

RESEARCH NEWSLETTER

Improving Effective Coverage in Health: Do Financial Incentives Work? | June 2022

POLICY RESEARCH REPORT

[Effective Health Care Reform Requires Transparency, Accountability, and Decentralized Financing, Says New Report](#)

Nearly two decades ago, many low- and middle-income countries began a transformation in health care financing. Centralized budgets and low levels of autonomy for facilities and workers were replaced with frontline autonomy, performance pay, and greater transparency and accountability for results, all through a package of reforms that came to be known as performance-based financing. Unfortunately, while health coverage did expand dramatically over the past two decades, this expansion was not accompanied by the expected improvements in health outcomes.

A new World Bank Policy Research Report, [Improving Effective Coverage in Health: Do Financial Incentives Work?](#), draws on research from 15 years and 40 countries to better understand the gap between health coverage and outcomes and point a way forward. At a Policy Research Talk last month, lead authors [Damien de Walque](#) and [Eeshani Kandpal](#), economists at the World Bank, shared key insights from their review of the evidence and recommended a new tack in health financing policy.

[Read the Feature Story »](#) | [Report](#) | [Overview](#) | [Launch Event](#) | [Presentation](#) | [Press Release](#) | [Damien de Walque, Lead Economist](#) | [Eeshani Kandpal, Senior Economist](#)

RESEARCH HIGHLIGHTS

WORKING PAPERS

✓ [Financial Incentives to Increase Utilization of Reproductive, Maternal and Child Health Services in Low- and Middle-Income Countries: A Systematic Review and Meta-Analysis](#)

Sven Neelsen, [Damien de Walque](#), [Jed Friedman](#), [Adam Wagstaff](#), World Bank Policy Research Working Paper 9793, October 2021

This paper provides the first meta-analysis of the impacts of financial incentives on reproductive, maternal and child health service coverage across performance-based financing (PBF), voucher, and conditional cash transfer (CCT) programs, and estimates mean effect sizes for each intervention type separately. A systematic review was conducted of the effects of PBF, voucher, and CCT programs on six reproductive, maternal, and child health service indicators. Four literature searches were conducted

between September 2016 and March 2021. Financial incentives increase coverage of all considered reproductive, maternal, and child health indicators, but mean effect sizes are of modest magnitude. There is little evidence for substantive variation in effect sizes across financial incentive interventions in general and between CCT, voucher, and PBF schemes in particular.

✓ [Information, Loss Framing, and Spillovers in Pay-for-Performance Contracts: A Framed Field Experiment with Nigerian Health Workers](#)

Sebastian Bauhoff, [Eeshani Kandpal](#), *World Bank Policy Research Working Paper 9687*, June 2021

This paper examines the direct and indirect impacts of incentives—in addition to information—on health workers' performance. In a field experiment embedded in a survey of 691 primary care clinics in Nigeria, 1,363 maternity care workers were randomized to three study arms: information, rewards, and penalties. Participants had to identify correct clinical actions based on the records of hypothetical patients receiving maternity care. Compared to information alone, both rewards and penalties increase time on task by 11 percent, correct overall performance by 6 to 8 percent, directly incentivized performance by 20 percent, and performance on a real-world task by about 15 percent. The findings indicate that incentives matter above and beyond information: the two incentive arms significantly outperform the information arm. However, the type of incentive does not seem to make a difference, with rewards and penalties performing similarly compared to information alone.

JOURNAL ARTICLES

✓ [Incentivizing Quantity and Quality of Care: Evidence from an Impact Evaluation of Performance-Based Financing in the Health Sector in Tajikistan](#)

Tashrik Ahmed, Aneesa Arur, [Damien de Walque](#), [Gil Shapira](#), *Forthcoming in Economic Development and Cultural Change | Working Paper*

To improve utilization and quality of health services, a growing number of low- and middle-income countries have been experimenting with financial incentives tied to providers' performance. Relying on a difference-in-differences approach, the authors estimate the impacts of the performance-based financing pilot in Tajikistan. Primary care facilities were given financial incentives conditional on the quality and quantity of selected services. Significant improvements were found on quality indicators, including elements of the content of care. While the communities in the pilot districts reported higher satisfaction with the local primary care facilities, and despite the improvements in quality, the impact on utilization was limited.

✓ [Inequality in the Quality of Health Services: Wealth, Content of Care, and Price of Antenatal Consultations in the Democratic Republic of Congo](#)

Günther Fink, [Eeshani Kandpal](#), [Gil Shapira](#), *Economic Development and Cultural Change*, vol. 70, no. 3, April 2022 | [Working Paper](#)

Although more than 80 percent of women receive antenatal care and deliver in facilities, the Democratic Republic of Congo (DRC) remains among the 10 countries with the highest maternal and infant mortality rates globally. This paper exploits unique data on care seeking and treatment quality to estimate the wealth gradient in quality of antenatal care in the DRC and decompose this gradient into several sources of inequality. The researchers find a significant wealth-quality gradient: a 1 standard deviation in household wealth is associated with a 1.6–3.2 percentage point increase in protocol compliance. A large part of the overall wealth-

quality gradient is driven by generally lower facility quality in poorer areas. However, the paper also finds a statistically significant within-facility quality-wealth relationship, suggesting that even conditional on the specific facility chosen, wealthier women receive a higher quality of care.

✓ [Does Patient Demand Contribute to the Overuse of Prescription Drugs?](#)

[Carolina Lopez](#), [Anja Sautmann](#), [Simone Schaner](#), *American Economic Journal: Applied Economics*, vol. 14, no. 1, January 2022 | [Working Paper](#)

Since patients cannot verify the true cause of their illness, they must rely on the provider's treatment recommendation. Some think this can tempt providers to overprescribe. However, it is also possible that it is the patients who drive demand for non-indicated treatment. In an experiment in Mali, this paper tested whether patients pressure providers to prescribe unnecessary antimalarial medications. The experiment introduced a discount for a course of malaria tablets, while varying whether only the provider knew about this discount or both provider and patient knew. The authors find evidence of patient-driven demand: informing patients about the discount, instead of letting providers decide whether to share this information, increased discount use by 35 percent and overall malaria treatment by 10 percent. These marginal patients rarely had malaria, worsening the illness-treatment match.

✓ [Decentralized facility financing versus performance-based payments in primary health care: a large-scale randomized controlled trial in Nigeria](#)

[Madhulika Khanna](#), [Benjamin Loevinsohn](#), [Elina Pradhan](#), [Opeyemi Fadeyibi](#), [Kevin McGee](#), [Oluwole Odutolu](#), [Gyorgy Bela Fritsche](#), [Emmanuel Meribole](#), [Christel M. J. Vermeersch](#), [Eeshani Kandpal](#), *BMC Medicine* 19, article 224, September 2021

This paper assesses two reform packages, performance-based financing (PBF) and direct facility financing (DFF), against each other and business-as-usual for maternal and child health care provision in Nigeria. The findings show that both PBF and DFF offer significant improvements over business-as-usual for service provision and quality of care. However, except for institutional delivery, PBF and DFF do not differ from each other despite PBF disbursing \$2 for every dollar disbursed by DFF. Both PBF and DFF offer viable improvements over business-as-usual in moving forward with health care reform. The findings from this study perhaps indicate that PBF and DFF should be viewed as complements and not alternatives.

✓ [Looking into the performance-based financing black box: Evidence from an impact evaluation in the health sector in Cameroon](#)

[Damien de Walque](#), [Paul Jacob Robyn](#), [Hamadou Saidou](#), [Gaston Sorgho](#), [Maria Steenland](#), *Health Policy and Planning*, vol. 36, Issue 6, July 2021 | [Working Paper](#)

Several studies have shown a positive impact of performance-based financing (PBF) on health service coverage, but relatively little is known about the mechanisms driving those results. This article presents the results of a randomized impact evaluation in Cameroon designed to isolate the role of specific components of the PBF approach. Overall, results indicate that PBF in Cameroon led to significant increases in utilization for several services (child and maternal vaccinations, use of modern family planning), but not for others like antenatal care visits and facility-based deliveries. In terms of quality, PBF increased the availability of inputs and equipment, qualified health workers, and led to a reduction in formal and informal user fees. However, for many positively impacted outcomes, the differences between the PBF group and the group receiving additional financing not

linked to performance are not significant, suggesting that additional funding rather than the explicit incentives might be driving improvements. In contrast, the treatment group that was offered enhanced supervision, coaching and monitoring without additional funding did not experience significant impacts compared to the control group.

✓ [Use of standardised patients for healthcare quality research in low- and middle-income countries](#)

Ada Kwan, Benjamin Daniels, Sofi Bergkvist, Veena Das, Madhukar Pai, Jishnu Das, BMJ Global Health, vol. 4, issue 5, September 2019

The use of standardized patients (SPs)—people recruited from the local community to present the same case to multiple providers in a blinded fashion—is increasingly used to measure the quality of care in low- and middle-income countries. Using examples from published studies and ongoing research, this paper illustrates how SP studies and the data they generate can be designed to answer a variety of research questions that go beyond basic quality measurement. The authors also discuss issues that have arisen with SP measurement, including those that are yet to be satisfactorily resolved. The main article thus seeks to answer: ‘Can an SP study contribute to my research question of interest, and if so, what issues should I be aware of?’ The statistical framework outlined in this paper provides a broad, high-level guide for study design.

For more Policy Research Working Papers from the Development Research Group: [Web](#) | [Email Notifications](#)

UPCOMING & RECENT EVENTS FROM THE DEVELOPMENT RESEARCH GROUP

- **June 20–24, 2022:** Annual Bank Conference on Development Economics 2022: [Recovery, Reform, and Business Environment](#)
- **June 24:** [Deep Trade Agreements Conference: Effects Beyond Trade](#)
- **June 29:** [Global Findex 2021 Launch Event](#)

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RESEARCH MILESTONE

A World Bank Research milestone — Policy Research Working Paper No. 10,000

Aart Kraay | Let's Talk Development | April 27, 2022

“The PRWP series began in 1988 following the consolidation of several earlier specialized working paper series at the World Bank (see Figure 1). The PRWP series publishes research by World Bank staff and consultants with a stated mission to “disseminate the findings of work in progress and to encourage the exchange of ideas among Bank staff and others interested in development issues”. Over 8000 individuals have authored or co-authored PRWPs, a list that includes Nobel Laureates [Douglass North](#), [James Heckman](#), [Elinor Ostrom](#), [Joseph Stiglitz](#), [Angus Deaton](#), [Paul Romer](#), [Michael Kremer](#), [Esther Duflo](#), and [Abhijit Banerjee](#) (click on their names to see their entries in the PRWP series).”

NEW RESEARCH TOOLS

[Household Impacts of Tariffs \(HIT\) Simulation Tool](#)

First released in 2019, the Household Impacts of Tariffs (HIT) simulation tool enables users to simulate how changes in import tariffs impact the incomes of households across the income distribution. The website provides estimates of (i) price changes induced by tariff reforms, and (ii) the resulting impact on the real income of households in different percentiles of the income distribution via their impact on (iii) the cost of consumption and (iv) their incomes using detailed data on households' income and consumption portfolios derived from representative household surveys harmonized with tariff data.

A new set of simulation apps designed for policy analysis using HIT is now available that focus on the impact of agricultural prices on income distribution. World Bank employees can access these apps via the World Bank's intranet at the following link: <http://wbgmsmtlb005/>. Non-Bank users can access offline versions of these tools and source codes for replication here.

Additional Resources

- Blog: [War-induced food price inflation imperils the poor](#)
- [Data and Tools from Development Research Group](#)

SOCIAL MEDIA

Supervisory guidance or binding rules? Evidence of the effectiveness of bank oversight in developing countries

[Davide S. Mare](#), [Franco Fiordelisi](#), [Gabriele Lattanzio](#) | *All About Finance* | June 21, 2022

“The 2007–09 global financial crisis spurred important policy debates on oversight of the banking industry. As discussed in the [Global Financial Development Report 2019/2020](#), after the crisis, bank regulations and supervision became more complex, potentially reducing transparency. This development represents a burden in developing countries, especially low-income countries, where supervisory resources and capacity are limited. In this regard, the recent COVID-19 shock presents an unprecedented challenge for financial authorities as, for example, bank asset quality is expected to deteriorate and policy action is needed to prevent and mitigate the negative effects associated with high and rapid increases in nonperforming loans (NPLs) (see World Development Report 2022, [chapter 2](#), for an in-depth discussion).

What is more effective in affecting bank behavior? How do regulations and supervisory actions interact? What are the conditions under which a binding regulation and effective supervision work best? These questions are especially important for the design and enforcement of prudential regulation in developing countries where the institutional environment is weak (see, for example, [Anginer, Demirgüç-Kunt, and Mare, 2018](#)). Yet, the difference between banking regulation and supervision is blurred in the academic literature. The vast majority of empirical studies focus largely on the impact of the former, often not properly articulating the distinction between supervisory and regulatory initiatives and referring to them interchangeably ([Hirtle and Kovner, 2020](#)). However, the economic and juridical implications of the issuance of non-legally binding supervisory guidance are materially different from those resulting from the passage of a hypothetically identical regulation.

[In a recent study](#), we provide an empirical assessment of whether banks respond differently to the adoption of supervisory

guidance compared to a specular regulatory action.”

[Read the blog](#)

Why is the price of cement so high in Africa?

Tristan Reed | Let's Talk Development | June 16, 2022

“The prices of several goods, including intermediate inputs such as cement, steel reinforcement bars, urea fertilizer, and broadband internet, are higher on average in the world's poorest countries, including many in Africa (Figure 1). This is important for two main reasons: higher prices for intermediate goods can slow economic growth; and this evidence runs counter to the general tendency for prices to rise with national income — a [cornerstone](#) of modern international macroeconomics.

Why we are seeing this unexpected pattern in price levels across different countries is not certain. One reason could be these higher prices reflect higher costs of production, or that higher prices might instead reflect a higher markup, as seen in markets with fewer firms and less competition. In a recent [paper](#), my co-authors and I distinguish between these hypotheses by looking at the case of Portland cement using an empirical industrial organization model (see [examples](#) in other industries).”

[Read the blog](#)

Curse of the Mummyji – Influence of Mothers-in-law on Women in India (Episode 3)

S Anukriti | Behind the Scenes of Econ Research | June 12, 2022

“S Anukriti, Research Economist at The World Bank unpacks the complexities of restrictive social norms and women’s social networks through her paper titled “[Curse of the Mummyji: the influence of Mothers-in-law on Women in India](#)” in an engaging conversation with Sakshi Hallan, a Research Analyst at The World Bank.

Using primary data from Jaunpur district in rural Uttar Pradesh, the study characterizes the social networks of young married women. Adopting an instrumental variables approach, the study then shows how co-residence with a mother-in-law affects the daughter-in-law’s access to family planning and reproductive health resources by imposing restrictions on the daughter-in-law’s ability to form social connections outside of her household.

‘It could be that you have a very well-intentioned program but it overlooks how the mother-in-law will either perceive that program or will prevent the daughter-in-law from accessing it or maybe she is actually going to be a supportive influence.’”

Listen to the podcast ([Spotify](#) | [Apple](#))

Better mobility for migrants, refugees, and societies: Read and comment on the new World Development Report 2023

Concept Note

Xavier Devictor, [Quy-Toan Do](#), [Çağlar Özden](#) | Let's Talk Development | May 25, 2022

“The priestly leaders of the Parsis were brought before the local ruler, Jadhav Rana, who presented them with a vessel full of milk to signify that the surrounding lands could not possibly accommodate any more people. The Parsi head priest responded by slipping some sugar into the milk to signify how the strangers would enrich the local community without displacing them. They would dissolve into life like sugar dissolves in the milk, sweetening the society but not unsettling it. The ruler responded to the eloquent image and granted the exiles land and permission to practice their religion unhindered if they would respect local customs, and learn the local language, Gujarati.’

This old Parsi legend vividly illustrates the challenges and opportunities faced by migrants and their host communities, and it is as relevant today as it was centuries ago. From Ukraine to Afghanistan, from Venezuela to Ethiopia, media headlines provide a daily

reminder of the centrality of the issue in our current lives.

This is not an abstract conversation about economic and social problems. It is about Anna from Kharkiv, Samir from Cairo, Eugenie from Lome, Geert from Amsterdam, Paola from San Salvador, and Ranjit from Mumbai. It is about people across the world who are looking for better economic opportunities and improved safety: simply put, better lives for themselves and for their families.

[Read the blog](#)

The State of Development Journals 2022: Quality, Acceptance Rates, Review Times, and What's New

[David McKenzie](#) | *Development Impact* | May 23, 2022

"It's taken me a bit longer to get this together this year, but for the sixth year in a row I have attempted to put together data on development economics journals that is not otherwise publicly available or easy to access (see [2017](#), [2018](#), [2019](#), [2020](#), [2021](#) for the previous editions). I once again thank all the journal editors and editorial staff who graciously shared their statistics with me."

[Read the blog](#)

How can countries improve tax collection? Lessons from Liberia

[Oyebola Okunogbe](#), [Yahe Li](#) | *Let's Talk Development* | May 19, 2022

"Out of all the people in Monrovia, how will the government know that I have not paid?" This was the question from a participant in a focus group discussion I held with property owners in Monrovia about their experiences with real estate tax in Liberia. This property owner, and many others, were well aware that the government was barely collecting real estate taxes across the city.

[Liberia, like many low- and lower-middle-income countries, faces serious challenges in collecting taxes. At the time this project began, a staggering 95 percent of residential properties remained outside of the tax net.](#) It was difficult to identify the tax base

because there was no comprehensive database on property locations, ownership, and values. Even for properties on the tax register, there was difficulty in collecting the taxes owed from year to year due to weak administrative and enforcement practices."

[Read the blog](#)

What's new in the analysis of heterogeneous treatment effects?

[Berk Özler](#) | *Development Impact* | May 16, 2022

"If you're like me, you have been doing heterogeneity analysis a certain way – let's call it 'old school' to be facetious. In the good version of things, you have some prespecified characteristics of the population (X , unaffected by treatment) over which you investigate the heterogeneity of treatment effects (HTE) [...]"

Increasingly, researchers are now opting for machine learning (ML) inference to assess heterogeneity. In this version of the analysis, you stay agnostic as to the source of the heterogeneity (other than specifying the vector space in which to search, i.e., the observed baseline characteristics of your study population) and let the data tell you which groups are more (or less) likely to benefit from treatment."

[Read the blog](#)

Words that resonate from Chris Blattman's new book "Why we fight"

[David McKenzie](#) | *Development Impact* | May 9, 2022

"I recently finished reading Chris Blattman's new book "[Why we fight: the roots of war and the paths to peace](#)". It is very well-

written, interspersing interesting anecdotes and personal experiences with a great overview of literature from political science, economics, history, and psychology [...]

I wanted to highlight for our readers a few paragraphs from his conclusions on the path forward, which I think will resonate a lot more generally with our readers at the World Bank and with others planning projects or attempting to test new interventions.”

[Read the blog](#)

Filling a Gaping Hole in the World Bank’s Global Poverty Measures: New Estimates of Poverty in India since 2011

Martin Ravallion | CGD Notes | May 4, 2022

“Until early April 2022 it seems that we were still pretty much in the dark about how India’s poor have been doing over the last ten years. That changed with the release of a World Bank working paper by Sutirtha Sinha Roy and Roy van der Weide (2022). I will briefly review what this paper has done, and then discuss what their results tell us.”

[Read the blog](#)

Using remote surveying methods to collect data during challenging times

Sofia Amaral, Lelys Dinarte-Díaz, Patricio Dominguez, Steffanny Romero | Let’s Talk Development | April 28, 2022

“[Collecting research survey data in hard-to-reach settings can be difficult. But when layered with the unique challenges of COVID-19, finding the right methods to reach intended participants becomes even more complex.](#) During COVID-19, it was important to monitor the pandemic’s impact on households’ economic and social wellbeing. Such research efforts required collecting basic household-specific data—including individual characteristics and beneficiary status of social programs— and sometimes sensitive information such as violence in the household and mental distress. But collecting data under mobility restrictions and health concerns for both enumerators and respondents was a daunting task.

Our team faced these challenges while working on [a project](#) in El Salvador that required surveying caregivers on their mental health and parenting skills. We wanted to understand if caregivers would be better able to manage stress within the family if provided with information on positive parenting and behavioral skills. But how could we conduct surveys— with limited budget and time—when these families were under a strict lockdown due to COVID-19?”

[Our recent research assesses the economic impact of Nepal’s power crisis of 2008-2017 and provides insights into what can be done to avoid future load-shedding crises in poor, generation capacity-constrained economies.](#)”

[Read the blog](#)

Microenterprise interventions: making it our business to know about businesses

Kathleen Beegle | Development Impact | April 28, 2022

“Although interventions such as targeting beliefs, behaviors, life-skills, and peer relations — as well as light-touch community programming — have shown promising effects on economic behavior and business outcomes, less is known about their impacts on poverty and their added value over economic interventions. I won’t delve into the many interesting findings in this paper which discusses outcomes 18-months post intervention (in early 2020). Rather, I want to focus on one specific aspect of this work related to the “economic outcomes” (other outcomes being related to consumption, psychosocial measures, and women’s empowerment). The main economic outcomes are household total revenue and beneficiary total revenue (not profit). All three treatments increased household and beneficiary revenue. And this was mainly driven by increases in off-farm business start-up and revenue.”

[Read the blog](#)

The joys of blogging

[Berk Özler](#) | *Development Impact* | April 27, 2022

“Last week, I came across a paper at an upcoming conference website. It’s in an area I really enjoy thinking about, in which I have done work myself. The question is very interesting, taking advantage of a novel technology to answer an important question — both from a policy and a theoretical perspective. I was excited to read and blog about it this week. Read it, I did. But while the paper started out really promising — there are many elements in there that have the makings of a stellar paper — I did find that the study design raises questions that make me seriously question the findings. I am not sure I believe the results. The study design issues are somewhat deep and complex — both from a theory as well as a measurement (available data) perspective. So, perfect for a post in *Development Impact*, where we can debate the nerdy intricacies of a good study. Our blog posts are generally not prescriptive, rather they occasionally cause the figurative “water cooler” debates at workplaces, academic hallways, etc. Great, right?”

[Read the blog](#)

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