Health and Retirement Study

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GeriPal.org
ePrognosis.org
SGIM Dataset Compendium

- Google “SGIM dataset compendium” – First hit

- Detailed descriptions of public datasets
  - Health Services Research
  - Clinical Epidemiology
  - *Expert Commentary: Strengths and Weaknesses*
<table>
<thead>
<tr>
<th>Study</th>
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Health and Retirement Study (HRS) & Asset and Health Dynamics among the Oldest Old (AHEAD)

- Key web links
- Dataset summary and expert comments
- Dataset details
  - Owner / manager
  - Study and sample characteristics
  - Major foci
  - Special supplements and resources
  - Links to other datasets
  - Papers published
  - Dataset accessibility and cost
  - Help desk

Key web links

Home page
http://hrsonline.isr.umich.edu/

Introduction and guide
http://hrsonline.isr.umich.edu/intro/index.html

Survey contents
Dataset Details

Dataset owner / manager

Sponsored by the National Institute on Aging, managed by the Institute for Social Research at the University of Michigan

Study and sample characteristics

Longitudinal panel survey of approximately 15,000 community-dwelling adults age 50 and older at survey initiation in 1992. The AHEAD study follows a similar structure with a focus on persons age 70 or older at study initiation. These studies oversample African-Americans, Hispanics, and Floridians. See http://hrsonline.isr.umich.edu/intro/sho_uinfo.php?hfyle=design&xtyp=2

Major foci

HRS and AHEAD include an extensive focus on financial and social status, both overall and related to health, but also include information on health status and health services utilization.

Key topic areas include:
• Health insurance and access
• Health care costs
• Social status
• Ambulatory care and health status
• Special populations and settings (elders)
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Sample and Characteristics

- University of Michigan: Institute Social Research
- NIA funded
- Started 1992
- Nationally representative: US adults age 50+
- ~20,000 participants
- Oversample: African Americans, Latinos, Residents FL
- Surveys every 2 years
- Most interviews: Phone
- Since 2006: Blood, Physical Performance, Psychosocial
- Exit interviews: next-of-kin after participant dies
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Major Foci

- Health and Wealth as People Age into Retirement
- Financial Factors: Economists
  - Health Insurance
  - Assets, Net Worth
  - Employment History
- Health
  - Health Services Utilization
  - Chronic Conditions
  - Cognitive and Physical Function
Links to other datasets

HRS / AHEAD provide links to data from:
- Centers for Medicare and Medicaid Services (CMS)
- National death index (NDI)
- Social Security Administration (SSA)


Papers published

HRS: Click here for a PubMed search for articles using this dataset.
AHEAD: Click here for a PubMed search for articles using this dataset.

Searchable bibliography: http://hrsonline.isr.umich.edu/biblio


Examples of papers published using HRS and AHEAD include:

Chronic conditions and mortality among the oldest old.
Lee SJ, Go AS, Lindquist K, Bertenthal D, Covinsky KE.

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Dataset Summary

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Expert comments

The Health and Retirement Study (HRS) is a unique nationally representative longitudinal survey. Designed to assess health status, employment decisions, and economic security during retirement, the study has followed a core cohort of adults born between 1931-1941 with biennial surveys since 1992. Very few surveys offer such rich detail on a broad set of variables for a longitudinal cohort over such a long period. For example, publicly available survey data are currently available for the core HRS cohort from 1992 to 2006. A group of older elderly adults (AHEAD cohort) has also been followed since 1993, and several younger cohorts have been added in subsequent years. The surveys have become increasingly sophisticated, and timely supplemental surveys provide additional detail on relevant issues, including cognition, diabetes care, and prescription drug coverage. Several clinical measures were recently added to the core survey in 2006 and include blood pressure measurements and blood cholesterol and hemoglobin A1c testing. There are several tools available to help researchers compile longitudinal datasets, including a tracker file, an online cross-reference tool to identify questionnaire concordance across survey waves after 1995, and a longitudinal dataset compiled by RAND researchers that includes many key variables.
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Expert Commentary: The Good

- 2+ decades: studies long follow up
- Large sample sizes: high impact publications
- Follows through death: mortality outcome
- Rich data on function (ADL, IADL, Falls): Geriatric Science, NIA
- ADAMS + Newer surveys: robust measures cognition
- Since ‘06: blood, physical performance measures
- Linkage to CMS: Health Services Use
- Linkage to Geographic Data: Regional Differences
Expert Commentary: Bad and Ugly

- HRS for beginners: cross sectional
- HRS for beginners + expert mentor: longitudinal
- HRS for beginners + expert mentor + $$$: CMS linkage
Links to other datasets

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Prognostic Awareness and Receipt of Cancer Screening Among Older Adults
A National Study

Nancy Schoenborn, MD

Prognosis and Cancer Screening

- Sample: HRS ages 65-85
- Measures
  - Predictor: self perceived likelihood of survival next 10-15 years
  - Outcome: self reported receipt of cancer screening (breast, CRC)
- Analysis
  - Longitudinal
  - Calculated prognosis Lee Index
Prognosis and Cancer Screening

- Findings:
  - Perceive prognosis long: more likely receive cancer screening, even if calculated prognosis was short
  - Perceived prognosis decreases over time, so does receipt of cancer screening

- Impact: primary care physicians engage older adults conversations about prognosis to make informed decisions continuing vs stopping cancer screening
Development and Validation of a Prognostic Model for Older Adults Admitted to Post Acute Care
A National Study

Robert Burke, MD
Prognostic Model Post Acute Care

- Sample: HRS ages 65+ Linked to Medicare Claims to identify 8,598 community dwelling participants admitted to post acute care (2000-2020)

- Measures
  - Predictors: sociodemographic, clinical, functional/cognitive factors, physical performance measures, serum markers, hospitalization measures (Medicare part A)
  - Outcomes: time to death, return to residence at home

- Analysis
  - Identify parsimonious set of predictors
  - Best subsets: most clinically useful
Prognosis and Cancer Screening

Findings:

- Identified set of 6 factors accurately predict outcomes: age, gender, #ADL disabilities, inability to name president, Cystatin C, and hospital discharge diagnosis

- Validated internally and externally (ELSA)

Impact: Added to ePrognosis; routinely used by clinicians to estimate prognosis for hospitalized older adults considering post acute care
WHAT WOULD YOU LIKE TO DO?

- Calculators
- Cancer Screening
- Communicating Prognosis
Dialysis vs. Conservative Management Among the Elderly with Chronic Kidney Disease: Quality of Life, Use of Health Services, Mortality

Rasheeda Hall, MD

Prognostic Model Post Acute Care

- Sample: HRS ages 80+ Linked to Medicare Claims to identify participants with chronic kidney disease (Cystatin C) who initiated dialysis (n=1,231) and who did not (n=192)

- Measures
  - Predictors: Initiation of dialysis vs no initiation
  - Outcomes: Life satisfaction, physical function (mobility, ADL, IADL), cognition (dementia probability), use of health services (hospitalizations, days in contact with health care system), mortality

- Analysis
  - Propensity score matching
  - Longitudinal analysis
Prognosis and Cancer Screening

Findings:

- Quality of life, physical/cognitive function and mobility all decreased more rapidly after initiation of dialysis compared to conservative management without dialysis.
- Dialysis initiation associated with 2 more hospitalizations per year; 47 more days/year of contact with health care system.
- Dialysis lived one month longer than no dialysis.

Impact: Used to guide about Tradeoffs between quality of life and mortality in decision making for very elderly with chronic kidney disease.