An example Metropolis Beamer presentation using R Markdown compiled in the rmdmetro Docker container

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Outline

Part 1

Part 2

Introduction

- This is a test
 - · of the Docker container

A slide with a citation

Greenland and Pearl (2011) define collapsibility as
 When an adjustment does not alter a measure, the measure is said to be collapsible over C or invariant with respect to the adjustment. Conversely, if an adjustment alters a measure, the measure is said to be non-collapsible over C.

A slide with some maths

- Neuhaus and Jewell (1993) explained that where f(p) is the link function
 - GLMs: $f(\mathbb{E}[Y]) = \eta$
 - e.g. logit link; $\log\left(\frac{p}{1-p}\right) = \eta$
- v is the conditional association between X and Y (on the scale of the linear predictor)
- Characteristic collapsibility function (CCF) $g_v(p)$, named by Daniel et al. (2021), maps P(Y|X=0,C) to P(Y|X=1,C) (e.g. part (b) of first figure)

CCF:
$$g_v(p) = f^{-1} \{ f(p) + v \}$$

• Take away: A parameter is said to be non-collapsible when its CCF is non-linear

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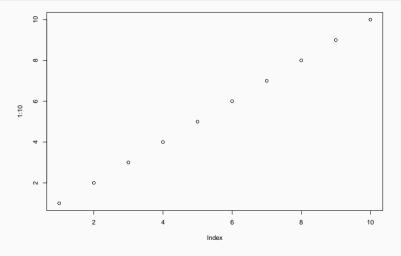
A slide with some code and output

· Estimate the marginal odds ratio

· A nice kable table

		2.5 %	97.5 %
(Intercept)	0.667	0.379	1.17
х	2.250	1.011	5.01

A slide with a plot



References



Daniel, R., J. Zhang, and D. Farewell. 2021. "Making apples from oranges: Comparing noncollapsible effect estimators and their standard errors after adjustment for different covariate sets." *Biometrical Journal* 63 (3): 528–557.



Greenland, S., and J. Pearl. 2011. "Adjustments and their Consequences—Collapsibility Analysis using Graphical Models."

International Statistical Review 79 (3): 401–426.



Neuhaus, J. M., and N. P. Jewell. 1993. "A geometric approach to assess bias due to omitted covariates in generalized linear models." Biometrika 80 (4): 807–815.