Summary

imPACT Review Report

El Salvador

March 2024

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Following a request received from the Minister of Health of the Republic of El Salvador in September 2022, an imPACT Review was conducted from February to November 2023 by the Programme of Action for Cancer Therapy (PACT) of the International Atomic Energy Agency (IAEA), the World Health Organization (WHO), and International Agency for Research on Cancer (IARC). The imPACT Review was organized within the framework of the WHO-IAEA Joint Programme on Cancer Control. A team of international experts, nominated by the IAEA, WHO and IARC, held technical discussions with key stakeholders, and visited the principal cancer facilities in the country.

Main findings

1. Planning and governance

The country has made great efforts to advance cancer control through the National Policy for the Prevention and Control of Cancer (PNPCC) in 2015 and its Implementation Plan (2017), the Law for the Prevention, Control and Care of Cancer Patients in 2021 (Decree No. 854), and the National Plan for a comprehensive approach to cancer in children and adolescents, 2021–2025. The Ministry of Public Health (MINSAL) is the governing body, coordinating implementation of service delivery within the Integrated National Health System (SNIS). The Office for Noncommunicable Disease (NCD-O) at the MINSAL coordinates with the Regional Directorates for Health and the hospital network in the execution of the programmes, including compliance with national regulations. During the last decade (2015–2022) MINSAL has strengthened the cancer governance system, yet it needs to update the PNPCC Implementation Plan and ensure a specific budget line is in MINSAL's annual budget. The 2021 law provides a framework for these improvements in the coordination and management of cancer control and prevention services, including the prioritized creation of a costed strategy for the training and retention of the cancer workforce and the strengthening of the cancer services network to ensure equal access to diagnosis and care.

2. Registry and surveillance

The cancer information and surveillance system in El Salvador is supported by different hospital-based systems and registries, as well as by the population-based cancer registry of San Salvador (RCBPSS). During the four years of formal operation of the RCBPSS (2018–2022), progress was made in data collection, coding, linking information

sources, and data management processes. Cancer is a notifiable disease by law, although there are still some difficulties in enforcing the regulations and ensuring the participation of all sources, particularly the private sector. The database, operating for at least three years with high coverage and quality, can be used to report figures on the cancer burden in El Salvador. These statistics are instrumental to plan and evaluate cancer control actions, as well as for promotion of cancer research. The RCBPSS needs necessary personnel to ensure continuity of data collection and analysis. Hospitals also need to revise their data collection methodology for the RCBPSS to obtain complete and high-quality information. For the operation of cancer registries, specific training is required in technical aspects related to definitions, coding, and the computer tool (CanReg5). GICR/IARC has supported in person and virtual technical assistance and training. It is essential to continue periodically and permanently with training the staff of the different registries in various aspects. The country has training programmes in epidemiology such as some diplomas and three master's programmes that can support the analysis of the information generated by the Cancer Registries.

3. Primary prevention

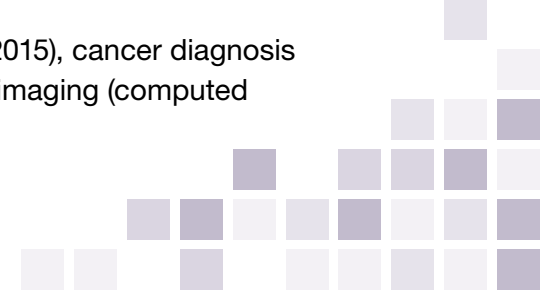
The country has a strong legal framework and strategic guidelines that support and promote primary prevention activities conducted by different members of the SNIS, under the leadership and direction of MINSAL. Within MINSAL there are multiple Directorates and Offices involved in developing and promoting activities in primary cancer prevention and control of risk factors (alcohol and tobacco consumption, infections, overweight, etc.). The Health Solidarity Fund (FOSALUD) is an entity attached to the MINSAL, with a key role in primary prevention. FOSALUD has a sustained and stable budget for the planning, organization and evaluation of its primary prevention programmes and activities. Health promoters play a key role in primary care and community health services, by educating and informing the public about primary prevention measures and bringing health services closer to communities. Coordination across different primary prevention efforts and activities is needed. MINSAL, FOSALUD and other members of the SNIS, such as the Salvadoran Social Security Institute (ISSS) and Military Health have a shared interest in primary prevention and their work is complementary.

4. Early detection

The government has updated technical guidelines for the screening of breast and cervical cancers and treatment guidelines are being revised for other priority cancers. Trained personnel and equipment are available for screening of cervical and breast cancers, although adjustments are needed to reduce delays with diagnosis of screen positive cases. Work is also being done to improve information systems, which will allow monitoring and evaluation of the screening programmes. Timely diagnosis and treatment of cancer is key to enabling and improving survival. It is therefore essential to raise awareness among the population and health professionals of early signs and symptoms of cancer.

5. Diagnosis

Despite the progress made since the last imPACT review (2015), cancer diagnosis needs to be further strengthened, especially in the area of imaging (computed



tomography and magnetic resonance imaging) both in terms of equipment and human resources. An opportunity is to strengthen the inter-institutional cooperation within the public sector to foster accessibility of the services provided in the clinical laboratories. There is a nuclear medicine department, located at the Rosales National Hospital, whose SPECT/CT equipment has recently been acquired through cooperation with the IAEA. El Salvador should ensure access to radioiodine treatment for patients with differentiated thyroid cancer and availability of the sentinel node biopsy for patients with localized breast cancer.

6. Treatment

Important achievements are evident in all areas of treatment, especially in the expansion of the hospital infrastructure, equipment, and human resources for cancer care. The practice to implement multidisciplinary teams for specific oncological pathologies is evident, and cancer care is organized according to areas of specialization. Indeed, in order to further develop this 'good practice', it would be essential to ensure workforce capacities and composition across public sector facilities. This consideration is an opportunity to support the decentralization of cancer services and establish comprehensive centers with specialized cancer care services.

7. Palliative care

El Salvador has established a national policy and implementation guidance intended to expand Palliative Care (PC) throughout the country. There has also been a strong interest in promoting palliative care services in all hospitals. To this end, El Salvador has introduced training initiatives for these professionals. There is good access to opioid analgesics nationwide. All these achievements have been achieved through sustained institutional and professional commitments. In order to continue with development of palliative care at the national level, El Salvador is encouraged to: (1) establish an official estimate of the number of people who require PC at the national level each year; (2) standardize the type of professionals required and the availability of hours for patient care and allocate specific funding; and, (3) promote awareness of the benefits of PC nationally, including more efficient use of existing resources and improved patient satisfaction.

8. Education and training

The country has professionals trained in all areas of cancer control, but more specialists are needed. There are no specialist residency programmes and the length of undergraduate studies in medicine (8 years) are much longer than the regional average (6 years). There are alliances managed through the National Institute of Health (INS) to obtain specialty scholarships abroad that are of great support to provide these professionals with education and training, but it is necessary to strengthen the capacity of the public sector to retain this specialized workforce, through the creation of a policy for the education and development of the oncological workforce. It is also important to actively maintain the continuing education programme, through Tele Echo.

9. Radiation safety

El Salvador has a national radiation safety policy and strategy and a legal and regulatory framework on occupational exposure. The regulatory body is the Directorate of

Radiological Protection (DPR) of MINSAL, which has the mandate to establish the necessary standards to complement the regulatory framework. The DPR is responsible, inter alia, for issuing authorizations, verifying compliance through inspections and enforce corrective measures in case of non-compliance. The DPR has competent staff and has established and implemented a management system aligned with safety objectives. However, challenges remain in centralization of occupational dose recording, recognizing, and assessing the competencies needed to perform medical physics activities, ensuring that all facilities are adequately covered to avoid contamination with radioactive material (especially in nuclear medicine facilities) and ensuring that dosimeter calibration procedures are carried out regularly within facilities.

Key priority recommendations

Planning and governance

- Update PNPCC Implementation Plan, with its financial resource needs, and ensure its sustainability over time, in accordance with the Regulations of the Cancer Law, through the allocation of a dedicated budget line for its implementation.
- Through the National Alliance for Cancer Prevention and Control, ensure compliance and monitoring of activities of the National Plan for a comprehensive approach to cancer in children and adolescents 2021-2025, with consultations every 2–3 months and technical support from PAHO/WHO.
- Design and implement a national policy for the training and career development of the cancer workforce (public sector) including incentives for their retention. Further develop national and international cooperation agreements for the cancer workforce development.
- Prioritize the development of comprehensive hospital oncology services (diagnosis, treatment, and palliative care) in a MINSAL Oncology Centre or Institute, ensuring a multidisciplinary approach and the coordination with the national and regional network of referral hospitals.

Registry and surveillance

- Ensure compliance of Article 21 of Chapter 4 of the National Regulations of the Law on Prevention, Control and Care of Cancer Patients on the mandatory reporting of cancer cases and Ministerial Resolution No. 920 of 2020, especially regarding private pathology laboratories.
- Review, update process and procedure manuals for population-based and hospital-based cancer registries. This update should focus on the transformation of the existing Cancer Information Systems into comprehensive and complete Hospital Cancer Registries to become a reliable source of information for the RCBPSS.
- Increase the RCBPSS budget to strengthen recruitment (at least 6 people are needed), training and career pathway development of the registry workforce.

Prevention

- Allocate resources to strengthen MINSAL's primary prevention activities and organize periodic meetings between all the actors involved in cancer prevention activities (MINSAL, FOSALUD, ISSS, NGOs, etc.) to define priorities and responsibilities, to assess progress, and to foster synergy and alignment between cancer prevention activities conducted within the SNIS by different actors.
- Strengthen the capacities of health promoters on primary and secondary prevention (workforce and skills) to enhance access to and work with remote areas and communities (involvement of community leaders is highly recommended). It is recommended to prioritize the affectation of health promoters in the communities that do not have one, prioritizing remote areas and relying on the community leaders.
- Develop proxy indicators to evaluate the impact of activities on primary prevention (e.g., measure the impact of training in the lifestyle of the target population) and train health promoter to measure results and impact of the interventions conducted.

Early detection

- Reduce the delay in receiving cytology results. Several measures are proposed to be applied individually or collectively:
- Implement mammography-based population screening in women aged 50 to 69 years with a screening interval of 2 years, as recommended by WHO.
- Assess the results of the pilot project to perform faecal immunochemical tests (FIT test) in San Salvador and explore the opportunity to expand it to a national scale.
- Strengthen PSA-based screening in symptomatic men, and avoid routine screening while ensuring a meaningful, frank, and well-documented discussion of the pros and cons of PSA screenings with every male patient within the recommended age group of 45 to 75 years.
- Request support to WHO country office to define and implement a national strategy for eradication of H. pylori.
- Implement and socialize the training plan on early diagnosis of signs and symptoms of paediatric cancer (childhood and adolescence) aimed at health professionals and promoters, as well as a normative document at the national level.

Diagnosis: diagnostic imaging and nuclear medicine

- Increase national pathology capacity with immunohistochemistry (IHC) and tumor marker analysis performed in all tertiary public hospitals, increasing the number of pathologists, and ensuring the supply of reagents for immunohistochemistry and other diagnostic methods.
- Increase national radiology capacity as part of a national plan for the development of public sector diagnostics and treatment infrastructure. Ensure that all tertiary level hospitals can provide CT and MRI services.
- Establish quality assurance programmes for nuclear medicine and diagnostic imaging.
- Develop agreements with PAHO and its international collaborators for the implementation of diagnostic technology projects for childhood cancers such as Cytogenetics and Molecular Biology.

Treatment: radiotherapy medical and surgical oncology

- Elaborate, disseminate, and promote the use of protocols and national clinical guidelines for the management of the most common cancers among the medical community, taking into account the available resources and their real feasibility.
- Assess the gaps in cancer workforce and develop an HR plan in collaboration with the scientific societies.
- Assess the cost and benefit of the procedures for cancer diagnosis and treatment, in order to better plan the annual budget for hospitals. Start this process with the assessment of the direct and indirect costs of radiotherapy procedures.
- Implement the National Plan for Childhood cancer and strengthen the management and coordination of existing pediatric oncology services, ensuring the quality of comprehensive care delivered to oncopaediatric patients. Resources should be allocated as a priority to increase the number of available beds and the specialization of at least one pediatric radiation oncologist.

Palliative care

- Strengthen the National PC Office in MINSAL, in terms of personnel and infrastructure, which could be a way to enhance the role of MINSAL in monitoring the development of PC at the national level.
- Establish the number of patients requiring PC at the national level as it is essential to have an estimate of the magnitude of the need for PC and what gap should be filled.
- Strengthen the MINSAL capacities (HR, budget, equipment and infrastructure) to assess and oversee the implementation of PC Guidelines.

Education and training

- Develop a training and retention policy for cancer-related human resources, to reduce the gaps identified in the SNIS.
- Create residency programmes for Radiotherapist Oncologists, Medical Physicists and Radiotherapy Technicians, taking into account the capacity among all centers and standing international agreements.
- Develop the curriculum for the training of nursing personnel with oncological specialty.
- Develop a targeted training plan for workforce currently exercising Medical Physicist functions and establish a national sustainable radiation safety and protection training programme for medical physicists, radiation protection officers and allied health professionals.
- Promote PC training at the level of all health disciplines, including undergraduate PC training and the development of PC training programmes at postgraduate level.

Radiation safety

- Licensees of institutions that use radiation for diagnosis and treatment must ensure that monitored and controlled areas are properly demarcated and marked.
- Establish a national dose registry as a central point for the collection and maintenance of dose records.

- Establish, approve, and implement harmonized criteria for the training and recognition of competencies of medical physicists with the participation of government agencies with responsibilities in health and education, relevant professional associations and other social actors, as appropriate.
- Ensure that diagnostic reference levels are established and applied in the optimization of medical exposure.

The WHO–IAEA–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 low- and middle-income countries. The 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.

Click here to read more about the imPACT mission to El Salvador: *El Salvador Continues to Improve Cancer Control Planning, Resources and Access | IAEA*

IAEA International Atomic Energy Agency

World Health Organization

International Agency for Research on Cancer
World Health Organization

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