



THE IMPACT OF
COVID-19
PANDEMIC ON
CANCER CARE
IN LATIN AMERICA
AND THE CARIBBEAN

→ **REPORT SUMMARY
AND MAIN FINDINGS**

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About this Report

Since December 2019, the COVID-19 pandemic has shifted traditional health priorities and disrupted the health system resource allocation. This has proven to be harmful for the prevention, diagnosis and treatment of several other diseases, including non-communicable diseases such as cancer. In Latin America, where cancer is the second main cause of death, the situation already posed significant challenges before the pandemic and these challenges have aggravated since this public health crisis took place. Oncologists and patients have had to find a balance between providing continuous health care and limiting exposure to the virus.

The purpose of this study is to assess the pandemic impacts on 18 key cancer care variables across 11 Latin American countries. The report was based on a survey made to cancer patient support organizations, a perception survey made to physicians and an economic analysis. The questionnaires were designed by an expert panel, which also validated the aggregated report results.

Findings

Regional Findings

- The impact of the COVID-19 pandemic on cancer care in Latin America has been felt mainly in three areas: supply of services, mortality and economic impact on the patients and health systems.
- One of the main impacts the pandemic has had on cancer care has been the loss of access to the early diagnosis and timely treatment required by patients.
 - All the respondents to the physician survey identified some level of disruption in cancer care. These interruptions mainly result from health system overburden as well as from other reasons including quarantines, travel bans, fear of infection and financial limitations.
 - 67% of respondents from patient organizations reported that cancer patients suffered from delays in their treatments and health care, and 15% said that patients were not able to receive their treatments.
- A significant finding is the reduced access to routine and follow-up examinations, associated both with their out-of-pocket costs and the unemployment-related loss of health coverage. This has created a very complex situation that health systems will face in the short and medium term.
 - 67% of the patient organizations reported that patients suffered from delays in getting treatments and health care.
 - The most important delays were observed in visits to the doctor, follow-up examinations of already diagnosed patients and early detection services.
- 96% of physicians expect to be overburdened by cancer patients and most of them believe that health systems are not prepared to manage this demand in terms of budget or health personnel allocation and availability of specialised centres.

Impact on Patients and Caregivers

- The study concludes that around 473,000 persons (within a range of 219,000-739,000) will be directly affected by a shift in the clinical cancer stage, will die because of the treatment delay or will suffer from financial catastrophe and impoverishment.
- The report shows that the COVID-19 pandemic had a disproportionate impact on women in Latin America and the Caribbean, which aggravated gender inequality in health.
 - 80 % of the surveyed physicians reported a significant reduction of cancer prevention programs and activities, and 96% mentioned a specific reduction in the number of screening mammograms.
 - This will impact millions of women, since breast cancer is the most common type of cancer among women in the region, and is often curable if detected in its early stages, which is possible thanks to these important routine screening programs.
- In turn, 2 out of 3 caregivers are women or young girls. The caregiver role has exposed women to a higher risk of getting infected with COVID-19 and to higher mental, physical and financial stress. Unless the gender issue is properly addressed, the pandemic impacts will threaten women development and well-being in terms of health, employment and social welfare.

Impacts on Patient Organizations

- Cancer patient organizations in the region have mentioned a decline in the economic conditions that is affecting the organizations themselves as well as patient support structures, thus exacerbating their vulnerability status.
 - Over half (56%) of the surveyed organizations have noticed that their financial situation has worsened, although demand for their services and patient care has significantly increased.

Economic Impact

- The economic impact of COVID-19 has been significantly felt in the countries of the region.
 - It is estimated that approximately 47 million jobs were lost in the second quarter of 2020 in America Latina.
 - Small and medium-sized companies –representing over 50% of formal employment in the region– were seriously affected.
- The economic effects of the pandemic will also strongly impact cancer care and its cost throughout the region.
 - The economic assessment concluded that the economic impact in the next 10 years might amount to **US\$10.7 billion** (within a range of US\$2.1-10.7 billion)..
 - This figure is estimated based on the delayed cancer diagnosis and start of therapies, as well as on the treatment interruptions caused by the pandemic.
- The pandemic disproportionate effects on women's health significantly affect the estimated total economic impact and highlight the urgency to have policies and interventions that specifically focus on women's health.
 - Breast cancer represents a US\$3.9 billion cost –around 50% of the total estimated economic impact since it comprises over 50% of all cancer cases and has a high survival rate, which means patients move to a more expensive clinical stage.
 - Breast and cervical cancer account for 30% of the increase in the 5-year cost of treatment.
 - These two types of cancer are also responsible for half of the economic capacity lost in a 10-year period, which is estimated in US\$4 billion. Thus, women are the most affected segment.
 - Brazil and Mexico concentrate almost 50% of this economic impact. In Mexico, breast cancer shows a higher impact than in other countries, as the survival rate at early disease stages is around 18% lower.

Recommendations

The following recommendations focus on addressing the challenges caused by the impact of the COVID-19 pandemic, so that governments and health systems may continue responding to this and other future pandemics in a way that prioritises the patient health, protection and care.

→ Based on the Patient Organization Survey:

- **Advocate for public policies and specific support programs** aimed at dealing with the new problems faced by patients created by the deterioration of the economic situation in the region, which particularly affects vulnerable groups such as cancer patients.
- **Map the New Players and Programs**, especially those in the social sphere, to create synergies that help patients with their new needs and support the sustainability of organizations that help patients affected by the economic impact of the pandemic..

→ Based on the Physician Survey:

- **Recognize and understand the strong cancer burden** generated by the pandemic and develop a dedicated and comprehensive strategy aimed at reducing cancer mortality by mitigating delays and interruptions to cancer diagnosis and care.
- **Develop specific strategies to be better prepared for future crises**, ensuring the continuity of the provision of cancer care services, including diagnosis, surgery and follow-up.
- **Combat the shortage and poor distribution of health resources in the region** by optimizing existing human resources and leveraging the use of technology.
- **Address the importance of continuing with cancer prevention programs** and implement strategies to close the detection gap that was created during the pandemic, in order to achieve early diagnoses and interventions.
- **Encourage local research on the impacts of the various actions, adjustments, and decisions** made to cancer care provision in light of the pandemic to create an evidence-based approach for the future.
- **Implement communication and awareness programs** that educate patients with cancer and caregivers to deal with the new reality and embrace the lessons learned from this pandemic as an integral part of the new normal of cancer care.

→ Based on the Economic Analysis:

- **Avoid postponement of cancer diagnosis and treatment**, and promote efforts that prioritise early detection and timely access to treatment, particularly for cancers such as lung and prostate, characterised by a combination of late detection and low survival rates.
- **Avoid delays in detection and diagnosis tests and interruptions to the treatment of breast cancer**, which is responsible for almost 50% of the estimated total economic impact of the pandemic and has resulted in a serious loss of economic capacity in different countries, including Brazil and Mexico.
- **Incorporate the gender perspective** to broaden the understanding of the problems associated with the COVID-19 pandemic and cancer care, recognising the disproportionate social and economic impact suffered by women and girls both as patients and caregivers, and mainstreaming gender in all stages of the creation of policies, plans, and strategies.

Findings by Country

Brazil



- In Brazil, the cancer care areas that experienced most interruptions during the pandemic were the surgery and diagnosis services, with a 60% decrease in cancer surgeries.
- Cancer prevention programs were significantly affected by COVID-19. 68% of the physicians surveyed in Brazil reported a decrease in the overall prevention programs and activities.
- This has had an impact on women care, where 95% of physicians report a reduced number of mammograms.
 - This postponement of important tests is alarming and has economic consequences, since in Brazil, breast cancer accounts for ~70% of the increase in the 5-year cost of treatment and ~40% of the loss of economic capacity.
- Another disturbing finding is that interruptions to chemotherapy were usual throughout the country. Most physicians said that over 10% of their patients missed at least one therapy cycle. What is more, 90% of the physicians made changes to different parts of the treatment plans for cancer patients.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 71% of physicians) and offering remote health care options.
 - 96% of physicians reported availability of laboratory testing close to patient homes, and 48% reported that medicines were delivered to patient homes.
- An alarming percentage of professionals –96%– perceive imminent harm to their patients caused by the interruptions to cancer care.

Colombia



- Interruptions to cancer treatment were reported in Colombia by 100% of physicians in 2020, and by 90% in 2021.
- 81% of the surveyed physicians reported patients that completely discontinued their treatment, due to both COVID-19-related reasons, including quarantines and fear of infection, and non-related reasons, including insurance coverage.
- Most cancer centres (92%) remained opened, but 96% of physicians noted moderate to severe interruptions in surgeries. Although interruptions were also observed in chemotherapy, most physicians said that less than 10% of their patients missed a cycle.
- Cancer prevention programs were significantly affected by the pandemic, with 77% of physicians reporting fewer prevention activities. All respondents noted a reduced number of mammograms and colonoscopies.
- The impact of the pandemic on women cancer care has a significant economic relevance – cervical cancer accounts for 76% of the increase in cancer treatment costs, since half of the cases moved from stage I to stage II, thus increasing costs by 75%.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 72% of physicians) and offering remote health care options.
 - 63% of physicians reported availability of laboratory testing close to patient homes, and 63% reported that medicines were delivered to patient homes.

Ecuador



- In Ecuador, the areas that suffered most interruptions to cancer care were surgery and diagnostic services. Other seriously affected areas were supportive care, chemotherapy and palliative care.
- 96% of the surveyed physicians indicated a reduction of over 50% in mammograms, which led to an increase in advanced disease at diagnosis.
- 98% of physicians expect an overload of cancer patients post-pandemic and most of them believe that the health system is not prepared to manage them in terms of budget or budget allocation and specialized facility availability.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 64% of physicians).
 - 76% of physicians reported availability of lab testing close to patient homes, and 59% reported that medicines were delivered to patient homes..
- **Economic Impact:** The impact of the pandemic on the country GDP and unemployment rates demanded actions to contain the costs of treatments and services to patients.
 - 39% of the surveyed physicians reported requests to implement cost-containment actions by their health plan suppliers and/or health institution during the pandemic.

Mexico



- Cancer care services were significantly interrupted in the pandemic, mainly in the areas of surgery (74%), chemotherapies (65%) and diagnosis (60%).
 - Interruptions to chemotherapy were usual, with 76% of physicians reporting that over 10% of their patients missed at least one cycle. Moreover, 88% of physicians made changes to part of their patients' treatments.
- A significant decrease in cancer prevention programs and activities was reported by 69% of the physicians surveyed in the country.
- In particular, the pandemic affected cancer care in women:
 - The surveyed physicians reported that mammogram screening tests had decreased by 90%.
 - This is significantly relevant from the economic point of view, since breast cancer accounts for 65% of the loss of economic capacity, because the survival rate in early stages of breast cancer is 18% lower than in other countries.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 51% of physicians).
 - 65% of physicians reported availability of laboratory testing close to patient homes, and 35% reported that medicines were delivered to patient homes.
- **Economic Impact:** 47% of the surveyed physicians reported requests to implement cost-containment actions by their health care suppliers and/or health institution during the pandemic. Moreover, 70% observed reductions in the budgets allocated to cancer care in their institutions.
- Over 90% of the surveyed physicians expect to be overburdened by cancer patients following the pandemic and most of them believe that the health system is not prepared to manage them in terms of health care personnel or budget allocation and availability of specialised centres.

Peru



- All the surveyed physicians reported moderate to severe interruptions to the cancer care services, with the greatest impact shown on surgery, diagnosis services and supportive care.
 - Other areas that also experienced slight to moderate interruptions included radiation therapy, according to 88% of the surveyed physicians, and palliative care, according to 74% of the physicians..
- All surveyed physicians reported a reduced number of cancer prevention programs and activities in the country, particularly in colonoscopies and mammograms.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 69% of the surveyed physicians).
 - Only 5% reported that their centres continued with outpatient visits as usual.
- **Economic Impact:** The impact of the pandemic on the country GDP and unemployment rates demanded actions to contain the costs of treatments and services to patients.
 - 47% of the surveyed physicians reported requests to implement cost-containment actions by their health plan suppliers and health institution during the pandemic. Accordingly, almost 70% observed a decrease in the budgets allocated to cancer care in their institutions.
- All the surveyed physicians expect to be overburdened by cancer patients following the pandemic and most of them believe that the health system is not prepared to manage them in terms of health care personnel or budget allocation and availability of specialised centres.

Central America



*Consolidated results from Costa Rica, Dominican Republic and Panama

- Unlike practically all South American countries, most of the surveyed physicians (87%) in Central America noticed an increase in cancer cases during the first six months of the pandemic (March-August 2020). These data differ from the regional trends, where first visits to cancer specialists were reduced by 28-38%.
- 98% of the surveyed physicians mentioned some level of disruption in the usual treatment of this condition. With this background, surgeries experienced the highest level of interruptions: 69% of respondents reported moderate to severe interruptions, while 66% of the physicians mentioned disruptions in diagnostic services and 58%, in supportive care.
 - 85% of respondents indicated that some patients completely discontinued their treatments due to COVID-19-related reasons (fear of infection, quarantines) and to non-related reasons (the health insurance company stopped covering the costs).
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, some centres implemented certain actions such as replacing visits to clinics by virtual visits (reported by 73% of the surveyed physicians).
 - 97% of respondents reported remote care options, including laboratory testing close to the patient homes (97%) and the delivery of medicines to patient homes (55%).
- **Economic Impact:** In Central American countries, most of the surveyed physicians (77%) reported that neither their institution nor health providers asked them to implement cost-containment actions during the pandemic.
- 92% the surveyed physicians expect to be overburdened by cancer patients following the pandemic and most of them believe that the health system is not prepared to manage them in terms of health care personnel or budget allocation and availability of specialised centres.

Southern Cone



*Consolidated results from Argentina, Chile and Uruguay

- In the Southern Cone, the areas that experienced most interruptions were surgery, followed by diagnostic services, with 69% and 58% of respondents reporting moderate to severe disruptions, respectively. In line with the regional trends, 86% of the surveyed physicians in the Southern Cone countries reported a decrease in cancer prevention programs and activities.
- **Measures to adapt:** To continue with the service provision to cancer patients during the pandemic, almost all the surveyed physicians or their centres (99%) implemented certain actions such as replacing visits to clinics by virtual visits (reported by 66% of respondents).
 - 76% of the physicians reported laboratory testing close to the patient homes.
- **Economic Impact:** The impact of the pandemic on the country GDP and unemployment rates demanded actions to contain the costs of treatments and services to patients.
 - 75% of the surveyed physicians reported requests to implement cost-containment actions by their health plan suppliers, and/or health institution during the pandemic.
- 93% the surveyed physicians expect to be overburdened by cancer patients following the pandemic and most of them believe that the health system is not prepared to manage them in terms of health care personnel or budget allocation and availability of specialised centres.

Methodology

The estimates provided in this economic and social impact analysis were calculated using a model that included the following 18 variables.

	Variable	Description
1	Average months of treatment delay/interruption	Number of months that treatment was delayed or interrupted during the pandemic
2	Proportion of patients affected by COVID	% of cancer patients that interrupted or delayed their treatment
3	2020, 2021 & 2022 estimated new cases	Number of new cases of cancer in a specific period of time
4	2020, 2021 & 2022 estimated patients	Number of cancer patients in treatment as of that year
5	Incidence distribution by stage	The distribution of new cancer cases diagnosed by clinical stage of cancer
6	Patients in treatment distribution by stage	The distribution of patients treated by clinical stage of cancer
7	5-year Survival rate by stage	Probability of being alive for 5 years after diagnosis by clinical stage of cancer
8	Observed hazard ratio by stage	The rate at which the risk of shifting clinical stage changes given a delay in treatment
9	5 year cost of treatment by stage	5 year patient cost of cancer's treatment per clinical stage of cancer
10	1st year cost of treatment ratio	The proportion of the first year cost of cancer treatment from the rest of the years
11	5 year cancer healthcare budget	Public healthcare budget destined to each cancer over 5 years
12	Yearly cancer healthcare budget	Public healthcare budget destined to each cancer for 2020, 2021 and 2022
13	1 to 4 year survival rate by stage	Probability of being alive for x years (from 1 to 4) after diagnosis by clinical stage of cancer
14	Average GDP per capita over 10 years	Gross Domestic Product distributed by the number of inhabitants for 10 years
15	Average ratio of years of life lost (YLLs) over disability-adjusted life years (DALYs)	The proportion that YLLs (years lost due to premature mortality) represents of total DALYs (includes YLLs plus Years Lived with Disability)
16	Social spending on poverty over 10 years	Expenses that governments have to incur to fight poverty per household
17	Impoverishment to financial catastrophe ratio	Proportion of people that fall into poverty given a financial catastrophe
18	Odds ratio of falling into financial catastrophe	Probability of falling into financial catastrophe per clinical stage of cancer

