Can Pay-For-Performance (P4P) Improve The Quality Of Maternal And Child Health Services In Nigeria? The Potentials And Preliminary Results

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Abstract

Since the introduction of the millennium development goals (MDGs) 4 and 5 (2/3 reduction in child deaths and 3/4 reduction in maternal deaths) in 2000, various health policies have been adopted in Nigeria to improve quality and utilisation of maternal and child health services to provide access to cost-effective interventions to prevent or treat a majority of the causes of these deaths. However, improvements have been very slow. With the 2015 deadline for the MDGs approaching, it is necessary to reflect on why these reforms have been unsuccessful, and pilot strategies to overcome the challenges identified in order to accelerate the process of meeting the MDG targets.

This paper discusses the introduction of a pay for performance (P4P) pilot to improve quality and utilisation of maternal and child health services in 3 out of 36 states in Nigeria, and its potential to address the challenges in the Nigerian health system (e.g. lack of transparency and poor governance).

The promising early results of the P4P scheme in Nigeria and evidence of effectiveness of similar P4P schemes in other low and middle income countries (such as Rwanda and Tanzania), suggest that P4P might be a game changing health reform in Nigeria to improve the quality and utilisation of maternal and child health services and accelerate the progress of meeting the MDG targets.

INTRODUCTIO

Despite the introduction of several health reforms in Nigeria to meet the health related millennium development goals (MDGs), improvements in maternal and child health outcomes have been limited [1-3]. In addition, the rate of decline of maternal and child deaths has not been sufficient to meet the MDG goals [4].

There is a wealth of established evidence that suggest that access to basic maternal and child health services such as antenatal care (ANC), postnatal care (PNC), and complete childhood immunization reduces these deaths by up to 70% [5, 6]. Therefore, past health reforms such as National Health Insurance Scheme, Expanded Immunization Program, and the Midwives Service Scheme have focused on improving access and utilisation of basic maternal and child health services [1-3]. However, there has been an inadequate increase in utilisation of these health services, which corresponds to the limited improvement in maternal and child health outcomes [4, 7, 8]. This has been attributed to a number of underlying challenges in the health system, which previous reforms have not been able to address. These include poor quality of care at the primary health care (PHC) facilities, inadequate government spending, and lack of accountability [9, 10].

Pay for performance (P4P) or Performance based financing (PBF) has recently been introduced in the Nigerian health system as approach with the potential of addressing these challenges in order to speedily increase the utilization of basic maternal and child health services. P4P is however a relatively new concept in Nigeria. In addition, contrast to what the popularity of P4P might suggest, its effectiveness has not been convincingly demonstrated, and researchers have suggested that the effectiveness of these schemes are likely dependent on designs, contexts and implementation [11, 12].

This paper reflects on the underlying challenges in the Nigerian health system, the design and potential of the P4P scheme to address these challenges, and the preliminary results. This paper contributes to knowledge that could inform, improve, and strengthen the design and implementation of the P4P in Nigeria.

QUALITY OF HEALTH CARE IN NIGERIA

Most of the PHC facilities in Nigeria lack basic equipment, essential drugs, and proper infrastructure, due to insufficient funding and lack of strategic planning and allocation of resources [13]. Furthermore, health workers assigned to these PHC facilities are often poorly motivated due to delay in meagre salary payments (sometimes lasting for months), which is exacerbated by the poor state of the PHC facilities [14]. This in turn leads to high health worker absenteeism at the PHC facilities, which often results in low utilisation of health services [15].

COST OF HEALTH CARE (INADEQUATE GOVERNMENT SPENDING)

Nigeria's budget for healthcare in 2010 was around 6 percent of total annual budget of the country, which amounted to approximately US $5 per capita government expenditure on health (compared to a total of US $60 per capita expenditure on health). This government expenditure on health falls short of the World Health Organization's recommendation of 15 percent (or US $14 per capita government expenditure on health) for developing countries [16]. Furthermore, due to the decentralized nature of the health care system in Nigeria, primary health care (PHC), which caters to about 70% of the population is allocated less than 1.5% of the country's annual budget [2, 8]. Consequently, over 80% of healthcare expenditure in Nigeria comes from out of pocket spending, which is a limiting factor in accessing and utilising basic health services especially for the poor and rural dwellers [13, 17].

This problem is worsened by misappropriation of funds and resource leakage. In 2008 Nigeria was ranked 121 out of 180 countries on corruption perception index [18]. In addition, there is substantial evidence that suggests that the annual health budgets drawn do not correlate with health expenditures [19]. This corruption takes on different forms in the health system, such as: overpayments for supplies and payment of salaries to 'ghost' health workers [20]. Thus drastically reducing healthcare funding, translating into chronic drug and equipment shortages, poor infrastructure, and delayed salary payments to health workers at primary health care facilities, which in turn reduces the quality of care.

POOR GOVERNANCE AND LACK OF ACCOUNTABILITY

The issue of poor governance and lack of accountability in the health system is one of the disadvantages of the decentralized nature of the health care system in Nigeria. Though there are clear cut responsibilities between the different levels of government in the health system, there is often duplication of roles and responsibilities which leads to weaknesses in coordination, performance tracking, supervision, and monitoring, generally resulting in poor performance in the healthcare services delivery [20, 21]

Furthermore, there are no formal mechanisms by which health service users in the community hold the providers (PHC facilities) responsible for provision and access of quality health services. There is also lack of accountability on expenditure and performance of the PHCs to the Local government [17]. The consequences of this at the PHC facilities include poor record keeping and poor transmission of information through the health systems, leading to poor allocation of resources and lack of feedback to the PHC facilities (from the Local and State Government, service users), which contributes to the poor quality of healthcare delivered at the PHC facilities [22].

As a result of these multiple underlying challenges, researchers and policy makers have argued that in order to accelerate the improvements of health outcomes in Nigeria, there is a need for a multifaceted pro-poor approach that has the potential of addressing these persisting problems [6, 23]. This led to the Introduction of P4P in Nigeria.

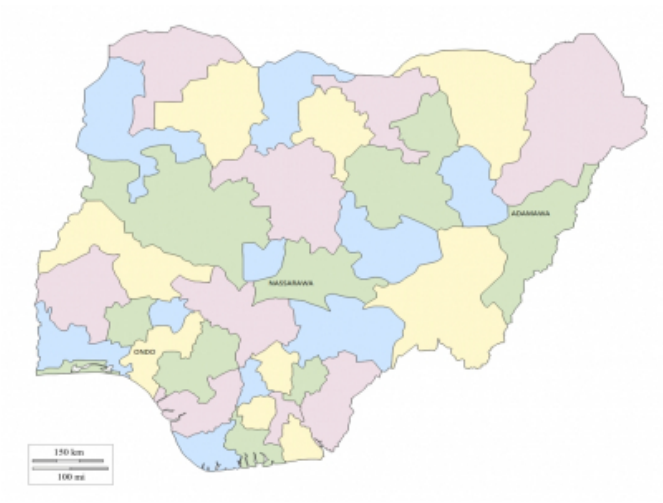
P4P IN NIGERIA (DESIGN AND IMPLEMENTATION)

The Nigerian P4P scheme (otherwise known as the Nigerian States Health Investment Project) was implemented in December 2011 (set to last until 2018) by the National Primary Health Care Development Agency (NPHCDA), a Federal Ministry of Health (FMOH) parastatal through a loan of 150 million US dollars from The World Bank [22].

The P4P scheme was implemented in 3 out of 33 States in Nigeria: Adamawa, Nassarawa, and Ondo (See figure 1).

Figure 1

Map of Nigeria showing the three P4P States



In the P4P scheme, large monetary (cash) bonuses are paid on a quarterly basis to primary health facilities (where individual health workers have the opportunity to earn part of it as bonuses) for verified health services (e.g. ANC, PNC, complete childhood immunizations) and quality structures (e.g. hygiene and general management) (see Table 1).

Table 1

Key design features of the Nigerian P4P scheme

Core design features	Category
Who receives the incentives	Incentive paid to Groups (health facilities) but individual health workers have the opportunity to earn part of it as bonuses
Type of incentive	Bonuses
Type of payment	Monetary (cash)
Size of incentive	Large (up to 100% of performance budget can be earned)
Performance measure	Absolute measure (pay per activity)
Domain of performance measured	Within clinicians/health workers control (Processes e.g. health service delivery such as ANC and hygiene/cleanliness of the health facility)
Timing of payment	Quarterly: health facility, Monthly: health workers

THE POTENTIAL OF P4P TO ADDRESS THE CHALLENGES IN THE NIGERIAN HEALTH SYSTEM

Through the approach and design of the P4P, it could address the underlying core challenges that limit utilisation and quality of maternal and child health services at PHC facilities in the following ways:

- The large size incentive paid to the health facilities represents an influx of new funds (increased government spending), which if used effectively could go a long way in improving problems such as lack of drugs or infrastructure, reducing the cost of health care (through user fee subsidies)[13, 14]. The large size of incentive also has the potential of supplementing salaries of the health workers, which will be particularly beneficial in the Nigerian context because it has the potential of helping the health workers focus on the health facility, rather than supplementing their income in other ways that takes their attention away from the health facility. Thereby reducing health worker absenteeism and improving health service delivery.
- Improvement in quality of health services rendered: the PHC facilities have immediate direct access to the incentives earned, thereby increasing resources to purchase essential drugs, equipment, and improve infrastructure, as opposed to usual government funding that might take a while or get embezzled before eventually reaching the PHC facilities.
- Improvement in proper allocation and management of resources: this could be achieved through the autonomy given to the PHC facilities in utilising the incentives earned. This will curb corruption and will allow the funds to be used in whatever ways that the health facility mangers see fit to improve the quality of health services (whether it be purchase of TV sets to ensure users or comfortable or alternative power supply to ensure proper running of the health facilities).
- Strengthening accountability, transparency, and good governance simultaneously: this could be achieved through incentives paid to the Local Government Areas and the State Ministry of Health for independent verification of spending and audit trails at the PHC facilities and monthly supervision and monitoring of the quality of care provided by the PHC facilities through community validation of facility performance and feedback. This also curtails falsification of data (corruption associated with P4P).

PRELIMINARY RESULTS: LOOKING TO THE FUTURE

The trends in figures 2-4 show improvements in care-seeking behaviors and the utilization of healthcare services with the introduction of the P4P scheme in the three pilot States from December 2011 to September 2014. Figure 2 shows a steady increase in number of childhood immunizations across all 3 States. Figure 3 also shows a remarkable increase in number of pregnant women seeking ANC. Figure 4 shows a steady increase in the number of institutional deliveries.

Figure 2

Number of childhood immunisation across the three pilot States

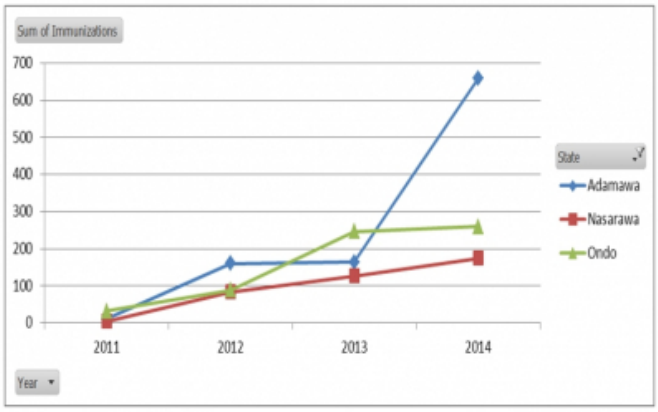


Figure 3

Number of pregnant women utilising ANC services after 20 weeks across the three Pilot States

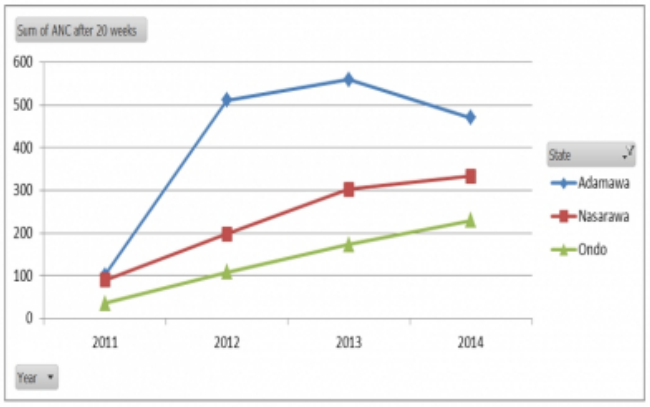
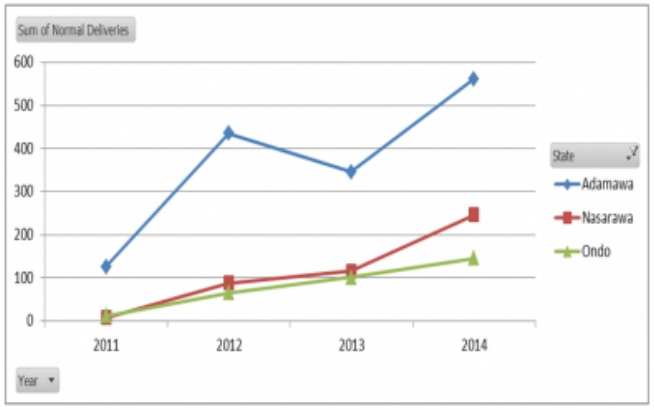


Figure 4

Number of institutional deliveries across the three Pilot States



The trends presented in the above graphs suggests that there is evidence of the potential of P4P to increase adoption of healthcare services, improve quality of services from providers and in turn, improve maternal and child health outcomes.

In addition, despite having similar design features and method by which performance have been measured across all three States, the preliminary results appear to be variable for some across the three States. This suggests that other sources of variation beyond design features, such as contextual and implementation factors might influence the results.

Consideration of the Nigerian context and literature suggests that there are a number of contextual and implementation factors could lead to heterogeneous results of the P4P scheme. These include management of the scheme and readiness of the PHCs to meet targets [12, 24].

Proper management of the scheme at the health facility level have been shown to improve the outcomes of P4P schemes in some countries like Tanzania [24]. Managers of the scheme at each health facility might influence the impact of the Nigerian P4P scheme because the managers of the different health facilities might handle the scheme differently, in terms of how the manager motivates the health workers and the strategies for improvement implemented by the health facility manager [25]. This might include different levels of supervision, and monitoring, transparency, communication etc. For example, health centres in which there is constant and appropriate supervision from the health facility manager are likely to produce better results compared to one with minimal supervision.

In the same way, the influence of infrastructure in the outcomes of the P4P scheme in Nigeria is very important, because one of the main issues weakening the health system is lack of appropriate infrastructure [14]. PHCs in the Nigerian P4P schemes have different infrastructure and equipment because of the influence of the different State governments and international donors. If there are differences, it is likely that it will results in differences in performance results. For example, an incentivised health service, such as childhood immunisations. Health facilities that lack fridges or power supply to maintain the cold chain storage of the vaccines are likely to have low performance results, whether or not the health workers in such facilities are highly motivated.

CONCLUSION

While the use of incentives to improve utilisation and quality of health services in Nigeria is a promising strategy, P4P is not a panacea. Evidence suggests that central to the effectiveness of P4P are design choices, contextual and implementation factors. To inform future implementation of P4P in the Nigerian context, there is need for preliminary research to explore the influence of contextual and implementation factors on the effectiveness of the scheme. In addition, there is the need to explore the cost effectiveness of a P4P approach in the Nigerian health system where resources are particularly scare in order to ensure maximum use of resources.

References

1. National Health Insurance Scheme, NHIS Verification Exercise Report Prepared by the Health Reform Foundation of Nigeria., 2012: http://www.herfon.org/downloads/nhis_reports/nigeria_health_insurance_scheme_verification_exercise_2012.pdf.
2. Abimbola, S., et al., The Midwives Service Scheme in Nigeria. PLOS MEDICINE, 2012. 9(5).
3. Abanida, E.A. Nigeria Immunization Programme-Increasing Access. in Nigeria At the 2nd Dialogue & Retreat of the Alliance of Southern Civil Society in Global Health 2012. Abuja, Nigeria: https://www.google.co.uk/urlsa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CDAQFjAA&url=http%3A%2F%2Fwww.chestradngo.org%2Findex.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D26%26Itemid%3D174&ei=1f15UvaIO6iN7Abqm4GoCw&usg=AFQjCNF0ejf28e5StwHlFDPa_DjOpLnZNA&sig2=EOlUSeaMRCzobvaQcpackg&bvm=bv.55980276,d.ZGU.
4. Nigeria count down to 2015, Maternal, newborn, and child survival, 2012: http://www.countdown2015mnch.org/country-profiles/nigeria
5. Hogan, D., L. Liu, and C. Mathers, CHERG-WHO methods and data sources for child causes of death 2000-2013, 2014, World Health Organisation: http://www.who.int/healthinfo/global_burden_disease/ChildCOD_method_2000_2013.pdf?ua=1.
6. Ebeigbe, P.N., Reducing maternal mortality in Nigeria: the need for urgent changes in financing for maternal health in the Nigerian health system. Niger Postgrad Med J, 2013. 20(2): p. 148-53.
7. National Population Commission, Nigeria Demographic and Health Survey (DHS), 2009: http://www.measuredhs.com/pubs/pdf/SR173/SR173.pdf.
8. National Bureau of Statistics, Nigeria Multiple Indicator Cluster Survey 2011 Summary Report, 2011.
9. Welcome, M.O., The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems, 2011. p. 470-478.
10. Uneke, C.J., et al., Promotion of health sector reforms for health systems strengthening in Nigeria: perceptions of policy makers versus the general public on the Nigeria health systems performance. Soc Work Public Health, 2013. 28(6): p. 541-53.
11. Epstein, A.M., Will Pay for Performance Improve Quality of Care? The Answer Is in the Details. New England Journal of Medicine, 2012. 367(19): p. 1852-1853.
12. Van Herck, P., et al., Systematic review: Effects, design choices, and context of pay-for-performance in health care. BMC Health Services Research, 2010. 10(1): p. 1-13.
13. Abdulraheem, I.S., A.R. Olapipo, and M.O. Amodu, Primary health care services in Nigeria: Critical issues and strategies for enhancing the use by the rural communities. Journal of Public Health and Epidemiology, 2012. 4(1): p. 5-13.
14. Akinwale, A., The menace of inadequate infastructure in Nigeria. African Journal of Science, Technology, Innovation, and Development 2010. 2(3): p. 207-208.
15. Akwataghibe, N., et al., Assessing health workers' revenues and coping strategies in Nigeria -- a mixed-methods study. BMC Health Services Research, 2013. 13(1): p. 387.
16. Xu, K., et al., Exploring the thresholds of health expenditure for protection against financial risk, in Health Sysytems financing2010, World Health Organisation
17. Lawanson, A.O., O. Olaniyan, and A. Soyibo, National Health Accounts estimation: lessons from the Nigerian experience. Afr J Med Med Sci, 2012. 41(4): p. 357-64.
18. Transparency International. Corruption perceptions index. 2008 [cited 2013 January 8].
19. Mohammed, U., Corruption in Nigeria: a challenge to sustainable development in the Fourth Republic. European Scientific Journal, 2013. 9(4): p. 118.
20. Umukoro, N., Governance and Public Health Care in Nigeria. Journal of Health Management, 2012. 14(4): p. 381-395.
21. Eno, V.B., Governance constraints and health care delivery in Nigeria: The case of primary health care services in Akwa Ibom State. Public Administration and Management, 2010. 15(2): p. 342-364.
22. NPHCDA, Performance Based Financing User Manual., 2012, https://nphcda.thenewtechs.com/cside/contents/docs/NSHIP-_PBF_manual_2012_version.pdf: Abuja, Nigeria.
23. Ilesanmi, O.S., A.O. Adebiyi, and A.A. Fatiregun, National health insurance scheme: how protected are households in Oyo State, Nigeria from catastrophic health expenditure? Int J Health Policy Manag, 2014. 2(4): p. 175-80.
24. Canavan, A. and G. Swai, Payment for Performance (P4P) Evaluation 2008 Tanzania Country Report for Cordaid, 2008, KIT Development Policy and Practice: Mauritskade, Amsterdam. p. 1-74.
25. Bredenkamp, C., et al., Health Facility Financial Management and the Indice Tool, in Performance-Based Financing Toolkit, G.B. Fritsche, Editor 2014. p. 149-164.

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