Secure the Future
Lung Cancer in Swaziland

Bristol-Myers Squibb Foundation

Submitted as part of Access Accelerated
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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

The information contained in this report is in the public domain and should be cited as: Bristol-Myers Squibb, Secure The Future - Lung Cancer in Swaziland (2018), Access Observatory Boston, US 2018 (online) available from www.accessobservatory.org
Program Overview

1 Program Name
Secure the Future - Lung Cancer in Swaziland

2 Diseases program aims to address
• Cancer (Lung)

3 Beneficiary population
• General population

4 Countries
• Swaziland

5 Program start date
September 01, 2017

6 Anticipated program completion date
Jun 31, 2020

7 Contact person
Michael Seiders (Michael.Seiders@bms.com)
Phangisile Mtshali (Phangisile.Mtshali@bms.com)

8 Program summary
The goal of this project is to strengthen the capacity of the Swaziland National Cancer Registry initiative on lung cancer surveillance by supporting evidence-based cancer registry coordination which will help in establishing the epidemiologic burden of lung cancer. The program will also assist the Swaziland Ministry of Health to address barriers to cancer care and improve access to early diagnostic services.

The program has the following specific objectives:

• Determine the epidemiological burden of and risk factors for lung cancer in Swaziland.

• Strengthen Community engagement and health care worker knowledge on Lung Cancer in Swaziland.

• Strengthen the program management and capacity of the Swaziland National Cancer Registry (SNCR).

• Strengthen capacity for Lung Cancer surveillance.

Specific objectives of the program include:

• To Determine the epidemiologic burden of lung cancer in Swaziland.

• To identify risk factors for lung cancer in Swaziland.

• To establish a multidisciplinary team towards improving cancer diagnosis and reporting.

• To improve data quality by reducing the death certificate only (DCO) and minimize the proportion of clinical diagnosis to pathology confirmed cases.

• To facilitate awareness on the mandate of SNCR to relevant stake holders and data sources.

• Capacity building of the SNCR through establishment of appropriate infrastructure, human resource and the required technical support.

• Professional development of SNCR staff to be able to apply international principles, standards and methods of population-based cancer registration.

• Assess Lung Cancer Knowledge, Attitudes and Practices in the community and the health care system.

(continued on next page)
Program summary cont.

- Use Knowledge, Attitude and Practices (KAP) Survey findings to develop (Lung) Cancer training materials.
- Provide Lung Cancer training to healthcare workers including pre-service training.
- Develop Information, Education, and Communication (IEC) materials to strengthen awareness of and advocacy for (Lung) Cancer risk factors and symptoms at community level.
- Conduct information sharing and learning sessions with the community through engaging the health promotion unit to increase awareness and uptake of lung cancer screening services.
- Establish platforms for sharing of best practices with regard to Lung Cancer within and among healthcare workers during monthly continuing medical education (CMEs) in all hospitals and Health centres.

Description of other specific activities linked to this program.

Strengthening the Swaziland Cancer Registries:
- Provision of relevant human resources, office equipment and working tools (computers, projector, vehicle).
- Training and development, coaching and mentoring.
- Attending and participating in conference, summit and meetings.
- Development and implementation of a professional development plan and a capacity building framework.

Supporting evidence-based cancer registry coordination:
- Establish a steering committee and technical working group and strengthening established technical working groups which are relevant to the program.
- Research capacity building.
- Strengthening cancer registries and documentation among health care workers.
- Make use of data and conduct implementation science and research.
- Develop and train a network of champions within high risk populations.
- Participate and attend working meetings, Regional HIV Semi-Annual Review ReHSAR and National HIV Semi-Annual Review (NaHSAR).
Program Strategies & Activities

9 Strategies and activities

Strategy 1: Community Awareness and Linkage to Care

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Create awareness among the general population on cancer and need for cancer reporting to the registry.</td>
</tr>
<tr>
<td>Technology</td>
<td>Upgrade and implement the CanReg 5 software.</td>
</tr>
</tbody>
</table>

Strategy 2: Health Service Strengthening

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>Training of National Cancer Registry staff.</td>
</tr>
<tr>
<td>Management</td>
<td>Produce standard operating procedure to standardize testing in the health sector.</td>
</tr>
</tbody>
</table>

Strategy 3: Health Service Delivery

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening</td>
<td>The Project will do the lung cancer screening.</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Lung cancer diagnostics will be done during the Lung Cancer survey.</td>
</tr>
<tr>
<td>Treatment</td>
<td>Treatment referrals to government hospital will be done for further management.</td>
</tr>
</tbody>
</table>

10 Strategy by country

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Awareness and Linkage to Care</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Health Service Strengthening</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Health Service Delivery</td>
<td>Swaziland</td>
</tr>
</tbody>
</table>
Companies, Partners & Stakeholders

### Company roles

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol-Myers Squibb</td>
<td>Sponsor and funder.</td>
</tr>
</tbody>
</table>

### Funding and implementing partners

<table>
<thead>
<tr>
<th>PARTNER</th>
<th>ROLE/URL</th>
<th>SECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol-Myers Squibb Foundation</td>
<td>Sponsor and funder.</td>
<td>Private</td>
</tr>
<tr>
<td>Swaziland Ministry of Health</td>
<td>The Ministry of Health’s Non-Communicable Disease Department - will work with the cancer registry in making sure that all the activities especially the awareness are implemented. The National TB Control Program - Will be undertaking the National TB Prevalence survey which will be implemented along with the Lung cancer survey and will be instrumental in facilitating TB/lung cancer diagnosis education.</td>
<td>Public</td>
</tr>
<tr>
<td>World Health Organization (WHO)</td>
<td>WHO gives a technical assistance in all our strategy and guiding documents.</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.who.org">www.who.org</a></td>
<td></td>
</tr>
<tr>
<td>African Cancer Registry Network (AFCRN)</td>
<td>The overall aim of the network is to improve the effectiveness of cancer registration and surveillance in sub Saharan Africa by providing expert evaluation of current problems and technical support to remedy identified barriers, with long term goals of strengthening health systems and creating research platforms for the identification of problems, priorities and targets for intervention. Also serves as the “regional hub” of the Global Initiative for Cancer Registration (GICR) of the International Agency for Research on Cancer (IARC). Sub-Saharan African countries, like countries in other regions, urgently need these data for cancer control planning, intervention programs and subsequently for the use by Health Ministries, policy makers, researchers, clinicians.</td>
<td>Voluntary</td>
</tr>
<tr>
<td></td>
<td><a href="http://afcrn.org/">http://afcrn.org/</a></td>
<td></td>
</tr>
<tr>
<td>PriceWaterhouse Coopers</td>
<td>PricewaterhouseCoopers Services PTY Ltd. will provide independent audit of the program in line with international audit standards.</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.pwc.com/">https://www.pwc.com/</a></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
<td>Type</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>The National Referral Hospital</td>
<td>The National Referral Hospital including the laboratory will be in charge of conducting and standardizing testing in the health sector including radiography, pathology for cancer diagnosis and also for quality assurance.</td>
<td>Public</td>
</tr>
<tr>
<td>Swaziland National Cancer Registry</td>
<td>Swaziland National Cancer Registry will be main implementing and benefiting partner.</td>
<td>Public</td>
</tr>
<tr>
<td>University Research Co., LLC</td>
<td>University Research Co., LLC (URC) URC is dedicated to improving the quality of health care, social services, and health education worldwide. URC's mission is to provide innovative, evidence-based solutions to health and social challenges worldwide. In Swaziland, URC works with the Ministry of Health and other stakeholders to provide technical assistance for scaling up provision and access to comprehensive, integrated, quality and decentralized HIV/TB services. Our other focus areas include HSS, in-service training, capacity development, behavioral change communication, research, improving quality of care, innovations and technology. URC is a professional non-government organization in Swaziland, affiliated with URC-CHS that will provide technical expertise, assistance and consultation to assist the Swaziland National Cancer Registry with implementation of the Lung Cancer Project activities. URC shall constitute a Steering Committee for ensuring coordination, and monitoring, of the lung cancer project. URC will also provide oversight and management of funds and will open a specific donor and grant bank account.</td>
<td>Private</td>
</tr>
</tbody>
</table>

http://afcrn.org/membership/membership-list/146-swazilandncr

http://www.urc-chs.com/
### Funding and implementing partners by country

<table>
<thead>
<tr>
<th>PARTNER</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol-Myers Squibb Foundation</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Swaziland Ministry of Health</td>
<td>Swaziland</td>
</tr>
<tr>
<td>World Health Organization (WHO)</td>
<td>Swaziland</td>
</tr>
<tr>
<td>African Cancer Registry Network (AFCRN)</td>
<td>Swaziland</td>
</tr>
<tr>
<td>PriceWaterhouseCoopers</td>
<td>Swaziland</td>
</tr>
<tr>
<td>The National Referral Hospital</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Swaziland National Cancer Registry</td>
<td>Swaziland</td>
</tr>
<tr>
<td>University Research Co., LLC</td>
<td>Swaziland</td>
</tr>
</tbody>
</table>

### Stakeholders

<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
<th>DESCRIPTION OF ENGAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>The Ministry of Health's Non-Communicable Disease Department - will work with the cancer registry ensuring that all the activities are implemented.</td>
</tr>
<tr>
<td>Commercial Sector</td>
<td>The private hospitals including the private laboratory (Lancet) – they are one of the sources for the cancer abstraction and further diagnosis. And some of the Swazi population gets cancer management on those facilities.</td>
</tr>
<tr>
<td>Local Hospitals/ Health Facilities</td>
<td>The National Referral Hospital including the laboratory – will be in charge of conducting and standardizing testing in the health sector including radiography, pathology for cancer diagnosis and also for quality assurance.</td>
</tr>
</tbody>
</table>
Local Context, Equity & Sustainability

Local health needs addressed by program

Cigarette smoking is the most important cause of lung cancer and overall, 6% of Swaziland’s population (Males: 11.7%; Females: 1.2%) smoke tobacco. However, among males aged 45-69 years of age, the proportion is considerably higher at 21%. Globally, Swaziland has the highest adult HIV prevalence of 26% with an incidence rate of tuberculosis (565 per 100,000/year) and a TB/HIV co-infection rate of 73%. Due to similarities in symptoms, lung cancer is often misdiagnosed as TB leading to delayed diagnosis or missed identification of cases. Furthermore, occupational exposure to asbestos, silica, and radon gas are additional and relevant lung cancer risk factors particularly in the southern part of Africa where mining activity is common. Asbestos mines in neighboring South Africa have employed thousands of Swazis since the 1920s from labor-sending communities and an asbestos mine operated in the northern region of the country from 1939 to 1991 also employed thousands of locals. Independent of asbestos exposure, the history of being a current or ex-mine-worker is associated with TB which in turn increases the risk of lung cancer.

Given the presence and confluence of these risk factors (tobacco use, HIV, TB, HIV/TB co-infection, mining history), the Swaziland National Cancer Registry is keen to investigate the burden of lung cancer in the country. According to the Swaziland 2016 Annual Vital Statistics Report, cancers rank 6th overall and 2nd among non-communicable diseases as the main causes of death. However, both the incidence and prevalence of cancers in Swaziland, especially lung cancer, are poorly understood. Only 56 incidence cases of lung cancer were identified during a retrospective national review of medical records covering January 1, 2014 to December 31, 2015 lagging behind other common cancers. The factors contributing to this situation are not well understood but are thought to be multifactorial including lack of awareness of lung cancer symptoms in communities and by non-oncology clinicians, misdiagnoses of lung cancer with TB, referral of suspected lung cancer cases to South Africa, lack of autopsy reports, and under-reporting to population-based registries. However, the Ministry of Health recognizes the threat of lung cancer to the population and is taking deliberate measures to address this challenge, including the undertaking of this proposed project.

Social inequity addressed

This project aims to strengthen the capacity of the Swaziland National Cancer Registry initiative on lung cancer surveillance by supporting evidence-based cancer registry coordination which will help in establishing the epidemiologic burden of lung cancer. The program will also assist the Swaziland Ministry of Health to address barriers to cancer care and improve early diagnostic services. This program will help to reduce the global inequity in lung cancer diagnosis and care between Swaziland and high income countries.

Local policies, practices, and laws considered during program design

This program is developed in collaboration with the Swaziland Government which ensures coherence with local policies and practices. For example, the strengthening of local cancer registry and health surveillance in the country is aligned to the vision and objectives of the Health Research Strategic Plan 2014-2018 by the Kingdom of Swaziland Ministry of Health.

How program meets or exceeds local standards

Currently, the burden of lung cancer is unknown. Registration of cancer is insufficient and reporting is inconsistent. The program will build these aspects of the Swaziland cancer registry to identify more lung cancer, but also improve cancer surveillance in general.
19. **Program provides health technologies (medical devices, medicines, and vaccines)**

No.

20. **Health technologies are part of local standard treatment guidelines**

Not applicable.

21. **Health technologies are covered by local health insurance schemes**

Not applicable.

22. **Program provides medicines listed on the National Essential Medicines List**

No.

23. **Sustainability plan**

The program anticipates that the Swaziland National Cancer Registry would continue to register lung cancer after the discontinuation of this program because of capacity built through the program. The Human Resources that are currently hired by the project will be absorbed by government. The governance structures for the cancer registry will also be strengthened for self-sustainability.
Additional Program Information

24 Additional program information
As part of a larger assessment report, International Atomic Energy Agency (IAEA) conducted an assessment in 2017. However, we still await the final report that can be made public. What we are sharing not is for internal purposes only.

25 Access Accelerated Initiative participant
Yes.

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


Program Indicators

Not yet available for this program
Appendix

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 their 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)?

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 program meets or exceeds local standards
Is there anything else that you would like to report on how your program meets or exceeds local standards?

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?

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.