

## HEALTH ANALYTICS BRIEF



### THE FINANCIAL AND HEALTH DIARIES WHAT DO THE FINANCIAL AND HEALTH DIARIES TELL US ABOUT DECISIONS TO RENEW IN HEALTH INSURANCE?

What influences renewal in insurance? Is it poverty (low wealth) or seasonality in how much cash a household has at hand (liquidity)? These and other questions were investigated in the Financial and Health Diaries study, consisting of weekly interviews with 240 households, over a one-year period. 120 of these households were located in Kwara State, Nigeria. The recorded data shed light on how to improve marketing strategies to target people that are up for renewal in the context of the Kwara State Health Insurance program.

Since 2007, the Kwara State Government, Hygeia Community Health Care, the Health Insurance Fund, PharmAccess Foundation, and healthcare providers have been working with local communities to improve access to affordable and quality healthcare for rural residents of Kwara State by offering subsidized health insurance and improving quality of care at program facilities. Since the introduction of the Kwara State Health Insurance program in 2007, a total of 347,000 individuals had enrolled in the scheme by December 2015.

However, with an annual renewal rate of 50%-60%, active enrolment stands at 137,000 individuals as of January 2016. Several studies have suggested that financial constraints hinder people from paying insurance premiums on time. The Financial and Health Diaries study was im-

plemented in Kwara State in 2012 to investigate to what extent poverty and seasonality in cash on hand (i.e. liquidity) constrain renewal in the insurance program.

At the beginning of the study, approximately half of the 120 households that took part in the study were enrolled in the insurance scheme. All adults in the study households participated in weekly private interviews from April 2012 to April 2013, covering the wet season (April-October) and the dry season (November-March). The interviews recorded all weekly financial transactions (Financial Diaries), such as income, loans, gifts, savings, and purchases, as well as the health events of all 829 household members (Health Diaries), such as illnesses, injuries, medical expenditures, and consultations at healthcare providers.



## KEY COUNTRY FACTS

**173.6 M**  
population  
(54% are rural)



**62%**  
of people live on less than  
USD 1.25/day

**69%**  
of people's spending on healthcare is out-of-pocket

Based on 2012 and 2013 World Bank and World Health Organization data.

## STUDY FACTS - NIGERIA

The Diaries study tracked low-income households over the course of a year to collect highly detailed data on how families manage their finances on a day-to-day basis and what kind of health problems they experienced. This research reveals hard-to-see aspects of the financial and health lives of rural Nigerians, providing new insight for the design of insurance marketing strategies, programs and quality improvement efforts.

**120**  
households investigated

**311**  
adults interviewed weekly for one year

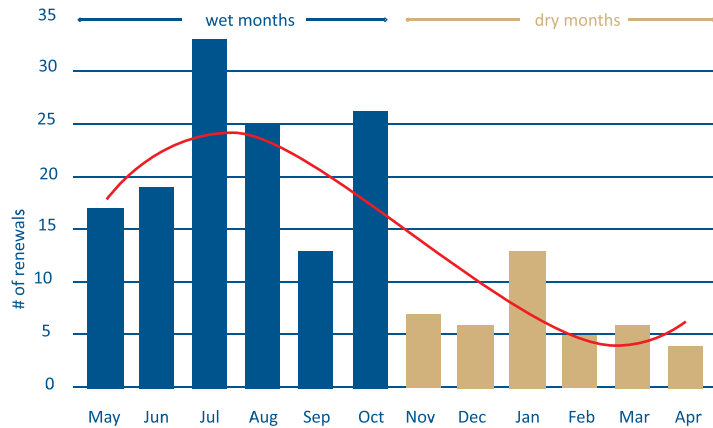
### PROGRAM PARTNERS

Kwara State Government  
Hygeia Community Health Care  
PharmAccess Foundation  
Health Insurance Fund

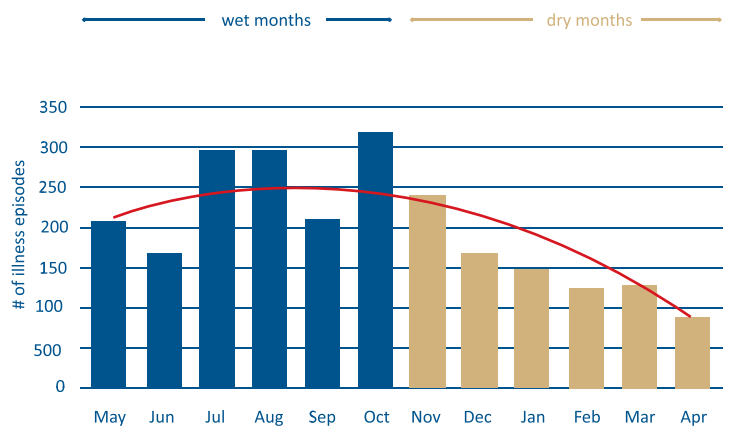
### RESEARCH PARTNERS

- Amsterdam Institute for International Development
- University of Ilorin Teaching Hospital
- International Food Policy Research Institute

**Figure 1** Total number of insurance renewals per month



**Figure 2** Total number of illness episodes per month



**Main findings**

*Seasonality in finances*

Insured households were significantly more likely to renew their expired insurance policies during the wet season than in the dry season (Fig. 1). This seasonal trend was confirmed by administrative enrolment data over the last five years, with the gap in insurance renewal between the two seasons actually expanding over time. The Financial Diaries revealed that agricultural activities are mostly concentrated in the wet season, when farmers plant and weed their crops. During this season, money turns over significantly faster, with both higher expenditures and higher sales from business. When the dry season starts, crops are harvested and thereafter, economic activity is limited as most farmers keep their harvest in storage for sale in leaner periods.

*Effects of finances (wealth and seasonality in cash on hand) on decision to renew*

Somewhat surprisingly, renewal into the health insurance program did not correlate with long-term household wealth nor did it with seasonality in cash on hand.

*Seasonality in health episodes*

The Health Diaries showed increased infectious diseases during the wet season (Fig. 2), correlating with an upward trend in health expenditures until October and a sharp decline thereafter.

The humid environment of the wet season facilitates transmission of malaria, intestinal worms and parasites at a time when economic activity is highest, with people spending more time in crowded markets and town centers where the risk of exposure to infectious diseases is higher.

*Influence of illness episodes*

Renewal of insurance was strongly associated with illness episodes. People were significantly more likely to renew in the insurance program when experiencing an illness or injury. This behaviour was independent of seasonal effects and of poverty and liquidity (seasonality in cash on

hand). However, as there is a waiting period between the moment of renewal and the moment coverage starts, many people still have to pay for part of the health costs associated with the illness episode.

**Conclusions**

Illness episodes strongly motivate people to renew in the insurance scheme, independent of household finances. There are potential gains of reminding people to timely renew their policy to make them more financially prepared for illnesses. Marketing efforts to remind people to renew should be planned before the start of the wet season since most illness episodes occur in this period.

**TAKE HOME MESSAGES**

- Wealth status and seasonality in cash on hand do not affect renewal of health insurance.
- Having an illness episode after insurance expiry does have an effect on renewal, probably increasing the salience of health insurance.
- Illness episodes are mostly likely to occur in the wet season.
- Marketing activities (making use of opportunities of digital innovations) to remind people to renew on time should be planned before the start of the wet season to prevent people from not being able to deal with the financial effects of being ill.

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