PROGRAM REPORT

APRIL 2020

Secure the Future - Tanzania

Bristol-Myers Squibb Foundation

Submitted as part of Access Accelerated

Access Observatory

Contents

The information in this report has been submitted by the company concerned to the Access Observatory as part of its commitment to Access Accelerated. The information will be updated regularly. For more information about the Access Observatory go to www.accessobservatory.org

Program Description

Program Overview

1 Program Name

Secure the Future - Tanzania

2 Diseases program aims to address

• Cancer (Lung)

3 Beneficiary population

• General population

4 Countries

• Tanzania

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

This initiative is part of a Multinational Lung Cancer Control Program (MLCCP) which aims to improve understanding of lung cancer patient pathways and access to respective early diagnostic services. This is to be done by addressing the barriers of cancer care by working with communities and the Ministry of Health in the identified regions, with potential scale-up. The goal of the program Secure the Future, Tanzania, is to inform continuous quality improvement in cancer related prevention, health systems and policy solutions. This will be achieved by establishing and testing infrastructure for ongoing monitoring of lung cancer screening, detection, treatment and outcomes.

The specific objectives are:

- To raise awareness on lung cancer and quantify its true burden in the specific regions of Tanzania.
- To validate the tool for screening high-risk groups for lung cancer in the community.
- To identify and mitigate the access barriers to optimal lung cancer care.
- To assess the risk factors associated with lung cancer.
- To establish standardized diagnostics and pathology evaluation and reporting.
- To establish a biobank for storage of the lung pathology specimen 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 under this phase involve:

- The preparation of surveys and questionnaires to design education and training of healthcare professionals and communities.
- Creation and dissemination of lung cancer awareness brochures and material.
- Establishing/strengthening cancer registries to include lung cancer and collect all epidemiology data.
- Training cancer registry staff to properly document cases.

Program Overview

8 Program summary cont.

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 the barriers to optimal lung cancer care. Activities are developing a data management strategy to document all the 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. This will also involve an evaluation of 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.

A detailed monitoring and evaluation (M&E) framework will be developed covering each objective under each goal. A monitoring and evaluation committee comprising of a team drawn from representatives of the collaborating partners will be formed. The committee will meet quarterly to discuss the quarterly reports of progress and challenges. These quarterly reports shall also be made available to the Bristol-Myers Squibb Foundation (BMSF), in addition to recommendations for the subsequent quarter. The study M & E will focus on the results as opposed to the inputs and activities. The planned approach to monitoring and evaluation will include success criteria for clinical, educational and policy outputs.

Program Strategies & Activities

9 Strategies and activities

Strategy 1: Community Awareness and Linkage to Care

ACTIVITY	DESCRIPTION
Planning	Planning programs with MoH and partners.
Communication	Awareness campaign materials to the community. Create and disseminate lung cancer awareness brochures and material.
Infrastructure	Provide vehicles for transportation to treatment.
Technology	Developing a referral tool from lower level centres to Medical centre for further investigations. Since we will be looking for the outcome, the same staff will be involved in the active case tracing post treatment to have a picture of survivorship.

Strategy 2: Health Service Strengthening

ACTIVITY	DESCRIPTION
Planning	Meetings with local institutions to assess main access barriers and identify risk factors.
Training	Training programs for local healthcare workers to standardized and improve cancer quality of care. Train cancer registry staff to properly document cases. Train administrators and researchers on bio-banking's importance in research and care. Training of staff in the lower level health facilities with regards to screening of clients who are having or are at risk of having lung cancer.
Infrastructure	Establish a biobank for storage of the lung pathology specimen for potential translational research.
Technology	Creation and validation of risk-factor screening tools for lung cancer. Establish tele-pathology with the participating centers for pathology reviews.
Management	Creation/establishment of boards for assessment of lung cancer cases. Establishing standardized diagnostics, pathology evaluation and reporting for lung cancer. Establish/strengthen cancer registries to include lung cancer and collect all epidemiology data.

10 Strategy by country

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

Companies, Partners & Stakeholders

11 Company roles

COMPANY	ROLE
Bristol-Myers Squibb	Sponsor and funder.

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
Tanzania Ministry of Health	Partner in raising awareness on lung cancer and quantifying the true burden of lung cancer in the specific regions of Tanzania. In addition, partner in health system capacity building and improve access to early diagnostic services for lung cancer by addressing the barriers of cancer care. http://www.moh.go.tz/en/	Public
World Health Organization (WHO)	Provides technical support in establishing cancer registries to include lung cancer. www.who.org	Public
African Cancer Registry Network (AFCRN)	Deliver tailored training in population-based cancer registration and use of data. http://afcrn.org/	Private
Bugando Medical Centre in Mwanza, Tanzania	Some of the roles of the Bugando Medical Centre in Mwanza, Tanzania Cancer institute include: 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. 2. Developing a data management strategy to document all the 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. 3. Developing standardized synoptic pathology reporting, diagnostic algorithms and treatment protocols for lung cancer 4. Through Tumour boards, developing best evidence based lung cancer treatment protocols tallying the biology and characteristics of the lung cancers which will be found. 5. Develop an SOP for the storage of frozen biopsies to be used for further testing. 6. Training –Tailored to different health cadres on lung cancer care in its holisticity. http://www.bugandomedicalcentre.go.tz	Private

Companies, Partners & Stakeholders

12 Funding and implementing partners, cont.

PARTNER	ROLE/URL	SECTOR
Catholic University of Health and Allied Sciences	Bugando Medical Centre is annexed to the Medical School-Catholic University of Health and Allied Sciences. The Catholic University of Health and Allied Sciences supports Bugando Medical Centre to establish and test infrastructure for ongoing monitoring of lung cancer screening, detection, treatment and outcomes, in order to inform ongoing improvement in cancer related prevention, health systems and policy solutions. https://www.bugando.ac.tz/	Private

13 Funding and implementing partners by country

PARTNER	COUNTRY
Bristol-Myers Squibb Foundation	Tanzania
Tanzania Ministry of Health	Tanzania
World Health Organization (WHO)	Tanzania
African Cancer Registry Network (AFCRN)	Tanzania
Bugando Medical Centre in Mwanza, Tanzania	Tanzania
Catholic University of Health and Allied Sciences	Tanzania

14 Stakeholders

STAKEHOLDER	DESCRIPTION OF ENGAGEMENT
Government	Ministry of Health of Tanzania is a partner involved in improving access to early diagnostic services for lung cancer by addressing the barriers of cancer care.
Local Hospitals/ Health Facilities	Bugando Medical Centre in Mwanza is a partner involved in: 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. 2. Developing a data management strategy to document all the 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. 3. Developing standardized synoptic pathology reporting, diagnostic algorithms and treatment protocols for lung cancer. 4. Treatment Protocol development. 5. Local SoPs for Specimens Storage. 6. Training.
Local universities	Catholic University of Health and Allied Sciences is a partner that supports Bugando Medical Centre to establish and test infrastructure for ongoing monitoring of lung cancer screening, detection, treatment and outcomes, in order to inform ongoing improvement in cancer related prevention, health systems and policy solutions.

Local Context, Equity & Sustainability

15 Local health needs addressed by program

Lung cancer is the most common cancer worldwide, and disproportionately affects low- and middle-income countries where over 58% of cases occur.[1] This however, is in sharp contrast with low incidence rates of lung cancers reported in Africa. This documentation of "low burden" of lung cancers in the context of critical lack of accurate data, likely reflects 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, smoking, mining activities and HIV infection. Mining and fishing industries all common in the Lake Zone of north West Tanzania, also use chemical carcinogens plus labor conditions enforce higher cigarette and tobacco usage. Most African countries lack nationwide or regional population-based cancer registries, and have no reliable source of mortality data.[2]

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometers, 60,000 of which is inland water. Tanzania has a population of about 50 million with the mainland divided into 26 regions and the island of Zanzibar into 5 regions. The Lake Zone in Tanzania is made up of Regions surrounding Lake Victoria; these are Geita, Simiyu, Shinyanga, Kagera, Mara and Mwanza. Mwanza is the main city and people in the zone rely on Mwanza for their main social and economic activities, including referral health services. Bugando is one of the 4 tertiary referral hospitals in Tanzania serving a population of 16 million people, about a third of the population of Tanzania and importantly the region contributes two thirds of all cancers seen in the country.

Bugando Medical Centre is annexed to the Medical School-Catholic University of Health and Allied Sciences. The Cancer institute forms part of Bugando Complex. As in many Sub –Saharan African countries, cancer stands as the 3rd cause of mortality after infectious disease and other non –communicable diseases. It actually accounts for 10% of all mortality. The majority of cases seen at cancer facilities (60%) do arrive in stage 3 or 4 of their diseases, where the only means of treatment that can be offered is counseling and palliative care. Reasons for late presentations are usually similar, including treatment competition with traditional vs. modern medicine, lack of awareness, costs associated with referrals, diagnostic difficulties, lack of multidrug therapy and treatment protocols, and lack of active follow-up for proper survival rate documentation.[3] All of these factors have contributed to the lack of reliable estimation for a true lung cancer burden in the Great Lakes Region.

a How needs were assessed

[No response provided]

b Formal needs assessment conducted

[No response provided]

16 Social inequity addressed

Yes. Through this program, continuous quality improvement in cancer related prevention, health systems and policy solutions will allow to ease the health inequity gap in lung cancer diagnosis and treatment between Tanzania and high-income countries. This will be achieved by establishing and testing infrastructure for ongoing monitoring of lung cancer screening, detection, treatment and outcomes. Knowing the real or close to real magnitude of lung cancer in the country will attract proper planning for early detection with treatment aims which has a curative intention rather than palliation. This program will enable treatment for all irrespective of the locality or economic status of the patient as all will be treated equally through projections driven by the project.

Local Context, Equity & Sustainability

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

By partnering with local hospitals and universities, as well as the Ministry of Health of Tanzania, 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, training 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. This being a pilot project, can easily be replicated to other cancers affecting the region.

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

[No response 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 Tanzania has engaged with a local university and medical center 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. The program is also helping to establish and strengthen cancer registries in which will continue to be in use after the program ends.

Through this project the referral mechanism from the rural areas to the Medical centre and back will be strengthened, this will in turn ensure the continuation of the process not only for lung cancer but even for other malignancies. Lastly, by involving the department of NCD under the ministry of health a coordination of the activities will be ensured.

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.
3. Nanguzgambo, A. B., Razack, R., Louw, M., Bolliger, C. T. (2011). Immunochemistry and lung cancer: Application in diagnosis, prognosis and targeted therapy. Oncology, 80, 247-256

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.