INTEGRATED WITH 'MULTINATIONAL LUNG CANCER CONTROL PROGRAMME' IN 2020

Secure the Future - Lung Cancer in Kenya

Bristol-Myers Squibb Foundation

Submitted as part of Access Accelerated

Access Observatory

Contents

Program Description

Program Overview

① **Program Name**

Secure the Future - Lung Cancer in Kenya

② **Diseases program aims to address**

• Cancer (Lung)

③ **Beneficiary population**

• General population

④ **Countries**

• Kenya

⑤ **Program start date**

September 01, 2017

⑥ **Anticipated program completion date**

August 31, 2020

⑦ **Contact person**

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⑧ **Program summary**

Lung cancer is the commonest cancer worldwide and disproportionately affects developing countries Kenya being part of it, where over 58% of cases occur. This however is in sharp contrast with low incidence rate of lung cancers reported in Africa (7.7per 100,000 men and 2.6 per 100,000 women respectively).[1] This apparently low burden of lung cancers in the context of critical lack of accurate data, likely reflects enormous underestimations of the true burden, considering the high prevalence in the African setting of some major risk factors for lung cancer[2] such as TB and HIV infection. Indeed, most African countries lack nationwide or regional population-based cancer registries, and have no reliable source of mortality data.

The epidemiology of lung cancer is largely unknown in Africa, reflecting until recently, the low priority given to cancer and non-communicable diseases (NCDs) research in this setting. In most African setting, there is low cancer awareness, uncoordinated or absent screening services, late cancer diagnosis, when therapeutic solutions where available, are less likely to be effective. In addition, cultural beliefs influence health seeking behavior. Patients with warning signs and those with clinical signs suggestive of cancer or diagnosed with cancer resort to alternative medicine, either preferentially or in parallel with modern medicine. For example, the number of lung cancer cases reported from Eldoret in Kenya over 5years period was extremely small with only 53 cases. All these factors have contributed to lack of a true burden estimation in this region which this program will address.

Secure the Future- Lung Cancer in Kenya seeks to improve access to early diagnostic services for lung cancer by addressing barriers to access for cancer care.

Program Overview

8   Program summary, cont.

Secure the Future- Lung Cancer in Kenya is part of a Multinational Lung Cancer Control Program (MLCCP) which aims to improve understanding of lung cancer pathways and access to early diagnostic services for lung cancer by addressing barriers to access for cancer care through working with communities and the Ministries of Health in the identified regions with a potential for scale-up. The goal of the program is to improve access to early diagnostic services for lung cancer by addressing barriers to access for cancer care.

The specific objectives are:

1. To raise awareness of lung cancer and quantify its true burden in specific regions of Kenya.
2. To validate a tool for screening high-risk groups for lung cancer in the community.
3. To identify and mitigate barriers to access for optimal lung cancer care.
4. To assess risk factors associated with lung cancer.
5. To establish standardized diagnostics and pathology evaluation and reporting.
6. To establish a bio-bank for storage of lung pathology specimens for potential translational research

The project is comprised of several components or sub-projects listed below:

Project 1 (Year 1): raising awareness on lung cancer and quantify true burden of disease.Activities include:

•   Preparing surveys and questionnaires to design education and training programs for healthcare professionals and communities.
•   Creation and dissemination of lung cancer awareness brochures and materials.
•   Establishing/strengthening cancer registries to include lung cancer and collect all epidemiology data.
•   Training cancer registry staff to properly document cases.

Project 2 (Year 1): validating the tool for lung cancer screening of high-risk groups for lung cancer (TB, HIV, Smokers, etc.), including the pilot of the tool.

Project 3(Year 1-2): identifying and mitigating barriers to access for optimal lung cancer care. Activities include:

•   Developing a data management strategy to document all cancer patients enrolled into the program and their demographics, as well as the reasons for delays in diagnosis and care throughout the continuum of lung cancer care.
•   Evaluating the referral pathways and barriers.

Project 4 (Year 2-3): •assessing risk factors associated with lung cancer. Activities include:

•   Piloting the documented risk factors and their correlations with lung cancer in the study population.
•   Assessing occupational or environmental exposures and their associations with lung cancer.

Project 5 (Year 1-2): establishing standardized diagnostics, pathology evaluation and reporting. Activities include:

•   Developing standardized synoptic pathology reporting, diagnostic algorithms and treatment protocols for lung cancer.
•   Tumor Boards strengthening/establishment to discuss lung cancer cases.
•   Establishing tele-pathology with the participating centers for pathology reviews.

Project 6 (Year 2-3): establishing a biobank for storage of the lung pathology specimen for potential translational research and train administrators and researchers on bio-banking's importance in research and care.

For more information on this program, please visit: https://accessaccelerated.org/initiative/secure-the-future-kenya-eldoret/

Program Strategies & Activities

9 Strategies and activities

Strategy 1: Community Awareness and Linkage to Care

ACTIVITY	DESCRIPTION
Communication	Creating and disseminating lung cancer awareness brochures and material.
Infrastructure	[No response provided]

Strategy 2: Health Service Strengthening

ACTIVITY	DESCRIPTION
Planning	Holding meetings with local institutions to assess main access barriers and identify risk factors.
Training	Training local healthcare workers to standardized and improve cancer quality of care. Training cancer registry staff to properly document cases. Training administrators and researchers on bio-banking's importance in research and care.
Infrastructure	Establishing a biobank for storage of the lung pathology specimen for potential translational research.
Technology	Creating and validating risk-factor screening tools for lung cancer. Establishing tele-pathology with the participating centers for pathology reviews.
Management	Creating and establishing boards for assessment of lung cancer cases. Establishing standardized diagnostics, pathology evaluation and reporting for lung cancer. Establishing and strengthening cancer registries to include lung cancer and collect all epidemiology data.

10 Strategy by country

STRATEGY	COUNTRY
Community Awareness and Linkage to Care	Kenya
Health Service Strengthening	Kenya

Companies, Partners & Stakeholders

11 Company roles

COMPANY	ROLE
Bristol-Myers Squibb	Sponsor and funder. The Bristol-Myers Squibb Foundation is a distinct legal entity from Bristol-Myers Squibb. Bristol-Myers Squibb (Parent Company) is the IFPMA member.

12 Funding and implementing partners

PARTNER	ROLE/URL	SECTOR
Bristol-Myers Squibb Foundation	Sponsor and funder. https://www.bms.com/about-us/responsibility/bristol-myers-squibb-foundation.html	Private
Kenya Ministry of Health	TThe Academic Model Providing Access to Healthcare (AMPATH /MTRH) Cancer Center, located in Uasin Gishu County, Kenya, is the primary implementation site of this program. In 2015, of all the patients presenting to AMPATH with cancer, 25% were from Uasin Gishu County. Therefore, there is a huge area of unmet need in cancer screening, early diagnostics and treatments for patients living in this county. The proximity of Uasin Gishu to the Cancer Center and the long-term partnership that the county enjoys with AMPATH and MTRH makes it an ideal center for the program. The implementing partner AMPATH is a partnership between three entities; The Ministries of Health (through Moi Teaching and Referral Hospital- MRTH), Ministry of Higher Education Science & Technology (through Moi University School of Medicine- MU) and A consortium of North American Universities led by Indiana University(-IU). The lung cancer program is embodied in the wider AMPATH program which partners with the above three entities. MTRH: Through the Research Sponsored Project Office (RSPO), formed jointly with MU staff manages all research and care grants in terms of human resource as well as finance and administration. Identified clients are treated and managed at the MTRH facility through an integrated approach of doctors and other care providers employed by MTRH. It is an important partner in raising awareness on lung cancer through continuous medical education of the staff, support lung cancer campaigns alongside other NCDs, advocate for NHIF cover of all clients and address barriers to early diagnosis, treatment and management of identified lung cancer patient. Provides ground for information that feeds into the cancer registry and thus build a data base for lung cancer information. This is important for use in establishing reliable source of mortality data and in essence the epidemiology of lung cancer. http://www.health.go.ke/	Public

Companies, Partners & Stakeholders

12 Funding and implementing partners, cont.

Moi Teaching and Referral Hospital	Through the Research Sponsored Project Office (RSPO), formed jointly with MU staff manages all research and care grants in terms of human resource as well as finance and administration. Identified clients are treated and managed at the MTRH facility through an integrated approach of doctors and other care providers employed by MTRH. It is an important partner in raising awareness on lung cancer through continuous medical education of the staff, support lung cancer campaigns alongside other NCDs, advocate for NHIF cover of all clients and address barriers to early diagnosis, treatment and management of identified lung cancer patient. Provides ground for information that feeds into the cancer registry and thus build a data base for lung cancer information. This is important for use in establishing reliable source of mortality data and in essence the epidemiology of lung cancer. http://www.mtrh.go.ke/	Public
Moi University School of Medicine	Forms part of RSPO that manages grants in human resource, finance and administration. An institution of higher learning that provides a rich ground for academic research, consultations and technical support. Provides experts in development of education, communication and information (IEC) materials that fits the targeted community (different tribes). http://www.ampathkenya.org/our-partners/musm/	Public
World Health Organization (WHO)	Providing technical support in establishing cancer registries to include lung cancer. www.who.org	Public
African Cancer Registry Network (AFCRN)	Delivering tailored training in population-based cancer registration and use of data. http://afcrn.org/	Voluntary
Indiana University - USA	Sub-contracted institution that offers technical oversight for the program. https://www.indiana.edu/	Public
Kenya Ministry of Health through Counties-Level	Assisting in health system capacity building and improving access to early diagnostic services for lung cancer in the community.	Public

Companies, Partners & Stakeholders

13 Funding and implementing partners by country
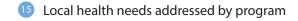
PARTNER	COUNTRY
Bristol-Myers Squibb Foundation	Kenya
Kenya Ministry of Health	Kenya
Moi Teaching and Referral Hospital	Kenya
Moi University School of Medicine	Kenya
World Health Organization (WHO)	Kenya
African Cancer Registry Network (AFCRN)	Kenya
Indiana University - USA	Kenya
Kenya Ministry of Health through Counties-Level	Kenya

14 Stakeholders

STAKEHOLDER	DESCRIPTION OF ENGAGEMENT
Government	The program works together with the Kenya Ministry of Health by assisting in health system capacity building and improving access to early diagnostic services for lung cancer in the community. The Program's work-plan is shared with the county leads through a stakeholders meeting where the leads criticize, corrects and agree to adopt it. The County Government also provides support to the community system and the Health care facilities in terms of infra-structures, staffing, developing and ensuring policies are implemented. The program assists in building capacity for staff through training, sensitization, on job mentorship, data management, reporting and support supervision jointly with county leads.
Non-government organization (NGO)	World Health Organization provides technical support in establishing cancer registries to include lung cancer.
Local Hospitals/ Health Facilities	MUSM: Forms part of RSPO that manages grants in human resource, finance and administration. An institution of higher learning that provides a rich ground for academic research, consultations and technical support. Provides experts in development of education, communication and information (IEC) materials that fits the targeted community (different tribes).

Local Context, Equity & Sustainability

15 Local health needs addressed by program

Lung cancer is the most common cancer worldwide, and disproportionately affects developing countries where over 58% of cases occur. This however, is in sharp contrast with low incidence rates of lung cancers reported in Africa. This apparently "low burden" of lung cancers in the context of critical lack of accurate data, likely reflects enormous underestimations of the true burden, considering the high prevalence in the African setting of some major risk factors for lung cancer such as pulmonary tuberculosis and HIV infection. Indeed, most African countries lack nationwide or regional population-based cancer registries, and have no reliable source of mortality data.

In Kenya, with a population of 42 million people, cancer ranks third as a cause of death after infectious diseases and cardiovascular diseases. It causes 7% of total national mortality every year. Although population based data does not exist in the country, it is estimated that the annual incidence of cancer is about 40,000 cases and the annual mortality to be over 28,000. Over 60% of those affected are below the age of 70 years with 70-80% of patients diagnosed at an advanced stage. Thus, Kenya remains one of the highest disease-burden countries in Sub-Saharan Africa.

a How needs were assessed
[No response provided]

b Formal needs assessment conducted
[No response provided]

16 Social inequity addressed

Yes. This program seeks to increase the local health system' ability to screen, diagnose, treat, and monitor lung cancer, thereby increasing capacity and improving cancer statistics in this area. This will help decrease the global inequity in lung cancer diagnosis and management between Kenya and high income countries. The program also endeavors to ensure those who are less privileged do not miss out on treatment and care. We have established a system of identifying those facing such challenges for support. Such may include but not limited to enrolling into the NHIF system, helping them form income generating groups (GISHE) such as women groups for economic empowerment. This helps leverage on the less privileged by helping them access care just like those economically empowered.

17 Local policies, practices, and laws considered during program design

From the Eldoret cancer registry, one of the two major cancer registries in Kenya, with a catchment population of 18 million people, lung cancer diagnosis was noted as follows:

- 17 cases in 2011.
- 11 in 2012.
- 13 in 2013.
- 12 in 2014.

These are gross under-representations of the burden of the disease due to lack of proper diagnostic work-up and overlap of symptoms of lungcancer and Tuberculosis that is still prevalent in this setting. By partnering with a local hospital, as well as the Kenya Ministry of Health through counties, this program has been designed considering the existence of local resources. Local practice and policies are actively included in design and implementation, through surveys, active participation of local professionals, trainings preparations, creation of awareness resources, or other materials. In addition, the program is helping to develop and standardize local practices of care by developing standardized synoptic pathology reporting, diagnostic algorithms and treatment protocols for lung cancer.

The county governments through respective County Executive Committee Members (CECMs) and County Health Management (CHM) team leads have been cooperating in policy and decision making. The CHM for each county has participated in the start-up meetings to discuss the objectives of the program and how it will be implemented.

Local Context, Equity & Sustainability

The team has also appointed lead persons to work with and granted the program the freedom to engage any of its members in activities deemed to support the program's objective. Local facilities have been involved in mobilization and campaigns for mass screening and establishing care centers for investigations, treatment and management for lung cancer. Community Strategies including creating awareness, education on risk factors, empowerment and mobilization for screening is led by the local leads in line with the policies, practices and the governing laws.

18 How diversion of resources from other public health priorities are avoided

[No reponse provided.]

19 Program provides health technologies (medical devices, medicines, and vaccines)

[No response provided.]

20 Health technologies are part of local standard treatment guidelines

N/A.

21 Health technologies are covered by local health insurance schemes

N/A.

22 Program provides medicines listed on the National Essential Medicines List

N/A.

23 Sustainability plan

Secure the Future- Lung Cancer Kenya has engaged with a local hospital to develop a standardized pathology reporting, diagnostic algorithms and treatment protocols for lung cancer which will continue to be used long after the program has ended. Integration of the program with already existing county supported programs. For example, integration of the lung cancer with the TB program will support the sustainability of the initiative. Having the county own the process of implementing the program from inception will also enable sustainability. This is achieved through in-cooperating the county leads in planning and executing of the agreed plan.

 The program is also helping to establish and strengthen cancer registries in which will continue to be in use after the program ends. The Cancer registry can also be used in reference and in advocating for budgetary allocation from government to ensure sustainability.

Additional Program Information

24 Additional program information

[No response provided.]

a Potential conflict of interest discussed with government entity

[No response provided.]

25 Access Accelerated Initiative participant

Yes.

26 International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) membership

Yes.

Resources

1. Ferlay et al., 2015. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. Int J Cancer. 136(5):E359-86. doi: 10.1002/ijc.29210. Epub 2014 Oct 9.

2. Siegel, K., Naishadham, D., and Jemal, A. (2012). Cancer statistics, 2012. CA: A Cancer Journal for Clinicians, 62 (1), 10-29.

Program Indicators

Not yet available for this program

Appendix

This program report is based on the information gathered from the Access Observatory questionnaire below.

Program Description

PROGRAM OVERVIEW

1 Program Name

2 Diseases program aims to address:

Please identify the disease(s) that your program aims to address (select all that apply).

3 Beneficiary population

Please identify the beneficiary population of this program (select all that apply).

4 Countries

Please select all countries that this program is being implemented in (select all that apply).

5 Program Start Date

6 Anticipated Program Completion Date

7 Contact person

On the public profile for this program, if you would like to display a contact person for this program, please list the name and email address here (i.e. someone from the public could email with questions about this program profile and data).

8 Program summary

Please provide a brief summary of your program including program objectives (e.g., the intended purposes and expected results of the program; if a pilot program, please note this). Please provide a URL, if available. Please limit replies to 750 words.

PROGRAM STRATEGIES & ACTIVITIES

9 Strategies and activities

Based on the BUSPH Taxonomy of Strategies, which strategy or strategies apply to your program (please select all that apply)?

10 Strategy by country

If you have registered one program for multiple countries, this question allows you to provide a bit more specificity about each country (e.g. some countries have different strategies, diseases, partners, etc.). Please complete these tables as applicable. For each portion you have you selected from above (program strategies), please identify which country/countries these apply.

COMPANIES, PARTNERS AND STAKEHOLDERS

11 Company roles

Please identify all pharmaceutical companies, including yours, who are collaborating on this program:

What role does each company play in the implementation of your program?

12 Funding and implementing partners

Please identify all funding and implementing partners who are supporting the implementation of this program (Implementing partners is defined as either an associate government or non-government entity or agency that supplements the works of a larger organization or agency by helping to carry out institutional arrangements in line with the larger organization's goals and objectives.)

a. What role does each partner play in the implementation of your program? Please give background on the organization and describe the nature of the relationship between the organization and your company. Describe the local team's responsibilities for the program, with reference to the program strategies and activities. (response required for each partner selected).

b. For each partner, please categorize them as either a Public Sector, Private Sector, or Voluntary Sector partner. (Public Sector is defined as government; Private Sector is defined

as A business unit established, owned, and operated by private individuals for profit, instead of by or for any government or its agencies. Generation and return of profit to its owners or shareholders is emphasized; Voluntary Sector is defined as Organizations whose purpose is to benefit and enrich society, often without profit as a motive and with little or no government intervention. Unlike the private sector where the generation and return of profit to its owners is emphasized, money raised or earned by an organization in the voluntary sector is usually invested back into the community or the organization itself (ex. Charities, foundations, advocacy groups etc.))

c. Please provide the URL to the partner organizations' webpages

13 Funding and implementing partners by country

If you have registered one program for multiple countries, this question allows you to provide a bit more specificity about each country (e.g., some countries have different strategies, diseases, partners, etc.). Please complete these tables as applicable. For each portion you have you selected from above (funding and implementing partners), please identify which country/countries these apply.

14 Stakeholders

Please describe how you have engaged with any of these local stakeholders in the planning and/or implementation of this program. (Stakeholders defined as individuals or entities who are involved in or affected by the execution or outcome of a project and may have influence and authority to dictate whether a project is a success or not (ex. Ministry of Health, NGO, Faith-based organization, etc.). Select all that apply.

Government, please explain
Non-Government Organization (NGO), please explain
Faith-based organization, please explain
Commercial sector, please explain
Local hospitals/health facilities, please explain
Local universities, please explain
Other, please explain

LOCAL CONTEXT, EQUITY & SUSTAINABILITY

15 Local health needs addressed by program

Please describe how your program is responsive to local health needs and challenges (e.g., how you decided and worked together with local partners to determine that this program was appropriate for this context)?

a How were needs assessed

b Was a formal need assessment conducted

(Yes/No) If yes, please upload file or provide URL.

16 Social inequity addressed

Does your program aim to address social inequity in any way (if yes, please explain). (Inequity is defined as lack of fairness or justice. Sometime 'social disparities,' 'structural barriers' and 'oppression and discrimination' are used to describe the same phenomenon. In social sciences and public health social inequities refer to the systematic lack of fairness or justice related to gender, ethnicity, geographical location and religion. These unequal social relations and structures of power operate to produce experiences of inequitable health outcomes, treatment and access to care. Health and social programs are often designed with the aim to address the lack of fairness and adjust for these systematic failures of systems or policies.*)

*Reference: The definition was adapted from Ingram R et al. Social Inequities and Mental Health: A Scoping Review. Vancouver: Study for Gender Inequities and Mental Health, 2013.

17 Local policies, practices, and laws considered during program design

How have local policies, practices, and laws (e.g., infrastructure development regulations, education requirements, etc.) been taken into consideration when designing the program?

18 How diversion of resources from other public health priorities are avoided

Please explain how the program avoids diverting resources away from other public health priorities? (e.g. local human resources involved in program implementation diverted from other programs or activities).

19 Program provides health technologies

Does your program include health technologies (health technologies include medical devices, medicines, and vaccines developed to solve a health problem and improve quality of lives)? (Yes/No)

20 Health technology(ies) are part of local standard treatment guidelines

Are the health technology(ies) which are part of your program part of local standard treatment guidelines? (Yes/No) If not, what was the local need for these technologies?

21 Health technologies are covered by local health insurance schemes

Does your program include health technologies that are covered by local health insurance schemes? (Yes/No) If not, what are the local needs for these technologies?

22 Program provides medicines listed on the National Essential Medicines List

Does your program include medicines that are listed on the National Essential Medicines List? (Yes/No) If not, what was the local need for these technologies?

23 Sustainability plan

If applicable, please describe how you have planned for sustainability of the implementation of your program (ex. Creating a transition plan from your company to the local government during the development of the program).

ADDITIONAL PROGRAM INFORMATION

24 Additional program information

Is there any additional information that you would like to add about your program that has not been collected in other sections of the form?

a Potential conflict of interest discussed with government entity

Have you discussed with governmental entity potential conflicts of interest between the social aims of your program and your business activities? (Yes/No) If yes, please provide more details and the name of the government entity.

25 Access Accelerated Initiative participant

Is this program part of the Access Accelerated Initiative? (Yes/No)

26 International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) membership

Is your company a member of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)? (Yes/No)

Program Indicators

INDICATOR DESCRIPTION

27 List of indicator data to be reported into Access Observatory database

For this program, activities, please select all inputs and impacts for which you plan to collect and report data into this database.

28 Data source

For this indicator, please select the data source(s) you will rely on.

29 Frequency of reporting

Indicate the frequency with which data for this indicator can be submitted to the Observatory.

30 Data collection

a. Responsible party: For this indicator, please indicate the party/parties responsible for data collection.

b. Data collection — Description: Please briefly describe the data source and collection procedure in detail.

c. Data collection — Frequency: For this indicator, please indicate the frequency of data collection.

31 Data processing

a. Responsible party: Please indicate all parties that conduct any processing of this data.

b. Data processing— Description: Please briefly describe all processing procedures the data go through. Be explicit in describing the procedures, who enacts them, and the frequency of processing.

c. Data processing — Frequency: What is the frequency with which this data is processed?

32 Data validation

Description: Describe the process (if any) your company uses to validate the quality of the data sent from the local team.

33 Challenges in data collection and steps to address challenges

Please indicate any challenges that you have in collecting data for this indicator and what you are doing to address those challenges.