

INTEGRATED WITH 'MULTINATIONAL LUNG CANCER CONTROL PROGRAMME' IN 2020

Secure the Future - Gauteng Province South Africa

Bristol-Myers Squibb Foundation

Submitted as part of Access Accelerated

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Program Description

Program Overview

1 Program Name

Secure the Future - Gauteng Province
South Africa

2 Diseases program aims to address

- Cancer (Lung)

3 Beneficiary population

- General population
- People with low income
- Rural populations

4 Countries

- South Africa

5 Program start date

June 01, 2017

6 Anticipated program completion date

May 31, 2020

7 Contact person

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8 Program summary

Secure the Future - Gauteng Province South Africa aims to establish a Centre of Respiratory Excellence (CORE) in Gauteng Province (South Africa) based at Helen Joseph Hospital (HJH), and to formalize a tripartite service delivery, training and research partnership with Chris Hani Baragwanath Academic Hospital (CHBAH) and Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) respiratory departments.

The Centre, called "The Lung Laboratory" will incorporate a multi-disciplinary team of pulmonologists, histopathologists based at the National Institute of Occupational Health (NIOH), oncologists, radiologists, nurses, palliative care professionals, community field workers, public, private, non-governmental organizations (NGOs) and academic research partners.

Project Goals include:

Goal 1: To conduct a needs assessment to identify:

- i) patient level barriers to early stage lung cancer presentation at respiratory clinics.
- ii) health system barriers to timely lung cancer identification, referral, diagnosis and treatment.
- iii) unmet end-of-life needs among lung cancer patients and their caregivers.

Project components to address this goal include:

- Renovation of CORE facility.
- Staff training on programme methods.
- Study conducted on patient barriers to care and analyze results.
- Identification of healthcare provider delays and resource limitations.

(continued on next page)

Program Overview

8 Program summary cont.

Goal 2: To implement minimally invasive lung cancer diagnosis and treatment procedures and assess their impact on diagnosis and staging delays. Project components to address this goal include:

- Purchase of equipment.
- Training of health care providers on equipment use.

Goal 3: To provide multi-level training for healthcare and community fieldworkers workers by providing training on lung cancer causes, symptoms, diagnosis, treatment, management, palliation, and epidemiologic research. Project components to address this goal include:

- Lung cancer training course development and piloting.
- Community Advisory Board/NGO training and community outreach project.

Goal 4: To assess the feasibility of introducing limited lung cancer screening services in the Gauteng Province. Project components to address this goal include:

- Establish a pilot lung cancer screening program for high risk patients from the mining industry.
- Determine the unit costs and proportion of cases diagnosed with early and late lung cancer.
- Provide commercial screening and diagnostic service planning.

Goal 5: To provide palliative care services for respiratory patients from CMJAH and HJH:Project components to address this goal include:

- Coordinate, train, integrate and extend all WITS/Gauteng Palliative Care services to terminal respiratory patients and their caregivers referred from HJH and CMJAH.
- Enroll patients and caregivers on ongoing research projects.
- Conduct research on palliative care patients & caregiver needs analysis.

Goal 6: To initiate research to assess the burden of lung cancer at CBHAH, CMJAH and HJH:Project components to address this goal include:

- Characterize lung cancer disease and determine incidence and outcomes for HIV-positive and HIV-negative patients and the impacts of comorbidities and smoking habits on fitness for treatment and survival.
- Develop an electronic database for patient records and research information.

The expected outcomes of this project include:

- Identification of unmet end-of-life needs among lung cancer patients and their caregivers and effectiveness of palliative care interventions.
- Community lung cancer awareness education and patient navigation services integrated in Community Advisory Board and well-established NGO community workers.
- Installation of state of the art diagnosis equipment.
- Training programs for pulmonologists from the partner University of Witwatersrand (WITS) hospitals and 6 pulmonology fellows/year.
- Training courses for primary care practitioners on lung cancer management and palliative care management developed and piloted and offered for sustainability.
- Data publishing and presentation at congresses and to the Department of Health.

Program Strategies & Activities

9 Strategies and activities

Strategy 1: Community Awareness and Linkage to Care

| ACTIVITY | DESCRIPTION |
|---------------|---|
| Communication | Community outreach on cancer. We have employed 3 community fieldworkers and 1 fieldworker manager in collaboration with our NGO partner CANCERVIVE. We have trained our fieldworkers to educate patients attending community clinics and referring hospitals on symptoms, causes and risk factors for lung cancer, the type of diagnostic interventions patients are likely to receive, how to determine if they are being unnecessarily delayed in the referral network for intervention by our fieldworkers. They assist in navigating patients through the referral network and they support cancer patients and their families in dealing with the diagnosis. They are also partnering the palliative care team in conducting home visits and supporting caregivers in the home in caring for the lung cancer patients. |

Strategy 2: Health Service Strengthening

| ACTIVITY | DESCRIPTION |
|----------------|---|
| Planning | Needs assessment to identify patient level barriers, health system barriers unmet end-of-life needs among lung cancer patients and their caregivers. |
| Training | Multi-level training for healthcare and community fieldworkers on lung cancer causes, symptoms, diagnosis, treatment, management, palliation, and epidemiologic research. |
| Infrastructure | Complete Centre of Respiratory Excellence (CORE) facility renovation in Gauteng Province (South Africa) based at Helen Joseph Hospital. Install state of the art cancer diagnostic equipment. |
| Technology | Developed an electronic database for patient records and research information. |
| Management | [No response provided] |

Strategy 3: Health Service Delivery

| ACTIVITY | DESCRIPTION |
|-----------|---|
| Screening | Lung cancer screening program for high risk patients from the mining industry. |
| Diagnosis | Implement minimally invasive lung cancer diagnosis procedures. |
| Treatment | Coordinate, integrate and extend all WITS/Gauteng Palliative Care services to terminal respiratory patients and their caregivers referred from HJH and CMJAH. |

Program Strategies & Activities

10 Strategy by country

| STRATEGY | COUNTRY |
|---|--------------|
| Community Awareness and Linkage to Care | South Africa |
| Health Service Strengthening | South Africa |
| Health Service Delivery | South Africa |

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 |
| World Health Organization (WHO) | International and local support, with guidelines for lung cancer management and screening programs in low and middle-income countries. www.who.int/en | Public |
| Charlotte Maxeke Johannesburg Academic Hospital | Hospital partner and Academic Department for the Division of Pulmonology, Department of Internal Medicine, University of the Witwatersrand, involved in program's lung cancer service delivery, training and research. | Public |
| Chris Hani Baragwanath Academic Hospital (CHBAH) | Hospital partner involved in program's lung cancer service delivery, training and research. https://www.chrishanibaragwanathhospital.co.za/ | Public |
| Helen Joseph Hospital Pulmonology Department | Host of the Centre of Respiratory Excellence (CORE) known as "The Lung Laboratory". | Public |
| WITS/Gauteng Palliative Care Center at CHBAH (Bara PC) | WITS/Gauteng Palliative Care Center at CHBAH (Bara PC) is a collaborating partner. In 2008 the Gauteng Centre of Excellence for Palliative Care was established at Chris Hani Baragwanath Hospital and adopted by the Gauteng Department of Health. The Wits Centre for Palliative Care was established in 2012, with a view to furthering academic excellence in palliative care. In 2013, the Centre started providing paediatric palliative Care services. The Centre consists of a team of doctors, professional nurses, enrolled nurses, social workers, social auxiliary workers, drivers, administrators and volunteer spiritual counsellors. Secure the Future will coordinate, train, integrate and extend all WITS/Gauteng Palliative Care services to terminal respiratory patients and their caregivers referred from Helen Joseph Hospital and Chris Hani Baragwanath Academic Hospital and will enroll patients and caregivers on ongoing research projects. https://www.wits.ac.za/palliativecare/ | Private |

Companies, Partners & Stakeholders

12 Funding and implementing partners

| PARTNER | ROLE/URL | SECTOR |
|---|--|-----------|
| National Cancer Registry | <p>The African National Cancer Registry (AFCRN) is a collaborating partner. Cancer Registry Network (AFCRN) was formally inaugurated on 1st March, 2012, and succeeded and expanded the activities of the East African Cancer Registry Network (EARN), which had been established in January 2011, thanks to a grant from the Doris Duke Charitable Foundation (USA). AFCRN is a project of the Cancer Registry Programme of the International Network for Cancer Treatment and Research (INCTR). It is supported financially through The (INCTR) Challenge Fund, a registered UK charity (charity number 1079181) that raises funds for INCTR projects. The Challenge Fund in turn receives donations designated to support cancer registry activities in low and middle income countries.</p> <p>The AFCRN aims to improve the effectiveness of cancer 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. Since September 2012, the International Agency for Research on Cancer (IARC), has partnered with AFCRN to provide a network Regional Hub for cancer registration in Sub-Saharan Africa. The role of a regional hub includes: providing technical and scientific support to countries; delivering tailored training in population-based cancer registration and use of data; advocating the cause of cancer registration in the region and facilitating setting up associations and networks of cancer registries; and coordinating international research projects and disseminating findings. The National Cancer Registry collaborates with the IARC in expanding the reporting expertise and capacity of the SA National Cancer Registry and in the establishment of a regional registry in Ekurhuleni in Gauteng. The NCR will collaborate with both the HJH CORE and other SA BMSF supported lung cancer centres in Northern Cape and KwaZulu Natal in the disseminating of South African regional and extrapolated National prevalence and mortality data for lung cancer.</p> <p>http://afcrn.org/membership/membership-list/87-ncrsa</p> | Voluntary |
| National Institute for Occupational Diseases (NIOH) | <p>NIOHCD is a collaborating partner. The main focus areas of the Epidemiology and Surveillance section are surveillance, research and teaching of occupational epidemiology and consultation. The section collaborates with other sections and institutions to support strategic development and research into nationally important needs, such as women and reproductive health. A multi-disciplinary team of pulmonologists and histopathologists based at NIOH will assist the program research. It provides routine cytology and histopathology diagnostic services for all lung cancer patients treated at the Helen Joseph Hospital CORE including immunohistochemistry subtyping of lung cancers which provide information on prognostic response to targeted treatments.</p> <p>http://www.nioh.ac.za/</p> | Public |

13 Funding and implementing partners by country

| PARTNER | COUNTRY |
|--|--------------|
| Bristol-Myers Squibb Foundation | South Africa |
| World Health Organization (WHO) | South Africa |
| Charlotte Maxeke Johannesburg Academic Hospital | South Africa |
| Chris Hani Baragwanath Academic Hospital (CHBAH) | South Africa |
| Helen Joseph Hospital Pulmonology Department | South Africa |
| WITS/Gauteng Palliative Care Center at CHBAH (Bara PC) | South Africa |
| National Cancer Registry | South Africa |
| National Institute for Occupational Diseases (NIOH) | South Africa |

14 Stakeholders

| STAKEHOLDER | DESCRIPTION OF ENGAGEMENT |
|------------------------------------|---|
| Government | A multi-disciplinary team of pulmonologists and histopathologists based at National Institute for Occupational Health (NIOH) will assist the program research. |
| Non-government organization (NGO) | The CORE JHJ are partnering with CANCELVIVE for all community outreach activities an NGO who employs community fieldworkers and cancer survivors for lung cancer education to patients attending high volume community clinics and hospitals referring patients to Helen Joseph Hospital, Charlotte Maxeke Johannesburg Academic Hospital and Chris Hani Baragwanath Academic Hospital. |
| Local Hospitals/ Health Facilities | We engage with Helen Joseph Hospital (HJH), Chris Hani Baragwanath Academic Hospital (CHBAH) and Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) respiratory departments as research partners and centers for provision of palliative services. |
| Local universities | We engage with Wits University to provide training to pulmonologists and students pursuing fellowship at WITS. |

Local Context, Equity & Sustainability

15 Local health needs addressed by program

Sub-Saharan Africa (SSA) has endemic HIV prevalence (>15%) and the highest (>70%) global HIV- Tuberculosis (TB) co-infection rate, primarily affecting socioeconomically disadvantaged urban and rural populations, the majority of whom are black. Patients in Gauteng Province are referred to the 3 participating hospitals. The University of the Witwatersrand (WITS) Healthcare complex serves two thirds of the Gauteng population of 13 million people that includes 3 million people from Soweto and more than a million migrants. The population has a high HIV, TB and smoking prevalence particularly among males. Because of their vulnerable status, patients experience significant morbidity and mortality. Of particular concern is the increasing incidence of lung cancer among black women, associated with increased smoking and potentially indoor air pollution from coal stoves. The latest 2011 SA National Cancer Registry (NCR) age standardized incidence rates for lung cancer are under-reported at 11/100,000 population, as the NCR is pathology-based relying on lung tissue biopsy specimens. The most important cause of lung cancer is tobacco smoking. Large numbers of lung cancers related to asbestos and other occupational exposures (from mining), indoor biomass-fuel exposure and chronic inflammatory lung diseases – in particular tuberculosis also occurs.

With the successful scale-up of antiretroviral therapy (ART), SA is facing an epidemic of non-communicable diseases (NCD's) among aging people living with HIV/AIDS (APLWH). This population group is expected to triple by 2040 and the burden of COPD and lung cancer will increase, highlighting the need for health system planning and for burden of disease research to inform health system responses¹. Lung cancer is the most common non-AIDS defining cancer among HIV-positive individuals with an incidence two to four fold higher than in HIV-negative patients, caused mainly by high prevalence of cigarette smoking among the HIV population^{2,3}.

Our program aims to understand and respond to the needs of patients and their families in accessing and receiving timely and appropriate recognition of their disease symptoms, referral, diagnosis, treatment, support and palliative care.

a How needs were assessed

[No response provided]

b Formal needs assessment conducted

[No response provided]

16 Social inequity addressed

The University of the Witwatersrand (WITS) Healthcare complex that implements this program serves two thirds of the Gauteng population of 13 million people that includes 3 million people from Soweto and more than a million migrants. The population has a high HIV, TB and smoking prevalence particularly among males. Because of their vulnerable status, patients experience significant morbidity and mortality. Of particular concern is the increasing incidence of lung cancer among black women, associated with increased smoking and potentially indoor air pollution from coal stoves. This program aims to provide interventions which would serve these vulnerable populations in Gauteng, South Africa helping to reduce inequity in lung cancer diagnosis and treatment between Gauteng and other parts of South Africa.

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

This project collaborates with several local hospitals and government organizations to address the burden of lung cancer using locally available resources. The program's research has been reviewed and approved by a local Institutional Review Board (IRB) in accordance with local laws and practices.

Additional Program Information

18 How diversion of resources from other public health priorities is 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

Not available at this time.

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. National Cancer registry. Cancer in South Africa 2011 Full Report. Retrieved from <http://www.cansa.org.za/files/2016/08/NCR-2011-cancer-tables.pdf>
2. Wang CJ, Silverberg MJ, Abrams DI. Non-AIDS-Defining Malignancies in the HIV-Infected Population. *Current infectious disease reports*. 2014;16(6):406. doi:10.1007/s11908-014-0406-0.
3. Simard EP, Engels EA. Cancer as a cause of death among people with AIDS in the United States. *Clin Infect Dis*. 2010;51:957–962.

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 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

- Responsible party: For this indicator, please indicate the party/parties responsible for data collection.
- Data collection — Description: Please briefly describe the data source and collection procedure in detail.
- Data collection — Frequency: For this indicator, please indicate the frequency of data collection.

31 Data processing

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

