



## Case Study

# Costing of Health Services for Provider Payment in Kenya

The Joint Learning Network for Universal Health Coverage (JLN) brings policy and technical leaders together to learn from each other and co-create solutions to their most pressing health systems challenges. Learning from each other what has and has not worked, they are able to build more equitable, resilient, and efficient health systems to accelerate progress towards universal health coverage. With the support of expert facilitation, the joint learning approach helps draw out country experiences in a structured way to frame problems, identify common issues, explore insights and knowledge, and synthesize practical solutions that are both country-specific and globally adaptable.

As part of this process, JLN members often co-develop new knowledge products, such as step-by-step costing and self-assessment tools. To date, JLN members have co-created 45 knowledge products on a variety of subjects. Members then bring knowledge products back to their countries, adapt them to their country's specific needs, and finally use or implement the knowledge product to solve a particular challenge. The use of JLN knowledge products is one clear example of the impact the JLN can have downstream in health systems; by enabling countries to use best-practices from JLN country experience as they work towards long-term health system goals, such as expanding and improving on UHC programs. This case study profiles the use of [Costing of Health Services for Provider Payment](#) in Kenya.

**Kenya's use of the *Costing of Health Services for Provider Payment* toolkit produced findings that were used to change county-level reimbursement models to lower costs, increase efficiency, and improve financial sustainability.**

<b>JLN Knowledge Product:</b>	Costing of Health Services for Provider Payment: A Practical Manual
<b>Country:</b>	Kenya
<b>Use Case:</b>	Adapted & implemented at county-level
<b>Leading Implementers:</b>	Makueni County Government
<b>Technical Support:</b>	Mr. Joseph Githinji, Health Economist, Kenya CCG
<b>Primary Outcome:</b>	Change to reimbursement model in 333 facilities in Makueni County
<b>Timeframe:</b>	2018-2019

## Data Collection Methodology

In order to document the link between JLN knowledge product development and country effects to-date, the JLN's case study series examines two evaluation questions:

1. What are the processes and preconditions necessary for JLN knowledge products to be used?
2. How has the JLN network and knowledge products contributed to health system changes?

The JLN's country case study series was structured as an explanatory single-case analysis, consisting of one or more key informant interviews per case study with key stakeholders identified by the relevant JLN Country Core Group (CCG). CCG leads were asked to use a snowball sampling methodology (a referral-based sampling approach) to identify the critical stakeholders involved in adaptation and implementation for each use case. In some instances a single key informant was sufficient to discuss the case and in other instances multiple



perspectives were required. Stakeholders interviewed are mostly mid- to senior-level government staff involved in the implementation of a health system reform that used a JLN knowledge product or approach. Drafts of summaries were shared with key informants to check for accuracy and completeness.

Data collection was conducted through in-depth interviews using a structured questionnaire that also included open-ended questions and, if relevant, potential prompts to encourage more detailed responses. Data collection was done using a standard Adaptation & Implementation tool developed and piloted by the JLN Monitoring and Evaluation (M&E) Technical Working Group.

### Limitations

Although the approach to the case study was informed by the JLN theory of change, document review, and pilots, the scope of each case study is limited to few key informants and all data have been collected retrospectively. Furthermore, case studies traditionally explore the complexity of a single or limited number of cases, so findings may not be generalizable.

In addition, while JLN Network Manager designed and conducted the case study with integrity and

with sensitivity to bias, the data collection efforts were conducted by the JLN Network Manager M&E staff and not by an independent data collector. The JLN Network Manager attempted to mitigate the potential for bias in this situation by requesting that respondents be open and honest to improve JLN knowledge products.

### Acknowledgements

The JLN would like to thank the implementing team that worked to customize the costing templates and tools to better fit their context in Kenya. The implementing team included seven members: Dr. Cyrus Wambua Matheka (team leader, key informant for this case study), Sylvia Mbevi, Anthony Mathulu, Christopher Muthama, Raphael Musyoki, Peninah Mutindi, and Alphonse Mutinda. The JLN also would like to thank Esther Mukoa Wabuge, Kenya Country Core Group Coordinator for her support as well as the entire Kenya Country Core Group. Additionally, the JLN would like to thank Dr. Agnes Munyua for conducting the training to adapt the tools to the Kenya context and train staff on how to implement the JLN's PHC self-assessment and costing tools. The co-development of the JLN Costing of Health Services for Provider Payment toolkit was facilitated by Results for Development.

## Country Context

Kenya's health system devolves authority to the country's 47 county governments to provide health services independently with the central government tasked with policy formulation, provision of technical guidance, and health sector regulation. This means that county administrations, like the one in Makueni County, have the mandate to organize and implement health programs for their constituents. As part of Makueni County's Vision 2025, leaders established "MakueniCare," in September 2016 as a functional and affordable

health insurance scheme for households.<sup>1</sup> Unfortunately, despite the new insurance scheme, out-of-pocket expenses remained high for many people, sometimes catastrophically high, and posed a significant barrier to accessing health services. Like many local health systems, Makueni County was under pressure to contain costs while also improving the quality of health services.<sup>2</sup>

<sup>1</sup> *Pilot Costing for Health Services Case of Makueni County Referral Hospital*. Prepared by Makueni County Team (Makueni County, Kenya, 2019).

<sup>2</sup> *Pilot Costing for Health Services* (Makueni County, Kenya, 2019).

One response to this challenge was to identify cost-savings and reduce inefficiencies to make better use of the funds available. Political leaders particularly wanted to know more about the fee-for-service model, its sustainability, long-term needs for investment, and the management implications to control costs. To help inform decision-making, Dr. Cyrus Matheka – a member of

Kenya’s JLN Country Core Group who works in Makueni County for the Department of Health – planned to implement the JLN’s [Costing of Health Services for Provider Payment: A Practical Manual](#) in the county to better understand what factors were driving high costs and how to improve the fee-for-service model being used.

## Results

### Adapting & Implementing the Costing of Health Services for Provider Payment: A Practical Manual

With support from the JLN, a county-level team – led by Dr. Matheka – analyzed the costs of services provided at the County Referral Hospital in Makueni County in Fiscal Year 2017-2018, as well as the hospital's total expenditures and the in-unit costs of in-patient and out-patient health services during this period.

This started with a five-day exercise in November and December 2019, facilitated by a Kenya CCG member, to adapt the tools to the Kenya context and train staff on how to implement the JLN’s PHC self-assessment and costing tools. There were five participants each attending from four different counties with backgrounds in community health, finance, pharmaceutical systems, nursing, and more. After the training, the Makueni County team returned to their work stations and worked with JLN CCG representatives to start populating the costing manual with their data.

Makueni County was the first to utilize the training because the county already had “MakueniCare” instituted while the other county governments were in the process of setting up pilot programs. In Makueni, the implementing team worked to customize the costing templates and tools to better fit their context. Because they were implementing the tool at the county-level, examples in the manual highlighting tertiary or national-level considerations

#### How did the JLN support?

- Training on the JLN knowledge product
- Ongoing, **real-time peer support** to further contextualize the tool

#### How did Kenya use the KP?

- Costed services at a single facility
- Findings showed a **misalignment between the reimbursement model and financial sustainability goals** for the county

#### What were the downstream changes?

- The evidence from the assessment was used to **change the reimbursement model** county-wide

were less relevant, requiring the team to further customize the templates to better fit their needs. During this additional customization, they relied heavily on the expertise of a CCG member, Mr. Joseph Githinji, a health economist, and they were able to prepare the tools to collect data across administrative, para-clinical, and clinical services.

Once the tools were adapted, the team began data collection by assigning each person to collect raw data available within their assigned units or central data (e.g., human resources and commodities) from central information systems. The team performed data quality checks and follow-up with departments where quality issues were identified to fill-in gaps and improve the validity of data informing the analysis. They also had to consider “lumped” costs,

like electricity, by developing custom formulas to adequately assign costs that could not simply be divided equally – for example, radiology is a small unit, but uses a lot of power. Another “lumped” cost is the equipment itself. Often government equipment is very old and depreciated past the information available for assigning value. The team had to attach value in their own context, which was a challenge.

“If JLN was not involved in this process, it would not have happened.”

-Dr. Cyrus Matheka

After running a preliminary analysis, the team had a better understanding of the total costs to run the facility in a year; disaggregated costs across administrative, para-clinical, and clinical services; and costs for individual services provided. With information on unit prices, costs, and investments, they could see, for example, the cost of a single patient when they are admitted to a surgical ward versus a medical ward. This gave them a clear window into the resources required to run facilities

## Recommendations

---

Here are some considerations from the implementing team to future implementers:

**Knowledge products can be contextualized at different levels of the health system:** Although many of the JLN’s knowledge products include examples from national-level UHC reform efforts, it is possible to look beyond these examples and to learn lessons about how knowledge products can be adapted to other levels of the health system. This example of Kenya’s experience demonstrates how it is possible to adapt this tool at a more local level to meet the needs of a county.

**The JLN approach can also be used within a country, not just across countries.** This example suggests that shared learning across

in a year and the total resources required. With this information, they realized that the fee-for-services model presented a high risk of insolvency.

## Health System Changes from the Costing of Health Services for Provider Payment: A Practical Manual

### Supporting Sub-National Provider Payment Policy Changes

The costing assessment results provided valuable evidence the implementing team could take to Makueni County leaders. Dr Matheka used the study findings, namely that the county’s fee-for-service model was fiscally unsustainable, to advocate for changes. County leaders agreed that they could increase efficiency while cutting costs, and for Fiscal Year 2019-2020, the county shifted their reimbursement model to rely less on charging fees for services and instead toward predetermined standard cost reimbursements for treatment across all 333 county facilities. The results of the assessment have also helped create standard pricing and quality standards for drugs as guided by the Kenya Essential Medicines List (KEML).

subnational units (for example states and counties), can benefit practitioners.

The implementing team also had recommendations for the network:

**Additional expertise needs to be leveraged across the JLN network:** The team implementing this knowledge product felt their success adapting and implementing this tool was predicated on the additional support they received. This is a particularly complex knowledge product, so the support from the resource persons to help adapt the tool was incredibly important. Using existing expertise within the JLN network was critical to successfully adapt and implement this knowledge product.



# Conclusion

---

Evidence-informed advocacy can be a powerful tool to influence policymakers and inform decision-making. By putting in the effort to customize the JLN's costing tools for a county-level context, leaders gained a better understanding of

the costs and resources needed to deliver health services, and they were able to revise their reimbursement schemes to lower costs, increase efficiency and maintain the solvency of healthcare facilities.

