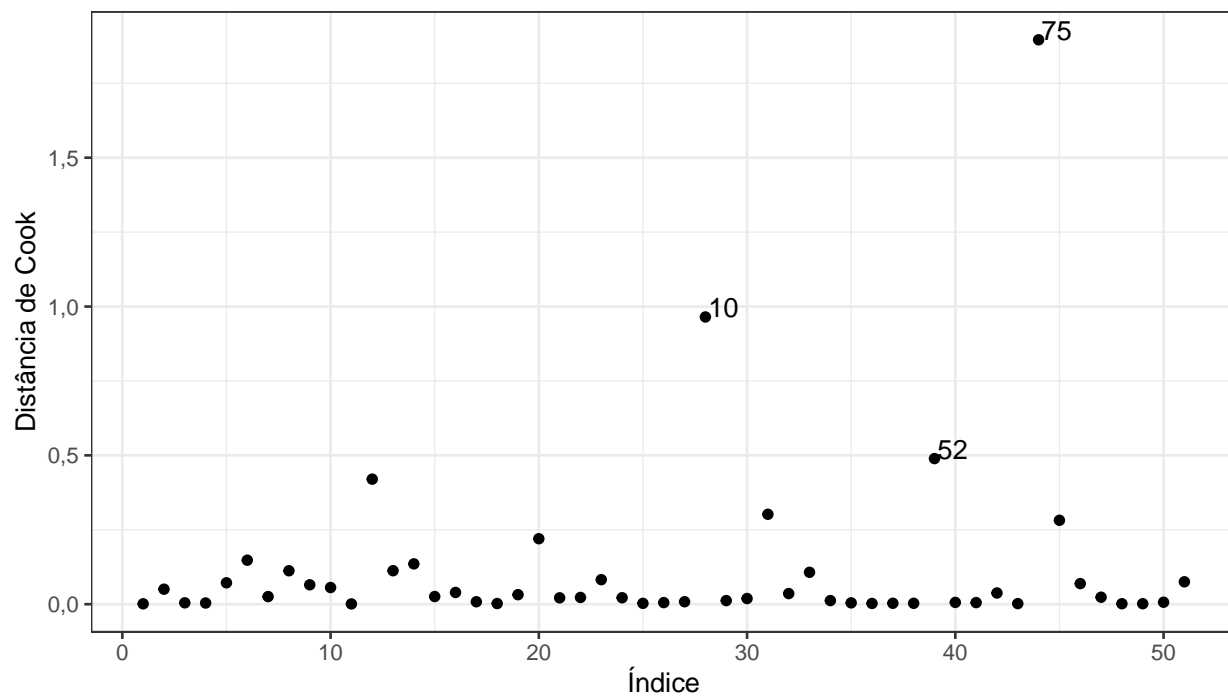
Table 36: Intervalo de confiança para a razão de chances

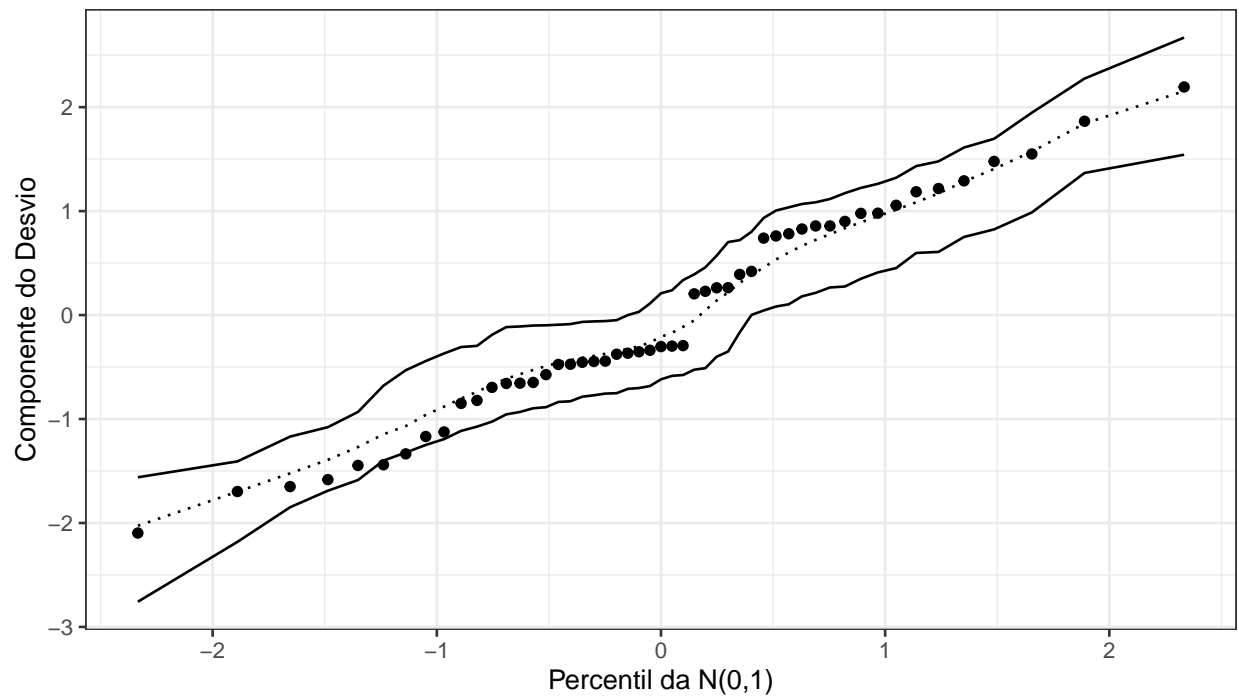
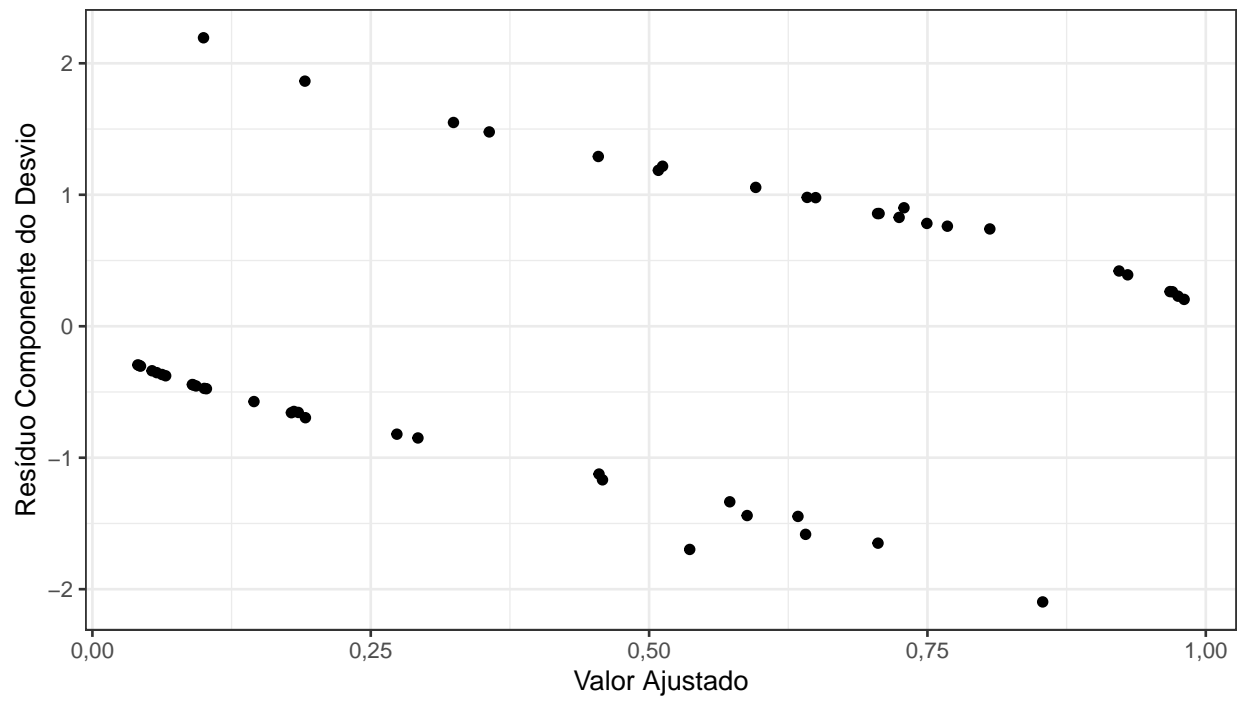
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,005	0,000	0,087
sofa	2,199	1,406	3,961
scr_basal	26,585	1,215	1314,570
su	1,031	0,997	1,077

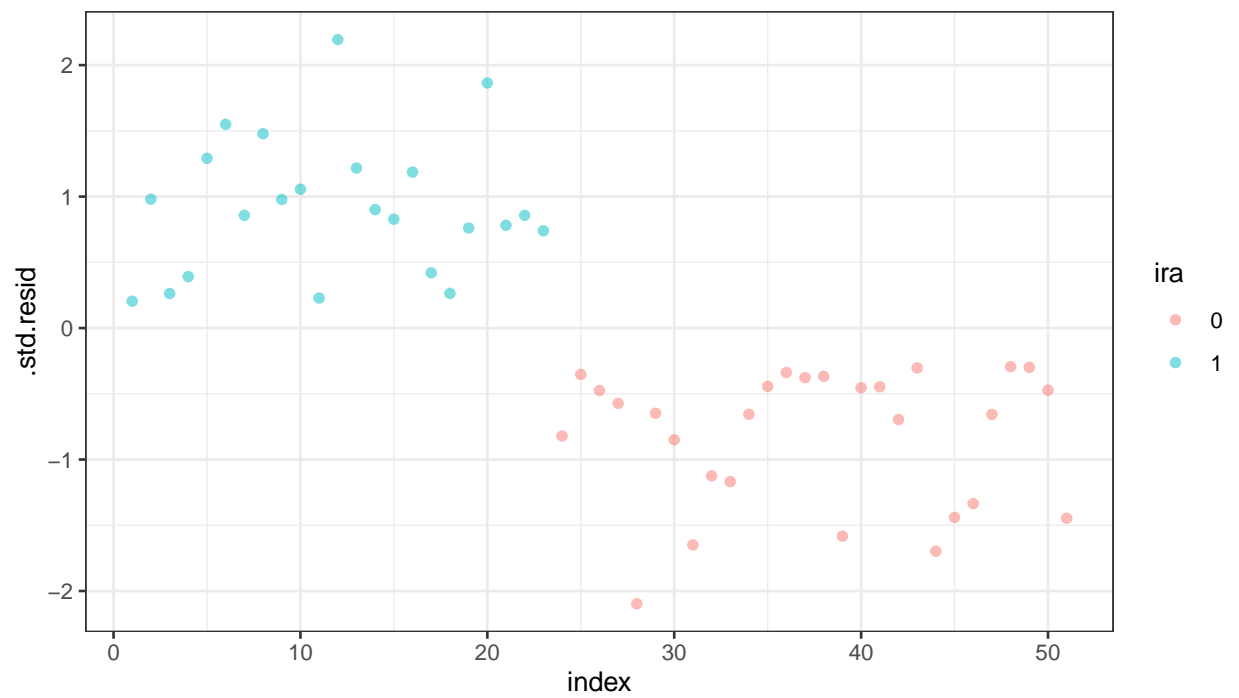
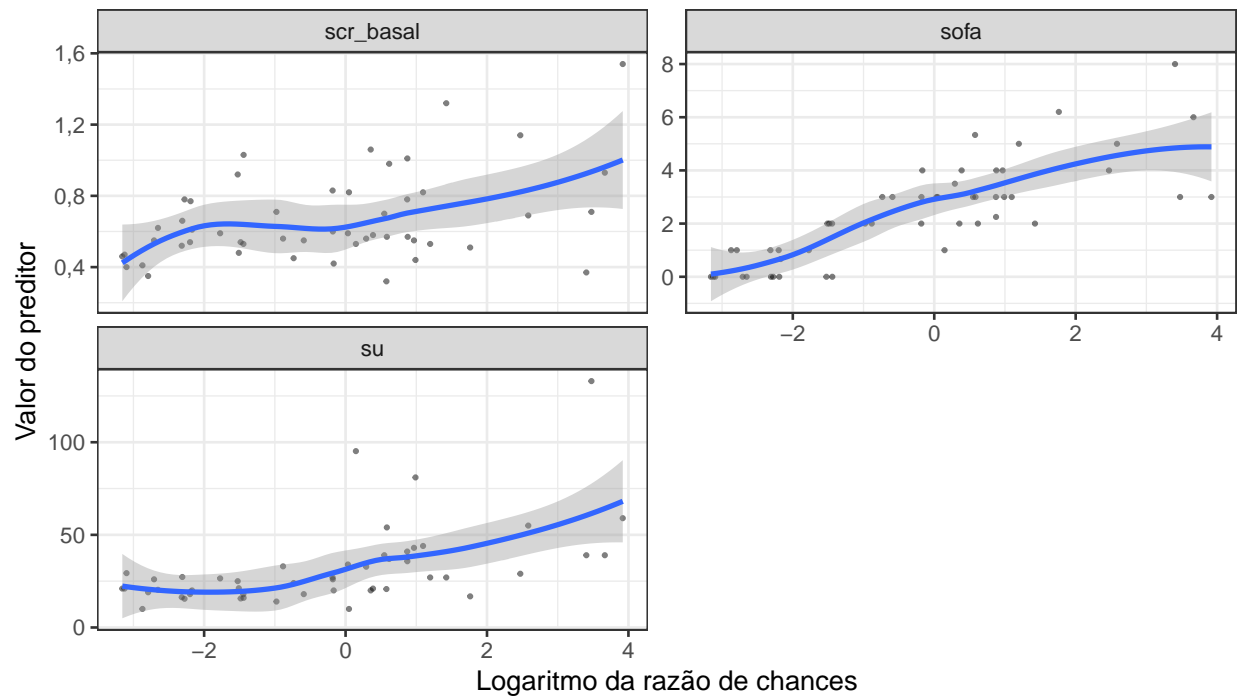
Table 37: VIF

Variável	value
sofa	1,101
scr_basal	1,107
su	1,007









Stepwise

Table 38: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5,313	1,691	-3,141	0,002
sofa	0,788	0,259	3,046	0,002
scr_basal	3,280	1,748	1,877	0,061
su	0,031	0,019	1,604	0,109

Table 39: Detalhes do modelo

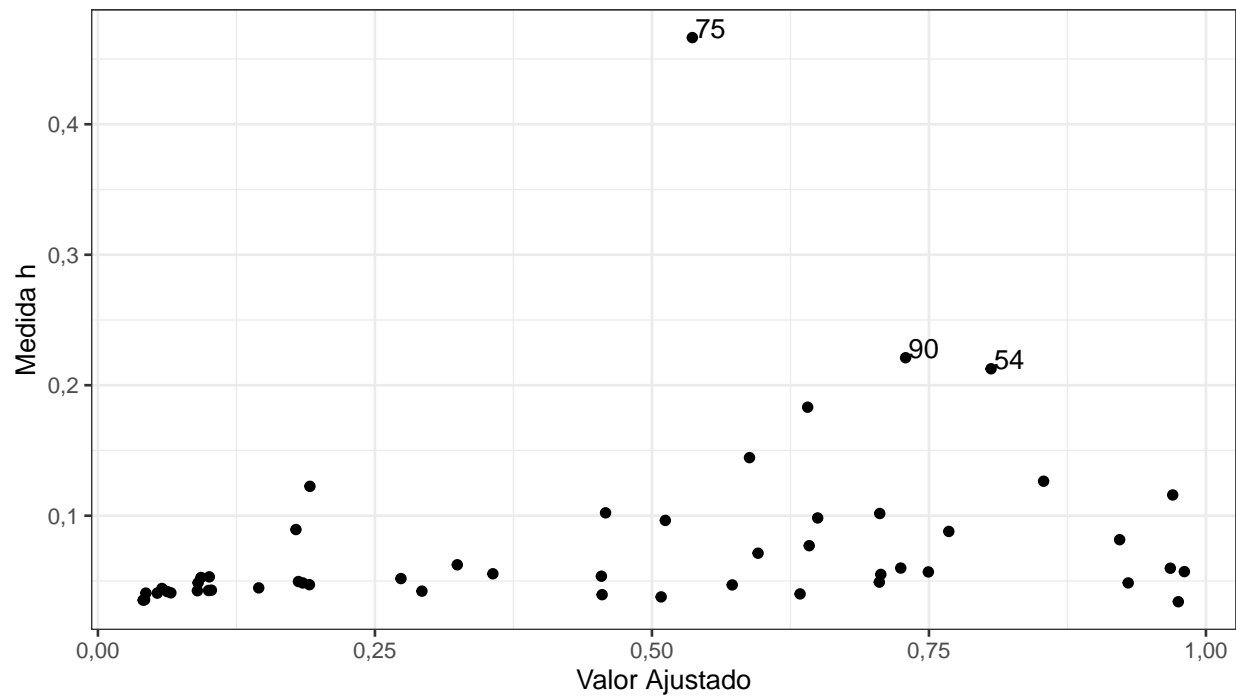
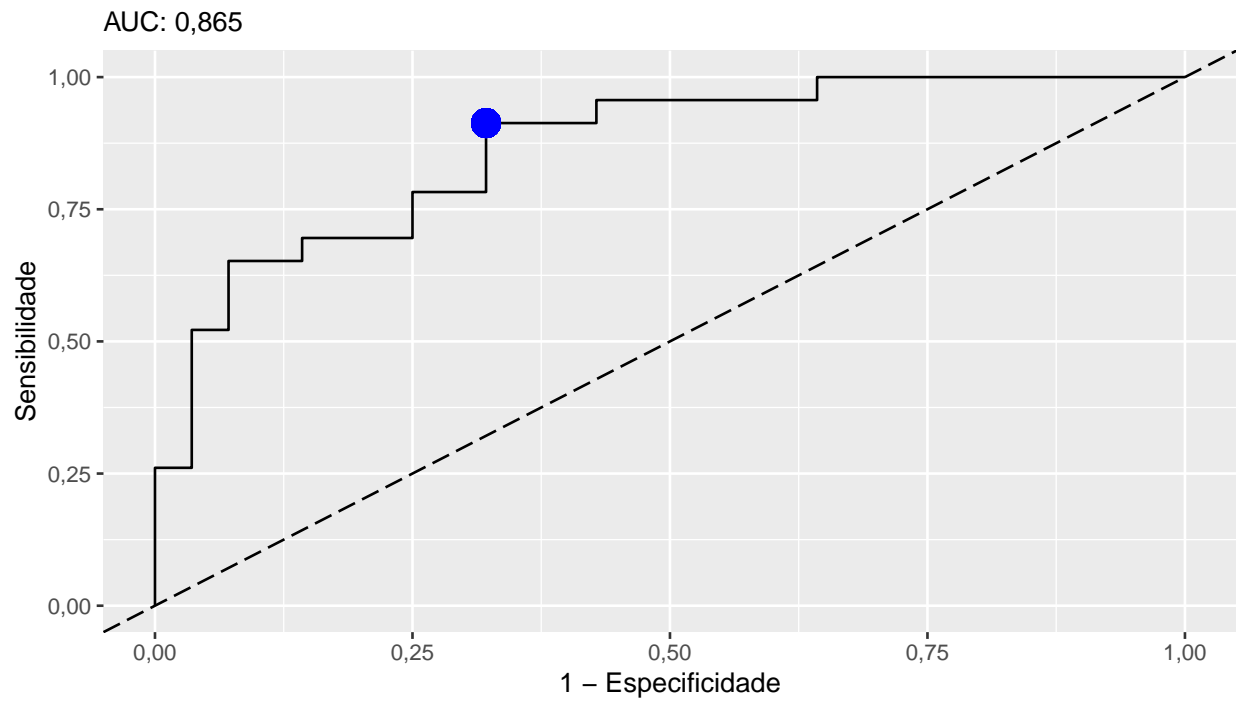
AIC	deviance	Graus de liberdade do resíduo	Número de observações
54,837	46,837	47	51

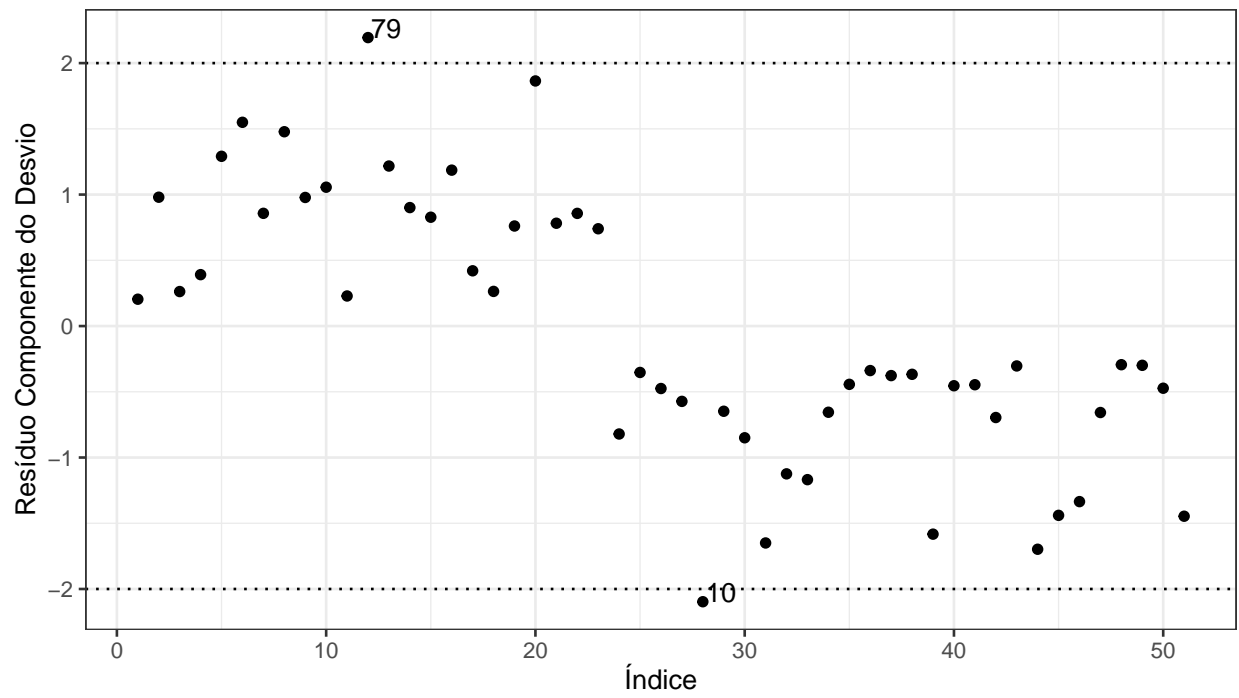
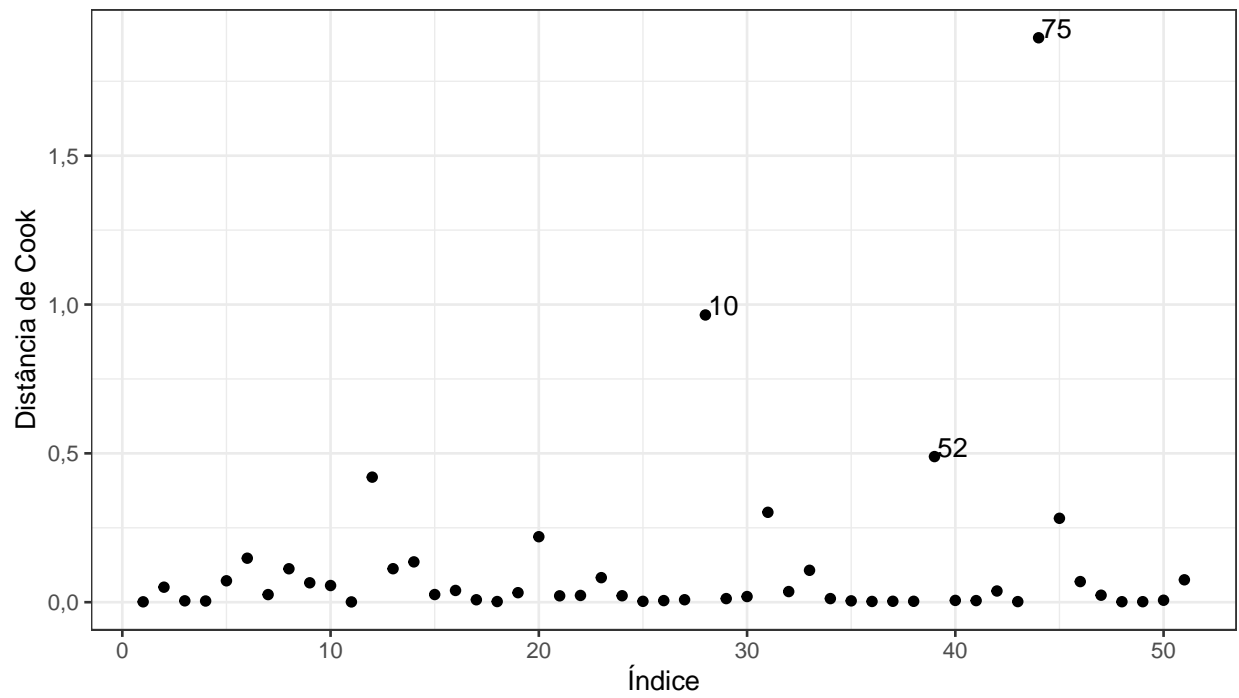
Table 40: Intervalo de confiança para a razão de chances

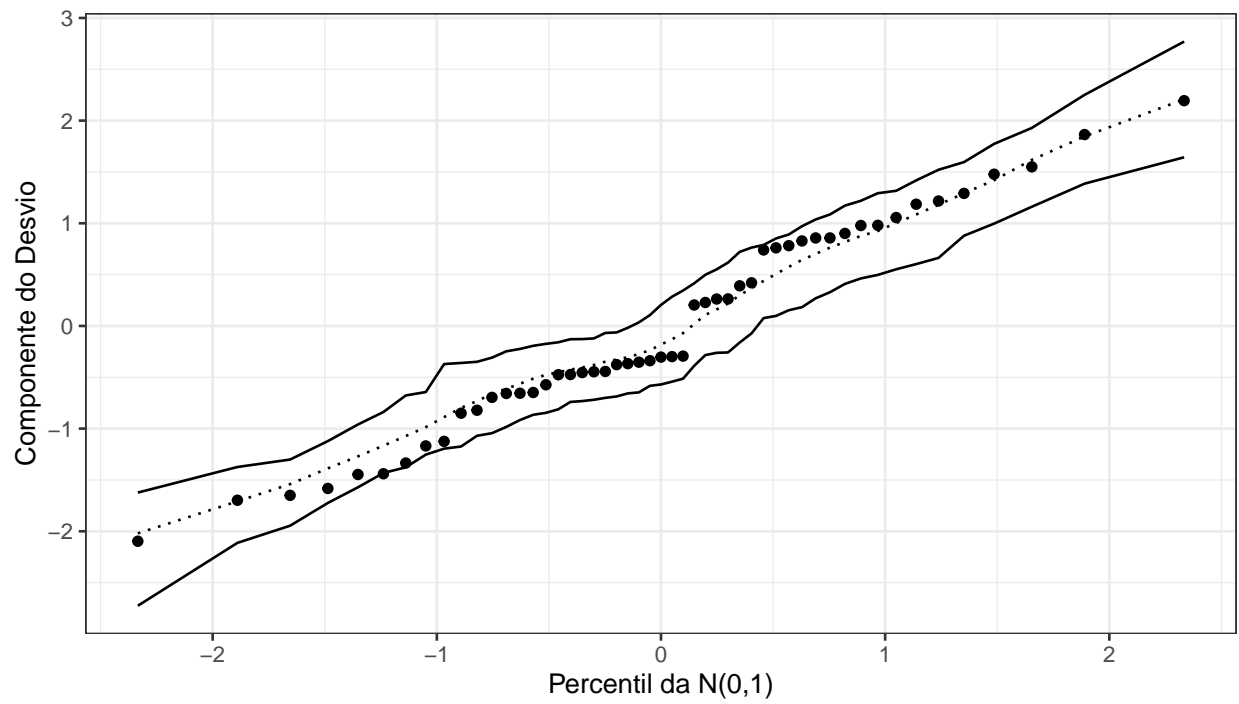
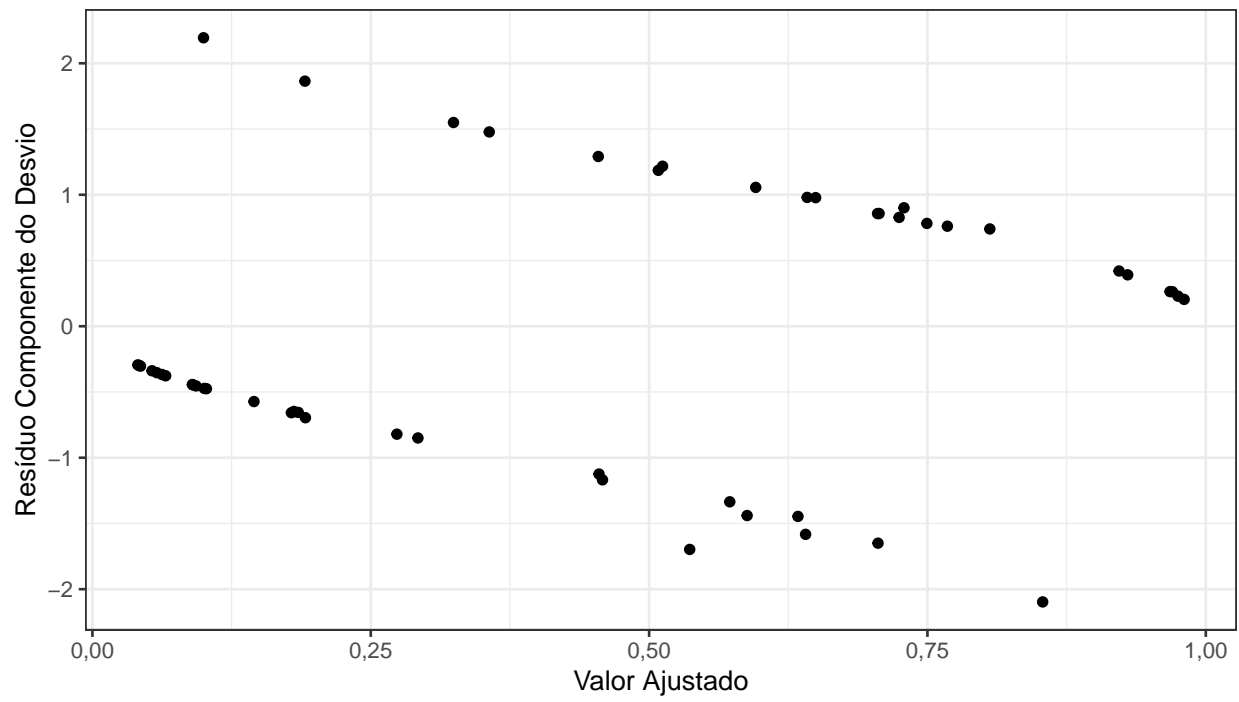
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,005	0,000	0,087
sofa	2,199	1,406	3,961
scr_basal	26,585	1,215	1314,570
su	1,031	0,997	1,077

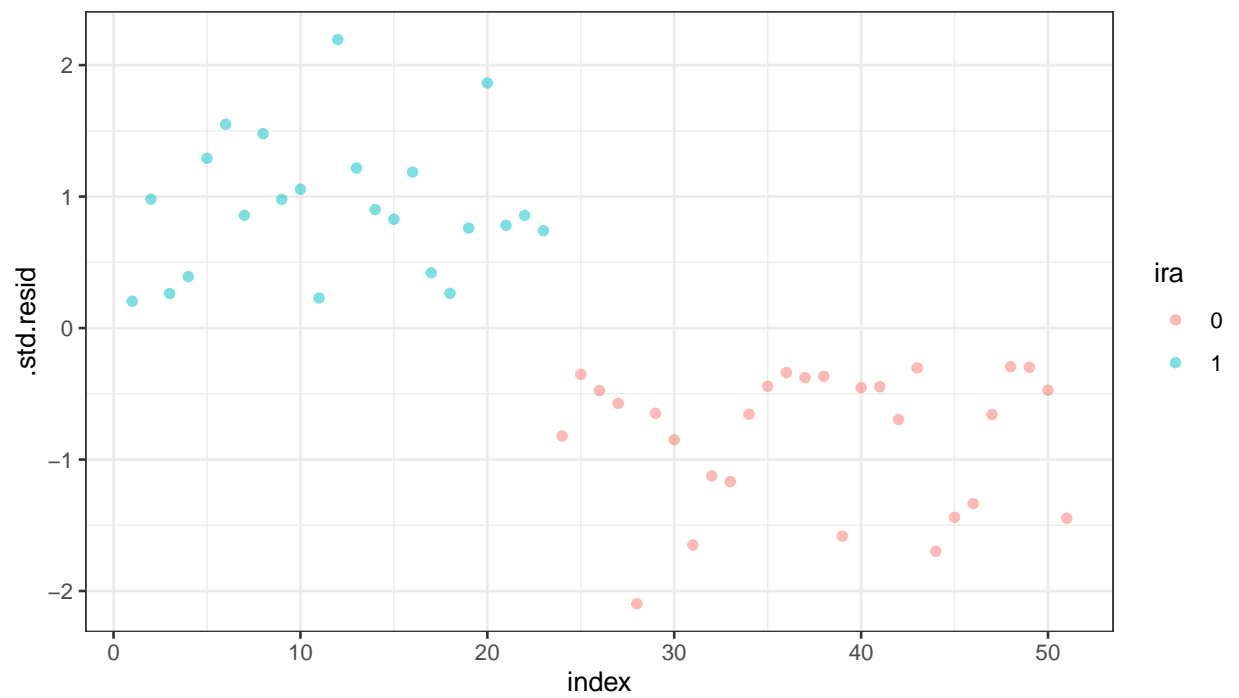
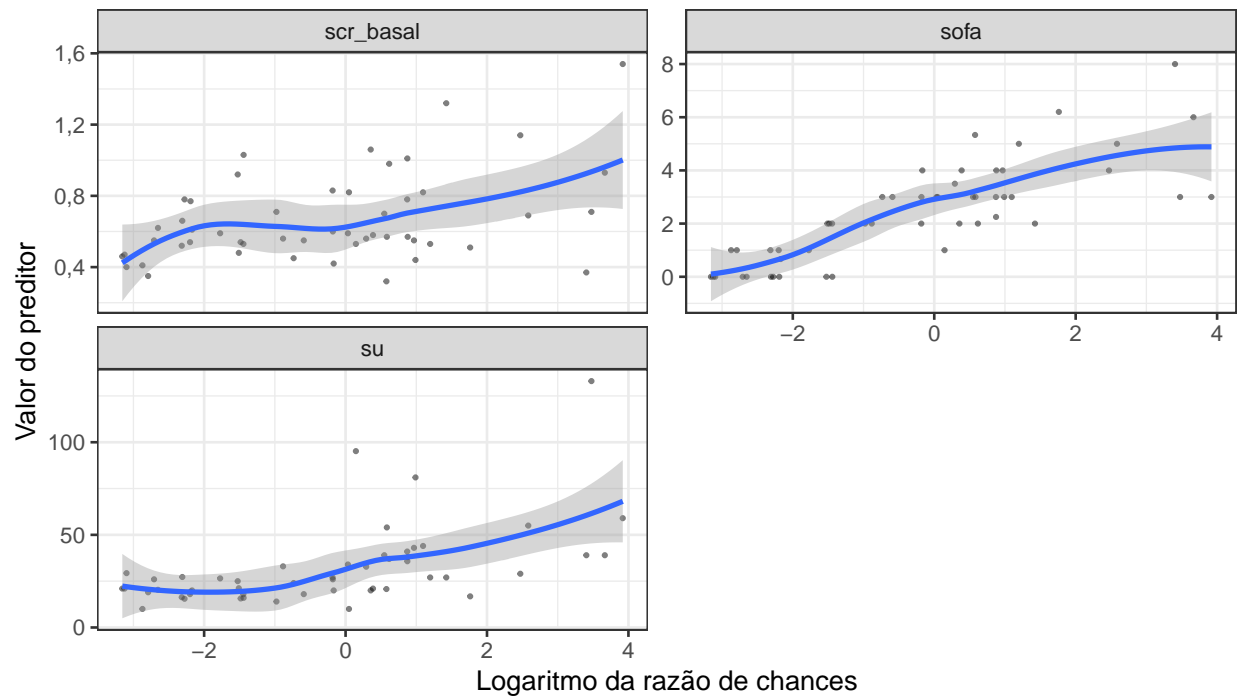
Table 41: VIF

Variável	value
sofa	1,101
scr_basal	1,107
su	1,007









Modelo união

Table 42: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-1892,429	1142389,906	-0,002	0,999
causa_ira1	2828,200	6456348,587	0,000	1,000
causa_ira2	107,428	2064484,878	0,000	1,000
sofa	79,272	36031,176	0,002	0,998
su	-3,074	2493,392	-0,001	0,999
fek	22,844	11003,939	0,002	0,998
uu_su	-79,611	74859,908	-0,001	0,999
una	2,165	989,958	0,002	0,998
scr_basal	-268,908	129607,998	-0,002	0,998
sosm	5,454	3608,930	0,002	0,999
delta_scr	-213,034	154703,066	-0,001	0,999
score_clinico	-6,908	11273,743	-0,001	1,000
dva_mcg_kg_min	258,738	230430,300	0,001	0,999
su:factor(causa_ira)1	6,017	5022,122	0,001	0,999
su:factor(causa_ira)2	4,417	7046,678	0,001	0,999
fek:factor(causa_ira)1	-22,587	27896,275	-0,001	0,999
fek:factor(causa_ira)2	52,634	68521,503	0,001	0,999
uu_su:factor(causa_ira)1	454,978	511795,354	0,001	0,999
uu_su:factor(causa_ira)2	696,243	517224,801	0,001	0,999
una:factor(causa_ira)1	-1,470	2212,297	-0,001	0,999
una:factor(causa_ira)2	-8,014	4365,828	-0,002	0,999
scr_basal:factor(causa_ira)1	738,834	985337,030	0,001	0,999
scr_basal:factor(causa_ira)2	378,867	310927,843	0,001	0,999
sosm:factor(causa_ira)1	-11,434	21530,904	-0,001	1,000
sosm:factor(causa_ira)2	-2,206	6980,846	0,000	1,000
delta_scr:factor(causa_ira)1	-245,508	2929948,305	0,000	1,000
delta_scr:factor(causa_ira)2	612,769	1740511,701	0,000	1,000

Table 43: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
54	0	24	51

Table 44: Intervalo de confiança para a razão de chances

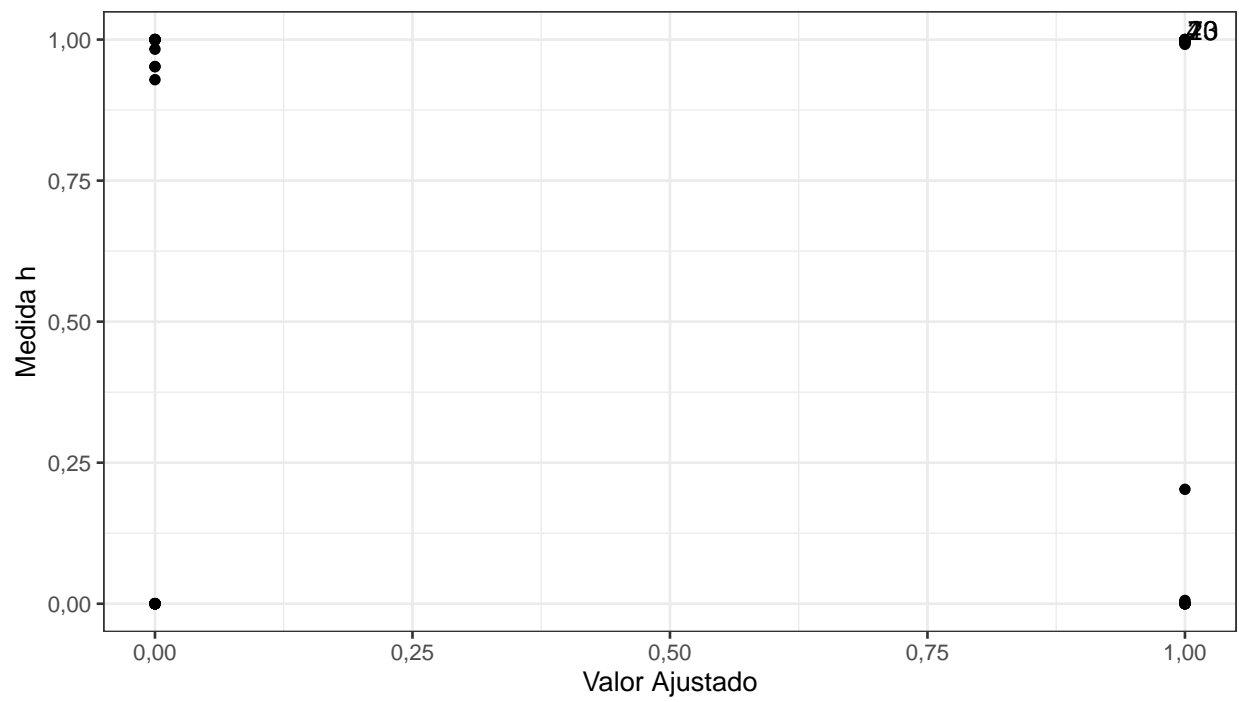
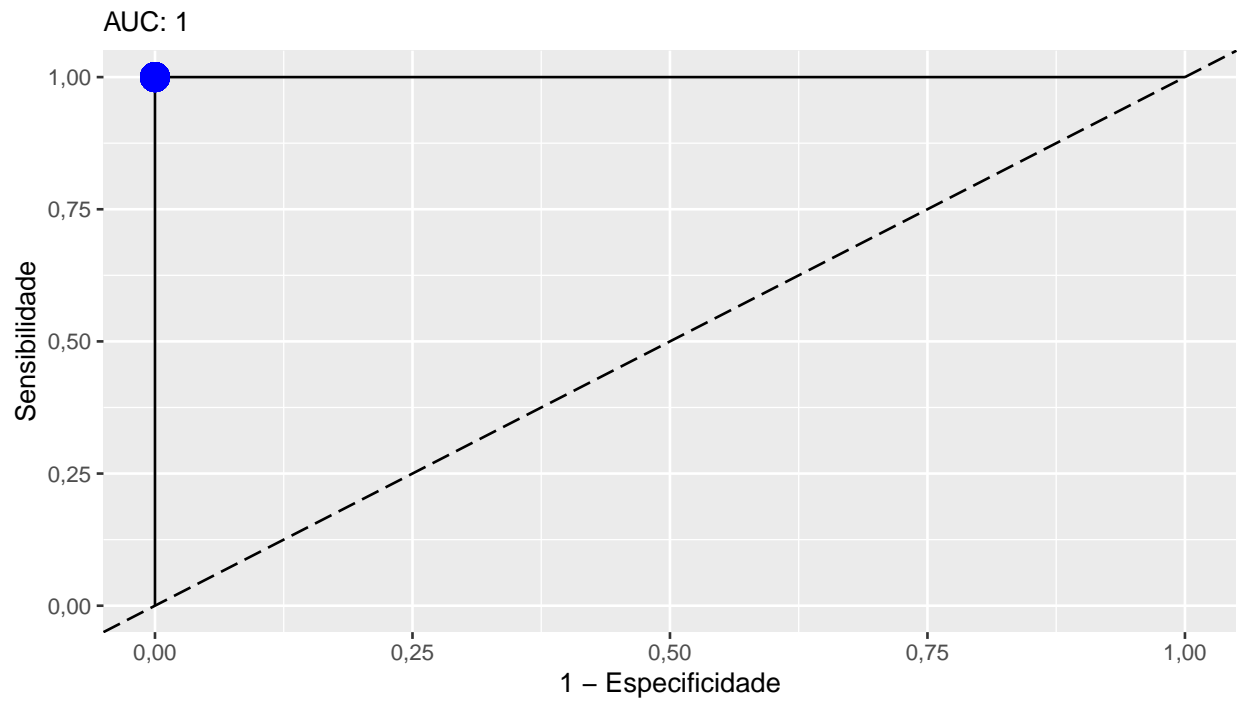
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,000000e+00	0	Inf
causa_ira1	Inf	0	Inf
causa_ira2	4,523736e+46	0	Inf
sofa	2,676462e+34	0	Inf
su	4,600000e-02	0	4,403425e+49
fek	8,341091e+09	0	8,246584e+192
uu_su	0,000000e+00	0	Inf

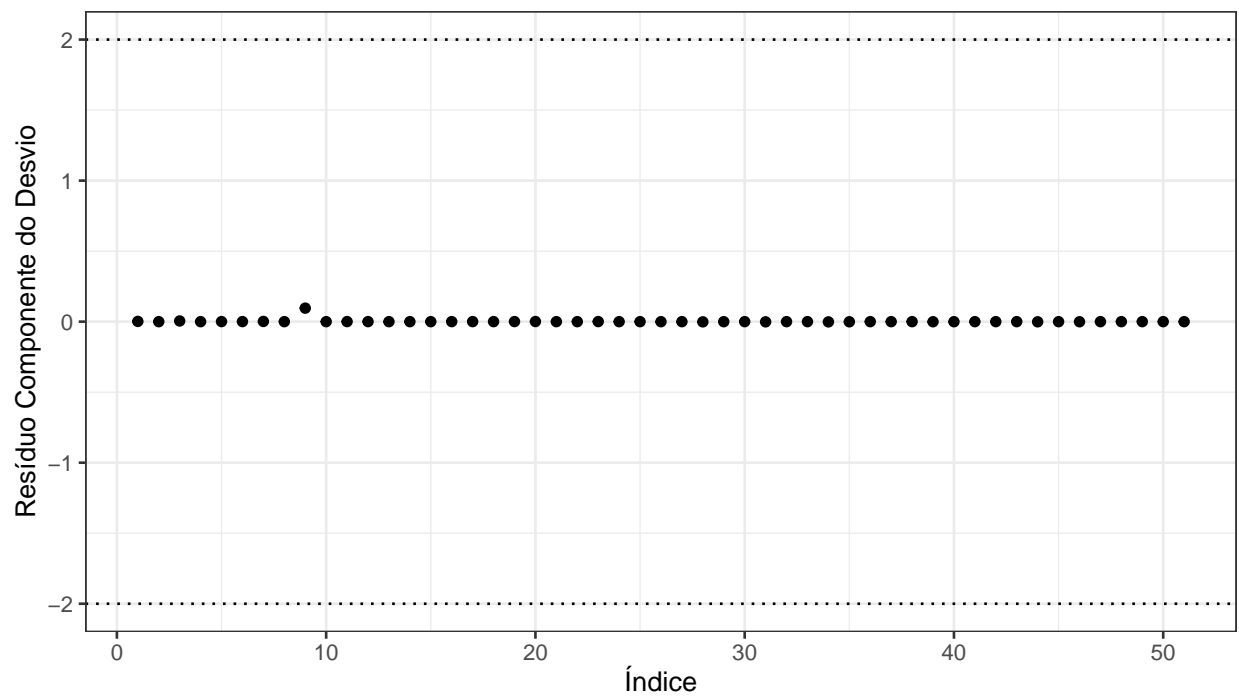
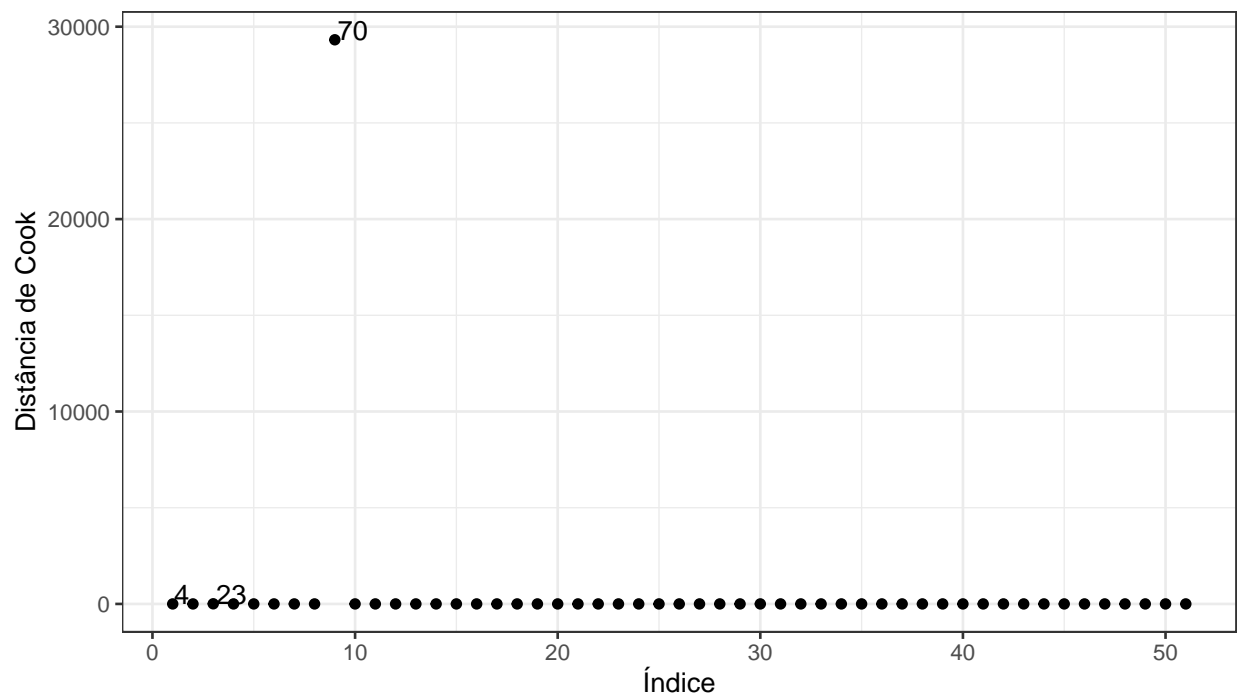
Table 44: Intervalo de confiança para a razão de chances (*continued*)

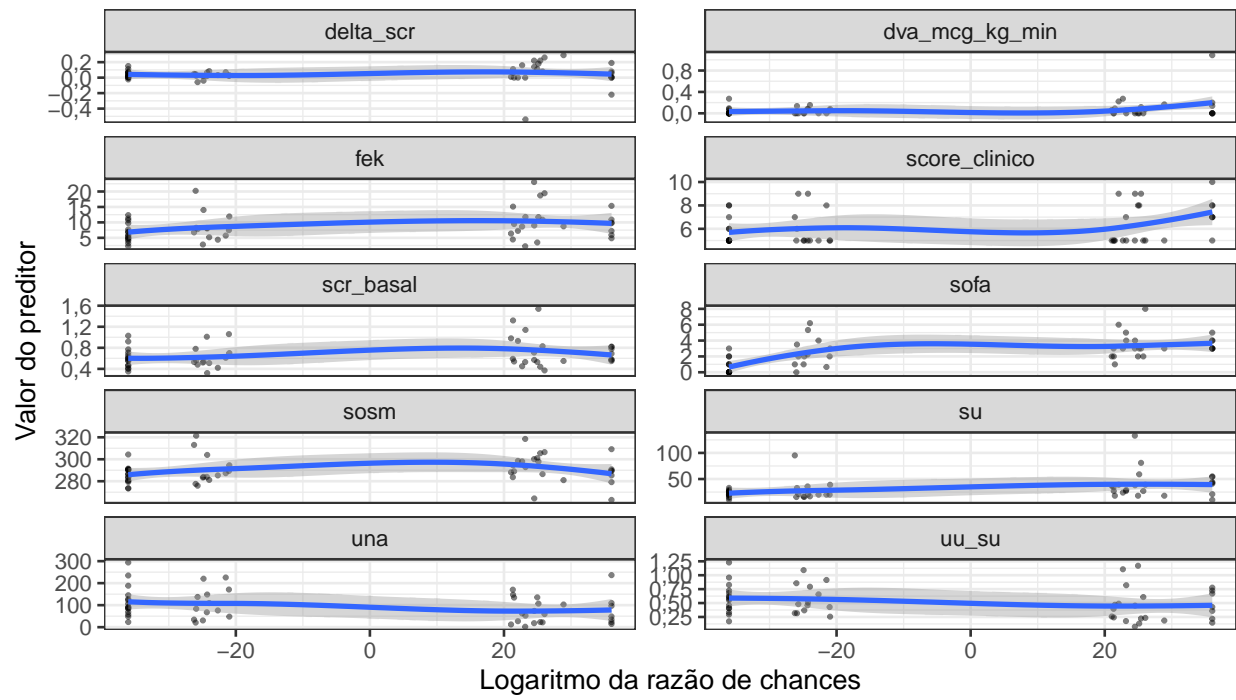
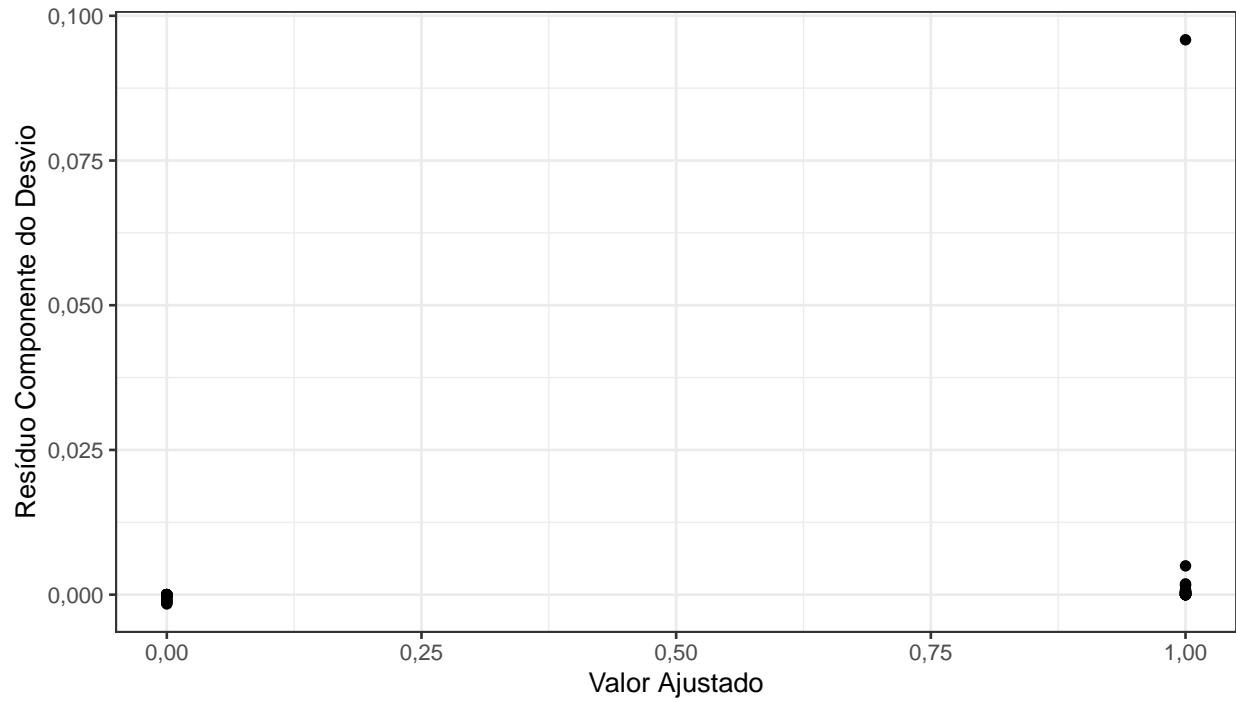
Variável	Estimativa	2,5 %	97,5 %
una	8,716000e+00	0	3,170475e+263
scr_basal	0,000000e+00	0	Inf
sosm	2,337430e+02	0	1,006771e+74
delta_scr	0,000000e+00	0	Inf
score_clinico	1,000000e-03	0	6,602926e+204
dva_mcg_kg_min	2,335498e+112	0	Inf
su:factor(causa_ira)1	4,105270e+02	0	3,622647e+89
su:factor(causa_ira)2	8,288300e+01	0	1,603821e+126
fek:factor(causa_ira)1	0,000000e+00	0	Inf
fek:factor(causa_ira)2	7,221546e+22	0	Inf
uu_su:factor(causa_ira)1	3,931016e+197	0	Inf
uu_su:factor(causa_ira)2	2,368170e+302	0	Inf
una:factor(causa_ira)1	2,300000e-01	0	5,111843e+33
una:factor(causa_ira)2	0,000000e+00	0	7,704698e+80
scr_basal:factor(causa_ira)1	Inf	0	Inf
scr_basal:factor(causa_ira)2	3,467602e+164	0	Inf
sosm:factor(causa_ira)1	0,000000e+00	0	Inf
sosm:factor(causa_ira)2	1,100000e-01	0	4,032731e+137
delta_scr:factor(causa_ira)1	0,000000e+00	0	Inf
delta_scr:factor(causa_ira)2	1,325373e+266	0	Inf

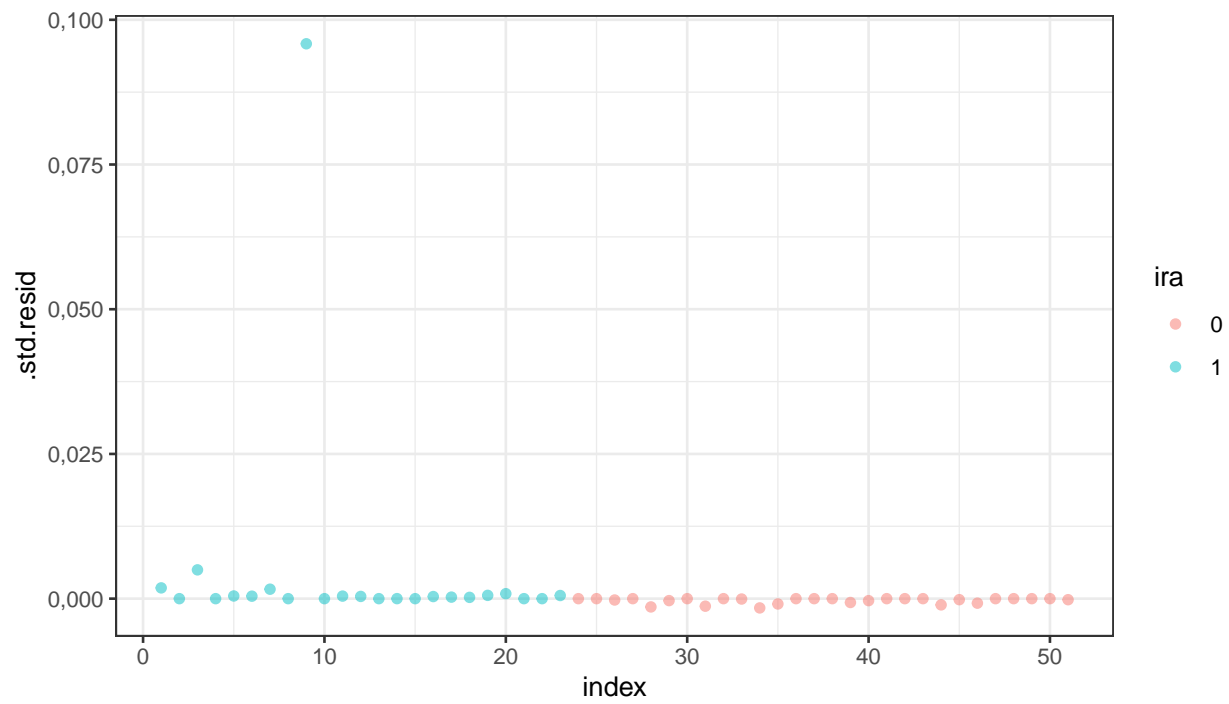
Table 45: VIF

Variável	GVIF	Df	$\widehat{GVIF}(1/(2*Df))$
causa_ira	96098796,900	2	99,010
sofa	30,684	1	5,539
su	11,099	1	3,332
fek	21,584	1	4,646
uu_su	4,387	1	2,095
una	69,628	1	8,344
scr_basal	17,266	1	4,155
sosm	6,996	1	2,645
delta_scr	2,435	1	1,561
score_clinico	2,859	1	1,691
dva_mcg_kg_min	3,023	1	1,739
su:factor(causa_ira)	3600,896	2	7,746
fek:factor(causa_ira)	18213,318	2	11,617
uu_su:factor(causa_ira)	1566,885	2	6,292
una:factor(causa_ira)	1119,528	2	5,784
scr_basal:factor(causa_ira)	14191,865	2	10,915
sosm:factor(causa_ira)	88189529,063	2	96,907
delta_scr:factor(causa_ira)	404,176	2	4,484









Modelo intersecção

Table 46: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5,313	1,691	-3,141	0,002
sofa	0,788	0,259	3,046	0,002
su	0,031	0,019	1,604	0,109
scr_basal	3,280	1,748	1,877	0,061

Table 47: Detalhes do modelo

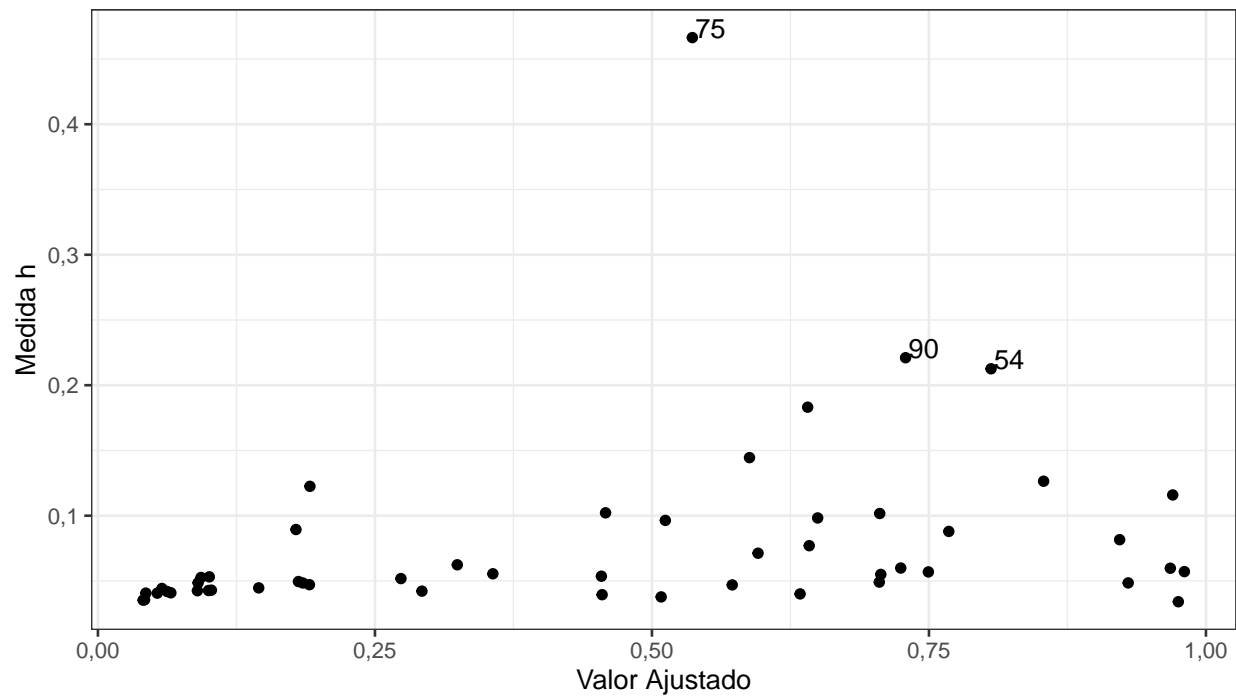
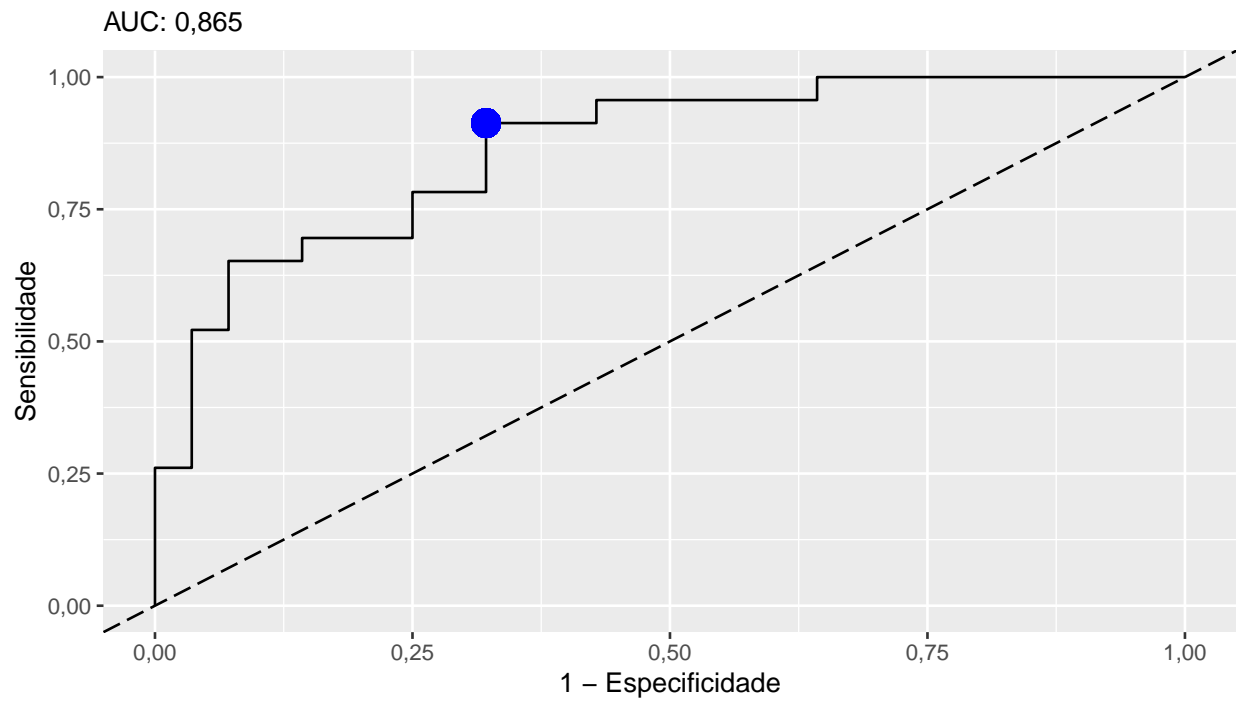
AIC	deviance	Graus de liberdade do resíduo	Número de observações
54,837	46,837	47	51

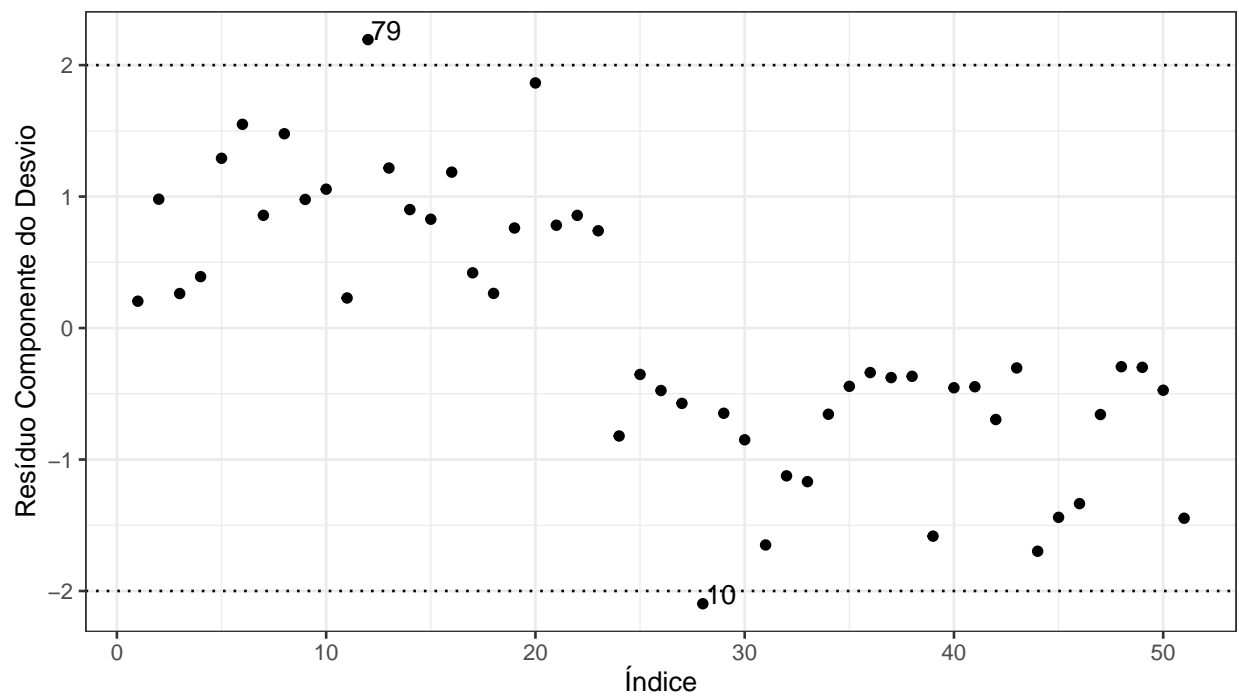
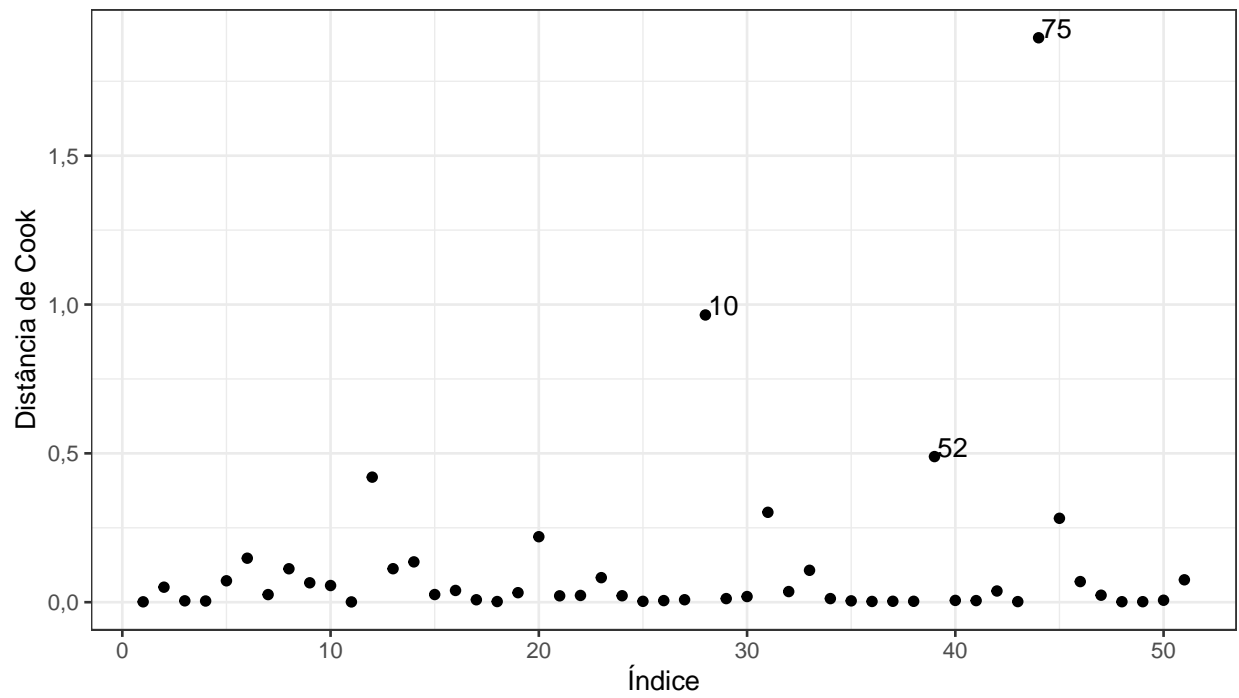
Table 48: Intervalo de confiança para a razão de chances

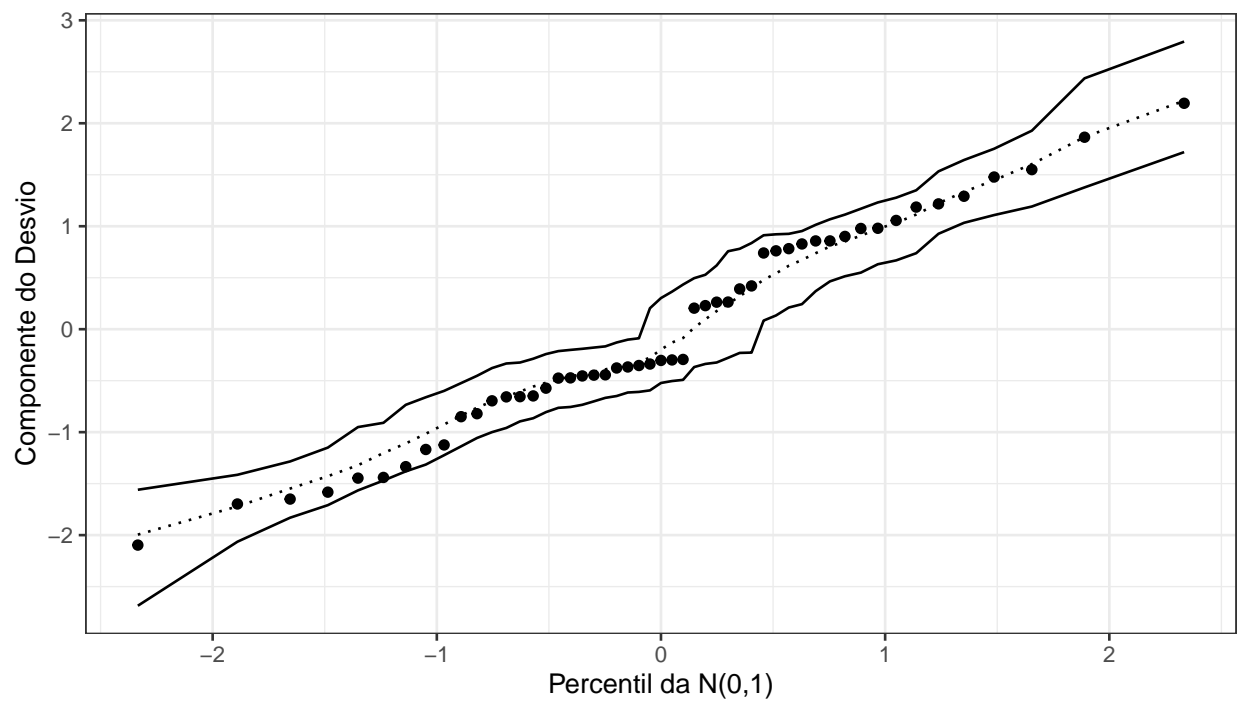
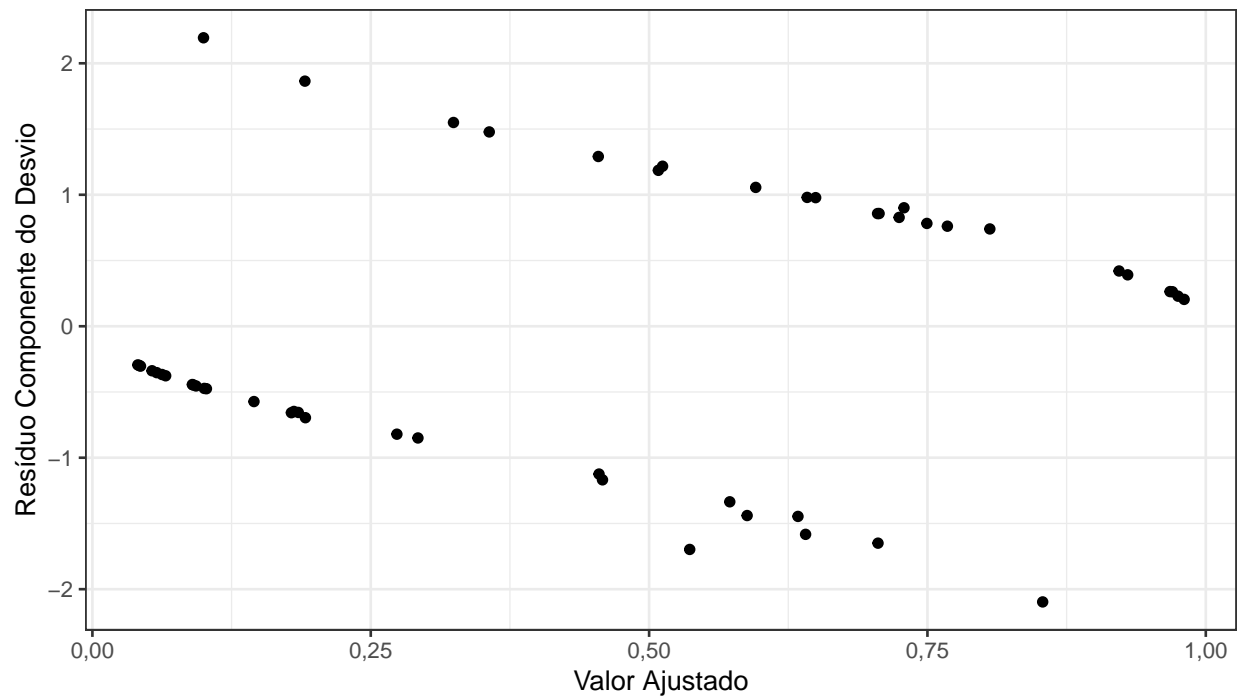
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,005	0,000	0,087
sofa	2,199	1,406	3,961
su	1,031	0,997	1,077
scr_basal	26,585	1,215	1314,570

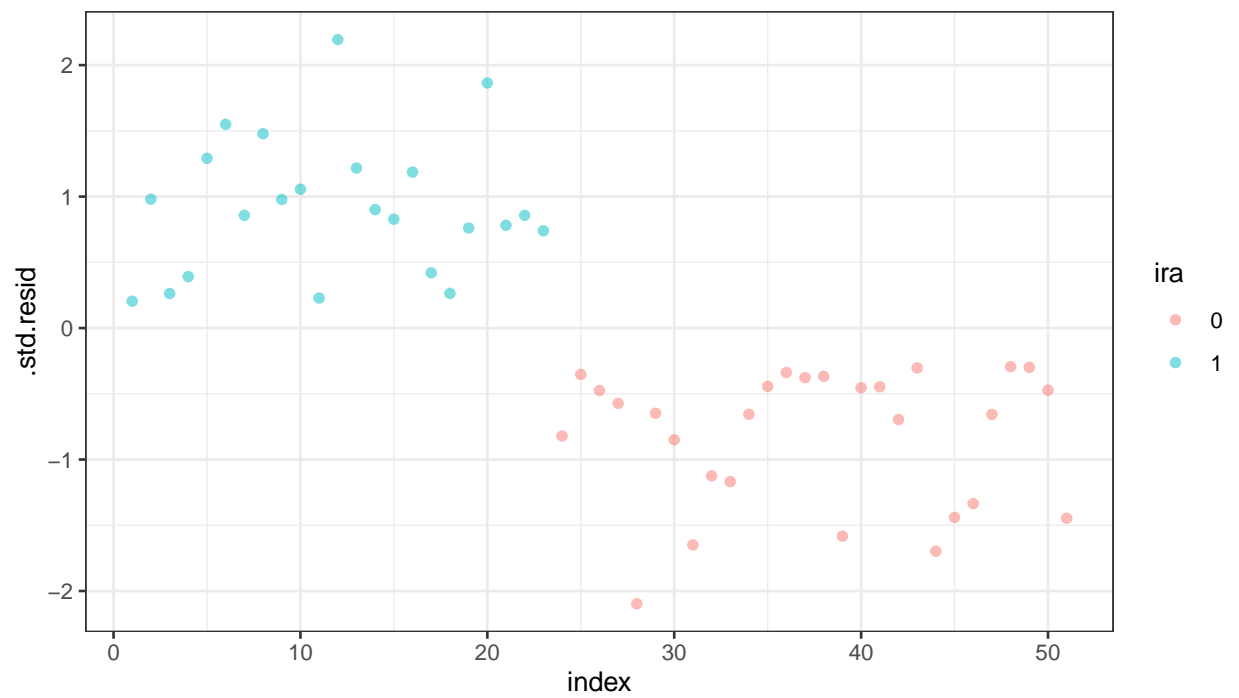
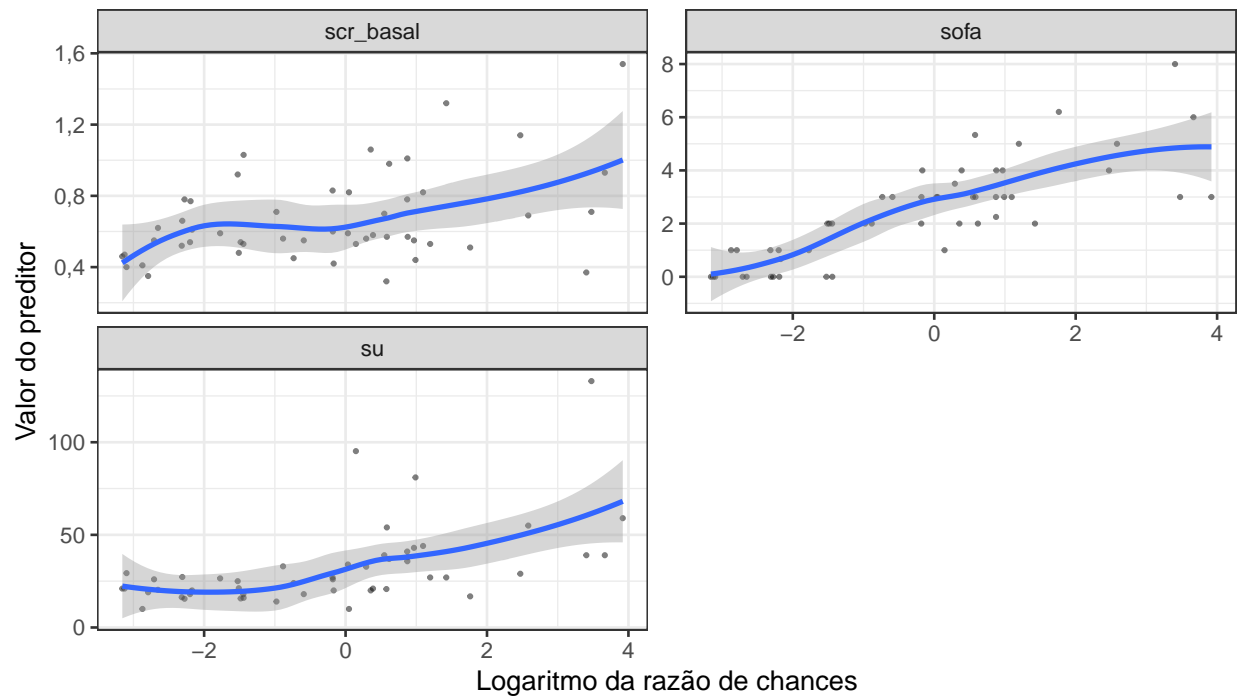
Table 49: VIF

Variável	value
sofa	1,101
su	1,007
scr_basal	1,107









Ajustes sem interação

```
selected_models = model_selection(df,
                                  selected_numerical_columns,
                                  selected_categorical_columns,
                                  target,
                                  include_interaction = F)
```

Modelo completo

Table 50: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-6,549	13,647	-0,480	0,631
factor(causa_ira)1	-2,067	1,738	-1,189	0,234
factor(causa_ira)2	-2,821	1,468	-1,922	0,055
factor(ventilacao_mecanica)1	1,803	1,730	1,042	0,297
sofa	0,873	0,355	2,460	0,014
su	0,034	0,034	1,014	0,311
fek	0,038	0,203	0,187	0,851
uu_su	2,017	2,364	0,853	0,394
una	-0,014	0,009	-1,574	0,116
scr_basal	6,449	3,030	2,128	0,033
sosm	-0,024	0,045	-0,536	0,592
delta_scr	8,146	5,555	1,466	0,143
tempo_internacao_hospitalar	0,015	0,021	0,720	0,471
score_clinico	0,595	0,427	1,395	0,163
dva_mcg_kg_min	0,745	3,072	0,243	0,808
uk	0,019	0,027	0,696	0,487

Table 51: Detalhes do modelo

AIC	deviance	Graus de liberdade do resíduo	Número de observações
66,719	34,719	35	51

Table 52: Intervalo de confiança para a razão de chances

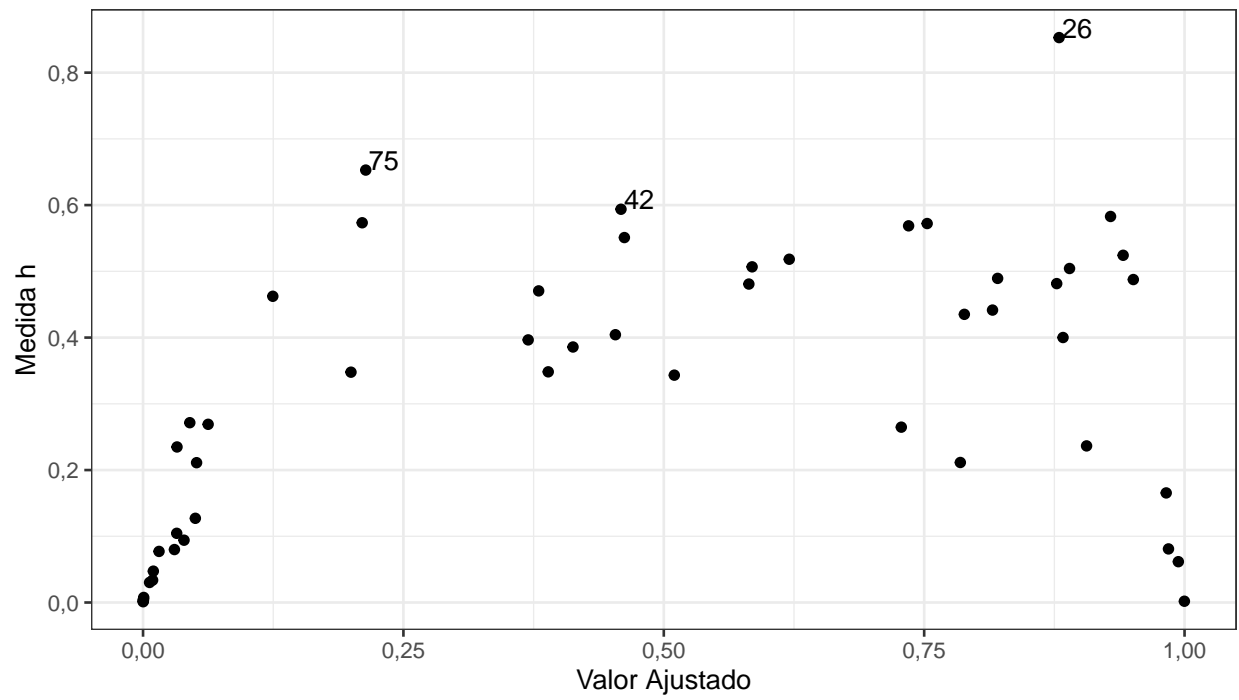
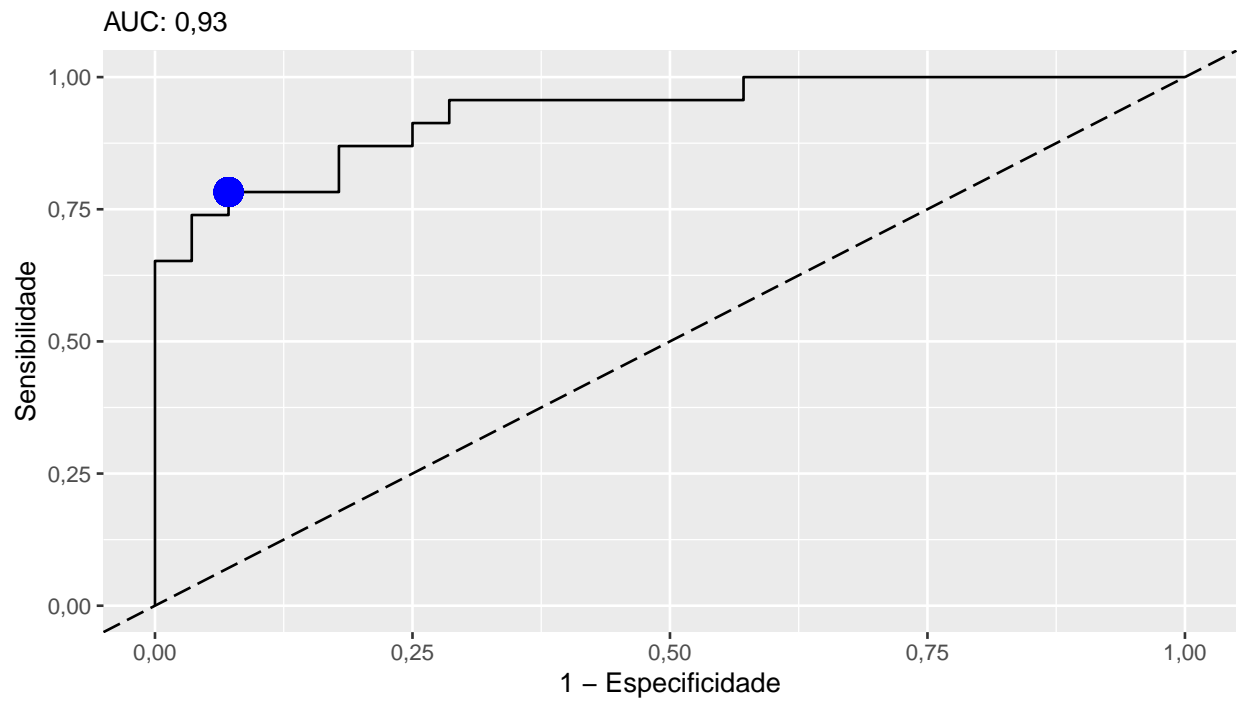
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,001	0,000	1,164392e+09
factor(causa_ira)1	0,127	0,002	3,402000e+00
factor(causa_ira)2	0,060	0,002	7,850000e-01
factor(ventilacao_mecanica)1	6,067	0,309	4,039950e+02
sofa	2,395	1,295	5,515000e+00
su	1,035	0,976	1,119000e+00
fek	1,039	0,699	1,622000e+00
uu_su	7,514	0,087	1,661981e+03
una	0,986	0,965	1,002000e+00
scr_basal	632,096	4,734	8,820014e+05

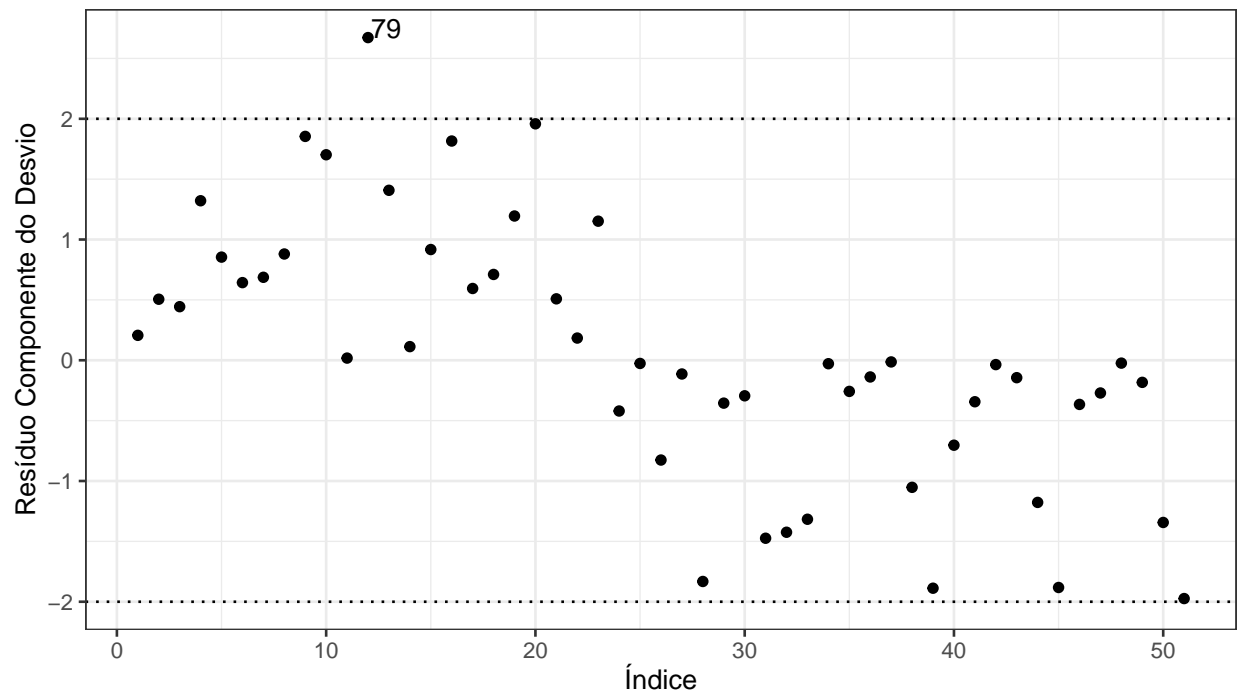
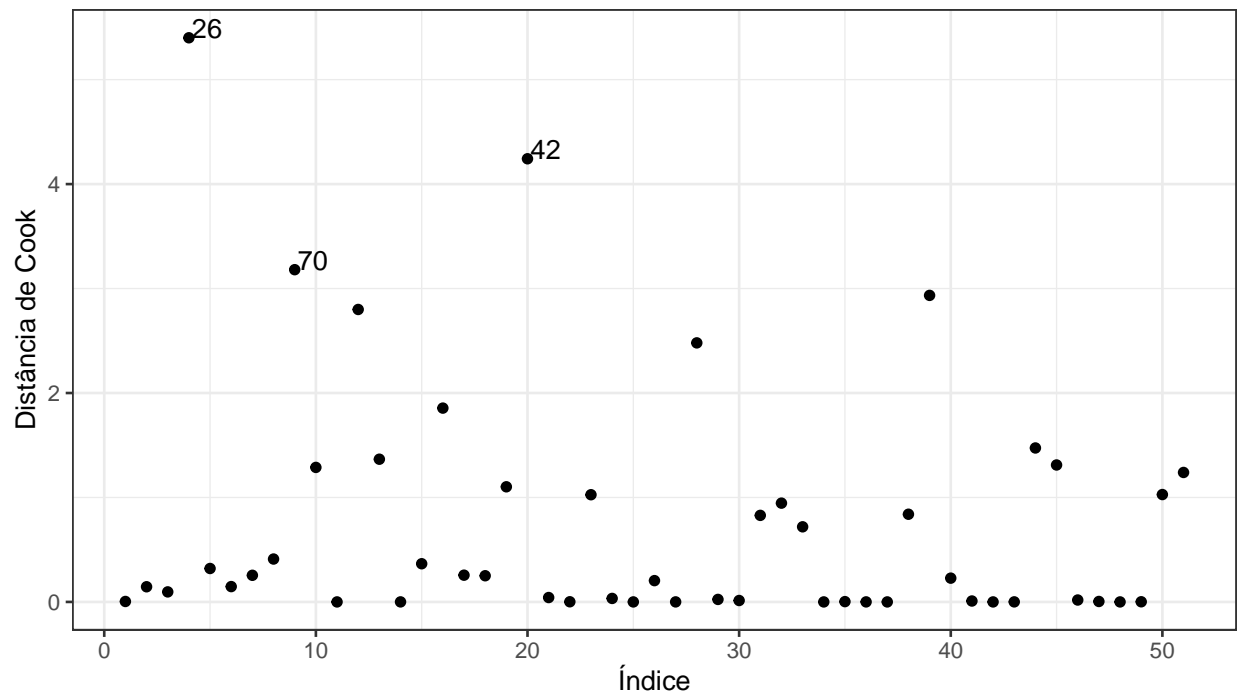
Table 52: Intervalo de confiança para a razão de chances (*continued*)

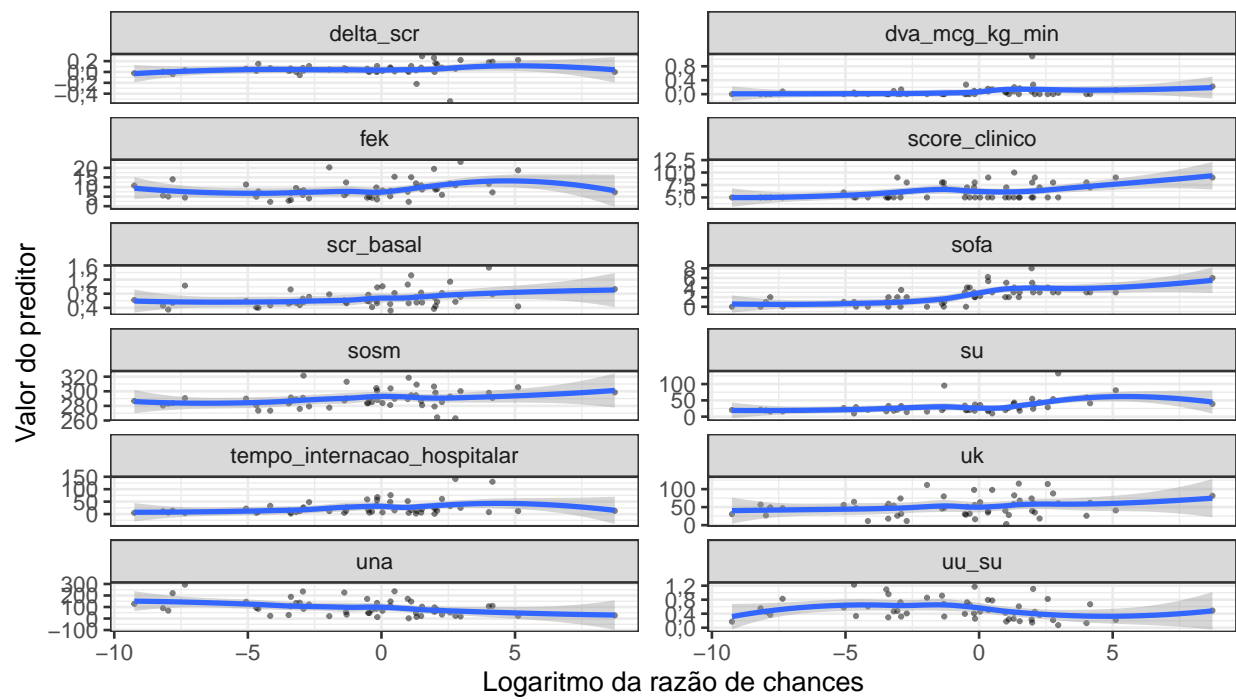
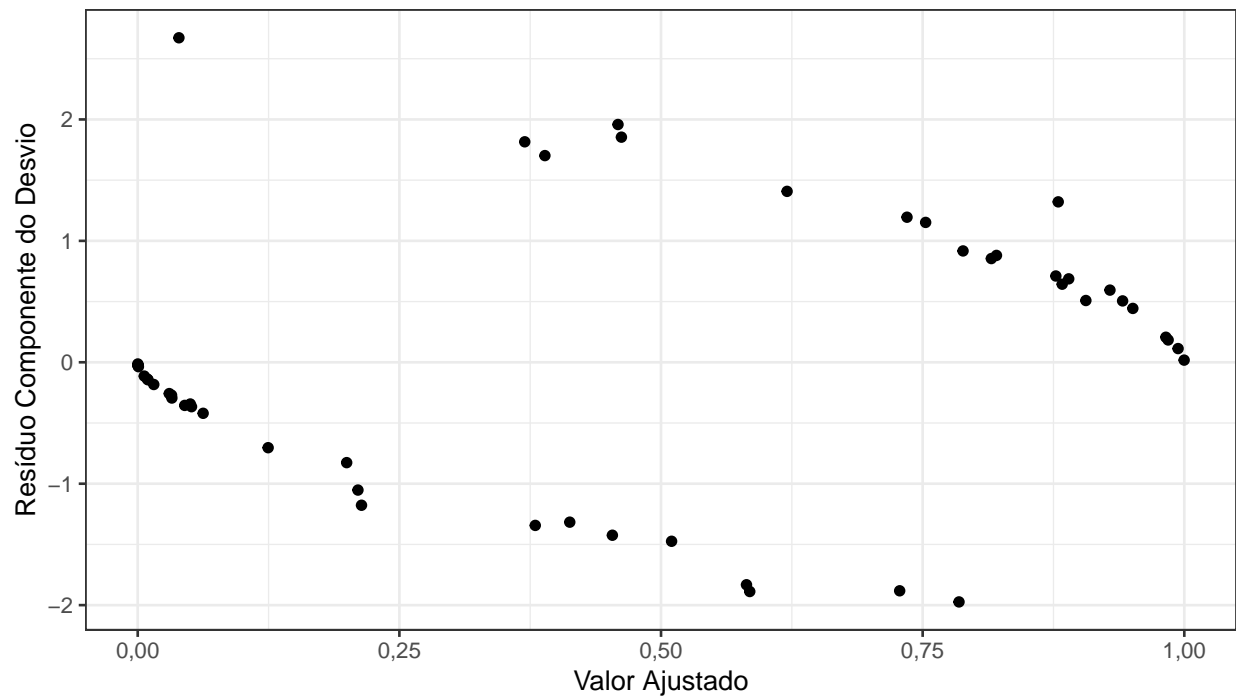
Variável	Estimativa	2,5 %	97,5 %
sosm	0,976	0,880	1,061000e+00
delta_scr	3450,985	0,058	9,854134e+08
tempo_internacao_hospitalar	1,016	0,977	1,068000e+00
score_clinico	1,813	0,834	5,023000e+00
dva_mcg_kg_min	2,107	0,009	2,070057e+04
uk	1,019	0,969	1,083000e+00

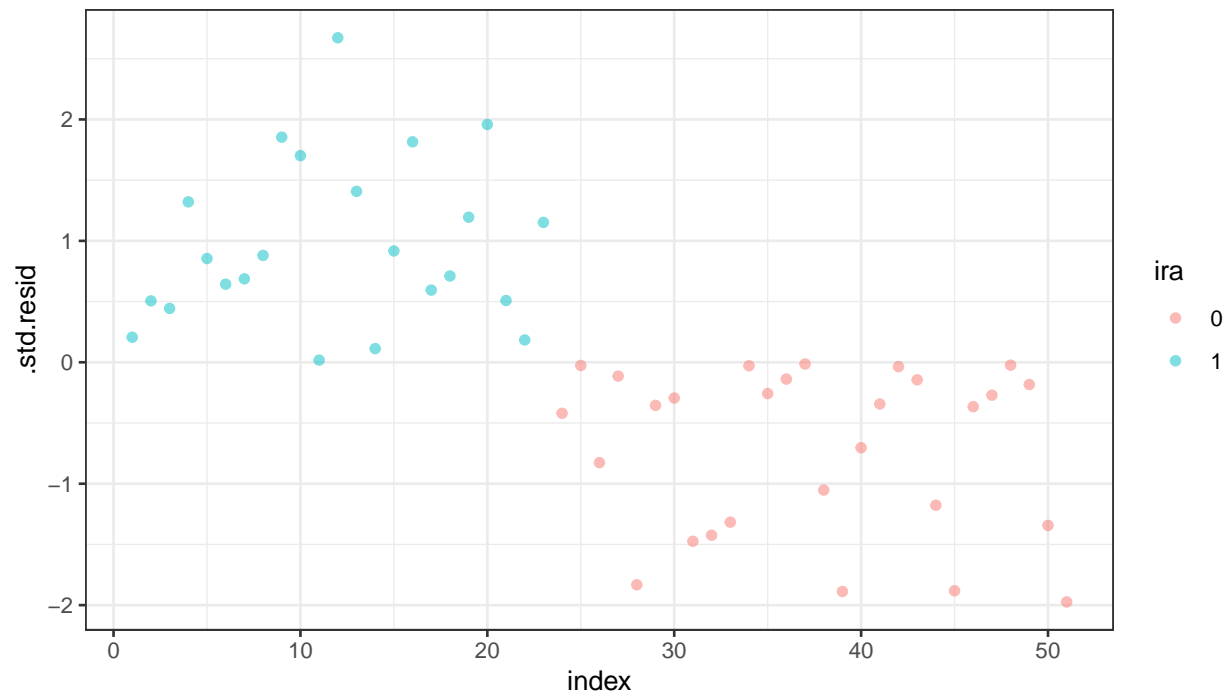
Table 53: VIF

Variável	GVIF	Df	$\widehat{GVIF}(1/(2*Df))$
factor(causa_ira)	5,534	2	1,534
factor(ventilacao_mecanica)	2,140	1	1,463
sofa	2,161	1	1,470
su	2,087	1	1,445
fek	4,176	1	2,043
uu_su	2,292	1	1,514
una	1,894	1	1,376
scr_basal	2,791	1	1,671
sosm	1,524	1	1,234
delta_scr	1,827	1	1,352
tempo_internacao_hospitalar	1,700	1	1,304
score_clinico	2,354	1	1,534
dva_mcg_kg_min	1,343	1	1,159
uk	3,260	1	1,806









Backward

Table 54: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-3,638	1,510	-2,409	0,016
sofa	0,778	0,252	3,090	0,002
una	-0,009	0,006	-1,486	0,137
scr_basal	3,508	1,714	2,047	0,041

Table 55: Detalhes do modelo

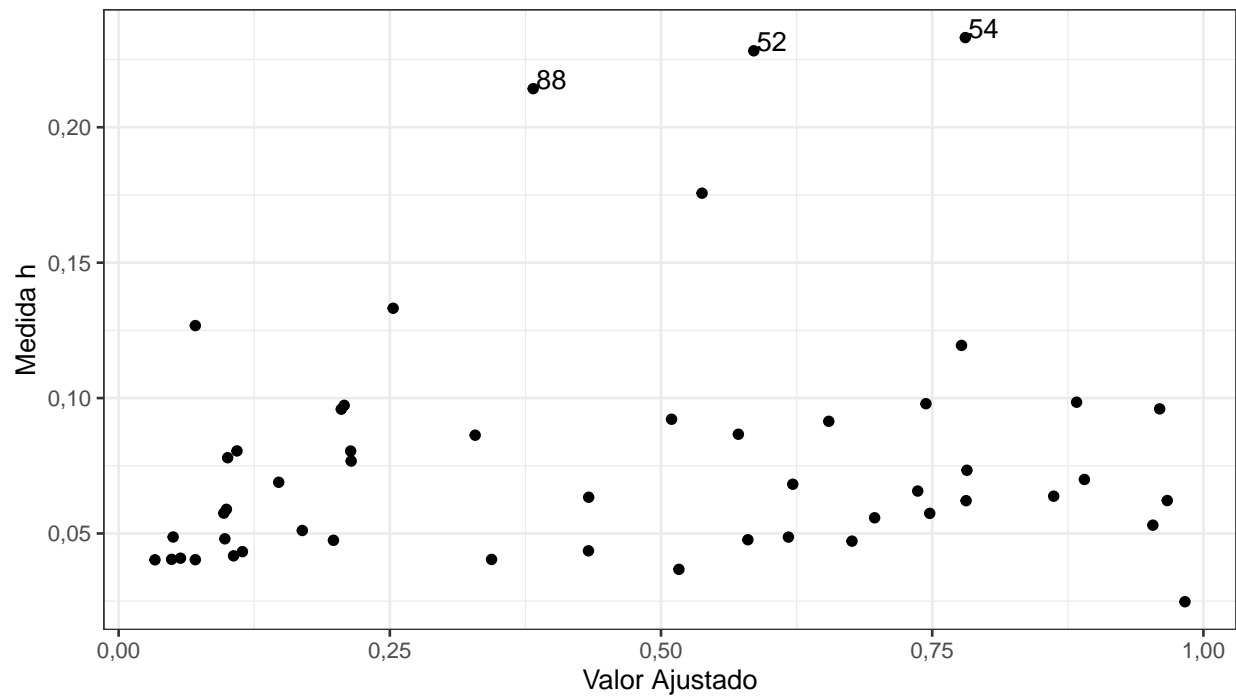
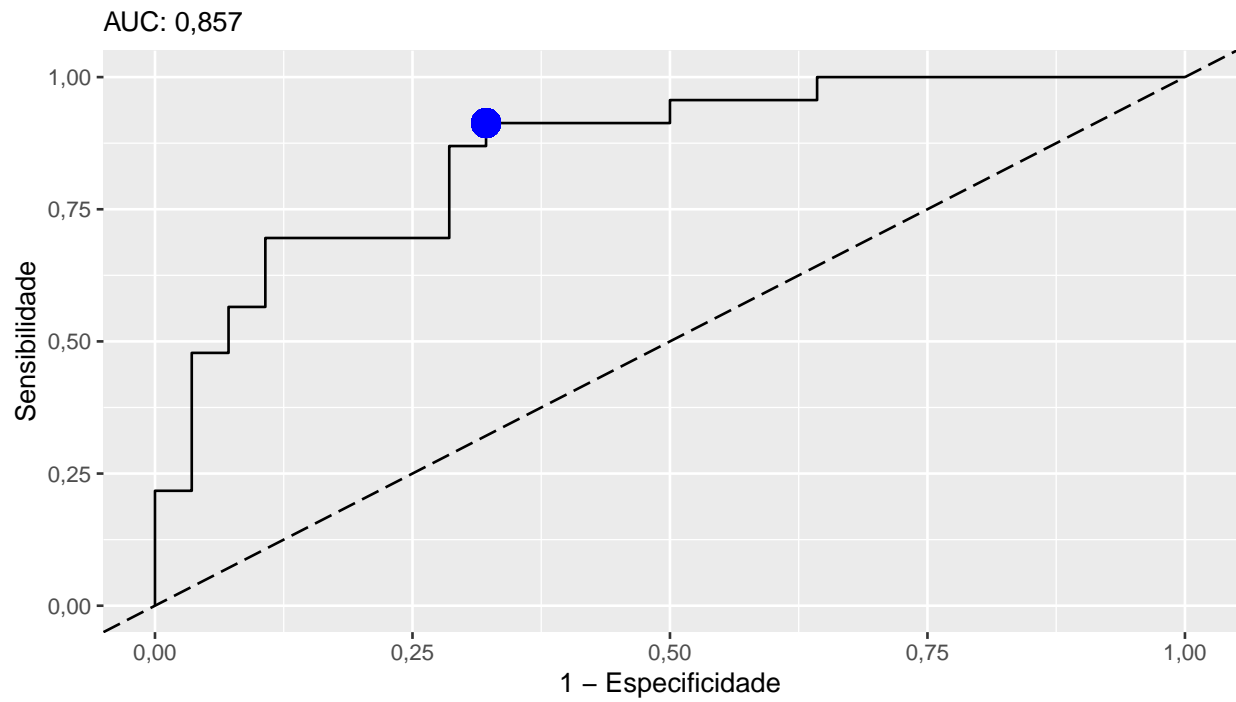
AIC	deviance	Graus de liberdade do resíduo	Número de observações
55,499	47,499	47	51

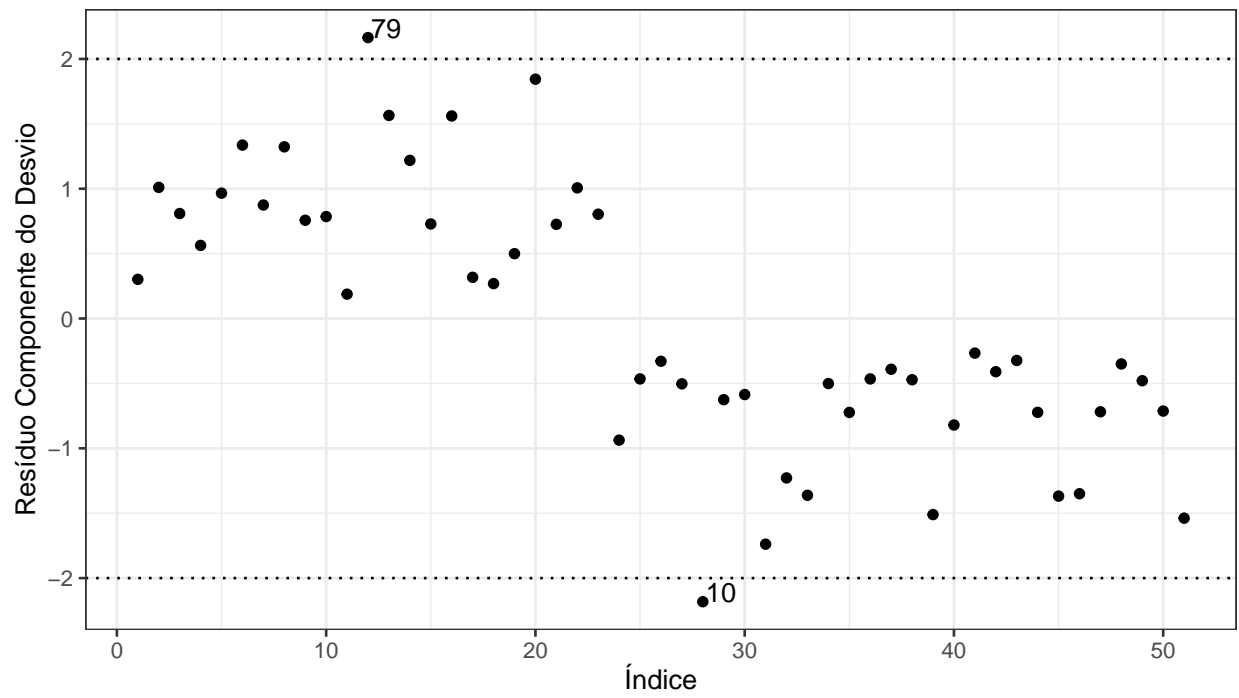
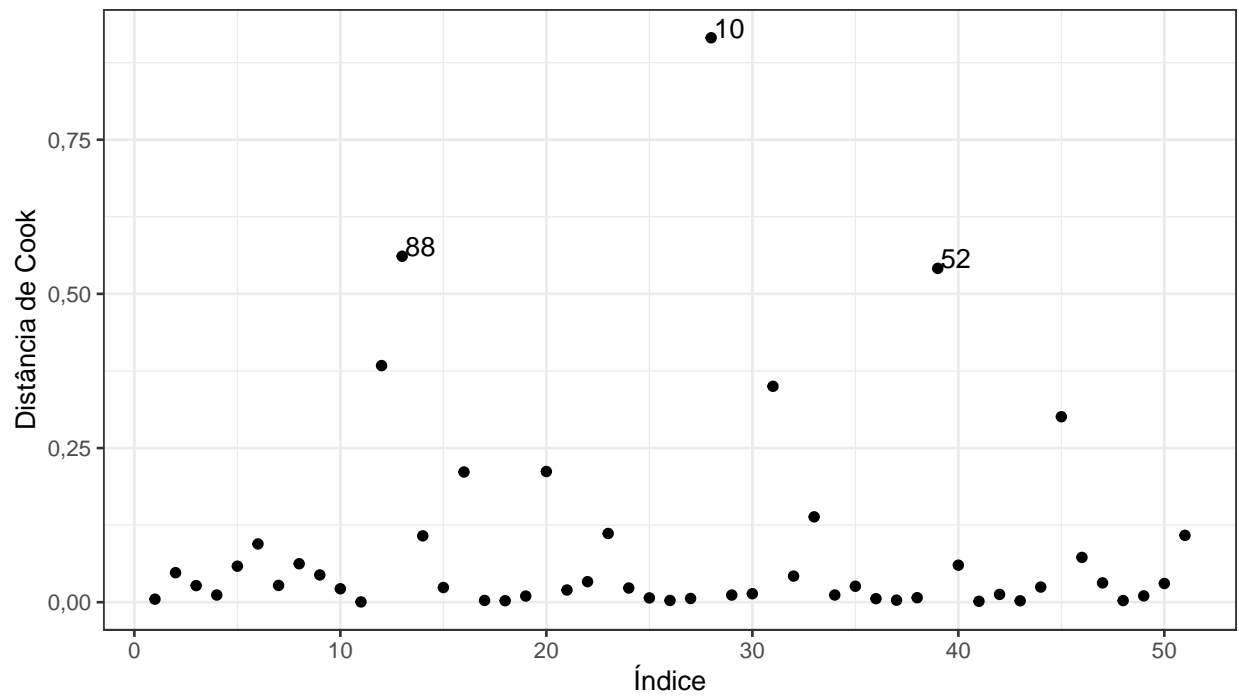
Table 56: Intervalo de confiança para a razão de chances

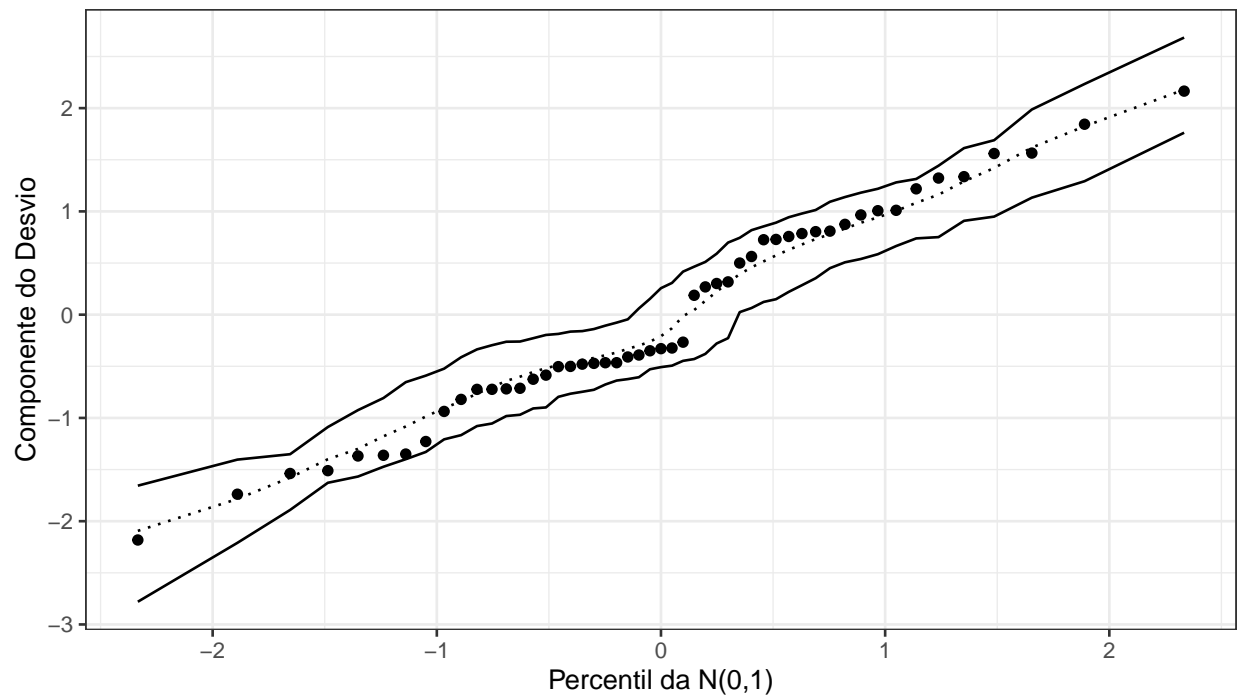
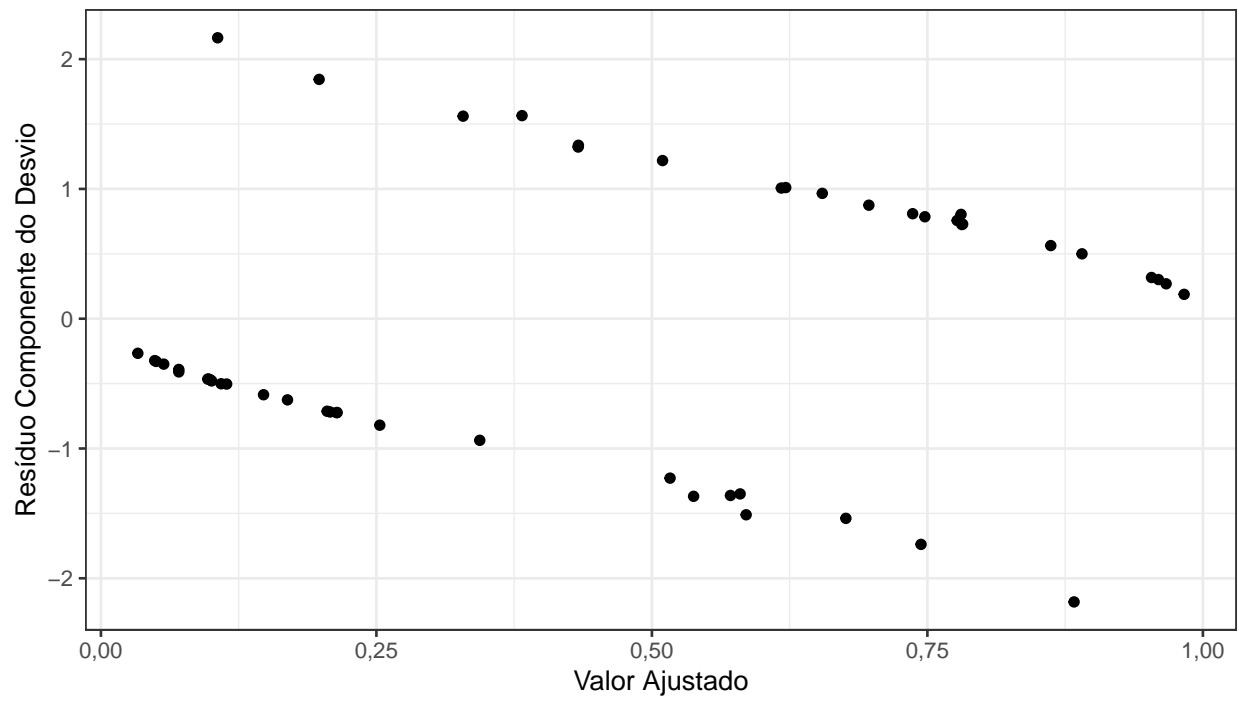
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,026	0,001	0,373
sofa	2,177	1,407	3,856
una	0,991	0,979	1,002
scr_basal	33,397	1,663	1567,448

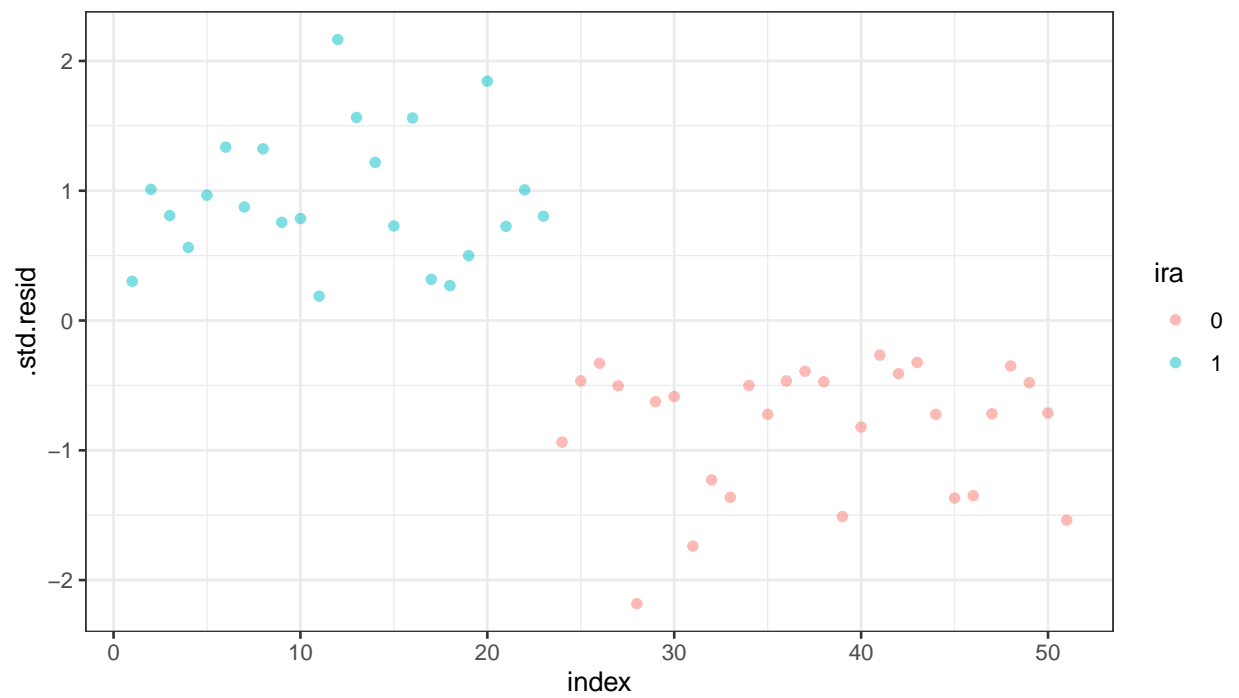
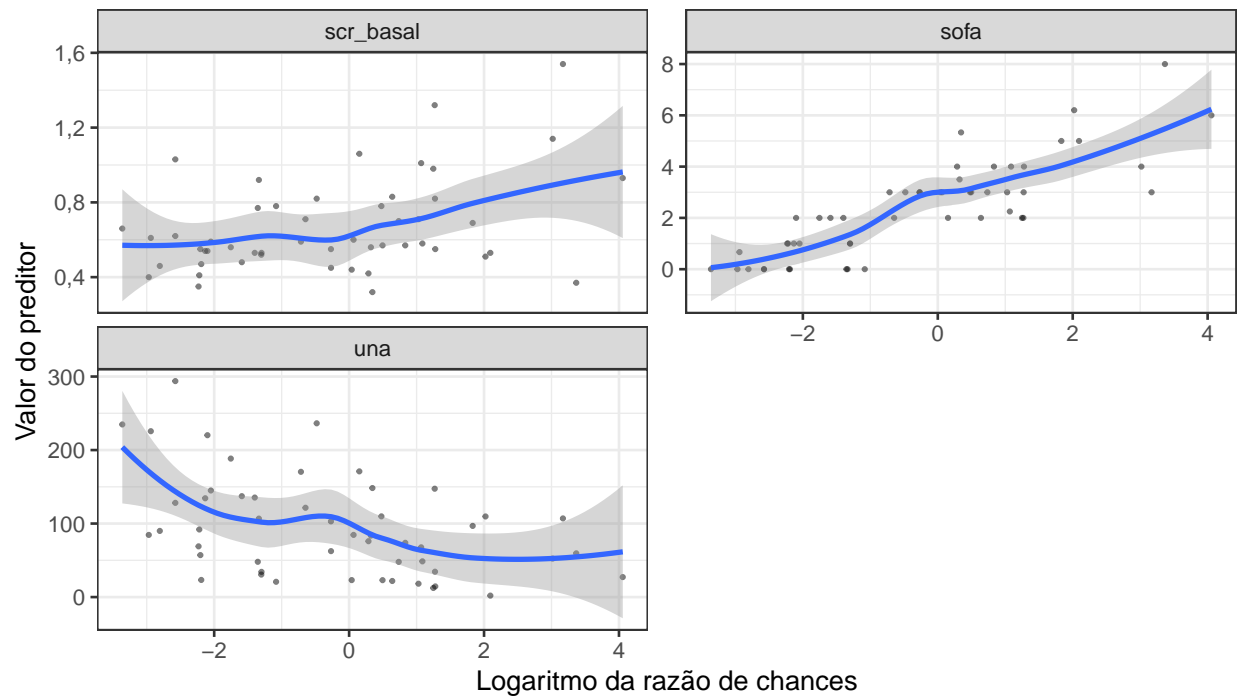
Table 57: VIF

Variável	value
sofa	1,069
una	1,024
scr_basal	1,091









Forward

Table 58: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5,313	1,691	-3,141	0,002
sofa	0,788	0,259	3,046	0,002
scr_basal	3,280	1,748	1,877	0,061
su	0,031	0,019	1,604	0,109

Table 59: Detalhes do modelo

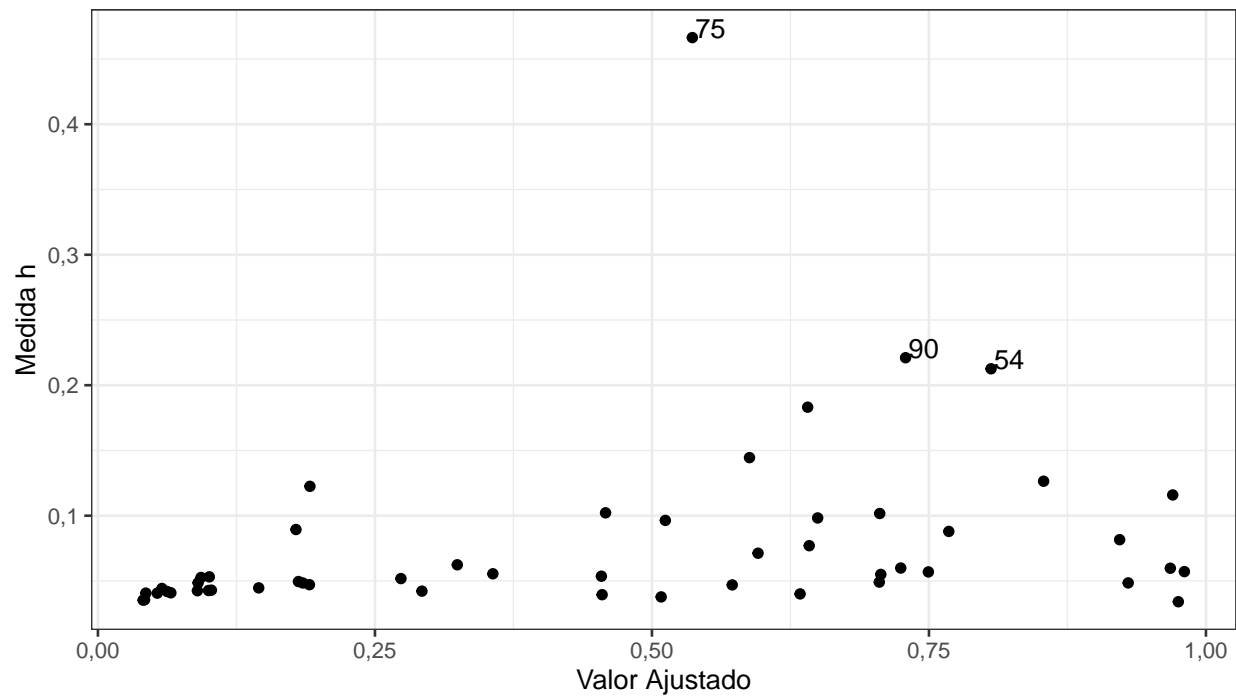
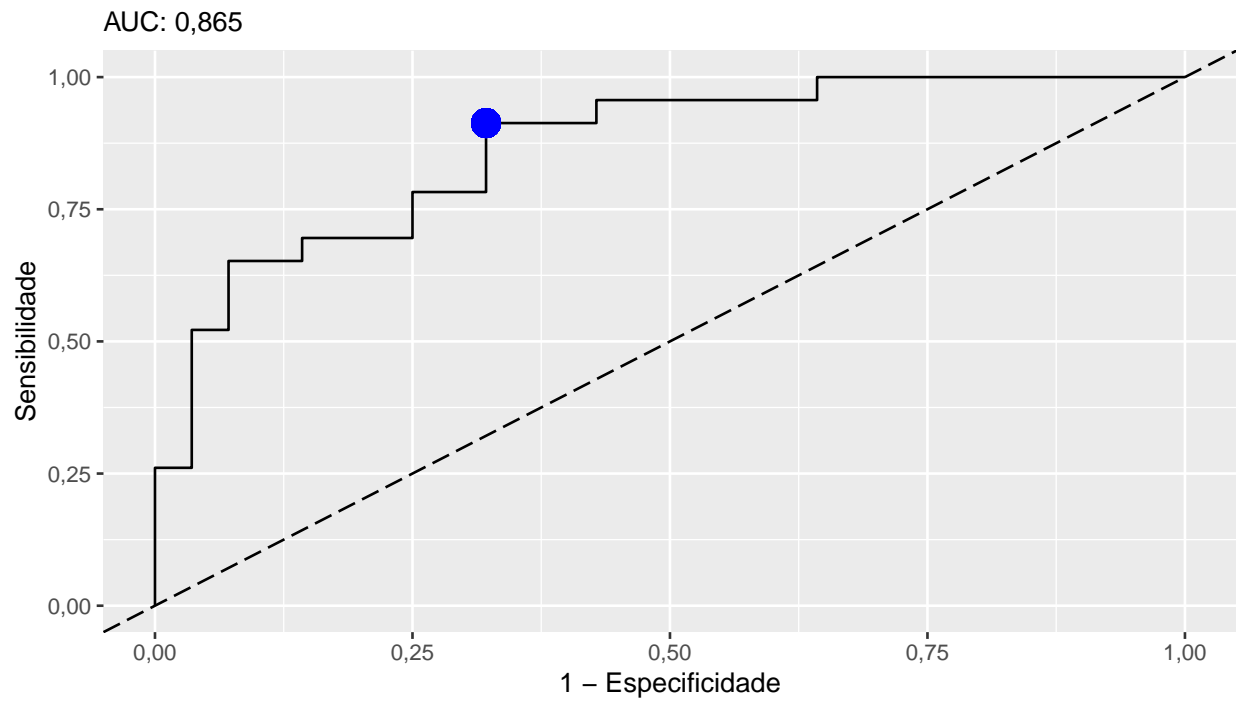
AIC	deviance	Graus de liberdade do resíduo	Número de observações
54,837	46,837	47	51

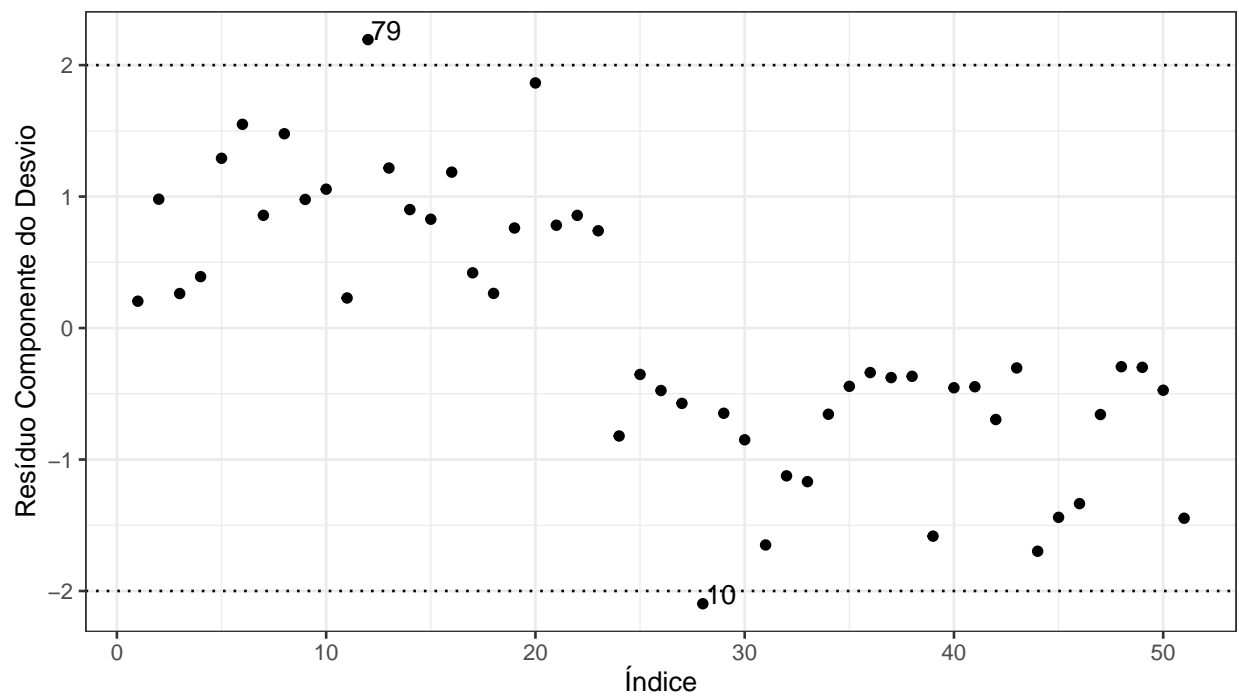
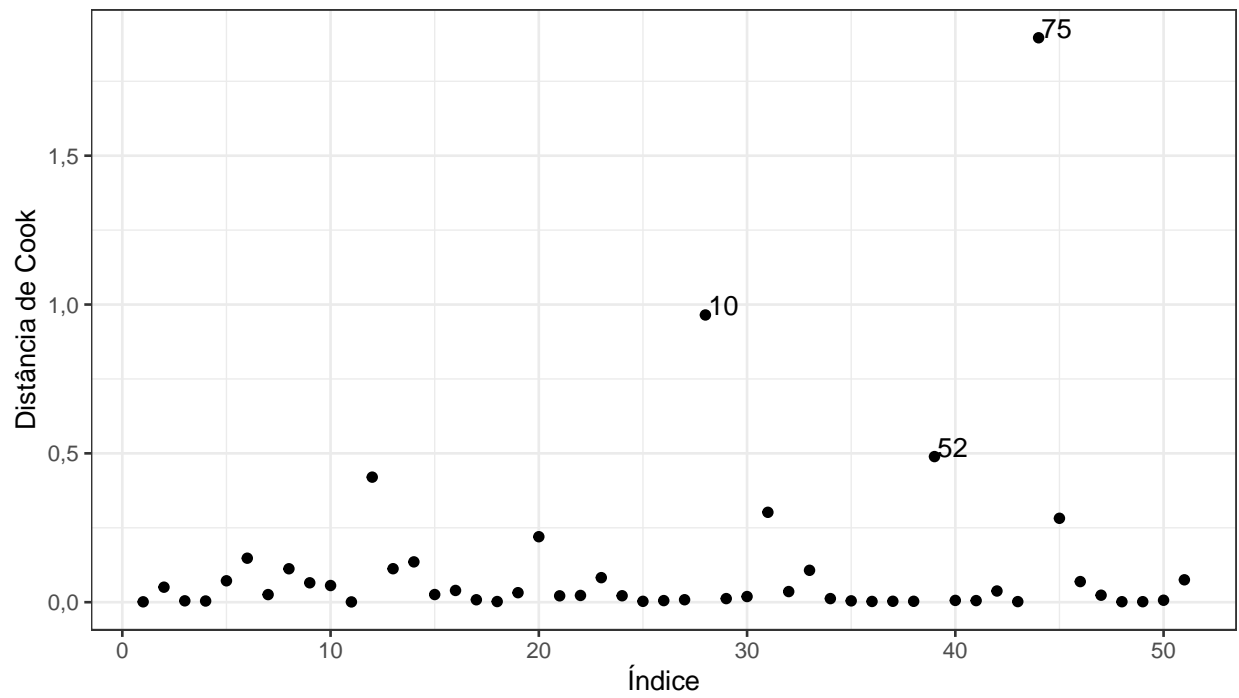
Table 60: Intervalo de confiança para a razão de chances

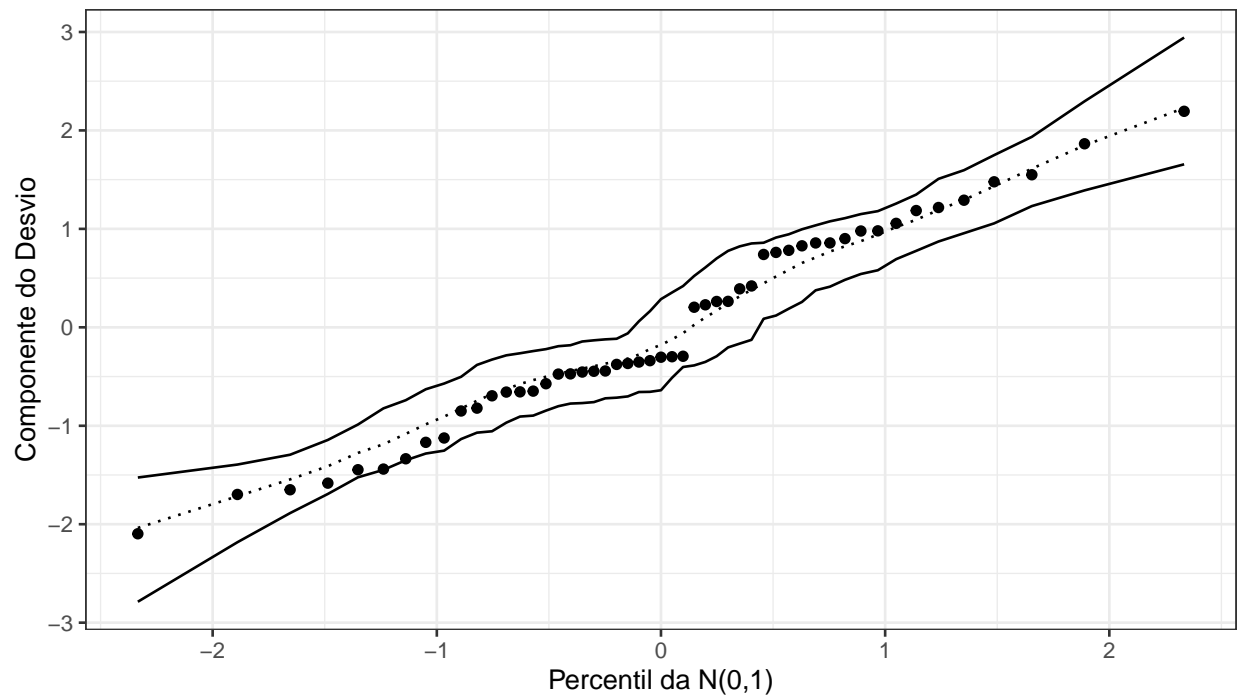
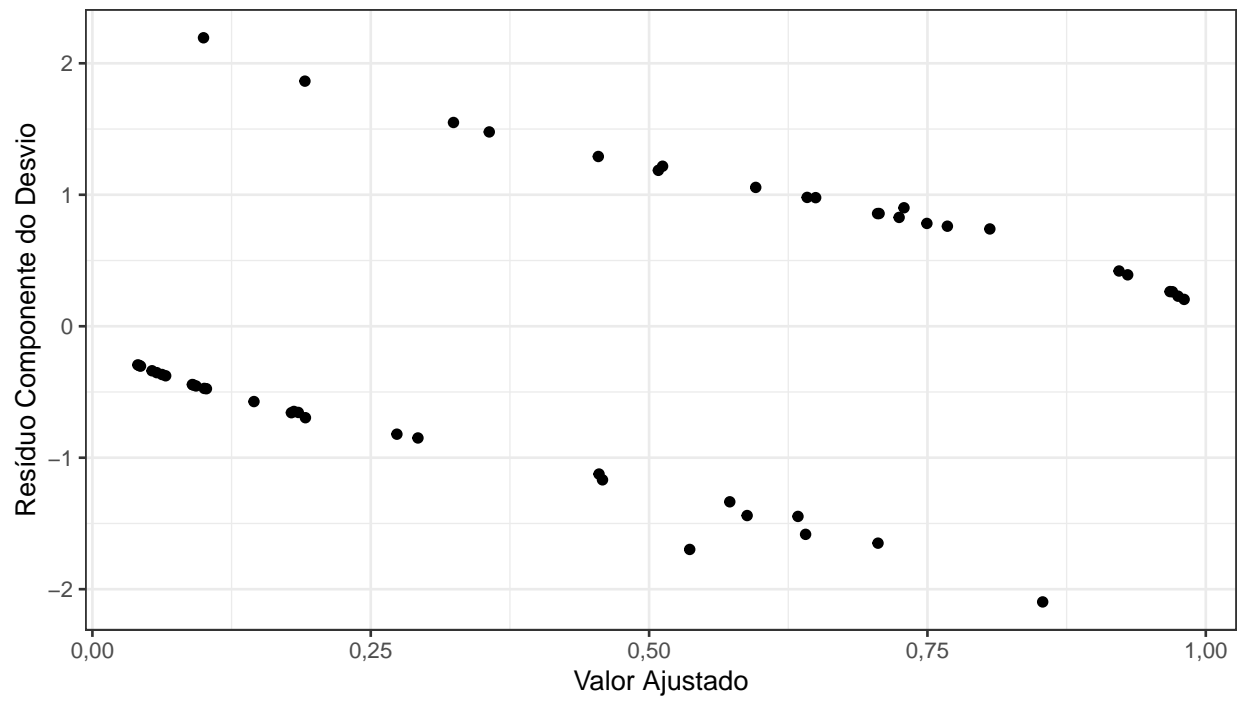
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,005	0,000	0,087
sofa	2,199	1,406	3,961
scr_basal	26,585	1,215	1314,570
su	1,031	0,997	1,077

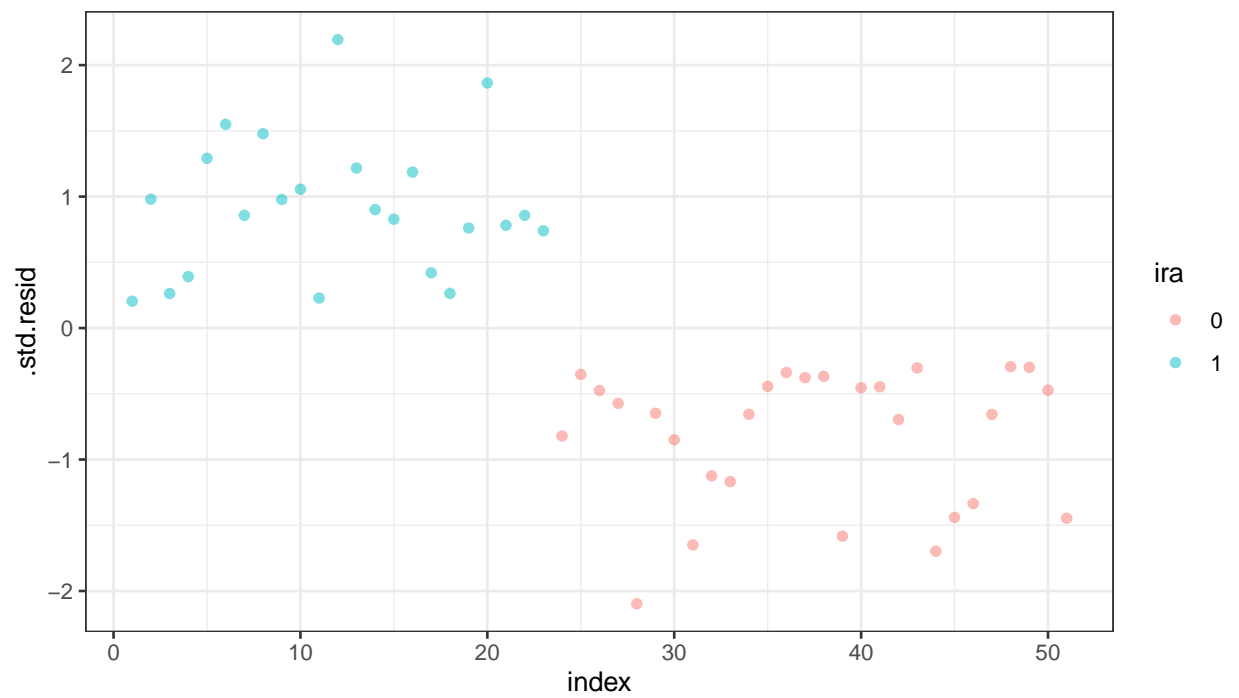
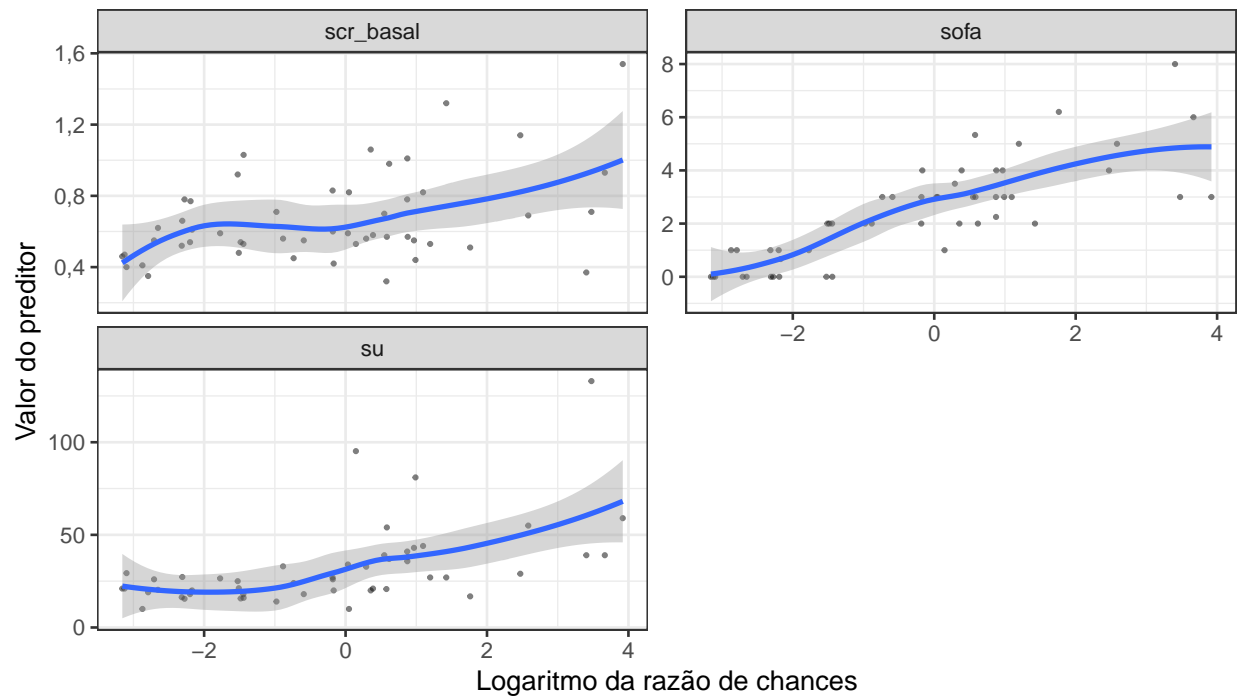
Table 61: VIF

Variável	value
sofa	1,101
scr_basal	1,107
su	1,007









Stepwise

Table 62: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-5,313	1,691	-3,141	0,002
sofa	0,788	0,259	3,046	0,002
scr_basal	3,280	1,748	1,877	0,061
su	0,031	0,019	1,604	0,109

Table 63: Detalhes do modelo

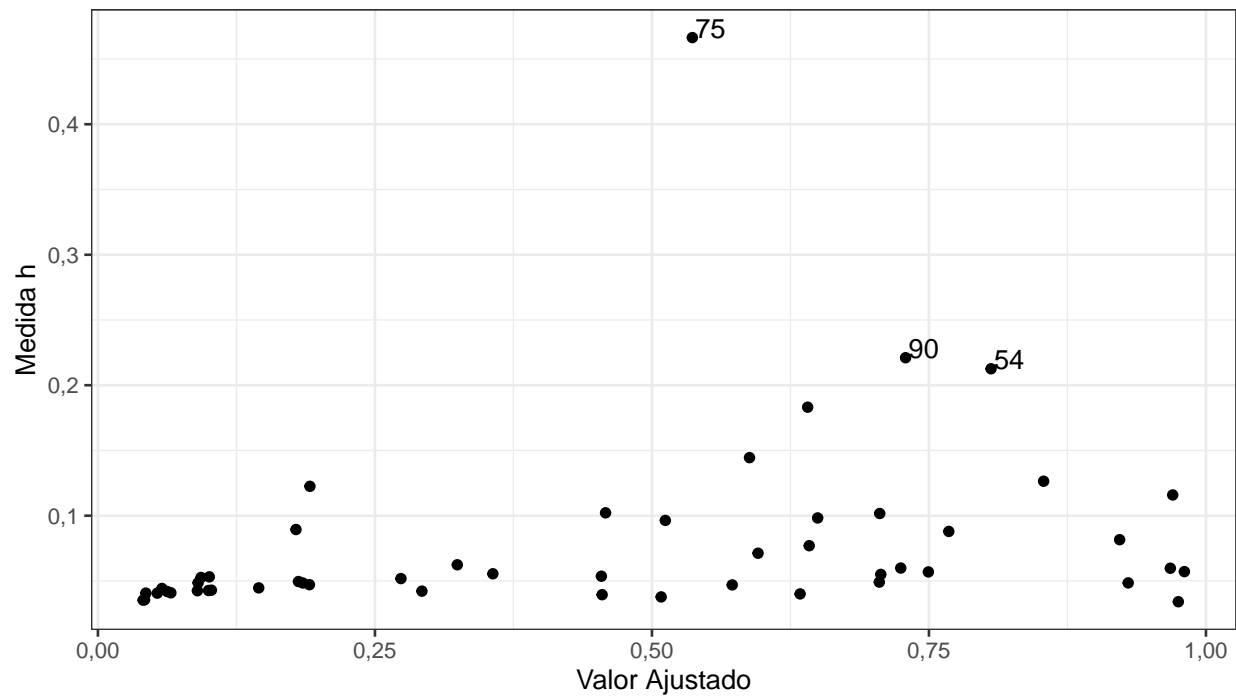
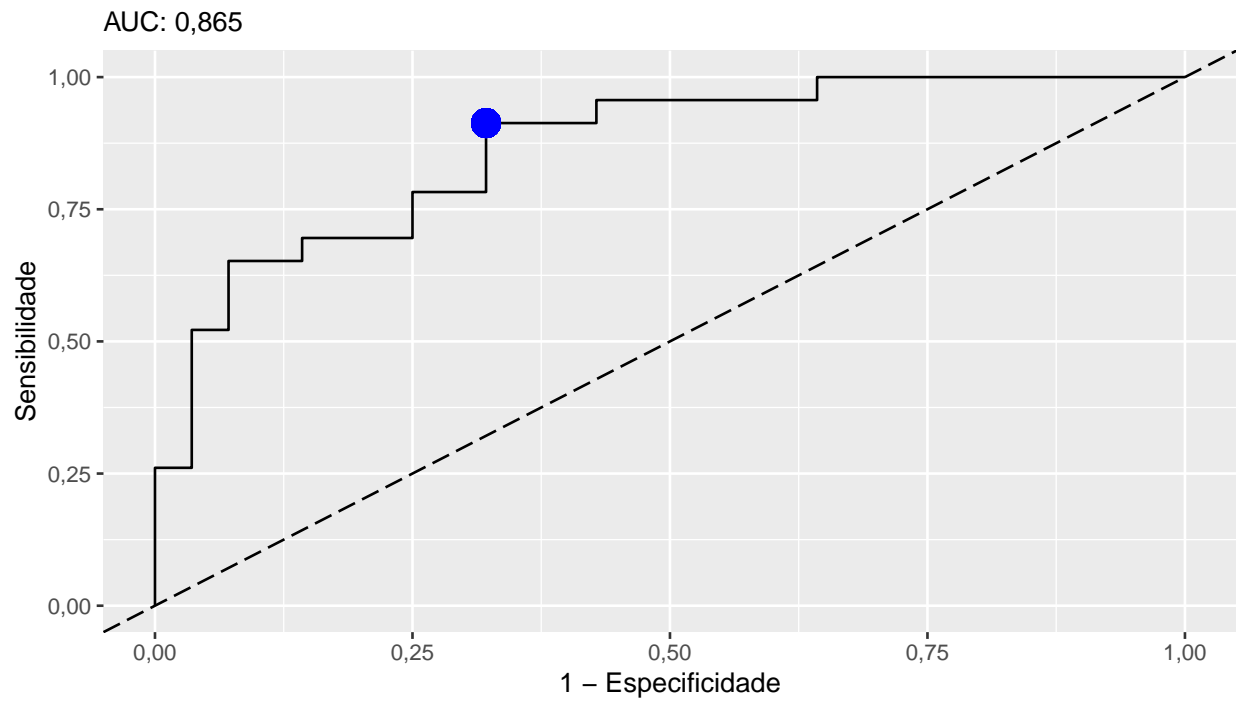
AIC	deviance	Graus de liberdade do resíduo	Número de observações
54,837	46,837	47	51

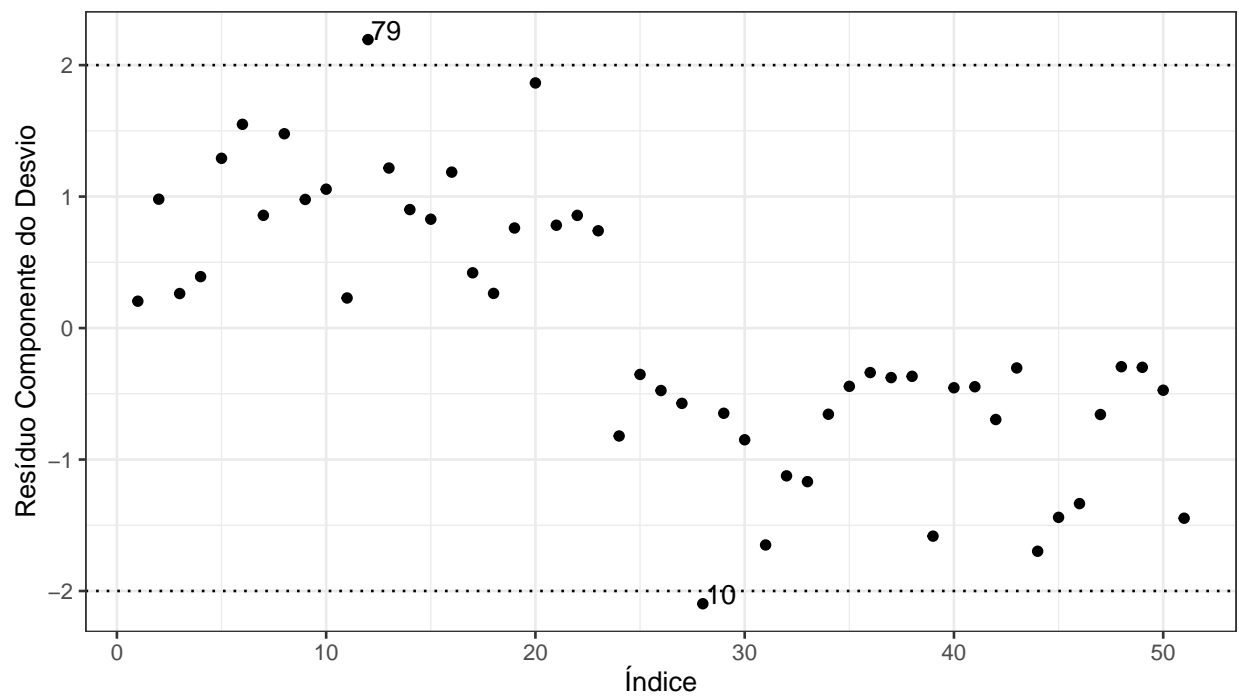
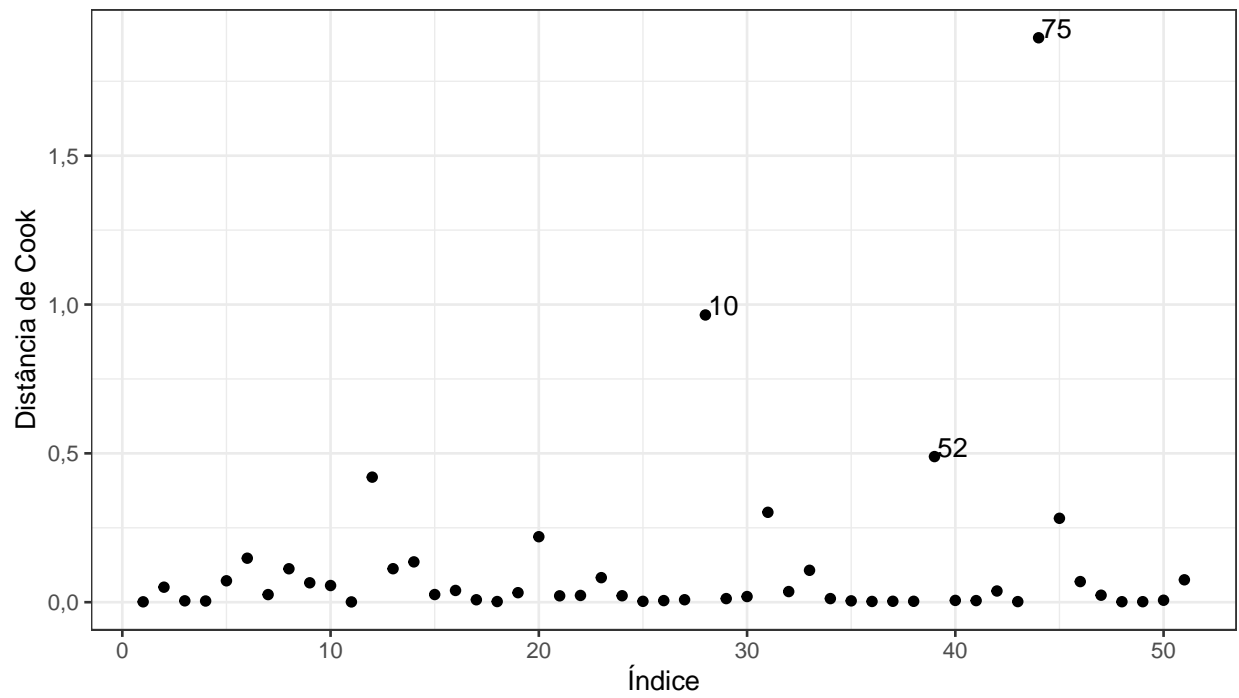
Table 64: Intervalo de confiança para a razão de chances

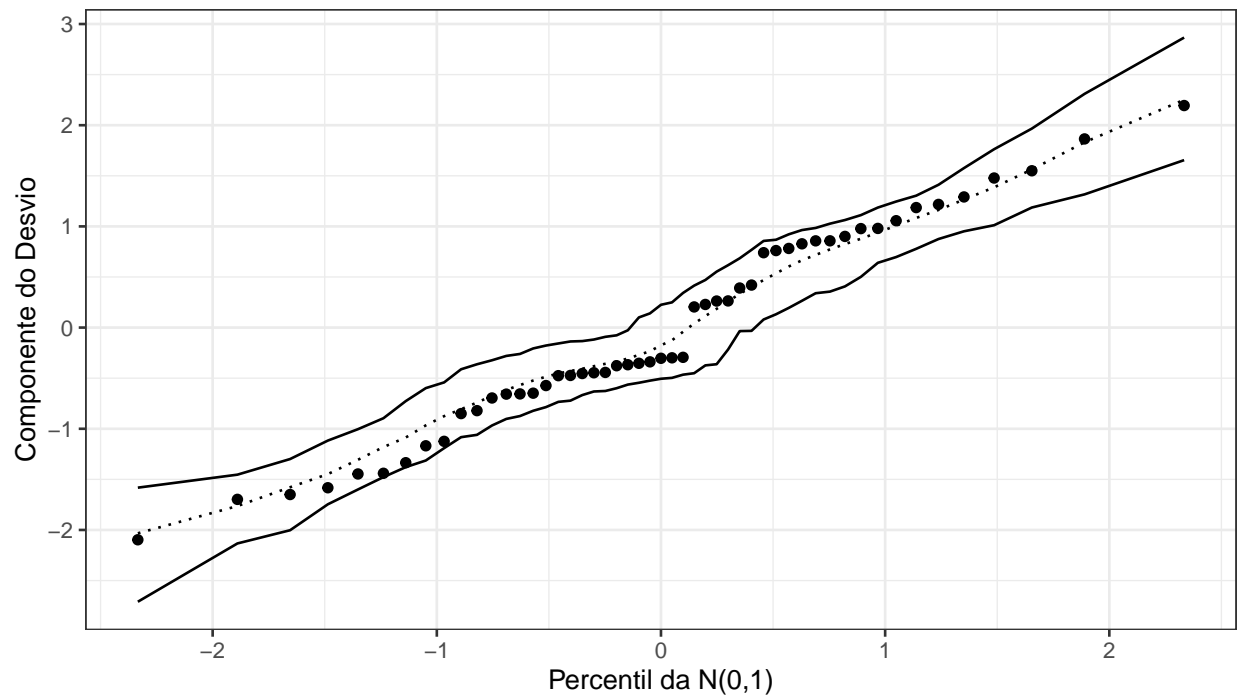
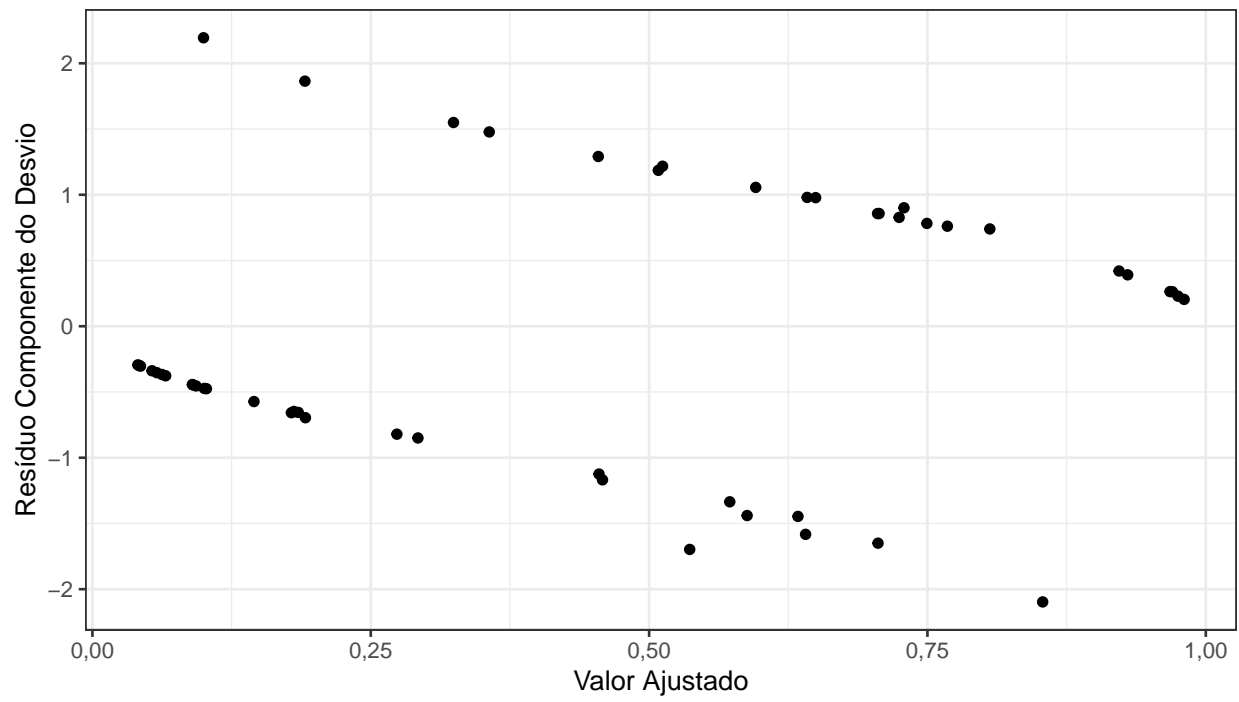
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,005	0,000	0,087
sofa	2,199	1,406	3,961
scr_basal	26,585	1,215	1314,570
su	1,031	0,997	1,077

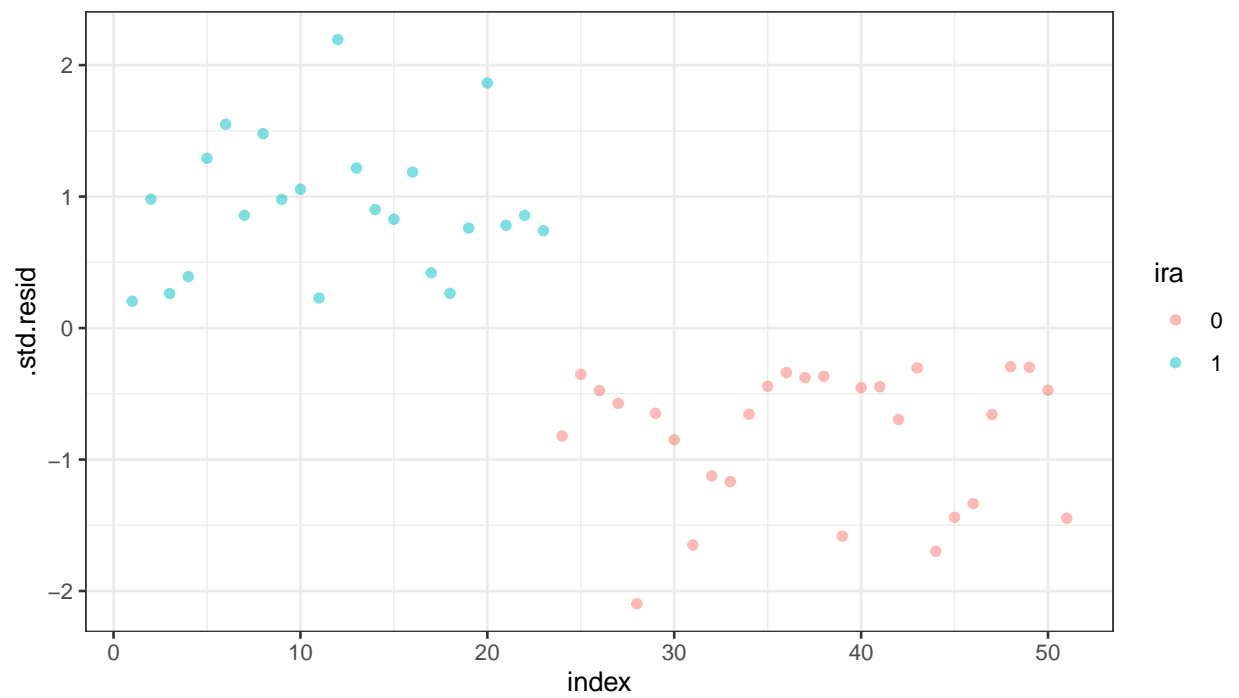
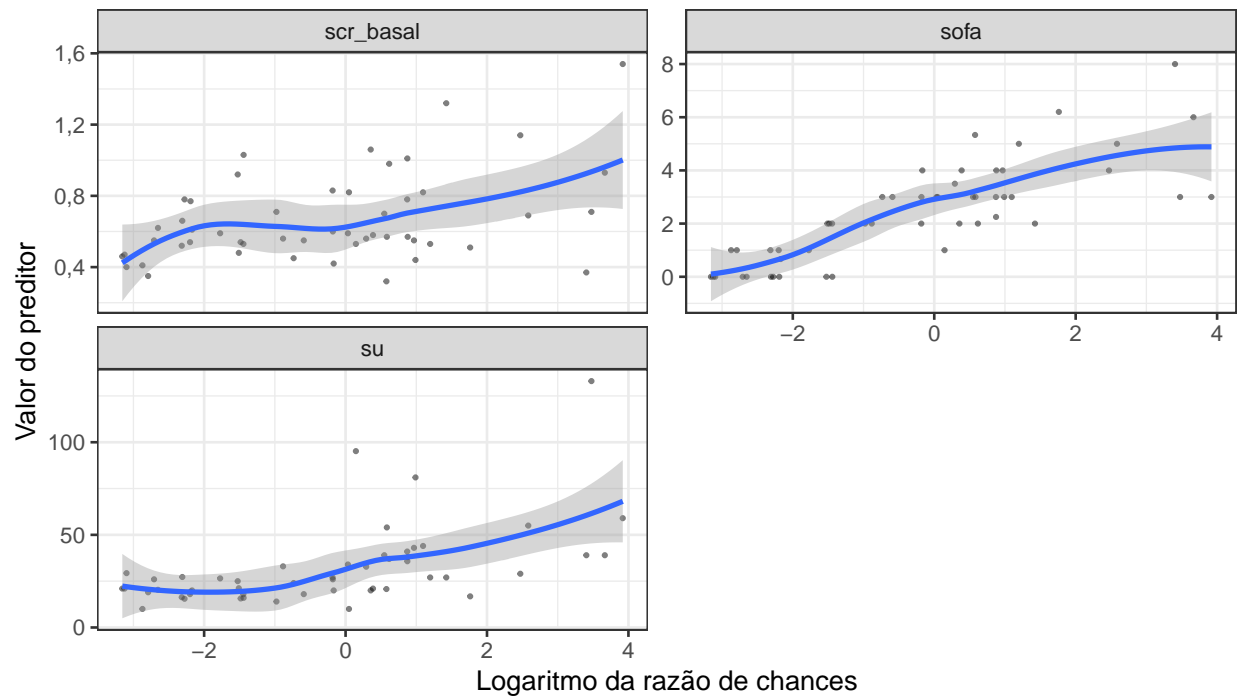
Table 65: VIF

Variável	value
sofa	1,101
scr_basal	1,107
su	1,007









Modelo união

Table 66: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-4,566	1,825	-2,502	0,012
sofa	0,757	0,256	2,957	0,003
una	-0,005	0,006	-0,839	0,402
scr_basal	3,421	1,758	1,945	0,052
su	0,023	0,021	1,104	0,270

Table 67: Detalhes do modelo

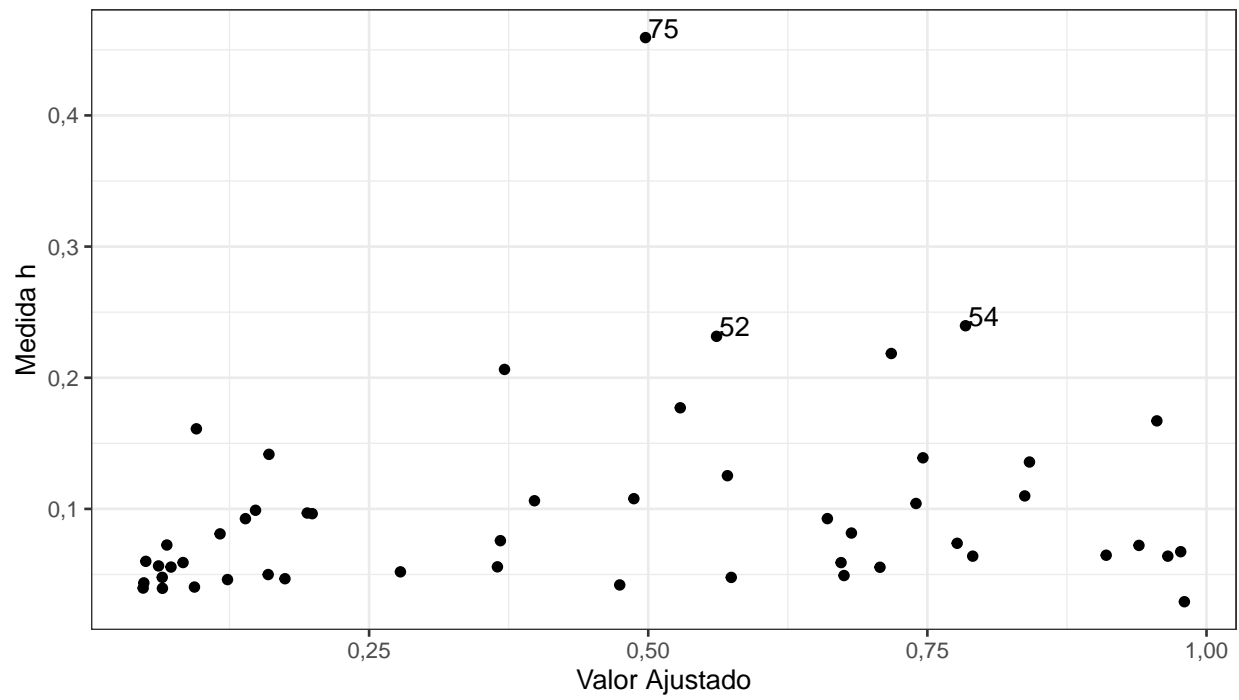
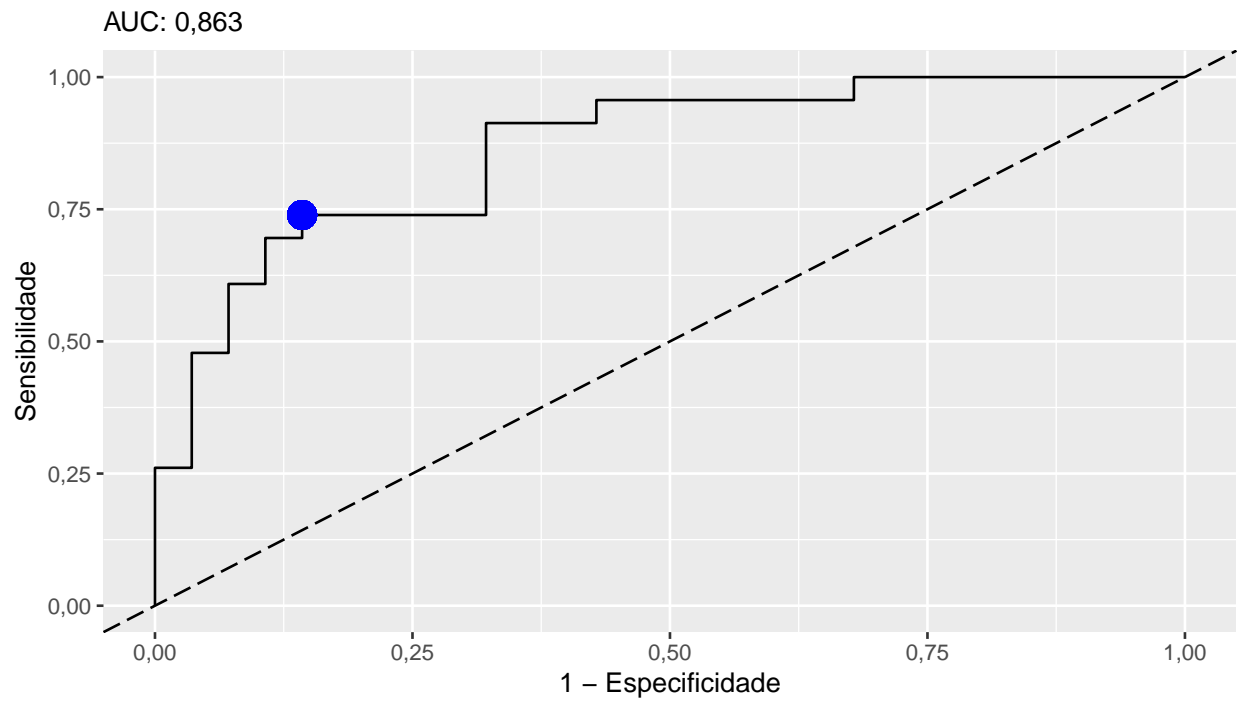
AIC	deviance	Graus de liberdade do resíduo	Número de observações
56,102	46,102	46	51

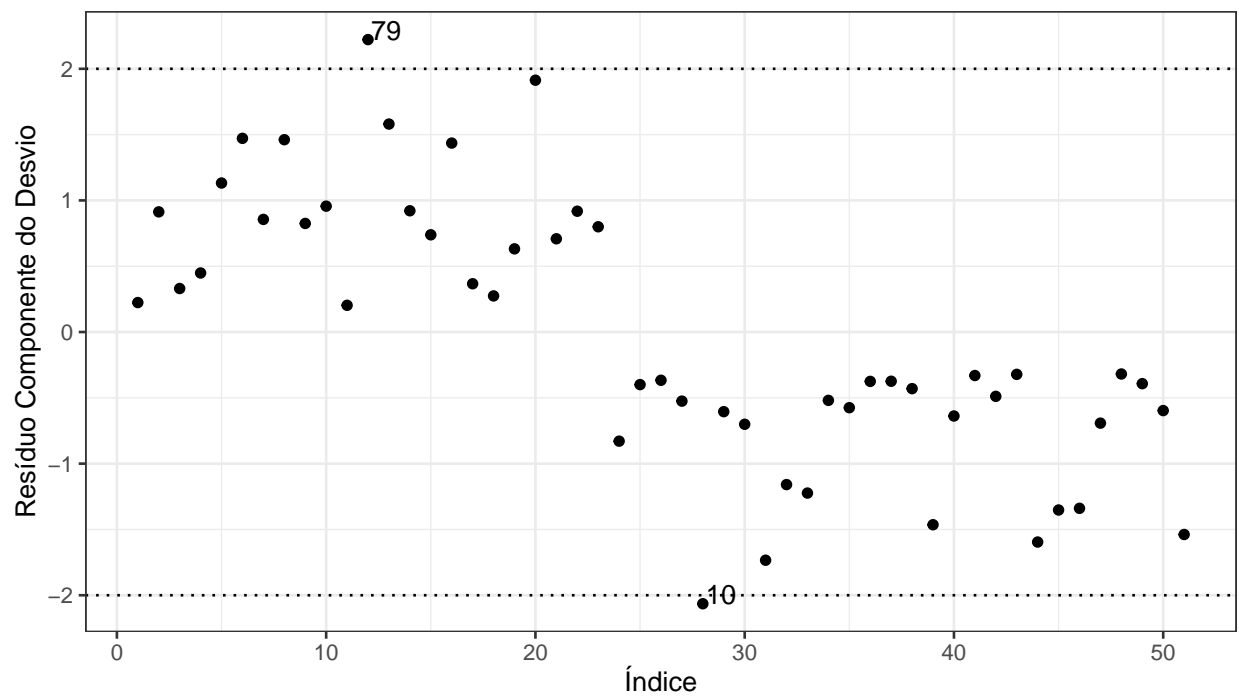
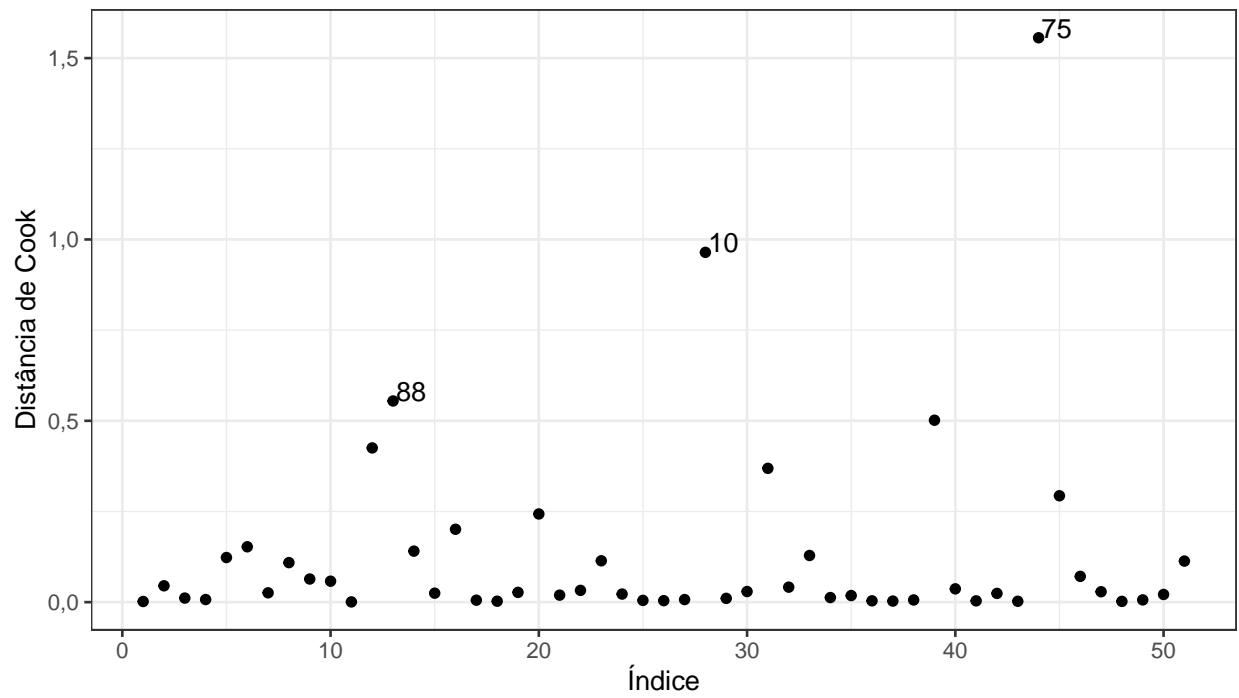
Table 68: Intervalo de confiança para a razão de chances

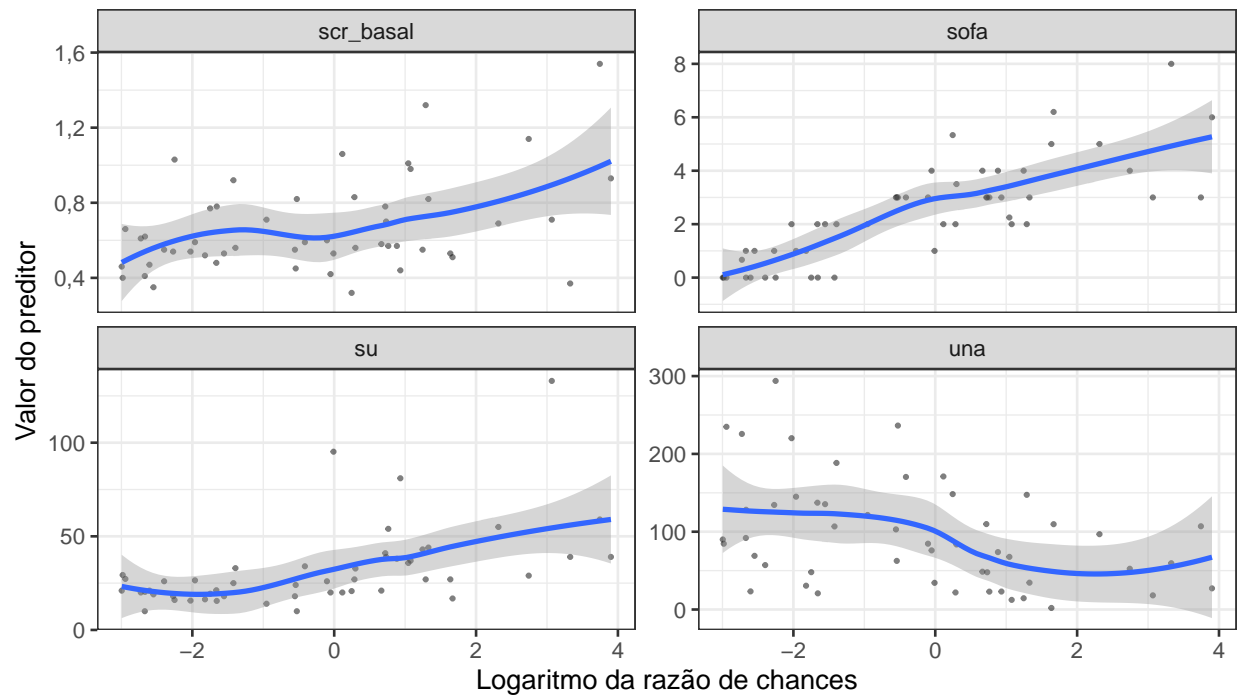
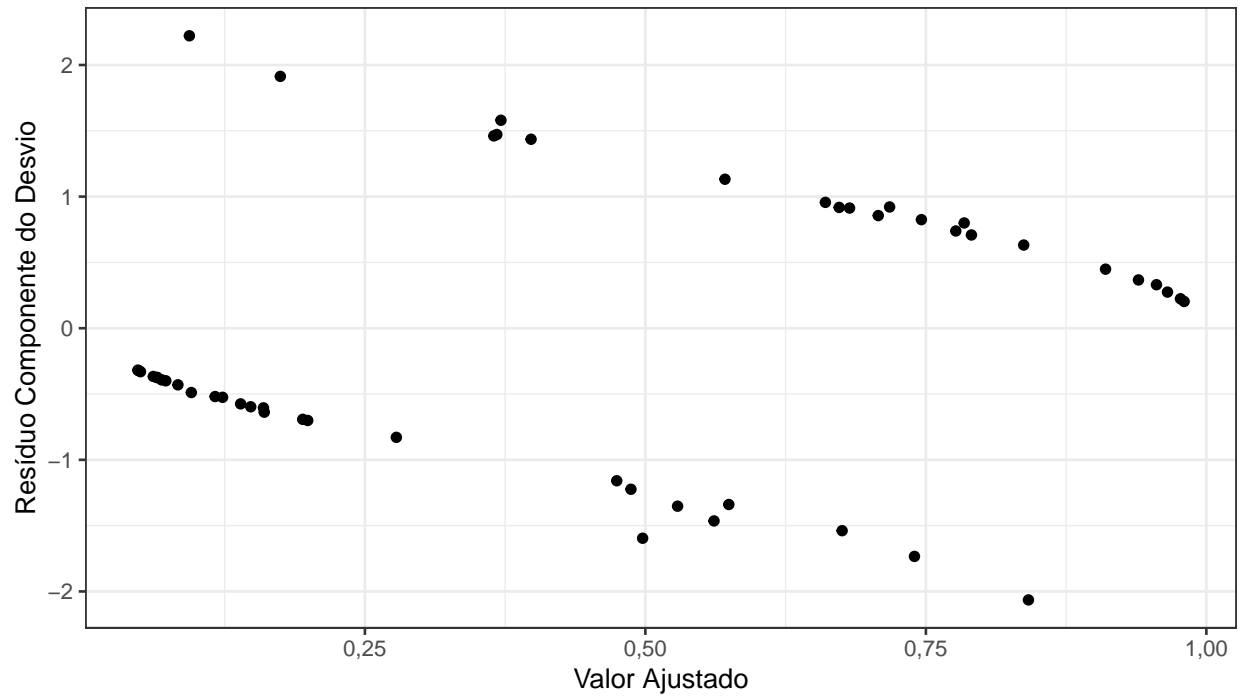
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,010	0,000	0,239
sofa	2,132	1,367	3,820
una	0,995	0,981	1,007
scr_basal	30,585	1,372	1568,481
su	1,023	0,986	1,072

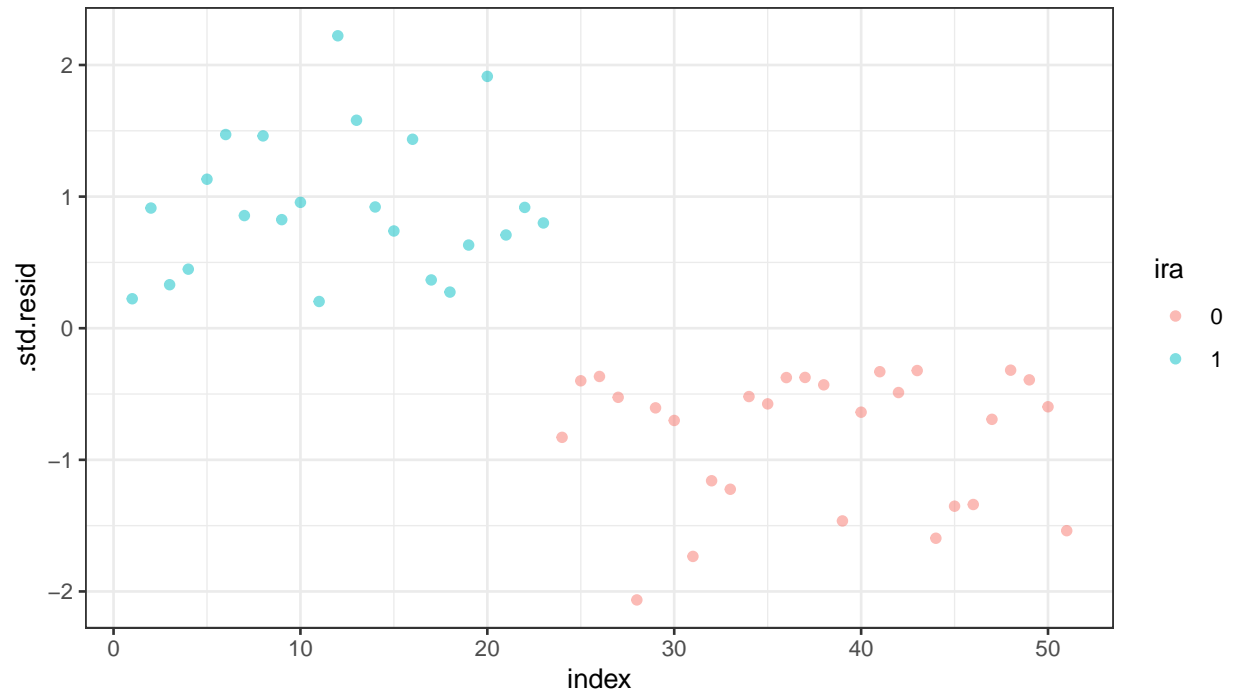
Table 69: VIF

Variável	value
sofa	1,092
una	1,255
scr_basal	1,107
su	1,226









Modelo intersecção

Table 70: Resumo do modelo

Termo	Estimativa	Erro padrão	Estatística	p-valor
(Intercept)	-4,385	1,466	-2,991	0,003
sofa	0,830	0,254	3,270	0,001
scr_basal	3,219	1,672	1,925	0,054

Table 71: Detalhes do modelo

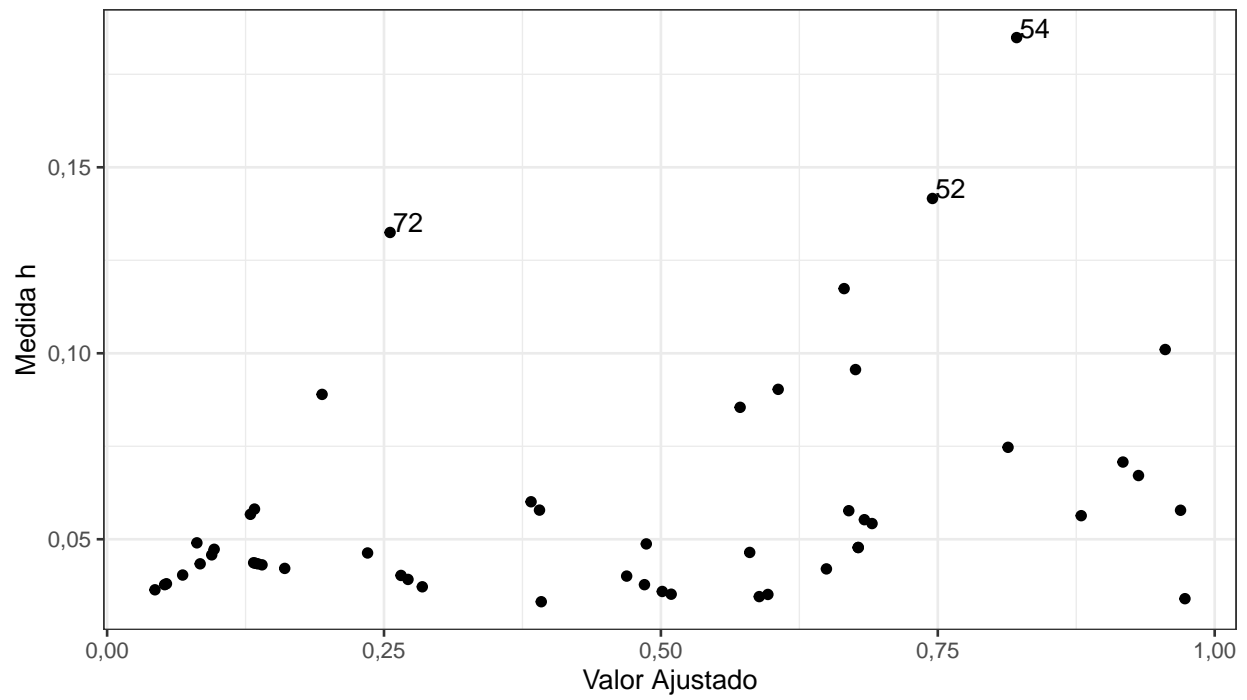
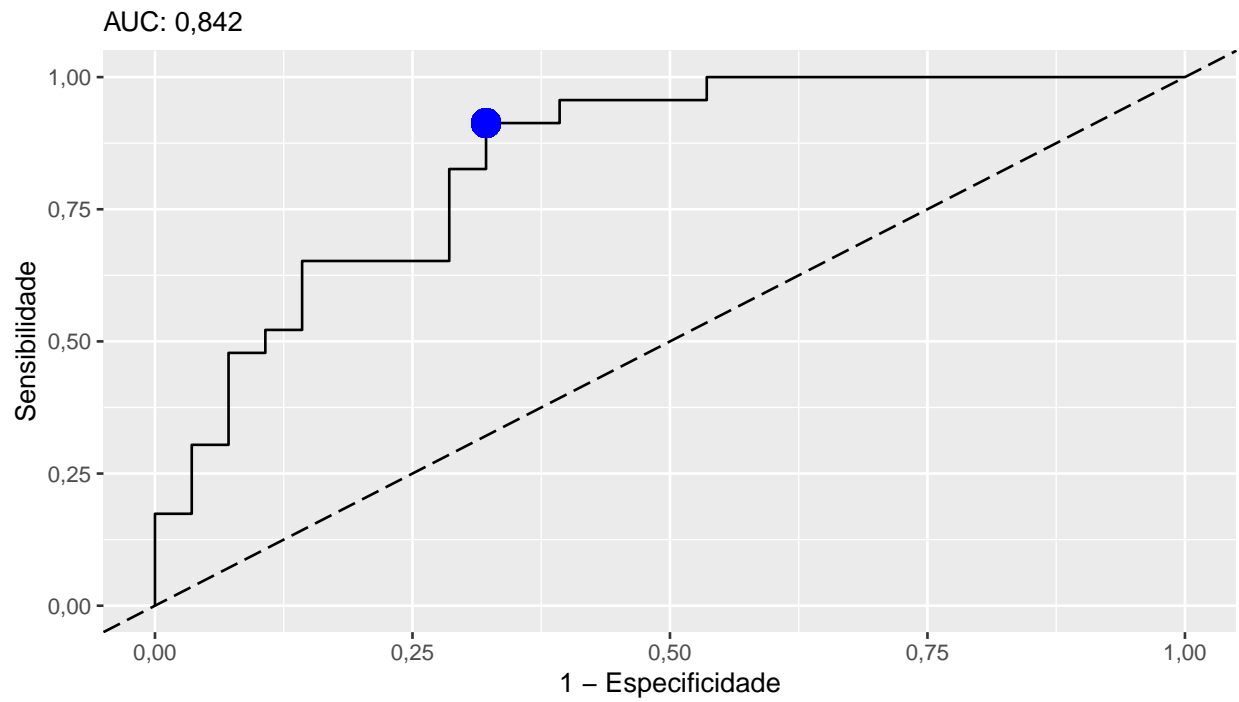
AIC	deviance	Graus de liberdade do resíduo	Número de observações
55,956	49,956	48	51

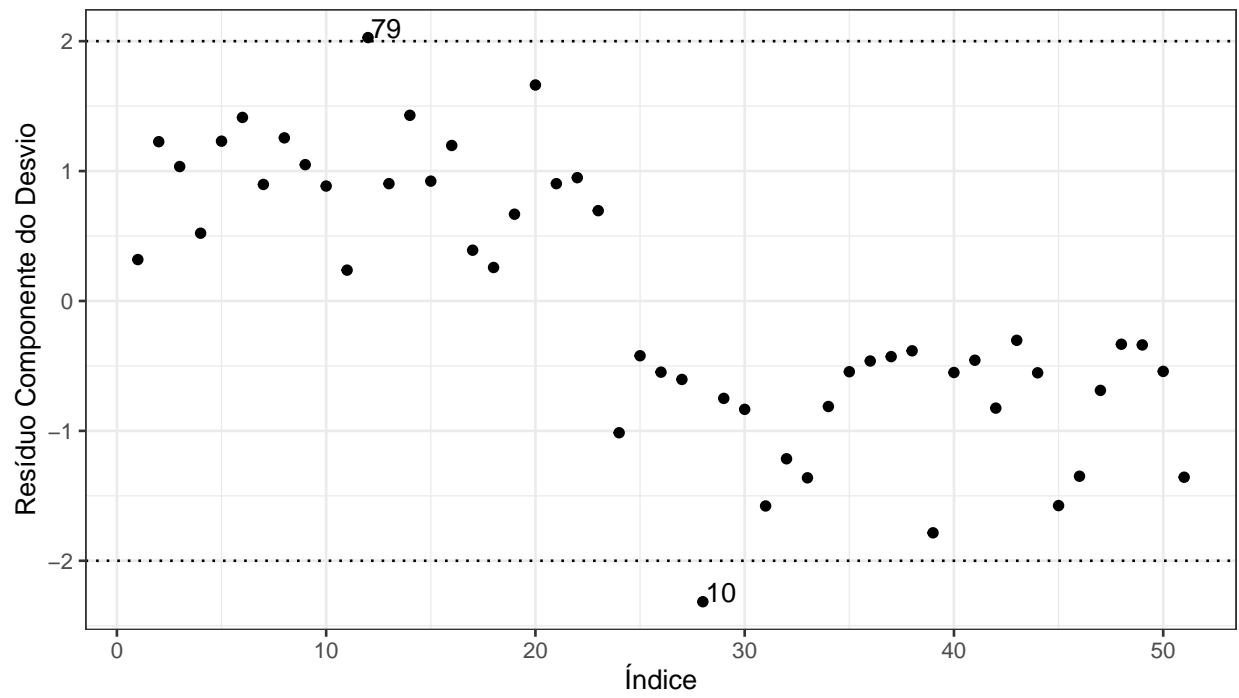
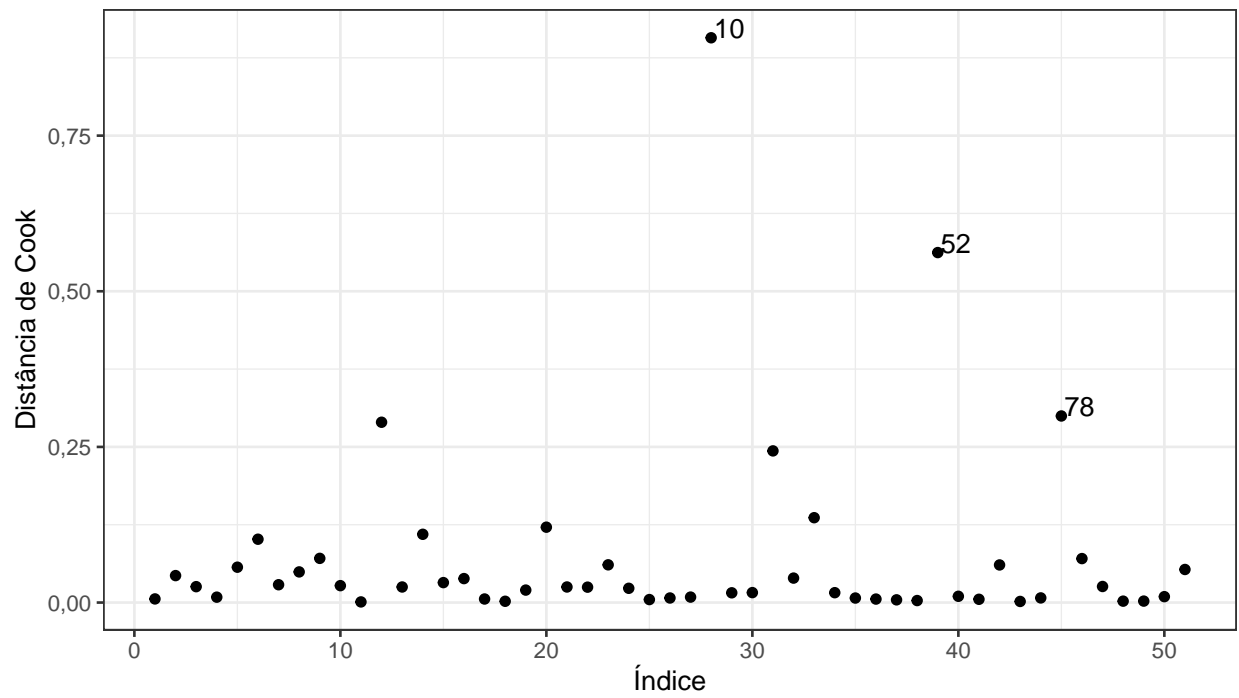
Table 72: Intervalo de confiança para a razão de chances

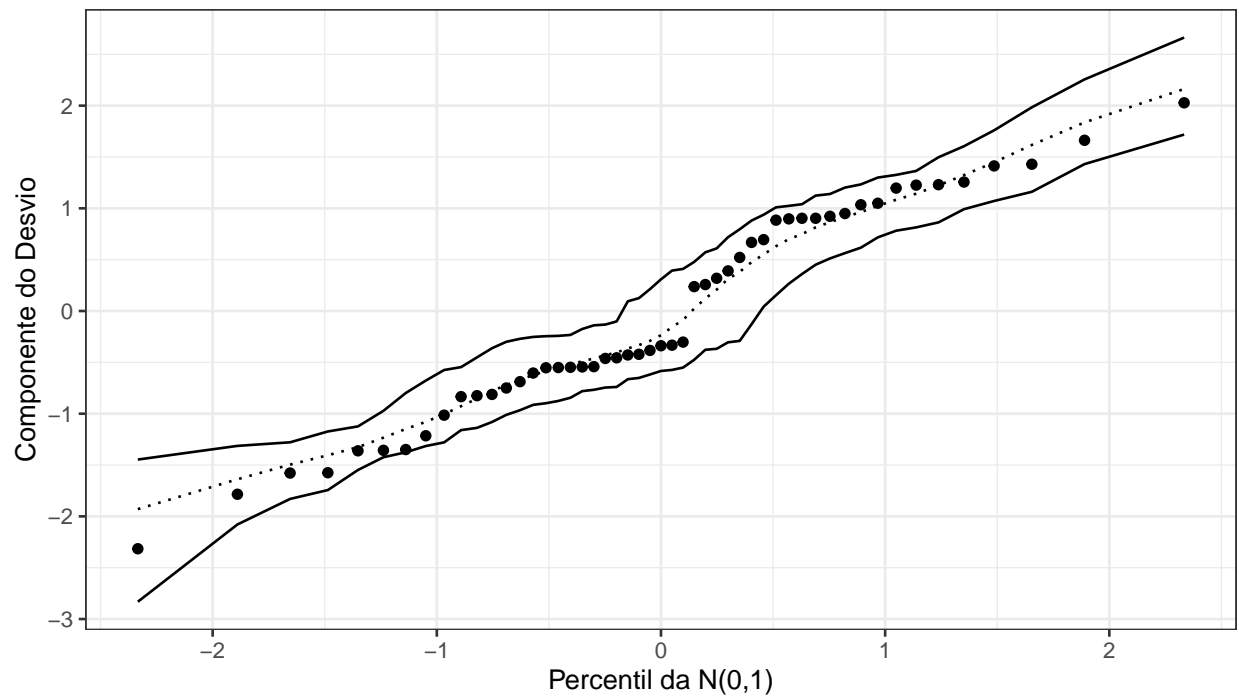
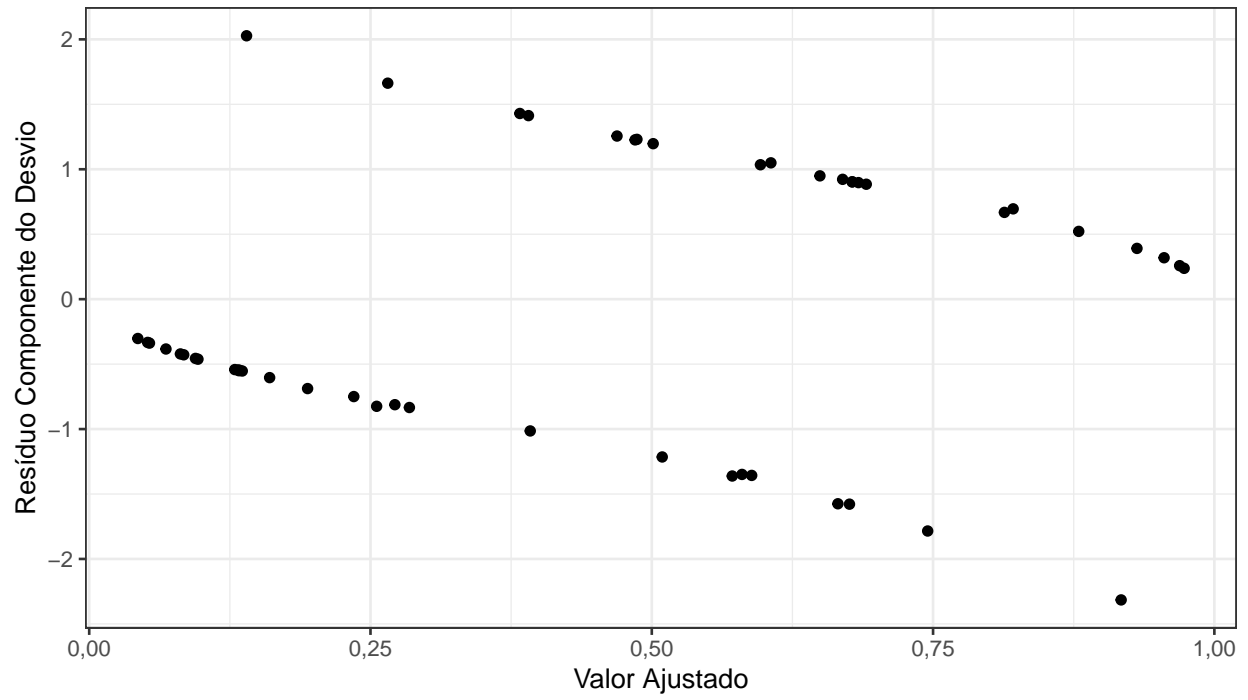
Variável	Estimativa	2,5 %	97,5 %
(Intercept)	0,012	0,000	0,155
sofa	2,294	1,482	4,090
scr_basal	24,997	1,335	1045,837

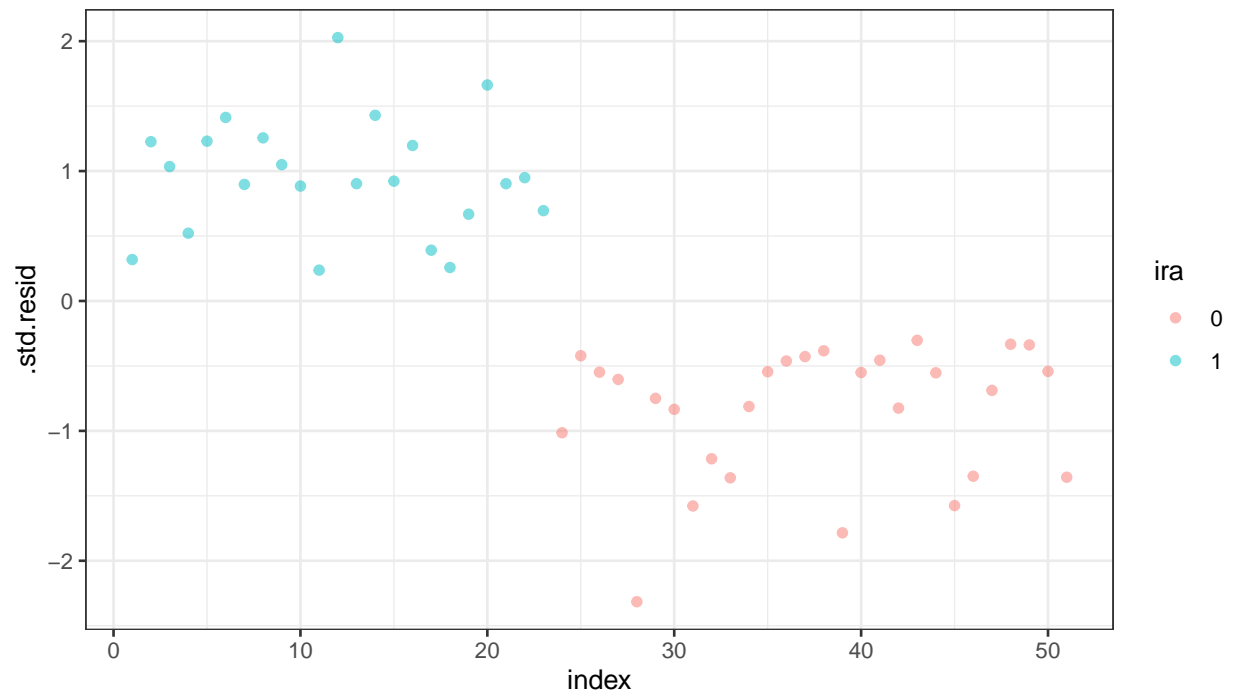
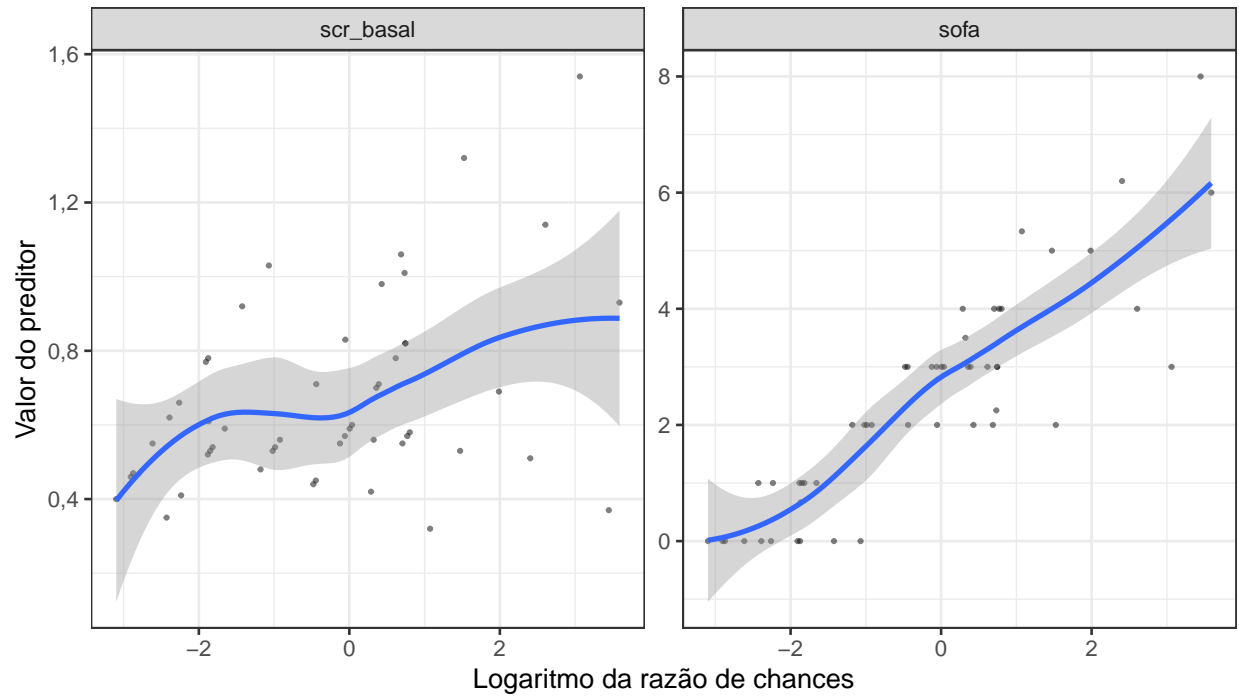
Table 73: VIF

Variável	value
sofa	1,075
scr_basal	1,075







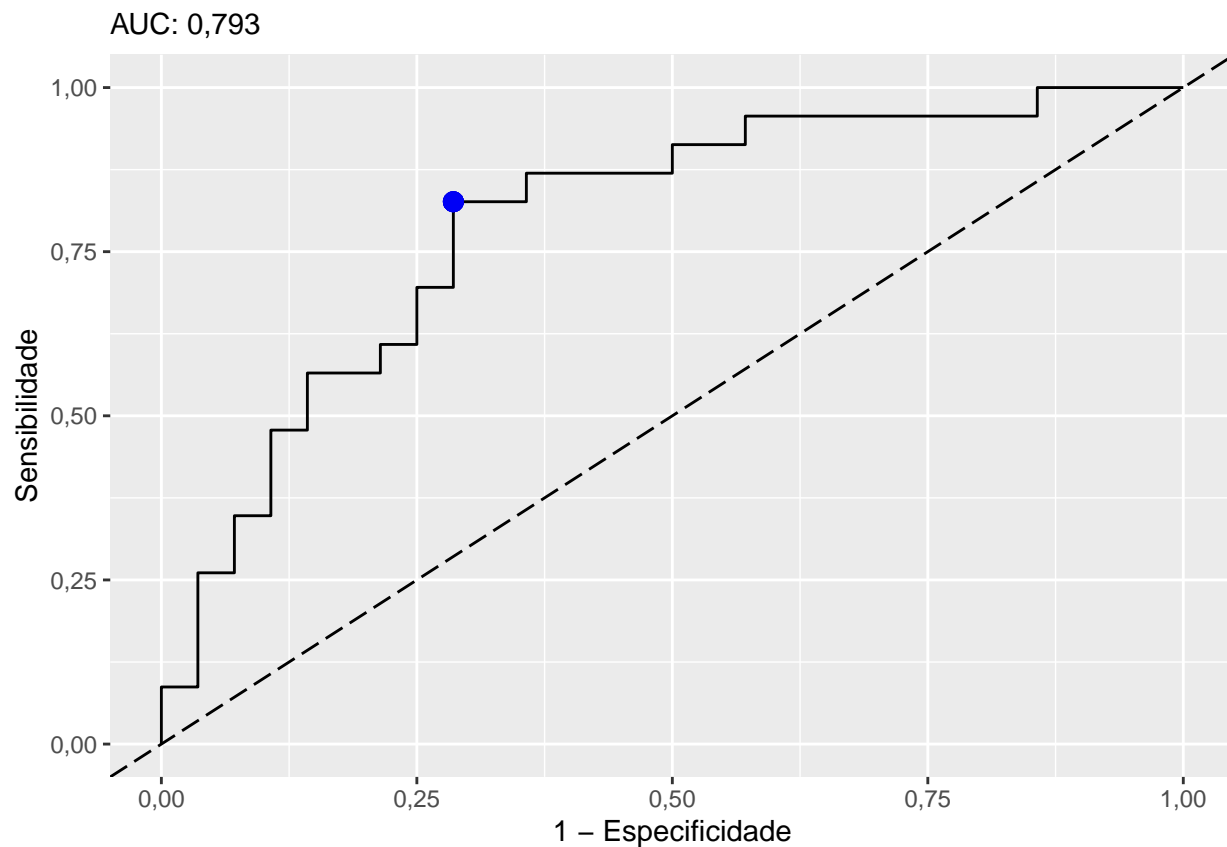


LOOCV (Leave one out cross validation)

ira ~ sofa + una + scr_basal

Table 74: Youden LOOCV threshold = 0.377

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
-Inf	1,000	0,000	23	0	0	28
0,043	1,000	0,036	23	1	0	27
0,052	1,000	0,071	23	2	0	26
0,056	1,000	0,107	23	3	0	25
0,064	1,000	0,143	23	4	0	24
0,071	0,957	0,143	22	4	1	24
0,078	0,957	0,179	22	5	1	23
0,092	0,957	0,214	22	6	1	22
0,103	0,957	0,250	22	7	1	21
0,104	0,957	0,286	22	8	1	20
0,107	0,957	0,321	22	9	1	19
0,114	0,957	0,357	22	10	1	18
0,119	0,957	0,393	22	11	1	17
0,139	0,957	0,429	22	12	1	16
0,158	0,913	0,429	21	12	2	16
0,169	0,913	0,464	21	13	2	15
0,201	0,913	0,500	21	14	2	14
0,225	0,870	0,500	20	14	3	14
0,229	0,870	0,536	20	15	3	13
0,232	0,870	0,571	20	16	3	12
0,232	0,870	0,607	20	17	3	11
0,249	0,870	0,643	20	18	3	10
0,279	0,826	0,643	19	18	4	10
0,325	0,826	0,679	19	19	4	9
0,377	0,826	0,714	19	20	4	8
0,401	0,783	0,714	18	20	5	8
0,434	0,739	0,714	17	20	6	8
0,498	0,696	0,714	16	20	7	8
0,565	0,696	0,750	16	21	7	7
0,596	0,652	0,750	15	21	8	7
0,604	0,609	0,750	14	21	9	7
0,615	0,609	0,786	14	22	9	6
0,623	0,565	0,786	13	22	10	6
0,640	0,565	0,821	13	23	10	5
0,666	0,565	0,857	13	24	10	4
0,694	0,522	0,857	12	24	11	4
0,710	0,478	0,857	11	24	12	4
0,714	0,478	0,893	11	25	12	3
0,725	0,435	0,893	10	25	13	3
0,739	0,391	0,893	9	25	14	3
0,748	0,348	0,893	8	25	15	3
0,757	0,348	0,929	8	26	15	2
0,766	0,304	0,929	7	26	16	2
0,795	0,261	0,929	6	26	17	2
0,838	0,261	0,964	6	27	17	1
0,867	0,217	0,964	5	27	18	1
0,916	0,174	0,964	4	27	19	1
0,953	0,130	0,964	3	27	20	1
0,956	0,087	0,964	2	27	21	1
0,961	0,087	1,000	2	28	21	0
0,973	0,043	1,000	1	28	22	0
Inf	0,000	1,000	0	28	23	0



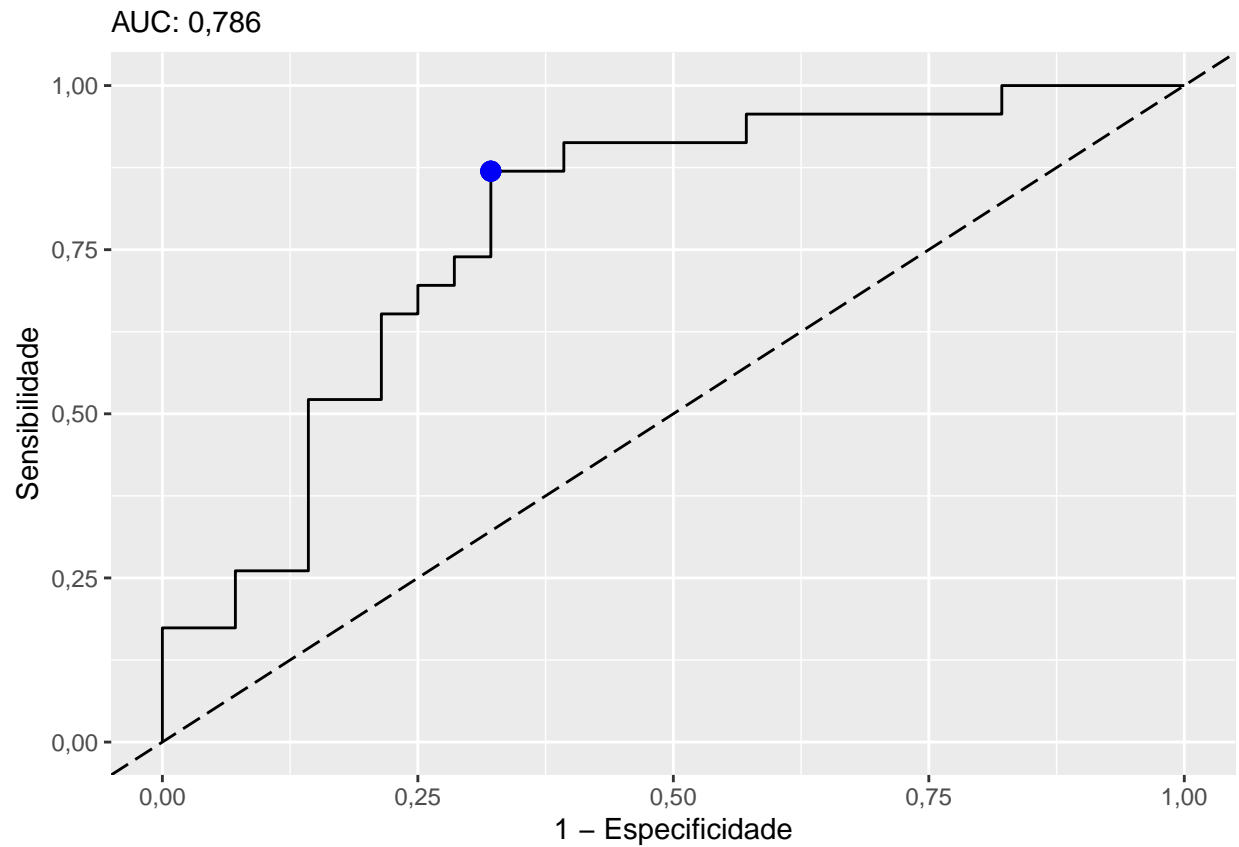
ira ~ sofa + su + scr_basal

Table 75: Youden LOOCV threshold = 0.312

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
-Inf	1,000	0,000	23	0	0	28
0,043	1,000	0,036	23	1	0	27
0,044	1,000	0,071	23	2	0	26
0,050	1,000	0,107	23	3	0	25
0,058	1,000	0,143	23	4	0	24
0,061	1,000	0,179	23	5	0	23
0,063	0,957	0,179	22	5	1	23
0,067	0,957	0,214	22	6	1	22
0,081	0,957	0,250	22	7	1	21
0,094	0,957	0,286	22	8	1	20
0,097	0,957	0,321	22	9	1	19
0,102	0,957	0,357	22	10	1	18
0,107	0,957	0,393	22	11	1	17
0,129	0,957	0,429	22	12	1	16
0,151	0,913	0,429	21	12	2	16
0,171	0,913	0,464	21	13	2	15
0,192	0,913	0,500	21	14	2	14
0,195	0,913	0,536	21	15	2	13
0,208	0,913	0,571	21	16	2	12
0,250	0,913	0,607	21	17	2	11
0,284	0,870	0,607	20	17	3	11
0,297	0,870	0,643	20	18	3	10
0,312	0,870	0,679	20	19	3	9
0,371	0,826	0,679	19	19	4	9
0,442	0,783	0,679	18	19	5	9

Table 75: Youden LOOCV threshold = 0.312 (*continued*)

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
0,467	0,739	0,679	17	19	6	9
0,481	0,739	0,714	17	20	6	8
0,500	0,696	0,714	16	20	7	8
0,538	0,696	0,750	16	21	7	7
0,583	0,652	0,750	15	21	8	7
0,606	0,652	0,786	15	22	8	6
0,612	0,609	0,786	14	22	9	6
0,631	0,565	0,786	13	22	10	6
0,655	0,522	0,786	12	22	11	6
0,675	0,522	0,821	12	23	11	5
0,689	0,522	0,857	12	24	11	4
0,690	0,478	0,857	11	24	12	4
0,699	0,435	0,857	10	24	13	4
0,721	0,391	0,857	9	24	14	4
0,740	0,348	0,857	8	24	15	4
0,748	0,304	0,857	7	24	16	4
0,763	0,261	0,857	6	24	17	4
0,781	0,261	0,893	6	25	17	3
0,850	0,261	0,929	6	26	17	2
0,921	0,217	0,929	5	26	18	2
0,935	0,174	0,929	4	26	19	2
0,946	0,174	0,964	4	27	19	1
0,957	0,174	1,000	4	28	19	0
0,966	0,130	1,000	3	28	20	0
0,970	0,087	1,000	2	28	21	0
0,977	0,043	1,000	1	28	22	0
Inf	0,000	1,000	0	28	23	0



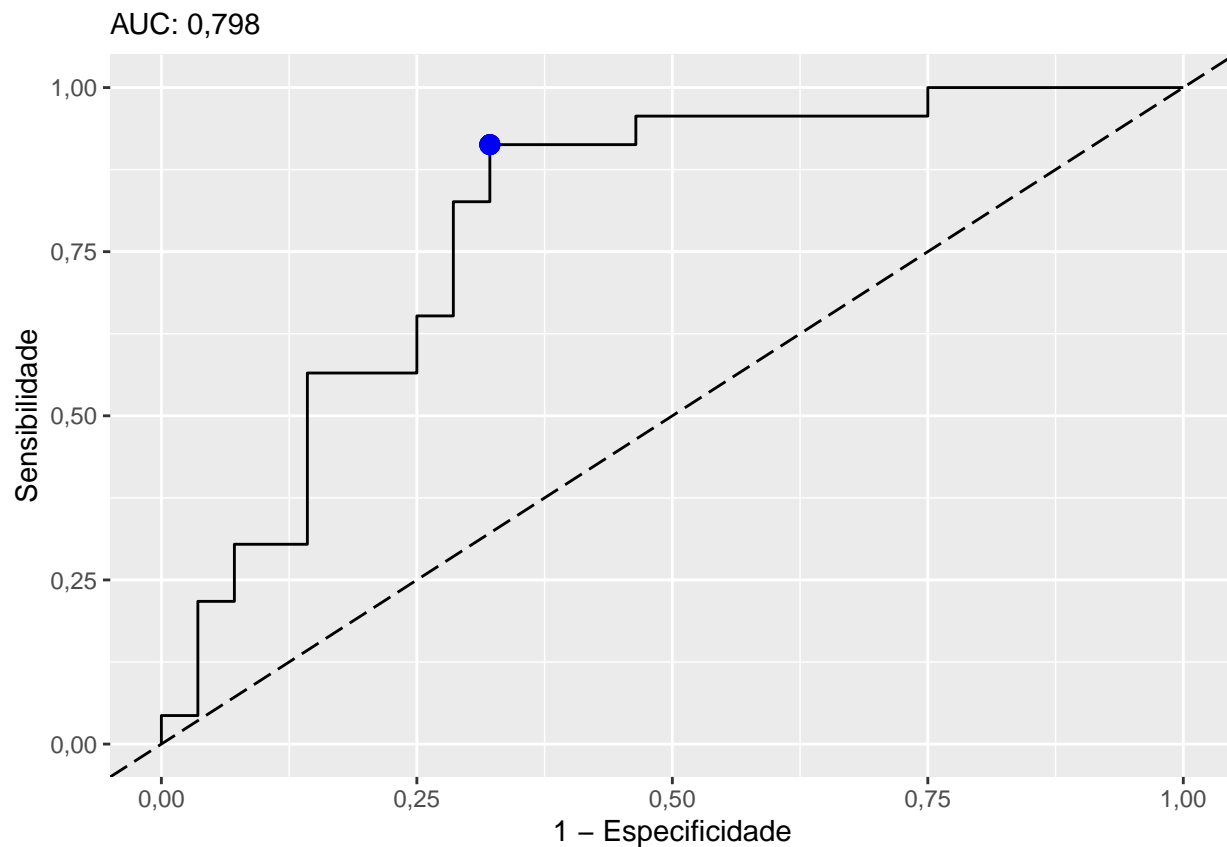
ira ~ sofa + scr_basal

Table 76: Youden LOOCV threshold = 0.320

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
-Inf	1,000	0,000	23	0	0	28
0,049	1,000	0,036	23	1	0	27
0,055	1,000	0,071	23	2	0	26
0,063	1,000	0,107	23	3	0	25
0,078	1,000	0,143	23	4	0	24
0,087	1,000	0,179	23	5	0	23
0,093	1,000	0,214	23	6	0	22
0,100	1,000	0,250	23	7	0	21
0,101	0,957	0,250	22	7	1	21
0,119	0,957	0,286	22	8	1	20
0,138	0,957	0,321	22	9	1	19
0,139	0,957	0,357	22	10	1	18
0,141	0,957	0,393	22	11	1	17
0,142	0,957	0,429	22	12	1	16
0,155	0,957	0,464	22	13	1	15
0,190	0,957	0,500	22	14	1	14
0,224	0,957	0,536	22	15	1	13
0,240	0,913	0,536	21	15	2	13
0,265	0,913	0,571	21	16	2	12
0,289	0,913	0,607	21	17	2	11
0,296	0,913	0,643	21	18	2	10
0,320	0,913	0,679	21	19	2	9
0,349	0,870	0,679	20	19	3	9
0,379	0,826	0,679	19	19	4	9
0,426	0,826	0,714	19	20	4	8

Table 76: Youden LOOCV threshold = 0.320 (*continued*)

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
0,454	0,783	0,714	18	20	5	8
0,463	0,739	0,714	17	20	6	8
0,474	0,696	0,714	16	20	7	8
0,505	0,652	0,714	15	20	8	8
0,548	0,652	0,750	15	21	8	7
0,575	0,609	0,750	14	21	9	7
0,595	0,565	0,750	13	21	10	7
0,609	0,565	0,786	13	22	10	6
0,618	0,565	0,821	13	23	10	5
0,630	0,565	0,857	13	24	10	4
0,642	0,522	0,857	12	24	11	4
0,656	0,478	0,857	11	24	12	4
0,664	0,391	0,857	9	24	14	4
0,669	0,348	0,857	8	24	15	4
0,711	0,304	0,857	7	24	16	4
0,752	0,304	0,893	7	25	16	3
0,767	0,304	0,929	7	26	16	2
0,788	0,261	0,929	6	26	17	2
0,827	0,217	0,929	5	26	18	2
0,864	0,217	0,964	5	27	18	1
0,899	0,174	0,964	4	27	19	1
0,938	0,130	0,964	3	27	20	1
0,959	0,087	0,964	2	27	21	1
0,969	0,043	0,964	1	27	22	1
0,971	0,043	1,000	1	28	22	0
Inf	0,000	1,000	0	28	23	0



ira ~ sofa + su

Table 77: Youden LOOCV threshold = 0.319

Ponto de corte	Sensibilidade	Especificidade	Verdadeiro positivo	Verdadeiro negativo	Falso negativo	Falso positivo
-Inf	1,000	0,000	23	0	0	28
0,087	1,000	0,036	23	1	0	27
0,092	1,000	0,071	23	2	0	26
0,098	1,000	0,107	23	3	0	25
0,100	1,000	0,143	23	4	0	24
0,108	1,000	0,214	23	6	0	22
0,116	1,000	0,250	23	7	0	21
0,120	1,000	0,286	23	8	0	20
0,126	1,000	0,321	23	9	0	19
0,129	0,957	0,321	22	9	1	19
0,134	0,957	0,357	22	10	1	18
0,143	0,957	0,393	22	11	1	17
0,156	0,957	0,429	22	12	1	16
0,169	0,957	0,464	22	13	1	15
0,194	0,957	0,500	22	14	1	14
0,233	0,957	0,536	22	15	1	13
0,262	0,913	0,536	21	15	2	13
0,275	0,913	0,571	21	16	2	12
0,293	0,913	0,607	21	17	2	11
0,310	0,913	0,643	21	18	2	10
0,319	0,913	0,679	21	19	2	9
0,323	0,870	0,679	20	19	3	9
0,327	0,826	0,679	19	19	4	9
0,364	0,783	0,679	18	19	5	9
0,399	0,739	0,679	17	19	6	9
0,407	0,739	0,714	17	20	6	8
0,440	0,696	0,714	16	20	7	8
0,468	0,696	0,750	16	21	7	7
0,496	0,652	0,750	15	21	8	7
0,538	0,652	0,786	15	22	8	6
0,579	0,609	0,786	14	22	9	6
0,607	0,565	0,786	13	22	10	6
0,618	0,522	0,786	12	22	11	6
0,629	0,478	0,786	11	22	12	6
0,650	0,478	0,821	11	23	12	5
0,672	0,478	0,857	11	24	12	4
0,677	0,435	0,857	10	24	13	4
0,685	0,435	0,893	10	25	13	3
0,707	0,391	0,893	9	25	14	3
0,729	0,348	0,893	8	25	15	3
0,752	0,304	0,893	7	25	16	3
0,780	0,261	0,893	6	25	17	3
0,812	0,217	0,893	5	25	18	3
0,863	0,174	0,893	4	25	19	3
0,901	0,174	0,929	4	26	19	2
0,914	0,130	0,929	3	26	20	2
0,940	0,087	0,929	2	26	21	2
0,961	0,087	0,964	2	27	21	1
0,971	0,043	0,964	1	27	22	1
0,984	0,000	0,964	0	27	23	1
Inf	0,000	1,000	0	28	23	0

