Since the early 2000s, there has been an increase in government-run health insurance schemes in low- and middle-income countries that aim to achieve universal health coverage. One key challenge in countries where the informal sector is a large part of the economy is that non-poor informal workers are less likely to enroll and retain in government health insurance programs, as they are outside the formal tax system. Researchers conducted a randomized evaluation to test the impact of various programs, including subsidies, registration assistance and information campaigns on the enrollment and retention of non-poor informal workers in Indonesia’s national health insurance program. Registration assistance and subsidies both increased household enrollment, but overall enrollment rates remained low.

**Policy issue**

Since the early 2000s, low- and middle-income countries have increasingly been implementing government-run health insurance schemes to provide universal health coverage for their citizens. Such coverage could increase access to key health services and prevent people without insurance from falling into or deeper into poverty due to the cost of health care when they get sick.

However, implementing a sustainable health insurance scheme can be difficult. Non-poor informal workers make up a large portion of the workforce in many low- and middle-income countries but are typically less likely to enroll and remain in insurance programs. Governments can enroll formally-employed individuals through their employers, and enroll low-income individuals by providing them with subsidized insurance, but these methods do not reach non-poor informal workers. Additionally, if only the
least healthy individuals opt in to the insurance program, the provider would need to cover more claims, which would increase the cost of premiums, and cause further dropout. To ensure the viability of health insurance schemes, governments must encourage healthy individuals and informal sector workers to sign up for coverage.

**Context of the evaluation**

The Government of Indonesia launched a national health insurance scheme, Jaminan Kesehatan Nasional (JKN), in 2014 with the aim of providing universal health coverage. While health insurance coverage has increased since then, approximately 20 percent of Indonesians in the target population remained without coverage as of 2020.

Non-poor informal workers, who make up about 30 percent of Indonesia's workforce, are required to individually register for JKN and make monthly premium payments. Families are required to enroll in the JKN program either in person at an office in the district capital or online through the program website. To register, households must fill in a form and present an updated Family Identity Card (Kartu Keluarga), the ID card of the family member that is doing the registration, and color photographs of each family member. According to Indonesia's Social Security Agency for Health (BPJS Kesehatan), 60 percent of Indonesia's non-poor informal workers still remained uninsured as of 2020. Potential barriers for individuals not signing up could be the high premium and the hassles for enrollment process.

Retention is another challenge: individuals can enroll in health insurance at any point during the year. This creates incentives for households to delay coverage until one gets sick and—despite penalties if someone drops coverage and then tries to reactive it—to drop coverage once one recovers.

Registering for insurance at BPJS Kesehatan

**Details of the intervention**
In 2015-2018, researchers worked in close partnership with the Indonesian Social Security Agency (BPJS), National Planning Agency (BAPPENAS), National Team for the Acceleration of Poverty Reduction (TNP2K), and Executive Office of the President of the Republic of Indonesia (KSP) to test the impact of different incentives and information campaigns on the enrollment and retention of non-poor informal workers in the JKN health insurance program.

Researchers randomly assigned 5,996 households from the cities of Bandung and Medan to receive a combination of the following interventions or to serve as part of the comparison group.

1. **Time-limited, temporary subsidies for health insurance premiums**: To test the influence of price on insurance purchases, researchers randomly assigned households to different subsidy offers for health care premiums for one year. Households were randomly selected to one of the following groups:
   - Full-subsidy, where all family members receive premium subsidies
   - Half-subsidy, where half of family members receive premium subsidies
   - No subsidy or comparison group

2. **Information about JKN**: To better understand the effect of increased knowledge on registration rates, all households received basic information on what the insurance covered, the premiums, and the procedure for registration. In addition, some households received additional information on the health care costs for certain medical conditions, such as a heart attack, about the waiting period between registering for JKN and the activation of health care coverage, or a reminder that enrollment is mandatory.

3. **Assisted registration**: To test the impact of traveling to the social security administration office to register for JKN versus being able to do so at home, half of the households were randomly offered the opportunity to register from home with the assistance of a surveyor through an online registration portal on a laptop computer. The other half were required to travel to the office.

Researchers collected household survey data and administrative data to measure the interventions' effects attempted and actual enrollment, coverage, and claims. In addition, researchers also examined the effects of the subsidies on government revenues.

**Results and policy lessons**

Providing temporary subsidies increased enrollment and retention with no additional cost to the government. However, many of those who attempted to enroll failed to complete their registration. Providing additional information showed no impact.

*Providing subsidies was effective at increasing enrollment during the following twelve months.* The effects were largest in the full subsidy group, where enrollment increased by 18.6 percentage points (an increase of almost 240 percent from a mean of 7.8 percent in the comparison group), followed by households receiving half-subsidy (who had a 10 percentage points or 130 percent increase). Households who received subsidies were also 3.9 percentage points or 58 percent more likely to remain covered even after the subsidies ended.

Meanwhile households receiving assistance in registering showed a smaller increase of 3.5 percentage points, or by 45 percent. There was no impact among households receiving additional information, suggesting that the lack of information might not be the key barrier to enrollment.

*Less than one-fifth of households who attempted to enroll were successful in doing so.* Households who received subsidies showed an increase in attempted enrollment by 23.7 percentage points relative to the comparison group (of whom 8 percent enrolled), but less than one-fifth of the households were successful in completing the registration process. Households reported issues with providing official identification documents as a key barrier.
Providing full subsidies substantially expanded coverage at no higher cost for the government. Although the government’s revenue was lower in the groups receiving full subsidies during the subsidy period, about twice as many household-months were covered in the full subsidy group compared to the no-subsidy group. Due to the premiums, revenue was almost identical between the full and no subsidy groups and cost the government about IDR 5,000 (US$0.35) per household.

**POLICY IMPLICATIONS**

In 2016, findings from the evaluation provided input to the National Development Planning Agency and Indonesia's Social Security for Health on a policy debate around JKN's pricing strategy. The results informed the Government of Indonesia's decision to avoid raising premiums between 2016 and 2019.

However, the long-term results of the study also suggested challenges in ensuring the program’s financial sustainability. In October 2019, the Ministry of Finance increased premiums for all healthcare classes for the options of schemes of its contributory JKN Mandiri program: lowest premium (class III), middle premium (class II), highest premium (class I).