Medical Standards Agendum

CANCER PROGRAM

CANCER ACTION PRIORITIES FOR 2017-2021
Introduction

While Papua New Guinea (PNG) continues to battle significant public health challenges from malaria, tuberculosis, HIV/AIDS and maternal and child health, it is now facing an epidemiological shift similar to that of other low- and middle-income countries. As lifestyles change the prevalence of non-communicable diseases rises. Cancer is a prime example of this.

Due to challenges in surveillance and the fact that many cancers in PNG go undiagnosed; the exact rates of cancer mortality and morbidity across PNG are unknown. However several reviews have revealed that cancer is on the rise. The most common cancers found in PNG are cervical, oral/head &neck, breast and liver.

Many of the cancers that are common in PNG can be prevented through behavioural changes such as the cessation of tobacco and betel nut use, a reduction in the harmful use of alcohol and an increase in positive behaviours such as physical activity and healthy eating. In addition, cervical and liver cancers can both be prevented through immunization programmes.

Considering these trends PNG must now develop a more comprehensive approach, using an evidence based approach and focusing on interventions that are appropriate in low resource settings. Key to this is the creation of a National Cancer Control Programme, which will facilitate a comprehensive set of measures including primary prevention, screening and early detection, diagnosis and treatment, palliative care, and the establishment of a cancer registry.

These are captured in the National Cancer Policy 2015 approved for implementation. We must now translate this policy into action in order to transform the cancer treatment services that will provide much more comprehensive service aimed at reducing the cancer morbidity and mortality and improve survival and quality of life for sufferers.

Achievements of the past cancer action plans

No cancer action plan existed in the past and many consider the cancer unit in Angau Memorial Hospital as the comprehensive cancer centre to manage all forms of cancer; however, that is not the case. Since its reopening in 2008, it has only been operating at half capacity, providing limited radiotherapy and chemotherapy. Cancer treatment through surgery and chemotherapy are done at Port Moresby general Hospital and in other provincial hospitals.

However, the Cancer Unit in Lae is still an important facility because of the radiotherapy. Radiotherapy is needed as a combination to surgery or chemotherapy for a complete cure or as palliation or as preliminary treatment prior to surgery or chemotherapy. Therefore, it is in the best interest of the people that the cancer unit in Lae be strengthened and improved to increase services from what it is able to do now. To do this it needs a lot of resources including manpower, infrastructure and funding to see a marked improvement. It is not easy given the state of the health systems support and the resources available to address the situation.

There were important actions taken over the last three years to improve the situation including infrastructure, upskilling of staff and medicines procurements, oncologist training, radiation therapy training, nursing oncology training, training on radiation protection and regulatory requirements for radiation safety, brachytherapy training including meetings to address in house issues. Others include:

- Collaboration with IAEA through a country project to improve access to radiotherapy services – this project is intended to deliver assistance through human resources development, infrastructure procurement and expert advice. PNG Government needed to support this project with counterpart funding
- Ongoing staff upskilling in oncology, radiotherapy, brachytherapy and medical physics, in-house as well as overseas placements
• Twining arrangements between Cancer Unit and Australian cancer institutions on a voluntary basis - (now needs to be taken at a government to government arrangement for sustainability)
• Policy reforms for addressing cancer have been developed, approved and ready for implementation but require resources such funding and personnel – this was non-existent in the past.
• Drug supply system for cancer including morphine has been improved but still needs further improvement, especially the procurement
• Oncology Training pathways established
• The radiotherapy training in University of Technology has been another important development to improve cancer treatment.
• Budget appropriation for cancer service operation available but needs to be increased.

These actions taken above have really helped to keep the cancer service going but more needs to be done to keep the momentum. So this cancer action plan for the next two years should be able to build on the existing services and take cancer care services to the next level.

Goals of this cancer Action plan

Given the current cancer situation the government has recognised the need to pay more immediate attention to the issue. This document provides the impetus for the elevation of the cancer issue to a priority level aimed at creating interventions at all levels of the health system with particular emphasis on components of cancer care including prevention, early detection, diagnosis and treatment services and other needed support services. Cancer control requires the involvement of all partners and stakeholders to work together for a common cause guided by a national cancer leadership structure, essentially the National Cancer Committee Secretariat. So building partnership is an important part of this plan. Refocusing on primary prevention and early detection is a key action in this plan to arrest the worsening cancer incidence and prevalence of common cancers. Cancer prevention has been neglected over the past years.

The specific objectives of the Cancer action plan are as follows:
1. Organize Governance and administrative arrangements for Cancer Services including legal and regulatory requirements;
2. Capacity building and human resource development;
3. Scaling up Cancer prevention
4. Establishment of Screening and early detection interventions
5. Strengthening and improving Diagnosis and Treatment
6. Strengthening palliative services
7. Establish A National Cancer Registry;
8. Coordinate stakeholder involvement for supporting cancer care;

Focus of the action plan

The foundation for implementing the National Cancer Policy Guidelines through this action plan is based on the following interventions.

1. Strengthening of Cancer treatment services at all levels of health care system;
2. Strengthening infrastructure and support system;
3. Expansion of laboratory services at district and peripheral health centres;
4. Addressing human capacity development;
5. Establishing Cancer Control Program and a national referral system;
6. Collecting resources and data to build a National Cancer Registry
7. Coordinating government and donor-partner supported activities;
9. Mobilizing the resources to finance the strategic plan.
Cancer prevention interventions are non-existent today so this area needs more attention. Preventing cancer from occurring is the best option to take to reduce the burden and pressure on limited treatment resources available in the country.

**Why need this action plan?**

Well, in cancer care, actions that are required to bring about a marked improvement in all phases of the cancer care pathway: *from prevention and early diagnosis, to living with cancer, terminal (palliative) care and bereavement support.*

These actions can be reflected within the five selected priority areas for intervention:
- Prevention
- Screening and early diagnosis
- Quality of care
- Personal and social support
- Research and evaluation

**Strategic Priority 1: Prevention**

**Overall goal for prevention is to avoid having people coming down with preventable cancers.**

Cancer prevention requires intervention on identified determinants that can be modified through public health actions related to the environment and lifestyle habits. Cancer prevention strategies must therefore be located in the broad context of social and economic environments, far beyond the health sector.

1.1 **Promoting and adopting healthy lifestyles**

Lifestyle factors play an important role in the causation of cancer. There is a strong justification for cancer prevention activities focused on reversing behavioural patterns linked to tobacco smoking, alcohol drinking, unhealthy diet and physical inactivity.

Addressing these risk factor there are great opportunities to prevent not only cancer but also cardiovascular disease, diabetes and respiratory illness.

1.1.1 Tobacco
1.1.2 Harmful Alcohol Consumption
1.1.3 Healthy Dietary Lifestyle
1.1.4 Exposure to cancer-causing substances
1.1.5 Vaccines

**Strategic Objective 2: Strengthening and Establishing Early Detection of Cancer**

**Overall goal is to diagnose cancers as early as possible.**

Survival rates for a number of common cancers can be greatly improved through early diagnosis and treatment. Cancer is a potentially lethal disease; therefore the primary goal of screening and treating patients is to save lives. Mortality is the most important outcome indicator for effectiveness of screening programmes.

2.1 **Raising public awareness:** Accessible information to help people recognise signs and symptoms that could be cancer, so that they can seek medical advice early, when treatment is most likely to be effective. National Cancer Programme will work with voluntary organisations to review the information available on all the common cancers, and see what more can be done to reach those most at risk.
2.2 Establishing a cancer screening programme: Initiate screening programmes that are cost-effective:

- breast screening programme
- cervical screening programme
- colorectal screening
- PSA testing to detect prostate cancer

Strategic Objective 3: Ensuring quality in the diagnosis and treatment of cancer

Overall goal is to ensure that all cancer patients have access to high quality care in the community or hospital in order to achieve the highest possible cure and survival rates, and to improve patients’ quality of life.

The organisation and delivery of clinical services for patients diagnosed with cancer is complex. It involves a wide range of professional expertise and contributions from organisations at all levels of the health system.

The following are considered to be essential features for quality of care in cancer care:

- People who are suspected to have cancer need prompt access to appropriate specialists for accurate diagnosis and subsequent clinical management.
- Cancer specialists come from a range of medical disciplines and clinical professions.
- They need to work effectively together within a multi-disciplinary service if the best decisions are to be made about each patient’s diagnosis, treatment and support, and if treatments are to be delivered safely and effectively.
- Diagnosis and treatment services are available at primary, secondary and tertiary care levels. Most cancer patients interact with services from more than one part of the health care system and with different providers. It is imperative that the roles and operational practices of the entire system for delivering cancer services develop logically and fit well together.
- Effective communication and coordination of the delivery of services by healthcare professionals at every level is essential in order to ensure that each patient’s pathway of care functions well.
- Patients’ needs must be central to the organisation and delivery of services. Patients’ views on different therapeutic options and expected outcomes should be part of the clinical decision-making process. Quality of life and psychosocial issues are important, and care plans should always take them into account.

3.1 Clinical guidelines and the coordination of cancer care

3.2 Clinical specialisation and upgrading cancer services – diagnostic services including, investigation, imaging, surgery, pathology etc.

3.3 Treatment of cancer including surgery, chemotherapy, radiotherapy and other newer technologies

Strategic Objective 4: Establishing cancer services in the community

4.1 Community Health Workers can play a crucial role in helping people reduce the risks of cancer, in promoting early detection and fast referral for investigation.

Strategic Objective 5: Improving the quality of life of persons living with cancer

5.1 Alleviating the impact of cancer

According to WHO, the goal of palliative care is to improve the quality of life of patients and families who face life-threatening illness, by providing pain and symptom relief, spiritual and psychosocial support from diagnosis to the end of life and bereavement. Palliative care is often associated with
cases of advanced cancer. However, WHO has recommended that palliative care should begin early in the course of the illness, thus forming part of the overall intervention protocol.

- Alleviating the physical impact of cancer
- Alleviating the psycho-social impact of cancer

**Strategic Objective 6: Addressing Patients’ Perspectives**

**Goal is to make patients’ and carers’ experiences as positive and empowering as possible.**

The process of providing cancer care should not be aimed solely at treating the cancer patient’s disease but should equally be geared towards making the patients’ and their carers’ experience as positive and empowering as possible. This can in turn have a beneficial effect on the outcome of the care process.

Four main dimensions of the care process as being capable of enhancing the cancer patient’s experience are:

- the physical and social context of care delivery
- patient information and education
- patient involvement and choice
- continuity of care.

**Strategic Objective 7: Human Resources**

**Overall aim is to strengthen the capacity of the skilled and flexible healthcare workforce needed to implement this Cancer Plan.**

The professional speciality of the workforce that works with cancer patients is very diverse. While a number of personnel, such as oncologists, work exclusively with cancer patients, others, such as surgeons, dedicate only part of their time to cancer patients while also caring for other patient groups. Rising trends in the prevalence of cancer, as a consequence of increased incidence rates and prolonged survival, together with the development and request for new services, result in an ever-increasing call for more human resources. On the other hand, inflexible demarcations between different groups of staff prevent the most effective use of the skills and

**Strategic Objective 8: Surveillance and Research**

**Our overall goal is to establish a national infrastructure for the coordination of cancer research and to strengthen surveillance in order to monitor disease prevalence and survival, and to document the quality of cancer services and their outcomes.**

**8.1 Surveillance in the cancer field**

The purpose of surveillance in the cancer area is to obtain data that can be used to monitor disease incidence, prevalence and survival and to document the quality of treatment efforts in order to be able to take preventative measures and make improvements. Survival data are important for monitoring the final effect of cancer treatment. Considerable amounts of data can be gathered and processed in the cancer area. The National Cancer Registry is of utmost necessity to maintain cancer statistics on incidence, survival and mortality. This information is used for developing National Health Plan.

**8.2 Cancer Research**

In order to be able to provide future modern treatment that meets the highest international quality standards, it is necessary to conduct research in all relevant aspects of the cancer area. Research will aim towards an ongoing evaluation of the progress and effectiveness of the implemented activities proposed in the Cancer Plan.
# Cancer Action Plan for Immediate Gains 2017-2021

<table>
<thead>
<tr>
<th>SP No</th>
<th>Strategic Priority</th>
<th>Activities</th>
<th>Responsible Agency</th>
<th>Indicator</th>
<th>Time Frame</th>
<th>Resources/Budget/year</th>
</tr>
</thead>
</table>
| 1     | Governance and Coordination          | 1. NDOH to elevate cancer to a National program similar to Malaria, TB and HIV/AIDS  
2. Implement the Health workforce enhancement plan to staff the cancer program  
3. Establish a national Steering Committee, responsible for planning, monitoring and evaluating the implementation of the Cancer Control Action Plan. The committee should convene as required.  
4. Draft a five to ten-year Action Plan to implement the cancer control policy, with short, medium and long term goals, specific activities, budget, indicators and Timeline.  
5. Establish Health promotion units at Hospitals and Health centres | NDOH               | Cancer program established                                                                                                                                       | 2017-2020       |                                                     |
|       |                                      |                                                                                                             | NDOH               | Committee appointed                                                                                      |              |                       |
|       |                                      |                                                                                                             | NDOH               | Plan developed                                                                                           |              |                       |
|       |                                      |                                                                                                             | NDOH               | Cancer clinics established in hospitals                                                                |              |                       |
| 2     | Primary Prevention                   | 1. Develop a cancer education and awareness program covering common cancers (advocacy and education of patients, care givers and health care workers)  
2. Education on cancer risk factors including; healthy eating, alcohol, betel-nut chewing, active life style, tobacco smoking, other risk factors.  
3. Advocate for the implementation of the anti-tobacco legislation (Amendment Act 2013), and | ALL Responsible programs, NCD/Health Promotion | IEC/media materials developed, Health promotion in mass media, Tobacco bill implemented | 2017-2020       | K200,000, K100,000, K200,000 |
ensure establishment of a set of regulations and adequate enforcement mechanisms once the legislation is adopted.

3. Expand and strengthen the betel-quid chewing control activities in collaboration with NCDC and other municipal authorities. Inform and educate the population about the link between betel-quid chewing and oral cancer.

4. Increase the coverage of Hepatitis B vaccination programmes to reduce the risk of liver cancer among the population.

5. Consider the inclusion of HPV vaccination in medium and long term plans at a national level for a national roll out program.

| 3 | Screening and Early Detection | 1. Develop a plan to scale-up the current VIA screen-and-treat services or similar techniques for cervical cancer early detection considering the facilities, equipment and training needed. | NDOH/NCDHS | VIA scale up plan developed and implemented | 2017-2021 | K2 million |
| 2 |  | Strengthen three or four provincial hospitals with capacity for cancer diagnosis and management of early cancers (equipment and human resources) | NDOH/Provincial hospital | Clincs established | 2017-2021 | K100,000 |
| 3 |  | Scale up breast cancer screening and awareness | NDOH/Hospitals | Breast cancer screening reports | 2017-2021 | K100,000 |

| 4 | Diagnosis and Treatment of cancer | 1. Strengthen supply of cancer drugs, reagents and morphine at PMGH and Angau Hospitals | NDOH/PMGH | Purchase orders or tender reports | 2017-2021 | K5 million |
| 2 |  | Develop Radiotherapy using linear accelerator in a container for radiotherapy at PMGH | NDOH/PMGH | Project completion report | 2017-2021 | K1 million |
| 4 |  | Train human resources in CT and MRI and cytology/histopathology. Put CT and MRI in Angau Hospital for cancer diagnosis and treatment, particularly in the areas of pathology and radiology. Port Moresby Hospital has CT and MRI but needs training for its staff. | NDOH/PMGH | Project report | 2017-2021 | K1 million |
5. Strengthen the existing radiotherapy service at Angau Memorial Hospital in Lae in the short term, replace the cobalt source, train the necessary human resources required, including safety and monitoring equipment

6. Strengthen papsmear cytology infrastructure at PMGH and Lae

3. Establish ongoing professional and other support for the national cancer control program from within and outside the country

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<tr>
<th>5</th>
<th>Improve Capacity of Radiotherapy centre at Angau Hospital</th>
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<tbody>
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<td>1.</td>
<td>Complete the enactment of the nuclear law in order to procure the cobalt-60 source replacement and establish effective independent regulatory authority empowered to regulate all uses of radiation applications.</td>
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<tr>
<td>2.</td>
<td>Establish radiation safety program for the radiotherapy centre including a QA program</td>
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<tr>
<td>3.</td>
<td>Organize the timely replacement of the Co 60 source and ensure the old source is repatriated to a source manufacturer. All previously used radioactive sources that are no longer in clinical use stored need to be further secured and if appropriate, should be reconditioned and disposed of safely, or alternatively, be repatriated promptly to their source(s) of origin.</td>
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<td>4.</td>
<td>Support the implementation of the IAEA supported national project PAP6001 to strengthen and support Lae cancer unit</td>
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<th>Palliative Care</th>
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<td>1.</td>
<td>Establish a National Palliative Care Programme and a steering committee which includes professionals from the Ministry of Health, Port Moresby General Hospital and Angau General Hospital, civil society organizations, selected provincial hospitals and other relevant stakeholders.</td>
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<td>8</td>
<td>Human Resources</td>
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<td>9</td>
<td>Establish national and international partnerships and networks for supporting cancer services</td>
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**Total budget estimates**

K16.4 million/annum
PROPOSE STRUCTURE OF THE NATIONAL CANCER CONTROL PROGRAM (NCCP)

Minister/Secretariat of Health

National Cancer Program Secretariat

National Cancer Control Program

Cancer Prevention
Diagnosis and Treatment
Cancer registry and research
Social support and partnerships
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