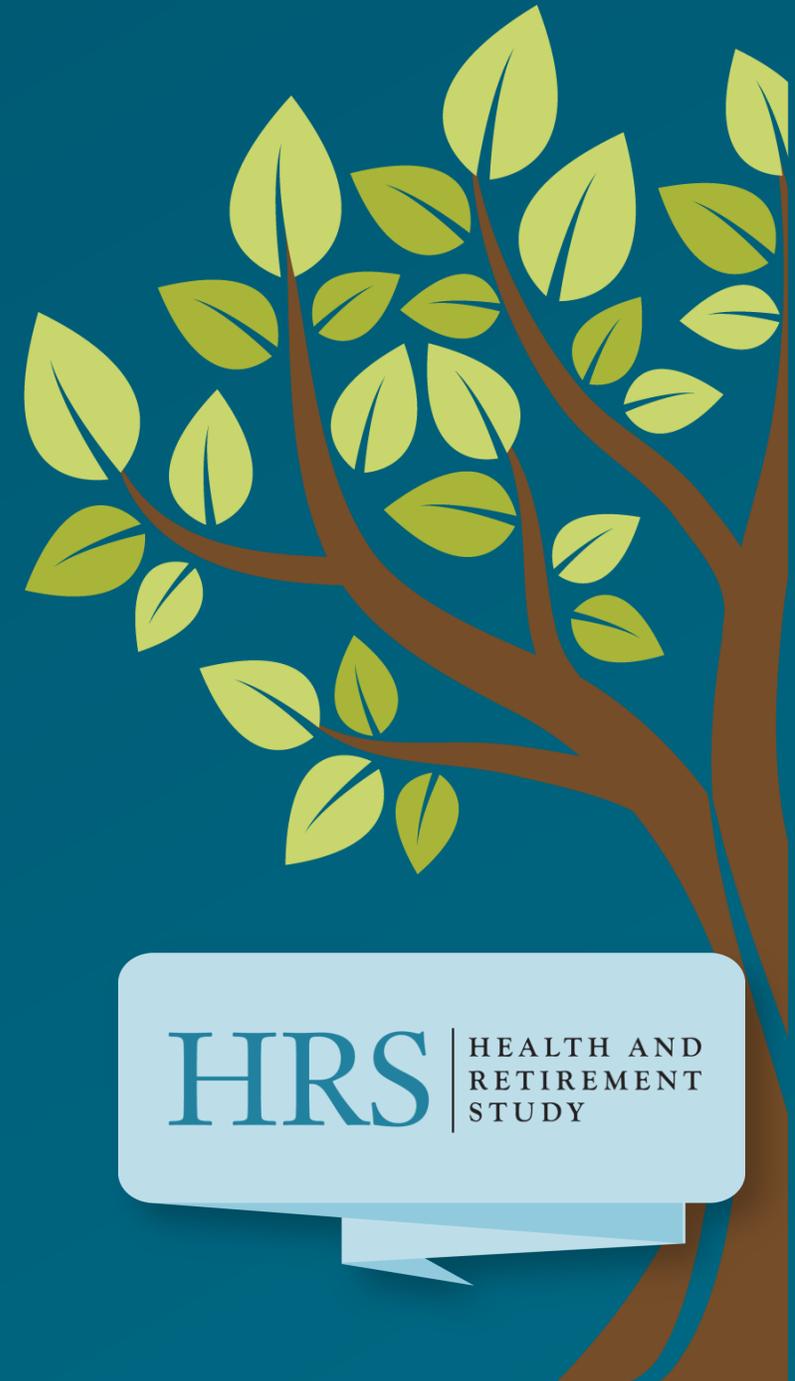


Overview of the HRS

Amanda Sonnega

October 25, 2025



HRS | HEALTH AND
RETIREMENT
STUDY

Our Plan

- History and overview
- Building the sample
- Study Design
- Study Content
- Restricted data enclave-this is where the contextual data live
- Quick tour of the website

Note: All of this available to review at your leisure in the new user guide

Jump in with quick questions, for longer questions send me an e-mail

asonnega@umich.edu

After the workshop, please send questions to our helpdesk so we can track them!

History

- Created in 1990 by an act of Congress to provide data for the study of health and retirement
- First longitudinal study of older people to include detailed economic and health information in the same survey
- Large leadership team from different disciplines
- The largest and most comprehensive nationally representative multi-disciplinary panel study of Americans over age 50
- Supported by a cooperative agreement with the National Institute on Aging (U01 AG009740) and funding from the Social Security Administration

“This study has allowed UM to dive deeper into the issues many Americans face as they age, such as income, work, assets, pension plans, health insurance, disability, physical health and functioning, cognitive functioning, health care expenditures, and more

Debbie Dingell –D-MI 6th

Essentials

The basic design is a survey that:

- Is nationally representative of the population over age 50
- Follows individuals and their spouses or partners from the time of their entry into the survey until death
- Introduces a new 6-year birth cohort of participants every 6 years

Any given wave has about 15-18,000 respondents, with over 46,000 respondents ever interviewed

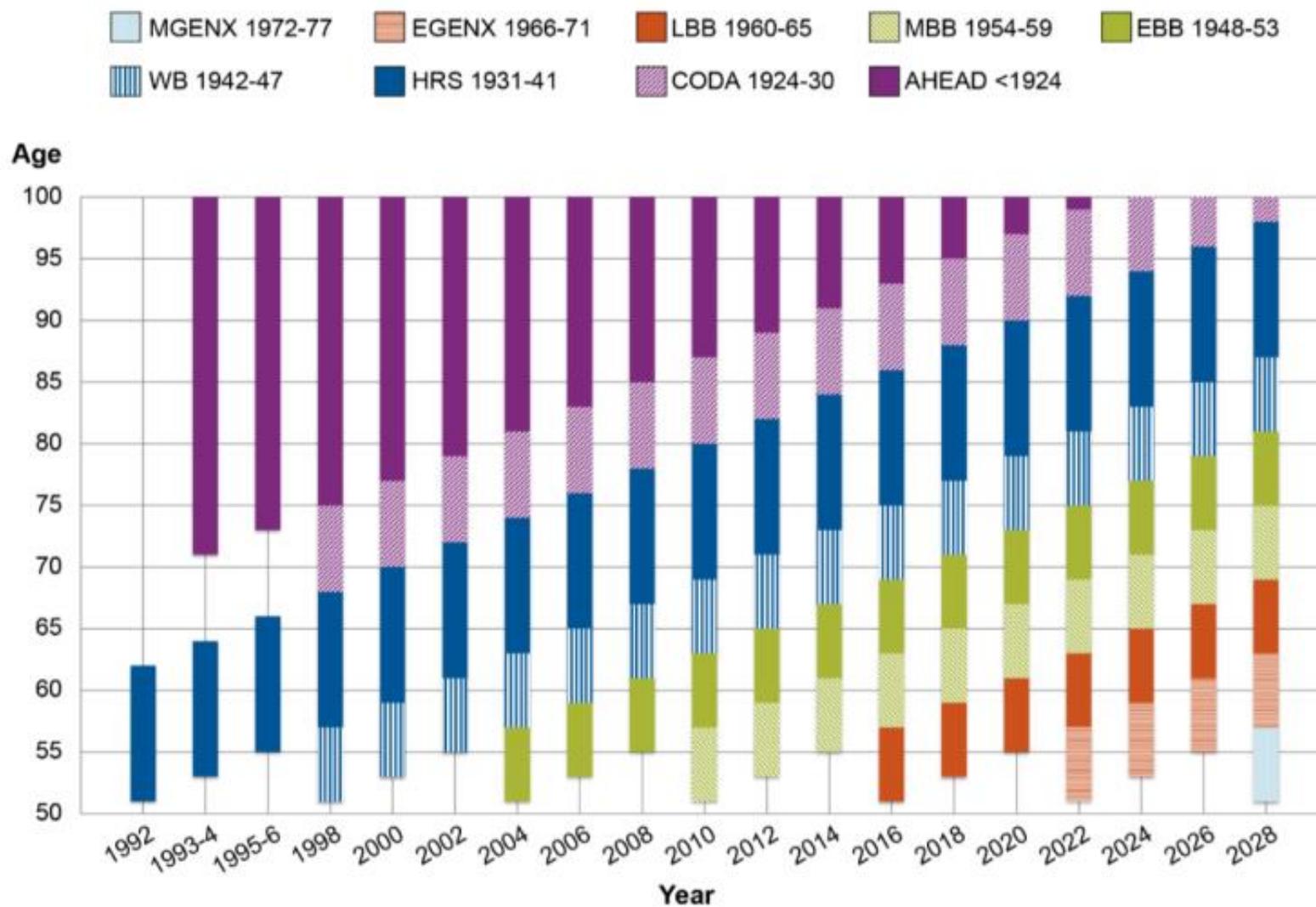
Three levels of data:

- Public-simply register, login, and access
- Sensitive-one extra form
- Restricted-available in secure data enclave



Building the Sample

Longitudinal Cohort Sample Design



Response Rates

Wave	Panel ¹			New Cohort ²			Total		
	#Cases	#Respondents	Response Rate	#Cases	#Respondents	Response Rate	#Cases	#Respondents	Response Rate
1992				15,497	12,652	81.6%	15,497	12,652	81.6%
1993				10,229	8,222	80.4%	10,229	8,222	80.4%
1994	12,777	11,420	89.4%				12,777	11,420	89.4%
1995	7,555	7,027	93.0%				7,555	7,027	93.0%
1996	12,620	10,964	86.9%				12,620	10,964	86.9%
1998	18,714	16,535	88.4%	6,819	4,889	71.7%	25,533	21,424	83.9%
2000	22,238	19,577	88.0%				22,238	19,577	88.0%
2002	20,559	18,166	88.4%				20,559	18,166	88.4%
2004	19,186	16,799	87.6%	4,420	3,330	75.3%	23,606	20,129	85.3%
2006	20,775	18,469	88.9%				20,775	18,469	88.9%
2008	19,459	17,217	88.5%				19,459	17,217	88.5%
2010	17,888	15,749	88.0%	9,310	6,283	67.5%	27,198	22,032	81.0%
2012	23,063	20,554	89.1%				23,063	20,554	89.1%
2014	21,529	18,747	87.1%				21,529	18,747	87.1%
2016	19,930	16,494	82.8%	8,282	4,368	52.7%	28,212	20,862	73.9%
2018	23,036	17,146	74.4%				23,036	17,146	74.4%
2020	21,264	15,723	73.9%				21,264	15,723	73.9%

A woman with long, wavy hair and glasses is shown in profile, looking towards the right. The image is overlaid with a semi-transparent blue gradient. The text "Study Design" is centered in white, bold font.

Study Design

Core interview modes

- 1992-2002
 - Face-to-face interview at baseline
 - Telephone was the primary mode for follow-up
 - Face-to-face offered to respondents age 80+
- 2006 and beyond
 - Half of core sample is randomly assigned to face-to-face interview enhanced with physical and biological measures and a mail-back psychosocial questionnaire
 - Other half sample assigned to telephone as before
- Beginning in 2018, some respondents are offered a self-administered web interview as their initial option for the core.
 - Only for those not in the EFTF sample that wave

Design of the enhanced face-to-face interview

	2006	2008	2010	2012	2014
EFTF Sample	A	B	A	B	A
A=First random half sample B=Second random half sample					

- Alternate waves
- Data from enhanced face-to-face is available every wave on a half sample, and longitudinally every four years
- Enhanced interview takes place at baseline or at follow-up
- For psychosocial, biomarker, and physical measures



Study Content

Content overview

Core

- The core survey takes place every two years. One and a half to three hour interview. The main part of the data. Sample size currently ranges from 15,000-20,000 any given wave.

Experimental Modules

- Three minutes on various topics. Takes place at the end of the core interview. About 10 modules every wave. Sample size is about 1,500.

Enhanced Face-to-Face

- Physical measures, biomarkers, genetics, and psychosocial information obtained as part of the enhanced face-to-face interview that happens on a random half sample every two years. Half of the core sample.

Supplemental studies (off-year, ancillary)

- Studies on a range of topics that take place in the “off-year.” Linked to the core. Sample sizes around 3,000-7,000.

Linked data

- HRS core data are linked to various sources of administrative and contextual data.

Core content areas

Health

- Physical/psychological self-report, conditions, disabilities; biomarkers and genetics; cognitive testing; health behaviors (smoking, drinking, exercise)

Health Services

- Utilization, expenditure, insurance, out-of-pocket spending, linkage to Medicare claims data

Labor Force

- Employment status/history, retirement, earnings, disability, retirement, type of work

Economic Status

- Income by source, wealth by asset type, capital gains/debt, consumption; linkage to pensions, Social Security earnings/benefit histories

Family Structure

- Extended family, proximity, transfers to/from of money, time, housing

Expectations

- Decision making; subjective probabilities

Experimental Modules

- Wide range of topics

Enhanced face-to-face

- As part of the enhanced face-to-face, interviewers administer physical tests and obtain specimens:
 - Physical measures: grip strength, timed walk, lung function, balance, height and weight, waist circumference, and blood pressure (Section I)
 - Saliva sample for genetic information: in addition to GWAS, telomere length, candidate genes, polygenic risk scores, genetic clocks (see Genetic Data link on Data Products page)
 - Blood-based biomarkers: with venous blood now extensive list (VBS on Sensitive Data page, requires one extra form)
 - Psychosocial self-administered mail-back questionnaire (Section LB)

Supplemental studies that are public

Consumption and Activities Mails Survey (CAMS) Biennial Mail Survey (2001-2021)

Cross sectional Mail Surveys

- 2021 HRS Perspectives on the Pandemic (See Covid-19 dedicated page)
- 2015/2017/2019 Life History Mail Survey (LHMS) (See Life History dedicated page)
- 2013 Health Care and Nutrition Mail Survey (HCNS) (non-sensitive survey information)
- 2013 Veteran's Mail Survey
- 2011 Health Care Mail Survey (HCMS) (non-sensitive survey information)
- 2007 Disability Vignette Survey (DVS)
- 2001 Human Capital and Educational Expenses Survey (HUMS)
- 1999 HRS Mailout Survey Internet surveys conducted in 2003, 2006/2007, 2009, 2011, 2013

Supplemental studies that are sensitive data

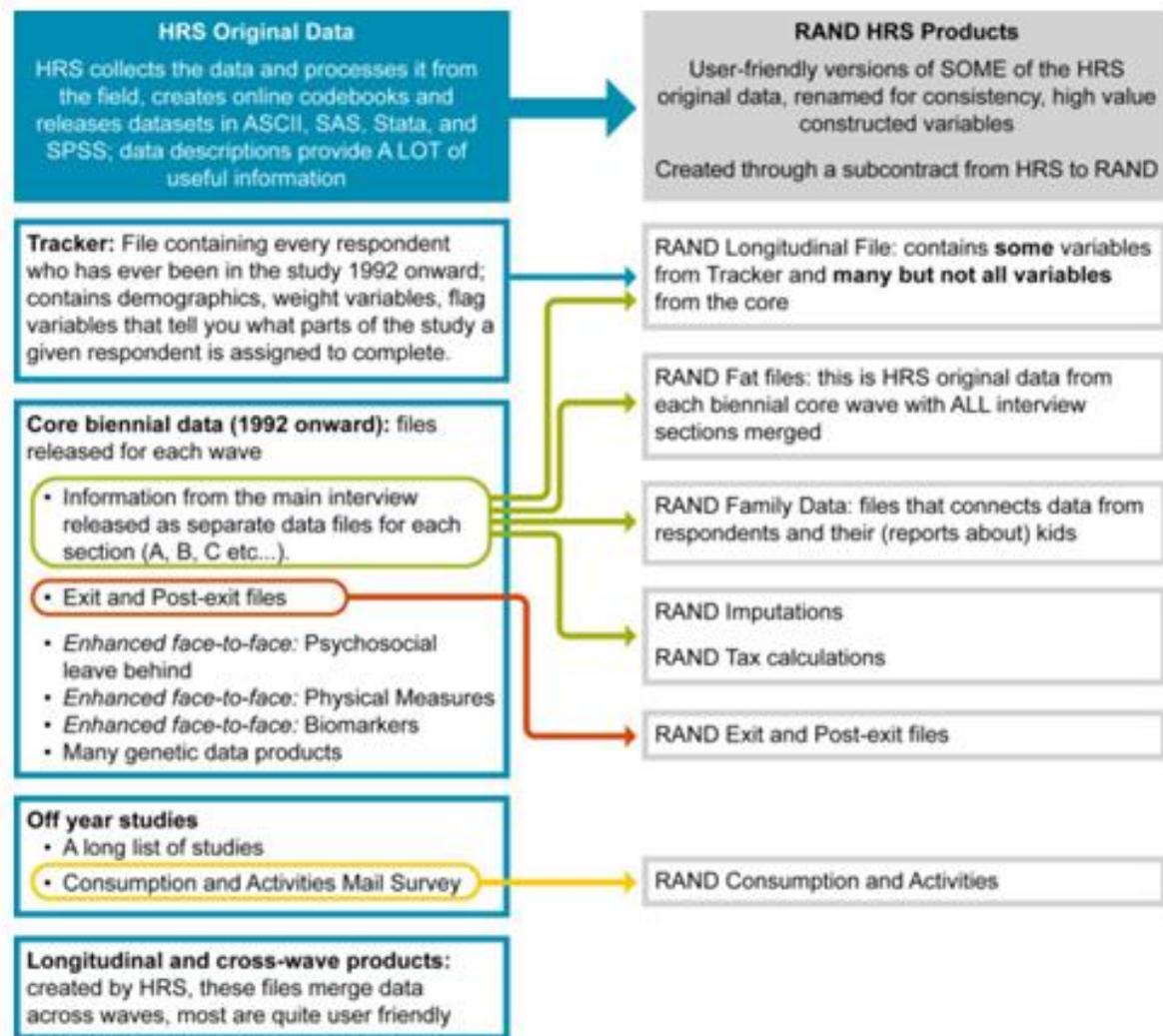
Aging Demographic and Memory Study (ADAMS) (2007, 2009, 2011)-in home clinical interview to diagnose dementia

Cross sectional Mail Surveys

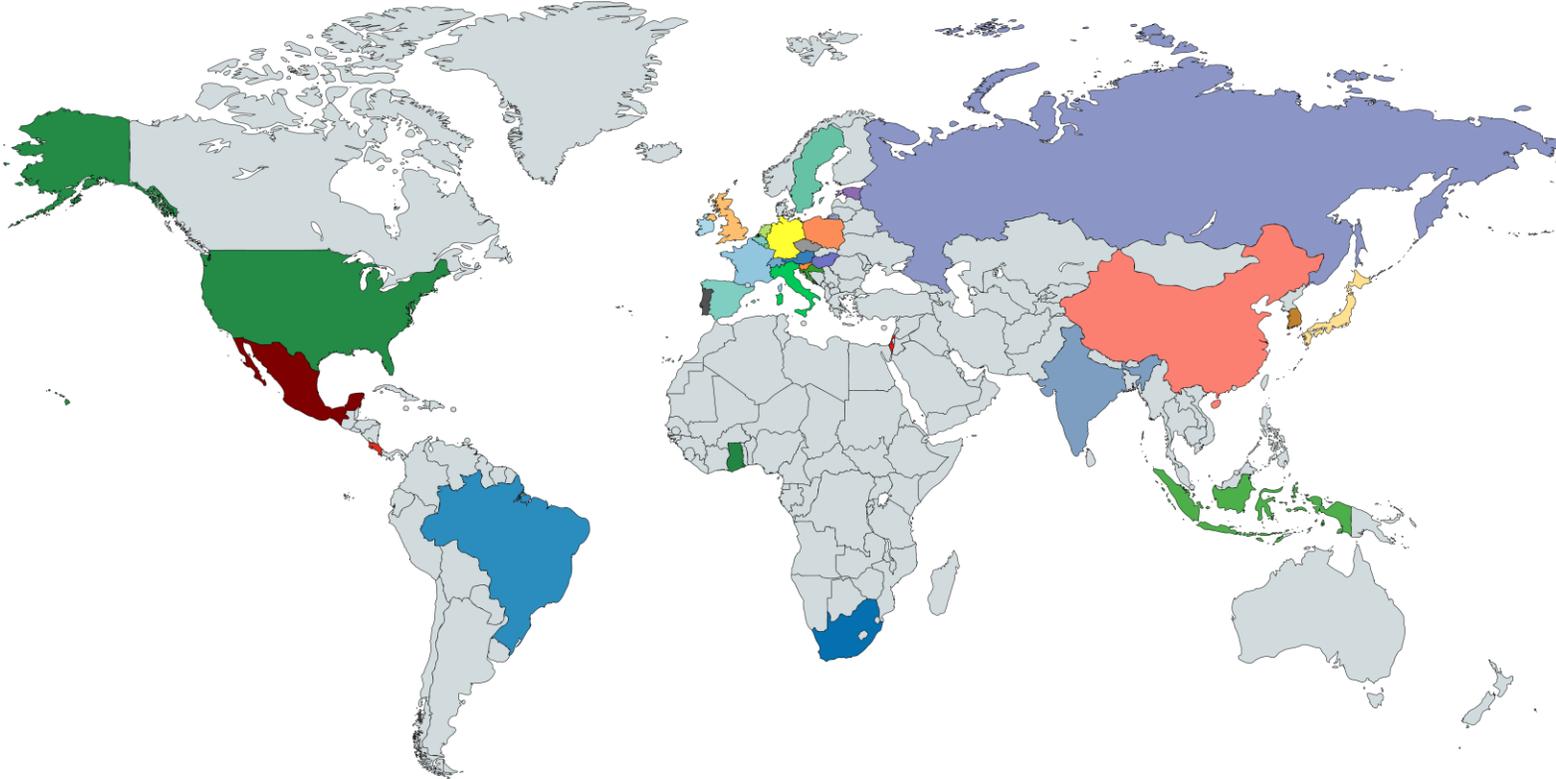
- 2019 Health Survey
- 2013 Health Care and Nutrition Mail Survey (HCNS) (portion of the survey with sensitive health data)
- 2011 Health Care Mail Survey (HCMS) (portion of the survey with sensitive health data)
- 2009 Health and Well-being Study (HWB)
- 2003 Diabetes Study

HRS Data are Complicated, RAND makes it easier

Figure 5. The relationship between HRS original data and RAND HRS data products



HRS International Family of Studies



Harmonization tool at USC Gateway to Global Aging
g2aging.org



Restricted Data

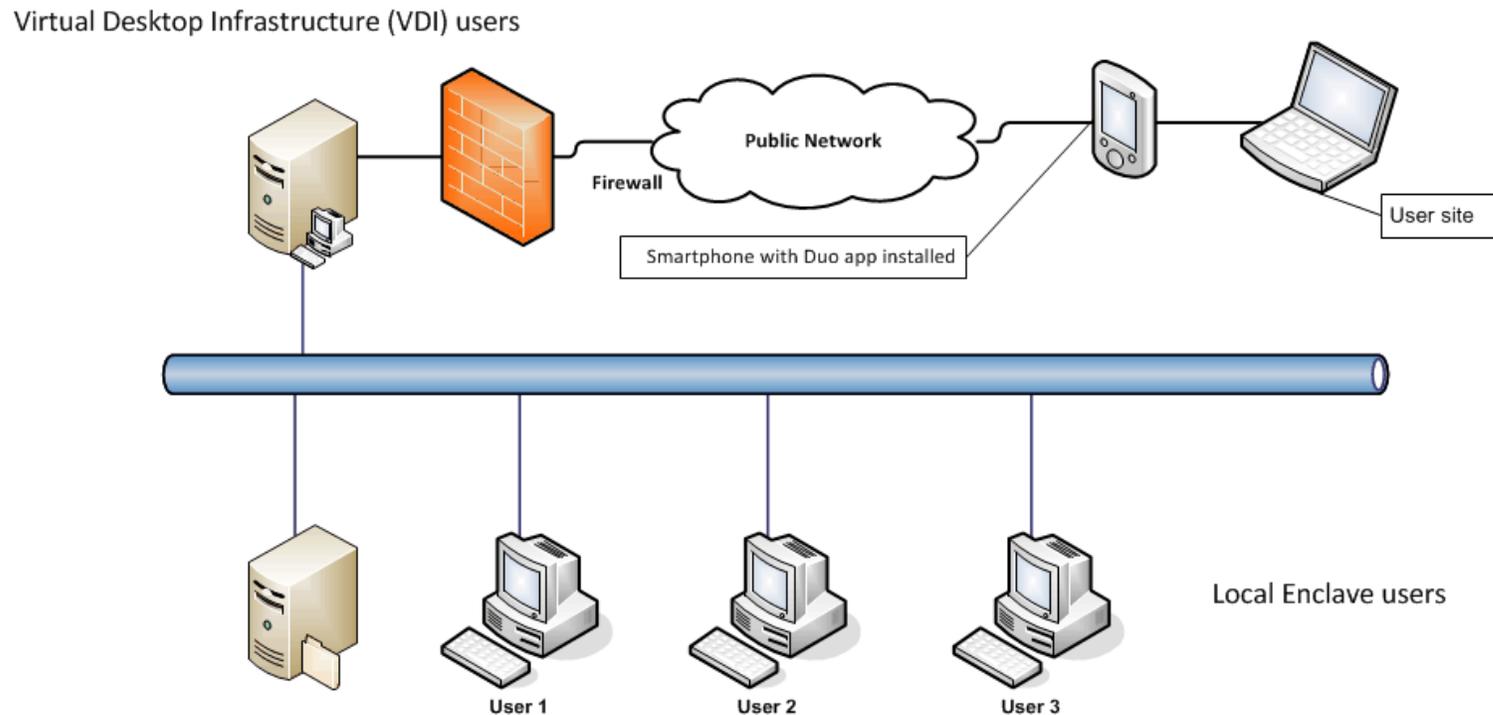
Restricted data

- National Death Index
- Social Security earnings and benefits
- Medicare and Medicaid claims data
- Veterans Administration
- Contextual Data Resource (HRS-CDR)
- Census Data
- Geographic Linkages Repository (GLR)
- Pension plans (Employer match)
- HRS-O*NET

Other restricted data: wide range of HRS survey data (geographic, demographic, health, occupation, schools and occupations from LHMS) as well as some user contributed linked datasets (Environmental Predictors of Cognitive Health)

Access to restricted data

Users remotely connect through the virtual desktop infrastructure (VDI) system with their own desktop to a secure data enclave maintained by the Michigan Center for the Demography of Aging (MiCDA) (Remote Desktop Protocol + 2-factor authentication)



Configuration for MiCDA Enclave Network

Preparing and submitting your application

- You will need an IRB approval letter from every institution represented on your application. Your IRB may tell you that you don't need one, but you do for our purposes.
- Exempt or non-regulated determination is fine.
- Create an account (register) if you haven't already
- Detailed application instructions at Data Products/HRS Restricted Data/Access with VDI
- Contact the helpdesk as you go (hrsrdapplication@umich.edu)

Preparing and submitting your application

- Project title and abstract
- Short descriptions of: planned data analysis, a list of the HRS restricted data products you are requesting, an explanation of how these products fit into your proposed research, explain why the unrestricted data are not adequate for your research purposes, how the results you plan to export or publish will comply with the requirements of disclosure limitation review, and any datasets you plan to import
- Study team information (name, role on project, business address, email, phone number)
- IRB letter (with all team members from your institution)
- MiCDA Access Agreement signed by each team member at your institution-electronic signatures okay, can use DocuSign-if there are team members from other institutions, they need a separate form.
- Your CV

Preparing and submitting your application

Each team member must create an account and submit:

- Data Security Plan (this is the only tricky part and there is now an example, but this is the form that trips people up most often-you need one form for each computer/location you may use, eg, PC at work and laptop at home)
- Their CV

Read these and check the box agreeing to:

- MiCDA Data Enclave Acceptable Use Policy Agreement
- ISR Pledge to Safeguard Respondent Privacy
- HRS Disclosure Limitation Review Policy Agreement form

Once the application is complete, it will be reviewed by the HRS team. Takes about 4-5 weeks. Each team member is contacted to set up 2-factor authentication and enclave login.

Working in the enclave

- All user accounts have Microsoft Suite, wide range of analysis software (if we don't have it, ask if we can get it), and all HRS public data including all RAND-HRS data products.
- ****All HRS data sets, RAND versions of data, and restricted data products can be merged for analyses, mostly just using HHID PN (household and person identifiers)****
- There's a firewall, so you can't cut and paste from the enclave to your desktop or access the internet from within the enclave.
- You are assigned a work area, If you have colleagues on the same project, you can have a shared work space with them as well.

Working in the enclave

- Very strict export rules that you should read carefully when you begin so you are not shocked when it's time to get your results out of the enclave! It takes some time to prepare your results for export, so be sure to build that into your timing.
- Importing code and other public datasets is allowed, but again, read first so you know what's involved.
- Data Products/HRS Restricted Data/Disclosure Limitation Review

Support and outreach

- HRS Help Desk: HRSquestions@umich.edu
- RAND files: RANDHRShelp@rand.org
- Sign up for our newsletters and announcements
- Online tutorials
- Documentation/Using HRS Data: A Guide for New Users



Quick Tour of the Website

Thank You!



Website: hrs.isr.umich.edu

Helpdesk: hrsquestions@umich.edu