to control it, including poor surveillance systems, the lack of a cohesive approach, and under-resourced health-care systems with inadequate access to screening and treatment, meaning that many patients seek treatment abroad. The authors emphasise the urgent need for a more cohesive approach to cancer control and for capacity building across the cancer care continuum. This theme is explored further in the fourth paper of the Series, wherein Spence and coauthors again analyse the Caribbean islands and describe several promising strategies to improve cancer prevention and treatment in those islands that are part of the Caribbean Community (CARICOM). These advances include the development of a centralised Caribbean cancer registry hub and innovations in the delivery of specialty oncology services such as palliative care across the region. The final paper of the Series emphasises the need for proactive and collaborative approaches to address the cancer crisis in small island nations in the Pacific, Caribbean, and elsewhere in the world, both across the small islands and in partnerships with high-income countries. The authors describe funding and investment opportunities that could ultimately help to improve and strengthen cancer-related health systems in small island nations, including ways in which the international community could help to support cancer control efforts in these under-resourced countries.

Overall, this Series highlights the unique challenges facing cancer control in small island nations and suggests ways in which these problems can be addressed. The authors collectively suggest prioritising regional collaborative approaches, enhancing cancer prevention, improving cancer surveillance, increasing access to and quality of palliative care, and development of targeted treatment capacity. Communication, collaboration, and increased investment—especially through implementation of universal health coverage—will be key to successfully addressing the ongoing cancer crisis in small island nations, which are often overlooked in the broader global view of cancer control, but are arguably among the countries with the greatest need for improvements across all areas of the cancer care continuum. Ultimately, urgent action is needed to avoid major human and economic losses due to cancer in these small and vulnerable island nations.

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A European paediatric cancer mission: aspiration or reality?

The 2018 Mazzucato Report[1] for the European Commission outlined a mission-oriented approach for the next EU Framework Programme for Research and Innovation. The recent confirmation that cancer will be the topic for the health mission area[2] is very welcome and we strongly believe this should include a mission to beat childhood cancers.

Akin to cancer moonshot initiatives in the USA, European research missions will aim to attain specific and measurable objectives in a defined timeframe, concentrating efforts in areas of high societal need and public resonance. Childhood cancer is an obvious candidate for such a mission. It accounts for 20% of childhood deaths after infancy and is thus the leading cause of child mortality from disease in Europe.[3] Childhood cancer is also a major contributor to morbidity in survivors and an area in which market-based innovation has been slow and insufficient. Nevertheless, the European paediatric haematology-oncology community has an extensive track record in successful delivery of innovative research and clinical strategies from strong collaborative research networks that have markedly improved outcomes. The community is ideally positioned to deliver a further ambitious and integrated programme of international research. The impact would resonate with young patients with this life-threatening disease, the families who support them, the increasing number of adult survivors who are living with the consequences of treatment, and the general public, who will doubtless identify with the societal and economic benefits.

For the **Cancer Today database** see https://gco.iarc.fr/today/home

In Europe alone, there are more than 35 000 new cases annually and more than 6000 children and young people dying from cancer each year (data are from the Cancer Today database). There are almost half a million childhood cancer survivors in Europe today, and this number will increase over time. Two-thirds of survivors live with the long-term effects of treatment, which can be severe, altering the daily lives and socioeconomic participation of at least half of those affected.[4] The trend of increasing childhood cancer incidence in Europe[5] underscores the urgency in addressing these issues.

The improvements in the diagnosis and treatment of childhood cancers over the past four decades[6] were built on a strong foundation of cross-border, multidisciplinary, international research, more recently supported by EU Framework funding programmes.[7–9] Although there are distinct areas of research that uniquely address the needs of childhood cancer, active engagement with the adult cancer and rare disease communities is in place because of the important synergies, exemplified most recently in collaborations on the European Reference Network framework and the Joint Action on Rare Cancers. Fostering biology-driven therapeutic innovation, addressing the needs of children and teenagers with cancers typically diagnosed in adulthood, and long-term surveillance and outcome research in survivors are just some examples of areas common to both adult and paediatric cancer communities.

In 2015, the European Society for Paediatric Oncology (SIOPE), in partnership with the patient advocate groups Childhood Cancer International-Europe and Unite2Cure, published a well defined long-term strategic plan to increase survival and the quality of life for children and adolescents with cancer in Europe by 2025.[7] This strategic plan is now evolving to keep pace with emerging innovations. For example, the availability of immunotherapy for hard-to-treat blood cancers in children and the technological opportunities to explore big data herald a wave of opportunities to improve survival. Life-saving gains would be enabled by sustainable international research platforms, adopting a bottom-up approach to therapeutic innovation and implementing new solutions through a framework for structured collection, storage, and use of big data and artificial intelligence to deliver tailored solutions across the patient pathway.

In this evolving scientific landscape, the need for an increased focus on childhood cancer is recognised by the WHO global initiative in this disease area[7] and the US Government Moonshot programme.[8] Recent research[9] reveals substantial disparities across Europe in levels of research funding for childhood cancer. It is therefore timely for Europe to capitalise on its previous support of paediatric cancer projects by delivering a dedicated, substantial, and targeted investment in research and innovation to combat childhood cancer.

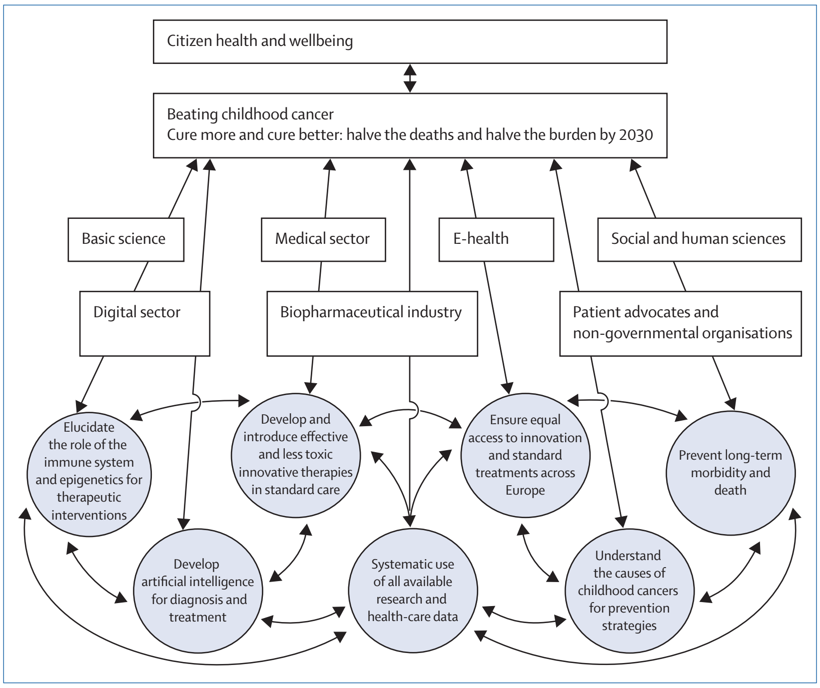

***Figure:* Society of Paediatric Oncology Europe proposal for an EU paediatric cancer mission**
Based on framework proposed by Mazzucato, 2018.[1]

The European strategic research priorities for childhood cancer are well defined, but now require strong investment in an integrated programme of research to realise the seven key objectives of the SIOPE strategic plan (figure). A European mission to beat childhood cancer could lead to a visionary and tangible change for children and adolescents with cancer and equalise survival across Europe while contributing to significant knowledge advancement in basic science for the benefit of all patients with cancer.

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Collection of routine cancer data from private health-care providers

Life in View/Science Photo Library

For more on the **National Cancer Registration and Analysis Service** see http://ncin.org.uk/home

The extent to which health care in the UK is funded through private insurance and out-of-pocket expenses has risen over the past 5 years.[1] Chemotherapy delivery and diagnostic endoscopies are the most frequently provided procedures in many parts of the UK.[2] In contrast to National Health Service (NHS) providers, private providers of cancer care are not mandated to submit data to the National Cancer Registration and Analysis Service, held by Public Health England. For NHS providers, these data include robust information on cancer incidence, stage, and treatments, including surgery, radiotherapy, and chemotherapy. These data support a range of crucial analyses at a national, regional, and provider level informing our understanding of cancer incidence, disease management, and outcomes. Currently, however, the data following private procedures are not routinely submitted, with limited diagnostic and treatment information available. Given the benefits of the intelligence derived from these data, the increase in private health-care provision and failure to routinely capture information from this sector might have substantial consequences both at a societal and patient level.

From a societal perspective, the identification of a survival gap between the UK and international peers has provided political and clinical motivation to invest in, and deliver, improvements in NHS cancer care over the past two decades. For example, increases in the use of surgery in the treatment of localised non-small-cell lung cancer can, in part, be attributed to previous unfavourable comparisons with international peers.[3]