



WHO Global Initiative for Childhood Cancer: **An Overview**

WHO GLOBAL INITIATIVE FOR CHILDHOOD CANCER: **AN OVERVIEW**

Every day, more than 1,000 children are diagnosed with cancer. This news sets all concerned on a demanding and life-changing journey. For children in high-income countries, more than 80% survive **(Figure 1)**. This has been a great achievement in science, innovation and public health.

But, for many children living in low- or middle-income countries, the reality is death and immense family strain. The impact translates to lost potential, greater inequalities and economic hardship. This can and must change.

The World Health Organization (WHO) Global Initiative for Childhood Cancer aims to improve outcomes for children with cancer around the world. The goal is to give all children with cancer the best chance to survive, to live full and abundant lives and to live and die without suffering. Working across borders, sectors and disciplines, we can create a better future for children with cancer.

Figure 1: Inequities in outcomes





ONLY ABOUT OF CHILDREN OF CHILDREN WILL CANCER WILL SURVIVE IN SOME LOW- AND MIDDLE-INCOME COUNTRIES



Photo credits: American Childhood Cancer Organization





CHILDHOOD CANCER: A PUBLIC HEALTH THREAT

Of the estimated 400,000 children diagnosed with cancer each year, most live in low- and middle-income countries. For them, treatment is often unavailable or unaffordable. Only about 20–30% of those children survive, compared to more than 80% in high-income countries.

This inequity threatens the attainment of universal health coverage. It also threatens the realization of other political commitments in the 2030 United Nations (UN) Agenda for Sustainable Development **(Figure 2)**. Inequities are common in childhood cancer. Children in lower-resourced settings are often unable to access care. Financial hardship for familiies is all too common. Some children may disproportionately suffer long-term side effects and experience discrimination.

We can level these inequities. Every child with cancer deserves better care. This is the time for action. People around the globe have already begun to act. Governments have committed to prioritize action on childhood cancer in World Health Assembly Resolutions. Communities have come together. Momentum is growing. The WHO Global Initiative for Childhood Cancer has been launched in September 2018. A clear target has been set.

THE GOAL OF THE GLOBAL INITIATIVE IS TO ACHIEVE AT LEAST A

AND TO REDUCE SUFFERING FOR ALL CHILDREN WITH CANCER BY 2030. **1 MILLION** CHILDREN WITH CANCER CAN BE SAVED IN THE NEXT DECADE.



LINKS BETWEEN EFFECTIVE CHILDHOOD CANCER CONTROL AND THE SDGs

1 № Ř¥ŘŘŤ	Financial protection from catastrophic illness like cancer reduces poverty	6 CLEAN WATER AND SAMILATION	Universal access to clean water and sanitation can reduce rates of infection-related complications.
2 ZERO HUNGER	Reducing hunger and malnutrition improves childhood cancer outcomes	8 DECENT WORK AND ECONOMIC GROWTH	Investing in diverse occupations required for care stimulates local economic growth and employment.
3 GOOD HEALTH AND WELL-BEING	Investing in childhood cancer supports attainment of multiple health related targets	10 REDUCED INEQUALITES	Promote access to care for all communities to reduce catastrophic health expenditure and inequalities.
4 EDUCATION	Educational services needed for children with cancer requiring prolonged hospitalizations	16 PRACE, JUSTICE AND STRONG INSTITUTIONS	Investing in child health promotes social stability and reduces exploitation and discrimination
5 EQUALITY	Promote access to care that is not discriminatory against girls and enables mothers and families.	17 PARTNERSHIPS FOR THE GOALS	Multi-sectoral collaboration and international cooperation improve childhood cancer outcomes



WHAT IS THE WHO GLOBAL INITIATIVE FOR CHILDHOOD CANCER?

To save lives and reduce suffering of children with cancer, this initiative seeks to **(Figure 3)**:

- increase countries' capacity to provide quality services for children with cancer
- prioritize childhood cancer nationally, regionally and globally to spark action

This is done by developing strategic action plans, led by governments and supported by individuals and groups across sectors. We will connect vital partners to advance comprehensive childhood cancer services. Other cancer and child health services will benefit from the strengthened health systems.

A technical package, **CureAII**, will guide countries as they carry out the Global Initiative. The outcome will be stronger health systems and improved care of children.



Goal	By 2030, achieve at least 60% survival for childhood cancer globally and reduce suffering for all Save one million additional lives						
Objectives	 increase capacity of countries to provide quality services for children with cancer, and increase prioritization of childhood cancer at the global, regional, and national levels Implemented across 6-10 countries (by 2019-2020) and 18-25 countries (by 2021-2023) 						
	National		Regi	onal		Global	
Outputs & Activities	Case Studies, Support		and Dia Snapshots,	Regional Assessment and Dialogues, Snapshots, and Policy Briefs		Global Framework, Technical Package, Dashboard, and Advocacy Materials	
	CureA// Children with Cancer						
Approach: Technical Package	Centres of Excellence and Care Networks with sufficient competent workforce	w par org	ersal Health Coverage ith benefit ckages and janizational els for quality services	Regimens for Management with context-appropriate guidance, essential technologies & medicines		Evaluation and Monitoring with quality assurance and robust information systems	
	Advocacy Leveraged		l Financing		inked Policies/ Governance		
	Acces		orting Coherent Coverage of Servi				



THE Cure*All* TECHNICAL PACKAGE

CureA*II* is an acronym used to identify the four key pillars and three enablers of the Global Initiative **(Figure 3)**. This package outlines an approach to assess a country or region's current situation, develop an action plan, implement and monitor progress. The approach includes tools, standards and support.

Pillars:

- Centers of excellence and care networks with
 enough trained workers to deliver services;
- Universal health coverage for comprehensive and essential quality services;
- Regimens and roadmaps for diagnosis and treatment. These tailored plans will aid delivery of quality services through evidence-based technologies and medicines;
- Evaluation and monitoring. Robust information systems and research will ensure effective implementation, quality assurance and constant improvement.







Photo credits: 300-Bedded Mandalay Children Hospital

Photo credits: CanKids KidsCan





Cross-cutting enablers:

- Advocacy
- Leveraged financing
- Linked governance

Our first focus is six common cancers that can • help us see what is working well, and where we • can improve. Together, they represent 50–60% • of all childhood cancers. These diseases are highly curable with proven therapies **(Figure 4)**. They are: E

- Acute lymphoblastic leukemia (a blood cancer)
- Burkitt lymphoma (a fast-growing lymph gland cancer)
- Hodgkin lymphoma (a lymph gland cancer)
- Retinoblastoma (a childhood eye cancer)
- Wilms tumor (a childhood kidney cancer)
- Low-grade glioma (a brain cancer)

By improving care in these diseases, we can make progress across all childhood cancers.

Figure 4:

Six common, tracer cancers for the Global Initiative



Acute Lymphoblastic Leukemia Most common worldwide



Burkitt Lymphoma Common in many low-income countries



Hodgkin Lymphoma Common in adolescents



Retinoblastoma Connecting communities for early diagnosis



Wilms Tumor Connecting multidisciplinary services



Low-Grade Glioma Connecting health systems

From addressing common challenges... ...to connecting

to connecting... vital partners

Highly curable, with proven therapies

Prevalent in all countries

Represents 50-60% of all childhood cancers Helps to advance comprehensive childhood cancer services and systems strengthening

Photo credits: Center for Cancer and Blood Disorders and Department of Radiology, **Children's Hospital Colorado, University of Colorado, USA**.

A COUNTRY, REGIONAL AND GLOBAL EFFORT

The WHO Global Initiative for Childhood Cancer spans country, regional and global levels **(Figure 5)**. It relies on WHO regional and country offices as well as national and state governments. Their actions are supported by academic institutions, nongovernmental organizations (NGOs) including parent support and advocacy groups, private sector entities and philanthropic foundations. These networks and partners are designed to serve the needs of children and their family.

Focus countries have been selected to pilot the Global Initiative **(Box 1)**. Other partners will join as the initiative grows. This collaboration will help extend benefits across all regions. It is important to share lessons learned as the **CureAII** framework is applied. Those details will help the initiative reach its targets and save more children.



Box 1:

Early Progress in the Global Initiative

Since the Global Initiative's launch in 2018, focus countries have been selected. Initial focus countries include Chana, Morocco, Myanmar, Peru, the Philippines, Senegal, Sri Lanka, Ukraine, Uzbekistan and Zambia. The governments of these countries have committed to improve childhood cancer care and outcomes and reduce suffering. Each country has defined priorities and begun implementation. Actions have been developed and new coalitions have formed. Significant progress has occurred. New legislation now includes childhood cancer care as an essential service. New members of the workforce are being trained. Countries beyond the initial focus countries are prioritizing childhood cancer. They are supporting access to childhood cancer





medicines and including childhood cancer in national strategies. A crucial part of this effort is to monitor progress. This is fed back via workshops and communities of practice. In light of the impact of COVID-19 on cancer programmes and implementing this Initiative, virtual approaches are being explored and broader strategies are being developed to support governments build back better.

Figure 5:

Select locations of focus countries and sub-regions per WHO Region

Americas (AMR)
Africa (AFR)
Eastern Mediterranean (EMR)
Europe (EUR)
Western Pacific (WPR)
South-East Asia (SEAR)

Photo credits: American Childhood Cancer Organization

Common activities at the global level include: carry out the **CureA***II* technical pac kage; support dialogue across sectors to strengthen the cancer care workforce and increase access to cancer medicines and technologies; provide platforms to set priorities, research and exchange best practices; coordinate global reporting on progress

Common activities at the regional level

include: develop and sustain a governance structure for shared objectives and results; facilitate participation in regional practice networks through WHO Knowledge Action Portal (KAP); support dialogue among neighboring countries regarding regional centers for training, clinical or logistics needs; coordinate country-level action; and align country strategies with regional priorities.

Common activities at country level include: use a four-step process (assess, plan, implement and monitor/modify) to implement a tailored CureAII approach for each country. (Figure 7).



Photo credits: Bless Child Foundation, Uganda/Brian Walusimbi



Figure 6: Strategic activities by level of action

GLOBAL INITIATIVE

- Set the global agenda
- Develop global norms and standards
- Provide platform for shared best practice, research and innovation
- Support multisectoral dialogue to strengthen workforce and increase access to cancer product
- Coordinate global reporting on progress indicators

REGIONAL ACTION

- Provide regional governance structure to define and accomplish shared outputs
- Support dialogue among neighboring countries and centres
- Coordinate countrylevel action
- Align country-specific strategies

COUTNRY ACCELERATION

- Define needs
 for in-country
 implementation
- Convene stakeholders across sectors toward shared objective
- Apply four-step process to scale-up capacity
- Generate case studies and best practice



IMPLEMENTATION OF CureAll

1. Assess the current childhood cancer situation

The first step is to assess the current situation of childhood cancer services, using existing data sources. These include registries and a special tool for the Global Initiative. Assessments take place at national and institutional levels. They help stakeholders find highimpact opportunities across the health system. Outcomes include:

- stakeholder maps of activities by local, regional and international partners
- a snapshot of the nation's and facility's capacity
- a summary of the country's childhood cancer landscape

2. Plan, cost and finance

The next step is a national dialog, workshop or consultation. This is attended by key leaders and partners. They will create a plan of action. Country-identified priorities are matched with partners. The aim is to build on or expand areas of collaboration. Results might include:

- analysis of the situation with stakeholder input
- country-specific analysis of cost and priorities
- workforce planning analyses
- dialog to help integrate and align childhood cancer with national planning
- action plans

3. Implement programme:

Success requires partnership among governments, health facilities, partnering organizations, civil society, patient and parent support groups, and communities. Regional and local governance structures will support the alliance between community-based activities and government policies. The Global Initiative and its network can help implement and manage strategies for the six indexed childhood cancers, including palliative and supportive care.

4. Monitor and modify: Linked to the **CureAll** package, a core set of cancer indicators are being developed. These will support countries as they monitor and respond to programme needs. These indicators will also help countries focus on quality improvement and research priorities.



WHO and its partners have developed tools to enable this four-step process. **(Box 2)**. Case studies and best practices gathered during this process can be used to accelerate regional and global action. The Global Initiative has launched the **CureAII** communities of practice known as the Knowledge Action Portal. All partners have key functions in this four-step process to contribute, to inspire and to share best practices (**Figure 7**).

Figure 7:

Functions of partners in the four implementation steps of CureAll



Focus countries can select from sample projects that span the phases of country action as well as **CureA***II* elements (**Figure 8**).

Box 2: Sample selection of strategic **CureAll** tools and projects

The **CureA***II* technical package includes a range of WHO resources such as:

- Tool to help set priorities, budgets and health system plans: This module builds on WHO and United Nations tools used in national health planning. It will help national decisionmakers understand the impact, cost and feasibility of cancer interventions. It will also help them identify the best scale-up scenario and produce an investment case.
- Tools to enable a policy dialogue in health workforce planning: The WHO Human Resources for Health 2030 framework can be customized to help users address workforce shortages.
- WHO management guidance for six index childhood cancers and supportive care: New resources will be developed to guide management across various care settings. These resources will also support research and innovation at national levels.
- Access to cancer health products: This programme will help manage barriers to accessing cancer medicines and technologies. It will focus on the challenges of obtaining childhood cancer medicines. The approach will span sectors to address the needs of each country.
- Dataset for cancer registries and programme monitoring: A core set of measures is to be specified and country support provided for indicators linked to quality assurance.





Photo credits: CanKids KidsCan



Figure 8: Sample strategic projects to be developed in focus countries, across country phases of action and **CureAII** elements

CureAll Core Projects



۱.	Analysis of cancer health system
2.	National Cancer Control strategy development/implementation
3.	Implementation of cancer workforce training packages
4.	National network and referral pathway strengthening
5.	Defining national standards and guidelines for index cancers
	Essential medicines and technologies strengthening, including via UN
	Economic analysis and benefit packages review of cancer
8.	Strengthening & linking cancer registries (population- & hospital-based)
9.	Country dashboard for childhood cancer monitoring
10.	Local/regional advocacy portfolios: case studies, awareness campaigns





Phases of Country Action





STAKEHOLDER ENGAGEMENT IN THE GLOBAL INITIATIVE FOR CHILDHOOD CANCER

Children with cancer and their families are at the center of this Initiative, surrounded by stakeholders across sectors. Each is motivated to create an environment that will improve access to high-quality care **(Figure 8)**. A core aim is to help governments and their partners to coordinate efforts and achieve this goal.

This Initiative boasts more than 100 participating organizations and hundreds of global experts. They have agreed to help governments create strategic plans and priorities. We can succeed when leading academic centers, professional societies, parent groups, philanthropic foundations and the private sector come together with a shared goal.

This Initiative and its partners have defined indicators to track progress and resources.

Focus countries have resources available. They can help define national models and practical approaches to address needs in childhood cancer care. The result will be regional and global dialogues and global visibility. In focus countries, specific priorities are matched to contributions from partners across sectors.

Select UN agencies have agreed to support the effort. These include WHO, the International Agency for Research on Cancer, the International Atomic Energy Agency, United Nations Children's Fund, and the UN Development Programme. Others have also dedicated expertise and resources, such as St. Jude Children's Research Hospital (a WHO Collaborating Center for Childhood Cancer), which supported the inception of the Global Initiative and contributed resources to develop and implement priority activities.



Photo credits: St. Jude Children's Research Hospital/Jere Parobek





CONCLUSION

Childhood cancer is curable when children have access to diagnostic, therapeutic and supportive care. This should be true for all children in all settings, yet for those with cancer in low- and middle-income countries, survival is still reduced, and death without pain control is too common. These inequalities in childhood cancer care are unacceptable and a threat to communities, economic development and social stability.

IF WE ACT NOW, WE CAN SAVE 1 MILLION LIVES OVER THE NEXT DECADE.

The justification is clear, and the action plan has been set. The Global Initiative for Childhood Cancer provides the framework and path for all countries to implement **CureAII** and improve the care and outcomes for all children with cancer.

We must equip partners with the tools to diagnose and save all children with cancer around the world. The Global Initiative will be successful if stakeholders unite to support governments in building capacity and promoting childhood cancer on the public health agenda.

The past 70 years have shown that progress can be made when we invest in systems to care for children with cancer and promote innovation. All countries can achieve a 60% survival target. Another generation of children with cancer globally rely on the actions we take now, together. Photo credits: St. Jude Children's Research Hospital/Jere Parobek

For more information:



www.who.int/cancer/childhood-cancer

CureAll Logo: WHO would like to thank Anya Broverman-Wray, Ruth I Hoffman and American Childhood Cancer Organization for their contributions.





