

## Dementia Codebook

- age - Age of patient
- gender - Patient's gender
- dementia\_all - Presence of dementia, 1=dementia (excluding missing values, response variable)
- educationyears - Length of education (in years)
- EF - Executive function (numeric variable, describes the level of mental skills, can be assessed through neurological tests)
- PS - Processing speed (numeric variable, evaluates the brain's ability to process information, it affects one's ability to use executive functions)
- Global - Global cognitive score (assesses overall status of cognition)
- diabetes - Presence of diabetes (1 - yes, 0 - no)
- smoking - Smoking status (categorical, describes "current smokers", "non-smokers", "ex-smokers")
- hypertension - Presence of hypertension (high blood pressure) in the patient ("yes"/"no")
- hypercholesterolemia - Hypercholesterolemia (presence of high cholesterol levels in the blood, "yes"/"no")
- lacunes\_num - Number of lacunes (categorical, binary, "zero"/"more-than-zero"), lacunes are small cavities in the brain which can be indicative of diabetes/cognitive impairment
- fazekas\_cat - Indicates level of white matter brain damage, uses Fazekas scale: 0 = absent, 1 = "caps" or pencil-thin lining, 2 = smooth "halo", 3 = irregular periventricular signal extending into deep white matter, information found outside of dataset:  
<https://radiopaedia.org/articles/fazekas-scale-for-white-matter-lesions?lang=us> categorizes scores into "0 to 1" and "2 to 3".
- study1 - indicates which study the observation originated from ("scans", "rundmc", "ASPS")
- study - same as study1, but splits "ASPS" into "ASPS-elderly" and "ASPS-family", indicates family and elderly cohorts of ASPS study. Information found about the studies wasn't in the dataset, but at this link:  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7274929/>
- SVD Simple Score - SVD (Small Vessel Disease) Simple Score, measures the signs of SVD, includes factors like lacunes, fazekas score, and microbleeds
- SVD Amended Score - SVD Amended Score, similar to Simple Score, but with a wider range, weighting factors more heavily.

- Fazekas - numerical variable, has the same meaning as fazekas\_cat, gives discrete value ranging from 0 to 3.
- lac\_count - Same meaning as lacunes\_num, but describes the category "more-than-zero" in more detail: "1 to 2", "3 to 5", and ">5"
- CMB\_count - categorical variable with two values: 0 and "at least one", describes cerebral microbleeds, which are small brain hemorrhages.