# Incorporating Health Insurance into a Consumption Measure

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Comprehensive Income Dataset Project

### Health insurance can't be ignored

- \$3.8 trillion in health expenditures in U.S. in 2019
  - 18% of GDP
- Health insurance coverage among non-elderly increased by 5 percentage points from 2007 to 2019
- Research has shown that health insurance has important effects
  - Health
  - Mortality
  - Reduced financial stress



# Health insurance matters for trends in income inequality

U.S. relative poverty rate with and without the market value of health insurance, 1963-2019

 Excluding Health Insurance
 21.7

 20
 Excluding Health Insurance
 21.7

 15
 Including Health Insurance
 16.0

 10
 Including Health Insurance
 16.0

 11
 11
 21
 31
 41
 51
 61

Note: Both poverty measures anchored to 19.5% official poverty rate in 1963. Poverty threshold increases at same rate as median income each year. Full-income poverty measure based on household equivalized post-tax, post-transfer income including in-kind transfers (with and without health insurance). Source: Burkhauser, Richard V., Kevin Corinth, James Elwell and Jeff Larrimore. 2021. "Evaluating the success of President Johnson's war on poverty: Revisiting the historical record using an absolute full income poverty measure." NBER working paper.



### Outline

- Conceptual issues
- Data sources
- Special considerations



#### **Conceptual Issues**



### Health expenditures vs. health insurance

#### • Health expenditures

- Conditional on getting sick, health expenditures improve well-being
- But person who get sicks and incurs health expenditures is NOT better off than healthy person with same level of non-health expenditures
- Health insurance
  - Ex ante, person with health insurance is better off than person without health insurance



#### How to value health insurance

#### • Employer sponsored coverage

- Sum of employee and employer paid premium
- Employees on average should value employer sponsored coverage at least at cost
  - Caveat: tax advantages of health insurance
- Government health insurance two options:
  - Risk-adjusted cost (mean cost for given risk class)
    - Risk class based on state, age and (possibly) disability status
  - Cost of comparable plan in market
    - Requires existence of comparable plan in market



## Medical out of pocket expenditures

- Include as consumption discretionary out-of-pocket expenditures not required to return to baseline health in event of sickness
  - E.g., cosmetic plastic surgery
- Exclude as consumption less discretionary expenditures
  - E.g., co-pays on heart surgery and insulin
- How to decide
  - Income elasticity of demand for expenditure type
  - Change in strength of association between income and consumption after including/excluding expenditure type
  - Judgement



#### **Data Sources**



## Data Source #1: Consumer Expenditure Survey

- Health insurance coverage/plan
- Medical out of pocket expenditures



### Data Source #2: Other surveys

- Cost of private health insurance
  - Obtain from other surveys (e.g., National Medical Care Expenditure Survey, Mercer/Foster Higgins National Survey of Employer Sponsored Health Plans)
  - Impute costs to CE respondents



## Data Source #3: Administrative aggregates

- Calculate risk-adjusted cost of public health insurance using administrative aggregates
- Medicaid: Average cost per recipient in a given year and state, by:
  - Children
  - Non-elderly adults
  - Elderly
  - Disabled
- Medicare: Average cost per recipient in a given year and state, by:
  - Elderly
  - Non-elderly



## Data Source #4: Individual-level administrative data

• Public health insurance recipients



#### **Special Considerations**



# Should health insurance value depend on health/disability status?

- People with worse initial health or disabilities have higher health insurance costs
- Adjusting health insurance value causes long-term sick/disabled to look better off
- Community rating under Affordable Care Act means that marketbased alternatives to public health insurance do not depend on health/disability status



# Should health insurance value be adjusted downward?

- Lower income people may have lower willingness to pay for health insurance
- Public health insurance recipients may value health insurance at below cost
  - E.g., Smeeding (1982); Gallen (2015); Finkelstein et al. (2019)
- Options
  - No downward adjustment
  - Provide two consumption measures
    - Measure #1: Zero value of health insurance
    - Measure #2: Full value of health insurance
  - Cap total value of health insurance at a share of total consumption
    - Meyer and Sullivan (2012)
    - Recommended by Interagency Technical Working Group on Evaluating Alternative Measures of Poverty



# Should a different equivalence scale be applied to health insurance?

- Question posed by ITWG on Evaluating Alternative Measures of Poverty
  - *"For a consumption resource measure that accounts for health insurance, would one account for economies of scale in purchasing a family plan or for per capita consumption of health insurance?"*
- Can't share across consumer unit members the value of health insurance in improving one's health

