

Aufgabe4

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8/4/2021

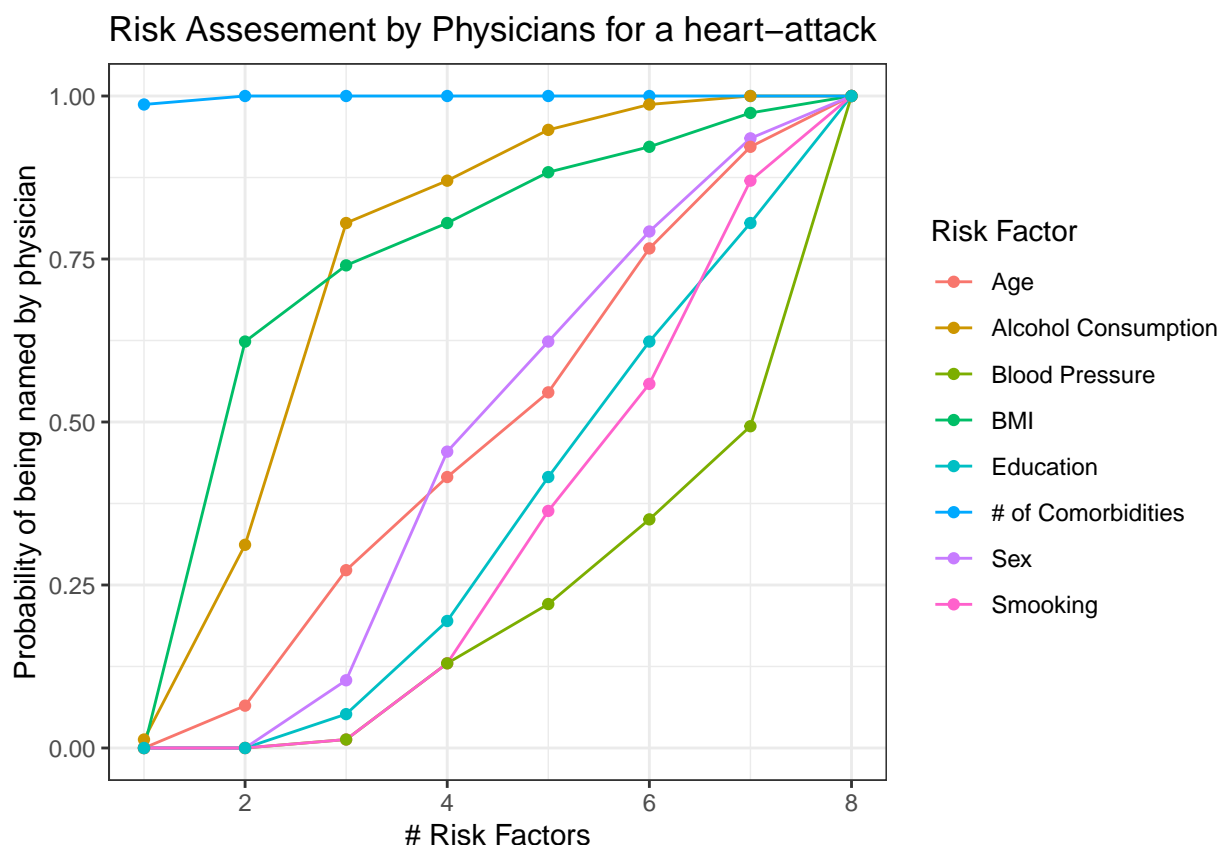
Aufgabe 4

```
umfragen <- readRDS("umfragen.Rds")

umfragen <- umfragen %>%
  add_column("n_factors"= 1:8, .before=1) %>%
  pivot_longer(!n_factors, names_to = "risk_factor",
               values_to = "probability")

legend_labels <- c("Age", "Alcohol Consumption", "Blood Pressure", "BMI",
                  "Education", "# of Comorbidities", "Sex", "Smoking")

ggplot(umfragen, aes(x= n_factors, y= probability, col= risk_factor))+
  geom_line()+
  geom_point()+
  ggtitle("Risk Assesement by Physicians for a heart-attack")+
  xlab("# Risk Factors")+
  ylab("Probability of being named by physician")+
  scale_color_discrete(name= c("Risk Factor"),
                      labels= legend_labels)+
  theme_bw()
```



Session Info

```
sessionInfo()
```

```
## R version 4.0.2 (2020-06-22)
## Platform: x86_64-apple-darwin17.0 (64-bit)
## Running under: macOS 10.16
##
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/4.0/Resources/lib/libRblas.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.0/Resources/lib/libRlapack.dylib
##
## locale:
## [1] de_DE.UTF-8/de_DE.UTF-8/de_DE.UTF-8/C/de_DE.UTF-8/de_DE.UTF-8
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods   base
##
## other attached packages:
## [1] forcats_0.5.1 stringr_1.4.0 dplyr_1.0.7 purrr_0.3.4
## [5] readr_1.4.0   tidyr_1.1.3   tibble_3.1.1 ggplot2_3.3.3
## [9] tidyverse_1.3.1 pammttools_0.5.7
##
## loaded via a namespace (and not attached):
## [1] Rcpp_1.0.6      lubridate_1.7.10 mvtnorm_1.1-1
## [4] lattice_0.20-44 assertthat_0.2.1 digest_0.6.27
```

## [7] foreach_1.5.1	utf8_1.2.1	R6_2.5.0
## [10] cellranger_1.1.0	backports_1.2.1	reprex_2.0.0
## [13] evaluate_0.14	highr_0.9	httr_1.4.2
## [16] pillar_1.6.0	rlang_0.4.11	lazyeval_0.2.2
## [19] readxl_1.3.1	rstudioapi_0.13	Matrix_1.3-3
## [22] checkmate_2.0.0	rmarkdown_2.8	labeling_0.4.2
## [25] splines_4.0.2	munsell_0.5.0	broom_0.7.6
## [28] compiler_4.0.2	numDeriv_2016.8-1.1	modelr_0.1.8
## [31] xfun_0.22	pkgconfig_2.0.3	mgcv_1.8-35
## [34] htmltools_0.5.1.1	tidyselect_1.1.1	proclim_2019.11.13
## [37] codetools_0.2-18	fansi_0.4.2	withr_2.4.2
## [40] crayon_1.4.1	dbplyr_2.1.1	timereg_2.0.0
## [43] grid_4.0.2	nlme_3.1-152	jsonlite_1.7.2
## [46] gtable_0.3.0	lifecycle_1.0.0	DBI_1.1.1
## [49] magrittr_2.0.1	scales_1.1.1	cli_2.5.0
## [52] stringi_1.6.1	farver_2.1.0	fs_1.5.0
## [55] xml2_1.3.2	ellipsis_0.3.2	generics_0.1.0
## [58] vctrs_0.3.8	Formula_1.2-4	lava_1.6.9
## [61] iterators_1.0.13	tools_4.0.2	glue_1.4.2
## [64] hms_1.0.0	pec_2020.11.17	survival_3.2-11
## [67] yaml_2.2.1	colorspace_2.0-1	rvest_1.0.0
## [70] knitr_1.33	haven_2.4.1	