

Summary imPACT Review Report



Paraguay

Mission date: September 2016

Summary

Following a request from the Government of Paraguay, an [imPACT Review](#) Mission was conducted in Paraguay from 19–22 September 2016 by the IAEA, IARC, and WHO through the [Programme of Action for Cancer Therapy \(PACT\)](#) and within the framework of the [WHO-IAEA Joint Programme on Cancer Control](#).

The imPACT Review's main objectives were:

- Assess comprehensive national cancer control capacities and needs in the areas of cancer control planning, cancer information and registration, prevention, early detection, diagnosis and treatment, palliative care, education and training and civil-society activities.
- Assess capacities and needs for effective implementation of the country's radiation medicine programme, as a component of a comprehensive national cancer control programme.
- Assess capacities and needs related to the national regulatory infrastructure for radiation safety, and the national nuclear security regime for radioactive material and associated facilities, with particular focus on health care applications of ionizing radiation technology and of radioactive sources.
- Assess opportunities for developing funding proposals for cancer control interventions.

According to GLOBOCAN 2012 estimates, Paraguay accounts for approximately 8000 new cancer cases every year and 5000 cancer deaths. The cancer burden is growing in Paraguay and the number of cancer cases is projected to double by 2030. As in many other low- and middle-income countries (LMIC), GLOBOCAN estimates for Paraguay indicate that cervical cancer is the leading cause of cancer-related death in women, while breast cancer ranks second. The two leading causes of cancer-related death in men are prostate and lung cancer.

The imPACT Review expert team, nominated by the IAEA, the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC), assessed Paraguay's cancer control capacity and needs in the areas of cancer control planning, cancer registration, prevention, early detection, diagnosis and treatment, and palliative care, as well as radiation safety infrastructure and practices, and the security of radioactive sources used for medical purposes.

The imPACT mission' meetings have been organized and coordinated by the imPACT Focal Point at the MoH and with the WHO/PAHO Country Office. The imPACT mission allowed to meet more than 80 professionals in the health sector and visit 12 cancer facilities (both private and public).¹

¹ Instituto Nacional del Cáncer (INCAN); Hospital General Pediátrico Niños de Acosta Ñu (Acosta Ñu); Instituto de Previsión Social (IPS); Hospital Regional de Luque (HRL); Hospital de Clínicas de la Universidad Nacional de Asunción (HCUNA); Instituto de Investigación en Ciencias de la Salud (IICS); Hospital Materno-Infantil San Pablo (HMISP); Centro Medico Bautista (CMB); Instituto Cotas Thompson (ICT); Clínica Privada de Radioterapia Terapeutix; Clínica de Tumores María y Josefa Barbero (CTMJJB); Instituto Privado de Hematología e Investigación Clínica (IPHIC)



Main findings

1. The Ministry of Health (MoH) considered the growing cancer burden in the National Action Plan for the Prevention and Control of NCDs 2014–2024 (Plan Nacional para la Prevención y Control de Enfermedades Crónicas No Transmisibles, PNAPCECNT), launched in 2014. A draft NCCP is under preparation.
2. Regarding cancer information, the MoH expressed the political will to develop a cancer registry that would meet international standards of population-based cancer registries and IARC organised several mission to support the development of a Population-Based Cancer Registry (PBCR) in the Asunción metropolitan area.
3. Several prevention activities are included in the PNAPCECNT such as the promotion of healthy nutrition, physical activity, reduction of obesity prevalence among children and adolescents, as well as reduction of tobacco and alcohol consumption. According to the survey on risk factor prevalence (STEPS survey), 19% of the adult population in Paraguay used tobacco (30% of men and 8% of women). Three global youth tobacco surveys were undertaken in 2002, 2008 and 2014 documenting reductions on tobacco use from 8.3% to 5.8% among 13–15 year old adolescents.
4. The National Immunization Programme (Programa Ampliado de Inmunizaciones, PAI) is well established in Paraguay and includes the vaccines against the Hepatitis B virus (HBV) and the Human Papilloma virus (HPV).
5. There is no organized breast cancer screening programme and there is no early detection programme. Breast cancer screening was added to the established cervical cancer screening prevention programme in 2009, yet there are no approved guidelines.
6. Oncological diagnostic capacity is insufficient to meet the population's requirements due to a significant shortage of qualified professionals in the diagnostic area, frequently damaged radiology equipment, an insufficient number of nuclear medicine departments and insufficient immunohistochemistry and flow cytometry services in pathology laboratories. In several diagnostic areas, no scheduling system for exams is foreseen and patients are attended to on a first come, first served basis. At the time of the mission, the only radiotherapy machine available in the public sector was broken down. This machine was frequently broken in the past years, with cancer patients being referred to the private sector.
7. Access to affordable treatment services is difficult for a significant proportion of the population due to geographical and economic reasons, the latter being the most relevant cause of inequity. Public institutions experience supply shortages of oncology medicines, including those comprised in the list of essential medicines. Expenses to be sustained by the cancer patient associated with treatment (transportation and accommodation), are high.
8. Regarding availability of treatment modalities, cancer surgery is performed in most centres by oncology surgeons, gynaecology oncologists, and thoracic surgeons as well as by coloproctologists, traumatologists, urologists and other surgical specialists with training in cancer surgery. Training in surgical oncology, mastology and gynaecology oncology is available in the country.
9. Despite the fact that the large proportion of cancer patients are diagnosed at advanced stages when curative treatment is ineffective, there is no Programme for Palliative Care in the country.



Summary of recommendations

Cancer Control Planning

- Establish a national Steering Committee (SC) for cancer control composed of 10 to 15 members, to provide wide technical advice to the MoH and to reinforce links and coordination between different areas of cancer control and levels of the health system.
- Under the direction of the MoH, the cancer control SC should be responsible for reviewing and finalizing the NCCP as a complement of PNAPCECNT as well as a five to-ten year Action Plan for its implementation, with a detailed budget that lays down the costing for each action. The NCCP should follow the related WHO guidelines.

Cancer Prevention

- Conduct a new STEPS survey in Paraguay.
- Implement as a priority a 2-dose regimen for HPV vaccine, as recommended by WHO.
- Expedite the completion and approve the regulation of the anti-tobacco law and initiate its implementation and enforcement.

Early Detection

- Train and raise awareness of concerned health professionals and ensure application of national guidelines on cervical cancer screening in all concerned health institutions.
- Screening of women too early (below 25 years), and too frequently (less than three years after two normal cytologies), should be discouraged. The guidelines should be modified accordingly.
- Include a procedure for treatment of women diagnosed with precancerous lesions in the national guidelines on cervical cancer screening. Set up a mechanism to ensure proper follow-up of all women with positive results and ensure access to diagnosis and treatment when required.
- Finalize and implement the guidelines and procedures for breast cancer control using the available scientific evidence, the regional and national experience and WHO guidelines and recommendations.

Cancer Diagnosis

- Develop and apply a scheduling system for all procedures in radiological departments, also by phone or the internet, to reduce the patient drop-out rate, allow hospital authorities to quantify the real demand for procedures and thereby also determine needs in terms of equipment and human resources.
- Repair damaged equipment and ensure appropriate maintenance service contracts are in place to reduce subcontracting of services to private institutions.
- Put into operation the public nuclear medicine department in IICS, which was set-up with the technical and financial support of IAEA and has an operational authorization from the ARRIN.

Cancer Treatment

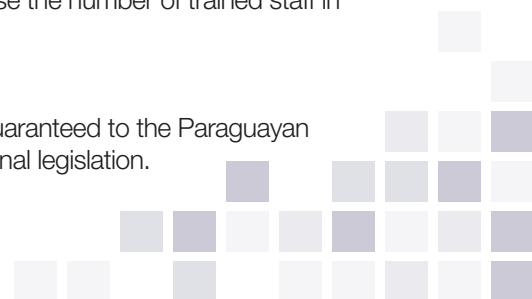
- Constitute a permanent working group under the leadership of INCAN, in collaboration with PRONAC and other relevant stakeholders to: develop a draft ministerial resolution to make mandatory the establishment of multidisciplinary teams in all institutions treating cancer patients; develop national guidelines for the management of most common, treatable and curable cancers to be submitted to the MoH; review and update a national list of essential oncology medicines compliant with the WHO list; review the provision of oncology services at the national level (adults and children).

Education and Training

- Create formal specialization programmes for non-existing residencies in cancer control related specializations as nuclear medicine and palliative care and develop and implement a need-based human resources national development programme to increase the number of trained staff in comprehensive cancer care and control.

Palliative Care

- Include palliative care among the health care services to be guaranteed to the Paraguayan population and introduce a law on palliative care into the national legislation.



Follow-up actions taken by the Ministry of Health

In the letter of nomination of counterpart for the IAEA's project INT6064 for 2020-2023, the country indicated that:

- In 2019, the National Law 6266/19 on care for Cancer Patients was enacted, which ensures coverage from prevention to palliative care, and regulates the creation of both the National Cancer institute as the regulating and governing body of public policies and the creation of the NCCP. The CCP manages breast, cervical and colon cancer prevention strategies. Other actions carried out by the program are the guidelines and protocols for the treatment of these types of cancer, the development of the palliative care in primary health care and manuals of good practices in radiotherapy and pathology laboratories.
- The NCCP need to be strengthened by updating plans and policies for continuing education, health promotion, surveillance, screening, timely and comprehensive treatment since it does not have a current CCP. They have collaborated with external partners for this, but the plans have been postponed due to COVID-19. Regarding cancer surveillance and registration, the country is in the implementation phase with the need to reinforce the technological capacities and resources for implementation.
- The pilot programme on HPV test was mentioned as a success story.

During a meeting to coordinate cancer-related activities support for the project INT6064 held on December 2020, the country:

- Presented advances in all the areas of the cancer control continuum. As challenges, the preparation of a National Plan for the fight against cancer which allows to decentralize the cancer services in the country and indicate the budget and annual goals needed was mentioned.
- The importance of continuing training qualified human resources was highlighted.

The country indicated that The Ministry of Health in Paraguay has been working to have better cancer data for cancer control planning. As a GICR Partner Country, Paraguay has committed to advance in the establishment of a Population Based Cancer Registry (PBCR) in Asunción, the capital city (<https://gicr.iarc.fr/case-studies/partner-country-paraguay/CaseStudy-PARAGUAY-v1.pdf>).



imPACT review experts and Paraguay health professionals during the in-country imPACT Review mission. (Photo: IAEA)



IAEA-WHO-IARC joint activities on cancer control

In March 2009, WHO and IAEA signed arrangements at the Director-General level to implement a [Joint Programme on Cancer Control](#). The main purpose of this arrangement is to coordinate activities and resources to provide evidence-based and sustainable support to comprehensive cancer control programmes, particularly in LMI countries.

In response to a Government request, an [imPACT Review](#) is carried out as a comprehensive assessment of national cancer control capacities and needs. It is a partnership effort between the International Atomic Energy Agency (IAEA), the International Agency for Research on Cancer (IARC) and the World Health Organization (WHO). Where relevant, other partners are involved, such as the Union for International Cancer Control (UICC) and the United Nations Office on Drugs and Crime (UNODC). The IAEA Division of [Programme of Action for Cancer Therapy \(PACT\)](#) is responsible for coordinating the imPACT Reviews and for mobilizing the resources for their implementation.

Link to imPACT Review news and related resources:



For more information, please contact:
PACT@iaea.org and/or info@who.int

Follow us on Twitter [@iaeapact](#)
[#CancerCare4All](#)

cancer.iaea.org
www.who.int/health-topics/cancer
www.iarc.who.int

