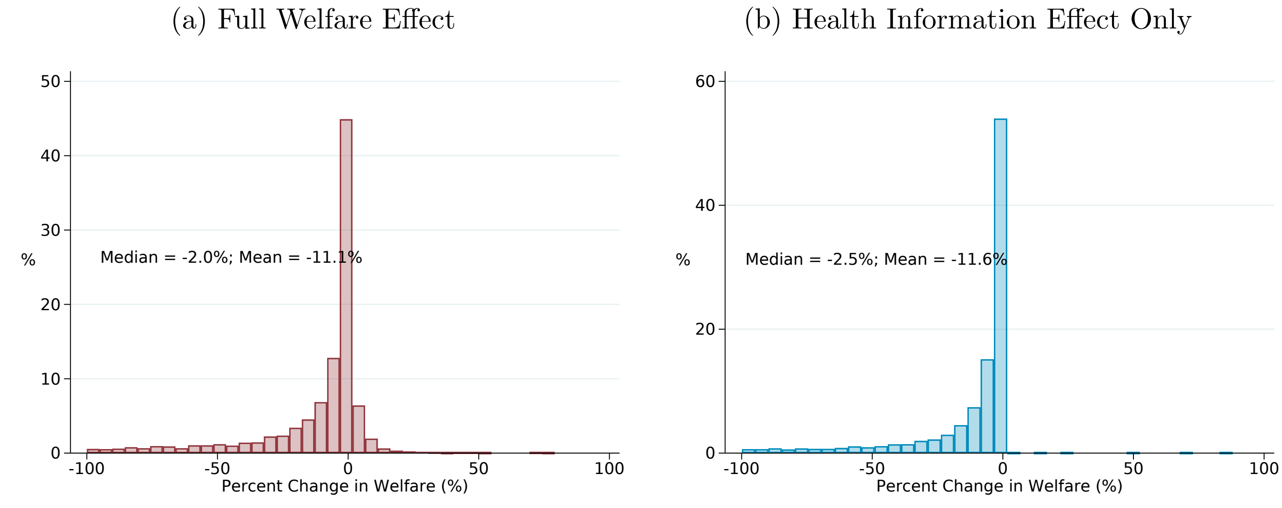
D Additional Structural Results

Figure D.1. Percentage Changes in Household Welfare Following Health Information



Notes: Figures show estimated percentage changes in household willingness to pay associated with major health events. The panel on the left shows differences in the case of a full response to a new diagnosis, including adjustments to risk aversion and moral hazard effects; the panel on the right shows only differences arising from adjustments to household risk assessments. Welfare effects are calculated in the year of the diagnosis relative to a benchmark in which no information is transmitted.

Figure D.1 illustrates the estimated percentage changes in welfare from new health information across the full sample, using the welfare criterion discussed in Section 6.1 of the main text. , the corresponding result to Figure 8 in the text.

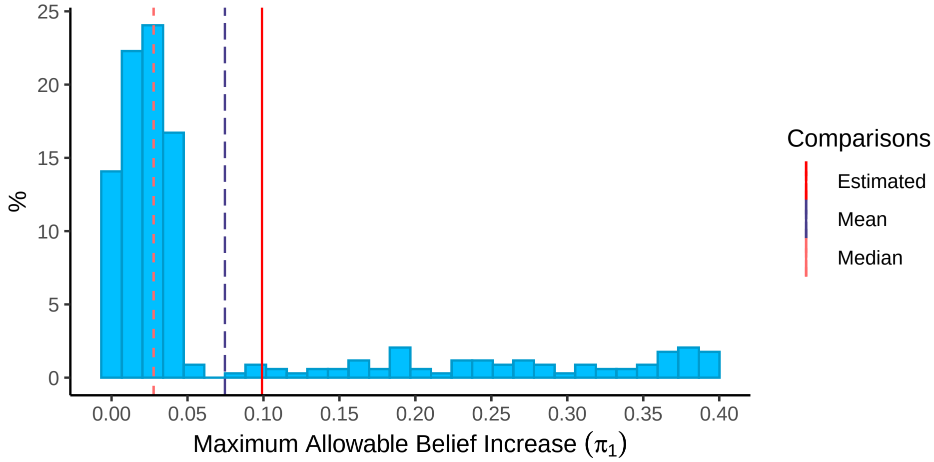


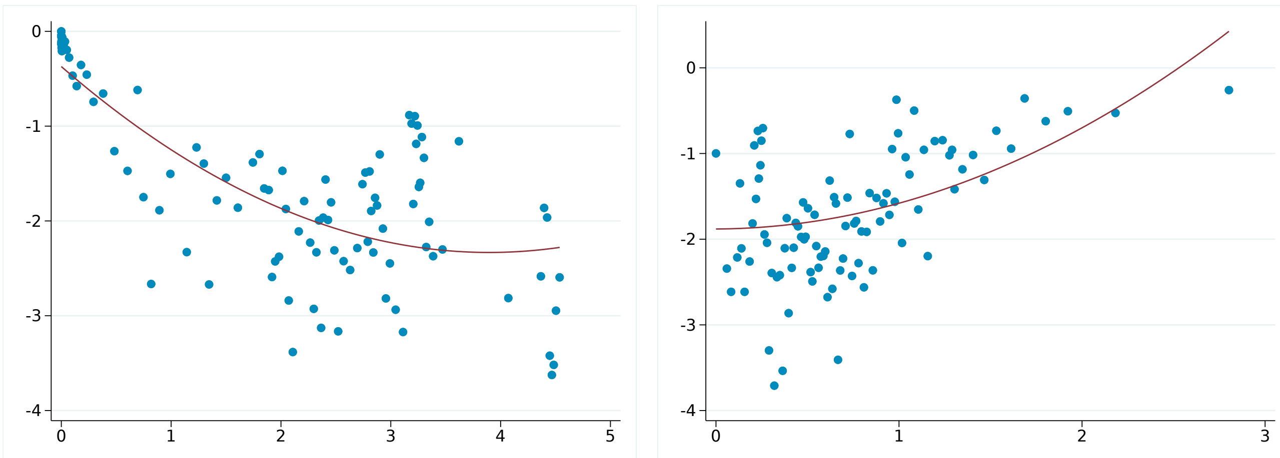
Figure D.2. Maximum Allowable Shifts in p_{it}, Conditional on Non-Decreasing Welfare

Figure D.2 shows the distribution of the largest allowable shift in beliefs (π_1) following a chronic diagnosis which is welfare non-decreasing for each individual affected by a new diagnosis in the sample. The figure plots the estimated value of π_1 for comparison against the mean and median maximal increase.

Figure D.3 illustrates heterogeneity in household characteristics and the value of new health information.

Figure D.3. Heterogeneity in Household Characteristics and WTP for Health Information

(a) Household Risk Aversion, $\overline{\psi}$ (b) Household Risk Scores

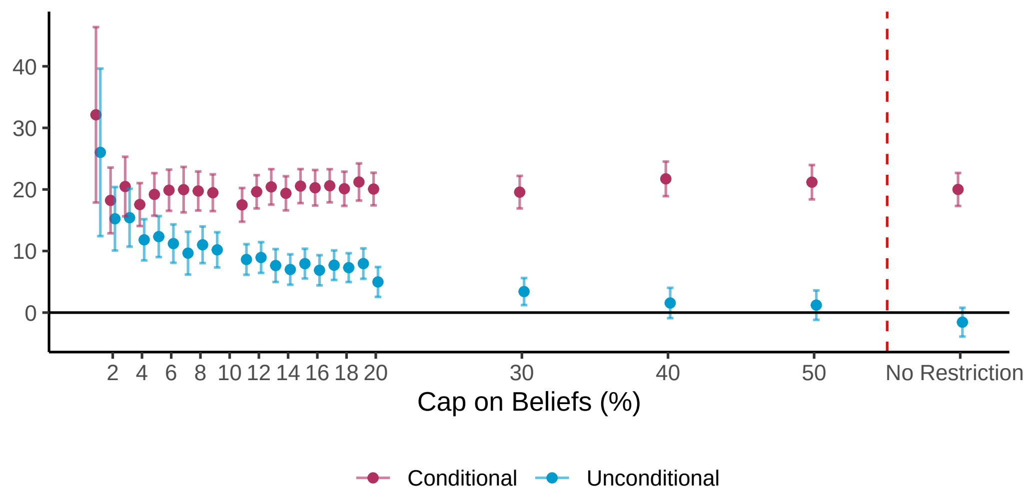


Notes: Figures show binscatters depicting the association between pre-diagnosis household health characteristics on the x-axis and the estimated welfare effects of receiving health risk information on the y-axis. Household characteristics include (a) average household risk aversion and (b) average household risk scores (calculated using the Johns Hopkins ACG System). Welfare effects are calculated in the year of the diagnosis relative to a benchmark in which no information is transmitted; see Figure 8 in the text for details. Binscatters are constructed using 100 bins and a quadratic fit line.

Figure D.4 highlights the relative magnitude of utility gains from imposing restrictions on belief updating (Section 6.2 in the text). Unconditional utility gains, shown in blue, increase with restrictiveness, in line with the results of the first panel. As in the first panel, gains are maximized at belief caps of 3% or fewer, providing a roughly 15% increase in expected utility on average. I find little evidence of heterogeneity in the value of risk information across those who benefit from it—the conditional gains in utility (shown in maroon) are constant at roughly a 20% gain across individuals.[1] This implies that the extent of updating—rather than other dimensions of health information—are driving welfare gains.

Figure D.4. Changes in Individual Utility from Bounding Responsiveness to New Diagnoses

(a) Average Percentage Change in Utility



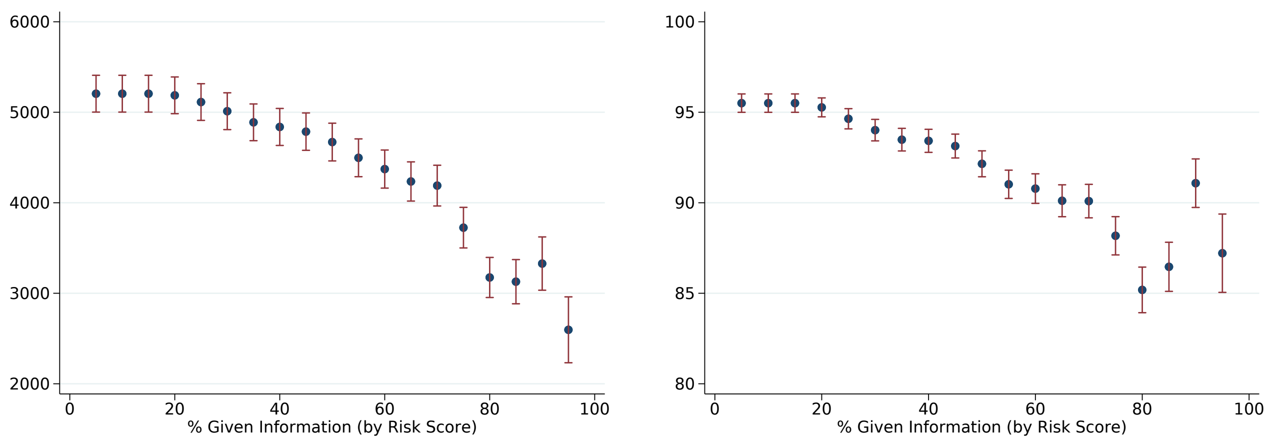
Notes: Figure shows results of counterfactual simulations estimating the expected utility gains from new health risk information communicated through household diagnoses. Each point presents estimates from separate simulations, which compare expected utility across states where (i) individuals update risk beliefs according to new information, albeit with some cap $\overline{p}$, and (ii) individuals do not learn from household diagnoses. The value of $\overline{p}$ is shown on the x-axis, with the far right simulation showing the difference between equilibrium responses and no responsiveness. Outcome variables include the unconditional (blue) and conditional (maroon) average percent changes in utility. Utility differences are measured according in 2020 USD and calculated at the year of diagnosis. Error bars represent 95% confidence intervals.

[1] Note that the welfare gains from extremely restrictive caps on beliefs (at 1% or fewer) are estimated to be much more imprecise, presumably because such a restrictive cap induces many of an individual's drawn beliefs to be either zero or extremely small.

Figure D.5 highlights the relative value of revealing health risk information conditional on *ex-ante* individual risk scores. Individuals with lower risk scores prior to the diagnosis stand to gain more from the revelation of health information, potentially because the large swings in belief updating, π_1, are counter-acted by already existing gaps between true and perceived risk.

Figure D.5. Changes in Welfare Gains From Targeted Revelation of Information

(a) Average Welfare Gains (WTP, \$)   (b) Households with Welfare Gains (%)



Notes: Figures show estimated welfare gains from revelation of health information. Individuals are organized by their average risk scores, from highest to lowest. Each point in both panels represents a different counterfactual scenario, where individuals with risk scores in the top x% of the sample are given information about their predicted health risks, $\hat{p}$, as described in the text. Returns to health information are presented as (a) average expected welfare changes, measured as willingness to pay in 2020 USD, and (b) the percentage of households with non-negative welfare gains.