

SUPPLEMENTARY MATERIALS**Supplementary tables**

Table S1: Sources of data for health insurance coverage, health expenditure and catastrophic household expenditure on health, and the number of countries for which data was retrievable from each respective source.

Variable category	Source	Count
Health insurance coverage	DHS	56
	WHO	13
	National statistics	11
	Peer-reviewed publication	8
	Multiple Indicator Cluster Surveys (MICS)	4
	Grey literature publication	3
	World Bank	3
	Malaria Indicators Survey (MIS)	1
	UHC policy	1
	All health insurance coverage sources	100
Health financing indicators	WHO Global Health Expenditure Database	99
Catastrophic expenditure indicators	WHO Global Health Observatory Database	89

Table S2: Linear regression output for a model estimating the association between health insurance coverage and expenditure on health as a portion of country GDP (n=99 countries, p=0.175)

Variable	Coefficient	Standard Error	T-statistic	P-value
Constant	5.63	0.362	15.6	<0.001
HI Coverage	0.0146	0.00829	1.76	0.0824
GNI per capita	-0.0000283	0.0000490	-0.577	0.565

Table S3: Linear regression output for a model estimating the association between health insurance coverage and government, private and external expenditures on health (n=99 countries)

Outcome	Variable	Coefficient	Standard Error	T-statistic	P-value
Government Expenditure ¹	Constant	0.0220	2.30	9.58	<0.001
	Coverage	0.158	0.0526	3.00	0.00342
	GNI per capita	0.00167	0.000311	5.37	<0.001
Private Expenditure ²	Constant	49.9	2.85	17.5	<0.001
	HI Coverage	-0.109	0.0652	-1.66	0.0995
	GNI per capita	0.0000852	0.000386	0.221	0.826
External Expenditure ³	Constant	28.1	2.03	13.827	<0.001
	HI Coverage	-0.0493	0.0466	-1.06	0.292
	GNI per capita	-0.00176	0.000275	-6.379	<0.001
Overall P-values:					
1: <0.001					
2: 0.148					
3: <0.001					

Table S4: Linear regression output for a model estimating the association between health insurance coverage and catastrophic expenditure on health, at both the 10% and 25% of household income thresholds (n=89 countries).

Catastrophic Expenditure Outcome	Variable	Coefficient	Standard Error	T-statistic	P-value
10% of HH Expenditure ¹	Constant	1.62	0.187	8.68	<0.001
	HI Coverage	-0.00111	0.00453	-0.246	0.807
	GNI per capita	0.0000296	0.0000277	1.066	0.290
25% of HH Expenditure ²	Constant	-0.238	0.267	-0.893	0.375
	HI Coverage	-0.00214	0.00648	-0.331	0.741
	GNI per capita	0.00003.64	0.0000396	0.918	0.361
Overall P-values:					
1. 0.451					
2. 0.601					

Table S5: Linear regression output for a model estimating the association between health insurance coverage and impoverishment due to healthcare expenses, at both the \$1.90/day and \$3.20/day poverty line thresholds (n=85 countries).

Impoverishment Indicator Outcome	Variable	Coefficient	Standard Error	T-statistic	P-variable
\$1.90 per day ¹	Constant	1.94	0.295	6.60	<0.001
	HI Coverage	-0.00837	0.00690	-1.21	0.228
	GNI per capita	-0.0000770	0.0000424	-1.82	0.0729
\$3.20 per day ²	Constant	1.76	0.249	7.05	<0.001
	HI Coverage	-0.00780	0.00583	-1.34	0.185
	GNI per capita	-0.0000221	0.0000358	-0.617	0.539
Overall P-values:					
1. 0.00115					
2. 0.0479					

Table S6: Adjusted linear regression output for a model estimating the association between changes in health insurance coverage over time and changes in government, private and out-of-pocket expenditures on health over time (n=25 countries).

Outcome	Variable	Coefficient	Standard Error	T-statistic	P-value
Government Expenditure ¹	Constant	3.965	2.47	1.61	0.120
	HI Coverage	-0.143	0.184	-0.780	0.442
	GNI per capita	0.0000165	0.000433	0.038	0.970
Private Expenditure ²	Constant	-1.66	2.71	-0.614	0.544
	HI Coverage	0.108	0.201	0.537	0.595
	GNI per capita	-0.0000489	0.000475	-0.103	0.919
Out-of-pocket Expenditure ³	Constant	-3.84	2.46	-1.56	0.130
	HI Coverage	0.0888	0.183	0.486	0.631
	GNI per capita	0.000139	0.000431	0.323	0.749
Overall P-values:					
1: 0.721					
2: 0.864					
3: 0.781					

Supplementary figures

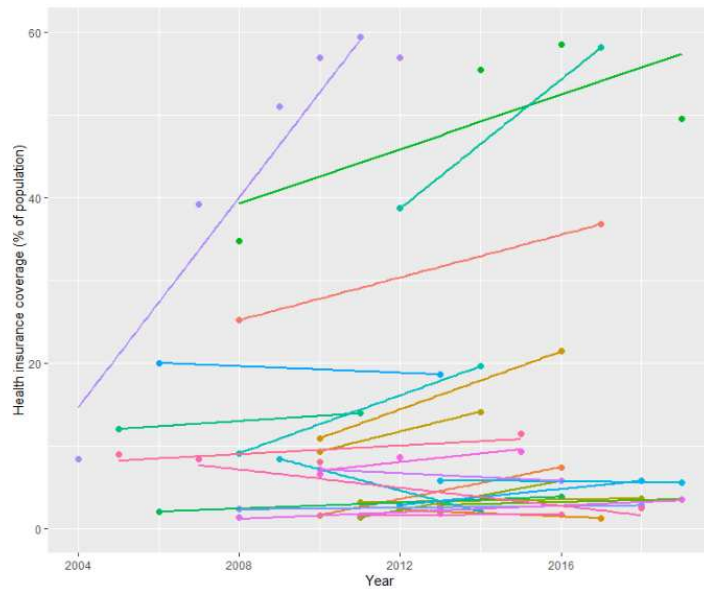


Figure S1: Level of health insurance coverage over time by country ($n=25$ countries)