

CBO's Modeling of Proposals to Expand Health Insurance Coverage

February 2009



Health Insurance Simulation Model (HISim)

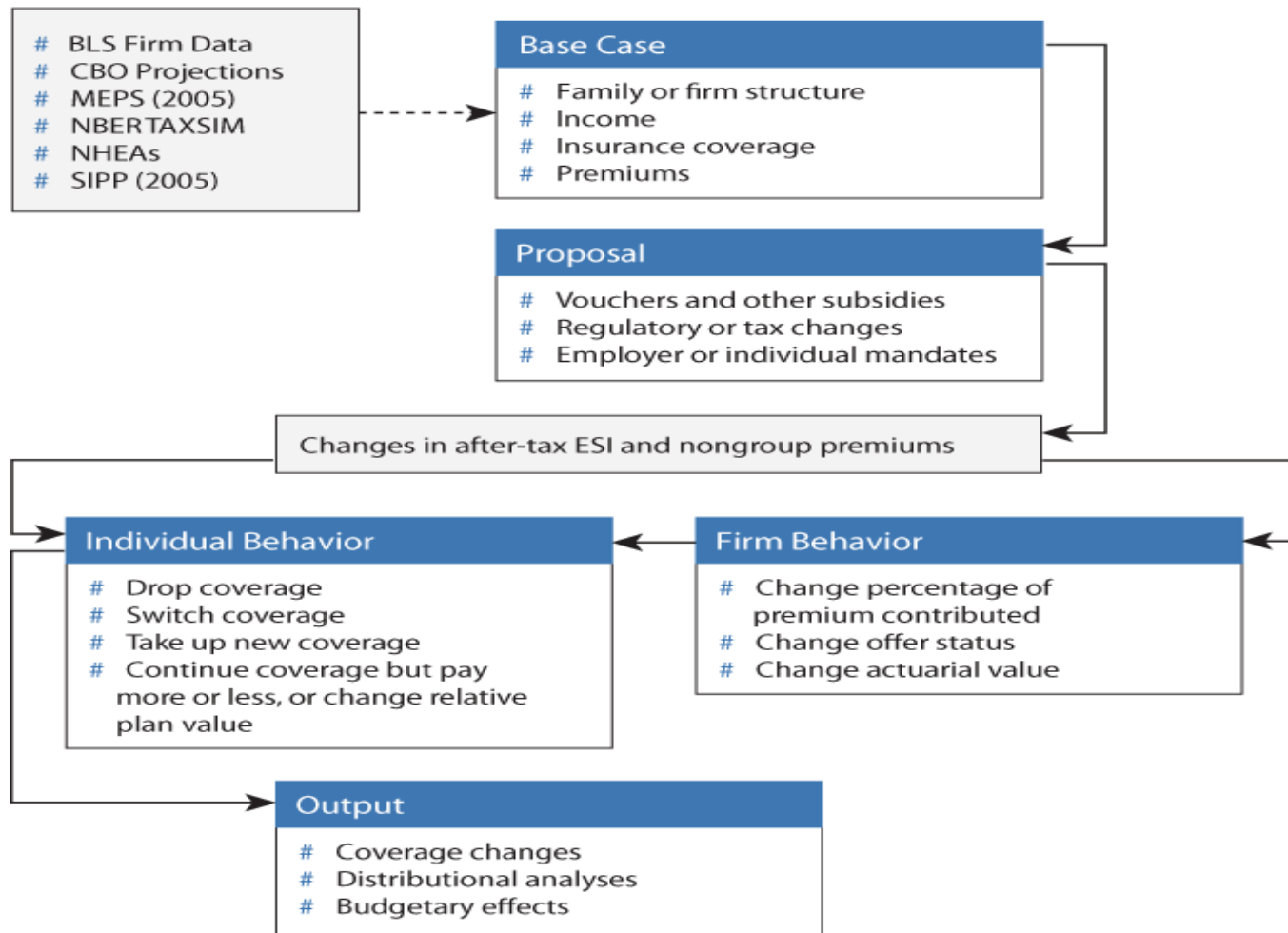
- In use since ~2004
- Used in proposals affecting health insurance coverage and the federal budget
- Used in 10-15 (of 115) of the recently released, *Budget Options: Volume I: Health*, Dec, 2008
- Detailed description in *CBO's Health Insurance Simulation Model: A Technical Description*, December, 2007



Model structure

- Microsimulation model
- Exogenous baseline
 - Very rich: multiple, mixed coverage within families retained
- Elasticity-based model
 - $\text{Coverage}_{t+1} = f(\text{Coverage}_t, \% \Delta \text{Price} * \text{Elasticity}, X)$
 - X = health status, income, family status, etc.
 - Equations for each possible status change, including addition or subtraction of new options
 - Firm and individual-level equations

CBO's Health Insurance Simulation Model



Source: Congressional Budget Office.

Notes: This diagram represents the basic flow and key components of the model. Although some elements or pathways are shown for illustration, the diagram is not meant to present every interaction or behavioral response in the model.

BLS = Bureau of Labor Statistics; MEPS = Medical Expenditure Panel Survey; NBER TAXSIM = National Bureau of Economic Research Tax Simulator; NHEAs = national health expenditure accounts; SIPP = Survey of Income and Program Participation; ESI = employer-sponsored insurance.



Selected estimates from *Health Options*

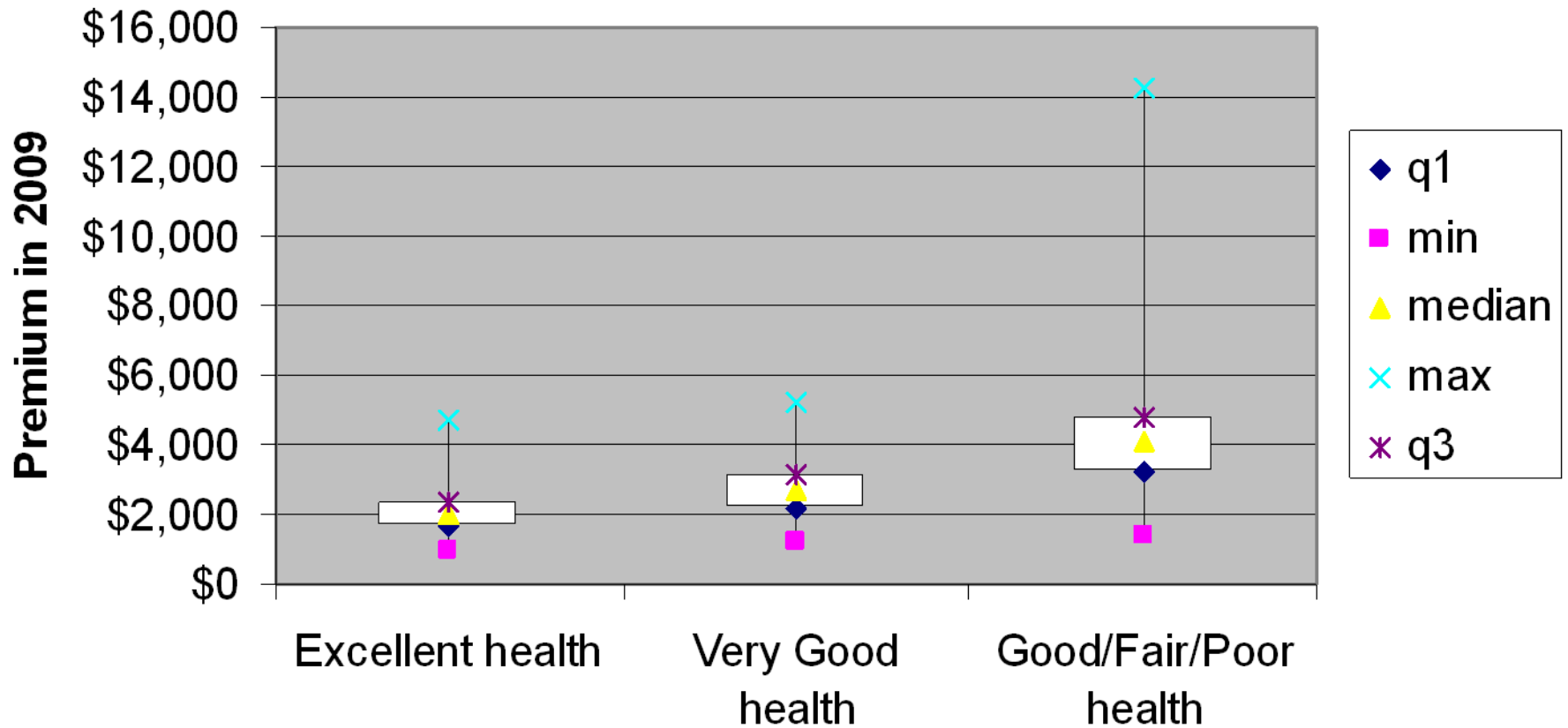
- Regulatory change (purchase nongroup in any state)
- Subsidies for nongroup coverage
 - Fixed-dollar voucher
 - Extension of income tax deductibility
- Subsidy for small-group ESI and nongroup via subsidized reinsurance
- Employer mandate (pay or play)

Buy nongroup in any state

- Allow purchase under any state's regulatory environment
 - Essentially undoes community rating
 - Moderate premium reduction to many low-risk in tightly regulated states
 - Larger premium increase to some high-risk in tightly regulated states
 - Net premium reduction from fewer covered mandates
 - Net uninsured reduction (~400,000), differential by health risk, offset by some firm dropping*

*Anthony T. LoSasso and Ithai Lurie, "Community Rating and the market for private non-group health insurance, *Journal of Public Economics* (in press), 2009.

Nongroup premiums for adults aged 25-44 (for a standardized package)



*Single premiums, typical deductible, copayments, etc

Voucher for nongroup coverage

- \$1,500 single, \$3,000 family
 - (~40-50% subsidy for average uninsured)
- For low-income households only
 - Phases out from 200-250% FPL
- Net takeup estimated as 2.2m of 29m fully eligible uninsured (~8%) in 2014; \$8.6B budget cost
 - Varies by premium, state, ESI offer, Medicaid eligibility, etc.
 - Reduced overall for implementation considerations
- Starting point is literature suggesting takeup elasticity (*% of uninsured who take up / % subsidy*) of ~.2 to .3*

*M. Susan Marquis and others, "Subsidies and the Demand for Individual Health Insurance in California," *Health Services Research*, vol. 39, no. 5 (2004), pp. 1547–1570.; M. Susan Marquis and Stephen H. Long, "Worker Demand for Health Insurance in the Non-Group Market," *Journal of Health Economics*, vol. 14, no. 1 (1995), pp. 47–63.; David Auerbach and Sabina Ohri, "Price and the demand for nongroup health insurance," *Inquiry: Vol. 43, No. 2* (2006), pp. 122–134.



Deduction for nongroup coverage

- Extend income tax deduction for nongroup premiums to all
- Estimated net takeup (including newly uninsured) of ~700,000 in 2014; \$6.3B budget cost
- Reduction in uninsured per budget dollar is less
 - Subsidy is more spread out
 - Nonlinear takeup elasticity
 - Subsidy rises with income
 - much more firm dropping of ESI

Reinsurance for high-cost claims

- Modeled 75% subsidy for claims over \$50,000 per individual
 - Available for firms <100 employees, nongroup
- Estimated as ~14% subsidy, higher for higher-cost firms, individuals (help from MEPS)
- Estimated 10% increase in offer rate among small firms (currently ~60% employees offered)*
- Estimated 2.1m reduction in uninsured; \$32B budget cost (larger 'base' to buy out)
 - Covers higher-cost uninsured relative to previous option

*See, for example, Jonathan Gruber and Michael Lettau, "How Elastic Is the Firm's Demand for Health Insurance?" *Journal of Public Economics*, vol. 88, nos. 7–8 (2004),

Employer pay or play

- \$500 fine for employers with >50 employees who do not: offer coverage AND contribute >50% of premium
 - ~10m uninsured (incl. dependents) in firms affected by mandate*
- Mandate increases offers and employer premium contributions, but elasticity is low
 - Reduction among affected uninsured of about 3-4%
- Q: Effect of mandate vs subsidy of same amount?
- Q: Takeup given induced offer? (Takeup and offer are endogenous)