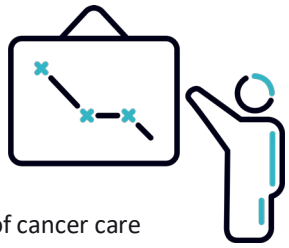
Cancer care in Argentina
Proposals to improve efficiency

About All.Can International



All.Can is an international multi-stakeholder not-for-profit organization working to improve efficiency of cancer care focusing on people. It is an initiative that seeks to influence policies and public participation focused on improving efficiency across the continuum of cancer care. It focuses resources on patient outcomes, acting as a catalyst and promoter of processes. For this purpose, All.Can includes representatives of patients and caregivers, health professionals, health economists, researchers, insurers, providers, legislators or representatives of different private companies involved in cancer care. All these relevant sectors are committed to improving the efficiency and sustainability of cancer care.

About All.Can Argentina

Argentina was the first country in Latin America to launch the initiative including a Board of Directors in late July 2019.

The initiative seeks to identify ways to optimize the efficiency of cancer care by focusing on the outcomes that matter to patients, the final purpose is to drive sustainable health solutions for all people affected by cancer.

The Steering Committee brings together representatives of academic institutions, scientific associations, patient groups, the pharmaceutical industry, communicators, and public policy experts.

General purpose

To contribute to cancer control in Argentina through efficient, people-centered, evidence-based policies with the participation of all stakeholders.

Specific purposes

1. To contribute to the **education** of health professionals in the continuum of cancer care, as well as to the training for health managers, funders, and other relevant stakeholders.

2. To contribute to **the strengthening and improvement of cancer control** through the continuum of care (prevention, screening, diagnosis, treatment, and palliative care).

3. To contribute to raising awareness about the social impact of cancer through effective **communication** appropriate to each audience.

4. To contribute to placing cancer on the public agenda through **advocacy actions** with public policy makers.

5. To promote **integrated and informed multi-stakeholder participation** in the design and implementation of cancer policies.

6. To contribute to the efficiency of cancer control through **innovative proposals and the generation of information**.

Strategic axis

1. Education.

2. Research and evidence generation.

3. Communication and promotion.

4. Policy advocacy.

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Executive summary

In Argentina, 70,000 people died from cancer in 2020, the second leading cause of death globally before the pandemic. In addition, with around 130,000 new cases per year, the country is among the seven countries with the highest incidence in the region.

When analyzing the current situation of cancer from the perspective of patients and their relatives or caregivers, shortcomings far beyond the limitations of available treatments come to light. **Cancer care is efficient when the best possible health outcomes are achieved with the human, financial, infrastructural and technological resources available, because they are focused on people with cancer and society.** Increased efficiency helps optimize the use of resources and increases the likelihood of survival and the quality of life of patients. Improving efficiency in the continuum of cancer care also benefits other stakeholders: caregivers, health professionals, managers, industry, governments, funders, and the rest of the population, thus **policies, practices, technologies, information systems, institutional frameworks, and incentives need to be aligned**.

In this document All.Can Argentina **proposes targeted actions to increase efficiency and equity in the continuum of comprehensive cancer care.** The main lines of work are:

- Promoting sustained **prevention** policies leading to deep long-term changes, including the strengthening of national programs for the prevention and control of cervical cancer, colorectal cancer and breast cancer.

- Increasing **early and correct diagnosis**, including, for example, guaranteeing access for the entire target population to tests for the timely detection of cervical, colorectal or breast cancer and proactive follow-up of patients within the system.

- Providing **prompt and well-coordinated multidisciplinary treatment** involving, among other measures, improving communication between primary, secondary and tertiary care levels, reducing excessive out-of-pocket expenses for patients, and implementing remote follow-up.

- Ensuring **palliative care and complementary care**, for example, by implementing policies and programs that prioritize psychological and emotional well-being as well as physical health.

We underline that these must be framed in **long-term national policies and plans, centered on people regardless of where they live, based on available scientific evidence, and include systematic monitoring and evaluation** to shape or adjust the course of policies and interventions.

Testimonials on cancer in Argentina

They treated me for hemorrhoids for **a year and a half**, and it was colon cancer.

My wife tried to make an appointment with the surgeon through her health insurance, and **by the time they gave it to her, she was already operated on and at home**.

There were personnel conflicts or economic problems at the radiotherapy center... **They cancelled the sessions in the middle of the treatment.**

When I completed chemotherapy, I felt like I had taken off my overcoat, like I **had no protection**.

General practitioners or gynecologists do not accompany the patient with a cancer diagnosis, **they forget about the patient.**

Once, chemotherapy was not good for me, **they forgot to add a painkiller.**

My wife sometimes attended her chemotherapy with near zero white blood cells, and one night she was told she had to take the colony stimulator drug herself, and they didn't have it there... **We were sent out to buy it.**

Palliative care comes too late. The oncologist does, does, does, does... **And when there is nothing else to do**, in inverted commas, in fact, there **is a lot to do.**

Physicians are not trained to talk to patients and provide **adequate end-of-life care.**

There are people promoting alternative therapies, **exploiting the extreme vulnerability of patients.**

Testimonials from patients and caregivers who took part in the following studies conducted by All.Can Argentina

[1] Loewy M. Barriers along the continuum of cancer patient's care in Argentina: a preliminary qualitative exploration. Available at https://www.all-can.org/wp-content/uploads/2020/08/AllCanArgentina_OncologyLandscape_Report.pdf.

[2] Ismael J, Mendez M, Gandino P, et al. Qualitative Study on Barriers to Access from the Perspective of Patients and Oncologists. International Journal of Innovative Science and Research Technology. 2021;6(7):494-9.

Introduction

From the molecular point of view, cancer can be defined as the result of the accumulation and successive selection of genetic and epigenetic disorders, allowing cells to survive, replicate and evade control mechanisms[3], something like a safe passage with causes and chances to promote uncontrolled cell growth. However, **there is a human and systemic dimension of the disease that is just as, or even more, relevant** which is usually left out of the spotlight. Its challenging complexity, with multiple barriers in prevention, detection, treatment, palliative care and support for survivors, as shown in the testimonials above, makes it necessary **to design comprehensive and efficient solutions**. The British philosopher of science June Goodfield put it in these words, "**Cancer begins and ends with people**. In the midst of scientific abstraction, it is sometimes possible to forget this one basic fact."[4]

A little more than half a century ago, former U.S. President Richard Nixon declared a "war on cancer" and promoted heavy investment to clarify the biological basis of the disease and find effective treatments[5]. There were great advances since then, but are still insufficient. And when analyzing the current situation of from the perspective of patients and their relatives or caregivers, shortcomings far beyond the pharmacological or therapeutic approach (or their limitations) come to light. According to a quantitative[6] and qualitative[2] study conducted by Ipsos Healthcare Cono Sur for All.Can Argentina, intended to understand and describe the experience of people with different types of cancer and to identify opportunities for improvement, the average time **from symptoms onset to cancer diagnosis was about six months.** However, this delay is two months shorter **for patients with prepaid health insurance**, a fact that shows the high degree of inequality associated with the different socioeconomic sectors.

During this research, conducted between 2019 and 2020 in the Buenos Aires Metropolitan Area, we were able to identify, at different stages of the patients' journey, other signs of **inefficiency in cancer prevention and care**[2]. Only **12% of respondents had learned of their disease before it became apparent,** thanks to screening or early detection tests[6]. Colon, rectum or prostate tumors, as well as blood cancer, which have nonspecific symptoms, were the types most frequently detected at advanced stages[6]. Often, patients had to **visit many physicians and undergo several tests** until the definite diagnosis[2-6]. Then, they faced **delays in the management or treatment** for their disease[2-6].

At All.Can we understand that cancer care **is efficient when the best possible health outcomes are achieved with the human, financial, infrastructural and technological resources available** because they are focused **on people with cancer** and society. Increased efficiency helps optimize the use of resources and **increases the likelihood of survival and the quality of life of patients.** Improving efficiency in the continuum of cancer care **also benefits other stakeholders**: caregivers, health professionals, managers, industry, governments, funders, and the rest of the population. It is also a global priority to achieve the United Nations Sustainable Development Goals, meet the growing demand for health services, **mitigate the lasting impact of the COVID-19 pandemic**, create mechanisms to cope with future unpredictable events, and **make health systems more equitable and sustainable**. To achieve this, policies, practices, technologies, information systems, institutional frameworks and incentives must be aligned[7].

Efficiency is not a way "to cut costs", but rather to optimize the use of resources and reinvest savings in further innovation for efficient strategies, equity and resilience of the healthcare system[7].

Certainly, **the impact of cancer varies according to the country, and each country faces particular challenges in improving the efficiency** of cancer management. In Argentina, 70,000 people died from cancer in 2020[8], the second leading cause of death globally before the pandemic. In addition, with around 130,000 new cases per year (Figure 1)[8], the country is among the seven countries with the highest incidence in the region. In 2018, the National Ministry of Health acknowledged that the country's most pressing health problems were associated with **inequity** and **inefficiency**[9]. It also attributed many limitations to the **fragmentation of the health system** (Figure 1) described in different reports[9-11].

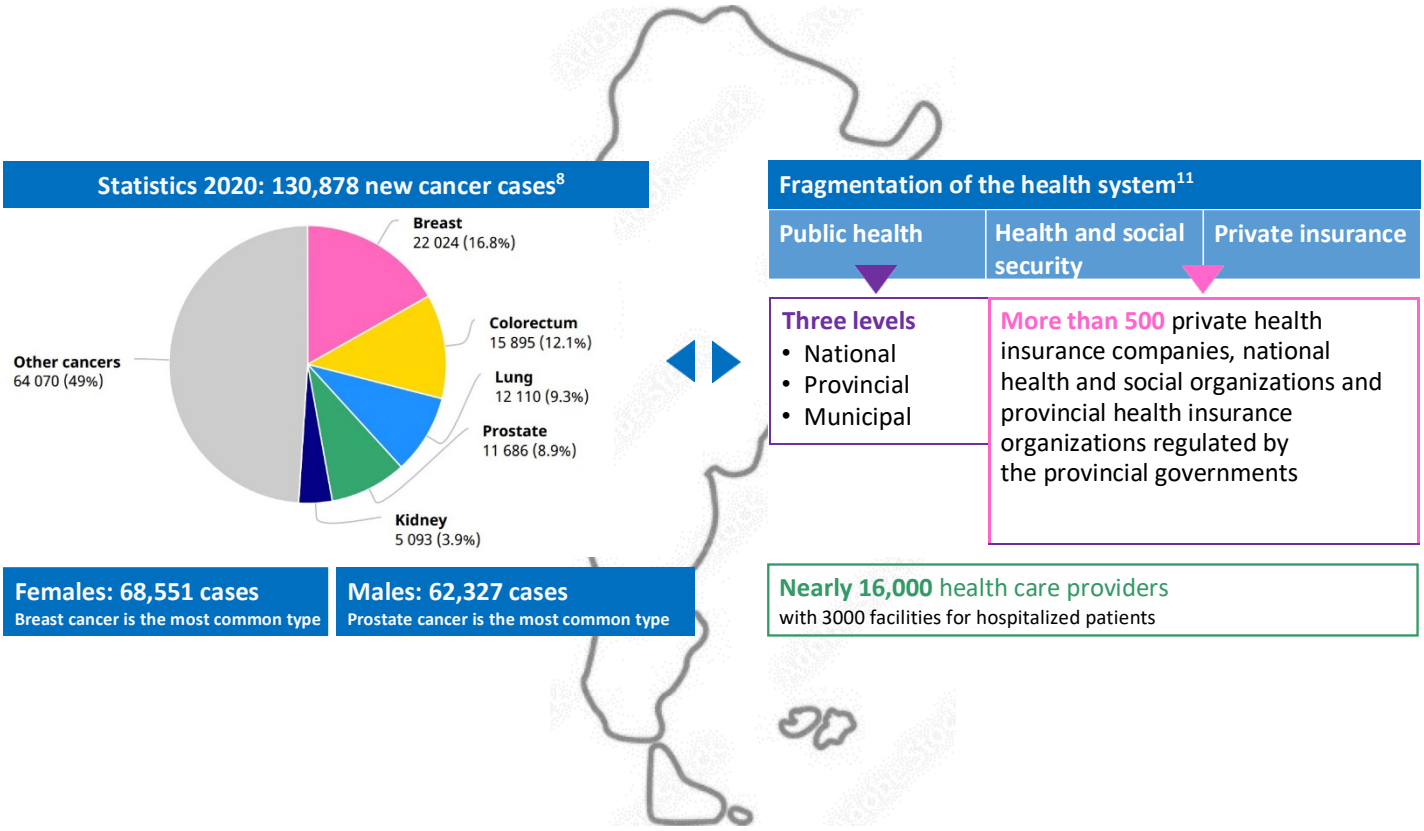

Figure 1. Frequency of the main cancer types in Argentina, a country with one of the most fragmented health systems in Latin America[8-11].

According to 2018 data, 36.1% of the population only had access to the public health subsystem[9]. On the other hand, the majority of the population had access to the contributory health system, PAMI or prepaid health insurance and received more effective health services, at least for the prevention and control of chronic diseases[9-10]. Thus, **there is a strong relationship between socioeconomic condition and access to efficient health services**, dependent on the employment situation of each person[10]. In turn, there are geographic inequalities: provinces with few resources have less financing, institutional capabilities, insurance coverage and access to medical services. The suboptimal efficiency of the Argentine system is shown in its low relative performance in terms of health outcomes as compared to other equivalent countries[10].

As an example of how this influences the approach to cancer, just note that **the mortality rate for cervical cancer is eight times higher in the poorest provinces**[10]. Interprovincial inequalities in cancer mortality rates result from regional differences in the coverage of cancer prevention and detection services, and the delays between diagnosis and treatment[10]. Sixty-five percent of medical technology and diagnostic imaging equipment is clustered within about 60 kilometers of Buenos Aires[10]. Our study showed that the percentage of patients with a delay of at least six months in treatment initiation in the public subsystem is almost twice that of the prepaid health system[6]. Our results are consistent with other data[10] on the **inequity in access to cancer services according to the user subsystem**.

"For those of us who work in cancer care, inequity in our country is, indeed, a concern and a worry, and we must strive until the last minute to avoid or minimize it."

Dr. Julia Ismael,

clinical oncologist, and member of the Executive Committee of All.Can Argentina.

In addition to the inefficacy, the fragmentation of the health system and the problems of access to health care, we believe that, **in Argentina, planning and implementation of cancer policies are deficient,** as also warned by many stakeholders linked to the care of the disease in our country[10]. In 2010, the Executive Power created[12] the National Cancer Institute as the governing body for public policies. Among its first actions, it started the Registro Institucional de Tumores de Argentina (a registry of tumors), strengthened and articulated the existing provincial registries, and initiated early detection programs. It also **elaborated the National Cancer Control Plan** (PNCC)[13]**, in consensus with all stakeholders in the system,** for the period 2018-2022; the plan actions were initiated between 2018[14] and 2019[15].

The PNCC is based on multi-stakeholder collaboration between the Argentine government and civil society organizations, scientific associations, and universities to implement evidence-based strategies. Its **main objectives** are to reduce cancer morbidity and mortality; to improve the processes of prevention, diagnosis, treatment and quality of care, and to place cancer on the public agenda as a key health problem in Argentina. For this purpose, it also considers reducing the prevalence of modifiable risk factors; ensuring the generation, availability and use of knowledge and information for decision making; and strengthening human resources management[10].

Therefore, the plan **emphasizes the need for a comprehensive approach to cancer care**, the inequities affecting health outcomes, and the Ministry of Health's commitment to achieving greater equity and developing high-quality cancer services for society as a whole[10]. However, **the reaching of these policies has been very low and heterogeneous in the population**[10]. Shortly before the end of the PNCC's period, data on its implementation have not yet been released, apart from some reports of partial progress[16].

Thus, this document proposes targeted actions to increase efficiency and equity in the continuum of cancer care. We emphasize that actions must be framed in **long-term national policies and plans, centered on people, based on available scientific evidence, and have a systematic monitoring and evaluation provided by the system,** which must be proactive to achieve efficiency. This is essential in order to align policies at other administrative levels, practices, technologies, information systems, institutional frameworks and incentives. Likewise, efficiency depends critically on **obtaining and analyzing outcomes that help confirm the direction of policies and interventions or to guide decision making for correcting the progress**.

Efficiency in the cancer care continuum: challenges and proposals

Cancer care is challenging because it does not involve a single disease, but hundreds of different and complex diseases that collectively affect millions of people of all ages. In general, they require different modalities of care and support provided by professionals from different areas for usually long periods. For this process to be efficient, close collaboration between the stakeholders involved at each level and stage of care is essential.

We believe that efficiency can be improved by providing all people, regardless of where they live, with a cancer approach that is people-centered, equitable, comprehensive, and continuous (Figure 2).

It must be **people-centered and comprehensive**, i.e., it must consider patients in a multidimensional way (physically, **psychosocially, and spiritually**) to invest resources in their needs and preferences, to empower them and to encourage them to take an active role in their own care. It is also essential for it to be **continuous** in order to favor coordination, minimize gaps in the transfer from one institution to another or from one service to another, and guarantee efficiency throughout each patient's journey. Below, we identify the priority areas in which we believe it is essential to improve efficiency and make proposals to get closer to that goal.

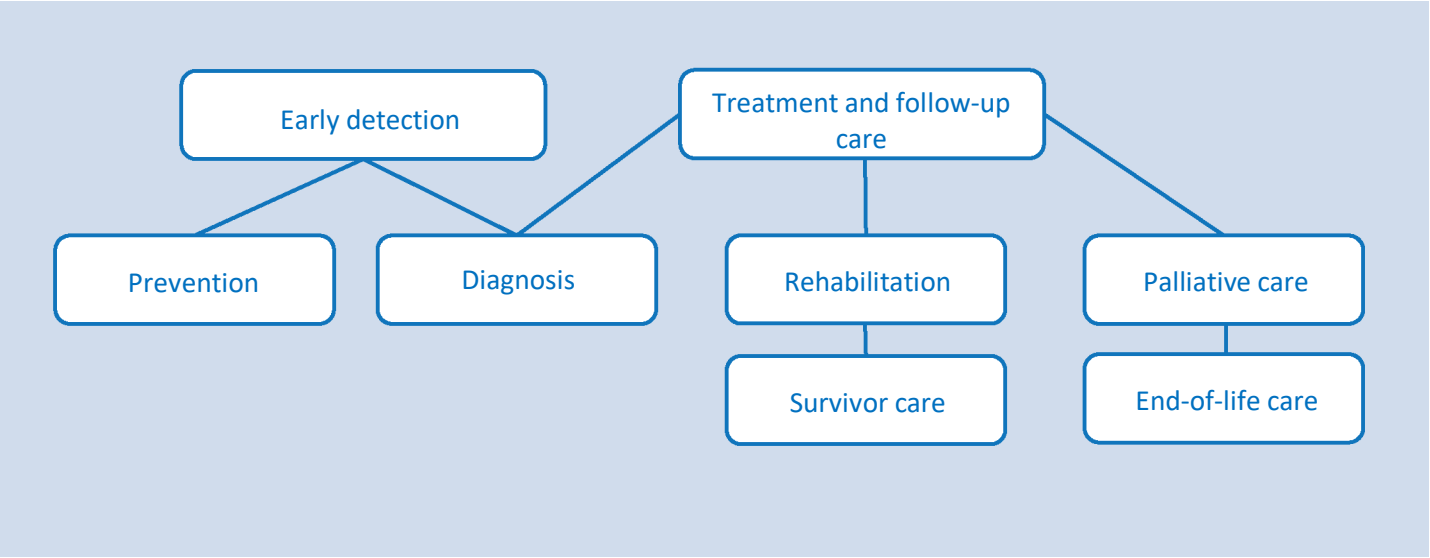

Figure 2. Cancer care continuum

Strengthening prevention

Challenge

About **4 out of 10 cancer cases are related to modifiable risk factors** and, therefore, **could be prevented**[17-19]. Tobacco use is attributed nearly 1 in 5 total cancer cases in the United States[17]. In Argentina, more than 15,000 people die each year from some type of cancer associated with tobacco use[20], and it has been estimated that, depending on the type of cancer, the ratio of deaths attributable to tobacco use ranges from 10% to 80% (Table 1)[21]. In particular, 90% of patients with lung cancer are smokers[20].

Table 1. Deaths due to different types of cancer caused by tobacco use (Argentina, 2015)[21].

Types of cancer	Deaths (%)	Types of cancer	Deaths (%)
Lung	8247 (82%)	Mouth and pharynx	615 (66%)
Esophageal	1315 (65%)	Bladder	577 (39%)
Pancreas	933 (22%)	Kidney	473 (26%)
Larynx	783 (81%)	Leukemia	252 (15%)
Stomach	658 (20%)	Cervix	112 (12%)

Alcohol consumption is another predisposing factor and is attributed 3.5% (4400) of cancer cases in 2020, which means that Argentina is among the most vulnerable countries to this risk factor in Latin America and ranks in an intermediate/high position as compared to other countries in the world[22].

Even worse, 6.8% (7600) of cancer cases in 2012 were attributed to **obesity**, the highest value for this indicator worldwide[22]. Cases associated with obesity are likely to increase in the coming years, as the prevalence of **excess weight (including overweight)**, far from being a controlled problem, increased from 49% of the adult population in 2005 to 57.9% in 2013 and to 61.6% in 2018[23-24]. Together with **sedentary** lifestyle, they affect increasingly younger people and vulnerable populations. The population exposed from an early age and adolescence to several risk factors will have an increased tendency to the disease in adulthood. People with fewer resources are more exposed to risk factors and are diagnosed in more advanced stages, adding a strong social component to the problem, as noted in the previous section[25-26].

Proposals

The above data, together with those on the frequency of other modifiable risk factors (diet deficient in fruits, vegetables, and fibers; oncogenic viruses and bacteria), the westernization of lifestyle and the aging of the population, explain the high incidence of cancer in Argentina. Therefore, **we emphasize that sustained prevention policies are needed to achieve profound changes in the long term**.

- Target prevention strategies to groups at higher cancer risk and socioeconomic vulnerability.

- Reduce the incidence of tobacco and alcohol consumption.

- Promote physical activity from childhood.

- Work on other risk factors for chronic non-communicable diseases.

- Strengthen the Programa Nacional de Prevención de Cáncer Cervicouterino[27] for cervical cancer prevention, which covers primary prevention through the human papillomavirus (HPV) vaccine and secondary prevention through screening for women (Papanicolaou or HPV testing).

- Encourage and ensure vaccination against HPV, which, in addition to cervical cancer, can cause cancer of the vulva, vagina, penis, anus and oropharynx. The vaccine is included in the National Vaccination Calendar for children aged 11 years[28] and it is available in the private sector for other ages.

- Strengthen the Programa Nacional de Control de Cáncer de Mama[29] for breast cancer control, that guarantees women equitable access to continuous, comprehensive, adequate, and timely care, and involves interventions from primary prevention to palliative care, based on scientific evidence and accepted quality standards.

- Strengthen the Programa Nacional de Prevención y Detección del Cáncer Colorrectal[30] for colorrectal cancer prevention and detection.

- Encourage and ensure vaccination against the hepatitis B virus, which can cause liver cancer. The vaccine is included in the National Vaccination Calendar for newborns or children from 11 years of age[28].

- Establish contingency plans to mitigate the consequences of regional or global health crises, such as the COVID-19 pandemic.

- Inform individuals and communities about cancer and work with them, according to their characteristics and particularities, to promote healthy habits and lifestyles.

Efficiency actions

In the United Kingdom and Sweden, national HPV vaccination programs for children under 14 years of age prevented almost 9 out of 10 cases of cervical cancer, compared to unimmunized girls and adolescents.

Increasing early and correct diagnosis

Challenge

Our study[6] confirmed that **the rate of cancer diagnosis in the framework of early detection programs or plans is very low**, and the people treated in the **public subsystem** are the **most affected** by this inefficiency (Figure 3). In addition, **20% of respondents first received an incorrect diagnosis**, regardless of where they were treated. Nearly **one third of the patients already had a cancer at an advanced stage** when their disease was detected.

Only four weeks late in the diagnosis **increase mortality rates** of several common types of cancer[31].

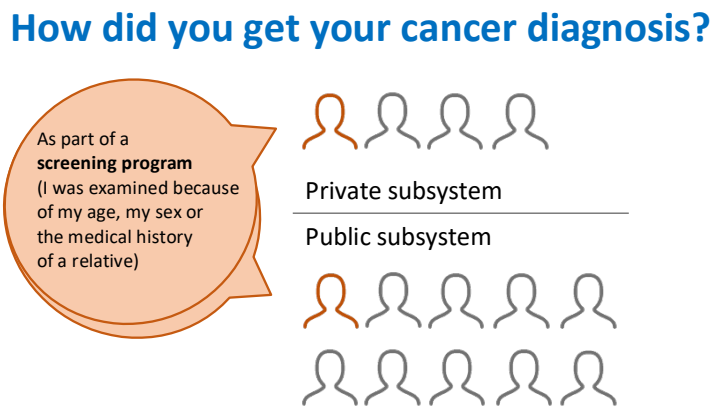

Figure 3. Frequency of early cancer detection in the country according to health coverage. Data from 400 patients surveyed for All.Can

Based on a previous survey[1] and our experience, we identified **three barriers** hindering efficient diagnosis of cancer in Argentina:

- Campaigns, although still periodic, but lacking sustained early detection policies.

- Inequity in access to screening tests.

- Discontinuation of the early detection process, which means that, once a positive result has been obtained, resources and trained health professionals are lacking to continue in a coordinated and timely manner with the complementary studies or procedures to confirm the diagnosis.

In the specific case of breast cancer screening, **inefficient use of mammography units and equipment obsolescence** were also identified as barriers: in 2018, only 8% of 381 public hospitals in the country had digital equipment available, which provide better quality images and, therefore, improve diagnostic accuracy[32].

"The main challenge in oncology today is undoubtedly early detection. [...]. Not only many lives will be saved, but it will also increase the efficiency of health investment."

Ignacio Zervino

Coordinator of the Fundación Pacientes de Cáncer de Pulmón, association member of All.Can Argentina

Proposals

Some strategies to improve efficiency in early detection are:

- Strengthen and deepen existing plans and programs, based on scientific evidence, that are essential for the early detection of cervical, breast and colorectal cancer.

- Guarantee not only the availability of tests or interventions, but also access to them for the entire target population -especially the most vulnerable one- (broad coverage) and that the results obtained have a proactive follow-up within the system and by the system itself (results should not be the sole responsibility of the individuals).

- Invest in the quality control of the installed technical resources and in the modernization of mammography units and equipment used in other diagnostic imaging techniques.

- Work on other risk factors for chronic non-communicable diseases.

- Mitigate the lasting consequences of the COVID-19 pandemic in these programs.

- Design policies and programs for other types of cancer with scientific support of their benefit in morbidity and mortality and adequate cost-effectiveness. For this purpose, research and evaluation of risk and prognostic factors are still needed. For example, in the United States, the benefit of screening tomography programs from the age of 50 for lung cancer detection in certain smokers has already been proven, and it would be advisable to evaluate their implementation in the country based on cost-effectiveness analyses of the strategy.

- Inform individuals and communities about cancer diagnosis and work with them, according to their characteristics and particularities, to promote, in addition to screening, attendance to regular health check-ups.

- Address socioeconomic factors that are also barriers to early diagnosis, for example, medication, transportation or childcare costs faced by individuals.

Efficiency actions

SISMAMA is the information subsystem implemented in Brazil by the Ministry of Health for the follow-up of breast cancer early detection actions. This is a “pay-for-performance” strategy.

Providing prompt and well-coordinated multidisciplinary treatment

Challenge

On average, our study respondents **had to wait two and a half months until treatment for their disease, with no major differences between those assisted by the public subsystem and those assisted by the private one**[6]. However, according to our experience and some studies[33], **access to treatment is highly dependent on the coverage** a person has. Like late diagnosis or diagnostic errors, delayed or discontinued treatment, or lack of access to all therapeutic options worsens outcomes and decreases the likelihood of survival. Eventually, it also increases the cost of care. In addition, consideration must be given to **the differential care that will be needed in the short, medium, or long term by the enormous number of people who survive cancer**.

Cancer is a complex and multifactorial disease requiring a multi-stakeholder approach, therefore, it requires the intervention of professionals from different specialties, not only from the health sciences. If patients have no access to all of them or to treatment modalities that are efficient and appropriate to their situation and context, care becomes inefficient. Another frequent cause of inefficiency is the fragmentation of the system due to the lack of coordination between the levels of care, professionals and providers. As a result, there are delays, omissions and treatment failures, or waste of resources.

Poor communication between primary care professionals and specialists is a common cause of inefficiency identified in different All.Can surveys[7].

Proposals

Below, there is a list of some strategies to contribute to efficiency in multidisciplinary cancer treatment:

- Reconfigure organizational frameworks, information systems, infrastructure, personnel allocation, training, and incentives to improve coordination and communication between primary, secondary, and tertiary levels of care, professionals, providers and funders.

- Improve patient experience by providing simpler treatments, easier administration methods, and better tolerated therapies, based on existing scientific evidence. This also helps solve health center capacity problems and reduces the cost of care.

- Prevent patients from incurring excessive out-of-pocket expenses that affect their finances and may even lead them to abandon treatment.

- Also systematically collect and analyze data on delays in treatment initiation, access to different therapeutic alternatives in each subsystem, how and how well patients comply with their treatment, and the outcomes obtained in real clinical practice conditions.

- Implement innovative strategies for organizing and administering treatment outside the hospital setting.

- Use the experience obtained during the pandemic to equitably implement telemedicine and remote monitoring services, without replacing face-to-face care. Ensure that they improve efficiency as well as that they are of high quality and appropriate to the needs of patients.

- Involve patients and their caregivers in the evaluation of interventions and in the design of innovative strategies.

Efficiency actions

Chemotherapy at home is an experience of the multidisciplinary team of the Hospital Militar Central and the Centro de Apoyo Nutricional in Buenos Aires. All patients felt as confident as if they had been treated at the hospital and would repeat the experience.

Ensuring palliative and complementary care

Challenge

In Argentina, **less than 10% of cancer patients receive palliative care, and for 6 out of 10 cases, this happens late.** These are data from a survey conducted by the physician Raúl Sala from Rosario, including almost 500 oncologists[34], although palliative care has been recognized as a medical specialty in the country since 2015 and the Programa Nacional de Cuidados Paliativos[35] for palliative care was created. A study published in late 2021 in *The Lancet Oncology* on cancer care in Latin America and the Caribbean revealed an insufficient number of palliative care services in the region[36].

Palliative care involves caring for people in their biological, psychosocial, and spiritual integrity throughout all stages of cancer. **The association between palliative care and imminent death is a prejudice** that deprives people of the possibility of better care, since it covers not only end-of-life care but also the care provided (or should be provided) from diagnosis and throughout treatment. It requires a multidisciplinary team (physicians, nurses, psychologists, social workers), whose role is to ensure the relief of suffering, discomfort, and pain.

Only 6 of the 50 medical schools in the country provide specific training in palliative care, according to All.Can Argentina's study on barriers in cancer treatment[1].

"Sometimes we find that, until the patient is referred for palliative care, a period of severe pain has elapsed...", regretted a physician interviewed by All.Can[1]. And he added: "I have observed resistance to accept that the patient cannot continue with chemo."[1] Other respondents agreed on this last point and also mentioned the fear of many people to talk to the person when the disease is not curable.

In addition, an oncologist interviewed in the research said: “One of the foundations of palliative care are ethical issues and decision making; shared decision making is not ‘washing your hands’ of the problem. Where palliative care teams exist, this is accomplished. For most patients lacking such professionals, this is far from being the case.”[1]

It is essential to bear in mind that people with cancer often have other concomitant diseases, such as hypertension or diabetes. Many of them also face complications associated with cancer and its treatment, and beyond these: mental health problems, malnutrition and pain, among others. In our quantitative study, the most important challenges during cancer care recalled by respondents were the emotional ones (Figure 4)[6]. Depression was the most frequent emotional disorder found in a study published in 2022, involving one million people[37]:

- Those who had undergone surgery, radiotherapy and chemotherapy had depressive symptoms much more frequently.

- Younger people, with more economic difficulties and with brain, prostate, testicular, Hodgkin's lymphoma and melanoma tumors needed closer monitoring of their mental health.

- Having any psychiatric disorder prior to cancer increased the risk of worsening after the onset of the oncologic disease.

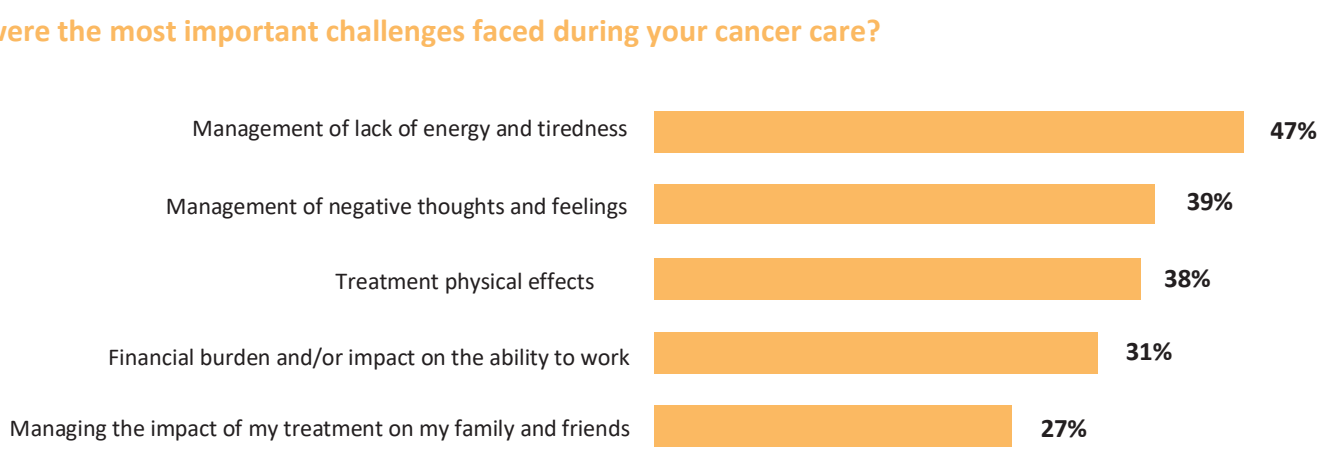

Figure 4. Most frequent responses in the quantitative study of All.Can Argentina[6].

Therefore, for cancer care to be efficient and of quality, it must address this diversity of disorders appropriately, otherwise outcomes worsen and demand on the healthcare system increases.

Proposals

These are just a few ideas for providing palliative care more efficiently:

- To ensure that all patients have access to comprehensive cancer treatment and palliative care from the time of diagnosis, and in accordance with their needs.

- To implement policies and programs that prioritize psychological and emotional well-being as well as physical health (comprehensive care).

- To implement changes in the curricula of careers, specializations, and postgraduate programs to train professionals in the different health disciplines of palliative care. The number of patients with chronic diseases, not just cancer, who need palliative care exceeds the capacity restricted to palliative care specialists alone.

"It is important to democratize palliative care, in the sense that the notion and training must filter into internal medicine, family medicine, clinical oncology, so that we can all learn."

Dr. María Viniegra,

clinical oncologist and member of the Executive Committee of All.Can Argentina

Efficiency actions

The **intervention of a palliative care team in a hospital in Buenos Aires** increased the proportion of patients reporting no suffering from 12% to 56% and none reporting "maximum suffering."

Data collection and analysis is needed to improve cancer care[7].

Improving efficiency requires the development of reliable information systems that systematically and comprehensively obtain data to identify inefficient processes and opportunities for improvement:

- For screening, genomic data and artificial intelligence help better estimations of risk, increase the accuracy of results and earlier diagnoses.

- Data from molecular tests allow for more efficient and personalized oncology treatments.

- Outcomes data reported by individuals during treatment and care can be used to improve therapeutic coordination, planning, schedules, other administrative tasks, and to tailor care plans to patient symptoms in real time.
- For follow-up, patient-provided data and remote monitoring via portable devices enable timely, quality decisions, can ensure that care continues beyond the active treatment stage and help people have access to the services they need.

An information system in line with these needs requires investment in connectivity and computer equipment, but also in assigning personnel for data loading and analysis, and in their ongoing training. It should be approached as a tool to move people closer to the goal of better care, a **useful tool provided long-term policies to support the implementation of strategies based on informed decisions are in place**.

Benefits from improving efficiency

Efficient cancer care **benefits society as a whole**[7]. For **patients**, it means the possibility of being cured or living longer and better. It also offers them a more satisfactory experience during the continuum of care, for example, it reduces the time they spend on their health care, the financial impact, and expenses not covered by health services, such as increased use of public transportation. Prevention and early diagnosis and treatment reduce medical costs and indirect socioeconomic costs due to reduced productivity of patients and **caregivers**. On the contrary, delays increase morbidity and mortality and require more costly and aggressive treatments. Timely and early access to palliative care relieves pain and other symptoms, improves quality of life, and, at the end of life, prevents futile medical care. Taking care of patients' mental health and nutrition also decreases the use of the healthcare system[7].

Data from Argentina surveys

68%

Patients who devote **more than one week per month** to cancer[38]

71%

Patients who reported secondary costs associated with treatment[6]

3% → 35%

Patients **unemployed or unable to work** before and after cancer treatment[6].

Investing in primary cancer prevention is the most efficient long-term strategy

- It improves the overall health and quality of life of the population by reducing the incidence of risk factors that are common to other non-communicable diseases.

- It prevents premature deaths.

- It reduces investment in the more costly later stages of the continuum of cancer care, thus allowing for a better redistribution of resources.

- It mitigates the socioeconomic impact of cancer and other chronic, even disabling, conditions.

Moreover, improving efficiency has never been more essential than it is today. On the one hand, it helps ensure the resilience of the **healthcare system** after the COVID-19 crisis, which exposed previous shortcomings and has had a major impact on the health of cancer patients and personnel. It is a common thought that dealing with pandemic delays in cancer diagnosis or treatment and interruptions in treatment and palliative care might lead to a new health crisis[39]. On the other hand, it helps ensure equity and long-term sustainability by meeting the growing demand for highly complex cancer care derived from the aging of the population and the exposure to risk factors. By 2035, it is estimated that the incidence in Argentina will increase by 50.2% without the implementation of urgent measures[40]. Efficiency will also benefit **healthcare professionals**, **funders and managers**, and even the **State,** because it will maximize the outcomes obtained from the services offered to patients and the resources invested in healthcare. According to some studies conducted globally, 20% to 40% of this budget is wasted on inefficient practices[41-42] that result in higher expenditures, but not in better outcomes.

Conclusions

All.Can Argentina believes that improving efficiency in the continuum of cancer care **should be a priority in all areas of healthcare decision making in the country**. Efficiency must be a common goal for cancer prevention, early diagnosis, timely and efficient treatment, meeting the expectations of people with cancer, and responding to what they need and expect throughout their journey, while meeting the growing demand for health services, reducing associated costs, and increasing the equity, sustainability, and resilience of health systems.

This can only be achieved with **sustained political decision focused on the problem and its solutions at the international, national, and local levels**. These will be some of the foundations for change:

- To consult and collaborate with all stakeholders in cancer care, including involving people with cancer and their caregivers in decision making.

- To identify, adopt, share, and extend efficient practices, technologies, and information systems, as well as other innovative tools or strategies in cancer care, and stop investing in those that are inefficient or waste resources.

- To implement institutional frameworks, information systems, policies, and incentives aligned towards efficient care for all people with cancer.

- To fund actions to improve efficiency appropriately and consistently with the impact of cancer on society as a whole.

All.Can Argentina is ready to **support policies and initiatives that improve efficiency in cancer care** by providing data; facilitating the exchange of evidence, knowledge, and best practices; promoting collaboration between countries and creating alliances at the international, national, or local level.

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