



Project Information Document/ Identification/Concept Stage (PID)

Concept Stage | Date Prepared/Updated: 18-Jul-2017 | Report No: PIDC120821



BASIC INFORMATION

A. Basic Project Data

Project ID	Parent Project ID (if any)	Environmental Assessment Category	Project Name
P164301		B - Partial Assessment	Tackling Non-Communicable Disease Challenges in Kenya (P164301)
Region	Country	Date PID Prepared	Estimated Date of Approval
AFRICA	Kenya	18-Jul-2017	
Financing Instrument	Borrower(s)	Implementing Agency	Initiation Note Review Decision
Investment Project Financing	Moi Teaching and Referral Hospital	Ministry of Health	The review did authorize the preparation to continue

Public Disclosure Copy

PROJECT FINANCING DATA

FINANCING

FINANCING SOURCES

Select all that apply

Counterpart Funding Trust Funds Parallel Financing

SUMMARY (USD)

Total Project cost	2,500,000
Total Financing	2,500,000
Trust Funds	2,500,000
Financing Gap	0

DETAILS

Trust Funds

Source	Currency	Amount	USD Equivalent
Pharmaceutical Governance	USD-US Dollars	2,500,000	2,500,000



Fund(PHGF)

B. Introduction and Context

Country Context

Like many other low and middle-income countries, the burden of disease in Kenya is changing rapidly with aging populations, sedentary lifestyles, improved control of communicable diseases, and rapid urbanization. Non-communicable diseases (NCDs) in Kenya currently represent nearly 30 percent of total deaths, in comparison to other countries in Latin America and Asia where they account for about 70 percent of total deaths. The main NCDs are cardiovascular conditions, cancers and diabetes. NCDs account for over 50 percent of hospital admissions. According to the STEP Survey (2015) risk factors for NCDs are already high in Kenya. Nearly 25 percent of adults have raised blood pressure, which is comparable or higher to levels seen in other low and middle-income countries. Roughly 27 percent of Kenyan adults and 40 percent of women are overweight or obese. Only 3 percent of the population has none of the five main risk factors for NCDs (i.e. *daily smoking, obesity, raised blood pressure; low intake of fruits and vegetables, low level of physical activity*).

Knowledge and health seeking behavior related to chronic diseases is generally poor with large socio-economic and gender disparities. Nearly 75 percent of the poorest have never been measured for blood pressure, in comparison to 38 percent of the richest. The proportion taking medications for elevated blood pressure among those diagnosed is about 57 percent for women but only 17 percent for men. About 74 percent of Kenyans above 45 years of age has never been screened for raised blood sugar. Of those screened and diagnosed, only around 35 percent are on medication, with large socioeconomic and geographical disparities. Similarly, only 22 percent of the poorest have heard of cervical cancer screening in comparison to 61 percent of the best off. Only 11 percent of Kenyan women have ever been screened for cervical cancer that is one of the leading cancers affecting women in the region. These figures highlight the low levels of awareness and knowledge, particularly among the poor and vulnerable, as well as limited availability of early screening and detection in primary health care settings.

Globally, non-communicable diseases are rising rapidly and will represent the largest share of the total disease burden in all countries irrespective of income level by 2030. Kenya is no exception. Deaths due to communicable diseases are projected to drop by 48 percent while those due to NCDs will rise by 55 percent by 2030 (Figure 1). In the short to medium term, Kenya is facing a double burden of disease with an unfinished communicable disease and maternal and child health agenda, and the rapid emergence of chronic diseases. This double burden of disease places increasing demands on county health systems and contributes to escalating health care costs. County governments need to develop models of chronic care that respond to this rising demand.

Sectoral and Institutional Context

Like in other low and middle-income countries, health systems in Kenya are not well equipped to address the growing NCD burden. The devolution process has further highlighted the challenges for county governments to keep pace with rising demands. Capacity to provide chronic care at the national and county levels suffers from: (i) limited



availability of programs that support prevention activities, early screening, detection, and treatment at the community and primary health care levels, as chronic care was historically provided only at the hospital level (levels 4/5)[1]; (ii) shortages of qualified personnel, limited skills, and a skewed distribution in favor of urban areas; (iii) poor access to critical technologies, diagnostics and medications; and (iv) inadequate financing. These health systems bottlenecks result in overwhelmed health care facilities, long waiting times, and compromised quality of care. Lack of screening and early detection results in a significant number of individuals diagnosed at an advanced stage of a disease. For example, 80 percent of female cancer cases in Kenya is diagnosed at stage three or four when little can be done. Similar weaknesses are observed in the diagnosis and management of hypertension and diabetes.

The Government of Kenya is cognizant of the rapidly emerging burden of chronic diseases, and has demonstrated high-level commitment to address these issues early before they spiral out of control. The Ministry of Health (MOH) has produced the *Kenya National Strategy for the Prevention and Control of Non-Communicable Diseases, 2015-2020*, a comprehensive document adopted for the country context from the global NCD action plan. The strategy documents the burden of disease, proposes appropriate strategies and interventions, and promotes a multi-sectoral approach. One of the overarching strategies is the integration of NCD prevention and control in primary health care settings that will leverage existing platforms, promote early screening and detection, and bring services closer to the beneficiaries. The MOH has also produced disease specific strategies/plans as well as protocols, and guidelines for management of the three main diseases (i.e. hypertension, diabetes, cancers). The STEP survey conducted with support from the World Bank has generated valuable information to help inform programmatic action. The NHIF benefit package includes comprehensive inpatient and outpatient services for all illnesses, including NCDs provided through contracted public and private health facilities. While this presents an opportunity for Kenyans, evidence shows that in general there is very limited understanding of health insurance, how it functions and the benefits.

The Kenyan government is in the process of finalizing a health financing strategy, which proposes a new health financing architecture. Under the new health financing strategy all Kenyans would have access to a predetermined benefit package that will include prevention and treatment of the main NCDs. Curative services will be purchased by a national health insurance fund, funded through tax funding and mandatory health insurance contributions. County health funds, supported through tax funding would be established and would be responsible for purchasing promotive and preventive health services, which will include screening of NCDs. A strong referral system, build around a primary care network model will be established to ensure that primary care facilities are the first point of contact for service delivery. While funding for chronic care remains grossly inadequate at this time, the measures described above represent an important step forward in terms of creating a strong enabling environment for piloting alternative models of care.

[1]The Kenyan healthcare system is structured into six levels: (i) *level 1*: household/community; (ii) *level 2/3 facilities*: dispensaries and health centers serving a population of 5,000 to 20,000; (iii) *level 4 facilities*: sub-county hospitals that serve 500,000-1,000,000; and (iv) *level 5 and 6 facilities*: counties and national referral centers.



Relationship to CPF

The MOH has a long standing record of close collaboration in the health sector with the World Bank. The ministry values the Bank's convening power, policy advice, and analytic work. Several complementary Bank-funded initiatives are currently underway, such as strong engagement on health financing policies, business case for investing in NCDs, and pilot activities to expand access to pathology services, improve NCD surveillance, and roll out cancer registries.

C. Project Development Objective(s)

Proposed Development Objective(s)

The proposed RETF will support the Government of Kenya (GOK) to develop and pilot models of integrated NCD care at community and primary care levels in selected counties that can inform the national scale up. More specifically, the RETF will support the design, execution, and systematic monitoring of a pilot program for screening, early detection and treatment of selected NCDs at community and primary care levels complemented by cost effective referral linkages. The RETF will lead to the production of a case study, documenting the main features of the model of care, and lessons learned to inform interventions that are scalable and sustainable.

Key Results

Expected Outputs: Case Study, Power Point Presentations.

Expected Outcomes: Strengthened knowledge about strategies for scaling up screening, detection and early treatment for selected NCDs

D. Preliminary Description

Activities/Components

The proposed NCD pilot project focuses on prevention that is one of the main priorities in Kenya. Early screening, detection and basic treatment will: (i) avert high levels of morbidity and mortality; (ii) pre-empt an escalation of health care costs associated with delayed health care seeking behavior; and (iii) lay the foundation for a comprehensive approach to chronic care management (i.e. patients need to be aware and know their status to seek care). Ultimately, catching people early will save lives, improve the quality of life, and avoid the impoverishing effects associated with high out-of-pocket spending due to catastrophic illnesses.

The pilot project will generate a model of care that will inform the roll out of the national strategy and that may be replicated by other county governments. The pilot builds on ongoing experience with a Chronic Care Model supported by AMPATH [1] in several counties in Western Kenya. Insights and lessons from the proposed NCD pilot are expected to inform policy development while simultaneously expanding coverage. The model (focused on *hypertension and diabetes*) has been introduced in limited geographic areas with promising initial results, as discussed below. The proposed pilot offers an opportunity to introduce the model to additional sub-counties to test its robustness in different settings; to include additional NCDs (*cervical and breast cancer*); and to systematically estimate



the costs and cost-effectiveness of alternative strategies.

The pilot will focus on NCD services at the community and primary health care levels while strengthening the referral system across different levels of care in two pilot counties. It will document what it takes to make this work in terms of strategies, systems, and resources. The process of scale up would involve initial meetings with county leadership led by the county health management teams to forge partnerships and sensitize them to this program. This would be followed by adaption of the program to the local situations. The curricula will be used to train trainers who will also be mentors during the roll out process. The training will be cascaded to primary health care workers and the same model of hypertension and diabetes prevention and control will be rolled out at all project sites while cervical and breast cancer screening is rolled out at selected sites. The tools, strategies, experiences and lessons from this pilot will be shared widely with other county officials to assist in the scale up to other parts of the country. The NCD pilot project will be separately supported by the Bank through a BETF (P163853) which aims to share and disseminate experiences and lessons from implementation at the national and global level. The description of the activities to be supported under the RETF is provided below.

Design, Piloting and Evaluating Models of Care for Screening and Treatment of Select NCDs. Two pilot projects would be conducted in two counties (i.e. Busia, Trans-Nzoia) in Western Kenya with support of AMPATH. Pilot 1 would include the expansion of the *Chronic Care Model* (CCM) and the testing of the *Expanded Chronic Care Model* (ECCM) in select sub-counties in Trans-Nzoia. Pilot 2 would include the expansion of the Chronic Care Model in sub-counties in Busia. Counties were selected based on the following criteria: (i) *commitment* and support of county governments;(ii) *high poverty* rates; and/or (iii) *disease burden*. Busia county with a population of roughly 954,000 inhabitants has a poverty rate of over 64 percent and a life expectancy of only 47 years. Based on community screenings done over the past two years in select counties the prevalence of elevated blood pressure is 22 percent and diabetes is 1.5 percent. Trans-Nzoia county has a population of nearly 957,000, a poverty rate of over 50 percent, and is predominantly agricultural. Based on community screenings the prevalence of elevated blood pressure and diabetes is 27 and 2 percent, respectively.

The main focus of the pilots would be on establishing/expanding basic NCD services at the community and primary health care levels using the Chronic Care Model. This would include raising awareness, early screening, diagnosis, linkage to a health facility for initial treatment of basic, cost effective interventions with referral to specialized facilities. In addition, a number of the sub-counties will benefit from the Expanded Chronic Care Model that includes community empowerment activities and enrollment of beneficiaries in the NHIF, as these aspects are critical to sustainability. An important aspect of the pilot will be to sensitize communities in participating counties on the importance of health insurance, the NHIF benefit package, payment rates and payment options and how to access services. Sensitization will be conducted jointly with the NHIF during the community meetings and NCD screening exercises, and will also include registration of beneficiaries. To increase retention rates, AMPATH will collaborate with the NHIF to monitor registration of beneficiaries and send monthly reminders through mobile phones to remind registered beneficiaries of their monthly payments. The interventions to be supported are expected to generate lessons on what is feasible; what impediments arise; what remedial actions are taken; how much it cost; and what is the scale up strategy. The pilots would be evaluated to draw lessons for potential scale up to other counties in Kenya. In addition to an impact evaluation (before and after study) a small qualitative process evaluation would be conducted to document the implementation process (i.e. What worked? What did not and why?). All necessary ethical clearances would be obtained prior to launching the pilots.

The implementation of the pilot NCD project will generate important lessons in terms of how services should be organized, delivered, and financed. The project will provide an opportunity to identify health system barriers to care



and develop feasible approaches and apply cost effective interventions with a focus on primary care. The pilot will: (i) determine knowledge, attitudes and practices of patients and providers; (ii) establish the effectiveness of alternative community education and screening strategies and different linkage and referral strategies; (iii) demonstrate the feasibility and scalability of the chronic care model for select NCDs; and (iv) ascertain the costs of these interventions and evaluate the cost effectiveness of the screening, linkage, referral and care strategies. The experience and lessons generated will be of broader interest to other county governments in Kenya struggling with similar challenges as well as to other low and middle-income countries participating in the broader industry-supported initiative (*Accelerated Access*) supporting this critical work.[2] The pilot NCD project will focus on health system barriers that impede access to chronic care: (i) shortages of personnel; retention and motivation of personnel; (ii) cost of drugs, stock outs, and inadequate availability of diagnostics; and (iii) weak referral system. While AMPATH's experience with chronic care has generated important early lessons in some counties, it is important to test the replicability and robustness of the model in different settings. Based on discussions with key stakeholders in Kenya a series questions have been identified, and will form the basis for the operational research agenda to be supported under the project. This current preliminary list of questions to be explored is as follows:

Community Level

- *Which approaches are most effective and cost effective in conducting screening -- facility based or community outreach either through mass screening or targeted screening at community meetings (Barazas)?*
- *Which workers are most appropriate to use (e.g. community health volunteers or remunerated community health workers) for initial screening?*
- *Should referrals to a health facility be done based on the initial screening or should there be a second confirmation measurement at the community level?*
- *Where should initial referrals be made to? (i.e., patient support groups, dispensaries, health centers or higher level facilities)*
- *How do these questions differ for each NCD (hypertension, diabetes, cancers)?*
- *What is the potential role of community level workers in supporting adherence?*

Primary Health Care Level

- *What strategies are most appropriate to address shortages, turnover and motivation of clinicians? What options work? - task sharing; task shifting or recruitment of additional personnel? What models of capacity building are most effective? What will be the commitment of county governments to absorb additional personnel at project completion?*
- *Which approaches and strategies are most effective to address the high cost of drugs and frequent stock outs? Role of community revolving pharmacies; strengthening the KEMSA system of drug stocking or centralized procurement of generic medicines by counties?*
- *How can health record systems be improved to comprehensively cover NCDs for better quality reporting to MOH and other stake holders?*
- *What strategies are most effective to address impediments to treatment adherence at facility level (i.e. long waiting times; frequent visits to collect medications; low health literacy level)?*
- *What is the cost of offering care for different tracer conditions?*



Cross Cutting

- *What measures need to be put in place to ensure that the referral system operates efficiently across the different levels of care?*
- *How will county and national governments sustain activities supported under the pilot program?*
- *How to promote financial sustainability? Role of the risk pooling? Role of county governments?*

[1] AMPATH consists of Moi University College of Health Sciences, Moi Teaching and Referral Hospital and a consortium of North American Universities

[2] Accelerated Access is a multi-stakeholder initiative to improve NCD care in low and middle income countries, involving more than 20 biopharmaceutical companies working in close collaboration with The World Bank Group and the Union for International Cancer Control (UICC) to overcome a variety of access barriers.

Public Disclosure Copy

SAFEGUARDS

E. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10	X		
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	

CONTACT POINT

World Bank



Contact : Gandham N.V. Ramana
Telephone No : 5327+6376

Title : Program Leader
Email :

Contact : Miriam Schneidman
Telephone No : 473-9391

Title : Lead Health Specialist
Email :

Borrower/Client/Recipient

Borrower : Moi Teaching and Referral Hospital

Contact : Jemima Kamano
Telephone No : 254719824277

Title : Assistant Program Manager
Email : shoine.hoine@gmail.com

Implementing Agencies

Implementing Agency : Ministry of Health

Contact : Dr. Joseph Mwangi Kibachio
Telephone No : 254722691574

Title : Head, Division of Non-Communicable Diseases
Email : kibachiojoseph@gmail.com

Public Disclosure Copy

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>