



EU Cancer Mission Cluster

Quality of Life • AYA

Working together to
improve the **quality of life** of
adolescents and young adults
affected by cancer



Funded by
the European Union

About the cluster



Adolescents and young adults (AYA), aged 15–39, affected by cancer often face long-term challenges that continue well beyond treatment. Alongside physical health impacts, many experience difficulties related to mental well-being, education, employment, relationships, and social participation.

Despite growing survival rates across Europe, survivorship support for AYA populations remains fragmented and uneven, with significant unmet needs persisting beyond treatment.

The **Quality of Life (AYA) Cluster** brings together six Horizon Europe projects working collaboratively to improve survivorship care and quality of life for young people living with and beyond cancer across Europe.

Aligned with the objectives of the **EU Mission on Cancer** and **Europe's Beating Cancer Plan**, the cluster contributes to a more coordinated European response to survivorship challenges affecting AYAs.

A collaborative approach

The Quality of Life (AYA) Cluster promotes collaboration across complementary Horizon Europe projects addressing survivorship and quality of life among AYA affected by cancer.

Together, the projects contribute to a more coordinated European approach to AYA survivorship research, innovation, and policy.



SCIENTIFIC COLLABORATION

Supporting knowledge exchange, alignment of research activities, and identification of synergies across survivorship and quality of life research.



DATA & DIGITAL INNOVATION

Promoting collaboration around digital health, AI-supported approaches, interoperability, and responsible data practices.



DISSEMINATION & POLICY OUTREACH

Strengthening coordinated communication, stakeholder engagement, and contribution to European survivorship policy discussions.

Working together to improve the quality of life of AYAs in Europe

Six projects. One cluster.

e·QoL

e-health tools to promote equality in quality of life for childhood to young adulthood cancer patients, survivors and their families - a pan-european project supported by PanCare and Harmonic consortia.

late aya

Understanding and addressing LATE-effects of treatment of AYA cancer survivors with AI-based digital phenotyping and non-invasive holistic approach.



Smart mirrors supporting healthier lives of AYA after cancer.



Patient-centred, evidence-based late effect screening and follow-up care of survivors of AYA cancer.



Predicting and preventing late effects in AYA cancer survivors, with a focus on fertility and reproductive health.



transcend-xr

Co-creation and implementation of an intervention to improve the understanding of testicular cancer late effects and unmet supportive care needs of AYA survivors using extended reality.

e-health tools to promote Equality in Quality of Life for childhood to young adulthood cancer patients, survivors and their families



Overview

e-health tools are already available for follow-up care of adult cancer patients, providing them recommendations; however, no such tools currently exist for children, adolescents, and young adult cancer survivors (CAYACS). The overall goal of e-QoL is to co-construct and develop e-health tools to promote equality in quality of life (QoL) for CAYACS in Europe.

Project at a Glance

Coordinator

CHU Angers, France

Duration

January 2024–December 2027

Partners

32 organisations / 16 countries

Website

<https://equolproject.eu>

GA No. 1136549

Key Objectives



Better understanding of the needs of CAYACS and their families in terms of supportive care and personalised counselling approaches.



Increased digitalisation of cancer care, with potential benefits for follow-up, research, and innovation.



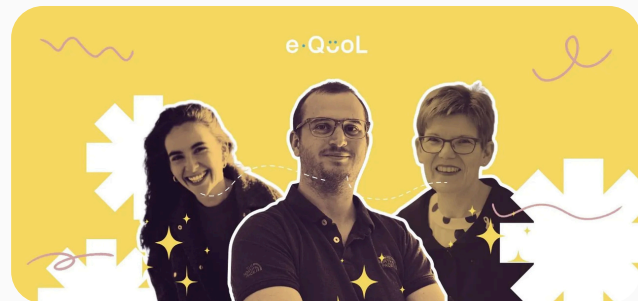
Better support for healthcare professionals, support workers, and counsellors working with CAYACS



Increased equitable access to survivorship passports/a new electronic tool within EU member States

Expected Impact

e-QoL project will provide children, adolescents and young adults who have survived cancer e-health tools designed specifically for and with them to manage their health during their survivorship journey.



Understanding and addressing LATE-effects of treatment of AYA cancer survivors with AI-based digital phenotyping and non-invasive holistic approach

late
aya

Overview

LATE-AYA aims to empower AYAs living beyond cancer to better manage their health and well-being by developing an AI-driven digital platform for managing the late effects of cancer treatment. The project will implement a holistic, non-invasive approach using smartphones and wearables to monitor physical, psychological, and social well-being.

Project at a Glance

Coordinator
Universidad Politécnica de Madrid, Spain

Duration
June 2025 - May 2030

Partners
19 organisations / 8 countries

Website
<https://www.late-aya.eu/>

GA No. 101214326

Key Objectives



Early identification of AYAs living beyond cancer who experience side effects that impact their QoL; proposes personalised interventions.



Collects large sets of biometric, behavioural and social activity data using smart device sensors (mobile apps and smartwatches).



Analyses collected data (through AI models) to predict the risk of late effects onset and relevant QoL trends.



Supports AYAs in self-management, empowerment and education through a personalised set of chatbot-supported messaging services.

Expected Impact

LATE-AYA will develop a data-driven, personalised care system for AYA cancer survivors. Combining wearable devices, AI-based analysis, and chatbot-supported coaching, the project will enable early diagnosis and improved management of late effects. It will generate an evidence-based digital platform that will empower AYAs, support caregivers and clinicians, and inform future guidelines. LATE-AYA aspires to standardise digital follow-up models across Europe, improving quality of life and long-term health outcomes for young cancer survivors.

Smart Mirrors supporting healthier lives of Adolescents and Young Adults after cancer



Overview

MAYA envisions a future where AYA cancer survivors are empowered to manage their cardiovascular health and lifestyle with the support of innovative digital tools specifically designed to address cardiotoxic-related late effects of cancer treatment, from the convenience of their homes.

Key Objectives



Empower AYA cancer survivors to manage their cardiovascular health through digital tools.



Address cardiotoxic-related late effects of cancer treatment with an expected reduction in the risk of major cardiac events by 30-40%.



Develop iCARE health hub, integrating a smart mirror and an AI-powered conversational agent, to deliver personalised care & continuous monitoring.



Develop participatory research methods including social innovation (co-research), multistakeholder engagement, and Living Labs.



Assess the feasibility and effectiveness of the iCARE health hub in pilot studies in 5 countries.

Project at a Glance

Coordinator
University of Ioannina, Greece

Duration
June 2025 - May 2030

Partners
16 organisations / 10 countries

Website
<https://maya-horizon.eu/>

GA No. 101213323



Expected Impact

MAYA empowers young cancer survivors to take control of their cardiovascular health by addressing the long-term heart effects of cancer treatment through innovative tools and targeted support. MAYA aims to reduce the risk of major cardiac events while promoting stronger physical health, emotional resilience, and social well-being. By integrating advanced monitoring technologies, multi-stakeholder engagement, Living Labs, and co-research, the initiative ensures that survivors, healthcare professionals, and communities work together to create meaningful, lasting impact.

Patient-centred, evidence-based late effect screening and follow-up care of survivors of adolescent and young adult cancer



Overview

The main aim of PanCare4AYA is to develop, test and scale-up evidence-based screening methods for the early detection of late effects in AYA cancer survivors as part of Survivorship Care to improve health and quality of life.

Project at a Glance

Coordinator
Prinses Máxima Centrum, Netherlands

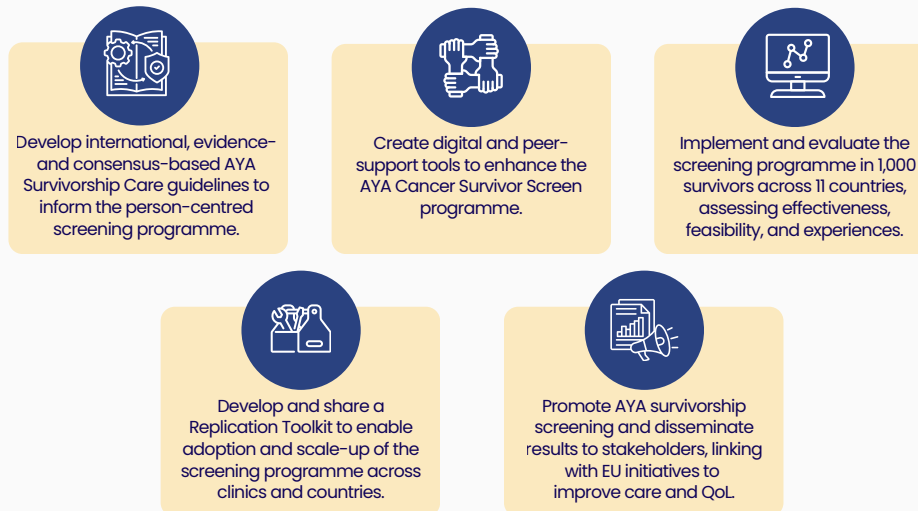
Duration
April 2025 – March 2030

Partners
29 organisations / 14 countries

Website
<https://www.pancare4aya.eu/>

GA No. 101213107

Key Objectives



Expected Impact

PanCare4AYA will widely disseminate findings to maximise impact on AYA cancer survivorship care. Key outcomes include an open-access Survivorship Care Guideline, plain-language brochures, a Replication Toolkit, and guidance for digital tools. These resources will support implementation and scale-up of the AYA Cancer Survivor Screen programme across Europe, inform healthcare practitioners, patients, caregivers, and policymakers, and promote evidence-based screening, follow-up, and digital readiness to improve advocacy and survivorship care for AYAs.

Predicting and preventing late effects in adolescent and young adult cancer survivors, with a focus on fertility and reproductive health



Overview

Many young cancer survivors face long-term health problems from the disease and its treatments, including infertility, and damage to reproductive organs or other organs. These late effects can impact quality of life. PredictAYA aims to understand the long-term effects of cancer treatment in AYA survivors and find ways to prevent them. By studying why some survivors are more vulnerable than others, PredictAYA supports better risk prediction and personalised care, with a main focus on fertility and reproductive health.

Project at a Glance

Coordinator
Karolinska Institutet, Sweden

Duration
June 2025 – May 2030

Partners
18 organisations / 10 countries

Website
<https://predictaya.eu>

GA No. 101214879

Key Objectives



Identify cancer survivors at risk of developing late effects by studying how common these effects are and when they occur.



Assess how specific cancer treatments affect fertility, reproductive health, sexuality, and quality of life of young survivors.



Develop a model to predict the risk of reproductive problems after cancer treatment based on genetic factors.



Determine which young cancer survivors should be screened for late effects of cancer treatment and when, to support early detection.



Assess the safety and effectiveness of fertility preservation for young survivors, and evaluate their experiences to improve access to care.

Expected Impact

PredictAYA empowers young cancer patients and survivors with better information about possible late effects, supporting informed choices, early follow-up care, and improved QoL. The project develops clinical guidelines on reproductive health to support healthcare professionals in offering personalised screening and advice to patients. PredictAYA contributes to implementing the EU Cancer Mission by providing knowledge and tools for more personalised survivorship care and fertility preservation for young survivors across Europe.

Co-creation and implementation of an intervention to improve the understanding of Testicular cANcer late effects and unmet Supportive Care Needs



Overview

The overall ambition of TRANSCEND-XR is to educate AYA testicular cancer survivors about the late effects of testicular cancer treatment and support them in attaining better quality of life during their survivorship journey in an ethically sound fashion. This will be achieved by co-creating, evaluating, and implementing an educational intervention using immersive extended reality technology.

Project at a Glance

Coordinator

University College Cork, Ireland

Duration

June 2025 - November 2030

Partners

15 organisations / 12 countries

Website

<https://transcend-xr.eu/>

GA No. 101214413

Key Objectives



Characterise the incidence, severity, and impact of late effects and unmet supportive care needs in AYA testicular cancer survivors.



Examine similarities and disparities in late-effect experiences across treatments and survivor demographics throughout Europe.



Co-create and validate a theory-based TRANSCEND-XR educational intervention with survivors, care partners, and healthcare professionals.



Evaluate the feasibility, effectiveness, and cost-effectiveness of the intervention through a pragmatic randomised controlled trial.



Assess implementation, ethical implications, policy relevance, and strategies to maximise uptake, impact, and long-term sustainability across Europe.

Expected Impact

TRANSCEND-XR will improve QoL for AYA testicular cancer survivors by reducing unmet supportive care needs and late-effect burden across Europe. Through ethical co-creation and rigorous evaluation, it will deliver an effective, cost-effective extended reality intervention scalable to real-world settings. The project will generate robust evidence to inform clinical practice, implementation, guidelines, and EU policy, while establishing a transferable model for equitable, sustainable digital education in cancer survivorship.

Looking beyond individual projects

Across Europe, AYA living with and beyond cancer continue to face major differences in access to follow-up care, psychosocial support, information and long-term survivorship resources.

While each project addresses these challenges from a different perspective, the **Quality of Life (AYA) Cluster** reflects a broader shift towards more connected, coordinated and survivorship-oriented approaches to care.

Together, these projects are contributing to the development of a European ecosystem focused on research, healthcare, digital innovation, lived experience, and policy dialogue. This collaborative effort aims to deepen our understanding of survivorship, enhance support for those affected, and meaningfully integrate survivorship into healthcare systems.

Follow the collective work of the Quality of Life (AYA) Cluster

digital
co-creation
quality of life
survivorship
personalised support
equity
connected care



Quality of Life • AYA

Discover the projects here



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