This is an overview of SAS programs used in the analysis for “Heterogeneity of Dementia Severity at Incident Diagnosis” by Shengjia Xu, Niloofar Fouladi-Nashta, and Julie Zissimopoulos published in the *Journal of Gerontology Social Sciences* in 2023. The programs are meant to run in order, with later programs relying on data created by earlier ones.

**Sample**

1\_Pull\_HRS\_All\_Waves.sas

* Source data: rndHRS\_p (Rand HRS longitudinal file), sasfmts.fmt
* Creates: HRS\_Final\_with\_Demog
* creates a long file of HRS waves 1 to 11 respondents, with the required demographic and cognitive information

2a\_Cleaning\_ADAMS.sas

* Source data: adamsa (ADAMS wave A)
* Creates: ADAMS\_A
* creates a new clean file of ADAMS Wave A respondents with variables of interest

2b\_ADAMS\_Waves.sas

* Source data: adamsa, rndHRS\_p, sasfmts
* Creates: HRS\_ADAMSA\_All
* creates matching wave numbers for ADAMS wave A respondents

2c\_Final\_Cleaning\_ADAMS.sas

* Source data: HRS\_ADAMSA\_All
* Creates: HRS\_ADAMSA\_final\_version

creates depression score, as well as various categorizations of CDR variable for predictive modeling step

3\_HRS\_wave6.sas

* Source data: sasfmts, HRS\_Final\_with\_Demog
* Creates: HRS6\_70yr\_NoFmt
* creates file including HRS wave 6 respondents with matching variables to the ADAMS sample for predictive modeling step

**Analysis**

4\_Models.sas

* Source data: HRS\_ADAMSA\_final\_version,
* Runs various predictive models on the final sample to assess and compare the predicted severity score