Copayments and the Value of Health Insurance: Experimental Evidence from Uganda*

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May 2026

Abstract

How do copayments affect the benefits and costs of health insurance in low-income settings? We study this question in a field experiment in rural Uganda that varies copayments for hospital-based outpatient insurance. Insurance substantially increases the use of high-quality hospital care, improves health, and reduces reliance on costly coping strategies. Lower copayments generate larger increases in utilization, yet health and financial-protection gains are similar across copayment levels. Net benefits derived from treatment effects on health outcomes and insurer costs favor higher copayments. At the same time, households place substantially higher value on low-copayment insurance, underlining that optimal copayment design depends on jointly understanding treatment effects, insurer costs, and household demand.

*We thank the Swiss Re Foundation and the Weiss Fund for financial support. We are grateful to Streamline Uganda for their partnership. We thank seminar participants at Columbia University, EIEF, Imperial College, Norwegian School of Economics and European Development Research Network Conference, the University of Delaware, the University of Groningen, the University of Padova, University of Zurich, the VDEV-CEPR-BREAD series, the workshop on finance and developmentt at the graduate instiute of international and development studies Geneva, and the World Bank. We thank Lenny Ngichia and Martin Atyera for their excellent work in managing the field activities. We are grateful to Fauzi Estiko, Sevda Karakas, and especially Joaquin Rodriguez for excellent research assistance. This project received IRB Approval from Columbia University and Mildmay Uganda Research and Ethics Committee (MUREC). The experiment was registered at the AEA RCT registry (registration number AEARCTR-0012956). All errors are our own.

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1 Introduction

High-quality healthcare remains difficult to access for much of the population in low- and middle-income countries. Although public provision is often officially free or heavily subsidized, limited staffing, absenteeism, drug stock-outs, and long waiting times frequently constrain the effectiveness of public facilities around the world (Das and Hammer, 2014; Kruk et al., 2018). Alongside the public system, a subset of the private healthcare facilities provides substantially higher-quality care. While the sector is highly heterogeneous (Daniels et al., 2024), these facilities often employ better-trained staff, have more reliable drug supply, and broader diagnostic capacity, but charge higher prices.

An increasingly common policy response is, therefore, to subsidize access to these higher quality private providers through health insurance schemes that lower the cost of care at the point of use (Das and Do, 2023). This approach reflects the recognition that many households already rely on private providers because of low quality in the public sector, but do so at high financial risk. Publicly financed insurance allows governments to harness existing private capacity while reducing out-of-pocket spending and exposure to catastrophic health shocks. It has become a central pillar of health-system reform in many low- and middle-income countries, including Ghana's National Health Insurance Scheme, India's PM-JAY, and Indonesia's JKN (Dupas and Jain, forthcoming).

A central design challenge for such insurance programs is determining the appropriate level of copayment. Copayments can mitigate overuse, lower insurer expenditures, and reduce fiscal pressure on governments (Newhouse, 1993). At the same time, copayments may deter households from seeking care when they are sick, because they require cash precisely when households are most constrained, and in turn discourage health insurance take-up and potentially worsen health outcomes (Chandra et al., 2024). Policymakers thus face a fundamental trade-off between financial sustainability and access to effective care and household welfare. Yet there is limited causal evidence on how copayments shape not only healthcare utilization, but also financial and health outcomes in low-income settings.

In this paper, we study the consequences of copayment design in health insurance using a randomized controlled trial in rural Uganda. We partner with three high-quality private not-for-profit hospitals and a healthcare technology provider to offer hospital-based health insurance to households. We randomly vary copayment regimes for outpatient care, which has an average uninsured cost of approximately USD 10 per visit. Eligible households are randomly assigned to receive insurance with different copayments (USD 0, 1.25, 2.50) or to a cash-transfer control group. Leveraging rich household survey data and detailed administrative records, we first estimate the effects of insurance on healthcare seeking, financial outcomes, and health outcomes. We then combine these experimental estimates with insurer costs to examine net benefits from health insurance, both under full household coverage, as well as under selection, which we study using incentivized measures of households' insurance valuation.

We begin by documenting the effects of insurance and copayments on healthcare seeking. Access to insurance substantially increases utilization of high-quality hospital care and leads households to substitute away from lower-quality facilities. These shifts are large and economically meaningful: zero-copayment insurance almost triples visits to insured hospitals per person in the experimental year relative to the control group (from 0.05 to 0.14), with progressively smaller increases at higher copayment levels. At the same time, the number of total facility visits is slightly lower for insured individuals (-0.03 from a 0.51 control mean), suggesting that a single hospital visit substitutes for multiple lower-quality encounters. In turn, health insurance significantly reduces out-of-pocket health expenditures (-24%) and reliance on costly coping strategies such as asset sales and borrowing (-0.15σ in a risk-coping index).

Health insurance also leads to substantial health benefits relative to the control group, including significant reductions in sick days (-1.19 from a control mean of 9.12, 13% reduction), missed work days (-15%), and missed and school days (-24%), and an increase in self-reported status ($+0.08\sigma$). We furthermore document within-household spillovers: while insurance does not measurably change healthcare utilization among uninsured household members, their health improves, consistent with reduced disease transmission or other household-level channels.

However, improvements in risk-coping and health outcomes do not differ meaningfully between low-, medium-, and high-copayment plans, despite large differential responses in healthcare utilization. In other words, while lower copayments induce substantially more healthcare utilization, they do not generate proportionally larger improvements in measured health or financial protection. A possible explanation for this finding is that lower copayments draw individuals with relatively better baseline status into care. As a result, the marginal patients induced to seek hospital care at low copayments may have lower expected health gains from treatment, which could help explain why large increases in utilization do not translate into commensurate improvements in average health outcomes. We also explore whether copayment levels change the types of conditions treated, but do not find evidence consistent with this hypothesis.

Our experimental design allows us to go beyond estimating treatment effects of copayments — the target of previous experimental and quasi-experimental work on copayments (see, e.g., Chandra et al., 2024; Brot-Goldberg et al., 2017; Buitrago et al., 2023) — in two important ways. First, we leverage detailed hospital administrative data to quantify benefits net of insurer costs and identify the most effective copayment level under universal coverage (i.e., when all the study subjects receive health insurance). Randomly assigned lower copayments increase average insurer expenditures through higher utilization and a larger share of costs covered per visit. We then construct a measure of net benefits under alternative copayment levels, which combines monetary benefits from reductions in health costs and improvements in health outcomes with insurer costs. Since lower copayments induce

higher insurer costs but not differential health benefits or household expenditure reductions, net benefits are maximized under the highest copay level (USD 2.50).

Second, by eliciting incentive-compatible measures of insurance valuation, we disentangle selection and behavioral responses, and further study the net benefits of insurance accounting for these factors. For this purpose, at baseline, we elicit incentive-compatible households' valuation of insurance for each copayment level, relative to cash. These data allow us to measure how much cash households are willing to forego to receive insurance with different copayments — the cash transfer equivalent, especially relevant for a government comparing social protection policies.

We find no evidence of adverse selection: individuals who generate higher costs under a given copayment do not have systematically higher valuations for a given product or higher valuations for low-copay insurance than for high-copay contracts. A possible explanation is that health realizations during the experimental year are only mildly correlated with baseline health outcomes, which, on the other hand, predict insurance valuation. These insights contribute to the literature on selection into health insurance, which to date has focused primarily on premiums rather than on copayments (see, e.g. Malani et al., 2024; Banerjee et al., 2014; Fischer et al., 2023; Banerjee et al., 2021; Asuming et al., 2024).

The elicited valuation further allows us to simulate counterfactual policy environments in which households choose between insurance contracts with different copayments and alternative cash transfers.[1] This approach makes it possible to trace out how both the composition of insured individuals and total insurer costs vary across copayment levels, while holding fixed the experimentally estimated treatment effects. These simulations indicate that higher copayments deliver higher net benefits, even when allowing for endogenous selection, thus reinforcing the findings of the analysis under the universal-coverage scenario.

At the same time, the valuation data reveal a stark pattern: households place substantially higher value on low-copayment insurance, with willingness to accept declining sharply as copayments increase. This pattern is consistent with existing evidence on the demand for insurance against small risks (Sydnor, 2010). High insurance valuation at baseline, particularly for low copayments, may be explained by imperfect expectations about future health and limited familiarity with the product. However, valuation elicited at endline remains high, and it is larger for households that experienced the low copay product in the first year. An alternative explanation is that household insurance valuation captures dimensions of insurance that are hard to account for when computing a monetary-equivalent value of benefits, such as peace of mind or protection against rare but severe shocks.

The paper delivers three important policy lessons. First, our findings indicate that insurance

[1] As in the classic study by Karlan and Zinman (2009), we wish to "observe unobservables", however, while in their study there is one dimension of interest — the interest rate of the loan, which affects selection and behavioral responses — in ours there are two: the cash-transfer alternative, which affects selection, and the copayment, which affects both margins.

for high-quality care delivers sizable health and financial-protection benefits, in contrast to much of the existing experimental literature in low-income settings, which often finds limited or no health gains from health insurance (see, e.g., Dupas and Jain, forthcoming; Malani et al., 2024; Haushofer et al., 2020; Thornton et al., 2010). One possible explanation for why our estimated health impacts are larger than in much of the prior literature is that, unlike many public insurance programs that primarily subsidize low-quality and congested care, our intervention connects households to a small set of high-quality hospitals through a tightly implemented insurance system.

Second, insurance net benefits are maximized at positive values of copayments. This result holds both under universal coverage and under selection, as households can choose between insurance and cash transfer. This result arises primarily because zero copayments induce additional health seeking and insurer costs, but do not differentially improve health outcomes. While net benefits are maximized in the experimental group with the highest copay, it is important to note that this level is still much lower than the average uninsured visit cost (USD 2.50 vs. USD 10).

Third, our analysis also illustrates the value of combining randomized insurance policy variation with administrative cost data and incentive-compatible measures of preferences. Such an approach makes it possible to evaluate not only what insurance does, but what it costs to deliver and how much households value what it provides. As low- and middle-income countries continue to expand health insurance coverage and integrate private providers into public systems, understanding these trade-offs will be central to designing financially sustainable and welfare-maximizing health insurance systems.

The paper proceeds as follows. Section 2 introduces the setting and Section 3 the experimental design. Section 4 discusses the treatment effects of insurance on healthcare seeking, risk coping, and health outcomes, by copayment level. Section 5 quantifies the net benefits of insurance under alternative approaches, accounting for treatment effects, insurer costs, and selection. Section 6 concludes.

2 Setting

Uganda operates a healthcare system that is divided into public and private healthcare. The public healthcare system is officially free at the point of use. In practice, however, public provision in rural areas is constrained by limited staffing, high absenteeism, frequent drug stock-outs, and long waiting times, as documented in facility surveys and administrative assessments of the public health system (Fitzpatrick, 2022). As a result, while official user fees are low or zero, households often face substantial non-price costs of care, including travel, waiting, and foregone income. In addition, prior work documents the presence of informal payments and other unofficial charges in parts of the public system, which further increase the effective cost of care for patients (McPake et al., 1999; Anderson et al., 2017).

Alongside the public system, Uganda has a large private healthcare sector that plays an important

role in healthcare provision, particularly in rural areas. Private providers are highly heterogeneous, ranging from small clinics with limited diagnostic capacity to large mission and not-for-profit hospitals offering comprehensive care. Prices and quality vary substantially across providers, with evidence of large dispersion in both dimensions across facilities (O'hanlon et al., 2017). While some private facilities offer markedly higher quality of care than public alternatives, private healthcare is typically financed out of pocket, which can make it unaffordable for low-income households and lead households to delay or forgo care.

In this setting, we partner with Streamline, a healthcare technology provider operating in Uganda. Streamline supplies hospitals with healthcare management software that digitizes detailed data on patient registration, visit-level care received — including services, drugs, and tests —, as well as patients' payments. In addition, Streamline administers vertically integrated hospital-based health insurance products for participating facilities. During the study period, Streamline's platform was active in approximately 50 hospitals across Uganda and covered over one million registered patients, with insurance products operating in twelve of these facilities at the time of the launch of the experiment.

For this research, we also collaborate with three private not-for-profit hospitals located in small towns: Kagando Hospital in Kasese District, Rugarama Hospital in Kabale District, and Nkozi Hospital in Mpigi District (see Figure A.1 for a map). We refer to these three hospitals as insured hospitals for the rest of the paper. While these hospitals are physically located in towns, their catchment areas extend well beyond urban centers and include predominantly rural populations in surrounding subcounties. All three insured hospitals had adopted Streamline's software and insurance infrastructure prior to the start of the experiment.

We initially utilize administrative records to describe these insured hospitals. Table B.1 reports the most common conditions treated in the insured hospitals in the experimental sample. Importantly, these insured hospitals not only provide specialist and emergency care, but also serve as points of contact for routine health needs in their catchment areas. In descending order of frequency, households receive care for: respiratory infections (e.g., coughs, colds), mild pain (e.g., headaches), pain with swelling (e.g., sprains), stomach/intestinal infections (e.g., diarrhea, worms), stomach acid problems (e.g., gastritis), and allergies and inflammation (e.g., skin rashes). For these conditions, patients receive five main categories of care. Based on the percentage of outpatient visits in which they occur, these are: services (89%), consultations (81%, the most frequent service type), drugs (85%), tests (65%), and procedures (4%). Tables B.2 and B.3 detail the specific drug and tests provided.[2]

Additionally, we utilize household survey evidence to compare the insured hospitals to other healthcare facilities in Table A.1. Other facilities can be classified into four categories, following

[2]Less common services include seeing a specialist for diabetes, dental problems, and pregnancy. Procedures consist primarily of dental work, wound treatment, and ear or eye interventions.

government guidelines. Level 1 facilities typically serve villages (around 5,000 people), level 2 facilities typically serve one subcounty (around 20,000 people), and hospitals (including our insured hospitals) often serve multiple subcounties or even larger areas. The final category is clinics, which mostly serve villages, are private, and fall in quality between level 2 facilities and hospitals. In alignment with the administrative data, we observe that insured hospitals provide a wide range of services, from general examination to specialist services, tests, drugs, procedures, and inpatient care. In contrast, general examinations are only available in 49% to 60% of clinics, level 1 facilities, or level 2 facilities. While tests and drugs are theoretically available in these facilities, specialist care and procedures are limited (in 10% to 22% of these lower-tier facilities). These lower-tier facilities also have substantially more reported problems with respect to personnel absenteeism, lack of equipment, and lack of drugs. Figure A.2 demonstrates similarly that insured hospitals score higher on quality and general impression, but lower on affordability and convenience to reach.

The standard insurance product offered through Streamline is a hospital-based plan that covers care at the enrolled facility. The annual premium is USD 7.50 per person, and the policy is sold at the household level. This premium may, at least in some years, cover the care provided by the hospital to the insured members. However, it does not cover other costs, including both variable costs (e.g., outreach activities) and fixed costs (e.g., insurance management and administration). Insurance coverage includes outpatient consultations, commonly prescribed drugs, diagnostic tests, emergency care, and inpatient care. The product features copayments: outpatient visits require a fixed copayment of USh 5,000 (approximately USD 1.25 using the average exchange rate at the beginning of the study), relative to typical uninsured visit costs of around USD 10.[3] Inpatient care involves proportional cost sharing with a copayment at 30%. Copayments are paid at the time of healthcare. As described in more detail below, although the insured hospitals had existing insurance schemes prior to the study, we recruited households in catchment areas where insurance coverage was minimal or absent at baseline, which we verify using baseline survey data. The insurance product is thus introduced to largely uninsured populations in the study sample.

3 Experimental Design

3.1 Sample Selection and Baseline Survey

We initially gathered information on savings groups operating in the geographical catchment areas of the three hospitals. Savings groups are common in rural Uganda (Burlando et al., 2021) and represent standard target populations for the hospitals offering the insurance product. We conducted a brief field

[3]Throughout the paper, we use an exchange rate of 0.00025.

exercise with the group leaders to confirm the identity of members in each group and identify target respondents in each group.

We then conducted a baseline survey with 3,019 households: 1,015 in the catchment area of the Kagando Hospital, 990 in the catchment area of the Rugarama Hospital, and 1,014 in the catchment area of the Nkozi Hospital. The baseline survey collected information on demographics, economic activities, health-seeking behavior, risk coping, and health.

3.2 Interventions: Health Insurance and Unconditional Cash Transfer

The main treatment of interest is the provision of free health insurance at one of the three insured hospitals, under three different copayment levels. To benchmark this treatment and control for income effects, we also introduced an unconditional cash transfer. We discuss the details of these interventions below.

Health insurance. Free health insurance provision targets up to four household members: the respondent, another randomly selected adult, and two randomly selected minors. The coverage terms of the experimental insurance product follow the pre-existing product described in Section 2.

In the experiment we randomly vary three levels of copayment for outpatient healthcare (the inpatient copayment is fixed at 30% across as in the standard product): i) $T0$: zero copayment for up to ten visits per households (and USD 1.25 afterwards); ii) $T1$: a copayment of approximately USD 1.25 per visit (as in the standard insurance product); iii) $T2$: a copayment of approximately USD 2.50 per visit. The coverage for the health insurance started within a few weeks after the baseline survey. Individuals assigned to health insurance received detailed guidelines on how to use the insurance and a personal health insurance card that had the respective copayment level printed on them.

Unconditional cash transfer. The cash transfer group receives a cash transfer equivalent to the value of the premium of the standard insurance product for four household members (USD 7.50×4=USD 30). The money is received via mobile money shortly after the conclusion of the baseline survey, matching the timing of the recruitment into the health insurance. In our analysis, we compare outcomes for households receiving health insurance to this cash transfer group, which we refer to as the control group throughout the paper.

Randomization. At the end of the baseline survey, we randomly assign 2,809 of the 3,019 surveyed households into four equally likely treatment arms (i.e., free insurance with three copayment levels and the unconditional cash transfer).[4] Randomization was conducted at the household level at the end of the survey, with no stratification.

[4]We excluded 88 households that already had health insurance at baseline and 122 households that were assigned to positive insurance prices to ensure incentive compatibility in the baseline valuation exercise described below.

3.3 Data Collection

Our study combines two complementary sources of data: survey data collected from all sample households and administrative data from the hospital system for insured individuals.

Survey data. In addition to the baseline survey, we conducted two follow-up surveys. Approximately six months after treatment assignment, we administered a phone-based midline survey. Approximately twelve months after treatment assignment, we conducted an in-person endline survey. Both surveys targeted the primary adult woman in each household and collected information on the previous six months, including economic activities, health-seeking behavior, risk coping, and health outcomes.

Administrative data. For individuals assigned to the three insurance groups, we obtained detailed administrative data from the Streamline hospital management system. This data covers all visits by insured individuals to the three insured hospitals during the insurance period. The administrative data includes patient-visit level information on all services provided, including consultations, as well as drugs dispensed, laboratory tests performed, and medical procedures conducted. For each visit and type of care, for instance, a consultation, the data records both the patients' payment, directly coming from the billing system, and the uninsured price (what an uninsured patient would pay). The billing system automatically generates the data, so it is likely to be close to complete.

3.4 Regression Specifications

To identify causal effects of health insurance on healthcare seeking, risk-coping, and health outcomes — and how such effects vary by copayment — we leverage the randomized assignment of insurance coverage and copayment levels.

Average treatment effects. In our first specification, we estimate the average treatment effect of health insurance based on our survey data, pooling insurance products across all copayment levels. We estimate:

$$y_{i,h,j,t} = \alpha + \beta T_h + \gamma y_{i,h,j,t=0} + \mu_t + \mu_j + \epsilon_{i,h,j,t} \tag{1}$$

where $y_{i,h,j,t}$ is an outcome for individual i in household h in the catchment area of hospital j at time t. Survey outcomes typically refer to the six-month period before the relevant survey wave (midline, endline). Some outcomes are collected on the household level. T_h is a binary indicator that is one if the household is assigned to any insurance treatment (T0, T1, or T2) and zero if it is assigned to the control group (C). In our main specification, we pool the midline and endline survey data and include survey wave fixed effects (μ_t), but we also report separate results in the appendix. If available, we control for the baseline value of the outcome variable, $y_{i,h,t=0}$. We additionally include hospital fixed

effects (μ_j). We cluster standard errors at the level of treatment, the household level. The coefficient β captures the average treatment effect of free insurance relative to an equivalent cash transfer.

Our main analysis focuses on the individuals eligible for health insurance, i.e., up to two adults and two children as described in Section 3.2. However, we also investigate within-household spillovers by comparing outcomes for non-eligible members between treatment and control households.

Treatment effects by copayment level. To examine how treatment effects vary with copayment levels, we estimate:

$$y_{i,h,j,t} = \alpha + \beta_0 T0_h + \beta_1 T1_h + \beta_2 T2_h + \gamma y_{i,h,j,t=0} + \mu_t + \mu_j + \epsilon_{i,h,j,t} \tag{2}$$

where $T0_h$, $T1_h$, and $T2_h$ are indicators for assignment to the USD 0, USD 1.25, and USD 2.50 copayment insurance products, respectively. The coefficients β_0, β_1, and β_2 represent the treatment effects for each copayment level relative to the cash transfer control group. We test for joint equality of these coefficients to assess whether copayment levels significantly affect outcomes.

3.5 Summary Statistics and Randomization Balance

Table A.2 presents summary statistics for the baseline analysis sample. The sample households are predominantly rural farming families. The average household size is 5.70 members, with 91% of households having children. The mean age of adults in the sample is 39.69 years, and the average age of children is 9.00 years. Most household heads are farmers (57%), followed by self employment (22%). Food insecurity is substantial in this population. At baseline, 58% of households report worrying about not having enough food, and 40% report running out of food in the period before the survey. This economic vulnerability points to the potential importance of financial protection from health shocks for this population.

Table A.3 provides further summary statistics on health-related variables and also examines the balance across treatment arms. Since the main sample refers to insured household members, only those are included in this table. On average, a household member is ill 7.04 days in a given year, missing 3.95 work days for adults and 1.80 school days for children. In the past month, 12% of members have visited any health facility; only 2% have visited an insured hospital. On average, they have spent USD 1.74 on health expenses in total in the past month. With households having on average USD 61.52 in savings, 29% report having taken a loan in the past year for health. While few households report mental illnesses like anxiety or depression, worries about health and medical expenses are widespread, with 41% stating that they are very worried about health and 55% that they are very worried about medical expenses in particular.

With respect to balance, we examine the balance of C versus T, where T pools across T0, T1, and

T2, in Column (3). For this analysis, we run a specification similar to Equation 1, with the baseline outcome as a dependent variable rather than as a control. We additionally separately examine the balance of C versus T0, T1, and T2. The respective coefficients are reported in Columns (5)-(7) (see Equation 2). We also test for equality of the coefficients in Column (8). Critically, the randomization achieved balance in physical health outcomes. T2 appears to have stronger mental health related to anxiety or depression, but worries about health and medical expenses are balanced. A caveat of our analysis is that despite the randomization, T0 appears to have higher healthcare utilization at baseline, which is reflected in some correlated outcomes, such as visits to the insured hospital and health expenses. We perform several strategies to address this concern. First, we show that our results are robust to alternative sets of control variables, including those selected via post-double selection Lasso (Belloni et al., 2014; Cilliers et al., 2024). Second, we incorporate robustness tests that exclude T0. Table A.4 demonstrates that none of the variables are statistically different in T versus C in the baseline, and health care utilization and physical health are balanced, considering only T1 and T2.

3.6 Treatment Compliance: Insurance Adoption and Copayments

Before presenting our main results, we verify that our treatment variation induced meaningful variation in insurance adoption and copayments. Table 1 reports health insurance product knowledge and satisfaction, using survey data. Across all three treatment groups, 88% report owning health insurance, while in the control group, only 5% report having health insurance during the experimental period.[5] Conditional on reporting to own health insurance, households demonstrate a high knowledge of their respective copayment levels: 73% of households that were assigned to T0 correctly report a copayment of USD 0. 93% of households assigned to T1 correctly say they have a copayment of USD 1.25, and 90% of households assigned to T2 report a copayment of USD 2.50. As we document more in detail in Section 4, households also report using health insurance, with usage varying by treatment groups: 49% of households in T0 report ever having used insurance, 40% in T1, and 35% in T2. Households are generally satisfied with the insurance, with satisfaction decreasing slowly with copayment levels: On a range from one to 5, where 5 is the highest value, T0 reports an average score of 4.14, T1 of 4.09, and T2 of 3.97.[6]

Additionally, we validate our treatment variation in the administrative data, which is only collected for insured individuals. Figure B.1 depicts the percentage of outpatient visits with a certain payment amount, over all outpatient visits, by treatment arm. We find that in the T0 arm, over 66% of visits are concentrated around the USD 0 copayment (in a range of USD 0 to USD 0.25). In the T1 arm, 58% of

[5]There are two reasons why some treated households may report not owning health insurance. First, households might not be aware that they own health insurance, despite our introduction of the insurance. Second, in the endline, some households' insurance had just ended when we interviewed them.

[6]Ten percent of households report having had problems with insurance, with the primary concerns limited coverage or unexpected costs, while other concerns such as poor service, complicated claim processes, delays claim processing or claim rejection are rare.

visits fall in a range of USD 1.00 and USD 1.50, and in the T2 arm, 48% fall in a range of USD 2.25 and USD 2.75. While the payment can also take other values — for instance, when households obtain services or drugs that are not covered by the insurance — this pattern provides evidence that treatment assignment was implemented successfully in the hospitals, and administratively recorded payments align with assigned copayment amounts.

4 Treatment Effects of Insurance

We analyze the treatment effects of insurance on healthcare seeking, risk coping, and health outcomes. Risk coping and health outcomes are obtained from the survey data, while measures of healthcare-seeking outcomes come from both survey and administrative data. Throughout, we investigate both the effect of insurance pooling across all three copayment levels (Equation 1) as well as the differential effect by copayment (Equation 2).

4.1 Healthcare Seeking

4.1.1 Survey Data

Healthcare-seeking by facility type. Table 2 presents treatment effects on healthcare utilization by type of healthcare facility. Insurance has a large and significant effect on visits to the insured hospitals: treated individuals have, on average, 0.07 more visits to insured hospitals (relative to a control mean of 0.05 visits per half-year), representing more than a doubling of utilization. This effect is significant at the one percent level. Looking at all hospital visits (not just insured hospitals), we see a similar pattern: insurance increases hospital visits by 0.06 (75% increase relative to the control mean of 0.08).

Additionally, insurance causes substantial substitution away from lower-tier facilities. Visits to these decrease by -0.01 to -0.04, or from -14% to -27%. This substitution pattern suggests that insurance allows households to access higher-quality hospital care instead of relying on lower-tier facilities. The substitution toward hospitals is economically meaningful because, as we documented in Section 2, hospitals generally provide higher quality care. This quality difference may contribute to the health benefits we document below.

Overall healthcare-seeking. Despite the relatively large increase in visits to the insured hospitals, Table 3 shows that insurance actually causes a small decrease in overall healthcare facility visits, both on the extensive and intensive margin. Treated individuals have 2 percentage points lower probability of any facility visit (5% relative to the control mean of 41%) and 0.03 fewer total facility visits (6% relative to the control mean of 0.51). These effects, while statistically significant, are modest in magnitude.

The pattern — more visits to insured hospitals but fewer total visits — suggests that a single hospital visit may substitute for multiple visits to lower-level facilities. This could occur if hospital care

is more effective, resolving health issues that would otherwise require repeated visits. Alternatively, the higher quality of hospital care might include more comprehensive treatment at a single visit.

Routine healthcare visits do not change significantly with insurance. This suggests that the changes in utilization are driven by treatment of acute conditions rather than increased prevention.

Total health expenditures decrease with insurance. Treated individuals spend -24% less over the control mean of USD 5.02 per half-year.[7] The effect is significant at the one percent level. This reduction in out-of-pocket costs represents one of the primary benefits of insurance, providing financial protection against health shocks.

Treatment effects by copayment level. The effects on healthcare utilization vary with copayment levels. The increase in visits to insured hospitals is 0.09 for T0 (USD 0 copay), 0.07 for T1 (USD 1.25 copay), and 0.04 for T2 (USD 2.50 copay). The difference among the three treatment arms is statistically significant ($p<0.01$). The pattern is similar for all hospital visits. There is no significant difference across copayment levels in the degree of substitution away from lower-tier facilities. All three insurance groups show similar reductions, suggesting that the decision to substitute toward hospital care does not depend on the copayment level.

The reduction in total facility visits is larger for the high copayment group: -0.06 visits for T2 compared to -0.01 for T0 ($p=0.01$ for test of equality across the three coefficients). The reduction in total health expenditure is approximately equal across copayment levels.

These patterns suggest multiple margins of adjustment. Better hospital care early in an illness episode may reduce the need for subsequent visits across all copayment levels. However, higher copayments may create an additional constraint, limiting the total number of hospital visits that households can afford, even with insurance. The net effect on total utilization reflects the balance between these forces.

4.1.2 Administrative Data

Summary statistics. The administrative data provides detailed information on the care households receive at the insured hospitals (for summary statistics, see Table B.4 column 1 and Table 4 column 1). Overall, 16% of insured individuals have at least one outpatient visit during the insurance year, averaging 1.82 visits among those with any outpatient visit.[8] Inpatient visits are rare (only 1% of individuals), so we focus exclusively on outpatient care.[9]

[7] For outcomes measured in USD, we estimate a Poisson regression. The coefficients are thus translated via $\exp(\hat{\beta})$-1, e.g., exp(-0.28)-1=-0.24.

[8] These statistics are directly calculated from the data and might differ slightly from the approximation of the summary statistics in the tables, e.g. $1.82 \approx 0.30$ unconditional number of visits divided by 0.16 probability of visit on average.

[9] Direct matching between data sources confirms their concordance. At the household level, 84% show identical information on whether they visited the insured hospital, and 66% match on visit frequency. Similarly, 85% of households show consistent reporting of visits to insured hospitals and insurance use on the extensive margin. At the individual level, 84% match on whether they visited the insured hospital, and 78% match on visit frequency. These concordance rates validate both the survey measures and the quality of the administrative data.

Conditional on having an outpatient visit, patients receive USD 17.16 in care ("gross insurer cost"), comprising USD 4.15 in copayments and USD 12.33 in insurance coverage ("net insurer cost"). Given that patients with any outpatient visit average 1.82 visits, this translates to USD 10.29 per individual visit (USD 2.44 copayment, USD 7.63 covered). Copayment errors are negligible, occurring for less than 0.5% of individuals.

Treatment effects. The administrative data mirrors the key pattern observed in the survey: visits to insured hospitals decrease with higher copayments. By the end of the insurance year, approximately 40% of T0 households have visited an insured hospital, compared to 32% in T1 and 28% in T2. These figures align closely with self-reported data from the surveys. Across both survey waves, 46% of households in T0, 39% in T1, and 35% in T2 report having visited an insured hospital.

Table B.4 reports the results for patient-level regressions, based on Equation B.1. Initially, this table confirms the pattern of decreasing outpatient visits as copayment increases. This pattern holds across different types of care, such as services, drugs, and tests. The probability of having a visit with coverage decreases by the copayment amount, while the probability of having a visit with copayment increases with the treatment arm copayment.[10]

In turn, insurer costs per insured person decrease with the copayment level. As shown in Table 4, this relationship holds both for gross costs (i.e., inclusive of copayments) and, even more starkly, for net insurer costs, which subtract the copay amounts paid by patients.

Finally, Figure 1 demonstrates the dynamic patterns of healthcare utilization. It depicts the share of households with an outpatient visit at a given point in time since the insurance start. We find that the differential utilization by copayment level emerges early and persists throughout the insurance year. The biggest difference occurs between USD 0 and USD 1.25 copayments, with a smaller marginal effect of increasing the copayment from USD 1.25 to USD 2.50. Figures B.2 and B.3 depict similar patterns for different types of care, such as services, drugs, or tests. Equipped with the effects on healthcare utilization, we next examine the impact on risk coping.

4.2 Risk Coping

Table 5 examines effects on household risk coping strategies. Insurance significantly reduces the need for costly coping mechanisms. An index of risk coping behaviors decreases by 0.15 standard deviations ($p<0.01$). Insurance reduces foregone healthcare significantly by 4 percentage points (13% of the control mean). This suggests that insurance not only shifts where people seek care but also reduces the extent to which financial constraints prevent access to needed care entirely. Investigating individual risk coping strategies that are summarized in the risk coping index, insurance decreases asset sales by

[10]Table B.5 shows that the results are robust to including controls from the baseline survey.

5 percentage points (25% of the control mean) and reductions in food consumption by 3 percentage points (23% of the control mean).

Effects on savings and borrowing provide additional evidence of financial protection. While the probability of saving does not change significantly, the current amount of savings decreases by 14% (marginally significant), possibly because insurance reduces precautionary saving motives. The probability of taking out a loan decreases by 4 percentage points (5% of the control mean), with a corresponding 15% reduction in total borrowing amounts. Loans specifically for healthcare purposes decrease by 3 percentage points (9% of the control mean). Taken together, these results suggest that households need to rely less on savings and loans with access to insurance.

Treatment effects by copayment levels. The effects on risk coping do not vary significantly across copayment levels for most outcomes. This suggests that insurance provides substantial financial protection even with USD 2.50 copayment, relative to being uninsured.

4.3 Health

Table 6 presents treatment effects on health outcome measures. Insurance leads to significant improvements in physical health, compared to the control group (i.e., the cash-transfer group). Self-rated health status at the time of the survey, measured on a scale from 1 to 5, increases by 0.08 standard deviations ($p<0.01$). The number of sick days decreases by 1.19 days over a six-month period (13% relative to control mean of 9.12 days), and work days missed due to illness decrease by 0.65 days (15% relative to control mean of 4.36 days). For children enrolled in school, school days missed due to illness decrease by 0.35 days (24% relative to control mean of 1.48 days).

These improvements in physical health are accompanied by reductions in health-related worries. An index of overall worry decreases by 0.09 standard deviations ($p<0.01$), with similar effects on worry about health problems and worry about affording medical expenses. Lower worries represent an additional dimension of welfare gain from insurance beyond the direct physical health improvements. However, we do not find significant effects on a broader mental health index that includes measures of anxiety or depression.

Treatment effects by copayment level. Examining heterogeneity by copayment level, we find no clear pattern in physical health outcomes. All three copayment groups show similar improvements in self-rated health, sick days, and days missed from work or school. The equality tests generally cannot reject the null of equal effects across copayment levels. There is some evidence that the reduction in worries is largest for the lowest copayment group. The USD 0 copayment group shows a 0.12 SD decrease in overall worry, compared to 0.08 SD for T1 and 0.07 SD for T2, though these differences are not statistically significant.

Why do lower copayments increase hospital utilization without improving health outcomes?

Access to health insurance improves health outcomes. However, the absence of differential health effects by copayment level, despite large differences in healthcare utilization, suggests that the additional utilization induced by lower copayments does not translate into proportional improvements in measured health outcomes on average. We consider several potential explanations for this pattern.

First, copayments may affect the type of health events for which households visit an insured hospital. For example, households facing lower copayments might seek hospital care for less severe conditions. Our administrative data allow us to assess this possibility. The statistics indicate that individuals across copayment groups visit insured hospitals for similar diagnoses (Table B.1) and receive comparable drugs (Table B.2) and tests (Table B.3). Consistent with this, survey data indicate that self-reported pain levels and illness episode duration are similar across hospital visits by individuals from different copayment groups. Thus, while copayments strongly affect the likelihood of visiting an insured hospital, we do not find evidence that the types of health events prompting these visits differ systematically by copayment level.

Second, copayments may affect which individuals seek hospital care. Table A.5 provides suggestive evidence in this direction. Among individuals who visit an insured hospital, those in lower-copayment groups have better (standardized) baseline self-reported health than those facing higher copayment: -0.23 in T0, -0.44 in T1, and -0.29 in T2, with the first difference significant at $p < 0.01$. These patterns are consistent with lower copayments inducing relatively healthier individuals to seek care, even for similar health events. For given symptoms, the returns to visiting the hospital may be lower for generally healthier individuals, which may help explain why a higher number of hospital visits in low copayment groups does not translate into better health outcomes at endline.

Third, some health benefits of additional utilization may not be captured by our outcome measures or time horizon. For example, lower copayments could generate short-lived improvements shortly after a visit that are not reflected in outcomes measured over a six-month period. While this remains possible, it appears unlikely that such effects would not be reflected in any of our measured outcomes, including sick days or days missed from work or school.

Finally, households' valuation of insurance declines sharply with copayments, even though health outcomes do not. As we discuss in the next section, this pattern is consistent with households valuing protection against rare or high-cost events, financial risk, or other outcomes that are not fully captured by our health measures.[11]

Comparison to other studies. Our findings of significant health and financial protection benefits of insurance stand in contrast to some previous studies of health insurance in developing countries. Table A.6 compares our results to a selection of recent experimental and quasi-experimental studies,

[11] Consistent with this interpretation, households facing lower copayments during the experimental year continue to report higher insurance valuation at endline.

summarized in Dupas and Jain (forthcoming). While some studies find reductions in out-of-pocket expenditures and catastrophic health spending, effects on healthcare utilization and especially health outcomes are often not statistically significant.

Possible explanations for why our health impacts are larger than in much of the existing literature is that both the quality of care insured and the effectiveness of insurance implementation differ sharply across settings. Many public insurance programs in low-income countries mainly expand access to already congested and low-quality public facilities, where absenteeism, weak diagnostics, drug stock-outs, and informal fees limit the scope for insurance to translate into health gains. In such environments, insurance may reduce prices without meaningfully changing the care received. In our setting, by contrast, insurance explicitly grants access to a small number of high-quality not-for-profit hospitals with reliable drugs, diagnostics, and trained staff, and is implemented through a tightly managed system that limits common frictions such as card rejection or informal payments. While we cannot separately identify these channels, together they suggest that insurance may generate larger health improvements when it reliably connects households to high-quality providers and when institutional frictions that undermine coverage elsewhere are minimized.

4.4 Within-Household Spillovers

We investigate within-household spillovers on uninsured household members in healthcare utilization and health outcomes, measured at the individual level. Appendix Table A.8 shows no significant treatment effects on healthcare utilization outcomes, either when pooling all insurance treatments or when disaggregating by copayment level. This indicates no evidence of spillovers from insured to uninsured household members in healthcare utilization.

In contrast, Appendix Table A.9 provides evidence of improved health outcomes among uninsured household members. In particular, uninsured members experience fewer sick days and fewer days missed from work or school, while the estimated effect on self-reported health status is positive but not statistically significant. As with utilization outcomes, there is little evidence of heterogeneity by copayment level.

These findings suggest the presence of within-household spillovers in health outcomes but not in healthcare utilization. One possible interpretation is that uninsured members benefit from reduced disease transmission within the household. However, other mechanisms may also contribute, such as improved health knowledge or behavioral changes within the household, or the sharing of medicines obtained through insured hospital visits.[12]

[12]Table A.10 and Table A.11 provide results for the full set of household members, insured and uninsured.

4.5 Supplementary Analysis and Robustness

In this section, we break down results by midline and endline survey, by age and gender, and discuss robustness checks.

Midline and endline survey. In our main analysis, we pool the midline and endline surveys. We now examine these surveys separately. Our key results on healthcare utilization hold in the midline (Table A.12) and endline survey (Table A.13). One exception is the results on overall facility visits on the extensive and intensive margin, regardless of the facility level. These results are negative in the midline survey but only become significant in the endline survey. The risk coping index decreases significantly in midline (Table A.14) and endline survey (Table A.15), while whether a household has forgone healthcare or not appears to be primarily driven by the midline result. In terms of physical health outcomes, we find significant health improvements at midline (Table A.16) and at endline (Table A.17). The worry effects are driven by the midline and insignificant at endline. One potential explanation is that at the time of the endline survey, health insurance was either already expired for a small share of households or was expiring soon. Overall, most of our findings hold in the midline and the endline survey, demonstrating persistence of our results throughout the insurance period. This is in alignment with the continuous increase in healthcare utilization over the insurance period that we observe in the administrative data (see Figure 1).

Age and gender. We report results by age and gender. We classify respondents by age at baseline into three groups: adults (18 years and above), minors (17 years and below), and young children (5 years and below). We find that our results on healthcare seeking hold for adults (Table A.18), minors (Table A.19), and young children (Table A.20). Both adults (Table A.21) and minors (Table A.22) experience significant improvements in health, but we are likely underpowered to detect effects for young children; the effects on health rank and sick days indicates that the young children are healthier but the effects are not statistically significant (Table A.23). In terms of gender, we find that our key results on healthcare utilization hold for female individuals (Table A.24) as well as male individuals (Table A.25). The same holds true for health outcomes, even though some health outcomes are insignificant for male individuals (see Table A.26 and A.27). Overall, we conclude that our results are not driven by one specific subgroup, and household members, regardless of age and gender, are likely to benefit from health insurance.

Robustness. One caveat of our analysis is that, despite randomization, households in T0 appear to have higher healthcare utilization at baseline, which is reflected in some correlated outcomes, such as visits to the insured hospital and health expenses. Balance was achieved on physical health outcomes. To address this, Table A.4 demonstrates that there are no statistical differences between the control group and pooled treatment groups after excluding T0, and very few imbalances between T1 and T2.

We thus repeat our main analysis excluding households in T0. We find that all our results hold in this robustness test (see Table A.28 for healthcare seeking, Table A.29 for risk coping, and Table A.30 for health outcomes).

As an additional robustness check, we employ post-double selection Lasso estimation to address potential concerns about baseline imbalances and improve precision (Belloni et al., 2014). This method selects control variables from a comprehensive set of baseline covariates (those in Tables A.2 and A.3) in two steps: first, selecting variables that predict the outcome, and second, selecting variables that predict treatment assignment. Table A.31 provides the results for healthcare seeking, Table A.32 for risk coping, and Table A.33 for health outcomes. Columns (3) and (9) report the number of control variables selected by Lasso for each outcome. The treatment effects estimated using post-double selection Lasso are highly consistent with our main specifications, both in magnitude and statistical significance. This consistency across specifications provides confidence that our results are not driven by chance imbalances or ad hoc covariate selection, but reflect treatment effects.

5 Copayments and Insurance Design

This section evaluates the welfare implications of alternative copayment levels. We first use information on treatment effects on health outcomes, and insurer costs to quantify net benefits under different copayments, and to identify the most effective copayment level under universal coverage. We then incorporate households' valuation of insurance to simulate outcomes and costs under alternative copayment and cash transfer combinations, allowing for endogenous selection. Both approaches point to higher copayments delivering higher net benefits. Finally, we document that households place higher value on low-copayment insurance and discuss potential explanations for why policy conclusions based on treatment effects may differ from those based on revealed preferences.

5.1 Net Benefits by Copayment

The results in the previous sections show that lower copayments induce additional healthcare utilization and higher insurer costs, with limited differential impacts on measures of health and risk-coping. This evidence suggests that lower copayments may be less effective from a cost-effectiveness perspective.

We formalize this argument by computing individual-level net benefits under free insurance to four members of the household for each copayment level c:

$$NB(c) = \sum_i B(i,c) - \big(E(i,c) - C(i,c)\big), \tag{3}$$

where $B(i,c)$ denotes the monetary value of insurance benefits for individual i. $E(i,c)$ denotes the gross value of healthcare received (what an uninsured patient would pay) and $C(i,c)$ is the insuree's

copayment (note that copays enter negatively in the individual insurance benefits, B). We compute aggregate net benefits, $NB(c)$ by summing over all the individuals in our sample. We include non-insured household members to account for within-household spillovers documented above.[13]

Table 7 presents the results. The first two rows show treatment effects by copayment on medical expenses and sick days. In the third row, we value a sick day at the average daily wage in rural areas, approximately USD 2 (Uganda Bureau of Statistics, 2021), and combine this monetary amount with out-of-pocket health expenditures to get a measure of insuree net health costs.[14] Average insuree net health costs is USD 41.78 in the control group, and decreases by USD 4.79, USD 5.12, and USD 6.96 in T0, T1, and T2, respectively, although these coefficients are statistically indistinguishable. The fourth row shows insurer costs, net of copayments. These are zero in the control group by construction and decrease with copay levels, due to differences in insurance utilization and copayment levels.

The last row in Table 7 presents total net health costs, summing over the insuree and insurer. Net benefits $NB(c)$ are defined as the reduction in these costs (i.e., minus the sign of the treatment effects in the table). We obtain two main results. First, net benefits are positive for all copayment levels: the combined benefits B outweigh the net insurer costs $E - C$. Second, net benefits are higher for higher copayments, reflecting similar levels of benefits — if anything, reductions in medical expenses and sick days are also larger with higher copayments — and lower net insurer costs. The difference between $T0$ and $T2$ is significant at 7%, but differences across other groups are noisy. The results imply that higher copayments can achieve comparable health outcomes at lower cost for a given population. Conversely, for a given budget, higher copayments would allow the insurer to extend free insurance coverage and health benefits to a larger population.

5.2 Net Benefits by Copayment Accounting for Selection

We now extend the analysis to account for endogenous selection into insurance across copayment levels. We consider the problem of a policymaker giving households a choice between two instruments: health insurance and a cash transfer. Copayments may thus affect the composition of insured individuals, for given cash transfer level. We proceed in four steps. We first present estimates of insurance valuation. We then use these estimates to simulate benefits under alternative combinations of copayments and cash transfers, explicitly accounting for selection. Next, we characterize insurer costs under selection. Finally, we combine simulated benefits and costs to compute net benefits under alternative copayment levels.

[13] For non-insured individuals, $E(i, c) - C(i, c) = 0$.

[14] It is not possible to credibly assign monetary values to other outcomes affected by the treatment, such as reductions in borrowing or asset sales. However, since treatment effects on these outcomes, as well as on health outcomes, are not significantly different across copays, their inclusion is unlikely to affect the conclusions below.

5.2.1 Insurance Valuation

Elicitation. We measure valuation through the cash equivalent: the amount of cash that makes households indifferent between receiving insurance and cash under different copayment levels. We elicit health insurance valuation at the beginning of the baseline survey. After the four household members eligible for the insurance are randomly selected (see Section 2), we elicit valuation using a multiple price listing (MPL) exercise. For each insurance product with copayment c, respondents choose between the insurance and a cash amount x. The cash amount varies from 0% to 300% of the standard premium (USD 30 per household) in 20% increments.

The elicitation protocol was designed to ensure comprehension and incentive compatibility. Enumerators provided detailed explanations of the insurance product and the choice task, conducted practice rounds, and administered comprehension checks. Physical cash was shown to make the alternatives concrete. To ensure incentive compatibility, we randomly selected 4% of households (N=122) to receive one of their MPL choices, drawn at random from their responses. These households were offered insurance at a premium consistent with their MPL responses and were excluded from the remainder of the study.

Valuation. Figure 2 plots the share of households choosing insurance over cash for different values of x, separately by copayment level. When the cash transfer is as high as the standard premium (approximately USD 30), 77% of households prefer insurance with zero copayment, 69% with a USD 1.25 copayment, and 62% with a USD 2.50 copayment. Valuation remains substantial even at higher prices: at approximately USD 85 (three times the standard premium), 48% of households still prefer insurance with a USD 1.25 copayment.

These patterns indicate substantial insurance valuation, with demand decreasing in both the cash transfer alternative and the copayment level. Two remarks apply. First, individuals may be initially overoptimistic about the insurance and adjust their valuation after experiencing the product. We evaluate this explanation by eliciting insurance valuation again at endline. After the experimental year ended, the insurance company reverted to offer the standard product at copayment USD 1.25, and thus we could only elicit incentivized valuation for this product. Figure C.1 describes the results. We find that valuation indeed falls, but it remains quite high: At the standard premium, approximately 56% of previously insured households would choose insurance over cash at endline, compared to 69% at baseline. Figure C.1 - Panel B breaks down valuation for the USD 1.25 copayment by copayment treatment group during the experiment. Valuation for households with zero copayment in the experimental year is higher than other groups, and very close to the baseline valuation. This is consistent with households having more experience with insurance — because of higher usage during the experiment — also valuing it more ex-post.

Second, our valuation elicitation measures the amount of cash transfers that households are

willing to forego to receive insurance, i.e., their willingness to accept. This measure is not the amount they would be willing to pay in a market setting. Implementing willingness to accept is motivated by two reasons. First, for policymakers who consider subsidizing health insurance, understanding the equivalent cash transfers represents a natural benchmark. Second, enforcement of willingness to pay can be very challenging in these low-income settings, as households may initally be expressing interest for the product, but later not follow up with the purchases, making stated willingness to pay hard to interpret. To understand the gap between these measures, in an additional sample of 324 households from one of the hospitals (Nkozi), we measured willingness to pay, as well as willingness to accept. Consistent with a large literature (see, e.g., Hanemann, 1991; Burlig et al., 2025), we find that willingness to accept substantially exceeds willingness to pay (Figure C.2). This gap clearly highlights that, while willingness to accept is a natural benchmark in the comparison to cash transfers, it is not the right metric to study demand in a market setting.

5.2.2 Simulated Benefits under Selection

We next use the elicited valuation to simulate benefits under alternative combinations of copayments and cash transfers, allowing for endogenous selection into insurance.

Let $Y_i^1(c)$ denote the potential outcome for individual i under insurance with copayment $c \in \{\text{USD } 0, 1.25, 2.50\}$, and let Y_i^0 denote the potential outcome if uninsured. Let $T_i(x, c)$ indicate whether individual i would choose insurance with copayment c over a cash transfer x.

Our experimental design identifies average treatment effects $\Delta(c) = \mathbb{E}[Y_i^1(c) - Y_i^0]$, since insurance assignment is randomized independently of valuation. Using the elicited choices of health insurance vs. cash, $T_i(x, c)$, we can simulate outcomes under counterfactual policies (x, c):

$$\tilde{Y}_i(x, c) = Y_i^1(c)T_i(x, c) + Y_i^0(1 - T_i(x, c)), \tag{4}$$

and corresponding simulated intention-to-treat effects:

$$\tilde{\Delta}(x, c) = \mathbb{E}[\tilde{Y}_i(x, c) - Y_i^0]. \tag{5}$$

We focus on two key outcomes: the number of sick days and total health expenditures, measured at the household level and aggregated annually. Figure 3, Panel A, shows that reductions in health expenditures are larger for medium and high copayments for values of x up to the standard premium, and similar across copayments at higher values of x. The smaller reductions in the low-copayment group are consistent with higher utilization, including expenditures on non-covered items. Panel B shows that simulated treatment effects on sick days do not exhibit a strong monotonic relationship with copayments, in line with the analysis of Section 4.3.

Figure 3, Panel C, plots simulated treatment effects across copayment levels for the monetary value of health benefits, as computed in Section 5.2. The ranking of copayments depends on the value of the cash transfer x, with higher copayments generating larger benefits at low values of x, and intermediate copayments dominating at higher values of x. However, for each copayment, net benefits are maximized at $x = 0$, plausibly due to higher enrollment. At this value, the highest copayment level (USD 2.50) induces the largest benefits, an effect driven by the differences in health expenditures.

5.2.3 Insurer Costs under Selection

Allowing for selection, copayment levels shape the costs that health insurance providers must cover in order to offer the product in four ways. First, insurer costs for a given amount of care are mechanically decreasing in copayments, since patients pay a higher share of total costs. Second, total costs increase with the number of insured patients, which decreases with the copayment. Third, copayments may affect utilization. Finally, allowing for selection, copayment levels may affect the insuree type, i.e. the insuree's propensity to utilize insurance, for given copay. Having examined the first three elements above, this section describes how we investigate the selection channel.

We test for selection using a feature of our design that allows us to compare average insurer costs under a common ex-post copayment across the sets of individuals who would choose insurance over a given cash amount under each copayment regime.

Figure 4, Panel A, presents the results. Each point captures the average gross insurer cost under the USD 1.25 copay, averaging across the set of individuals who would choose insurance at copayment level c over a cash transfer x. If lower copayments attracted sicker individuals, we would expect those choosing insurance under T0 to generate higher costs than those choosing under T2, even when both groups receive the same T1 copayment. Instead, at each cash transfer amount, average costs are very similar across copayment groups, indicating that variation in copayments does not generate economically meaningful selection on expected costs. The figure also suggests limited selection on valuation: for each copayment level, average costs are relatively flat as a function of the alternative cash offer, x, indicating that individuals with higher insurance valuation are not systematically more (or less) costly to insure.

The absence of selection on actual usage during the insured year contrasts with evidence of selection on baseline outcomes. Appendix Table A.7 shows that willingness to accept for insurance is correlated with baseline health status and the number of sick days in the 12 months prior to the baseline survey. However, insurance usage (among treated households) and endline health outcomes (for control households) are only weakly correlated with these baseline measures. If households base their decisions on past health experiences and have limited ability to predict future health, this may explain why baseline covariates—but not ex-post realized usage—predict insurance valuation. This

point has important implications for the study of adverse selection in such settings. In particular, it highlights the value of eliciting insurance valuation for all households, regardless of their eventual insurance assignment, rather than relying solely on variation in prices and observed purchase decisions (Einav and Finkelstein, 2011) .

The remaining panels of Figure 4 complete the analysis of the relation between copayments and insurer costs, Panel B isolates treatment effects of copays, showing average costs among households who choose medium-copay (USD 1.25) insurance over the respective cash amount (i.e, fixing selection), and are then allocated to different copayment levels. Higher copayments reduce healthcare utilization and therefore lower total expenditures per insured individual, an effect that is flat in insurance valuation. Panel C shows average costs among households choosing insurance at the respective copay over the respective cash amount, when given insurance with the respective copay. Due to the absence of selection by copayment, the patterns in the average costs closely resemble those of the previous treatment-only graph.

Panels D and E show average costs among all households in the sample, as opposed to average cost per insuree. Insurer costs for a given household are set to zero if they choose the respective cash amount over insurance with the respective copay. D shows gross costs, and E shows costs net of copayments. In both cases, average costs per household are decreasing in copayment.

5.2.4 Net Benefits under Selection

We now combine the simulated benefits and the insurer costs to compute net benefits under alternative copayment levels and cash transfers:

$$NB(x,c) = \sum_{i:T_i(x,c)=1} B(i,c) - \big(E(i,c) - C(i,c)\big), \tag{6}$$

where the key difference from the definition in the previous section is the restriction to individuals who take up insurance with copay c given the alternative cash offer c, $T_i(x,c) = 1$.

Figure 3, Panel D, presents the resulting net benefit function $NB(x,c)$. Because estimated health benefits exceed insurer costs across all copayment levels, net benefits are maximized with full enrollment ($x = 0$). Since net benefits are maximized under full enrollment, differential selection across copayment levels does not affect the comparison of maximized net benefits across copayment levels. At $x = 0$, the highest copayment level ($c = 2.50$) delivers the largest net benefits, reflecting similar, if not higher, benefits for insurees and lower costs for the insurer.

5.3 Discussion

The analysis above uses experimentally estimated treatment effects on health outcomes, risk-coping, and insurer costs to quantify net benefits under alternative copayment levels. This treatment-based

approach points to higher copayments delivering higher net benefits, both under universal coverage and when allowing for selection based on households' valuation of different insurance products.[15]

However, as documented in Section 5.2.1, households exhibit substantially higher valuation for lower copayments, a pattern consistent with existing evidence on the demand for insurance against small risks (Sydnor, 2010). Accordingly, when net benefits include household valuation rather than measured benefits, they are highest for low copay.[16] Although higher copayments reduce insurer costs, they also substantially reduce individuals' valuation of insurance. As a result, the welfare losses from reduced valuation outweigh the cost savings.

The divergence between the treatment-based and revealed preference approaches provides direct evidence that our measure of net benefits does not capture all relevant dimensions of value. In particular, households exhibit substantially higher valuation for lower copayments despite limited differences in measured outcomes. This pattern suggests that valuation captures aspects of insurance that are hard to convert in a monetary outcome — such as a reduction in worrries - or are not captured in the experimental year — such as rare but severe shocks. It may also reflect behavioral factors, e.g., imperfect expectations about future health risks and costs. These findings imply that conclusions about optimal copayment levels depend critically on the welfare criterion. The treatment-based approach, grounded in realized outcomes, points to higher copayments as more cost-effective. In contrast, incorporating households' valuation highlights additional dimensions of value that favor lower copayments.

6 Conclusion

This paper studies how copayments shape the benefits and costs of health insurance in low-income settings. Using a randomized controlled trial in rural Uganda, we provide hospital-based health insurance under different copayment levels and combine experimental treatment effects with incentive-compatible measures of insurance valuation and detailed administrative data on insurer costs. This design allows us to examine not only how copayments affect healthcare utilization and health outcomes, but also how they shape selection into insurance and, ultimately, the net benefits of alternative insurance contracts.

We find that access to insurance substantially increases the use of high-quality hospital care, improves health, and reduces costly risk-coping behaviors such as borrowing and asset sales. These effects are economically meaningful and stand in contrast to much of the existing experimental literature on health insurance in low-income countries, which has often found limited health gains. Our results

[15] Importantly, the "high" copayment in our experiment remains substantially below the average cost of an uninsured visit (USD 2 vs. USD 8). While net benefits are increasing in copayments over the range we study, the fact that they are positive indicates that further increases in copayments would, at some point, reduce net benefits.

[16] Define the revealed-preference based net benefits as $NB(x,c)^{RP} = \sum_{i:T_i(x,c)=1} V(i,c) - \big(E(i,c) - C(i,c)\big)$, where $V(i,c)$ denotes the valuation of insurance with copayment c for individual i, and the rest of the terms are defined as in the previous equation. Appendix Figure 5 shows that, under the revealed preference approach, lower copayments generate higher welfare.

suggest that when insurance expands access to genuinely higher-quality care, the potential for health and welfare improvements is considerably larger.

Copayments induce sizable behavioral responses. Lower copayments lead to higher insurance take-up and much greater utilization of hospital care, conditional on insurance take-up. At the same time, we find that the health improvements generated by insurance do not vary meaningfully across copayment levels: households with zero copayments are not healthier, on average, than those facing positive cost sharing. We show that this pattern arises in part because lower copayments draw relatively healthier individuals into care, even for similar health events, reducing the marginal health returns of additional visits. As a result, copayments primarily operate on extensive margins of coverage and utilization rather than on the intensity of health benefits conditional on treatment.

These findings have important implications for insurance design. Using a revealed-preference approach that combines households' valuation of insurance with insurer costs, we show that low-copayment contracts generate the highest net benefits. Households place higher value on coverage that minimizes out-of-pocket payments at the point of care, even after an experimental year of experience with the product. This valuation response more than offsets the higher costs associated with increased enrollment and utilization. From this perspective, generous coverage with low copayments is socially optimal.

In contrast, when net benefits are computed using experimentally estimated health and financial outcomes rather than households' valuation, higher copayments perform similarly or better. Because lower copayments do not generate additional health gains but do increase insurer costs, outcome-based calculations favor more cost sharing. The divergence between these two approaches highlights a fundamental tension in insurance design: whether policy should be guided primarily by realized health impacts or by the value households place on financial protection, access, and peace of mind.

The analysis presented in this paper illustrates the importance of integrating experimental variation in insurance design with direct measures of household preferences and detailed data on provider costs. This combination allows policymakers to move beyond estimating the effects of insurance alone and toward a fuller assessment of both the value households place on coverage and the resources required to provide it. As health insurance continues to expand and private providers play a growing role in publicly financed systems across low- and middle-income countries, carefully balancing these valuation–cost trade-offs will be essential for building insurance programs that are both fiscally viable and welfare enhancing.

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Tables

Table 1: Product Knowledge and Satisfaction

	C	T0	T1	T2	N
	(1)	(2)	(3)	(4)	(5)
Health insurance ownership (yes/no)	0.05	0.88	0.88	0.88	2,793
Copayment USD 0 (yes/no)		0.74	0.03	0.03	2,007
Copayment USD 1.25 (yes/no)		0.20	0.93	0.05	2,007
Copayment USD 2.50 (yes/no)		0.05	0.04	0.90	2,007
Usage (yes/no)		0.49	0.40	0.35	1,619
Satisfaction (1 to 5, 5 = highest)		4.14	4.09	3.97	2,016
Problems (yes/no)		0.10	0.08	0.08	2,016

Notes: This table reports product knowledge and satisfaction among treatment groups. The data are pooled from the midline and endline periods and are at the household level. The first row shows the proportion of households that report owning any health insurance (the study health insurance or any other health insurance). The next three rows show the proportion correctly identifying their copayment level (conditional on reporting insurance ownership). Usage indicates whether the household tried to use the insurance at any point; this variable was only collected at endline. Satisfaction is measured on a 1 to 5 scale. The variable problems indicates whether the household encountered difficulties using the insurance.

Table 2: Healthcare Seeking by Facility Type

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
visits: insured hospital (nr)	0.05	0.07***	18,440	0.09***	0.07***	0.04***	0.00***
	(0.22)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.08	0.06***	18,440	0.09***	0.06***	0.03***	0.00***
	(0.29)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.11	-0.03***	18,440	-0.03***	-0.02	-0.04***	0.07*
	(0.35)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.07	-0.01	18,440	-0.01	-0.01	-0.01	0.88
	(0.25)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.15	-0.04***	18,440	-0.04***	-0.03**	-0.04***	0.91
	(0.41)	(0.01)		(0.01)	(0.01)	(0.01)	

Notes: This table reports healthcare-seeking effects by facility type. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Only insured household members are included in the sample. Any hospital includes insured hospitals. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Visits are winsorized at the 99th percentile. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table 3: Healthcare Seeking Overall

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.41	-0.02*	18,440	-0.00	-0.02	-0.04***	0.02**
	(0.49)	(0.01)		(0.01)	(0.01)	(0.01)	
facility visits (nr)	0.51	-0.03**	18,440	-0.01	-0.03	-0.06***	0.01**
	(0.70)	(0.02)		(0.02)	(0.02)	(0.02)	
routine visits (yes/no)	0.06	-0.00	18,983	-0.00	-0.00	-0.01	0.35
	(0.25)	(0.00)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	4.65	-0.28***	18,440	-0.21***	-0.32***	-0.31***	0.27
	(12.34)	(0.06)		(0.07)	(0.07)	(0.08)	

Notes: This table reports healthcare-seeking effects overall. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Only insured household members are included in the sample. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table 4: Insurer Cost

	Mean all	Mean T0	β_1(T1)	β_2(T2)	N
outpatient: gross insurer cost (USD)	2.81	3.82	-1.29***	-1.80***	7,849
	(8.15)	(9.46)	(0.30)	(0.28)	
outpatient: copayment (USD)	0.68	0.56	0.14*	0.22***	7,849
	(2.52)	(2.35)	(0.07)	(0.08)	
outpatient: net insurer cost (USD)	2.02	3.10	-1.38***	-1.96***	7,849
	(6.14)	(7.68)	(0.24)	(0.22)	

Notes: This table reports insurer costs, using the administrative data. Equation B.1 describes the regression. The data are at the patient level. Only insured household members are included in the sample. The variables in USD are summed over all visits. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

$$y_{i,h,j} = \alpha + \beta_1 T1_h + \beta_2 T2_h + \mu_j + \epsilon_{i,h,j} \tag{7}$$

Table 5: Risk Coping

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
risk coping index (std)	0.00	-0.15***	5,513	-0.15***	-0.17***	-0.14***	0.86
	(1.00)	(0.04)		(0.04)	(0.04)	(0.04)	
foregone healthcare (yes/no)	0.30	-0.04***	5,448	-0.05***	-0.05***	-0.03	0.47
	(0.46)	(0.01)		(0.02)	(0.02)	(0.02)	
sold assets (yes/no)	0.20	-0.05***	5,449	-0.05***	-0.04***	-0.05***	0.84
	(0.40)	(0.01)		(0.02)	(0.02)	(0.02)	
reduced food consumption (yes/no)	0.13	-0.03**	5,449	-0.02**	-0.03**	-0.03**	0.98
	(0.34)	(0.01)		(0.01)	(0.01)	(0.01)	
saved past year (yes/no)	0.83	-0.01	2,714	-0.00	-0.02	-0.01	0.61
	(0.37)	(0.02)		(0.02)	(0.02)	(0.02)	
savings current amount (USD)	100.01	-0.14*	2,714	-0.01	-0.22**	-0.19*	0.10
	(184.87)	(0.08)		(0.10)	(0.10)	(0.10)	
loan past year (yes/no)	0.82	-0.04**	2,720	-0.02	-0.04**	-0.04**	0.51
	(0.38)	(0.02)		(0.02)	(0.02)	(0.02)	
loan for health (yes/no)	0.32	-0.03*	2,719	-0.03	-0.04	-0.04	0.90
	(0.47)	(0.02)		(0.02)	(0.02)	(0.02)	
loan amount past year (USD)	245.48	-0.15*	2,720	-0.02	-0.24**	-0.20**	0.07*
	(481.19)	(0.08)		(0.10)	(0.10)	(0.10)	

Notes: This table reports risk coping effects. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household level. Variables in rows 5 to 9 are only collected in the endline survey. The risk coping index averages over whether households used any of the following coping strategies: taking loans (from moneylenders, banks, family, friends, or groups), receiving remittances, selling assets, reducing consumption (food or other), increasing labor supply, or having children work or miss school. Savings and loan amounts are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey, except savings and loan questions in rows 5 to 9, which refer to the past year. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table 6: Health Outcomes

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	-0.00	0.08***	18,983	0.07***	0.10***	0.07**	0.69
	(1.00)	(0.02)		(0.03)	(0.03)	(0.03)	
sick days (nr)	9.12	-1.19**	18,979	-1.14**	-1.01*	-1.41**	0.78
	(23.28)	(0.46)		(0.56)	(0.56)	(0.58)	
work days missed (nr)	4.36	-0.65***	10,011	-0.58**	-0.58**	-0.81***	0.61
	(8.49)	(0.23)		(0.27)	(0.27)	(0.27)	
school days missed (nr)	1.48	-0.35***	7,583	-0.22*	-0.46***	-0.37***	0.07*
	(3.74)	(0.10)		(0.12)	(0.11)	(0.12)	
mental health index (std)	-0.00	0.04	9,219	0.05	0.01	0.05	0.39
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry index (std)	0.00	-0.09***	5,449	-0.12***	-0.08*	-0.07*	0.33
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry: health (std)	-0.00	-0.09***	5,449	-0.12***	-0.07	-0.08**	0.41
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry: medical expenses (std)	0.00	-0.11***	5,449	-0.14***	-0.10**	-0.09**	0.41
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	

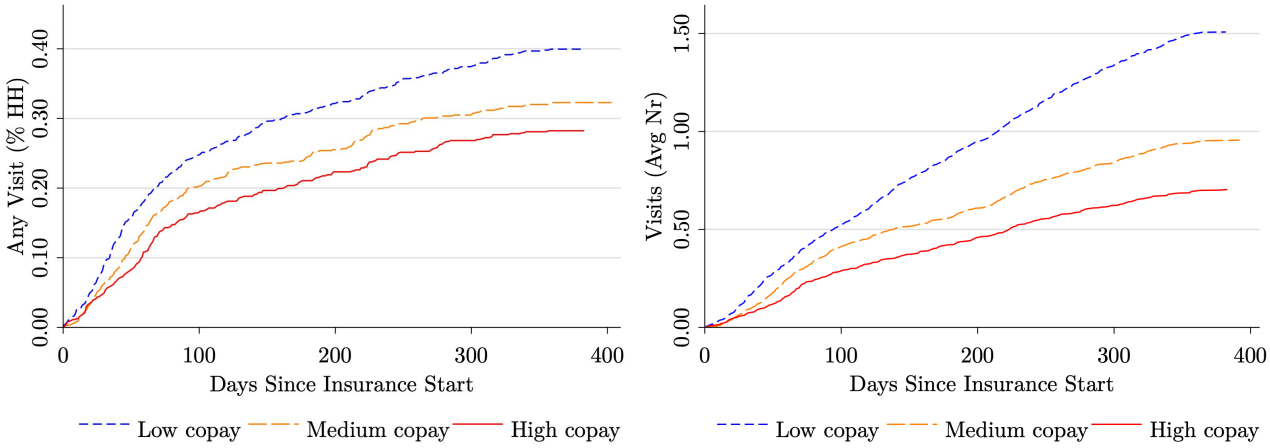
Notes: This table reports health outcome effects. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level except for worry-related variables; these are collected at the household level. For household-member level variables, only insured members are included in the sample. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Worries are measured by asking "How worried are you about having health problems/accidents/money for medical treatment/money for basic needs for you or your family members?". The worry index is based on these four items. Days are winsorized at the 99th percentile. Health status ranking and worry-related questions refer to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table 7: Net benefits

	Mean C	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1	T0=T2	T1=T2	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Medical expenses	8.16	-1.15**	-2.14***	-2.11***	0.05	0.06	0.96	0.09
		(0.54)	(0.50)	(0.52)				
Sick days	33.45	-3.52*	-2.92	-4.89**	0.77	0.51	0.34	0.62
		(2.06)	(2.06)	(2.08)				
Insuree net health costs	41.74	-4.79**	-5.12**	-6.96***	0.88	0.34	0.41	0.58
		(2.30)	(2.29)	(2.32)				
Insurer net costs	0.00	3.06***	1.68***	1.12***	0.00	0.00	0.00	0.00
		(0.19)	(0.13)	(0.10)				
Total net health costs	41.78	-1.71	-3.46	-5.89**	0.44	0.07	0.29	0.19
		(2.33)	(2.30)	(2.33)				

Notes: This table reports monetary equivalents of outcomes. Medical expenses are the total medical expenses borne by the insuree, while sick days is the monetary equivalent of the cost of their sick days, valuing labor at $2 per day. Both variables are summed across midline and endline surveys. Insuree net health costs is the sum of these two variables. Insurer net costs are the uninsured price of the healthcare provision provided to the insuree at the hospital, net of any copayments they paid, from the administrative data. Total net health costs are the insuree net health costs plus the insurer net health costs. The data are at the household-member level and only insured members are included in the sample. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Figure 1: Healthcare Seeking at Insured Hospitals (Administrative Data)

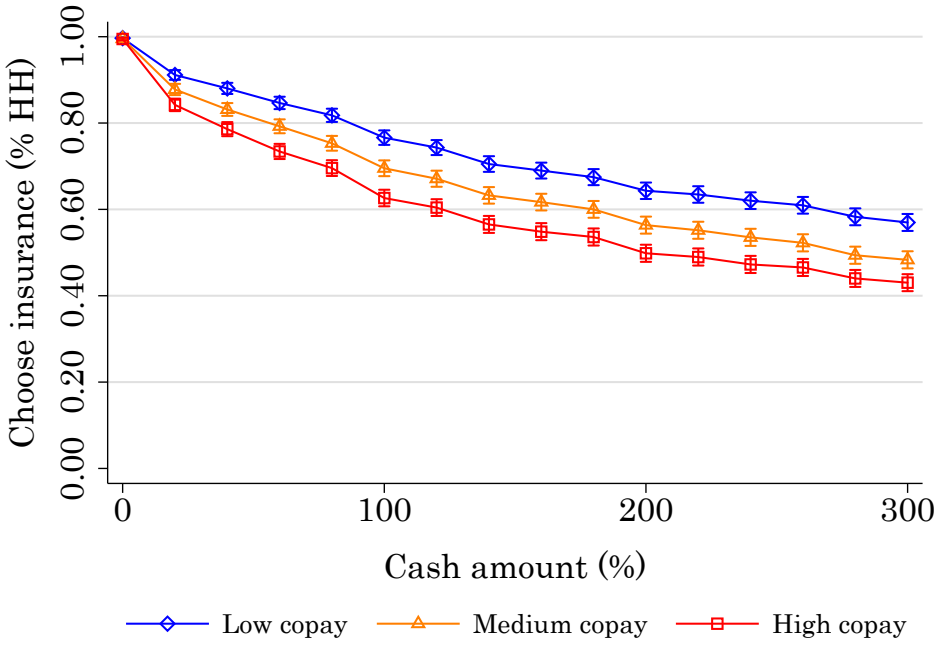


(a) Any Visit

(b) Average Number of Visits

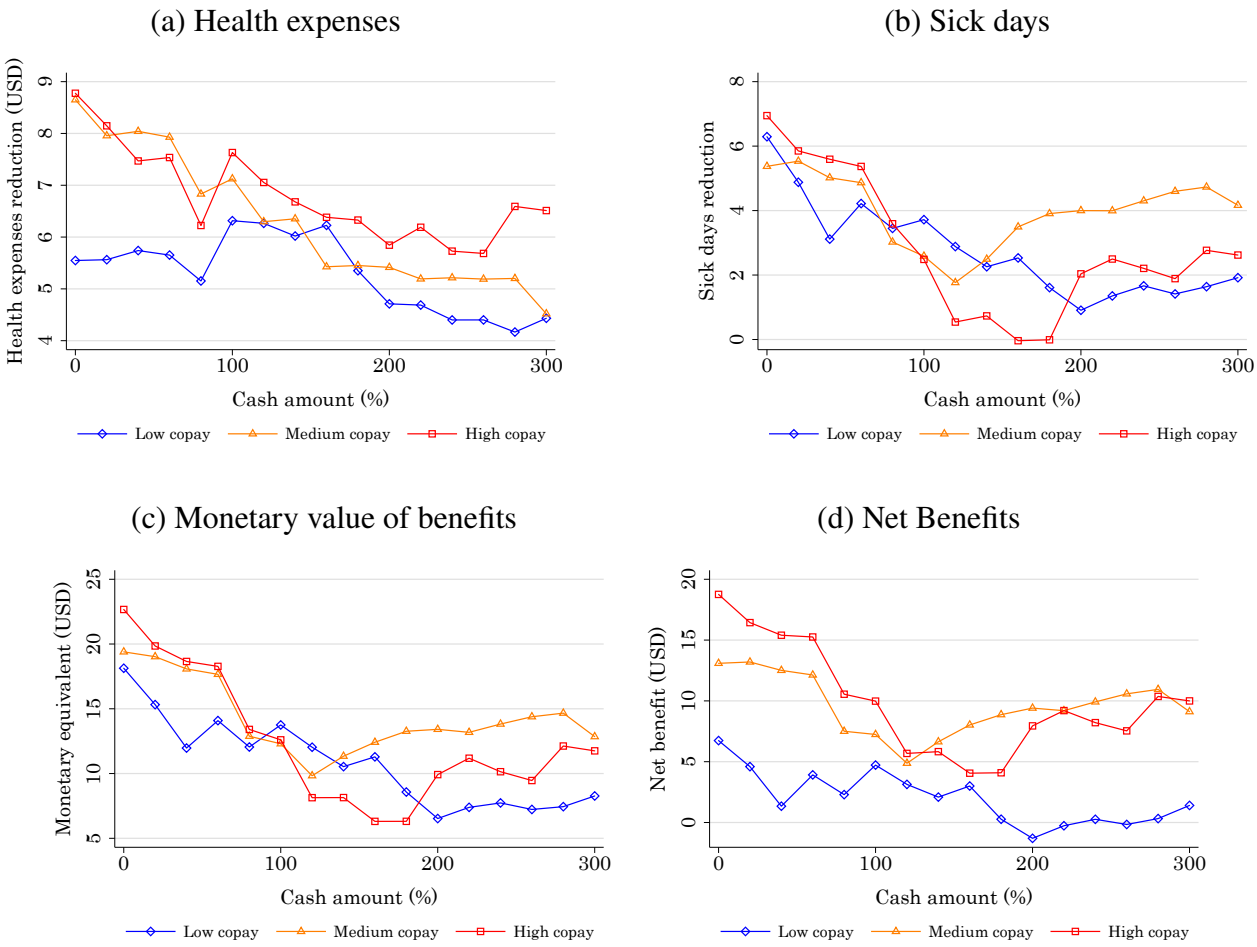
Notes: This figure describes outpatient visits recorded in the administrative hospital data. Figure 1a depicts the share of households with an outpatient visit at a given point in time since the insurance start. Figure 1b depicts the average number of outpatient visits per household, at a given point in time since the insurance start. The short-dashed blue lines depict arm T0 (low copayment), the long-dashed yellow lines arm T1 (medium copayment), and the solid red lines arm T2 (high copayment).

Figure 2: WTA by Copay



Notes: This figure shows the proportion of households choosing insurance over cash (willingness to accept) at different cash amounts, separately for three copayment levels: low (USD 0), medium (USD 1.25), and high (USD 2.50). The x-axis shows the cash amount as a percentage of the standard premium (USD 7.50 per person, or USD 30 for four household members). The y-axis shows the fraction of households preferring insurance to the cash equivalent at each point.

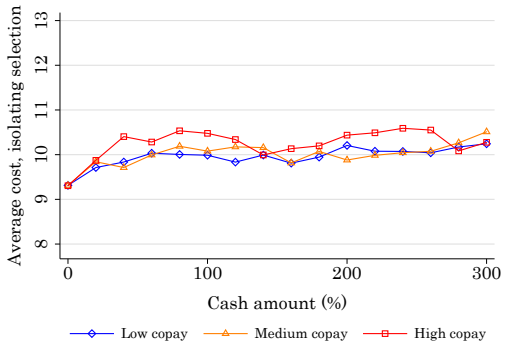
Figure 3: Simulated Outcomes



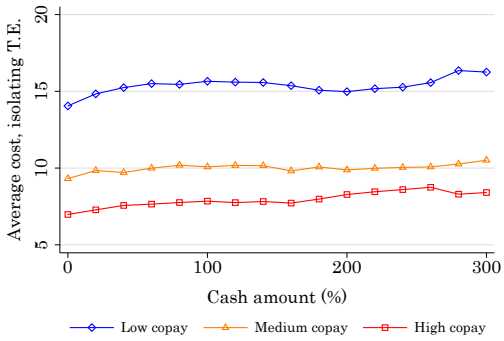
Notes: This figure shows the simulated treatment effects, across all households in the sample, when households are offered the choice between insurance with the respective copay and the respective cash amount. (a) shows the treatment effect on the number of sick days per household over the year. (b) shows the treatment effect on the total annual health expenditure of the household. (c) shows the monetary equivalent of these two treatment effects, valuing a sick day at $2. (d) shows net benefit derived from treatment effects, which is the monetary equivalent of the effects on days sick and total healthcare expenditure, minus net costs to the insurer of the insured care, for households who choose insurance, and zero for households who do not (Equation 6).

Figure 4: Insurer Costs

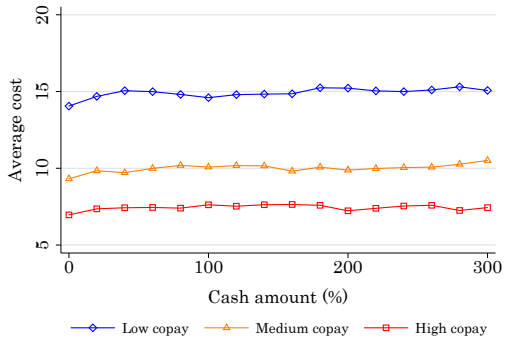
(a) Average cost curves isolating selection



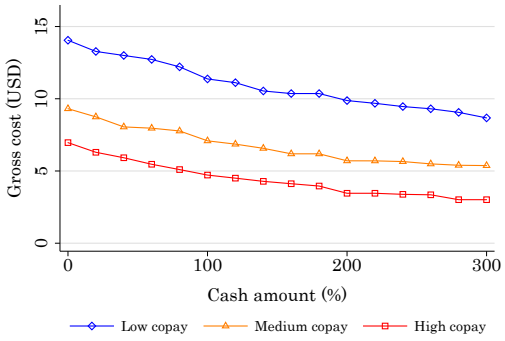
(b) Average cost curves isolating treatment effects



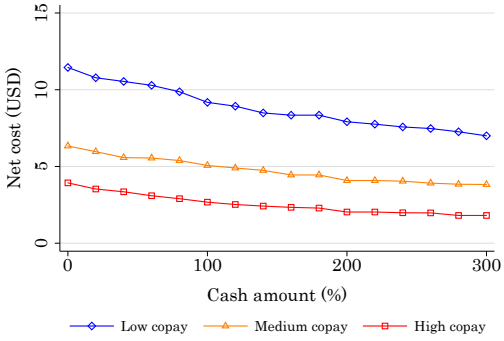
(c) Average cost curves



(d) Simulated gross costs

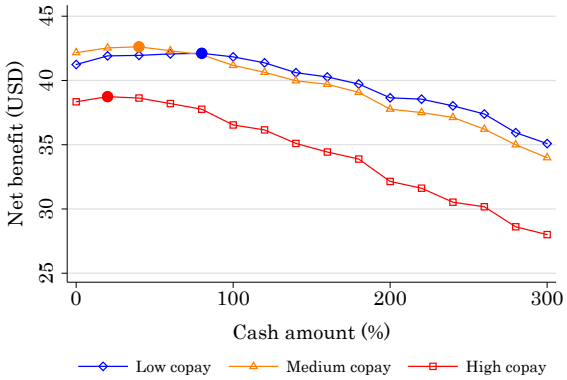


(e) Simulated net costs



Notes: This figure shows costs to the insurer of the healthcare provided to the insured. (a)-(c) show average gross costs per household, among insured households. (a) isolates selection effects of copays in, showing average costs among households choosing insurance at the respective copay over the respective cash amount, when given insurance with the medium copay (USD 1.25). (b) isolates treatment effects of copays, showing average costs among households choosing insurance at the medium copay (USD 1.25) over the respective cash amount, when given insurance with the respective copay. (c) shows average costs among households choosing insurance at the respective copay over the respective cash amount, when given insurance with the respective copay. (d)-(e) show average costs per household, among all households in the sample, where insurer costs for a given household are set to zero if they choose the respective cash amount over insurance with the respective copay. (d) shows gross costs, and (e) shows costs net of copayments.

Figure 5: Net Benefits- Revealed Preferences



Notes: This figure shows net benefits of insurance provision, across all households in the sample, when households are offered the choice between insurance with the respective copay and the respective cash amount. Net benefits are derived from revealed preference, which is the valuation of the insurance minus net costs to the insurer of the insured care for households who choose insurance, and zero for households who do not.

Appendix A: Treatment Effects of Insurance (Survey Data)

Tables

Table A.1: Healthcare Facility Characteristics

	Clinic (villages)	Level 1 (villages)	Level 2 (one) (subcounty)	Hospital (beyond) (district)	Insured (multiple) (subcounties)
N facilities (nr)	93	29	50	19	3
share public (%)	5.21	50.74	55.58	47.80	2.25
available: general examination (%)	52.34	48.89	59.52	87.75	94.77
available: specialist (%)	16.09	9.66	22.36	70.60	91.75
available: tests (%)	91.09	87.75	96.33	98.51	98.83
available: drugs (%)	98.50	94.10	99.09	98.06	99.48
available: x-ray (%)	8.35	4.21	12.83	66.29	86.32
available: inpatient (%)	54.26	39.79	81.38	83.87	96.54
available: procedures (%)	12.53	9.80	21.66	75.88	93.02
free care (%)	5.34	52.45	54.22	44.50	1.95
free care in practice (%)	69.68	89.86	77.79	45.35	21.01
insurance plan (%)	0.03	0.00	0.49	4.05	75.33
problems: closed (%)	6.55	9.01	2.62	0.47	0.30
problems: waiting time (%)	6.23	18.79	22.64	17.65	14.84
problems: no doctor/nurse (%)	7.71	13.62	9.45	1.76	1.47
problems: not well trained (%)	3.46	2.90	1.67	0.96	0.55
problems: lack equipment (%)	18.01	17.41	13.67	5.36	1.01
problems: lack drugs (%)	14.99	40.55	38.31	23.68	3.20
problems: cleanliness (%)	0.93	5.01	3.77	4.05	1.24
problems: additional/unexpected costs (%)	3.86	1.22	4.26	7.88	11.62
problems: overcharges (%)	22.31	6.88	9.52	19.05	37.54
reach by walking (%)	54.84	50.25	27.96	4.75	7.15
transport time (minutes)	27.62	25.05	31.05	105.43	37.50
transport cost (USD)	0.50	0.39	0.77	3.91	1.41
go for mild illness (e.g., headache) (%)	23.43	17.96	15.39	1.40	5.16
go for mild malaria (%)	24.92	16.61	22.74	5.22	19.08
go for severe malaria (%)	11.56	9.41	15.74	15.62	37.39

Notes: This table reports summary statistics for different health care facility types. These are reported based on household-level averages. Households were asked about multiple facilities. N facilities indicates how many facilities households were interviewed about in this category. We exclude facilities with fewer than five households interviewed. Problems indicate whether the household had any problems at this facility.

Table A.2: Baseline Household Summary Statistics

	Mean (1)	SD (2)	Min (3)	Median (4)	Max (5)	N (6)
Household members (nr)	5.70	2.40	1.00	5.00	18.00	2,809
Adults 18+ (nr)	2.64	1.25	1.00	2.00	10.00	2,809
Has children <18 (yes/no)	0.91	0.28	0.00	1.00	1.00	2,809
Children <18 (nr)	3.06	1.95	0.00	3.00	13.00	2,809
Students (nr)	2.95	1.97	0.00	3.00	13.00	2,809
Insured members (nr)	3.60	0.74	1.00	4.00	4.00	2,809
Insured adults (nr)	1.89	0.32	1.00	2.00	2.00	2,809
Insured children (nr)	1.71	0.62	0.00	2.00	3.00	2,809
Female (%)	0.53	0.20	0.00	0.50	1.00	2,809
Age of adults (years)	39.69	11.30	20.00	37.00	94.00	2,809
Age of children (years)	9.00	3.58	0.00	9.14	17.00	2,570
HH head: Farmer (yes/no)	0.57	0.50	0.00	1.00	1.00	2,809
HH head: Self-employed (yes/no)	0.22	0.41	0.00	0.00	1.00	2,809
HH head: Salaried employment (yes/no)	0.11	0.32	0.00	0.00	1.00	2,809
HH head: No formal education (yes/no)	0.10	0.31	0.00	0.00	1.00	2,809
HH head: Primary school (yes/no)	0.46	0.50	0.00	0.00	1.00	2,809
HH head: High school (yes/no)	0.26	0.44	0.00	0.00	1.00	2,809
HH head: College/university (yes/no)	0.17	0.37	0.00	0.00	1.00	2,809
Adult had work absence past month (yes/no)	0.48	0.38	0.00	0.50	1.00	2,809
Work days off (nr)	3.54	4.54	0.00	2.00	30.00	2,809
Work days off - health (nr)	1.57	3.13	0.00	0.00	30.00	2,809
Student had school absence past month (yes/no)	0.30	0.38	0.00	0.00	1.00	2,461
School days off (nr)	1.17	2.14	0.00	0.00	30.00	2,461
School days off - health (nr)	0.65	1.52	0.00	0.00	30.00	2,461
Earth/mud floor (yes/no)	0.41	0.49	0.00	0.00	1.00	2,809
Has electricity (yes/no)	0.30	0.46	0.00	0.00	1.00	2,809
Has piped drinking water (yes/no)	0.50	0.50	0.00	0.00	1.00	2,809
Insufficient water access (yes/no)	0.25	0.44	0.00	0.00	1.00	2,809
Worried about food (yes/no)	0.58	0.49	0.00	1.00	1.00	2,809
Skipped meals (yes/no)	0.40	0.49	0.00	0.00	1.00	2,809
Has insurance at baseline (yes/no)	0.00	0.03	0.00	0.00	1.00	2,809
Trust in insurance (1 to 5, 5 = highest)	3.75	0.76	1.00	4.00	5.00	2,809
Reason no insurance: Unaware of insurance (yes/no)	0.64	0.48	0.00	1.00	1.00	2,809
Reason no insurance: Too expensive (yes/no)	0.34	0.47	0.00	0.00	1.00	2,809

Notes: This table presents baseline characteristics at the household level. Insured members refer to members who receive insurance through our study. Education refers to whether the members have any education in this category; the education does not have to be completed. Gender, age, and absence variables are the averages across household members for a given household. Work absence refers to the past month and is conditional on adults. School absence refers to the past month and is conditional on students below the age of 18.

Table A.3: Baseline Characteristics by Treatment Group

	Mean C (1)	Mean C (not std) (2)	β(T) (3)	N (4)	β_1(T0) (5)	β_2(T1) (6)	β_3(T2) (7)	T0=T1=T2 (8)
health status ranking today (1 to 5, 5=highest, std)	-0.00	4.19	-0.03	10,104	-0.05	-0.04	-0.00	0.39
	(1.00)	(0.87)	(0.03)		(0.04)	(0.04)	(0.04)	
sick days (nr)	7.04		0.23	10,102	0.26	0.25	0.18	0.99
	(15.27)		(0.41)		(0.51)	(0.50)	(0.52)	
work days missed (nr)	3.95		0.15	5,302	0.08	0.21	0.16	0.94
	(9.18)		(0.31)		(0.38)	(0.37)	(0.39)	
school days missed (nr)	1.80		0.06	3,994	0.04	-0.08	0.24	0.42
	(5.06)		(0.20)		(0.24)	(0.23)	(0.26)	
mental health index (1 to 5, 5=highest, std)	0.00	4.50	0.01	10,104	-0.03	-0.01	0.08**	0.01***
	(1.00)	(0.70)	(0.03)		(0.04)	(0.04)	(0.04)	
worry index (1 to 4, 4=highest, std)	-0.00	3.21	-0.02	2,809	0.02	-0.06	-0.03	0.26
	(1.00)	(0.68)	(0.04)		(0.05)	(0.05)	(0.05)	
worry: health (1 to 4, 4=highest, std)	-0.00	3.07	0.03	2,809	0.08	0.01	-0.01	0.17
	(1.00)	(0.96)	(0.04)		(0.05)	(0.05)	(0.05)	
worry: medical expenses (1 to 4, 4=highest, std)	-0.00	3.33	-0.01	2,809	0.01	-0.03	-0.00	0.64
	(1.00)	(0.85)	(0.04)		(0.05)	(0.05)	(0.05)	
any facility visit (yes/no)	0.12		0.01*	10,102	0.03***	0.00	0.00	0.01***
	(0.32)		(0.01)		(0.01)	(0.01)	(0.01)	
facility visits (nr)	0.13		0.02**	10,102	0.05***	0.01	0.01	0.02**
	(0.37)		(0.01)		(0.01)	(0.01)	(0.01)	
visits: insured hospital (nr)	0.02		0.01	10,102	0.01**	0.01	0.00	0.10
	(0.14)		(0.00)		(0.00)	(0.00)	(0.00)	
visits: any hospital (nr)	0.03		0.01	10,102	0.01**	0.01	-0.00	0.05**
	(0.17)		(0.00)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.02		-0.00	10,102	0.00	-0.01	-0.00	0.26
	(0.14)		(0.00)		(0.00)	(0.00)	(0.00)	
routine visits (yes/no)	0.05		0.00	10,059	-0.00	-0.00	0.01	0.20
	(0.21)		(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	1.74		0.18*	10,102	0.33***	0.11	0.06	0.03**
	(6.85)		(0.09)		(0.11)	(0.12)	(0.12)	
risk coping index (0 to 1, 1=highest, std)	0.00	0.08	0.08*	2,809	0.11*	0.08	0.06	0.77
	(1.00)	(0.12)	(0.05)		(0.06)	(0.06)	(0.05)	
sold assets (yes/no)	0.02		0.00	2,809	-0.00	0.01	0.00	0.50
	(0.13)		(0.01)		(0.01)	(0.01)	(0.01)	
reduced food consumption (yes/no)	0.03		0.01	2,807	0.02**	0.01	0.00	0.12
	(0.18)		(0.01)		(0.01)	(0.01)	(0.01)	
saved past year (yes/no)	0.66		0.03	2,787	0.03	0.02	0.04	0.73
	(0.47)		(0.02)		(0.02)	(0.02)	(0.02)	
savings current amount (USD)	61.52		0.05	2,787	0.06	-0.13	0.21*	0.01**
	(128.55)		(0.09)		(0.11)	(0.11)	(0.11)	
loan past year (yes/no)	0.76		0.02	2,809	0.03	0.01	0.01	0.62
	(0.43)		(0.02)		(0.02)	(0.02)	(0.02)	
loan for health (yes/no)	0.29		0.01	2,809	0.02	0.02	-0.01	0.32
	(0.45)		(0.02)		(0.02)	(0.02)	(0.02)	
loan amount past year (USD)	203.16		0.11	2,808	0.08	0.09	0.15	0.78
	(396.76)		(0.08)		(0.10)	(0.10)	(0.10)	

Notes: This table presents baseline characteristics. Column (2) reports the non-standardized control mean. Equation 1 corresponds to Column (3), and Equation 2 to Columns (5)-(8). Only insured household members are included in the sample. A description of the variables is provided in the respective main outcome Tables 2, 3, 5, and 6. Sick days and days missed refer to the past year. Similarly, routine controls, risk coping, and savings and loans questions refer to the past year. Data on facility visits, total health expenses, mental health index, and worries are collected for the past month. For outcomes measured in USD, we estimate a Poisson regression. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.4: Baseline Characteristics by Treatment Group (Excluding T0)

	Mean C (1)	Mean C (not std) (2)	β(T) (3)	N (4)	β_2(T1) (5)	β_3(T2) (6)	T1=T2 (7)
health status ranking today (1 to 5, 5=highest, std)	-0.00	4.20	-0.02	7,555	-0.04	-0.00	0.28
	(1.00)	(0.87)	(0.03)		(0.04)	(0.04)	
sick days (nr)	7.04		0.22	7,554	0.25	0.17	0.88
	(15.27)		(0.44)		(0.50)	(0.52)	
work days missed (nr)	3.95		0.19	3,963	0.22	0.16	0.89
	(9.18)		(0.33)		(0.37)	(0.39)	
school days missed (nr)	1.80		0.07	2,980	-0.08	0.24	0.19
	(5.06)		(0.21)		(0.23)	(0.26)	
mental health index (1 to 5, 5=highest, std)	0.00	4.51	0.03	7,555	-0.01	0.08**	0.02**
	(1.00)	(0.69)	(0.03)		(0.04)	(0.04)	
worry index (1 to 4, 4=highest, std)	-0.00	3.20	-0.05	2,101	-0.06	-0.03	0.59
	(1.00)	(0.68)	(0.04)		(0.05)	(0.05)	
worry: health (1 to 4, 4=highest, std)	-0.00	3.05	0.00	2,101	0.01	-0.01	0.65
	(1.00)	(0.96)	(0.04)		(0.05)	(0.05)	
worry: medical expenses (1 to 4, 4=highest, std)	-0.00	3.33	-0.02	2,101	-0.03	-0.00	0.55
	(1.00)	(0.86)	(0.04)		(0.05)	(0.05)	
any facility visit (yes/no)	0.12		0.00	7,554	0.00	0.00	0.91
	(0.32)		(0.01)		(0.01)	(0.01)	
facility visits (nr)	0.13		0.01	7,554	0.01	0.01	0.92
	(0.37)		(0.01)		(0.01)	(0.01)	
visits: insured hospital (nr)	0.02		0.00	7,554	0.01	0.00	0.33
	(0.14)		(0.00)		(0.00)	(0.00)	
visits: any hospital (nr)	0.03		0.00	7,554	0.01	-0.00	0.16
	(0.17)		(0.00)		(0.01)	(0.01)	
visits: clinic (nr)	0.02		-0.00	7,554	-0.01	-0.00	0.46
	(0.14)		(0.00)		(0.00)	(0.00)	
routine visits (yes/no)	0.05		0.00	7,526	-0.00	0.01	0.20
	(0.21)		(0.01)		(0.01)	(0.01)	
total health expenses (USD)	1.74		0.09	7,554	0.12	0.06	0.61
	(6.85)		(0.10)		(0.12)	(0.12)	
risk coping index (0 to 1, 1=highest, std)	0.00	0.08	0.07	2,101	0.08	0.06	0.83
	(1.00)	(0.11)	(0.05)		(0.06)	(0.05)	
sold assets (yes/no)	0.02		0.01	2,101	0.01	0.00	0.48
	(0.13)		(0.01)		(0.01)	(0.01)	
reduced food consumption (yes/no)	0.03		0.01	2,099	0.01	0.00	0.35
	(0.18)		(0.01)		(0.01)	(0.01)	
saved past year (yes/no)	0.66		0.03	2,082	0.02	0.04	0.43
	(0.47)		(0.02)		(0.02)	(0.02)	
savings current amount (USD)	61.52		0.05	2,082	-0.14	0.21*	0.00***
	(128.55)		(0.10)		(0.11)	(0.11)	
loan past year (yes/no)	0.76		0.01	2,101	0.01	0.01	0.96
	(0.43)		(0.02)		(0.02)	(0.02)	
loan for health (yes/no)	0.29		0.00	2,101	0.02	-0.01	0.22
	(0.45)		(0.02)		(0.02)	(0.02)	
loan amount past year (USD)	203.16		0.12	2,100	0.09	0.15	0.56
	(396.76)		(0.09)		(0.10)	(0.10)	

Notes: This table presents baseline characteristics, excluding households in treatment arm T0. Column (2) reports the non-standardized control mean. Equation 1 corresponds to Column (3), and Equation 2 to Columns (5)-(7). Only insured household members are included in the sample. A description of the variables is provided in the respective main outcome Tables 2, 3, 5, and 6. Sick days and days missed refer to the past year. Similarly, routine controls, risk coping, and savings and loans questions refer to the past year. Data on facility visits, total health expenses, mental health index, and worries are collected for the past month. For outcomes measured in USD, we estimate a Poisson regression. The last column tests for equality between the T1 and T2 treatment coefficients, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.5: Baseline Health Status Conditional on Visit to Insured Hospital

	C	T0	T1	T2
	(1)	(2)	(3)	(4)
health status ranking at baseline	-0.28	-0.23	-0.44	-0.29
conditional on visit to insured hospital	(1.14)	(1.11)	(1.07)	(1.05)
T0=T1 p-value	0.01***			
T1=T2 p-value	0.44			
T0=T2 p-value	0.07*			

Notes: This table reports health status ranking today at time of the baseline survey, conditional on having any visit to an insured hospital at midline or endline. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?", where 5 is the highest value. The table also tests for the difference in means between T0 and T1, T1 and T2, and T0 and T2.

Table A.6: Comparison to Other Health Insurance Studies

	Country	Insurance Provider	Time Period	Research Method	OOPE Impact	Risk of Catastrophic Expenditure	Healthcare Utilization	Health
Karan et al. (2017)	India	Gov	2008-12	DD	not sig.	not sig.	N/A	N/A
Fan et al. (2012)	India	Public	2007-08	DD	not sig.	not sig.	N/A	N/A
Powell-Jackson et al. (2014)	Ghana	Community	2004	RCT	-30%***	N/A	+0.3 visits**	not sig.
King et al. (2009)	Mexico	Gov	2005-06	RCT	-16%	-1.9pp**	not sig.	not sig.
Conti and Ginja (2023)	Mexico	Gov	2005-10	DD	N/A	N/A	heterogenous	heterogenous
Levine et al. (2016)	Cambodia	NGO	2007-08	RCT	N/A	-1.8pp**	not sig.	not sig.
Fink et al. (2013)	Burkina Faso	Community	2004-06	RCT	not sig.	-3.9pp**	not sig.	not sig.
Malani et al. (2024)	India	Gov	2013-19	RCT	N/A	N/A	not sig.	not sig.
Haushofer et al. (2020)	Kenya	Private	2011-13	RCT	not sig.	N/A	not sig.	not sig.
Gruber et al. (2023)	China	Public	2004-10	DD	not sig.	N/A	+8.4pp**	+2.7%** life exp.

Notes: This table compares findings from selected studies estimating impacts of health insurance on out-of-pocket expenditure (OOPE), catastrophic health expenditure, healthcare utilization, and health outcomes. This table is obtained from Dupas and Jain (forthcoming), Table 1 in their paper.

Table A.7: Selection on baseline covariates

	WTA Low	WTA Medium	WTA High	N
	(1)	(2)	(3)	(4)
Household members (nr)	0.02	0.02	-0.00	2,438
	(0.04)	(0.04)	(0.04)	.
Adults 18+ (nr)	0.04**	0.05**	0.05**	2,438
	(0.02)	(0.02)	(0.02)	.
Children <18 (nr)	-0.02	-0.03	-0.05*	2,438
	(0.03)	(0.03)	(0.03)	.
Age of adults (years)	0.31	0.27	0.31	2,438
	(0.20)	(0.19)	(0.19)	.
Age of children (years)	0.07	0.08	0.10*	2,231
	(0.06)	(0.06)	(0.06)	.
HH head: Primary school (yes/no)	-0.02**	-0.03***	-0.02**	2,438
	(0.01)	(0.01)	(0.01)	.
HH head: High school (yes/no)	0.02**	0.01	0.01	2,438
	(0.01)	(0.01)	(0.01)	.
Work days off sick (nr)	-0.02	0.01	0.04	2,438
	(0.08)	(0.08)	(0.08)	.
School days off sick (nr)	0.04	0.05	0.07*	2,135
	(0.04)	(0.04)	(0.04)	.
Earth/mud floor (yes/no)	-0.03***	-0.03***	-0.04***	2,438
	(0.01)	(0.01)	(0.01)	.
Has electricity (yes/no)	0.03***	0.03***	0.04***	2,438
	(0.01)	(0.01)	(0.01)	.
Has piped drinking water (yes/no)	0.02**	0.02**	0.01	2,438
	(0.01)	(0.01)	(0.01)	.
Worried about food (yes/no)	-0.03***	-0.03***	-0.03***	2,438
	(0.01)	(0.01)	(0.01)	.
Trust in insurance (1 to 5, 5 = highest)	0.09***	0.09***	0.09***	2,438
	(0.01)	(0.01)	(0.01)	.
Health today	-0.06***	-0.05***	-0.06***	2,438
	(0.01)	(0.01)	(0.01)	.
Days ill	0.55***	0.54***	0.54***	2,438
	(0.17)	(0.16)	(0.16)	.
Total health expenses (USD)	0.15***	0.14***	0.15***	2,438
	(0.04)	(0.04)	(0.04)	.

Notes: This table reports selection of insurance based on baseline covariates. For each copay level, it reports the correlation between Willingness To Accept for insurance with that copay and the reported baseline household-level covariate.

Table A.8: Healthcare Seeking (Uninsured Members)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.28	-0.02	12,160	-0.00	-0.01	-0.04**	0.12
	(0.45)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.33	-0.03	12,160	-0.01	-0.02	-0.05**	0.13
	(0.57)	(0.02)		(0.02)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.02	0.00	12,160	0.00	0.00	0.00	0.92
	(0.15)	(0.00)		(0.00)	(0.00)	(0.00)	
visits: any hospital (nr)	0.03	0.01	12,160	0.01	0.01*	0.00	0.37
	(0.19)	(0.00)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.06	-0.00	12,160	0.00	0.00	-0.01	0.19
	(0.26)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.05	-0.00	12,160	0.01	-0.00	-0.01	0.49
	(0.21)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.10	-0.02	12,160	-0.02	-0.02*	-0.01	0.64
	(0.33)	(0.01)		(0.01)	(0.01)	(0.01)	
routine visits (yes/no)	0.02	-0.00	11,774	-0.00	-0.00	-0.01*	0.32
	(0.14)	(0.00)		(0.00)	(0.00)	(0.00)	
total health expenses (USD)	2.52	-0.10	12,160	-0.05	-0.09	-0.16	0.67
	(8.46)	(0.09)		(0.11)	(0.11)	(0.11)	

Notes: This table reports healthcare-seeking effects for uninsured household members. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.9: Health Outcomes (Uninsured Members)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.04	11,775	0.06	0.07*	-0.02	0.06*
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
sick days (nr)	5.08	-0.76**	11,770	-0.97**	-0.57	-0.73	0.64
	(15.85)	(0.39)		(0.44)	(0.47)	(0.47)	
work days missed (nr)	2.61	-0.66**	3,902	-0.78**	-0.41	-0.75**	0.48
	(7.47)	(0.31)		(0.37)	(0.38)	(0.34)	
school days missed (nr)	1.30	-0.24**	6,396	-0.22*	-0.25*	-0.25*	0.96
	(3.50)	(0.12)		(0.13)	(0.15)	(0.14)	
mental health index (std)	-0.00	0.01	6,075	0.05	-0.01	0.00	0.57
	(1.00)	(0.05)		(0.05)	(0.06)	(0.06)	

Notes: This table reports health outcome effects for uninsured household members. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.10: Healthcare Seeking (Full Sample)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.36	-0.02*	30,600	-0.01	-0.02	-0.04***	0.02**
	(0.48)	(0.01)		(0.01)	(0.01)	(0.01)	
facility visits (nr)	0.44	-0.03**	30,600	-0.01	-0.03	-0.06***	0.01***
	(0.66)	(0.01)		(0.02)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.03	0.04***	30,600	0.06***	0.04***	0.02***	0.00***
	(0.20)	(0.00)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.06	0.04***	30,600	0.05***	0.04***	0.02***	0.00***
	(0.26)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.09	-0.02**	30,600	-0.02*	-0.01	-0.03***	0.06*
	(0.32)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.06	-0.01	30,600	-0.00	-0.01	-0.01	0.67
	(0.23)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.13	-0.03***	30,600	-0.03**	-0.03**	-0.03**	0.98
	(0.38)	(0.01)		(0.01)	(0.01)	(0.01)	
routine visits (yes/no)	0.05	-0.00	30,757	-0.01	-0.00	-0.01**	0.14
	(0.21)	(0.00)		(0.00)	(0.00)	(0.00)	
total health expenses (USD)	3.80	-0.23***	30,600	-0.17**	-0.25***	-0.27***	0.32
	(11.01)	(0.06)		(0.07)	(0.07)	(0.07)	

Notes: This table reports healthcare-seeking effects for the full sample, including uninsured household members. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.11: Health Outcomes (Full Sample)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.06***	30,758	0.07**	0.08***	0.04	0.35
	(1.00)	(0.02)		(0.03)	(0.03)	(0.03)	
sick days (nr)	7.57	-1.04***	30,749	-1.11***	-0.82*	-1.18***	0.68
	(20.84)	(0.35)		(0.42)	(0.43)	(0.45)	
work days missed (nr)	3.85	-0.63***	13,913	-0.61***	-0.49**	-0.79***	0.39
	(8.24)	(0.20)		(0.24)	(0.24)	(0.23)	
school days missed (nr)	1.40	-0.30***	13,979	-0.23**	-0.36***	-0.31***	0.31
	(3.64)	(0.09)		(0.10)	(0.10)	(0.10)	
mental health index (std)	-0.00	0.03	15,294	0.05	-0.01	0.03	0.39
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	

Notes: This table reports health outcome effects for the full sample, including uninsured household members. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.12: Healthcare Seeking (Midline)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.36	-0.01	9,220	0.01	-0.01	-0.03*	0.08*
	(0.48)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.41	-0.01	9,220	0.02	-0.01	-0.03	0.05*
	(0.58)	(0.02)		(0.02)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.04	0.07***	9,220	0.09***	0.06***	0.04***	0.00***
	(0.19)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.06	0.06***	9,220	0.08***	0.06***	0.04***	0.00***
	(0.24)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.08	-0.02**	9,220	-0.02**	-0.01	-0.03***	0.30
	(0.27)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.06	-0.01	9,220	-0.01	-0.01	-0.02*	0.81
	(0.24)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.11	-0.03***	9,220	-0.03**	-0.02**	-0.03***	0.77
	(0.31)	(0.01)		(0.01)	(0.01)	(0.01)	
routine visits (yes/no)	0.10	-0.01	9,764	-0.02*	-0.00	-0.02*	0.21
	(0.30)	(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	3.29	-0.28***	9,220	-0.22**	-0.32***	-0.33***	0.50
	(9.55)	(0.08)		(0.10)	(0.10)	(0.10)	

Notes: This table reports healthcare-seeking effects for the midline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household-member level. Only insured household members are included in the sample. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.13: Healthcare Seeking (Endline)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.46	-0.03**	9,220	-0.01	-0.03*	-0.05***	0.12
	(0.50)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.61	-0.06**	9,220	-0.03	-0.05*	-0.10***	0.06*
	(0.79)	(0.02)		(0.03)	(0.03)	(0.03)	
visits: insured hospital (nr)	0.05	0.07***	9,220	0.10***	0.07***	0.03***	0.00***
	(0.25)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.10	0.05***	9,220	0.09***	0.05***	0.02*	0.00***
	(0.34)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.13	-0.03***	9,220	-0.04**	-0.02	-0.05***	0.08*
	(0.40)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.07	-0.01	9,220	-0.00	-0.01	-0.01	0.76
	(0.25)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.19	-0.05***	9,220	-0.05***	-0.04**	-0.04**	0.96
	(0.48)	(0.02)		(0.02)	(0.02)	(0.02)	
routine visits (yes/no)	0.03	0.00	9,219	0.01	0.00	0.00	0.59
	(0.16)	(0.00)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	6.01	-0.27***	9,220	-0.20**	-0.32***	-0.30***	0.36
	(14.48)	(0.07)		(0.08)	(0.08)	(0.09)	

Notes: This table reports healthcare-seeking effects for the endline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household-member level. Only insured household members are included in the sample. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.14: Risk Coping (Midline)

	Mean C (1)	β(T) (2)	N (3)	β_1(T0) (4)	β_2(T1) (5)	β_3(T2) (6)	T0=T1=T2 (7)
risk coping index (std)	-0.00	-0.17***	2,793	-0.20***	-0.15***	-0.15***	0.56
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	
foregone healthcare (yes/no)	0.39	-0.07***	2,729	-0.09***	-0.07**	-0.04	0.16
	(0.49)	(0.02)		(0.03)	(0.03)	(0.03)	
sold assets (yes/no)	0.23	-0.06***	2,729	-0.07***	-0.05**	-0.06***	0.68
	(0.42)	(0.02)		(0.02)	(0.02)	(0.02)	
reduced food consumption (yes/no)	0.21	-0.03*	2,729	-0.04*	-0.02	-0.04*	0.80
	(0.41)	(0.02)		(0.02)	(0.02)	(0.02)	

Notes: This table reports risk coping effects for the midline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household level. The risk coping index averages over whether households used any of the following coping strategies: taking loans (from moneylenders, banks, family, friends, or groups), receiving remittances, selling assets, reducing consumption (food or other), increasing labor supply, or having children work or miss school. Other variables on savings and loans are only collected in the endline survey. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.15: Risk Coping (Endline)

	Mean C (1)	β(T) (2)	N (3)	β_1(T0) (4)	β_2(T1) (5)	β_3(T2) (6)	T0=T1=T2 (7)
risk coping index (std)	0.00	-0.14***	2,720	-0.10*	-0.18***	-0.14***	0.32
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	
foregone healthcare (yes/no)	0.22	-0.02	2,719	-0.02	-0.03	-0.02	0.88
	(0.41)	(0.02)		(0.02)	(0.02)	(0.02)	
sold assets (yes/no)	0.16	-0.04**	2,720	-0.03	-0.04*	-0.05**	0.64
	(0.37)	(0.02)		(0.02)	(0.02)	(0.02)	
reduced food consumption (yes/no)	0.06	-0.02*	2,720	-0.01	-0.03**	-0.01	0.33
	(0.24)	(0.01)		(0.01)	(0.01)	(0.01)	
saved past year (yes/no)	0.83	-0.01	2,714	-0.00	-0.02	-0.01	0.61
	(0.37)	(0.02)		(0.02)	(0.02)	(0.02)	
savings current amount (USD)	100.01	-0.14*	2,714	-0.01	-0.22**	-0.19*	0.10
	(184.87)	(0.08)		(0.10)	(0.10)	(0.10)	
loan past year (yes/no)	0.82	-0.04**	2,720	-0.02	-0.04**	-0.04**	0.51
	(0.38)	(0.02)		(0.02)	(0.02)	(0.02)	
loan for health (yes/no)	0.32	-0.03*	2,719	-0.03	-0.04	-0.04	0.90
	(0.47)	(0.02)		(0.02)	(0.02)	(0.02)	
loan amount past year (USD)	245.48	-0.15*	2,720	-0.02	-0.24**	-0.20**	0.07*
	(481.19)	(0.08)		(0.10)	(0.10)	(0.10)	

Notes: This table reports risk coping effects for the endline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household level. Variables in rows 5 to 9 are only collected in the endline survey. The risk coping index averages over whether households used any of the following coping strategies: taking loans (from moneylenders, banks, family, friends, or groups), receiving remittances, selling assets, reducing consumption (food or other), increasing labor supply, or having children work or miss school. Savings and loan amounts are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey, except savings and loan questions in rows 5 to 9, which refer to the past year. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.16: Health Outcomes (Midline)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.10***	9,764	0.10***	0.12***	0.09**	0.70
	(1.00)	(0.03)		(0.03)	(0.04)	(0.04)	
sick days (nr)	11.29	-1.52*	9,759	-1.59	-1.16	-1.82*	0.78
	(30.59)	(0.81)		(0.98)	(0.98)	(0.98)	
work days missed (nr)	4.66	-0.79**	5,146	-0.80**	-0.79**	-0.77*	1.00
	(9.85)	(0.33)		(0.40)	(0.40)	(0.40)	
school days missed (nr)	1.90	-0.47***	3,774	-0.25	-0.65***	-0.52**	0.07*
	(4.89)	(0.18)		(0.21)	(0.19)	(0.21)	
worry index (std)	0.00	-0.17***	2,729	-0.19***	-0.18***	-0.15***	0.75
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	
worry: health (std)	0.00	-0.17***	2,729	-0.21***	-0.16***	-0.14**	0.44
	(1.00)	(0.04)		(0.05)	(0.05)	(0.06)	
worry: medical expenses (std)	0.00	-0.21***	2,729	-0.23***	-0.21***	-0.18***	0.62
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	

Notes: This table reports health outcome effects for the midline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household-member level except for worry-related variables; these are collected at the household level. Only insured household members are included in the sample. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. Worries are measured by asking "How worried are you about having health problems/accidents/money for medical treatment/money for basic needs for you or your family members?". The worry index is based on these four items. Days are winsorized at the 99th percentile. Mental health information is only collected at endline. Health status ranking and worry-related questions refer to the time of the survey, sick days and days missed to the previous six months. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.17: Health Outcomes (Endline)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	-0.00	0.06**	9,219	0.05	0.07*	0.06	0.81
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
sick days (nr)	6.87	-0.85***	9,220	-0.66*	-0.88**	-1.01***	0.62
	(11.18)	(0.31)		(0.37)	(0.37)	(0.37)	
work days missed (nr)	4.05	-0.51**	4,865	-0.34	-0.34	-0.84***	0.13
	(6.79)	(0.24)		(0.29)	(0.30)	(0.29)	
school days missed (nr)	1.07	-0.23***	3,809	-0.19**	-0.27***	-0.22**	0.63
	(2.00)	(0.08)		(0.09)	(0.09)	(0.09)	
mental health index (std)	-0.00	0.04	9,219	0.05	0.01	0.05	0.39
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry index (std)	0.00	-0.01	2,720	-0.05	0.02	0.02	0.27
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	
worry: health (std)	-0.00	-0.01	2,720	-0.04	0.02	-0.03	0.48
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	
worry: medical expenses (std)	0.00	-0.01	2,720	-0.05	0.02	-0.00	0.40
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	

Notes: This table reports health outcome effects for the endline period. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are at the household-member level except for worry-related variables; these are collected at the household level. Only insured household members are included in the sample. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Worries are measured by asking "How worried are you about having health problems/accidents/money for medical treatment/money for basic needs for you or your family members?". The worry index is based on these four items. Days are winsorized at the 99th percentile. Health status ranking and worry-related questions refer to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.18: Healthcare Seeking (Adults)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.47	-0.02	9,730	-0.01	-0.02	-0.04***	0.08*
	(0.50)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.61	-0.04**	9,730	-0.01	-0.03	-0.08***	0.02**
	(0.76)	(0.02)		(0.03)	(0.03)	(0.03)	
visits: insured hospital (nr)	0.06	0.08***	9,730	0.11***	0.08***	0.04***	0.00***
	(0.26)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.11	0.07***	9,730	0.09***	0.07***	0.04***	0.00***
	(0.35)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.13	-0.04***	9,730	-0.04***	-0.02*	-0.05***	0.03**
	(0.38)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.07	-0.01	9,730	-0.01	-0.01	-0.01	0.69
	(0.25)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.17	-0.04***	9,730	-0.04**	-0.03**	-0.04***	0.80
	(0.44)	(0.01)		(0.02)	(0.02)	(0.02)	
routine visits (yes/no)	0.11	-0.01	10,014	-0.01	-0.00	-0.01	0.75
	(0.31)	(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	6.59	-0.27***	9,730	-0.23***	-0.27***	-0.32***	0.59
	(15.22)	(0.07)		(0.08)	(0.08)	(0.09)	

Notes: This table reports healthcare-seeking effects for insured adults (age 18 and above at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.19: Healthcare Seeking (Minors)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.34	-0.02	8,710	0.00	-0.03*	-0.04**	0.05**
	(0.47)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.40	-0.03	8,710	-0.00	-0.03	-0.05**	0.07*
	(0.61)	(0.02)		(0.02)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.03	0.05***	8,710	0.08***	0.04***	0.03***	0.00***
	(0.18)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.05	0.05***	8,710	0.08***	0.04***	0.02**	0.00***
	(0.22)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.08	-0.02*	8,710	-0.02*	-0.01	-0.02*	0.52
	(0.30)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.06	-0.01	8,710	-0.01	-0.01	-0.01	1.00
	(0.24)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.12	-0.03***	8,710	-0.03**	-0.03**	-0.03**	0.99
	(0.37)	(0.01)		(0.01)	(0.01)	(0.01)	
routine visits (yes/no)	0.02	-0.00	8,969	-0.00	0.00	-0.01	0.11
	(0.13)	(0.00)		(0.00)	(0.00)	(0.00)	
total health expenses (USD)	2.51	-0.31***	8,710	-0.16	-0.49***	-0.29***	0.01***
	(7.51)	(0.09)		(0.11)	(0.10)	(0.11)	

Notes: This table reports healthcare-seeking effects for insured minors (below age 18 at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.20: Healthcare Seeking (Children Age 0 to 5)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.37	0.01	2,512	0.01	0.01	-0.00	0.83
	(0.48)	(0.02)		(0.03)	(0.03)	(0.03)	
facility visits (nr)	0.44	0.01	2,512	0.00	0.03	-0.01	0.68
	(0.64)	(0.03)		(0.04)	(0.04)	(0.04)	
visits: insured hospital (nr)	0.02	0.08***	2,512	0.11***	0.08***	0.05***	0.00***
	(0.13)	(0.01)		(0.02)	(0.02)	(0.01)	
visits: any hospital (nr)	0.04	0.07***	2,512	0.11***	0.07***	0.03**	0.00***
	(0.20)	(0.01)		(0.02)	(0.02)	(0.01)	
visits: facility level 2 (nr)	0.09	-0.00	2,512	-0.02	0.02	-0.01	0.11
	(0.33)	(0.02)		(0.02)	(0.02)	(0.02)	
visits: facility level 1 (nr)	0.07	-0.02	2,512	-0.02	-0.02	-0.02	0.99
	(0.26)	(0.01)		(0.02)	(0.02)	(0.02)	
visits: clinic (nr)	0.17	-0.06***	2,512	-0.08***	-0.06**	-0.04	0.20
	(0.41)	(0.02)		(0.02)	(0.03)	(0.03)	
routine visits (yes/no)	0.02	0.01	2,576	0.00	0.01	0.01	0.43
	(0.13)	(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	2.38	-0.13	2,512	-0.10	-0.31*	-0.00	0.18
	(6.23)	(0.14)		(0.17)	(0.16)	(0.18)	

Notes: This table reports healthcare-seeking effects for insured young children (below age 6 at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.21: Health Outcomes (Adults)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.11***	10,014	0.11***	0.12***	0.10***	0.89
	(1.00)	(0.03)		(0.03)	(0.03)	(0.03)	
sick days (nr)	12.65	-1.49**	10,010	-1.50*	-1.08	-1.90**	0.67
	(28.66)	(0.75)		(0.90)	(0.91)	(0.93)	
work days missed (nr)	4.36	-0.65***	10,011	-0.58**	-0.58**	-0.81***	0.61
	(8.49)	(0.23)		(0.27)	(0.27)	(0.27)	
school days missed (nr)	.	.		.	.	.	.
	(.)	(.)		(.)	(.)	(.)	
mental health index (std)	0.00	0.05	4,865	0.07	0.01	0.08	0.23
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	

Notes: This table reports health outcome effects for insured adults (age 18 and above at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.22: Health Outcomes (Minors)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.05*	8,969	0.03	0.08**	0.05	0.47
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
sick days (nr)	5.23	-0.94**	8,969	-0.83*	-1.04**	-0.95**	0.88
	(14.35)	(0.37)		(0.44)	(0.44)	(0.47)	
work days missed (nr)	.	.		.	.	.	.
	(.)	(.)		(.)	(.)	(.)	
school days missed (nr)	1.48	-0.35***	7,583	-0.22*	-0.46***	-0.37***	0.07*
	(3.74)	(0.10)		(0.12)	(0.11)	(0.12)	
mental health index (std)	-0.00	0.04	4,354	0.04	0.02	0.07	0.63
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	

Notes: This table reports health outcome effects for insured minors (below age 18 at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.23: Health Outcomes (Children Age 0 to 5)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.06	2,576	0.08	0.04	0.06	0.83
	(1.00)	(0.05)		(0.06)	(0.06)	(0.06)	
sick days (nr)	5.67	-0.23	2,576	-0.48	0.04	-0.24	0.85
	(13.69)	(0.67)		(0.76)	(0.93)	(0.88)	
work days missed (nr)	.	.		.	.	.	.
	(.)	(.)		(.)	(.)	(.)	
school days missed (nr)	1.05	0.01	1,536	-0.02	-0.06	0.13	0.52
	(2.27)	(0.14)		(0.18)	(0.17)	(0.17)	
mental health index (std)	0.00	0.07	1,256	0.11	0.05	0.07	0.75
	(1.00)	(0.07)		(0.08)	(0.08)	(0.08)	
worry index (std)	0.00	-0.09***	5,449	-0.12***	-0.08*	-0.07*	0.33
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry: health (std)	-0.00	-0.09***	5,449	-0.12***	-0.07	-0.08**	0.41
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
worry: medical expenses (std)	0.00	-0.11***	5,449	-0.14***	-0.10**	-0.09**	0.41
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	

Notes: This table reports health outcome effects for insured young children (below age 6 at baseline). Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.24: Healthcare Seeking (Female)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.42	-0.01	9,976	0.00	-0.00	-0.04**	0.06*
	(0.49)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.53	-0.03	9,976	-0.00	-0.02	-0.06**	0.06*
	(0.72)	(0.02)		(0.03)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.05	0.08***	9,976	0.11***	0.08***	0.05***	0.00***
	(0.22)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.09	0.07***	9,976	0.09***	0.07***	0.04***	0.00***
	(0.31)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.12	-0.03***	9,976	-0.03**	-0.02	-0.04***	0.05**
	(0.37)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.06	-0.01	9,976	-0.00	-0.01	-0.01	0.64
	(0.24)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.15	-0.04***	9,976	-0.04***	-0.03*	-0.04***	0.72
	(0.41)	(0.01)		(0.01)	(0.02)	(0.01)	
routine visits (yes/no)	0.08	-0.00	10,266	-0.00	0.00	-0.01	0.47
	(0.26)	(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	4.82	-0.25***	9,976	-0.18**	-0.35***	-0.23**	0.19
	(12.33)	(0.07)		(0.08)	(0.09)	(0.09)	

Notes: This table reports healthcare-seeking effects for insured female individuals. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.25: Healthcare Seeking (Male)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
any facility visit (yes/no)	0.39	-0.03**	8,464	-0.01	-0.04**	-0.05***	0.06*
	(0.49)	(0.01)		(0.02)	(0.02)	(0.02)	
facility visits (nr)	0.48	-0.04**	8,464	-0.01	-0.04	-0.07***	0.04**
	(0.67)	(0.02)		(0.02)	(0.02)	(0.02)	
visits: insured hospital (nr)	0.05	0.05***	8,464	0.08***	0.05***	0.02**	0.00***
	(0.22)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: any hospital (nr)	0.07	0.05***	8,464	0.08***	0.05***	0.02*	0.00***
	(0.27)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 2 (nr)	0.09	-0.02**	8,464	-0.03**	-0.01	-0.03**	0.44
	(0.31)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: facility level 1 (nr)	0.07	-0.01	8,464	-0.01	-0.01	-0.01	0.91
	(0.25)	(0.01)		(0.01)	(0.01)	(0.01)	
visits: clinic (nr)	0.15	-0.04***	8,464	-0.03**	-0.04**	-0.04**	0.99
	(0.40)	(0.01)		(0.02)	(0.02)	(0.02)	
routine visits (yes/no)	0.05	-0.01	8,717	-0.01	-0.00	-0.01*	0.42
	(0.22)	(0.01)		(0.01)	(0.01)	(0.01)	
total health expenses (USD)	4.44	-0.30***	8,464	-0.23**	-0.28***	-0.42***	0.23
	(12.35)	(0.08)		(0.10)	(0.10)	(0.11)	

Notes: This table reports healthcare-seeking effects for insured male individuals. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.26: Health Outcomes (Female)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	-0.00	0.09***	10,266	0.11***	0.12***	0.06*	0.19
	(1.00)	(0.03)		(0.03)	(0.03)	(0.03)	
sick days (nr)	10.38	-1.65***	10,266	-1.70**	-1.85**	-1.39*	0.83
	(25.66)	(0.63)		(0.74)	(0.73)	(0.80)	
work days missed (nr)	5.06	-1.00***	5,678	-0.91**	-1.07***	-1.01***	0.88
	(9.20)	(0.30)		(0.36)	(0.35)	(0.36)	
school days missed (nr)	1.41	-0.33**	3,921	-0.31**	-0.35**	-0.32**	0.95
	(3.73)	(0.13)		(0.15)	(0.15)	(0.16)	
mental health index (std)	-0.00	0.04	4,987	0.07	0.00	0.04	0.33
	(1.00)	(0.04)		(0.04)	(0.04)	(0.04)	

Notes: This table reports health outcome effects for insured female individuals. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.27: Health Outcomes (Male)

	Mean C	β(T)	N	β_1(T0)	β_2(T1)	β_3(T2)	T0=T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
health status ranking today (std)	0.00	0.06**	8,717	0.03	0.07*	0.09***	0.16
	(1.00)	(0.03)		(0.04)	(0.04)	(0.04)	
sick days (nr)	7.56	-0.56	8,713	-0.40	0.05	-1.39**	0.07*
	(19.85)	(0.53)		(0.65)	(0.68)	(0.62)	
work days missed (nr)	3.40	-0.15	4,333	-0.09	0.11	-0.50	0.18
	(7.30)	(0.27)		(0.34)	(0.35)	(0.32)	
school days missed (nr)	1.56	-0.37***	3,662	-0.13	-0.57***	-0.41**	0.01**
	(3.75)	(0.14)		(0.18)	(0.15)	(0.17)	
mental health index (std)	-0.00	0.03	4,232	0.03	0.00	0.07	0.35
	(1.00)	(0.04)		(0.05)	(0.05)	(0.05)	

Notes: This table reports health outcome effects for insured male individuals. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Worry-related variables are not reported because they vary only on the household level. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Days are winsorized at the 99th percentile. Health status ranking refers to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for the equality of coefficients among the three treatment arms, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.28: Healthcare Seeking (Robustness Excluding T0)

	Mean C	β(T)	N	β_2(T1)	β_3(T2)	T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)
any facility visit (yes/no)	0.41	-0.03**	13,782	-0.02	-0.04***	0.16
	(0.49)	(0.01)		(0.01)	(0.01)	
facility visits (nr)	0.51	-0.05***	13,782	-0.03	-0.07***	0.08*
	(0.70)	(0.02)		(0.02)	(0.02)	
visits: insured hospital (nr)	0.05	0.05***	13,782	0.07***	0.04***	0.00***
	(0.22)	(0.01)		(0.01)	(0.01)	
visits: any hospital (nr)	0.08	0.04***	13,782	0.06***	0.03***	0.01**
	(0.29)	(0.01)		(0.01)	(0.01)	
visits: facility level 2 (nr)	0.11	-0.03***	13,782	-0.02	-0.04***	0.02**
	(0.35)	(0.01)		(0.01)	(0.01)	
visits: facility level 1 (nr)	0.07	-0.01	13,782	-0.01	-0.01	0.96
	(0.25)	(0.01)		(0.01)	(0.01)	
visits: clinic (nr)	0.15	-0.03***	13,782	-0.03**	-0.04***	0.69
	(0.41)	(0.01)		(0.01)	(0.01)	
routine visits (yes/no)	0.06	-0.00	14,175	-0.00	-0.01	0.15
	(0.25)	(0.00)		(0.01)	(0.01)	
total health expenses (USD)	4.65	-0.32***	13,782	-0.32***	-0.31***	0.91
	(12.34)	(0.06)		(0.07)	(0.08)	

Notes: This table reports healthcare-seeking effects, excluding households in treatment arm T0. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level. Only insured household members are included in the sample. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. The last column tests for equality between the T1 and T2 treatment coefficients, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.29: Risk Coping (Robustness Excluding T0)

	Mean C (1)	β(T) (2)	N (3)	β_2(T1) (4)	β_3(T2) (5)	T1=T2 (6)
risk coping index (std)	0.00	-0.16***	4,127	-0.17***	-0.15***	0.61
	(1.00)	(0.04)		(0.04)	(0.04)	
foregone healthcare (yes/no)	0.30	-0.04**	4,078	-0.05***	-0.03*	0.41
	(0.46)	(0.02)		(0.02)	(0.02)	
sold assets (yes/no)	0.20	-0.05***	4,078	-0.04***	-0.05***	0.59
	(0.40)	(0.01)		(0.02)	(0.02)	
reduced food consumption (yes/no)	0.13	-0.03**	4,078	-0.03**	-0.03**	0.94
	(0.34)	(0.01)		(0.01)	(0.01)	
saved past year (yes/no)	0.83	-0.02	2,033	-0.02	-0.01	0.51
	(0.37)	(0.02)		(0.02)	(0.02)	
savings current amount (USD)	100.01	-0.20**	2,033	-0.22**	-0.18*	0.74
	(184.87)	(0.09)		(0.10)	(0.10)	
loan past year (yes/no)	0.82	-0.04**	2,039	-0.04**	-0.04**	0.98
	(0.38)	(0.02)		(0.02)	(0.02)	
loan for health (yes/no)	0.32	-0.04*	2,038	-0.04	-0.04	0.98
	(0.47)	(0.02)		(0.02)	(0.02)	
loan amount past year (USD)	245.48	-0.22***	2,039	-0.24**	-0.21**	0.71
	(481.19)	(0.09)		(0.10)	(0.10)	

Notes: This table reports risk coping effects, excluding households in treatment arm T0. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household level. Variables in rows 5 to 9 are only collected in the endline survey. The risk coping index averages over whether households used any of the following coping strategies: taking loans (from moneylenders, banks, family, friends, or groups), receiving remittances, selling assets, reducing consumption (food or other), increasing labor supply, or having children work or miss school. Savings and loan amounts are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey, except savings and loan questions in rows 5 to 9, which refer to the past year. The last column tests for equality between the T1 and T2 treatment coefficients, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.30: Health Outcomes (Robustness Excluding T0)

	Mean C	β(T)	N	β_2(T1)	β_3(T2)	T1=T2
	(1)	(2)	(3)	(4)	(5)	(6)
health status ranking today (std)	-0.00	0.09***	14,175	0.10***	0.07**	0.48
	(1.00)	(0.02)		(0.03)	(0.03)	
sick days (nr)	9.12	-1.21**	14,174	-1.01*	-1.42**	0.47
	(23.28)	(0.49)		(0.56)	(0.58)	
work days missed (nr)	4.36	-0.70***	7,473	-0.58**	-0.82***	0.36
	(8.49)	(0.24)		(0.27)	(0.27)	
school days missed (nr)	1.48	-0.41***	5,650	-0.46***	-0.37***	0.36
	(3.74)	(0.11)		(0.11)	(0.12)	
mental health index (std)	-0.00	0.03	6,890	0.01	0.05	0.25
	(1.00)	(0.04)		(0.04)	(0.04)	
worry index (std)	0.00	-0.07**	4,078	-0.08*	-0.07*	0.84
	(1.00)	(0.04)		(0.04)	(0.04)	
worry: health (std)	-0.00	-0.08**	4,078	-0.07	-0.09**	0.66
	(1.00)	(0.04)		(0.04)	(0.04)	
worry: medical expenses (std)	0.00	-0.09***	4,078	-0.10**	-0.09**	0.90
	(1.00)	(0.04)		(0.04)	(0.04)	

Notes: This table reports health outcome effects, excluding households in treatment arm T0. Equation 1 corresponds to Column (2), and Equation 2 to Columns (4)-(7). The data are pooled from the midline and endline periods and are at the household-member level except for worry-related variables; these are collected at the household level. Only insured household members are included in the sample. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Worries are measured by asking "How worried are you about having health problems/accidents/money for medical treatment/money for basic needs for you or your family members?". The worry index is based on these four items. Days are winsorized at the 99th percentile. Health status ranking and worry-related questions refer to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. The last column tests for equality between the T1 and T2 treatment coefficients, reporting p-values. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.31: Healthcare Seeking (Robustness Lasso)

	Mean C (1)	β(T) (2)	Con (3)	N (4)	β_1(T0) (5)	β_2(T1) (6)	β_3(T2) (7)	T0=T1=T2 (8)	Con (9)
any facility visit (yes/no)	0.41	-0.02***	21	18,190	-0.00	-0.03***	-0.04***	0.00***	23
	(0.49)	(0.01)			(0.01)	(0.01)	(0.01)		
facility visits (nr)	0.51	-0.03***	23	18,190	-0.01	-0.04**	-0.06***	0.00***	25
	(0.70)	(0.01)			(0.01)	(0.01)	(0.01)		
visits: insured hospital (nr)	0.05	0.06***	18	18,190	0.09***	0.06***	0.03***	0.00***	22
	(0.22)	(0.00)			(0.01)	(0.01)	(0.01)		
visits: any hospital (nr)	0.08	0.06***	20	18,190	0.08***	0.05***	0.03***	0.00***	26
	(0.29)	(0.01)			(0.01)	(0.01)	(0.01)		
visits: facility level 2 (nr)	0.11	-0.03***	20	18,190	-0.03***	-0.02**	-0.03***	0.01***	26
	(0.35)	(0.01)			(0.01)	(0.01)	(0.01)		
visits: facility level 1 (nr)	0.07	-0.01**	15	18,190	-0.01	-0.01**	-0.01*	0.81	21
	(0.25)	(0.00)			(0.00)	(0.00)	(0.00)		
visits: clinic (nr)	0.15	-0.04***	18	18,190	-0.04***	-0.03***	-0.04***	0.81	22
	(0.41)	(0.01)			(0.01)	(0.01)	(0.01)		
routine visits (yes/no)	0.06	-0.01	19	18,809	-0.01	-0.00	-0.01	0.45	28
	(0.25)	(0.00)			(0.00)	(0.00)	(0.00)		
total health expenses (USD)	4.65	-0.29***	16	18,274	-0.22***	-0.35***	-0.32***	0.21	21
	(12.34)	(0.06)			(0.07)	(0.07)	(0.07)		

Notes: This table reports healthcare-seeking effects, using a post-double selection Lasso estimator. All variables from Table A.2 and Table A.3 are included as potential control variables. Wave fixed effects, hospital fixed effects, and the lagged dependent variable are in the set of controls that are always included. Columns (3) and (9) show the number of control variables selected by Lasso. A plug-in penalty parameter is used. Equation 1 corresponds to Column (2)-(3), and Equation 2 to Columns (5)-(9). The data are pooled from the midline and endline periods and are at the household-member level. Only insured household members are included in the sample. The facility categories form a quality hierarchy: hospitals (including insured hospitals) provide the highest quality of care, followed by Level 2 facilities, then Level 1 facilities. Clinics, which are mostly private, have quality levels that typically fall between Level 2 facilities and hospitals. Routine visits refer to preventive healthcare visits. Total health expenses are calculated as the sum across all health events and all related actions taken. Visits and health expenses are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey. Column (8) tests for the equality of coefficients among the three treatment arms. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

Table A.32: Risk Coping (Robustness Lasso)

	Mean C (1)	β(T) (2)	Con (3)	N (4)	β_1(T0) (5)	β_2(T1) (6)	β_3(T2) (7)	T0=T1=T2 (8)	Con (9)
risk coping index (std)	0.00	-0.16***	15	5,459	-0.16***	-0.17***	-0.14***	0.71	15
	(1.00)	(0.03)			(0.04)	(0.04)	(0.04)		
foregone healthcare (yes/no)	0.30	-0.04***	14	5,395	-0.05***	-0.04***	-0.03	0.34	14
	(0.46)	(0.01)			(0.02)	(0.02)	(0.02)		
sold assets (yes/no)	0.20	-0.05***	12	5,396	-0.06***	-0.05***	-0.05***	0.77	12
	(0.40)	(0.01)			(0.01)	(0.01)	(0.01)		
reduced food consumption (yes/no)	0.13	-0.03***	10	5,400	-0.03**	-0.03**	-0.03**	0.98	10
	(0.34)	(0.01)			(0.01)	(0.01)	(0.01)		
saved past year (yes/no)	0.83	-0.01	6	2,689	-0.01	-0.02	-0.01	0.65	6
	(0.37)	(0.02)			(0.02)	(0.02)	(0.02)		
savings current amount (USD)	100.01	-0.16**	10	2,711	-0.05	-0.24**	-0.20**	0.15	10
	(184.87)	(0.08)			(0.09)	(0.10)	(0.10)		
loan past year (yes/no)	0.82	-0.04**	6	2,717	-0.02	-0.04**	-0.04**	0.53	6
	(0.38)	(0.02)			(0.02)	(0.02)	(0.02)		
loan for health (yes/no)	0.32	-0.04*	9	2,716	-0.03	-0.04	-0.04	0.97	9
	(0.47)	(0.02)			(0.02)	(0.02)	(0.02)		
loan amount past year (USD)	245.48	-0.18**	10	2,718	-0.06	-0.25***	-0.23**	0.11	10
	(481.19)	(0.08)			(0.10)	(0.10)	(0.09)		

Notes: This table reports risk coping effects, using a post-double selection Lasso estimator. All variables from Table A.2 and Table A.3 are included as potential control variables. Wave fixed effects, hospital fixed effects, and the lagged dependent variable are in the set of controls that are always included. Columns (3) and (9) show the number of control variables selected by Lasso. A plug-in penalty parameter is used. Equation 1 corresponds to Column (2)-(3), and Equation 2 to Columns (5)-(9). The data are pooled from the midline and endline periods and are at the household level. Variables in rows 5 to 9 are only collected in the endline survey. The risk coping index averages over whether households used any of the following coping strategies: taking loans (from moneylenders, banks, family, friends, or groups), receiving remittances, selling assets, reducing consumption (food or other), increasing labor supply, or having children work or miss school. Savings and loan amounts are winsorized at the 99th percentile. For outcomes measured in USD, we estimate a Poisson regression. Survey questions refer to the past six months before the respective survey, except savings and loan questions in rows 5 to 9, which refer to the past year. Column (8) tests for the equality of coefficients among the three treatment arms. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

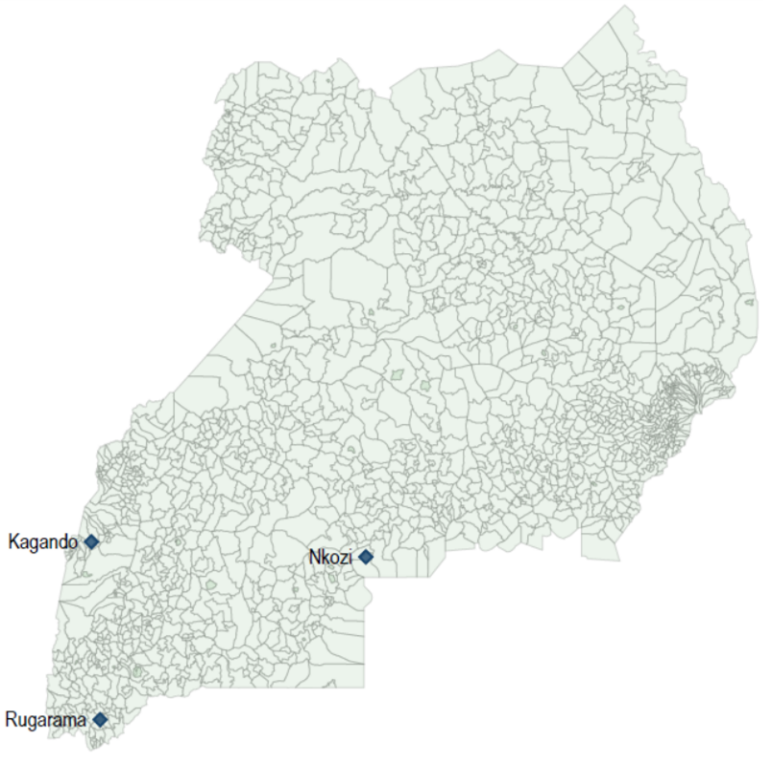
Table A.33: Health Outcomes (Robustness Lasso)

	Mean C (1)	β(T) (2)	Con (3)	N (4)	β_1(T0) (5)	β_2(T1) (6)	β_3(T2) (7)	T0=T1=T2 (8)	Con (9)
health status ranking today (std)	-0.00	0.08***	25	18,722	0.07***	0.09***	0.07***	0.61	31
	(1.00)	(0.02)			(0.02)	(0.02)	(0.02)		
sick days (nr)	9.12	-1.14***	16	18,719	-1.33***	-1.02**	-1.25***	0.76	25
	(23.28)	(0.37)			(0.45)	(0.45)	(0.45)		
work days missed (nr)	4.36	-0.65***	18	9,849	-0.67***	-0.56**	-0.73***	0.73	21
	(8.49)	(0.19)			(0.23)	(0.22)	(0.23)		
school days missed (nr)	1.48	-0.35***	11	7,507	-0.23**	-0.46***	-0.36***	0.03**	11
	(3.74)	(0.09)			(0.11)	(0.10)	(0.11)		
mental health index (std)	-0.00	0.05**	17	9,094	0.06**	0.01	0.07**	0.05*	19
	(1.00)	(0.02)			(0.03)	(0.03)	(0.03)		
worry index (std)	0.00	-0.09***	13	5,396	-0.12***	-0.08**	-0.07*	0.26	13
	(1.00)	(0.03)			(0.04)	(0.04)	(0.04)		
worry: health (std)	-0.00	-0.10***	14	5,396	-0.12***	-0.07*	-0.09**	0.37	14
	(1.00)	(0.03)			(0.04)	(0.04)	(0.04)		
worry: medical expenses (std)	0.00	-0.11***	14	5,396	-0.14***	-0.10***	-0.08**	0.27	14
	(1.00)	(0.03)			(0.04)	(0.04)	(0.04)		

Notes: This table reports health outcome effects, using a post-double selection Lasso estimator. All variables from Table A.2 and Table A.3 are included as potential control variables. Wave fixed effects, hospital fixed effects, and the lagged dependent variable are in the set of controls that are always included. Columns (3) and (9) show the number of control variables selected by Lasso. A plug-in penalty parameter is used. Equation 1 corresponds to Column (2)-(3), and Equation 2 to Columns (5)-(9). The data are pooled from the midline and endline periods and are at the household-member level. Only insured household members are included in the sample. Health status rank is measured by asking respondents: "In general, how do you rate your health status today on a scale from 1 to 5?". Work days missed are limited to members who are above 18 at baseline. School days missed are limited to members who are below 18 at baseline and enrolled in school. The mental health index averages over eight components and is only collected at the endline. Worries are measured by asking "How worried are you about having health problems/accidents/money for medical treatment/money for basic needs for you or your family members?". The worry index is based on these four items. Days are winsorized at the 99th percentile. Health status ranking and worry-related questions refer to the time of the survey, sick days and days missed to the previous six months, and the mental health index to the past month. Column (8) tests for the equality of coefficients among the three treatment arms. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

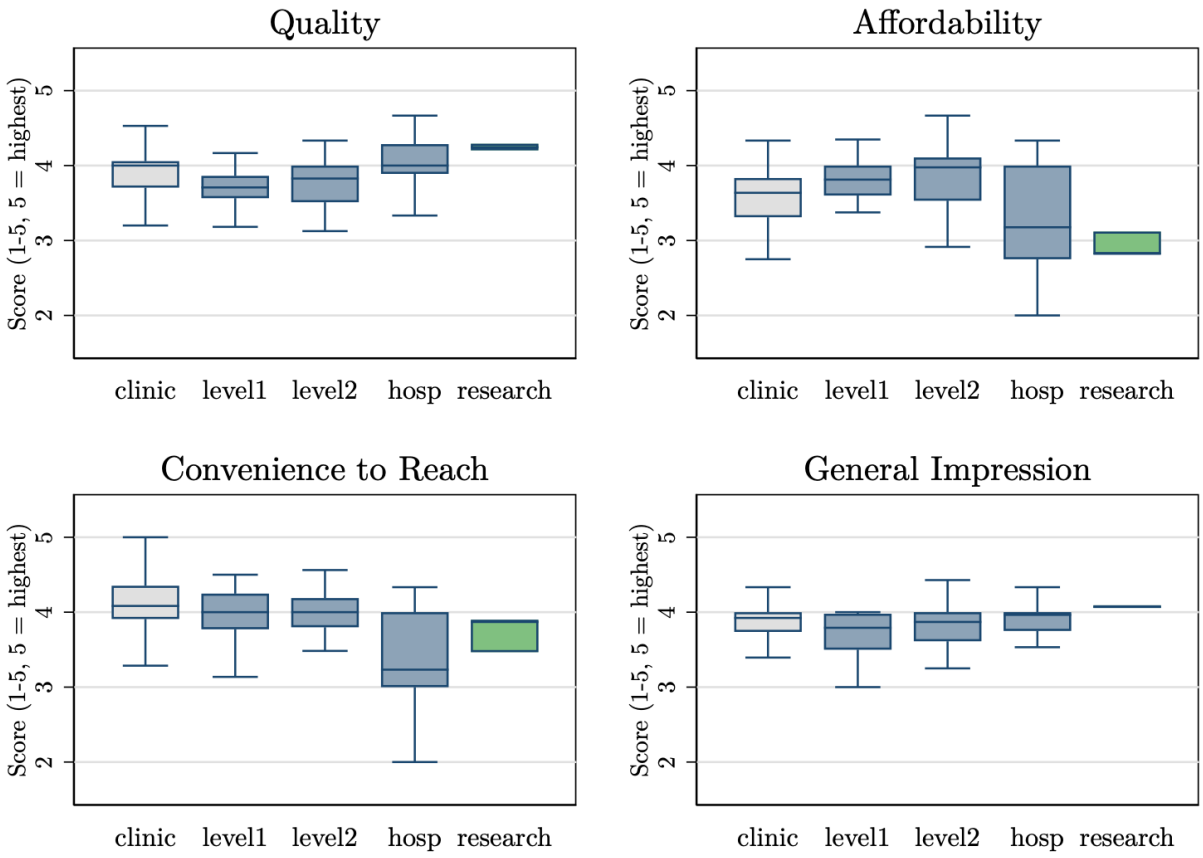
Figures

Figure A.1: Insured Hospital Locations



This figure depicts the locations of the three insured hospitals: Kagando Hospital in Kasese district, Rugarama Hospital in Kabale district, and Nkozi Hospital in Mpigi district. All three hospitals are in rural areas.

Figure A.2: Healthcare Facility Characteristics



This figure depicts the score of a given facility, averaged over households that were interviewed about this facility. Households could provide a score between one and five. The graph provides box plots based on the underlying facility-level data. The box plots depict the upper adjacent value, the 75th percentile, the median, the 25th percentile, and the lower adjacent value. The adjacent values are calculated based on 1.5 times the inter-quartile range (IQR), i.e. Q1 - 1.5 × IQR and Q3 + 1.5 x IQR.

Appendix B: Administrative Data

Tables

Table B.1: Summary Statistics on Illnesses

	Visits with illness (%)			
Illness category	T	T0	T1	T2
respiratory infections (coughs, colds, sore throat, ear infections, pneumonia)	48.71	48.51	51.95	44.71
mild pain (headaches, body aches)	29.95	30.26	29.15	30.34
pain with swelling (joint pain, muscle pain, sprains)	26.74	25.61	31.75	22.36
stomach/intestinal infections (diarrhea, food poisoning, worms, amoeba)	23.14	22.98	24.24	21.96
stomach acid problems (heartburn, ulcers, indigestion, gastritis)	17.82	17.63	17.60	18.56
allergies and inflammation (skin rashes, hay fever, itching)	15.85	16.67	15.30	14.77
vitamin and mineral deficiencies (anemia, weak bones)	14.87	15.70	13.42	14.97
skin infections (wounds, boils, bacterial skin infections)	8.91	10.00	8.08	7.58
urinary tract infections (bladder infections, painful urination)	5.53	5.18	5.63	6.19
moderate to severe pain	4.33	3.51	4.33	6.19
fungal infections (yeast infections, ringworm, thrush)	4.16	5.96	2.02	2.99
high blood pressure and heart conditions	3.30	2.98	3.17	4.19
nerve pain (burning, tingling, shooting pain)	2.70	3.42	2.02	2.00
depression and anxiety	2.49	2.37	3.17	1.80
severe infections requiring iv treatment	2.10	2.46	1.73	1.80

Notes: This table reports the share of outpatient visits with the respective illness. The top 15 illnesses in the overall treatment sample (T) are reported, followed by the share of visits with an illness in T0 (low copay), T1 (medium copay), and T2 (high copay). Illnesses are derived from the type of drugs that were issued.

Table B.2: Summary Statistics on Drugs

	Visits with drug (%)			
Drug category	T	T0	T1	T2
analgesic - simple	27.85	28.42	26.70	28.14
analgesic - anti-inflammatory	24.81	23.68	29.58	20.76
antibiotic - penicillin	21.17	20.96	23.52	18.36
gastrointestinal - acid reducer	16.80	16.14	17.03	17.96
antibiotic - metronidazole	15.21	14.30	16.88	14.97
vitamin/supplement	14.87	15.70	13.42	14.97
respiratory - cough syrup	10.54	12.28	9.96	7.39
antibiotic - fluoroquinolone	10.54	9.47	11.40	11.78
antihistamine	8.83	9.47	8.08	8.38
antibiotic - macrolide	8.27	7.98	7.79	9.58
steroid - systemic	6.26	6.75	6.06	5.39
antibiotic - cephalosporin	6.21	6.49	7.50	3.79
antibiotic - nitrofurantoin	5.53	5.18	5.63	6.19
gastrointestinal - rehydration	4.93	5.53	4.91	3.59
antiparasitic	4.63	4.82	4.18	4.79

Notes: This table reports the share of outpatient visits with the respective drug. The top 15 drug types in the overall treatment sample (T) are reported, followed by the share of visits with a drug type in T0 (low copay), T1 (medium copay), and T2 (high copay).

Table B.3: Summary Statistics on Tests

	Visits with test (%)			
Test category	T	T0	T1	T2
malaria testing	31.92	32.72	34.20	26.95
urine testing (infections, kidney problems)	25.32	25.26	25.25	25.55
typhoid fever testing	25.28	25.53	25.40	24.55
complete blood count (anemia, infections)	22.71	22.72	23.95	20.96
h. pylori testing (stomach ulcers)	13.67	13.25	12.99	15.57
ultrasound scans	7.88	7.11	7.50	10.18
brucella testing (animal-borne infection)	7.07	5.79	8.51	7.98
syphilis testing	6.51	6.84	5.63	6.99
diabetes monitoring (blood sugar tests)	4.67	3.51	4.62	7.39
stool testing (parasites, infections)	4.28	4.12	3.46	5.79
inflammation and arthritis tests	3.77	3.51	4.62	3.19
hiv testing	2.91	3.16	2.89	2.40
x-rays	1.97	1.40	2.16	2.99
other specialized tests	1.84	1.84	2.16	1.40
pregnancy testing	1.63	1.49	2.02	1.40

Notes: This table reports the share of outpatient visits with the respective test. The top 15 test types in the overall treatment sample (T) are reported, followed by the share of visits with a test type in T0 (low copay), T1 (medium copay), and T2 (high copay).

Table B.4: Healthcare Utilization

	Mean all	Mean T0	β_1(T1)	β_2(T2)	N
outpatient: any visit (yes/no)	0.16	0.22	-0.06***	-0.09***	7,849
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: visits (nr)	0.30	0.42	-0.15***	-0.22***	7,849
	(0.90)	(1.10)	(0.03)	(0.03)	
inpatient: any visit (yes/no)	0.01	0.01	-0.01*	-0.00	7,849
	(0.11)	(0.12)	(0.00)	(0.00)	
inpatient: visits (nr)	0.01	0.02	-0.01*	-0.00	7,849
	(0.12)	(0.13)	(0.00)	(0.00)	
outpatient: any service (yes/no)	0.16	0.21	-0.06***	-0.09***	7,849
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: service (nr of visits)	0.26	0.37	-0.13***	-0.20***	7,849
	(0.80)	(0.99)	(0.03)	(0.03)	
outpatient: any consultation (yes/no)	0.16	0.20	-0.06***	-0.09***	7,849
	(0.36)	(0.40)	(0.01)	(0.01)	
outpatient: consultation (nr of visits)	0.24	0.34	-0.12***	-0.19***	7,849
	(0.69)	(0.85)	(0.03)	(0.02)	
outpatient: any drug (yes/no)	0.15	0.20	-0.06***	-0.09***	7,849
	(0.36)	(0.40)	(0.01)	(0.01)	
outpatient: drugs (nr of visits)	0.26	0.37	-0.15***	-0.21***	7,849
	(0.79)	(0.99)	(0.03)	(0.03)	
outpatient: any tests (yes/no)	0.13	0.18	-0.06***	-0.08***	7,849
	(0.34)	(0.38)	(0.01)	(0.01)	
outpatient: tests (nr of visits)	0.19	0.28	-0.10***	-0.16***	7,849
	(0.58)	(0.71)	(0.02)	(0.02)	
outpatient: any procedures (yes/no)	0.01	0.01	-0.00	-0.01**	7,849
	(0.10)	(0.12)	(0.00)	(0.00)	
outpatient: procedures (nr of visits)	0.01	0.02	-0.00	-0.01**	7,849
	(0.15)	(0.15)	(0.00)	(0.00)	
outpatient: coverage (yes/no)	0.15	0.21	-0.07***	-0.10***	7,849
	(0.36)	(0.41)	(0.01)	(0.01)	
outpatient: copay (yes/no)	0.12	0.10	0.05***	0.02*	7,849
	(0.33)	(0.30)	(0.01)	(0.01)	
outpatient: wrongly paid (yes/no)	0.00	0.01	-0.00	-0.00	7,849
	(0.07)	(0.08)	(0.00)	(0.00)	
outpatient: zero copay item (yes/no)	0.14	0.19	-0.07***	-0.09***	7,849
	(0.34)	(0.39)	(0.01)	(0.01)	
outpatient: positive copay item (yes/no)	0.16	0.21	-0.06***	-0.09***	7,849
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: share items zero copay (%)	0.06	0.09	-0.03***	-0.04***	7,849
	(0.19)	(0.21)	(0.01)	(0.01)	

Notes: This table reports healthcare utilization effects, using the administrative data. Equation B.1 describes the regression. The data are at the patient level. Only insured household members are included in the sample. Services include consultations, which are general, and other specialized services, such as dental services. Coverage (yes/no) is an indicator of whether the patient had a visit with a coverage. Copayment (yes/no) is an indicator of whether the patient had a visit with a copay. Wrongly paid (yes/no) is an indicator of whether the patient wrongly paid for an item that they should not have paid for. Zero copayment item (yes/no) is an indicator that is one if the patient received at least one zero copayment item; positive copayment item (yes/no) is an indicator that is one if the patient received at least one positive copayment item. The share of items with zero copayment is the number of items with zero copayment divided by the total number of items received at the visit; we then take the average over the visits. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

$$y_{i,h,j} = \alpha + \beta_1 T1_h + \beta_2 T2_h + \mu_j + \epsilon_{i,h,j} \tag{B.1}$$

Table B.5: Healthcare Utilization With Baseline Survey Controls

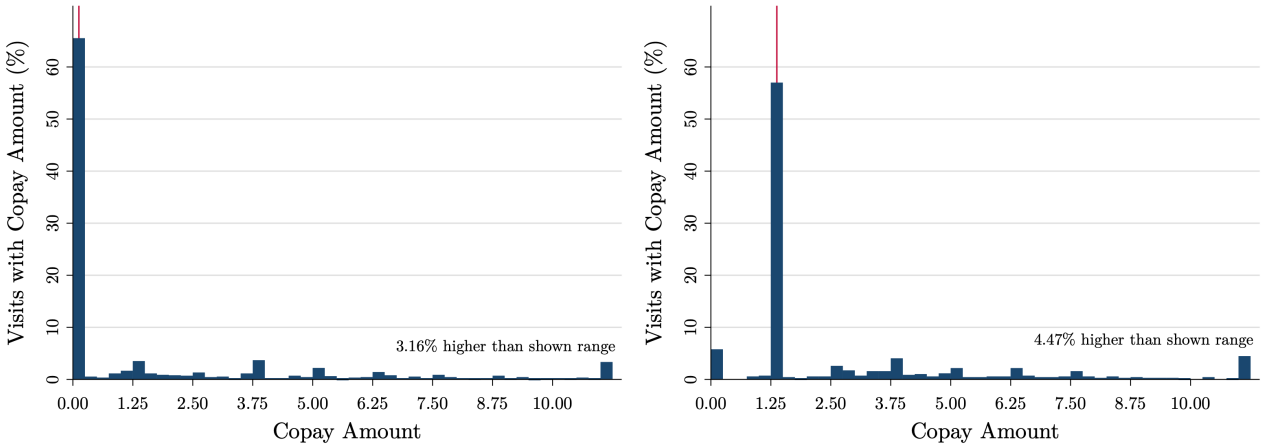
	Mean all	Mean T0	β_1(T1)	β_2(T2)	N
outpatient: any visit (yes/no)	0.17	0.22	-0.06***	-0.10***	7,329
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: visits (nr)	0.30	0.43	-0.16***	-0.23***	7,329
	(0.90)	(1.12)	(0.03)	(0.03)	
inpatient: any visit (yes/no)	0.01	0.02	-0.01**	-0.00	7,329
	(0.11)	(0.12)	(0.00)	(0.00)	
inpatient: visits (nr)	0.01	0.02	-0.01*	-0.00	7,329
	(0.12)	(0.13)	(0.00)	(0.00)	
outpatient: any service (yes/no)	0.16	0.22	-0.06***	-0.09***	7,329
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: service (nr of visits)	0.27	0.38	-0.13***	-0.20***	7,329
	(0.80)	(1.01)	(0.03)	(0.03)	
outpatient: any consultation (yes/no)	0.16	0.21	-0.06***	-0.09***	7,329
	(0.36)	(0.41)	(0.01)	(0.01)	
outpatient: consultation (nr of visits)	0.24	0.35	-0.12***	-0.20***	7,329
	(0.70)	(0.86)	(0.03)	(0.03)	
outpatient: any drug (yes/no)	0.15	0.21	-0.06***	-0.09***	7,329
	(0.36)	(0.40)	(0.01)	(0.01)	
outpatient: drugs (nr of visits)	0.26	0.38	-0.15***	-0.21***	7,329
	(0.79)	(1.00)	(0.03)	(0.03)	
outpatient: any tests (yes/no)	0.14	0.19	-0.06***	-0.09***	7,329
	(0.34)	(0.39)	(0.01)	(0.01)	
outpatient: tests (nr of visits)	0.20	0.29	-0.10***	-0.16***	7,329
	(0.59)	(0.73)	(0.02)	(0.02)	
outpatient: any procedures (yes/no)	0.01	0.02	-0.01*	-0.01**	7,329
	(0.11)	(0.12)	(0.00)	(0.00)	
outpatient: procedures (nr of visits)	0.01	0.02	-0.00	-0.01**	7,329
	(0.15)	(0.15)	(0.00)	(0.00)	
outpatient: coverage (yes/no)	0.15	0.22	-0.08***	-0.10***	7,329
	(0.36)	(0.41)	(0.01)	(0.01)	
outpatient: copay (yes/no)	0.12	0.10	0.06***	0.02**	7,329
	(0.33)	(0.30)	(0.01)	(0.01)	
outpatient: wrongly paid (yes/no)	0.00	0.01	-0.00	-0.00	7,329
	(0.07)	(0.08)	(0.00)	(0.00)	
outpatient: zero copay item (yes/no)	0.14	0.19	-0.07***	-0.09***	7,329
	(0.34)	(0.39)	(0.01)	(0.01)	
outpatient: positive copay item (yes/no)	0.17	0.22	-0.06***	-0.10***	7,329
	(0.37)	(0.41)	(0.01)	(0.01)	
outpatient: share items zero copay (%)	0.06	0.09	-0.03***	-0.04***	7,329
	(0.19)	(0.22)	(0.01)	(0.01)	
outpatient: total uninsured price (USD)	2.85	3.97	-1.33***	-1.89***	7,329
	(8.22)	(9.69)	(0.31)	(0.29)	
outpatient: copay (USD)	0.67	0.56	0.16**	0.22***	7,329
	(2.49)	(2.34)	(0.07)	(0.08)	
outpatient: coverage (USD)	2.07	3.26	-1.45***	-2.04***	7,329
	(6.25)	(7.90)	(0.25)	(0.23)	

Notes: This table reports healthcare utilization effects, using the administrative data, with baseline survey controls (health status, sick days, total health expenses, visits to insured hospitals). Equation B.2 describes the regression. The data are at the patient level. Only insured household members are included in the sample. Services include consultations, which are general, and other specialized services, such as dental services. Coverage (yes/no) is an indicator of whether the patient had a visit with a coverage. Copayment (yes/no) is an indicator of whether the patient had a visit with a copay. Wrongly paid (yes/no) is an indicator of whether the patient wrongly paid for an item that they should not have paid for. Zero copayment item (yes/no) is an indicator that is one if the patient received at least one zero copayment item; positive copayment item (yes/no) is an indicator that is one if the patient received at least one positive copayment item. The share of items with zero copayment is the number of items with zero copayment divided by the total number of items received at the visit; we then take the average over the visits. The variables in USD are summed over all visits. Total uninsured price is what an uninsured patient would pay at the hospital. Standard errors reported in parentheses are clustered at the household level. $***$, $**$, and $*$ indicate significance at the 1%, 5%, and 10% levels.

$$y_{i,h,j} = \alpha + \beta_1 T1_h + \beta_2 T2_h + \mu_j + \epsilon_{i,h,j} \tag{B.2}$$

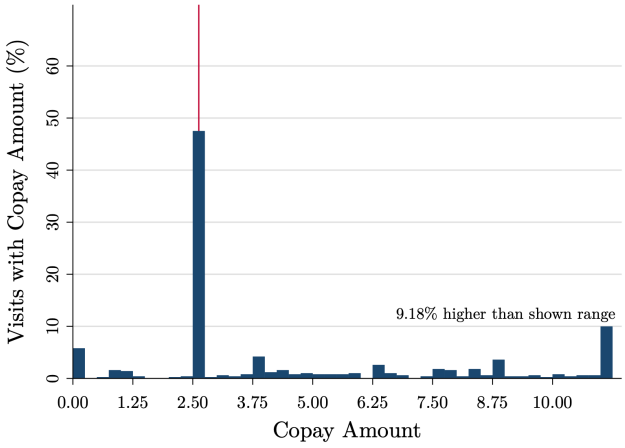
Figures

Figure B.1: Payments at Insured Hospitals

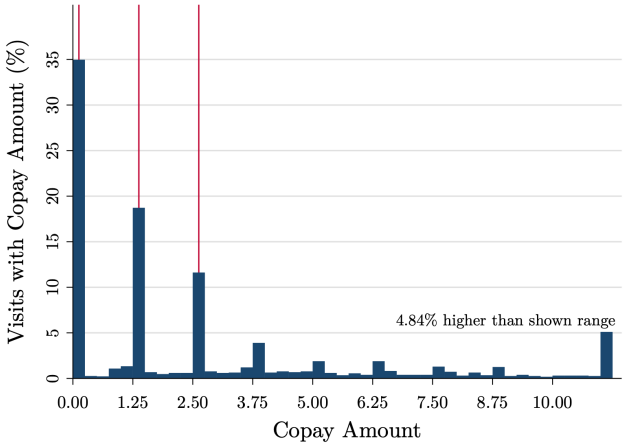


(a) T0: Copayment USD 0

(b) T1: Copayment USD 1.25



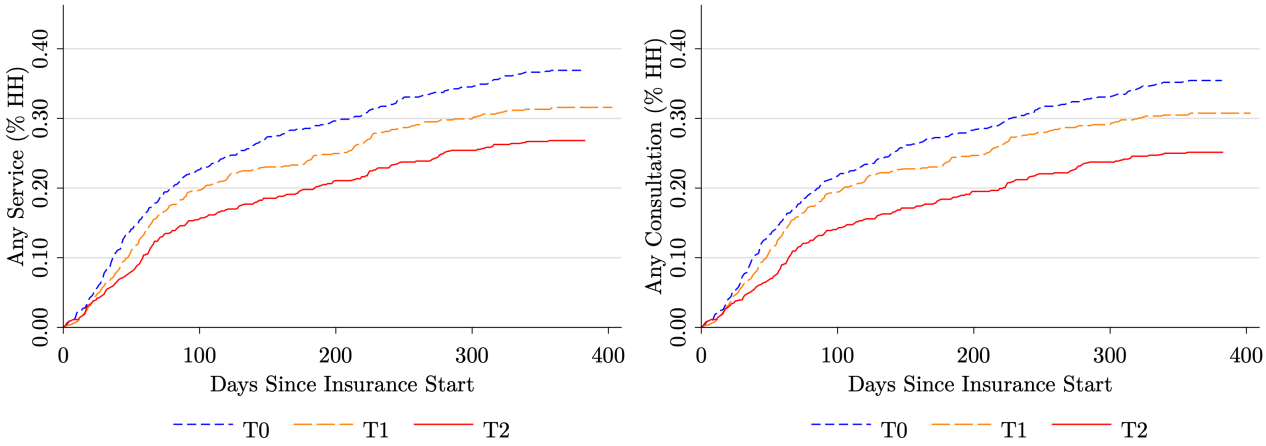
(c) T2: Copayment USD 2.50



(d) T0, T1, and T2 pooled

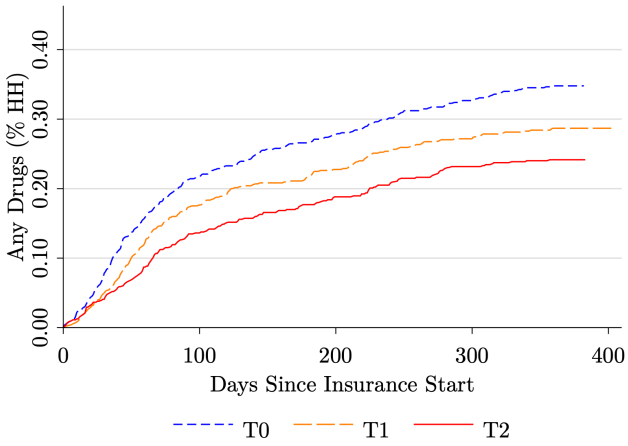
This figure depicts the percentage of outpatient visits with a certain payment amount, over all outpatient visits, by treatment arm (Figures B.1a, B.1b, and B.1c) and pooled among treatment arms (Figure B.1d). The red vertical lines indicate the copayment as of the insurance contract for the respective treatment arm.

Figure B.2: Healthcare Seeking (Any Visit with Category)

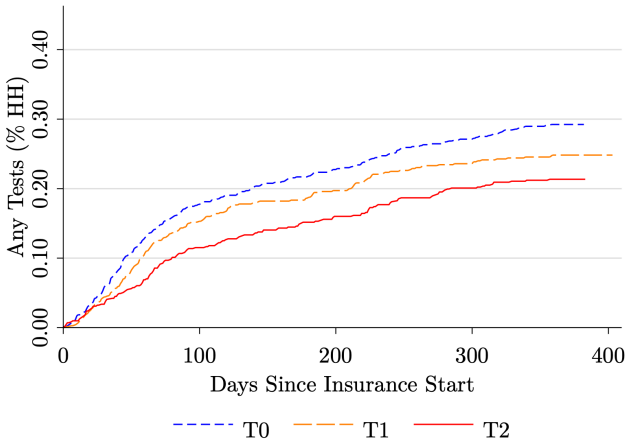


(a) Services

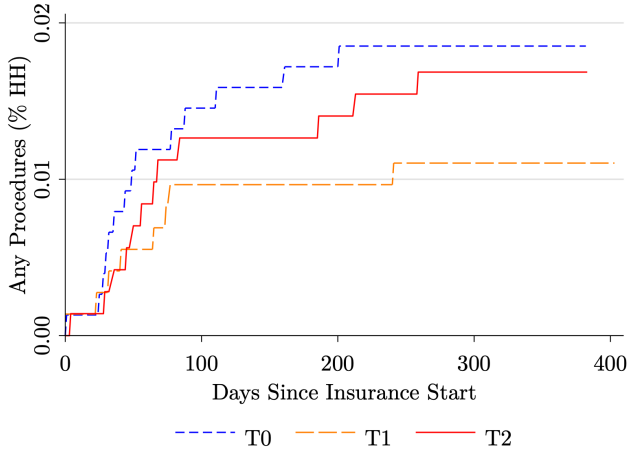
(b) Consultations



(c) Drugs



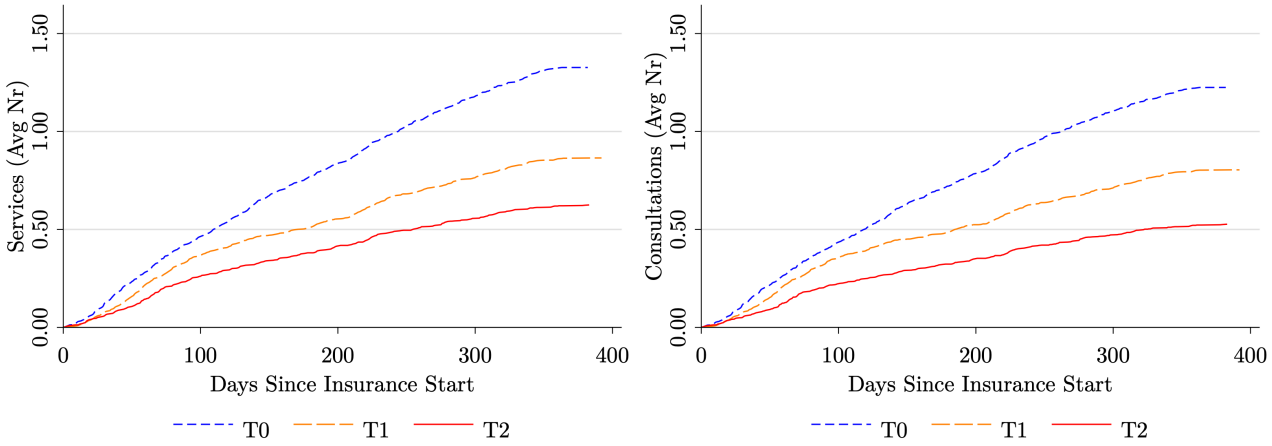
(d) Tests



(e) Procedures

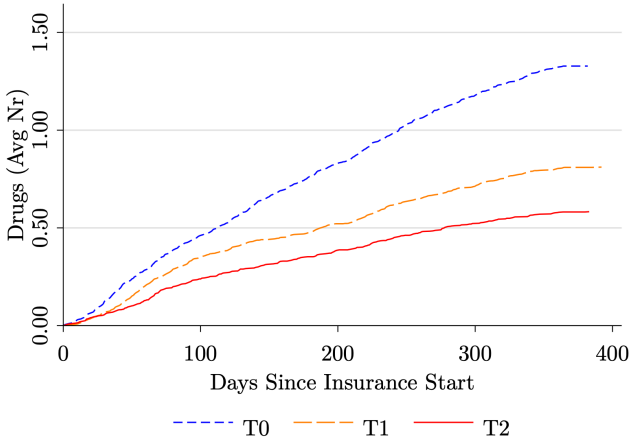
This figure describes the share of households (HH) with outpatient visits that include services (Figure B.2a), consultations – which are a type of services – (Figure B.2b), drugs (Figure B.2c), tests (Figure B.2d), or procedures (Figure B.2e), as recorded in the administrative hospital data. Statistics are provided at a given point in time since the insurance started. The short-dashed blue lines depict arm T0 (low copayment), the long-dashed yellow lines arm T1 (medium copayment), and the solid red lines arm T2 (high copayment).

Figure B.3: Healthcare Seeking (Number of Visits with Category)

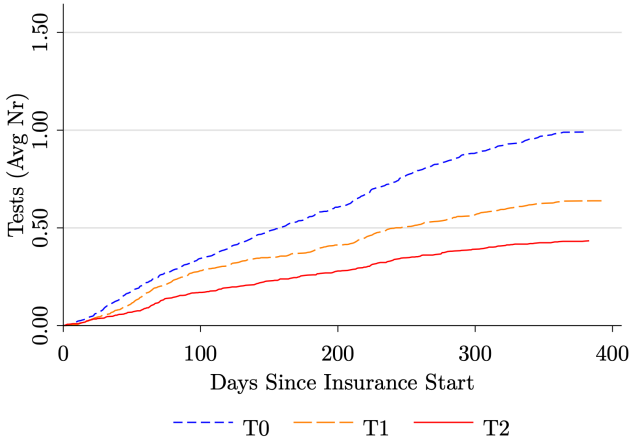


(a) Services

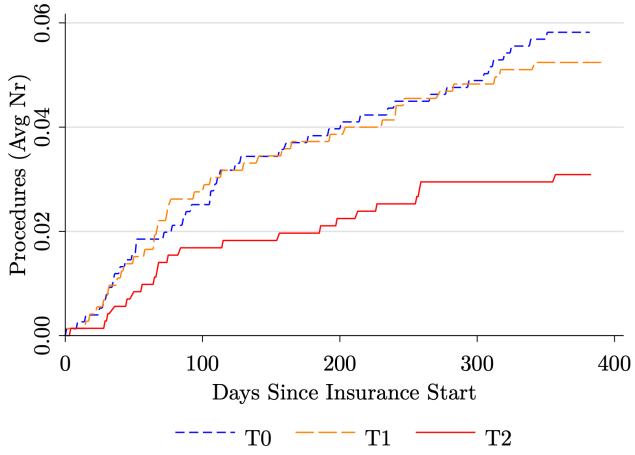
(b) Consultations



(c) Drugs



(d) Tests



(e) Procedures

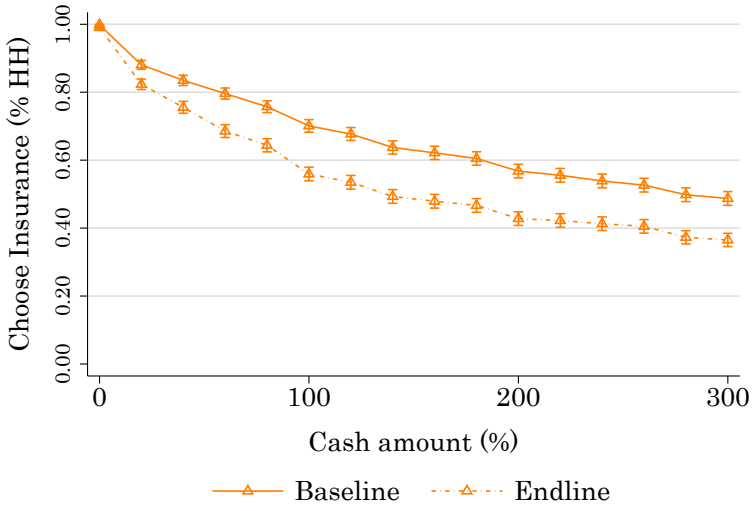
This figure describes the average number of outpatient visits per household, conditional on having any outpatient visit, that include services (Figure B.3a), consultations – which are a type of services – (Figure B.3b), drugs (Figure B.3c), tests (Figure B.3d), or procedures (Figure B.3e), as recorded in the administrative hospital data. Statistics are provided at a given point in time since the insurance started. The short-dashed blue lines depict arm T0 (low copayment), the long-dashed yellow lines arm T1 (medium copayment), and the solid red lines arm T2 (high copayment).

Appendix C: Insurance Valuation

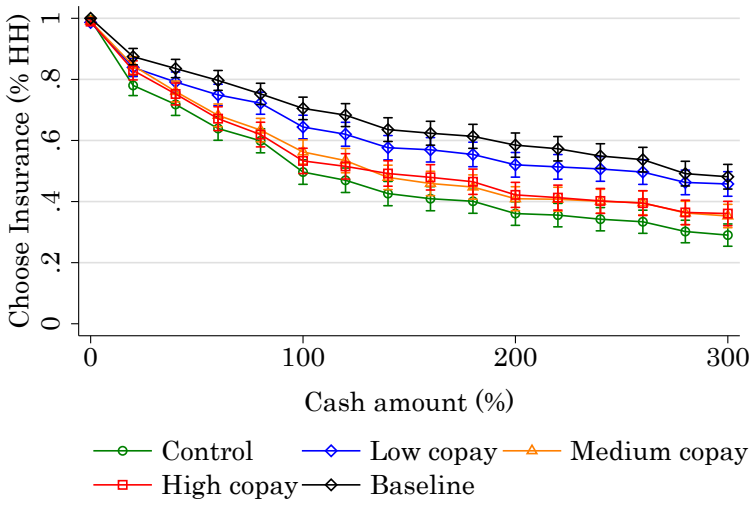
Figures

Figure C.1: Demand for Insurance (USD 1.25 Copay) at Endline

(a) Baseline vs. Endline

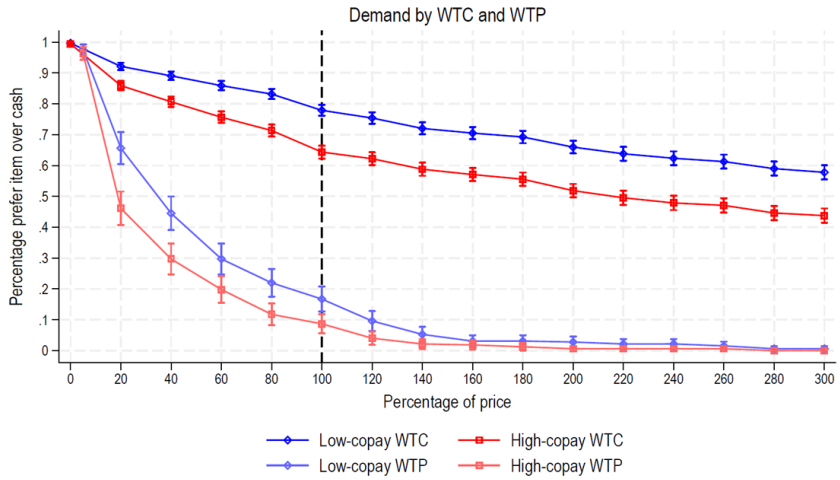


(b) Endline by treatment groups



This figure shows the proportion of households choosing USD 1.25 copayment insurance over cash at endline (after 12 months of insurance coverage for treated households). (a) compares choices at endline to choices at baseline (before treatment assignment), restricting to households that received insurance treatment (T0, T1, or T2). (b) compares choices across treatment groups in the main experiment. The x-axis shows the offered cash amount as a percentage of the standard premium. The y-axis shows the fraction preferring insurance to cash.

Figure C.2: Willingness to Accept versus Willingness to Pay



This figure compares willingness to accept (WTA) and willingness to pay (WTP) for insurance in a subsample of 324 households. Both low-copayment (USD 0) and high-copayment (USD 2.50) insurance are shown. WTA (solid lines) measures the proportion choosing insurance over cash, while WTP (dashed lines) measures the proportion willing to purchase insurance at each offered cash amount. The x-axis shows offered cash amount as a percentage of the standard premium.