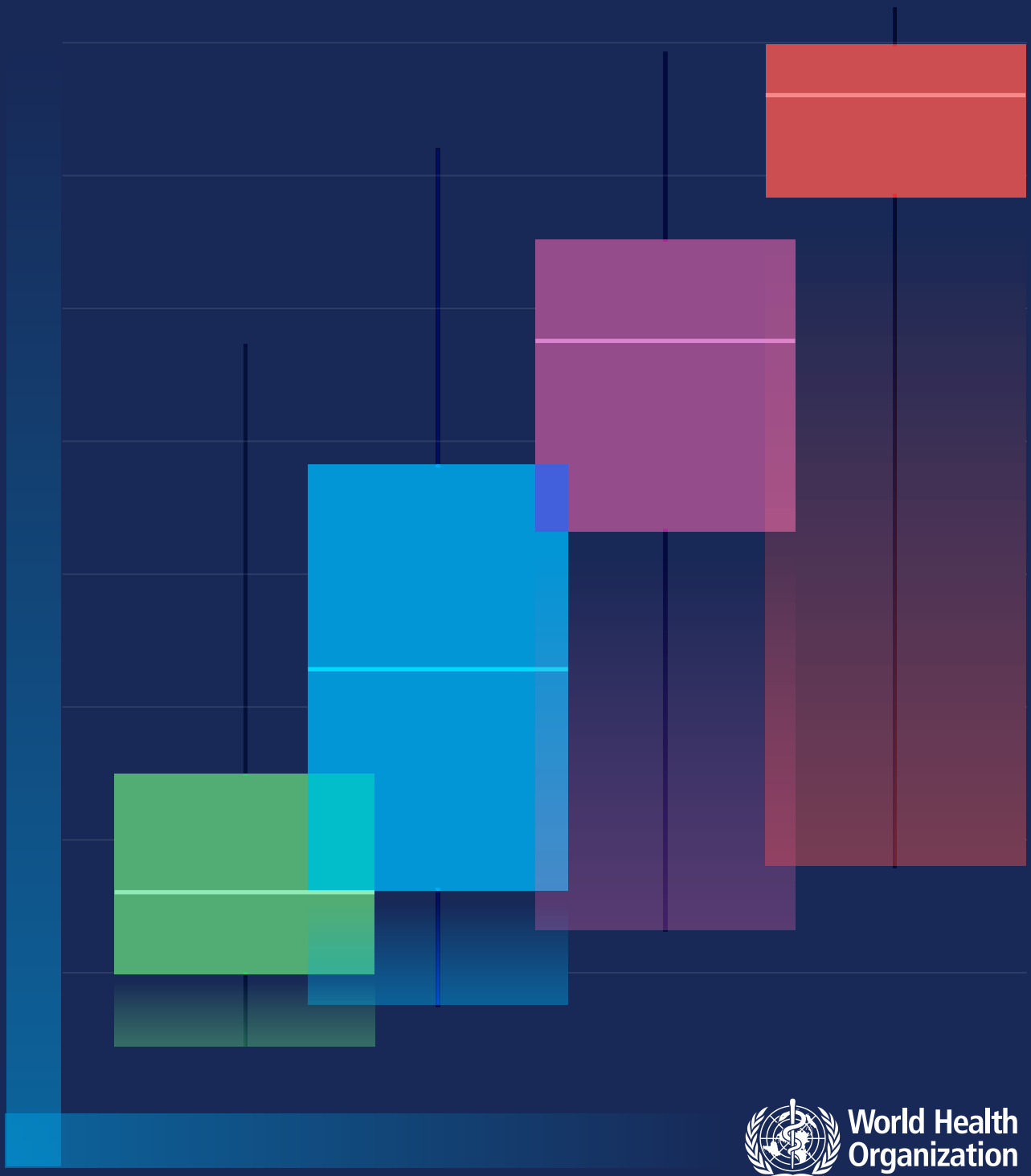
Measuring survival, driving change

Advancing equity through the WHO Global Initiative for Childhood Cancer



World Health Organization

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Preface

Reducing inequalities to improve survival for all.

The survival gap between children with cancer in high- and low-income countries is one of the greatest health inequities of our time.

Of the 400 000 children estimated to develop cancer each year, 80% live in low- and middle-income countries. For children in high-income countries, survival is more than 80%; in some low- and middle-income countries, less than 30% of children diagnosed with cancer survive.

The WHO Global Initiative for Childhood Cancer (GICC), launched at the Third High-level Meeting on the Prevention and Control of Non-communicable Diseases during the 2018 United Nations General Assembly, was established to bridge this gap. The initiative has since brought together partners to increase the survival of children with cancer globally and to reduce suffering for all. This report highlights progress made so far.

One key challenge remains the availability of quality data: without it, Member States lack the essential information to evaluate how effectively their health systems are responding to cancer and to engage in robust monitoring for evidence-informed policy-making. To support Member States in this, WHO has produced the first country-comparable five-year survival estimates for children and adolescents diagnosed with lymphoid leukaemia across 194 Member States, with over two thirds of countries actively participating in the consultation process through the WHO Country Portal. These modelled estimates complement sparse available data. Strengthening high-quality, population-based cancer registry data remains essential for sustainable monitoring and policy-related decision-making. The WHO GICC and its partners continue to support countries in building and improving population-based cancer registries to inform effective cancer control policies.

Mapping related inequities – both through the results of a scoping review and through these new estimates – help Member States to better understand childhood cancer disparities and identify opportunities for improvement.

Through implementation of the GICC Cure*All* framework, progress is already being made towards the GICC target of increasing the global five-year survival of children with cancer to at least 60%, reducing suffering for children with cancer and their families, and saving one million lives by 2030.



Dr Jeremy Farrar
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and Disease Prevention and Control

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WHO gratefully acknowledges the financial support provided by St. Jude Children's Research Hospital, the United States, through its partnership with WHO, which contributed to the development of the childhood cancer survival estimates and of this report.

Abbreviations

CCI	Childhood Cancer International
CONCORD	Collaborative Research on Cancer Data
DALY	disability-adjusted life year
GICC	Global Initiative for Childhood Cancer
HICs	high-income countries
IAEA	International Atomic Energy Agency
IARC	International Agency for Research on Cancer
ICCD	International Childhood Cancer Day
IHME	Institute for Health Metrics and Evaluation
LMICs	low- and middle-income countries
NCCP	national cancer control plan/planning
SIOP	International Society of Paediatric Oncology
WHO	World Health Organization

Executive summary

The survival gap between children with cancer in high-income and low-income countries is one of the greatest health inequities of our time. Of the 400 000 children estimated to develop cancer each year, 80% live in low- and middle-income countries (LMICs). For children in high-income countries (HICs), survival is more than 80%; in some LMICs, still less than 30% of children diagnosed with cancer survive.

The WHO Global Initiative for Childhood Cancer (GICC), launched at the Third High-level Meeting on the Prevention and Control of Non-communicable Diseases during the 2018 United Nations General Assembly, was established to bridge this gap. The initiative has since brought together partners to increase the survival of children with cancer globally and to reduce suffering for all. This report highlights progress made so far.

Distinct aetiology, treatment and prognosis

Childhood cancer is a group of diverse and heterogeneous rare cancers arising in children and adolescents. Childhood cancers grow and spread faster than adult cancers but are also more sensitive and responsive to treatment: this makes childhood cancer outcomes particularly amenable to improvement through investments in health systems.

The GICC focuses on six index cancers: Acute lymphoblastic leukaemia; Burkitt lymphoma; Hodgkin lymphoma; retinoblastoma; Wilms tumour; and low-grade glioma.

A burden obscured by limited coverage of population-based cancer registries

One key challenge in addressing survival inequity gaps has been the inadequate availability of real-world quality data: without accurate data, Member States lack the information they need to be able to evaluate how effectively their health systems are responding to childhood and other cancers, and cannot engage in the robust monitoring needed for evidence-informed policy-making. In 2010, less than 14% of the global child population was covered by high-quality cancer registries, and that reduces to only 5% of the child populations in Africa and Asia. To highlight the factors underlying differences in childhood cancer incidence and survival – given the absence of global real-word data – WHO undertook a scoping review of disparities in childhood cancer in LMICs. To support Member States' understanding of how effectively their health systems are responding to childhood cancer and complement sparse available data, WHO also produced the first country-comparable five-year survival estimates for children and adolescents diagnosed with lymphoid leukaemia across 194 Member States between 2017 and 2021.

The estimates highlight persistent inequities in lymphoid leukaemia survival across regions and income levels. Five-year net survival varies dramatically across regions, with the highest-performing regions achieving survival levels up to twice those of regions with the poorest outcomes. While some regions now approach or exceed 80–90% survival among children, others remain closer to 40%. These patterns are more pronounced when comparing adolescents (15–19 years) to children (0–14 years). This age-related survival gap reflects long-standing challenges faced by adolescents affected by cancer to access accurate diagnosis and timely treatment. These findings underscore the need to develop tailored, person-centred strategies to improve outcomes for this particular age group.

Mapping disparities, making progress

The age-related disparities that the country-comparable survival estimates have revealed provide a valuable example of how mapping such differences helps Member States to identify opportunities for improvement. These improvements can be achieved through implementation of the four key pillars and three cross-cutting enablers that make up the Cure*All* framework. Through implementing the framework, the GICC is already making encouraging progress toward the explicit target of increasing the global five-year survival of children with cancer to at least 60% by 2030, while also reducing suffering for children with cancer and their families, and saving a million more lives.

Despite progress, strengthening high-quality population-based cancer registries remains essential for sustainable monitoring and evidence-informed policy-making. The GICC and its partners continue to support countries with building robust registry systems that inform effective cancer control policies.



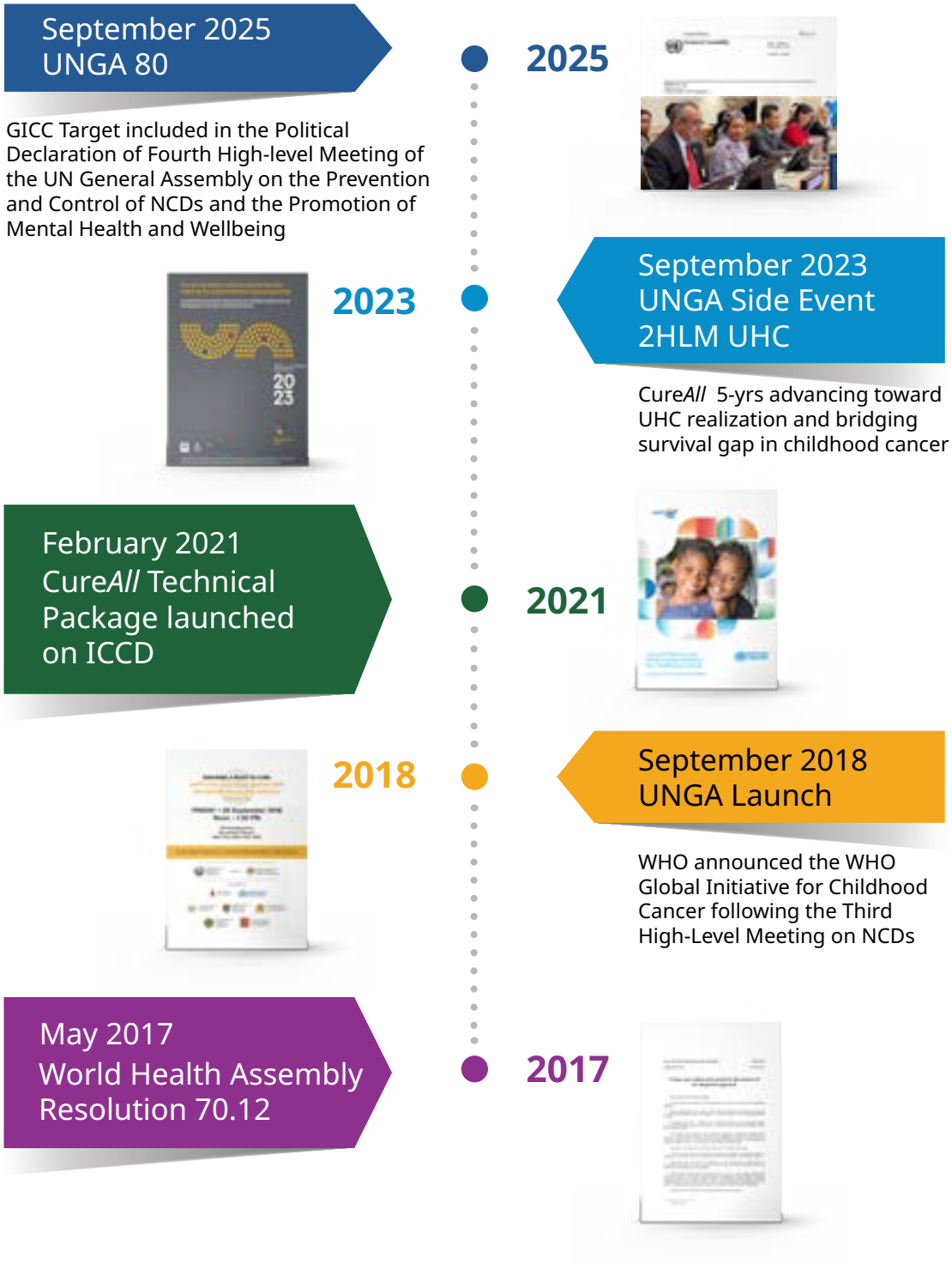
1 Overview of the WHO Global Initiative for Childhood Cancer

1.1 Highly treatable, highly impactful, highly inequitable: why we prioritize childhood cancer

The Global Initiative for Childhood Cancer (GICC) was launched at the Third High-level Meeting on the Prevention and Control of Non-communicable Diseases, held during the 2018 United Nations General Assembly, by the World Health Organization (WHO), St. Jude Children's Research Hospital, International Society of Paediatric Oncology (SIOP), Childhood Cancer International (CCI) and other global partners, in recognition of the need to address the profound inequities around childhood cancer. The initiative sets out a vision for an equitable and systematic approach to closing widespread gaps in childhood cancer and strengthening health systems across the globe, with the aim of increasing the overall survival probability at five years for children with cancer to at least 60% worldwide by 2030, averting one million deaths *(1)*. This ambitious target is enshrined as part of the Political Declaration of the 4th High-level Meeting on Non-communicable Diseases and mental Health (Fig. 1).

Childhood cancers are generally **highly treatable** with therapies that are cost-effective. Survival in high-income countries is now approaching 90%

Fig. 1. Delivering on the promise: key milestones in the GICC journey



UNGA: United Nations General Assembly; ICCD: International Childhood Cancer Day; 2HLM UHC: United Nation High-level Meetings on Universal Health Coverage; NCDs: Non communicable diseases.

As childhood cancer is less common than other childhood diseases, in many low- and middle-income countries (LMICs) it is not seen as a leading public health issue and so is not widely prioritized in national health programmes. As a result, although progress in high-income countries (HICs) shows that most childhood cancers are highly treatable with therapies that are cost-effective, too many children with cancer are unable to access the treatments they need.

As a result, a child's chance of surviving cancer is largely determined by where that child lives: the capacity of a society to take care of its most vulnerable members both reflects and is determined by the level of the country's development. Yet the potential economic gains of investing in childhood cancer programmes are immense. The burden of caring for a child with cancer, and the impact of every premature death, ripples out beyond that child's immediate family and community to affect the country's actual and future workforce, human capital and broader economic landscape *(2)*.

Too many children with cancer are **unable to access** the **treatment** they need

By driving robust multisectoral collaboration, GICC has already succeeded in elevating childhood cancer as a global health priority, shifting the narrative from inevitability to one of opportunity. This report summarizes work done by the GICC to better characterize the inequities in childhood cancer survival and contributory factors, mapping the inequities to better monitor, steer and propel progress.

1.2 Distinct in aetiology, treatment and prognosis: why childhood cancer is a distinct group of cancers

Childhood cancers are a group of diverse and heterogeneous rare conditions arising in children and adolescents: they are distinct from cancers in adults by virtue of their aetiology, prognosis and treatment.

Because they arise in organs and tissues that are still developing, childhood cancers grow and spread faster than cancers in adults, but also are more sensitive and responsive to treatment *(3,4)*. This makes progress against childhood cancers especially amenable through health systems improvement.

Because the causes of childhood cancer are not well understood, cancer prevention is less of a focus for children than for adults. The risk of developing childhood cancers has been attributed to several factors, including ionizing radiation, some therapeutic procedures (e.g. radiotherapy, chemotherapy) and association with genetically defined conditions (such as Down syndrome and neurofibromatosis) *(5,6)*. Although environmental and lifestyle factors have been studied *(7)*, most evidence is based on case–control studies in which it is difficult to control bias. Studying potential aetiological factors requires prospective cohort studies, which are expensive to run and require large international consortia to achieve sufficient statistical power *(8)*. Given the biology of childhood cancer, the limited available resources should be prioritized toward cost-effective measures that prevent treatment failure, rather than toward primary prevention strategies with minimal expected impact.

Box 1. GICC six index cancers

GICC focuses on six "index" cancers selected to be used as tracer indicators for the implementation of childhood cancer control programmes.

The six index cancers are:

- acute lymphoblastic leukaemia
- Burkitt lymphoma
- Hodgkin lymphoma
- retinoblastoma
- Wilms tumour, and
- low-grade glioma

These index cancers were chosen because they are prevalent in all countries, are highly curable with evidence-informed treatments, and because each condition enables monitoring of specific responses from the health care system *(2)*.

1.3 A disease with long-term effects and generational impact

A diagnosis of cancer has a generational impact on families *(9,10)*. Children who survive childhood cancer can go on to suffer long-term physical, neurocognitive, and psychological effects from both disease and treatment *(10)*. Additionally, a higher risk of second malignancies has been described, with potential risk factors for this including genetic predisposition, chemotherapy, radiotherapy or stem cell transplantation *(11)*.

Childhood cancer is the eighth leading cause of death and ninth-leading cause of lost disability-adjusted life years (DALYs) among all cancers in 2023, underscoring its substantial burden on health systems and communities worldwide *(12)*. However, the global impact is heterogeneous. In HICs, cancer is the disease causing the largest number of deaths in these age groups *(12, 13)*. In the same populations in other settings, reported cancer cases and deaths appear to be less common. However, corresponding data are sparse and likely incomplete. The GICC, with its partners, has focused significant attention on the need for accurate data and understanding in this area.

2 Mapping the global burden, measuring the survival gap

2.1 A global burden obscured by limited coverage of population-based cancer registries

The childhood cancer burden is measured through **incidence** (the number of new cases per million person-years of a defined childhood population per year), **survival** (the probability for children in a defined cohort of being alive five years after cancer diagnosis), and **mortality** (the number of deaths per million person-years of a defined childhood population). To estimate the total burden of the disease, including the impact of years of life adversely affected by ill-health and disability, mortality is then combined with morbidity to calculate lost disability-adjusted life years (DALYs).

Childhood cancer is the fourth leading cause of death in adolescents and young adults globally

Information on incidence is collected and compiled by population-based cancer registries, which record information on all cases occurring in a defined population over a given registration period. Registries then estimate childhood cancer survival, either by linking the records of registered cancer patients with death records (i.e. passive follow-up) or by actively seeking information on specific children's health status from families or treating physicians (i.e. active follow-up).

Mortality statistics collected by vital statistics offices at national level are provided to the WHO mortality database *(12)*. However, many LMICs do not maintain national mortality databases. As the Global Cancer Observatory relies on data from population-based cancer registries and the WHO mortality database when producing estimates of cancer incidence and mortality *(14)*, the reliability of country-specific cancer estimates improves with increasing coverage of national registration and vital statistics systems.

Unfortunately, almost 80% of the world's population is not covered by population-based cancer registries *(15)*. Globally, population-based cancer registry coverage remains limited: during 2001–2010, only about

11% of children aged 0–14 years lived in areas covered by high-quality cancer registries, with coverage below 2% in South Asia and sub-Saharan Africa *(16)*. As a result, childhood cancer incidence in many LMICs is likely to be substantially underestimated.

It has been estimated that 400 000 new cancers arise annually among children and adolescents worldwide *(16)*, with approximately 90% thought to occur in LMICs *(17).* This suggests that childhood cancer incidence is approximately 140 new cases on average per million person-years, with substantial regional variation ranging from less than 100 to more than 180 per million across populations *(15).*

However, estimations are affected by significant limitations in diagnosis as well as data collection systems, particularly in LMICs. This means that a significant proportion of childhood cancer cases – up to 43% of cases in some countries – may currently go undiagnosed and untreated *(18)*.

It is estimated that up to 43% of children may go undiagnosed globally

The number of childhood cancers is expected to increase in the next decade owing to population growth and to improvements in case diagnosis and reporting, particularly in areas that currently have low incidence rates. It is estimated that the number of unidentified annual cancer deaths worldwide could reach as high as 2.9 million between 2015 and 2030 *(2)*.

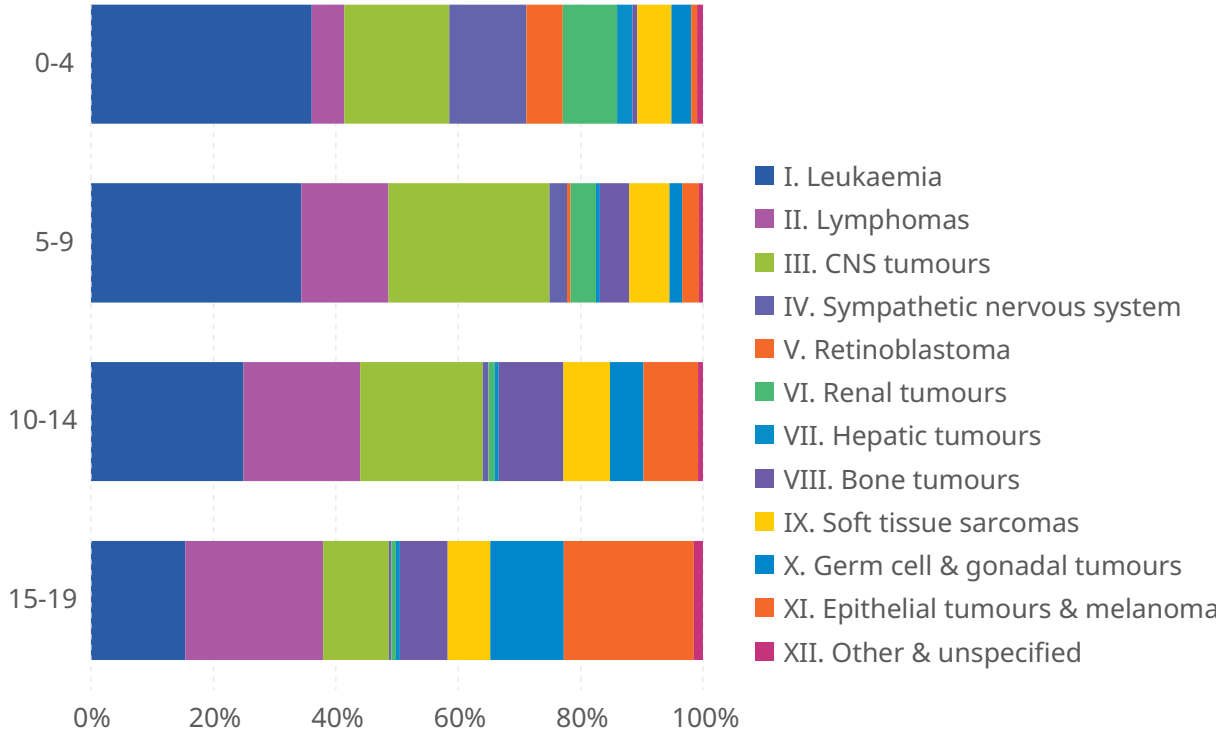
Mortality figures capture only part of the burden: childhood cancer was estimated to result in approximately 11.7 million lost DALYs worldwide. An estimated 144 000 children died from cancer in 2023, notably the GICC six index cancers contributed to nearly half of those deaths (47.3%, CI:42.2-52.0) *(1,19,20)*.

A more nuanced understanding of the cancer burden is obtained by looking at variations in the distribution of cancer types: in most populations, especially those in HICs, the leading cancers are childhood leukaemia and central nervous system tumours. While in Latin America and the Caribbean, lymphomas are the leading cancers reported in children younger than 15 years *(21)*. This likely reflects variable environmental factors as well as differences in case ascertainment *(15)*.

Understanding the distribution of cancer types by age can also inform service provision: in younger children, leukaemia and cancers of the central and sympathetic nervous systems are the most common, whereas in adolescents the proportions shift toward epithelial tumours, melanoma, germ cell and gonadal tumours (see Fig. 2).

Clear and detailed mapping of cancer disparities help Member States to deliver the right services to the right populations, a key component of improving survival.

Fig. 2. Distribution of childhood cancer types, by age, 2001–2010



Source: Reproduced with permission from Steliarova-Foucher et al., 2017 (16).

2.2 Closing the data gap: a scoping review sheds light on survival inequities

Survival in LMICs ranges from 60 to 70% but can be as little as 5% *(15)*

Childhood cancer survival is most commonly reported as five-year survival. Thanks to advances in diagnosis, treatment, and supportive care, HICs report 80% or higher survival for many childhood cancer types. However, many LMICs still report far lower survival, ranging from 60–70% to as little as 5% *(15)*.

Prognostic outcomes vary across childhood cancer types, reflecting differences in disease biology, stage at diagnosis and response to treatment (Fig. 3). However, across cancer types, survival tend to be associated with overall socio-economic development: childhood cancers diagnosed early are sensitive to treatment, and survival improves dramatically with strategic investments in infrastructure, workforce capacity and equitable service delivery *(22)*.

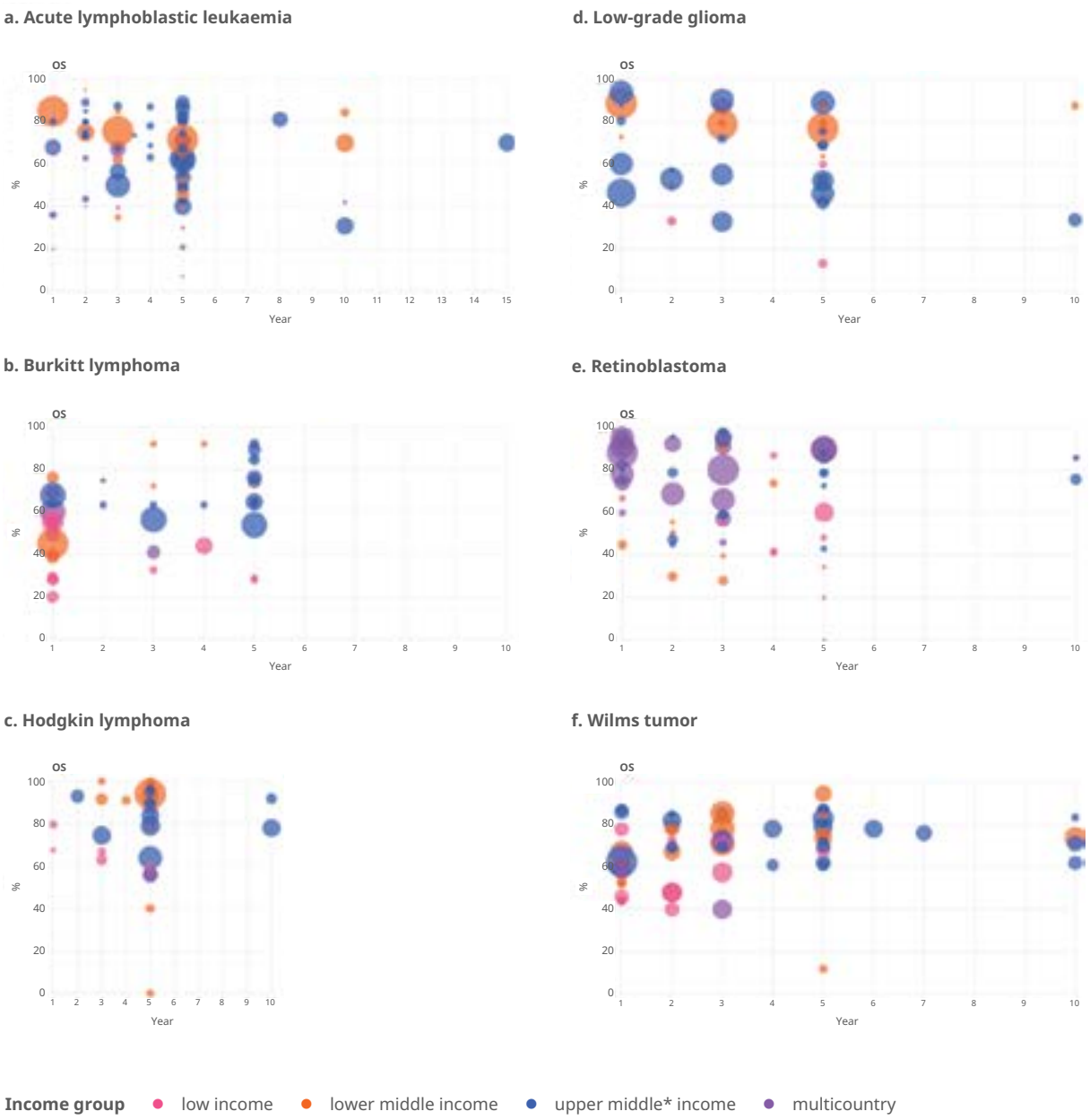
The stark difference in survival between LMICs and HICs is primarily attributed to factors such as delays in diagnosis, treatment abandonment, limited access to essential medicines or supportive care, and systemic barriers in health service delivery – factors that display marked differences between most upper-middle income countries and low-income countries, for example.

To better understand these disparities, a scoping review was undertaken to assess survival for the six GICC index cancers across diverse settings. Data was collected from 196 published studies from 38 LMICs, published between 2013 and 2024 *(23)*. The scoping review analysed survival outcomes for the six GICC index cancers and compiled these according to national income levels.

The review revealed wide variations in reported average overall five-year survival for the six different GICC index cancers across countries as shown by Fig. 3 where bubble size reflects the proportion of studies stratified by national income level: for acute lymphoblastic leukaemia it was 64.4% (range: 7.0 – 95.0%); for Burkitt lymphoma and other mature B-cell malignancies 62.5% (20.0 – 92.0%); for Hodgkin lymphoma 78.6% (range: 40.0 – 96.6%); for low-grade glioma 66.0% (13.0 – 93.7%); for retinoblastoma 70.0% (0.0 – 98.0%); and for Wilms tumour 68.9% (12.0 – 94.6%). The gap between upper-middle income countries and low-income countries was particularly accentuated for certain cancers such as Hodgkin lymphoma and Wilms tumour. Socio-economic barriers and limited access to healthcare were often associated with worse outcomes. Although these results indicate that for some cancer types, we are already achieving the GICC target of 60%, there is still a persistent gap to reach the level achieved in HICs, where these estimates are typically above 80%.

However, most studies were hospital-based, with fewer than 5% using population-based data. This raises a concern about how nationally representative retrieved data may be.

Fig. 3. Survival variation for six GICC index cancers in low and middle-income countries



Source: Reproduced with permission from Santero et al., 2025 (23).

2.3 Five-year survival estimates for lymphoid leukaemia produced for first time

To address the critical gaps in childhood cancer survival data identified through the scoping review process, WHO produced the first country-comparable five-year net survival estimates in children (0–14 years of age) and adolescents (15–19 years of age) diagnosed with lymphoid leukaemia between 2017 and 2021. Leukaemia is the most common cancer type in children and the third most common in adolescents *(15)*.

These estimates were produced using common assumptions and standard methodology for 194 Member States, with the aims of tracking progress toward the GICC 2030 survival target, assessing how many countries may be on course to achieve at least 60% survival, and identifying where further action is needed to support countries implementing targeted and effective cancer control strategies.

To promote knowledge exchange and strengthen the technical foundations of the estimates, WHO conducted Member State consultations on the results. The consultation process ensured full transparency with Member States by enabling them to review their own preliminary survival estimates and provide feedback based on the best available national data. By actively involving Member States, the consultation reinforced country ownership of the estimates, supported the use of the most appropriate data to assess health system performance, and contributed to producing more accurate and comparable survival estimates to guide targeted actions to reduce childhood cancer inequalities.

The modelling approach followed a tiered strategy that prioritized the highest-quality available data while also ensuring coverage for all Member States. Global survival estimates for childhood cancer are informed by population-based data from the CONCORD (Collaborative Research on Cancer Data) programme *(24)*. Where robust, nationally representative CONCORD data exist, estimates are closely aligned to those observed survival patterns, with projections applied where needed to extend trends to the 2017–2022 period. In line with CONCORD-3 *(24)*, 47 countries had data that covered 100% of the national population and population coverage varied between 1% and 86% in 24 remaining countries. Overall, the registries participating in CONCORD-3 covered a population of nearly one billion people, with broader geographical coverage than any previous international comparison of cancer survival. However, for children and adolescents, it only included 16 LMICs *(15)*. In countries lacking CONCORD data, the model draws on relevant covariates such as, acute lymphoid leukaemia (ALL) 1-mortality-to-incidence ratio estimates derived from the 2023 release of Institute for Health Metrics and Evaluation (IHME) global burden of disease incidence and mortality data, as well as the IHME total health expenditure estimates and radiotherapy unit density from the WHO Directory of Radiotherapy Centres among others. Geographical and temporal correlations, using global and regional patterns were established to inform the estimates. For settings where data are available but of limited quality – such as those with high uncertainty, low reliability, or only sub-national coverage – the approach combines both strategies, balancing empirical data with modelled patterns to produce consistent, comparable estimates across all Member States.

The resulting country-comparable survival estimates highlight the persistent inequities in childhood cancer survival across regions and income levels. Five-year net survival varies dramatically across regions, with the highest-performing regions achieving survival levels up to twice those of regions with the poorest outcomes (see Annex). While some regions now approach or exceed 80–90% survival among children, others remain closer to 40%. These patterns are more pronounced when comparing adolescents (15–19 years) to children (0–14 years) as shown in Fig. 4 and 5. This age-related survival gap reflects long-standing challenges faced by adolescents affected by cancer to access accurate diagnosis and timely treatment. These findings underscore the need to develop tailored person-centred strategies to improve outcomes for this target age group of the Cure*All* Framework implementation.

Across regions, high-income areas of the world consistently demonstrate strong performance, whereas regions with greater health system constraints show markedly lower survival and wider variability. The Western Pacific and European Regions have reached some of the highest estimated survival levels, while the African Region and parts of the Eastern Mediterranean Region continue to face persistent challenges that reflect systemic differences in access to timely diagnosis, essential medicines and high-quality care.

WHO country-comparable estimates show that adolescents affected by cancer are facing long-standing challenges to access accurate diagnosis and timely treatment

Many countries continue to face challenges in collecting reliable real-world data on childhood cancer survival, making it difficult to accurately track progress towards the GICC target or identify the specific barriers driving poor outcomes. This reinforces the need to strengthen population-based cancer registries, which remain the cornerstone for reliable survival estimates. Through the country consultation process Member States with national cancer registries submitted population-based survival estimates, which allowed improved comparability of survival estimates across countries over time, and demonstrated the value of nationally-owned data systems.

WHO estimates show that 104 (54%) Member States among 194 reached the 60% five-year survival GICC target with high variation between WHO regions

The estimates indicate overall improvement in global childhood cancer survival between 2000 and 2021. However, the pace of progress has been uneven, particularly for adolescents aged 15–19 years, and regions with stronger health system investment have experienced more upward trends (see Annex 1), while progress in resource-constrained regions has been slower, underscoring the urgent need for targeted action to close the survival gap worldwide.

Fig. 4. Five-year net lymphoid leukaemia survival (%) across regions and countries for children aged 0–14 years from 2017 to 2021, by WHO region

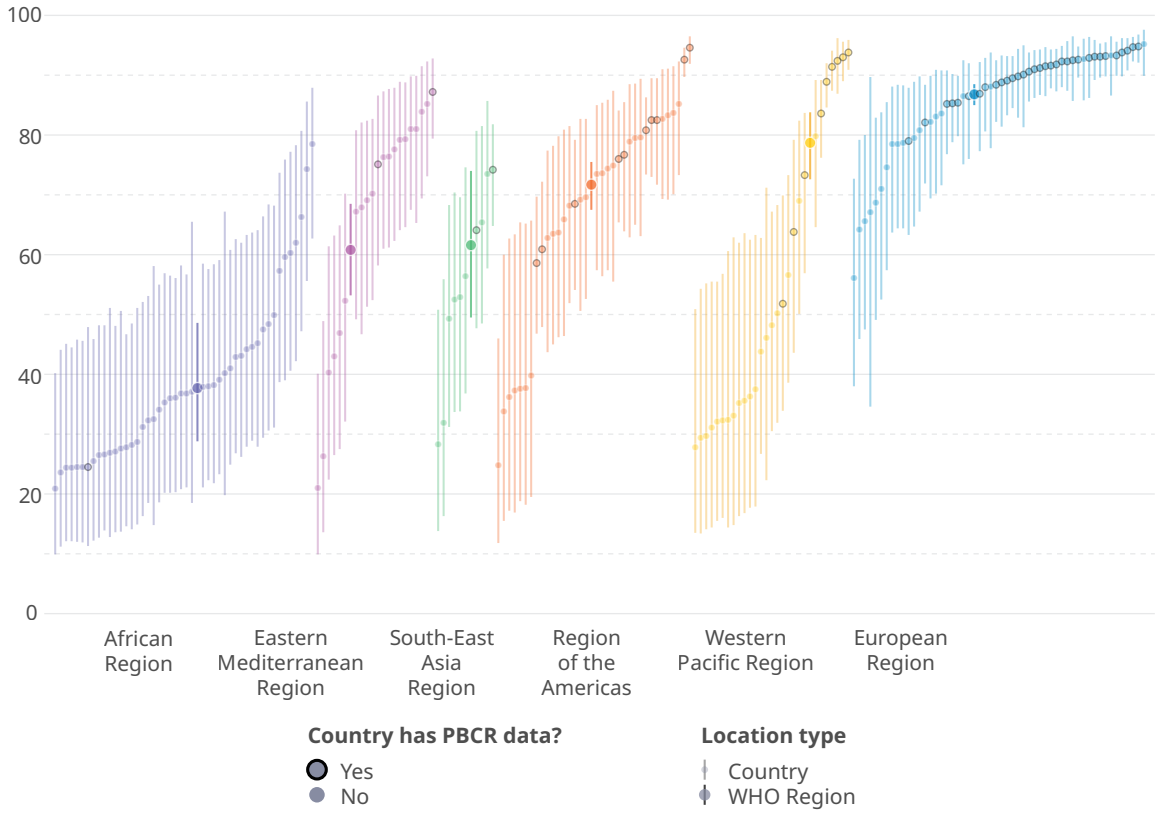
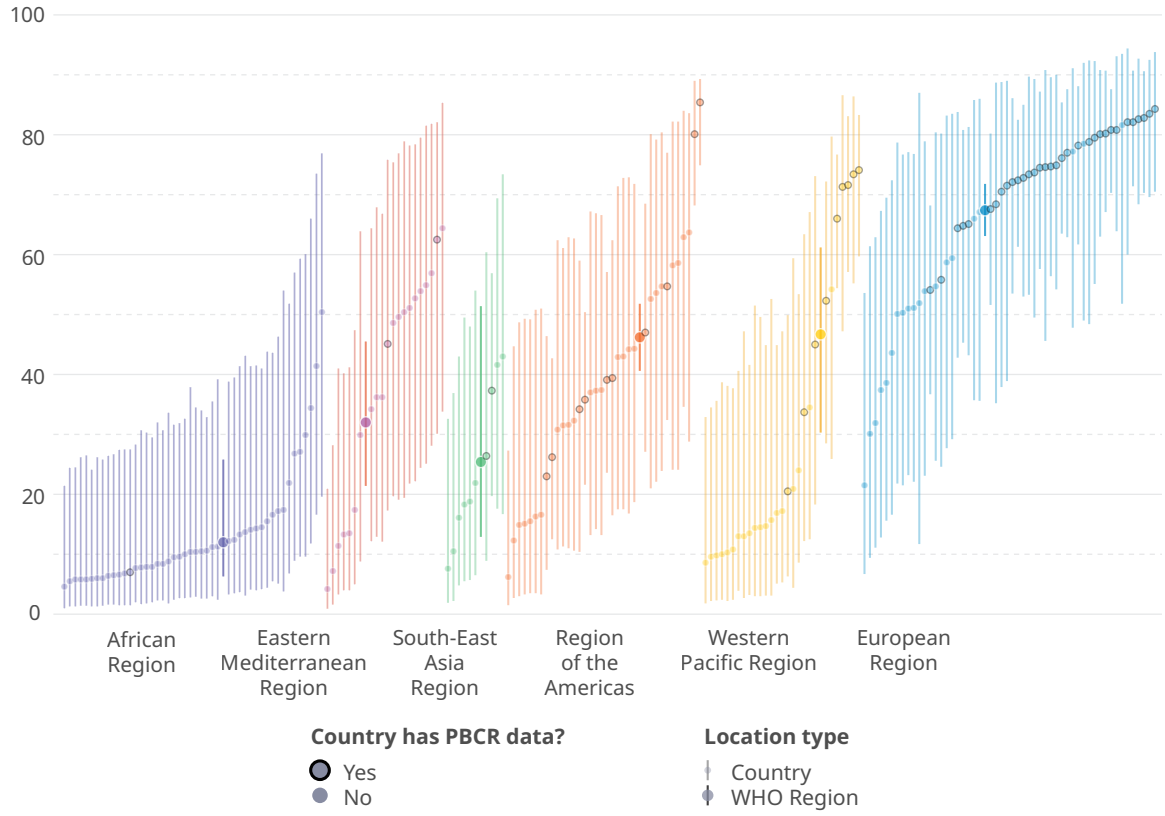


Fig. 5. Five-year net lymphoid leukaemia survival (%) across regions and countries for adolescents aged 15–19 years from 2017 to 2021, by WHO region



3 From commitment to impact: the Cure*All* framework as a driver for health systems strengthening

3.1 Factors underlying the survival gap

The stark differences in cancer survival are primarily attributed to challenges in accurate and complete diagnosis as well as delays in diagnosis and treatment, treatment abandonment, limited access to essential medicines and supportive care, as well as to systemic barriers in health service delivery and limited options for advanced care and technologies, with broad differences between most upper-middle income countries and low-income countries *(22)*. However, many LMICs have limited data available *(15)*.

Strategic investments in infrastructure, training and equitable service delivery can dramatically improve survival

Different cancers, specifically the six GICC index cancers (Box 1), are associated with different prognoses and expected survival outcomes. However, across cancer types, survival tend to be associated with overall socio-economic development: childhood cancers are highly sensitive to treatment, and so survival improves dramatically with strategic investments in infrastructure, training and equitable service delivery *(22)*.

Childhood cancer intersects multiple public health domains, including child and adolescent health, noncommunicable diseases and community health, it can be seen as an indicator of the overall performance of a health care system. Disparities in access to health services, both between and within countries, are largely influenced by variations in universal health coverage and the level of political commitment to achieving the 2030 United Nations Agenda for Sustainable Development.

The significant improvements in childhood cancer survival reported in HICs can be linked to factors such as timely and accurate diagnosis, precise staging, and the ability to better tailor treatment and supportive care, among others *(13)*. These outcomes thus reflect the level of broader determinants of health, such as the socioeconomic status encompassing the overall socio-economic context, income level and its distribution *(2,25)*, which affects the conditions people live in and the quality of the existing health care system *(17)*.

Self-reported data, sourced from the WHO Noncommunicable Disease Country Capacity Survey (CCS), shows a significant increase in early detection programmes globally from 2019 to 2021 *(25)*. However, this progress is largely driven by HICs, where coverage now approaches nearly 100%. In contrast, low- and lower middle-income countries still report coverage rates below 50%. Furthermore, according to CCS, nearly 80–90% of upper middle- and high-income countries reported comprehensive availability of high-quality cancer control services for children, such as pathology, surgery, chemotherapy and radiotherapy. In contrast, low-income and lower-middle income countries reported significantly lower availability: 50–60% reported availability of pathology, surgery and chemotherapy, and only 30–40% availability of radiotherapy *(25)*.

Low-income and lower-middle-income countries reported significantly lower availability of high-quality cancer control services for children: 50–60% reported availability of pathology, surgery and chemotherapy, and only 30–40% availability of radiotherapy

The quality of childhood cancer services is as important as their availability, with the adequate training of health care professionals being fundamental *(22)*; this can also play a role in addressing late diagnosis *(26)*. It is also crucial to understand the accessibility of services (i.e. when the services exist but they are unaffordable or have inadequate human resources, among other constraints), alongside the acceptability to local populations *(22)*. Health insurance status, for example, has been shown to influence survival in childhood cancer *(27)*.

Abandonment of treatment remains associated with childhood cancer mortality across LMICs and refers to a failure to start or complete curative treatment, with missed treatment of four weeks or more, which can be attributed to several reasons. The SIOP Abandonment Working Group includes 100 multidisciplinary and multilingual members from 35 countries with varying experiences concerning treatment abandonment, working together to design strategies to prevent and tackle abandonment. In 2012, the group conducted an online survey of health care professionals covering 101 countries and found that long travel time, low socio-economic status and low education level of families played a crucial role in increasing the probability of treatment abandonment in LMICs. Across both LMICs and HICs, concerns over potential effects and toxicity of treatments also played a role *(28)*.

3.2 GICC operational approach: implementing the Cure*All* framework

In collaboration with St. Jude Children's Research Hospital and other global partners, WHO developed a framework to provide operational guidance for policy-makers, programme and hospital managers on how to support implementation of the GICC. The methodological approach is based on four key pillars and three cross-cutting enablers, which make up the acronym Cure*All*.



The Cure*All* framework presents priority interventions aiming to improve the quality of childhood cancer care and build progress towards universal health coverage. It also outlines how to assess resources and needs of a country or a region to ensure childhood cancer care, develop a national childhood cancer plan, implement it and monitor progress.

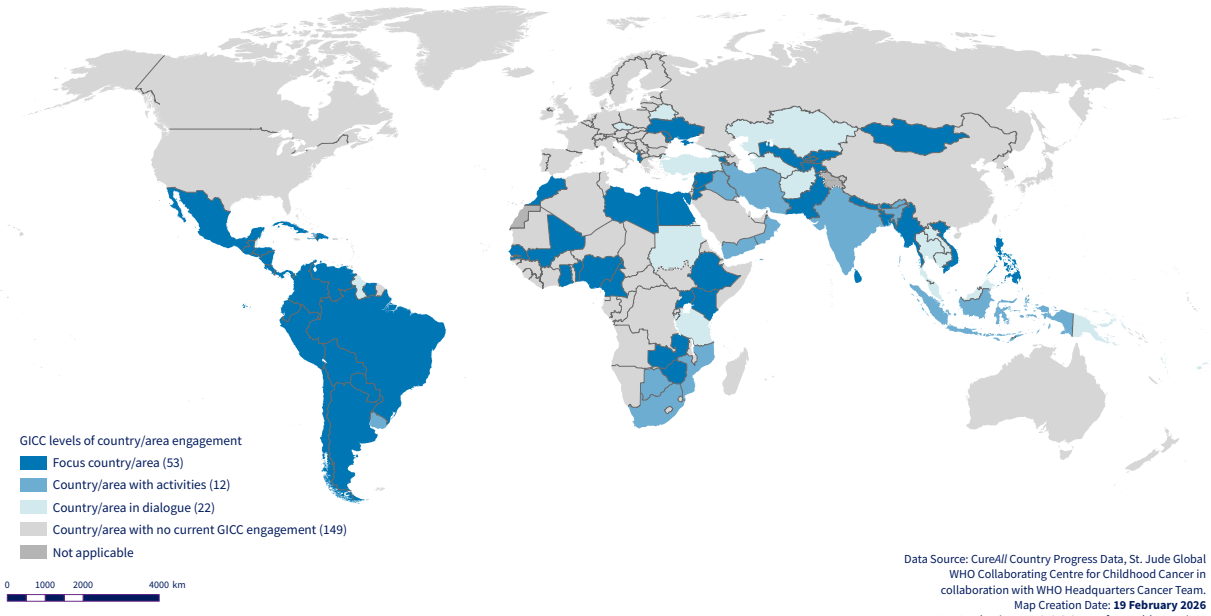
The implementation of the GICC has shown that with political will, strategic investments and an integrated approach, it is possible to improve the lives of children and adolescents with cancer. From its start in 2018 in ten initial focus countries, the GICC has officially reached over 50 focus countries in 2025 (see Fig.6 and Box 2). Its global impact has spread to other countries outside the initiative and impacted the lives of more than 500 000 children and their families, with a total of over 400 projects having been developed based on the Cure*All* framework (Fig. 6).

> 50 countries across all six WHO regions have included childhood cancer in their national cancer control plan strategies since 2019

By the end of 2024, over 100 Member States have completed their national assessments and 50 countries across all six WHO regions have included childhood cancer in their national cancer control strategies.

Fig. 7 illustrates the progress made in advancing the prioritization of childhood cancer within national health agendas, through critical advances in national cancer control planning (NCCP) efforts and through Cure*All* country reach and impact.

Fig. 6. Member States engagement in the GICC



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Cure*All* Country Progress Data, St. Jude Global WHO Collaborating Centre for Childhood Cancer in collaboration with WHO Headquarters Cancer Team.
Map Creation Date: **19 February 2026**
Map Production: WHO GIS Centre for Health, DNA/DDI
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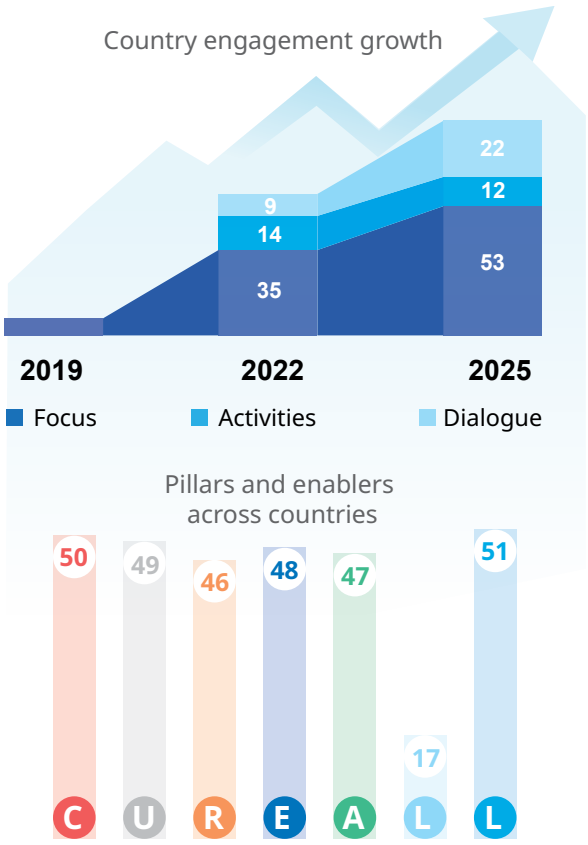
Box 2. Using the Cure*All* framework to assess implementation of the GICC in the WHO African Region

In order to close gaps in service delivery, they must first be identified. In the WHO African region – predicted to have the largest young population in the world by 2055 – childhood cancer five-year survival is some of the lowest worldwide, estimated to be around 30%. To map gaps in service delivery, the WHO Regional Office for Africa surveyed ministries of health in 34 countries in the region. The survey found that although 26 countries (77%) reported the existence of specialized centres to treat childhood cancer, only 13 (38%) had defined referral pathways. In the surveyed countries, 19 (56%) invest in training primary health care workers for early diagnosis and referral. Although 21 (62%) countries included childhood cancer in national cancer control plans (NCCPs), only 15 (44%) of these plans have received dedicated funding for implementation. Two thirds of countries have explored alternative financing mechanisms, but significant gaps in sustainable funding persist. Around half of the countries surveyed do not have access to essential chemotherapy agents (47%) or lack access to radiotherapy services and palliative care (53%). Although 24 countries (71%) reported existing population-based cancer registries, only 5 (15%) countries defined indicators for childhood cancer control, and 8 (24%) integrated these into health information systems. The survey reveals significant progress in some areas, but also highlights persistent gaps, and opportunities to act.

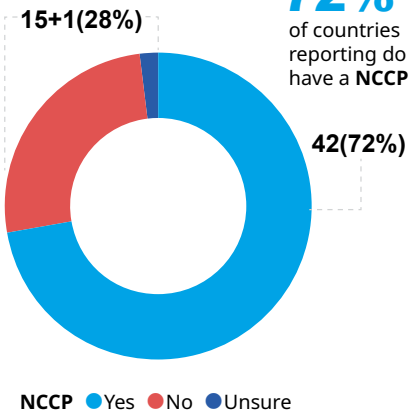
Source: WHO Regional Office for Africa

Fig. 7. Prioritization of childhood cancer in national health agendas:
A. Critical advances in national cancer control planning (NCCP) efforts
B. Cure*All* Country reach and impact

A. Critical advances in NCCP efforts



28% of countries reporting do **not** have a readily identifiable **NCCP**



72% of countries reporting do have a **NCCP**

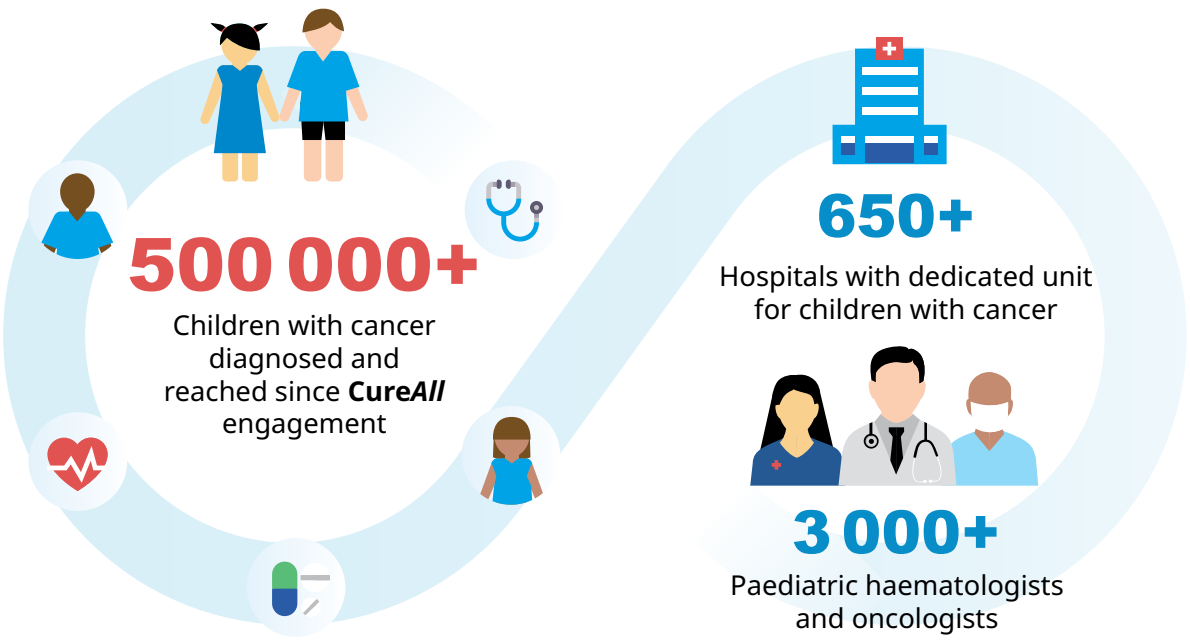
145 K+ Children with cancer diagnosed and reached in 2025

85 NCCP Projects

83% of reporting countries are implementing NCCP projects

118 NCCP deliverables of which **40% linked to U pillar**

B. Cure*All* country reach and impact



500 000+
Children with cancer diagnosed and reached since **Cure*All*** engagement

650+
Hospitals with dedicated unit for children with cancer

3 000+
Paediatric haematologists and oncologists

Source: Cure*All* country progress dashboard. Last updated January 2026.

3.3 Centres of excellence

Quality childhood cancer services require access to coordinated interventions at different levels of health systems and across the continuum of care. This implies specialized treatment centres and efficient referral pathways between various levels of care (e.g. from local health facilities to specialized centres). This can help ensure timely diagnosis, multidisciplinary treatment and support by a qualified workforce.

WHO has been working closely with partners to promote workforce capacity development. For example, St. Jude Children's Research Hospital – a WHO Collaborating Centre for childhood cancer – has been supporting skills transfer and local capacity building across all six WHO regions, with an active global alliance serving as an implementation network. Several countries have also developed competency-based training curricula for their workforce. For example, the WHO Regional Office for South-East Asia, with partners, established the South-East Asia Regional Childhood Cancer Network to promote dialogue and sharing of best practices across institutions in the region with frequent technical dialogues and meetings *(29)*.

Across the six WHO regions, 50 countries have improved their childhood cancer services. In South-East Asia alone, 23 tertiary level institutions have increased their capacity to provide care for an additional 7500 children since 2022. Regional approaches tailored to the unique contexts of individual countries are essential to advancing implementation of the GICC Cure*All* framework *(2)* (see Boxes 3 and 4).

Box 3. Bringing care closer to communities and across borders

One example of regional contextualization has been the shared care model implemented in Myanmar and Nepal. This model of care consists of an organized network of smaller treatment centres at a provincial level supported by tertiary childhood cancer centres, bringing care closer to communities in hard-to-reach areas. By reducing the need for frequent travel, this model supports adherence to treatment by allowing children and parents to attend to usual daily activities and save family finances.

In Myanmar, the number of satellite centre network hospitals increased from 17 to 41 between 2019 and 2023, with 157 patients (32% of new cases) in 2023 being treated in collaboration between the different levels of health care institutions. A total of 115 health care providers were trained and 907 patient reviews were done between November 2022 to December 2023.

The coordination of care pathways across neighbouring countries has also been used effectively, such as in conflict-affected areas in the occupied Palestinian territory, including east Jerusalem, the Syrian Arab Republic, Ukraine and Yemen.

Box 4. Driving essential research

Research into childhood cancer remains critically limited in LMICs, with only 28% of clinical trials taking place in these countries, presenting significant disadvantage in attaining improvements of outcomes *(30,31)*. The GICC, with its partners and worldwide network of experts, aims to reduce inequalities in access to clinical trials and implementation research in different contexts. There is also an overall need to place greater focus on product development for children. Low numbers of potential beneficiaries, and the need to formulate products appropriate to age and stage of development of children have contributed to insufficient investment being made.



3.4 Universal health coverage

Universal health coverage means ensuring that all people have access to the full range of quality health services they need, when and where they need them, without suffering financial hardship. It is a political commitment made by governments and included in the United Nations 2030 Agenda for Sustainable Development (target 3.8). Care services for children with cancer are one of the priorities of national cancer control plans in over 80 countries. The incorporation of childhood cancer care in minimum packages of benefits has helped drive progress towards the target of universal health coverage, while also helping to secure financing and sustainability of childhood cancer services in almost 50 countries across all WHO regions.



3.5 Regimens for management

Improving childhood cancer outcomes means ensuring timely access to essential medicines and technologies and improving quality of care by adhering to best practice standards and training health care workers, promoting early diagnosis and enabling a coordinated referral pathway. Through the GICC, over 45 countries have started working to optimize the provision of services and access to essential medicines and technologies.

One example of this is the effort to improve psychosocial care in paediatric cancer centres across Latin American and Caribbean countries by adapting care standards, establishing multicentre working groups and developing training materials accordingly. In total, more than 50 health professionals participated, six standards of psychosocial care were validated, and 16 technical outputs were produced so far *(32)*.

In 2021, the Global Platform for Access to Childhood Cancer Medicines (GPACCM) was established to close the gap in access to quality medicines and provide an uninterrupted supply of quality-assured childhood cancer medicines for approximately 120 000 children with cancer in LMICs (Box 5). Additionally, the WHO Model Essential Medicines List for Children (EMLc) was first revised in 2023 and again in 2025 *(33,34)*, leading to an updated version aligned with GICC priorities. Unmet needs highlighted through these updates led to the development of the paediatric drug optimization (PADO) process for cancer medicines, with the aim of better targeting

research and development efforts towards identified needs for GICC index cancers (Box 1). Through a set of meetings with key stakeholders, the PADO process generated a priority list of formulations to be developed with a time horizon of three to five years, and a "watch list" with drugs recommended for investigation and development with a time horizon of five to ten years *(33,34)*.

Box 5. Global Platform for Access to Childhood Cancer Medicines: a collaborative partnership that delivers

In February 2025, the first shipments of essential childhood cancer medicines began to reach pilot countries participating in the Global Platform for Access to Childhood Cancer Medicines.

The Global Platform is a partnership between WHO and St. Jude Children's Research Hospital, in collaboration with the United Nations Children's Fund (UNICEF) and the Pan American Health Organization Strategic Fund. It was established in 2021 to close the gap in access to quality medicines and provide an uninterrupted supply of quality-assured childhood cancer medicines for approximately 120 000 children with cancer in LMICs.

By the end of 2025, 29 facilities across six participating countries were receiving childhood cancer medicines through the Global Platform, with 890 576 standard unit medicines delivered to the countries, and 2 471 children estimated to have benefited so far. Of the next cohort of six countries, two (El Salvador and Moldova) had progressed to be able to begin receiving medicines in early 2026, while the others continued to progress their health systems towards readiness.



3.6 Evaluation and monitoring

Robust monitoring systems contribute to evidence-informed policy-making and foster accountability, which is why high-quality cancer registries are an essential tool for cancer control programmes. To support better understanding of countries' childhood cancer burdens, the International Agency for Research on Cancer and St. Jude Children's Research Hospital established a collaboration – Targeting childhood cancer through the Global Initiative for Cancer Registry Development (ChildGICR) – that has been instrumental in advocating for expansion of population coverage by cancer registries in LMICs and their focus on childhood cancers. The initiative reinforces childhood cancer registration by building capacity through a series of online training courses. In total, 125 health professionals in 27 countries or territories have received in-depth training on various aspects of childhood cancer registration.

Another initiative aiming to improve childhood cancer monitoring is the St. Jude Global Childhood Cancer Analytics Resource and Epidemiological Surveillance System registry platform to facilitate hospital-based data collection in LMICs. By 2024, it had been expanded to 89 hospitals across more than 40 countries *(35)*.

In line with Pillar E, over 45 countries have strengthened their health information systems and defined indicators for monitoring and evaluation in alignment with the global initiative (Fig. 6).

3.7 Advocacy

Advocacy is a crucial enabler for implementing the GICC, helping to align different stakeholders to help prioritize childhood cancer and facilitate implementation of existing legislation and initiatives. Advocacy has been key to facilitating policy dialogues in more than 40 Member States across the six WHO regions (Box 6).

At a national level, advocacy efforts can help create the momentum required to change legislation and incorporate childhood cancer as a public health priority. For example, the Ministry of Health of Peru established several committees to develop policy and regulatory documents aiming to strengthen paediatric cancer control. This contributed to a decrease in the treatment abandonment rate from 18.6% to 8.5%, and a decrease in events of clinical deterioration and in mortality of hospitalized patients. In addition, advocacy efforts also led to the approval of a national childhood cancer law stipulating universal health coverage for diagnosis and cancer treatments in children and adolescents, special paid leave for parents and the creation of the National Childhood and Adolescent Cancer Programme and of the National Paediatric Cancer Registry *(36,37)*.

Box 6. Advocacy: mass communication campaigns aid timely diagnosis of childhood cancer

One regional example of advocacy in action in Latin American and Caribbean countries has been the use of mass communication campaigns. In 2023, a comprehensive campaign "Support Kids with Cancer", targeting parents, caregivers and health professionals was launched by the Pan American Health Organization (PAHO), St. Jude Children's Research Hospital and Childhood Cancer International. The campaign focused on the first signs of the most common childhood cancers and thus aimed to improve timely diagnosis and treatment outcome. Another example is the more tailored communication campaign in 2022 targeting the Plurinational State of Bolivia, Haiti and Peru to address the refusal of treatment of patients with retinoblastoma and osteosarcoma.

3.8 Leveraged financing

A key aspect of the Cure*All* framework is to support Member States in planning and securing sustainable long-term financing for paediatric cancer control. WHO has worked on reinforcing the global response to cancer by strengthening health systems, and supporting countries in decision-making towards smart investments in cancer care that contribute to universal health coverage. The premature death of a child or an adolescent represents a loss for future workforce and for the overall development of a country. It is estimated that for each dollar invested in childhood cancer treatment, there is a net return of three dollars in productivity gains *(22)*.

In partnership, United Nations agencies support WHO Member States by providing access to tools to help assess, set priorities and estimate costs to inform national cancer control plans and policies. These efforts have contributed to around 20 countries securing domestic funding to ensure sustainability of their childhood cancer programmes.

3.9 Linked policies and governance

Strengthening existing partnerships, developing new ones and working across different sectors through an integrated approach is at the core of the GICC. These ongoing efforts have also been spearheaded by regional, sub-regional and national initiatives.

In March 2024, the WHO Eastern Mediterranean Regional Office organized a workshop to collectively reflect on ongoing implementation of the GICC in the region and to encourage countries to further prioritize childhood cancer. In the sub-region of Central America, a collaboration between different ministries of health, WHO and partners has supported the inclusion of childhood cancer in national action plans and in best practice guidelines.

At a national level, there has been a marked increase in the recognition of childhood cancer as a public health priority, with an increasing number of countries benefiting from the momentum gathering around the GICC. Childhood cancer has been prioritized in national policies of over 50 Member States (Box 7).

Box 7. Applying a regional strategy to accelerate the GICC in Latin America and the Caribbean

It is estimated that around 30 000 children and adolescents under the age of 19 years develop cancer each year in the Latin America and Caribbean region, representing 10.4% of all childhood cancers in the world. Survival varies widely across different countries of the region. To address both burden and related inequities, the Pan American Health Organization (PAHO), St. Jude Children's Research Hospital and other collaborators developed a regional strategy to accelerate implementation of the GICC (38).

First, a comprehensive situational analysis was undertaken to establish key objectives for the region. Next, in 2021, PAHO established seven regional working groups aligned with the Cure*All* framework to address the main factors contributing to poor outcomes in childhood cancer (i.e. early detection, treatment abandonment, nursing, palliative care, nutrition, psychosocial, and supportive care). These working groups included over 200 professionals from 21 different countries and developed comprehensive needs assessments looking at main regional priorities and opportunities for improvement.

This approach led to the production of childhood cancer profiles for the Region of the Americas, measuring progress towards the goals of GICC for different sub-regions and for individual countries. Situation assessments in the areas of early diagnosis, abandonment of treatment, nutrition and palliative care helped provide in-depth understanding of areas of improvement across the region. Other outputs such as technical documents, virtual courses, educational content series and communication campaigns were also created.

3.10 Where we go from here: accelerating progress to save one million lives

The GICC has made significant progress in elevating childhood cancer as a global health priority. In September 2025, the childhood cancer community achieved a major milestone when the GICC target of achieving a childhood cancer survival of at least 60% globally by 2030 was included in the *Political declaration of the fourth high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases and the promotion of mental health and well-being (39)*. This marked the first time that childhood cancer has been clearly reflected as a global noncommunicable disease priority at this level and translating political commitment into measurable action and impact.

The way forward aligns closely with the strategic directions and commitments set out by that declaration. In particular, the commitments to advance research and innovation, strengthen national surveillance and civil registration systems, and build analytical capacity to track progress toward the 2030 target, directly reinforce the work already underway through Cure*All* framework *(40)*. These priorities are directly reinforced through Cure*All* Framework Pillar E implementation, which integrates monitoring and evaluation, implementation science and research, across countries engaged in the initiative to inform continuous improvement in childhood cancer care *(41).*

The persistent lack of high-quality population-based cancer registries has constrained countries' abilities to monitor childhood cancer outcomes and design effective control strategies *(42)*, prompting WHO to develop the first WHO childhood cancer country-comparable lymphoid leukaemia survival estimates. The consultative process underpinning these estimates has created a critical opportunity to strengthen Member State commitment to improving childhood cancer surveillance and data-driven policy-making. Closing these data gaps is a political priority and GICC has demonstrated that through sustained multisectoral partnerships, bringing together national authorities, WHO, IARC, IAEA, St. Jude Children's Research Hospital, SIOP, CCI and other global partners, this is feasible. Such collaborations reinforce surveillance systems, expand population-based registry capacity, and ensure that high-quality evidence is systematically used to inform equitable, effective and accountable childhood cancer control policies.

GICC has also served as a platform to accelerate research and innovation, through multisectoral partnerships that bring together WHO, national authorities, research institutions, industry and civil society to address market fragmentation and enable sustainable access to child-appropriate cancer treatments as evidence with the target product profiles development for childhood cancer *(43)*. These efforts are reinforced by the Global Platform for Access to Childhood Cancer Medicines, which strengthens forecasting, regulatory alignment and the supply of quality-assured medicines. By integrating research and access strategies into national cancer control frameworks, the GICC supports evidence-informed policy, and enables the sustainable introduction of innovations that improve outcomes for children and adolescents with cancer.

The current priority for the GICC is to build on the success achieved in more than 80 countries by aligning technical expertise, institutional mandates and investments across sectors through Cure*All* implementation. In so doing, the GICC will expand access to timely, quality care at the national and regional levels, which will allow acceleration of progress and achievement of the ambitious target to reduce the global burden of childhood cancer, and increase global survival among children with cancer to at least 60% by 2030, reducing suffering for children with cancer and their families, and saving one million lives.

References

1. WHO Global Initiative for Childhood Cancer: An overview. Geneva: World Health Organization; 2020 (https://www.who.int/docs/default-source/documents/health-topics/cancer/who-childhood-cancer-overview-booklet.pdf, Accessed on September 2025).

2. Cure*All* framework: WHO Global Initiative for Childhood Cancer. Increasing access, advancing quality, saving lives. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/347370). License CC BY-NC-SA 3.0 IGO

3. Ma X, Liu Y, Alexandrov L, Edmonson M, Gawad C, Zhou X et al. Pan-cancer genome and transcriptome analyses of 1,699 paediatric leukaemias and solid tumours. Nature. 2018:371–6 (https://doi.org/10.1038/nature25795).

4. Hunger S, Mullighan C. Acute lymphoblastic leukemia in children. New England Journal of Medicine. 2015:1541–52 (https://doi.org/10.1056/NEJMra1400972).

5. Ripperger T, Bielack S, Borkhardt A, Brecht I, Burkhardt B, Calaminus G et al. Childhood cancer predisposition syndromes – a concise review and recommendations by the Cancer Predisposition Working Group of the Society for Pediatric Oncology and Hematology. American Journal of Medical Genetics A. 2017;173(4):1017–37 (https://doi.org/10.1002/ajmg.a.38142).

6. Stiller C. Epidemiology and genetics of childhood cancer. Oncogene. 2004;23 6429–44 (https://doi.org/10.1038/sj.onc.1207717)

7. Spector LG, Pankratz N, Marcotte EL. Genetic and nongenetic risk factors for childhood cancer. Pediatric Clinics of North America. 2015;62:11–25 (https://doi.org/10.1016/j.pcl.2014.09.013).

8. Tikellis G, Dwyer T, Paltiel O, Phillips GS, Lemeshow S, Golding J et al. The International Childhood Cancer Cohort Consortium (I4C): A research platform of prospective cohorts for studying the aetiology of childhood cancers. Paediatric Perinatal Epidemiology. 2018;32:568–83 (https://doi.org/10.1111/ppe.12519).

9. McLoone JK, Wakefield CE, Glasson N, Wiener L, Ortiz R, Ilbawi A et al. The Lived Experience of Childhood Cancer Survivors and Their Parents: A Multi-National Study of Access to Survivorship Care and Information and Support Needs. Pediatric Blood Cancer. 2025:e31593 (https://doi.org/10.1002/pbc.31593).

10. Cayrol J, Wakefield CE, Ilbawi A, Donoghoe M, Hoffman R, Echodu M et al. The lived experience of people affected by cancer: A global cross-sectional survey protocol. PLoS One. 2024;19 (https://doi.org/10.1371/journal.pone.0294492).

11. Zahnreich S, Schmidberger H. Childhood Cancer: Occurrence, Treatment and Risk of Second Primary Malignancies. Cancers (Basel). 2021 May 26;13(11):2607 (https://doi.org/10.3390/cancers13112607).

12. GBD 2023 Childhood Cancer Collaborators. Global burden of cancer in children and adolescents aged 0-19 years, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023. Lancet. 2026 Apr 4;407(10536):1360-1373. (https://doi.org/10.1016/s0140-6736(26)00200-x).

13. Pritchard-Jones K, Pieters R, Reaman G, Hjorth L, Downie P, Calaminus G et al. Sustaining innovation and improvement in the treatment of childhood cancer: lessons from high-income countries. Lancet Oncology. 2013;14:e95–e103 (https://doi.org/10.1016/S1470–2045(13)70010-X).

14. Global Cancer Observatory. Lyon: International Agency for Research on Cancer/World Health Organization; 2025 (https://gco.iarc.fr/en, accessed on 18 December 2025).

15. Allemani C, Matsuda T, Carlo VD, Harewood R, Matz M, Niksic M et al. Global surveillance of trends in cancer survival 2000–14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. Lancet. 2018; 391:1023–75 (https://doi.org/10.1016/S0140–6736(17)33326–3).

16. Steliarova-Foucher E, Colombet M, Ries LAG, Moreno F, Dolya A, Bray F et al. International incidence of childhood cancer, 2001–10: a population-based registry study. Lancet Oncology. 2017 18:719–31; (https://doi.org/10.1016/S1470–2045(17)30186–9). License CC BY-NC-SA 3.0 IGO.

17. Bhakta N, Force L, Allemani C, Atun R, Bray F, Coleman M et al. Childhood cancer burden: a review of global estimates. Lancet Oncology. 2019;20:e42–e53 (https://doi.org/10.1016/S1470–2045(18)30761–7).

18. Ward Z, Yeh J, Bhakta N, Frazier A, Atun R. Estimating the total incidence of global childhood cancer: a simulation-based analysis. Lancet Oncology. 2019;20:483–93 (https://doi.org/10.1016/S1470–2045(18)30909–4).

19. Global health estimates 2021: Leading causes of death. Global Health Observatory. Geneva: World Health Organization; 2024 (https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death, accessed on 24 April 2025).

20. Global health estimates 2021: disease burden by cause, age, sex, by country and by region, 2000–2019. Geneva: World Health Organization; 2024 (https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates, accessed on 24 April 2025).

21. de Paula Silva N, Colombet M, Moreno F, Erdmann F, Dolya A, Piñeros M et al, and IICC-3 contributors. Incidence of childhood cancer in Latin America and the Caribbean: coverage, patterns, and time trends. Revista Panamericana de Salud Pública. 2024;48:e11(https://iris.paho.org/handle/10665.2/59307). License CC BY-NC-ND 3.0 IGO.

22. Atun R, Bhakta N, Denburg A, Frazier AL, Friedrich P, Gupta S et al. Sustainable care for children with cancer: a Lancet Oncology Commission. Lancet Oncology. 2020;21:e185–e224(https://doi.org/10.1016/s1470–2045(20)30022-x).

23. Santero M, Sequeira RO, Paixao MC, Martinez MM, Roig PM, Chantada G et al. Childhood cancer survival in low- and middle-income countries and the Global South: emerging evidence and critical gaps from a scoping review of observational studies. EJC Paediatric Oncology. 2025; (https://doi.org/10.1016/j.ejcped.2025.100422). License CC BY-NC-SA 3.0 IGO.

24. Global surveillance of trends in cancer survival 2000–14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. Lancet. 2018;391(1015):1023–1075 (https://doi.org/10.1016/S0140–6736(17)33326–3).

25. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2021 global survey. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/331452). License CC BY-NC-SA 3.0 IGO.

26. Zabih W, Thota AB, Mbah G, Freccero P, Gupta S, Denburg AE. Interventions to improve early detection of childhood cancer in low- and middle-income countries: a systematic review. Pediatric Blood Cancer. 2020;67 (https://doi.org/10.1002/pbc.28761).

27. Olbara G, Martijn HA, Njuguna F, al. e. Influence of health insurance status on childhood cancer treatment outcomes in Kenya Support Care Cancer. 2020;28 917–24 (https://doi.org/10.1007/s00520–019–04859–1).

28. Friedrich P, Lam C, Kaur G, Itriago E, Ribeiro R, Arora R. Determinants of Treatment Abandonment in Childhood Cancer: Results from a Global Survey. PLoS ONE. 2016;11 (https://doi.org/10.1371/journal.pone.0163090).

29. Expanding childhood cancer services. Geneva: World Health Organization; (https://www.who.int/southeastasia/activities/expanding-childhood-cancer-services, accessed 18 December 2025).

30. Research and development landscape for childhood cancer: a 2023 perspective. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373665). License CC BY-NC-SA 3.0 IGO.

31. Hunleth J, Burack S, Kaufman L, Mohrmann C, Shato T, Wiedenman E et al. Inequities in childhood cancer research: a scoping review. EJC Paediatric Oncology. 2024;4 (https://doi.org/10.1016/j.ejcped.2024.100171).

32. Trigoso V, Vásquez L, Fuentes-Alabi S, Pascual C, Méndez T et al. Standards for psychosocial care in pediatric cancer: adapted proposal for Latin American and Caribbean countries. Revista Panamericana de Salud Pública. 2023; 47 (https://iris.paho.org/handle/10665.2/58351). License CC BY-NC-ND 3.0 IGO.

33. The selection and use of essential medicines 2023: web annex B: World Health Organization Model List of Essential Medicines for Children: 9th list (2023). Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/371091). License CC BY-NC-SA 3.0 IGO.

34. The selection and use of essential medicines, 2025: WHO Model List of Essential Medicines for Children: 10th list. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/382242). License CC BY-NC-SA 3.0 IGO.

35. Maas MR, Yang A, Muir MA, Collins JB, Canter C, Tamamyan G et al. Evaluating implementation of a hospital-based cancer registry to improve childhood cancer care in low- and middle-income countries. Cancer Medicine. 2024;13:e70125 (https://doi.org/10.1002/cam4.70125).

36. Vasquez L, Maradiegue E, Rojas N, Montoya J, Zapata A, Ugaz C et al. Catalyzing Childhood Cancer Care in Peru After One Year of the Global Initiative for Childhood Cancer. JCO Global Oncology. 2021;7 (https://doi.org/10.1200/GO.20.00601).

37. Maradiegue E, Pascual C, Vasquez L, Maza I, Ugaz C, Montoya J et al. Strengthening public health policies for childhood cancer: Peru's achievements through the WHO Global Initiative for Childhood Cancer. Revista Panamericana de Salud Pública. 2023;47 (https://doi.org/10.26633/RPSP.2023.132).

38. Vásquez L, Fuentes-Alabi S, Benitez-Majano S, Ribeiro KB, Abraham M, Agulnik A et al. Collaboration for success: the Global Initiative for Childhood Cancer in Latin America. Revista Panamericana de Salud Pública. 2023;47:e144 (https://iris.paho.org/handle/10665.2/57978). License CC BY-NC-ND 3.0 IGO.

39. Political declaration of the fourth high-level meeting of the General Assembly on the prevention and control of noncommunicable diseases and the promotion of mental health and well-being (A/80/L.34). New York: United Nations General Assembly; 2025 (https://docs.un.org/en/A/80/L.34).

40. WHO report on cancer: setting priorities, investing wisely and providing care for all. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/330745). License CC BY-NC-SA 3.0 IGO.

41. WHO South-East Asia regional strategy for comprehensive cancer prevention and management 2024–2030. New Delhi: World Health Organization, Regional Office for South-East Asia; 2024 (https://iris.who.int/handle/10665/378875). License CC BY-NC-SA 3.0 IGO.

42. Daltveit D, Morgan E, Bardot A, Steliarova-Foucher E, Damie A, Hagenimana M et al, Childhood cancer survival in Africa, Asia, Latin America and the Caribbean, during 2008–2017 (SURVCAN-3): a population-based benchmarking study of 16 821 children. Journal of the National Cancer Institute. 2025;jaf321 (https://doi.org/10.1093/jnci/djaf321).

43. Accelerating the development of priority formulations in childhood cancer: target product profiles for paediatric formulations of cyclophosphamide, etoposide, mercaptopurine, methotrexate, procarbazine, temozolomide. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/383037). License CC BY-NC-SA 3.0 IGO.

Annex. WHO global and regional lymphoid leukaemia five-year median survival estimates

Fig. A1. Global five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) for a) children aged 0–14 years and b) adolescents aged 15–19 years

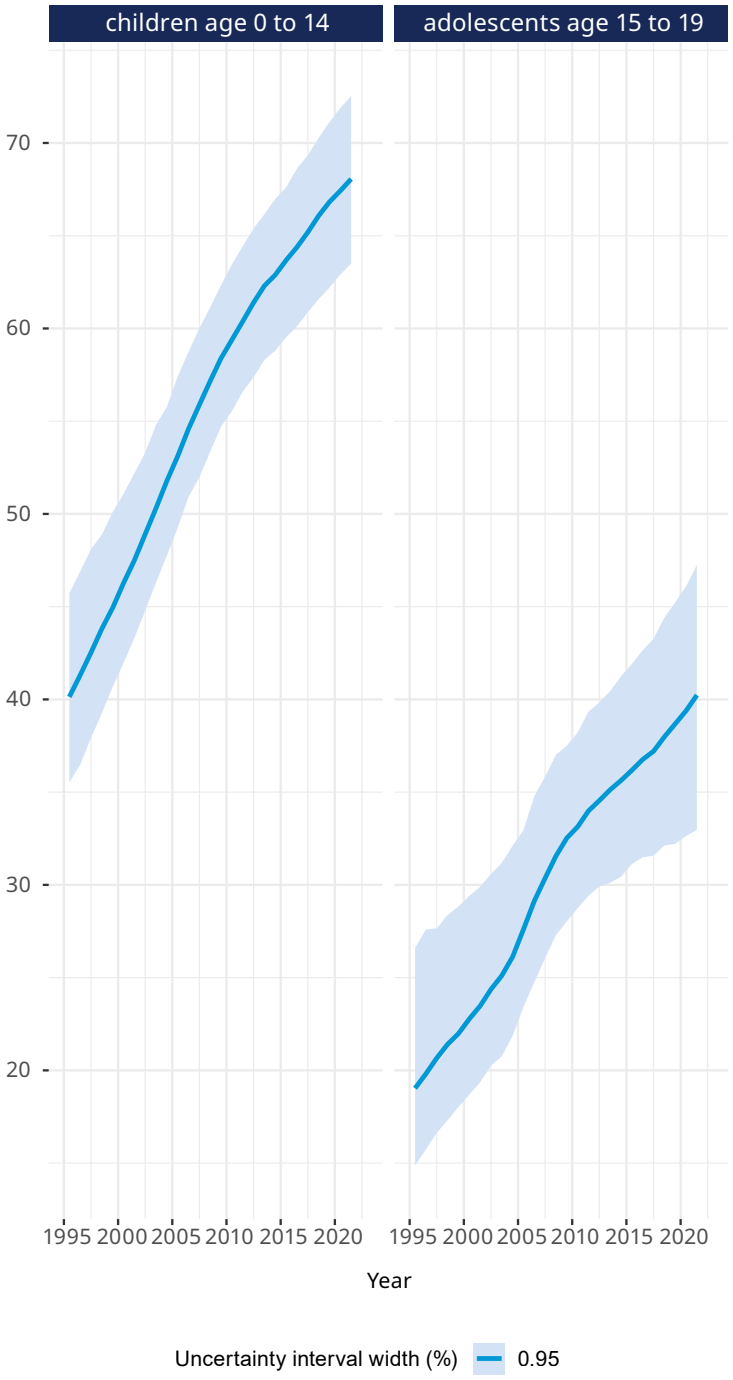


Fig. A2. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemias combined (ICCC-3 group Ia) in the WHO African Region for a) children aged 0–14 years and b) adolescents aged 15–19 years

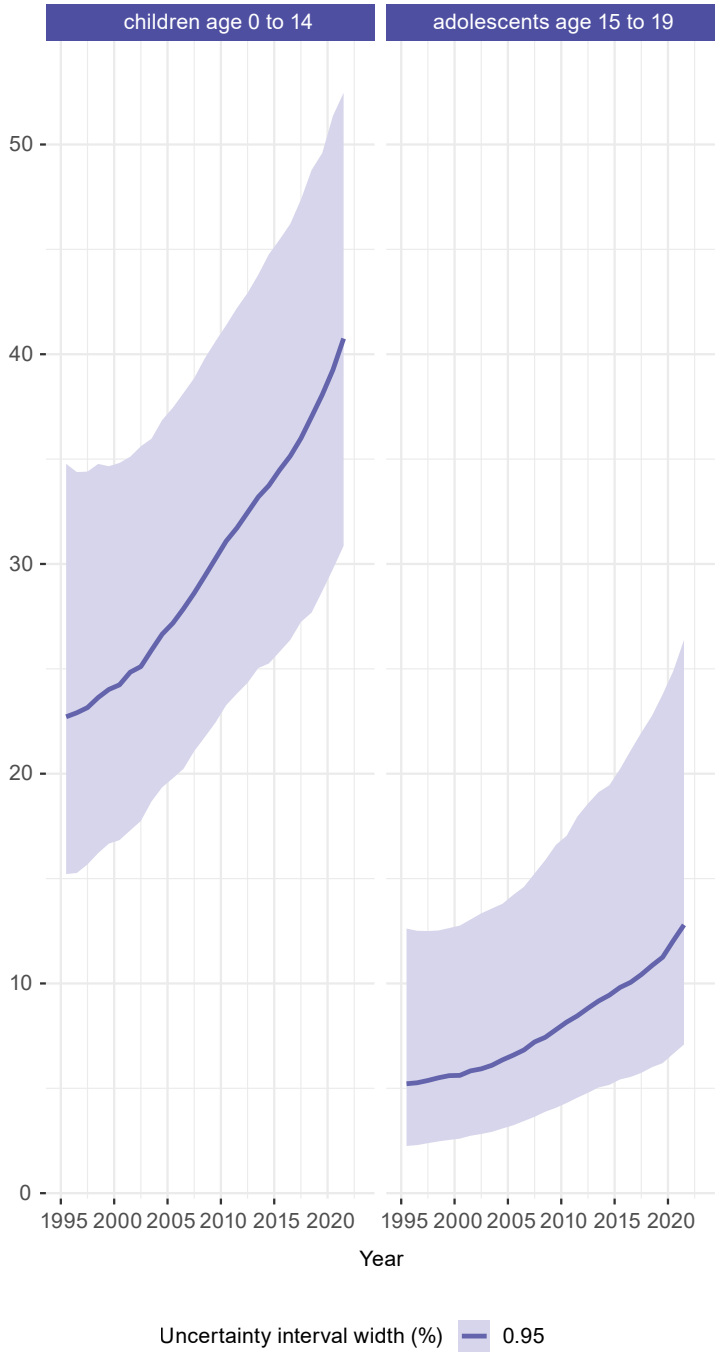


Fig. A3. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) in the WHO Region of the Americas for a) children aged 0–14 years and b) adolescents aged 15–19 years

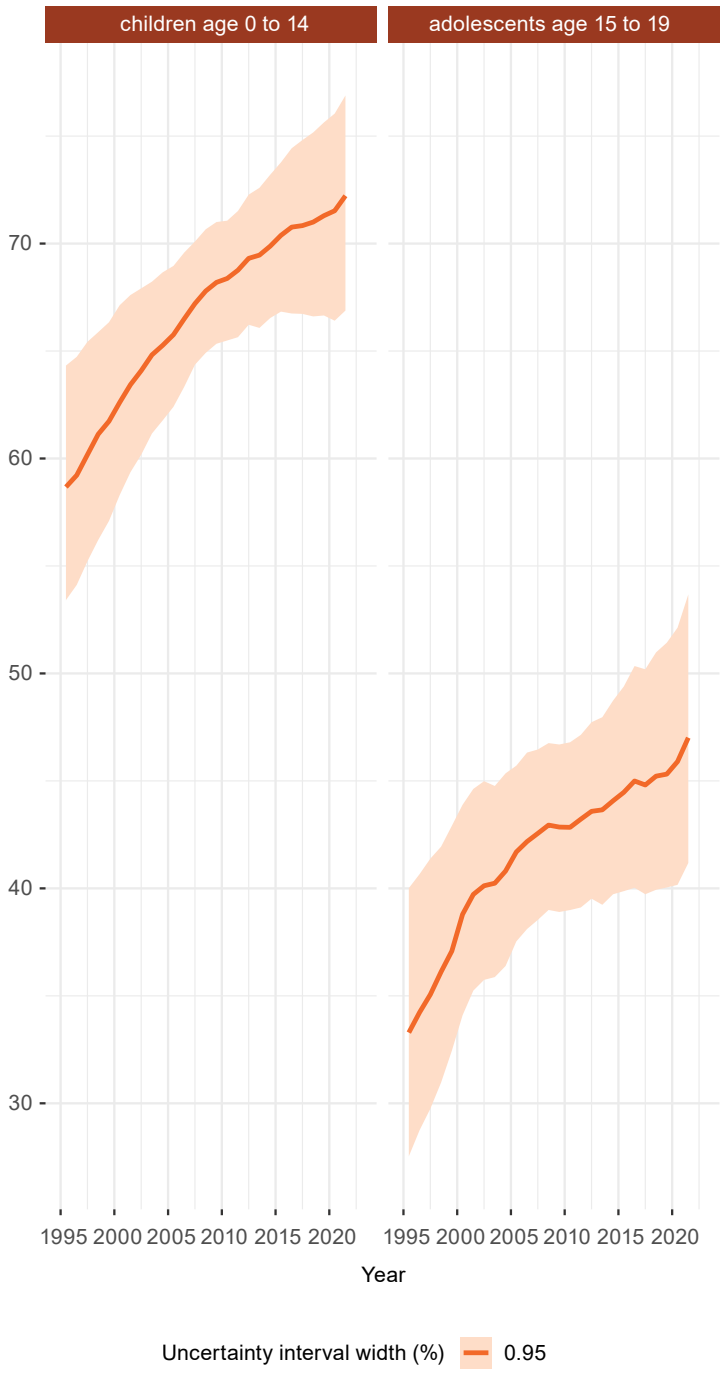


Fig. A4. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) in the WHO South-East Asian Region for a) children aged 0–14 years and b) adolescents aged 15–19 years

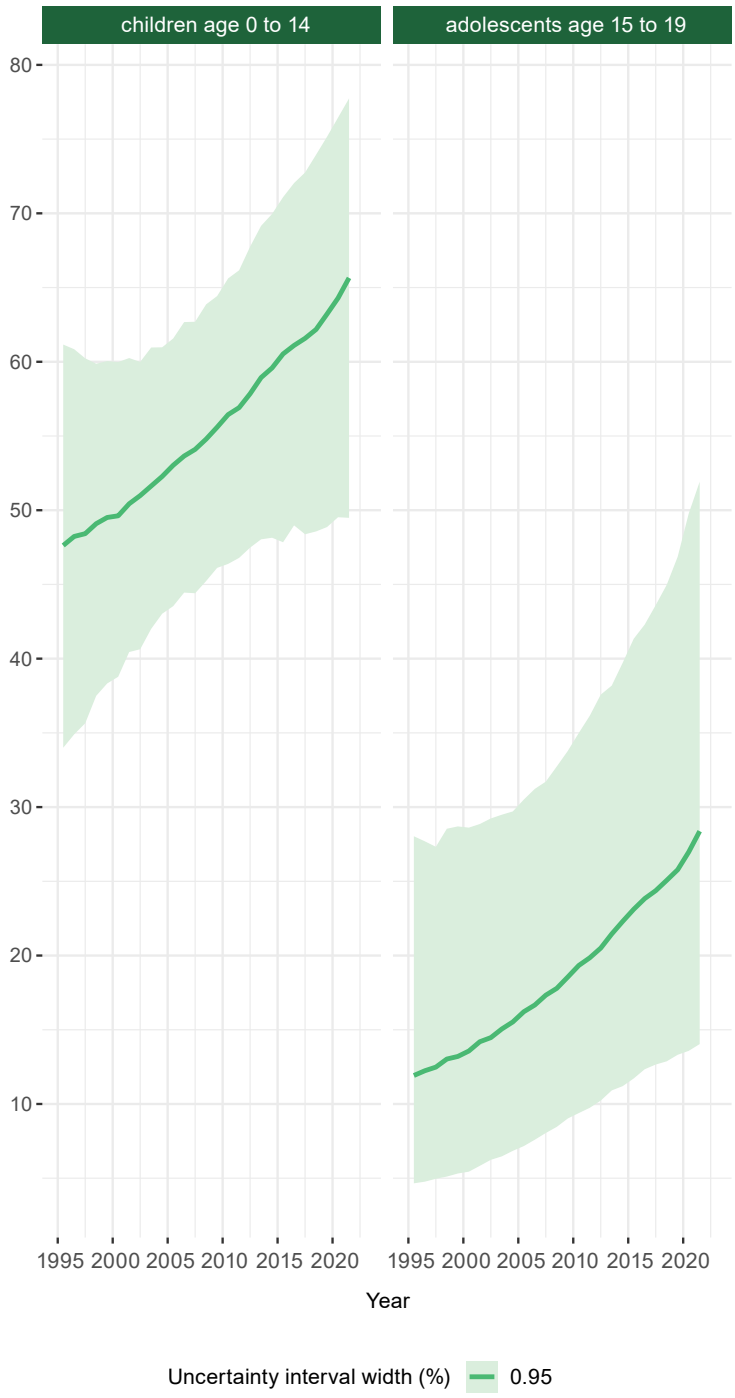


Fig. A5. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) in the WHO European Region for a) children aged 0–14 years and b) adolescents aged 15–19 years

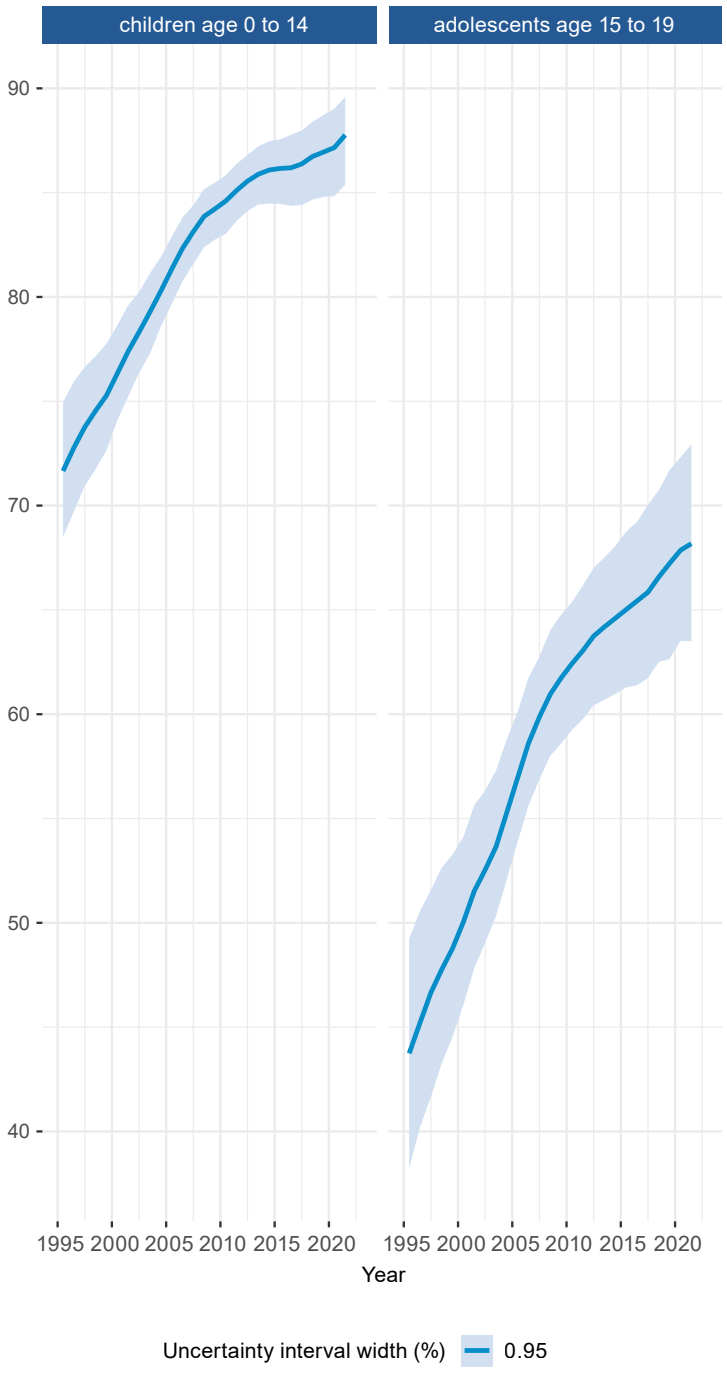


Fig. A6. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) in the WHO Eastern Mediterranean Region for a) children aged 0–14 years and b) adolescents aged 15–19 years

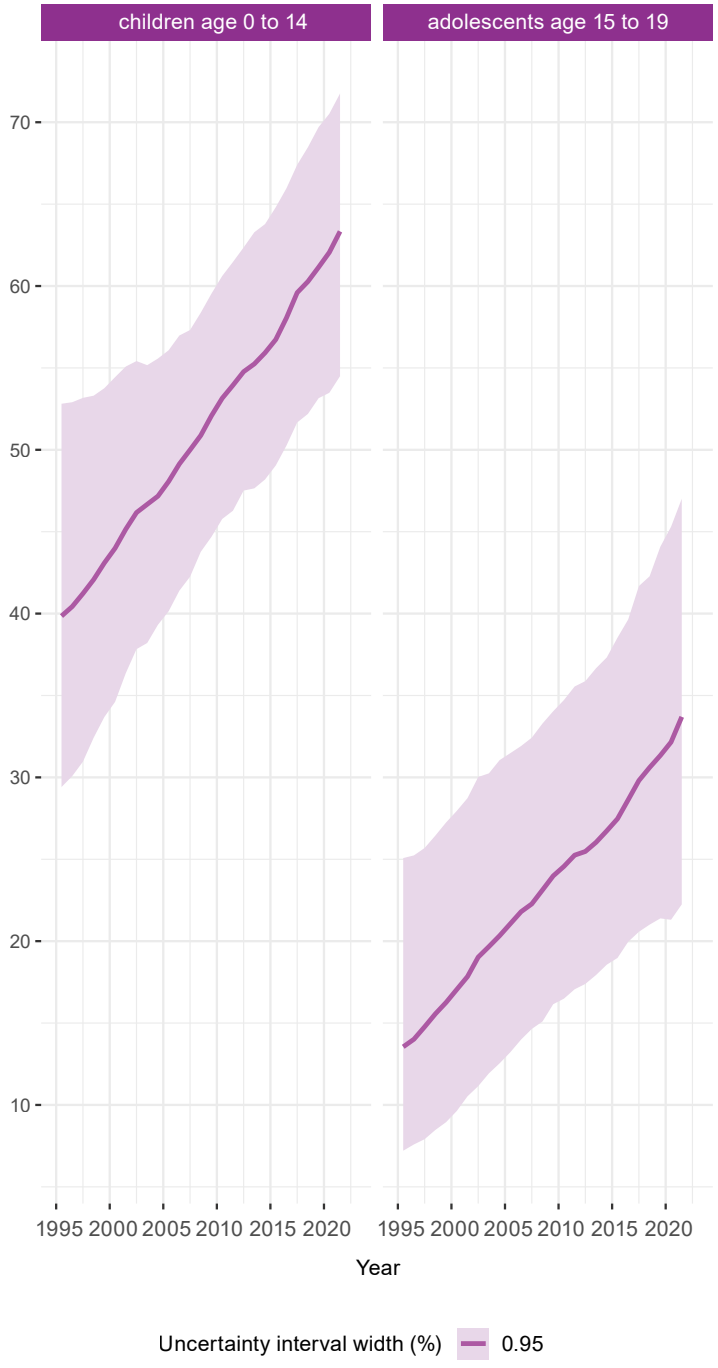


Fig. A7. Five-year net survival (%) for children and adolescents diagnosed with lymphoid leukaemia combined (ICCC-3 group Ia) in the WHO Western Pacific Region for a) children aged 0–14 years and b) adolescents aged 15–19 years

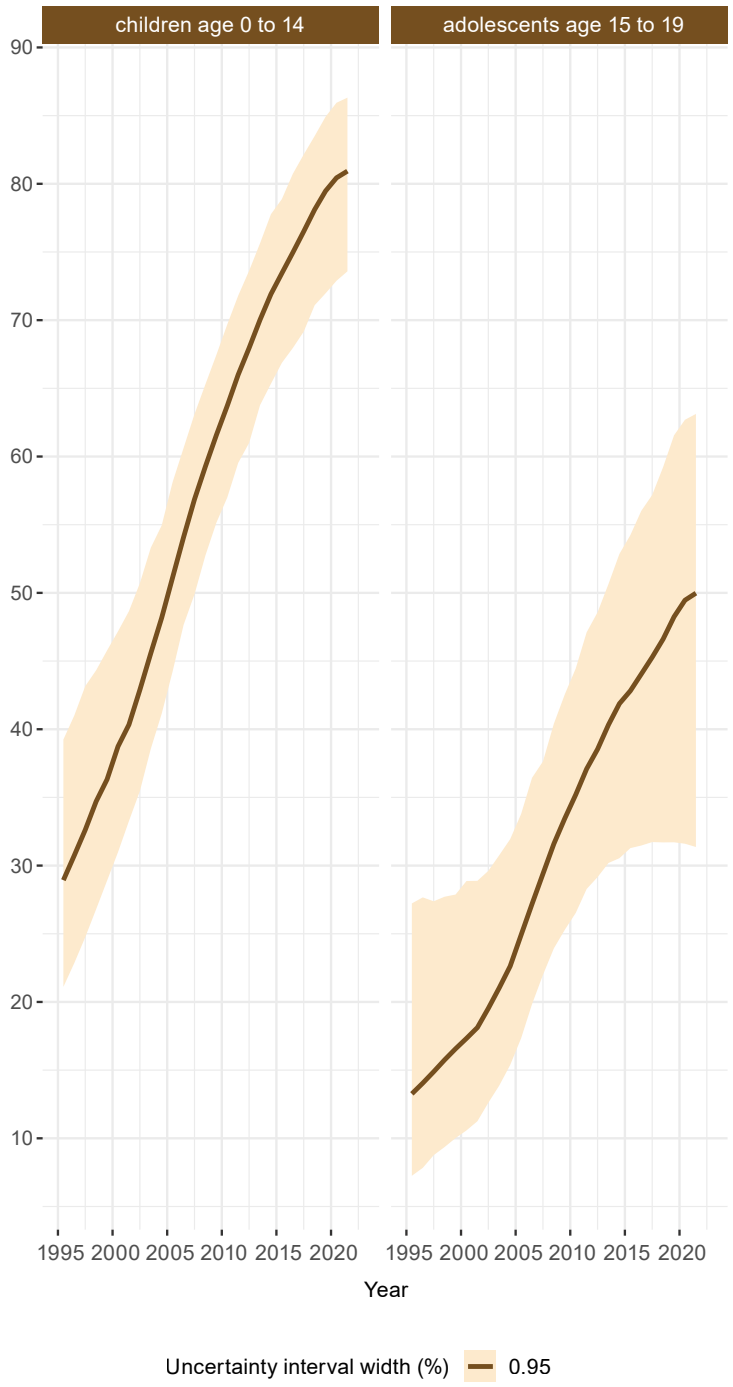
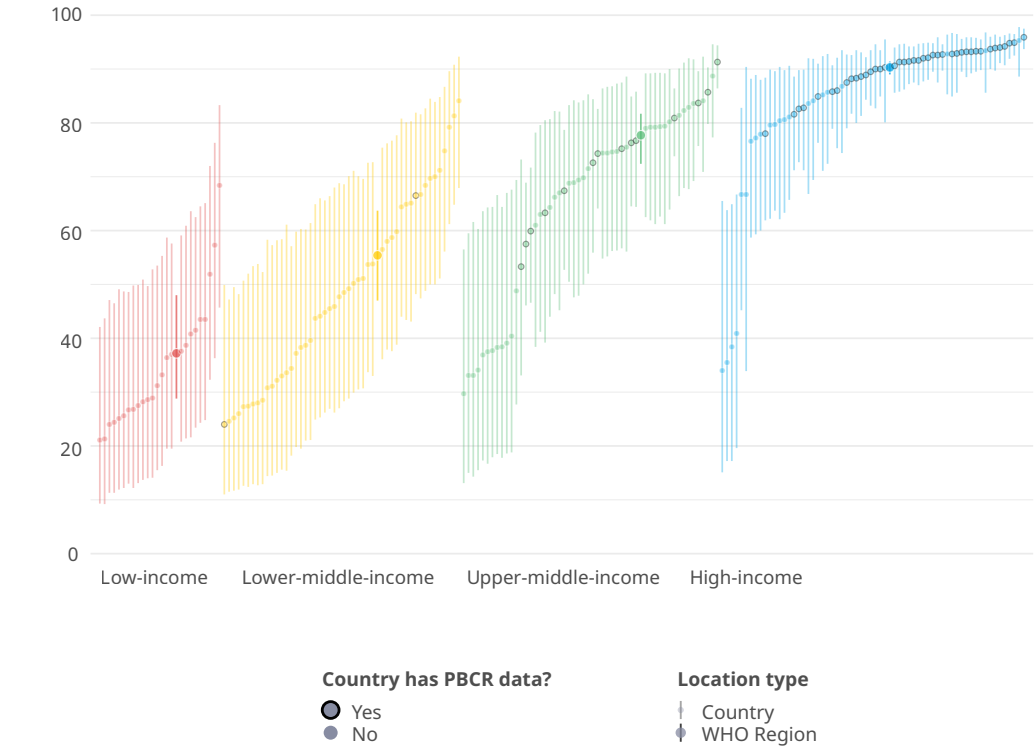


Fig. A8. WHO estimates of childhood and adolescent lymphoid leukaemia five-year survival from 2017 to 2021, by country World Bank income for A) children aged 0–14 years and B) adolescents aged 15–19 years

A.

Children aged 0 to 14 years



B.

Adolescents aged 15 to 19 years

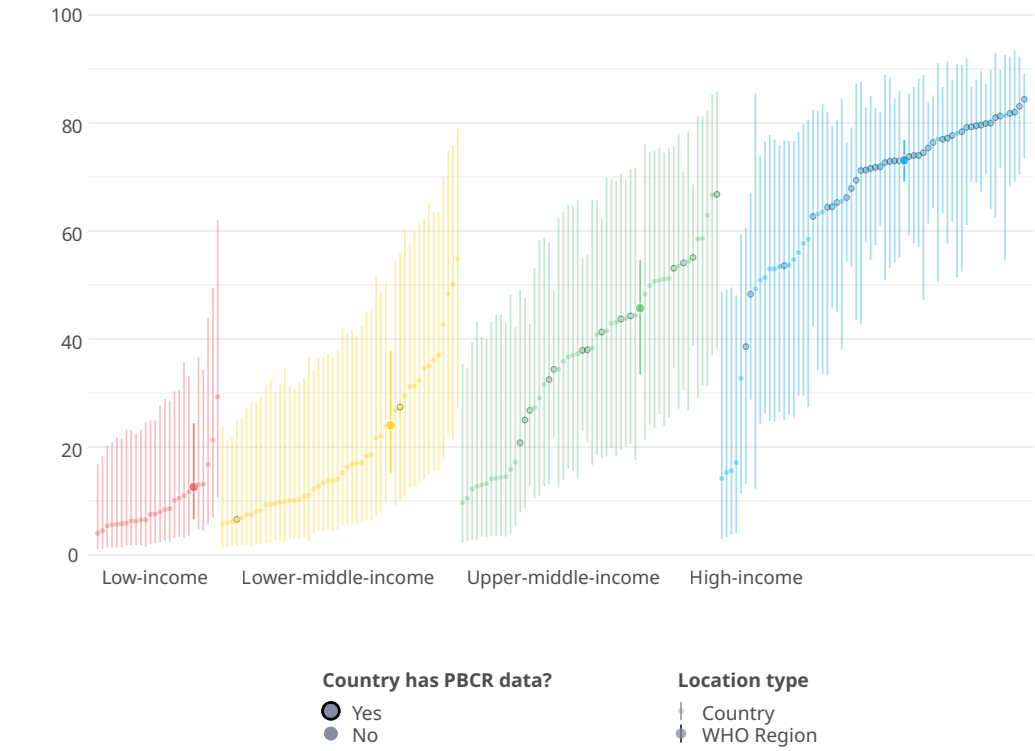
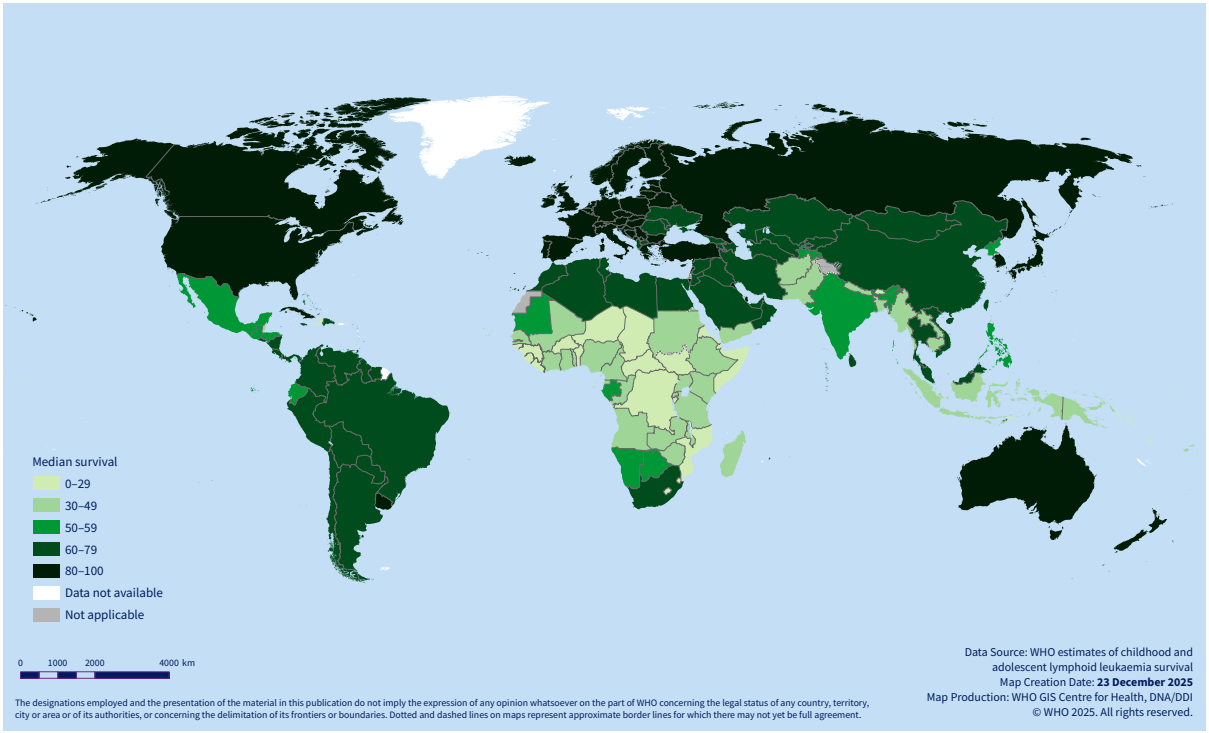


Fig A9. WHO estimates of childhood and adolescent lymphoid leukaemia five-year survival for observed and projected childhood cancer diagnoses between 2000 and 2021



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