MANI Learning Series

Results Brief

October 2018

Performance Based Financing: Helping to build a more resilient health system in Bungoma County

Background

The Maternal and New-born Improvement Project (MANI), with the support from the UK Department for International Development (DFID), is a health systems strengthening intervention with the goal of reducing maternal and neonatal deaths in Bungoma. The project is made up of a range of demand-and supply side interventions including a transport voucher to enable free transport to health facilities among poor women for delivery and a Performance Based Financing (PBF) scheme. This brief presents the results of the PBF scheme, recognising that some of these are also influenced by other MANI interventions, notably the voucher scheme.

Since the implementation of PBF began at the end of 2015, there have been two periods of prolonged industrial action in Kenya; doctors and nurses were on strike for 3 months from December 2016 and in June 2017, nurses went on strike again for 5 months. Both of these events were a significant blow to health system in Kenya, causing huge disruption to service delivery. As we will show in the results below, the PBF scheme helped to strengthen the resilience of the health system in Bungoma, enabling the continued delivery of essential MNH services during these periods.

Design of the PBF scheme in Bungoma

The Bungoma PBF scheme is designed to incentivise health facility and health worker performance, specifically related to the provision of seven key MNH services as well as improvements in quality of care. The 37 participating health facilities across the six MANI-supported sub-counties are awarded a performance payment based on the number of specified MNH services provided, each of which has its own reimbursement rate. This payment is then inflated based on the facility's quality score, calculated through a quarterly assessment using the QuIC-PBF tool. Table 1 provides details of the measures used to assess performance.

PBF is intended to compliment rather than to replace traditional input-based financing. It does so by incentivising providers and giving them the autonomy to decide what is needed to address their service delivery gaps. Out of the total performance payment, 60% goes

Table 1: Measures used to assess performance

Output indicators and dimensions of quality used to assess performance	
7 Output Indicators	**9 Dimensions of Quality**
1. Pregnant women receive at least 4 Antenatal Care (ANC) visits	1. Human Resources
2. Deliveries conducted by Skilled Birth Attendants (SBA)	2. Infrastructure
3. Women attending Post-natal care (PNC) 48 hours post-delivery	3. Equipment and supplies
4. Women attending PNC 2 weeks post-delivery	4. Drugs
5. Women receiving short-acting family planning (FP) methods	5. Hygiene and waste Disposal
6. Women receiving long-acting reversible FP methods	6. Management and Governance
7. Women screened for cervical cancer	7. Data Management
	8. Admission and Referral
	9. Availability of service

directly to staff while the remaining 40% is directed toward facility level improvements. In line with DFID procurement regulations, payments to staff are made in cash via M-pesa (a mobile money transfer through a local telecommunication firm Safaricom) whereas facility payments are provided in-kind in the form of medical supplies or minor renovations, based on the specific requests of the facility. Facilities were selected in consultation with the County Government, based on utilisation rates, with preference given to facilities with larger volumes of deliveries, while also ensuring good geographic spread. Each of these facilities are also included in the transport voucher scheme.

Results

Health system resilience

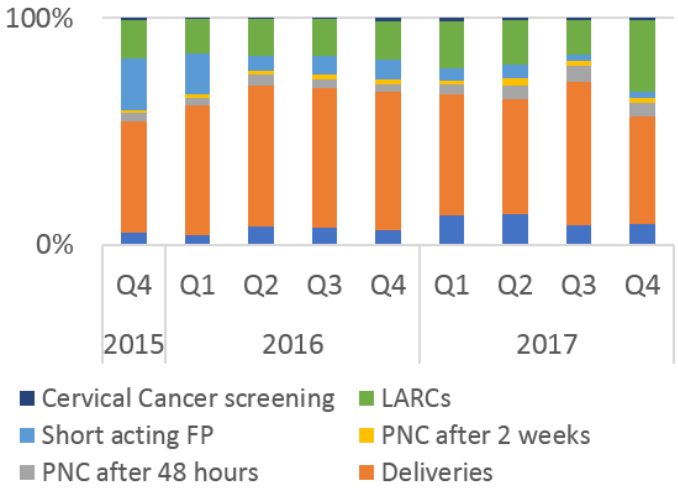
Out of the seven incentivised services, deliveries accounted for the largest share of PBF reimbursement (47-63% each quarter) and therefore the service most strongly influenced by the PBF scheme. Comparing the trend of number of facility-based deliveries in the six MANI supported sub-counties[1] to the other four sub-counties in Bungoma, we see that there was a notable growth in the MANI sub-counties while the number in the non-MANI sub-counties declined. While, in both cohorts, deliveries showed a sharp decline during the strikes, they recovered more quickly and with greater magnitude in MANI-supported sub-counties compared to non-MANI sub-counties.

A qualitative study carried out in November 2017 helps to shed light on some of the reasons why the MANI-supported facilities were more resilient to the strikes. A key reason revealed by this study is that the PBF scheme provided a source of income for health workers during this period. As this income was linked to service provision, health workers were confident that by continuing service provision they would obtain a performance reward.

"For the past 5 months I was on strike. But I remained [working] around all through… I decided to work and most of the time I was seeing clients. Mothers, I was delivering them. I knew for the quarter that there was something coming"

Nurse, Miendo Dispensary

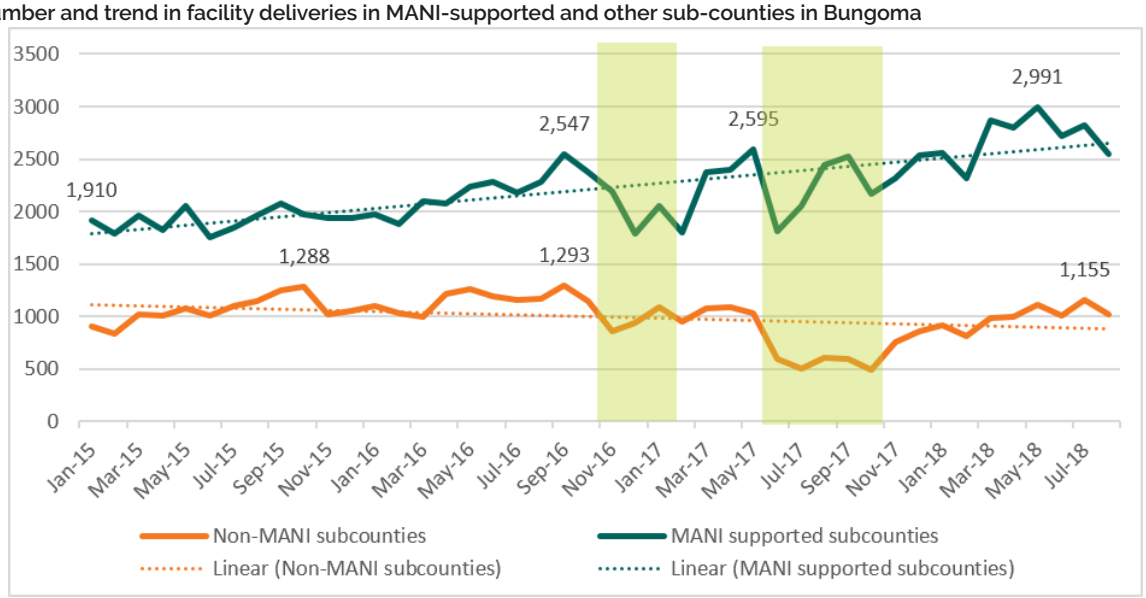
Figure 1: Proportion of the total performance reward generated by each service (Source: PMIS) in Bungoma County



Source: PMIS

Throughout the period of implementation, including but not limited to the period of strikes, the PBF scheme has provided a source of extrinsic motivation for health workers by providing financial rewards as well as an explicit acknowledgement of their work.

Figure 2: Number and trend in facility deliveries in MANI-supported and other sub-counties in Bungoma



Source: DHIS2

1 There are a total of 97 facilities in the MANI sub-counties, including 92 facilities that implement the voucher scheme, 37 of which are also part of the PBF scheme. The remaining 5 facilities are private facilities.

"I would say that it has really made a great impact, because PBF itself is a direct motivation to the staff and staff are so much willing and will always work around the clock to ensure that they have numbers that can make them get the reward PBF so they will always work"

Nurse, Malakisi Health Center

Text Box 1: Description of how PBF has helped to improve service delivery in Sub-County Hospital

"PBF staff incentive, the supply of commodities and equipment has really motivated my staff. Earlier, we got supplies from county government though there were gaps of not getting what you had ordered. Now with PBF, we strategically budget for the commodities under the 40% amounts and MANI project [procures and] delivers those items to us. Clients no longer buy Jik and cotton wools, we provide for them free of charge. The two locum nurses employed are being motivated financially from the PBF 60% staff sharing. They have indeed helped ease the burden of burn-outs and improved on work productivity. In fact, they are conducting delivery services in hospital despite the on-going nurses' strike. This noble thing of conducting deliveries during this strike period has really painted a good picture of Sirisia sub-county hospital to our community. If PBF was not here we maybe would have been closed"

Senior nursing officer in-charge, Sirisia sub-county hospital

This increased motivation has translated into improvements in health facility performance in PBF facilities in a number of ways (see also Text Box 1):

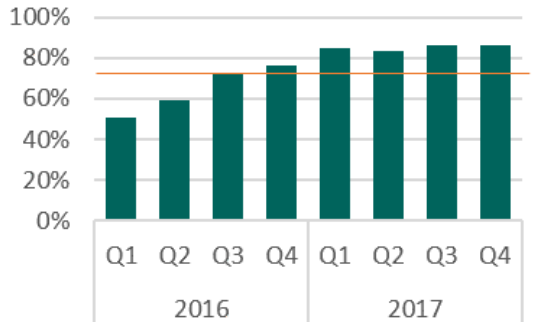
- Health workers were willing to work longer hours, enabling facilities to extend their opening times. **"before, we were only working from 8am, especially in dispensary, until 5pm when we close. But now, after this, it has encouraged us to work 24hrs daily".** (Nurse, Khalala Dispensary)
- Facility staff sought out opportunities to integrate services, for example, by providing information on other services available **"I work at the outpatient department and every time that patients walk in… I will always like to enquire about her family planning status, pregnancy status whether they have been screened for cervical cancer as such, I make sure that I direct them to the right place".** (Clinical officer, Malakisi Health Center)
- Health workers actively follow-up with clients to remind them to attend their next ANC appointment **"Before PBF…. I wait those who come, and I see them and I go…. But with the advent of PBF, we came up with a diary to follow up with clients… I have a goal that I am going for"** (Clinical Officer, Kaptanai Dispensary)
- Facilities have used a portion of their PBF reward to provide incentives to CHVs. **"For 1st ANC, we are using community strategy, whereby we are involving the CHVs. We are motivating CHVs when they come to this facility"** (Clinical Officer, Kaptanai Dispensary)

Quality of Care

PBF was included in the MANI programme design with the aim of increasing quality of care, thereby ensuring that facilities are equipped to meet the additional demand created through community engagement and demand-side financing efforts.

Quality of care is assessed using the Quality of Institutional Care (QuIC) Assessment tool. This is a web-based tool developed using open-source software (Commcare). It is designed to quickly collect and analyse data on readiness to provide Emergency Obstetric and Neonatal Care (EmONC) services as well as nine dimensions of quality. Data is collected on a tablet which facilitates easy calculation of the quantitative score and the production of colour coded scorecards to inform decision-making.

3. Average score in QuIC assessment by quarter (*Source*: QuIC)



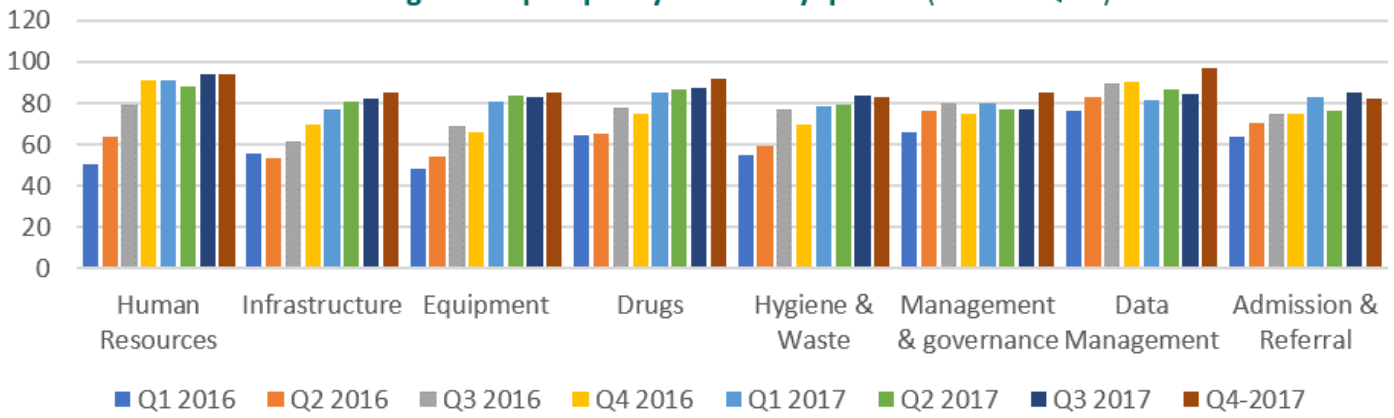
The results of the QuIC assessments have shown a marked improvement in the readiness of facilities to provide quality MNH services. First implemented in Quarter 1 2016, the average score across facilities was 51%. Since then, each quarter has shown an increase, with the Q4 2017 average score reaching 86%, with all sub-counties exceeding 84% across their facilities.

In order to qualify for the quality adjustment to their performance bonus, facilities must achieve at least 60% in the QuIC assessment. While in Q1 only 10 of the 35 PBF facilities reached this minimum threshold, by Q4 2017 all 37 facilities surpassed this threshold.

"The MANI project has changed the working environment. It is more work friendly, and in terms of clients, in the recent past, people fear to come to this facility due to, sanitation, due to environment. But as of late, especially starting from last year, the numbers [have] increased from 300 to 500, so it means that its really helping us a lot."

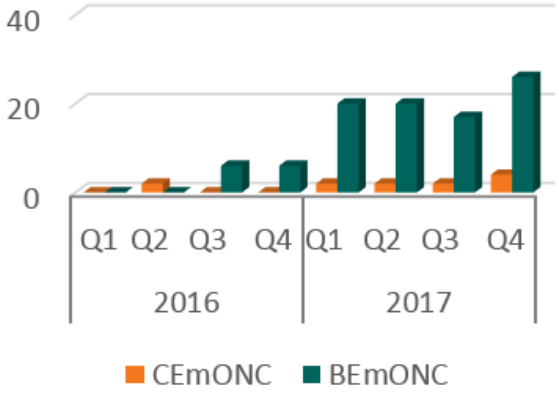
Nurse, Bungoma CRH

4. Average score per quality domain by quarter (Source: QuIC)



There was an improvement in the average score for each of the nine dimensions of quality during the period. Across all dimensions, the human resources dimension saw the biggest improvement with a 44 percentage-point increase across the two-year period. The next biggest improvement was for equipment which increased by 37 percentage points. This may be explained by the seed funding investment which was used to purchase essential equipment for all PBF facilities based on the gaps identified in the first QuIC assessment.

5. Number of facilities that achieved EmONC status, by quarter (*Source:* QuiC)



There has been a significant improvement in EmONC functionality across PBF facilities, from no EmONC facilities in Quarter 1 2016 to 26 Basic Emergency Obstetric and Neonatal Care (BEmONC) facilities and 4 Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) facilities in Quarter 4 2017. This demonstrates a significant improvement in Bungoma's capacity to handle complications arising from pregnancy.

Efficiency

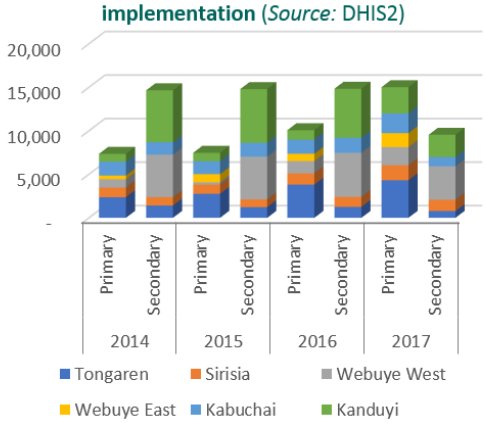
At the health system level, one of the intended benefits of the PBF system is that quality improvements would lead to increased utilisation at lower level facilities, thereby reducing overcrowding at the hospital level, and ensuring a more rational use of resources. In terms of deliveries, 2016 saw some narrowing of the gap between the volume provided in primary and secondary facilities, mainly due to a growth in the number of deliveries in dispensaries and health centres. In 2017, however, the number of deliveries in primary facilities far outstripped the number in secondary facilities, thus demonstrating a more optimal use of health system resources.

In addition, the PBF scheme has led to increased efficiencies at the facility level by strengthening planning, priority setting and decision making, thus ensuring available resources are aligned to the most pressing needs of the facility.

"Before PBF, we were looking at meetings as a waste of time… [not] as a means and way of finding solutions to our problems from within. Now… we are realizing that we are achieving our goals; we are planning together; and everybody knows the tasks they are supposed to carry out"

Clinical officer, Kaptanai Dispensary

6. Number of deliveries in primary and secondary facilities before and during PBF implementation (*Source:* DHIS2)



The decision-making process of how to use the PBF rewards has also been found to improve teamwork by providing the facility with a common set of goals to align behind.

"It works well. Involving people is the power and fuel for any success. If you do things alone, you are bound to fail. In fact, it kills teamwork. And there is no way you can achieve minus teamwork…So I believe that teamwork that sitting together promotes efficiency, it promotes transparency and accountability it gives a room for asking a question"

Clinical Officer, Kaptanai Dispensary

Results

The PBF scheme implemented from October 2015 until October 2018 has helped to significantly improve the provision of quality maternal and new-born health services in Bungoma County. While the overall growth in services was severely hampered by the two prolonged periods of industrial action, the PBF scheme helped to mitigate the negative impact of these strikes by providing an additional source of income for health workers and facilities.

There has also been a dramatic improvement in quality of care provided by facilities enrolled in the scheme, with marked improvements in quality assessment scores as well as a considerable expansion in the number of facilities providing emergency obstetric care from zero in 2015 to 30 by the end of 2017.

At a health systems level, the PBF scheme has also contributed to a more optimal use of resources by investing in primary health facilities and equipping them with the skills, equipment and infrastructure needed to effectively serve their communities with quality services. This has resulted in a dramatic increase in utilisation at lower level facilities thus reducing the over-reliance on the secondary facilities.

One of the key success factors of this initiative has been the continuous engagement with key stakeholders at each level of the county health system in Bungoma. This has been critical in building buy-in and ensuring that the programme is adapted to the local context and therefore aligned with local needs and priorities.

- From the outset, the **County Health Management Team (CHMT)** played a key role in the programme design and implementation. During the design phase, the CHMT advised the MANI team on the services to be incentivised (ie those that were most in need of improvement); the reimbursement rates for these services; and the quality assessment criteria. The CHMT has also approved all quarterly PBF payments rewarded to facilities. While this sometimes resulted in delays in the process, it was very important for building partnership and trust.
- The **Sub-County Health Management Teams (SCHMTs)** actively participated in the quarterly quality assessments. In addition to building their ownership of the PBF scheme, it also helped them to better understand the needs of their facilities, which was particularly important in the absence of any other funding for supportive supervision.
- The **Health Facility Management Committees (HFMCs)** were responsible for distributing the performance rewards to health workers using a tool shared by the MANI team and deciding on what equipment and supplies to request based on their own specific needs. By placing this decision-making power in the hands of the facility, they were empowered to identify ways to improve quality, productivity and overall performance.
- The **Community Units**, through their Community Health Volunteers, provided pregnant women with information on birth preparedness and service availability and were particularly instrumental in increasing uptake of facility based deliveries and of antenatal care. Quarterly meetings with CHVs provided important feedback on ways to adapt and strengthen the programme.

This process of stakeholder engagement has not only been important for the successful implementation of the PBF initiative, but has also helped to strengthen institutional capacities which will pave the way for ongoing reforms in the county, particularly the roll out of Linda Mama as well as the World Bank Transforming Health Systems for Universal Care (THS-UC) programme in Bungoma.

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