Innovation and equity were the central themes of the 2021 World Cancer Leaders’ Summit, both in terms of the focus of discussions and in its delivery, as this year the event was held virtually for the first time. Over the course of the World Cancer Leaders’ Summit, more than 600 cancer leaders from 104 countries came together across 47 different sessions. These discussions explored different facets of innovation in cancer control and how – through targeted research, design and partnerships – innovations can be used to improve equity in cancer control.
In his opening address UICC President, Prof. Anil D’Cruz laid the foundations for discussions by reflecting on how the COVID-19 pandemic has shone a spotlight on many of the underlying inequities in health systems and how these continue to increase the cancer burden. Simultaneously, stakeholders have been pushed to think critically and creatively about how programmes and policies can be better designed to improve equity. The challenge for the cancer community is, therefore, how to best capture and scale-up innovations to set countries on course to deliver universal health coverage as well as achieve global cancer and NCD goals. He formally recognised the amazing support of the Summit hosts, the American Society for Clinical Pathology (ASCP) and the ongoing partnership with WHO, IARC and IAEA.

Picking up on this theme, Dr Atul Gawande shared his thoughts on the mismatch between investments in breakthrough innovations and in breakthroughs in implementation. Using safe surgery as a lens, he explored how there needs to be a shift from thinking about how to teach clinicians about innovations to creating new ‘rules of the road’ to implement these across a health system. This systems approach, Dr Gawande suggested, is the next big opportunity to improve health, but requires a much more explicit focus on equity.

“Unprecedented times stir the innovators in all of us. We have witnessed the dramatic impacts on cancer services that have stretched healthcare workers to their limits and increased reticence from patients. But cancer centres, societies, patient groups and others have demonstrated their creativity in continuing to support patients and keep their own organisations effective.”

Prof. Anil D’Cruz, President, UICC
In her keynote address, EU Health Commissioner Stella Kyriakides shared how the EU Beating Cancer Plan is taking innovative approaches to cancer control. Included in the proposed plan is an inequity register, which will help to monitor how changes across health systems are affecting cancer prevention, diagnosis, treatment and care for patients across the region to provide data and feedback for policymaking.

Globally, Dr Tedros Adhanom Ghebreyesus and Dr Bente Mikkelsen from the World Health Organization (WHO) shared how scaling up the systematic implementation of a core package of cancer services could save seven million lives by 2030 and better support the 20 million people who are currently diagnosed but unable to access cancer services each year. WHO is working towards this goal with its three flagship initiatives for breast, cervical and childhood cancers.
One theme that emerged from the Summit was that how research questions are framed can determine whether or not innovations drive equity. Dr Elisabete Weiderpass, Director of IARC, highlighted the need to link innovation research with the challenges faced by communities and ensure that it includes vulnerable or marginalised populations often left out. The foundation for this research needs to be robust public health surveillance and strong collaborations across different organisations, which IARC is working to support.

Putting this into practice, Dr Kate Allen highlighted the critical importance of policy-oriented research to help inform equity-promoting policies and programmes. Picking up on this theme in the UK, Ms Michelle Mitchell suggested that even national level data can mask substantial inequities in socio-economic status that will shape the effectiveness of policies on cancer prevention, diagnosis, treatment, and care. As such, all policymaking must be cognisant of the inequities across populations, geographies, and cancer types.

Exploring this further Dr Craig Earle highlighted the value of involving citizens through online tools and pop-up sessions to bring in new viewpoints during the refresh of the Canadian Strategy for Cancer Control. In particular, he emphasised the value of actively engaging communities with worse cancer outcomes as part of an ‘equity by design’ approach.
Exploring health inequities in the US, Mr David Simas shared how much of the work done to date recognises inequities and develops policies, but fails to fully understand the complex connections that bind communities and through which change is made. Taking up this theme, Dr Jill Jim emphasised the importance of engaging with indigenous communities and tribal authorities to develop culturally appropriate care, supported by adequate resources, as well as starting conversations about cancer with tribal authorities to facilitate progress. Dr Folakemi Odedina took this further, sharing her experiences on how institutional challenges in science continue to reduce representation in clinical and public health research, with implications for the types of studies and outputs generated. In response, Dr Odedina called for much more to be done to overcome these barriers and diversify how, where and for whom research is done. The US National Cancer Institute shared perspectives in two ‘On the road to the Summit’ sessions on the role that implementation science plays in understanding how innovations can drive equity. Providing examples of tobacco control in Vietnam, ‘Global implementation science to drive equity’ explored the value of designing studies to gather insights into how interventions can be adapted to local contexts and rolled out to deliver change. ‘Adapting national cancer control plans to respond to disruptions and innovation’ drew on lessons learned during the pandemic about the use of national plans as a framework for deliberate and equity-focused decision making in complex situations and systems.
Ms Suleika Jaouad and Mr David Craig moved the conversation from communities to individual patients and their participation in shaping and driving care. Ms Jaouad shared part of her journey as a person diagnosed with cancer who became an advocate for her own care. In particular, she argued for the need to broaden the focus of discussions from saving a life to saving the quality of a life. This could, for example, include discussing a patient’s long-term goals around fertility as well as recognising the impact of what happens outside the hospital, including family and support networks, on a person’s survival and wellbeing.

Building on this, Mr Craig shared the work of the GRYT Health platform in connecting people with similar experiences, with the goal of helping them to move down the connection-education-advocacy pathway to take a more active role in their own care. Speaking about the value of the platform, he suggested that managing the fear around cancer is a large part of the work and there is a clear need for patients, clinical teams and researchers, to ask questions and learn as ‘our ability to change a situation is directly proportional to our understanding of it’, said Mr Craig.

Picking up on this theme, a session, organised by the US National Cancer Institute, on ‘Equity and community engagement in technology development, translation and dissemination’ brought together speakers from across sectors to explore how communities must be engaged. Central to this was the importance of communities in defining problems and solutions to ensure that implementation does not create new siloes or barriers to patient access or fragment the limited resources for cancer control.
Digital innovations often produce great excitement around their ability to improve cancer survival, but less attention is paid to where and how innovations can promote equity. In a session on digital health driving equity, panellists looked at the potential for artificial intelligence (AI), project ECHO and digital patient data systems to improve the quality and availability of cancer services. Dr David Klimstra shared his thoughts on the role AI is starting to play in supporting decision-making around cancer, while Dr Sanjeev Arora provided an update on how building online communities can support countries in catching up on the delays in cancer diagnosis and treatment due to COVID-19. Sharing a national example from Rwanda, Dr Francois Uwinkindi described how a project to digitise cancer patient records is helping to improve coordination and cooperation across cancer centres and therefore the quality of care that patients are receiving.

Exploring this theme further, Dr Garth Graham highlighted the potential value that big data has in identifying new trends in large sample sizes. However, he cautioned that the algorithms drawing on big data are only effective where these sets are representative of populations. As such, it is critical that marginalised communities are represented, and developers and researchers need to focus on these groups and actively engage communities in research design to address their concerns and support their inclusion to ensure they do not replicate inequities.
Within the scope of digital innovations, the development of new media has played a particularly influential role. The COVID-19 pandemic has highlighted the problem of health misinformation and, while not a new trend, Prof. Viswanath argued that the scale and network effect, in combination with the rapid pace of scientific knowledge generation, have created even more fertile ground for misinformation. Looking ahead, Prof. Viswanath argued that actions can be taken to counter misinformation, but much more focus needs to be placed on the role of platforms and training journalists to improve the quality of health information. This echoed the points raised by Dr Graham in his keynote on the need for platforms such as YouTube and Google to promote trusted health data.

Sharing the French experience, Mr Emmanuel Collin suggested that it is not reasonable to place the onus of evaluating the overwhelming volume of new scientific information on individuals. Instead, it is important to recognise the validity of questions that the general public has and provide trusted information to ‘prebunk’ some of the most common myths in an accessible manner. He shared the strategy of the French National Cancer Institute to use peer communicators and their website and social media platforms to actively participate in conversations on cancer as part of this work.
How to ensure innovation reaches cancer patients equitably remains a major hurdle and was the focus of several sessions over the course of the World Cancer Leaders’ Summit. Commenting on the findings of two recent The Lancet and The Lancet Oncology commissions, Dr Sue Horton and Prof. Rifat Atun shared the compelling economic cases for investing in diagnostics and imaging for cancer. However, recent studies suggest that investing in services across the spectrum of cancer control amplifies the economic benefits. Investing $230 billion between 2020 and 2030 could save 134 million life years and deliver $2.7 trillion in net benefits for economies and communities, and would only represent a 6.9% growth in investment.

Further exploring the theme of ‘Achieving scale with innovations’, Dr Paul Farmer argued that progress happens where cancer control focuses on equity. In Rwanda progress stems from a dual focus on planning with the bottom quintile in mind and using existing primary health care systems to deliver services as close to patients as possible. Learning from the HIV/AIDS movement, Dr Farmer argued that there needs to be a shift from control to care, and that concerns over financial feasibility cannot be allowed to drive the discussion; instead, there is a strong need for civil society organisations to champion the need for care.

Echoing this, Ms Susanne Schaffert made the case that when thinking about innovative product approval is half the job. To achieve the goal of equitable cancer care, medicine and technology producers need to work with all partners to ensure that products reach the patients. She suggested that COVID-19 has caused all stakeholders to critically re-think their practices, but the onus is now on everyone not to return to the status quo, but to build back better and more equitably.

**Innovations in diagnosis**

Early diagnosis is critical to improving cancer outcomes, however, as Dr Paul Limburg noted, around 70% of cancers do not have recommended screening pathways and so cancers are diagnosed on symptoms alone. In this context the session on ‘multi-cancer early detection and the future of diagnostics’ considered how a future liquid biopsy multi-cancer test could contribute to more equitable cancer control. Dr Dan Milner suggested that, if brought to a reasonable level of accuracy and price, these technologies could enable low- and middle-income countries to ‘leapfrog’ the need to invest in multiple screening programmes. Looking ahead to this point Ms Teresa Graham emphasised the huge step forward this would represent, but reminded participants of the critical importance for countries to have the support needed to develop systems that ensure access to quality and affordable treatment, as well as adequate regulations and financial protections.

Picking up on this theme of technical innovations, Prof. Ian Frazer discussed how innovations in geonomics could potentially drive improvements in cancer survival. He cautioned that, in order to do so, these new technologies should be assessed in order to balance cost with clinical impact. A further session on ‘Biomarker testing and precision medicine’ explored similar themes in how these new technologies can be better implemented to improve cancer survival by supporting doctors to prescribe the most effective and appropriate medicines based on tumour types across Europe and the Americas and current work to expand these technologies in middle-income countries.
Driving innovation through partnerships

Throughout the discussions, speakers recognised the role of partnerships in driving and implementing innovations. Mr Darian Stibbe introduced a session on effective partnerships noting that big challenges often need multi-sectoral approaches to deliver long-term, sustainable solutions. Taking the example of the McCabe Centre, Ms Hayley Jones described the importance of partnerships as an engine for change and the need to continue looking outside siloes to draw on diverse experiences in developing innovative solutions. Picking up on this theme, Dr Sue Henshall shared her thoughts on how bringing public and private actors together can utilise far more diverse skill sets and resources to solve common challenges in cities. Reflecting on this in the context of the challenges posed to the financial sustainability of civil society organisations during the COVID-19 pandemic, Ms Katie Dain shared the work of the NCD Alliance in partnering with private sector organisations to establish a civil society support fund.

Dr Hayat Sindi also provided an example of the recent Women’s Cancers Partnership Initiative for Breast and Cervical Cancer Control in low- and middle-income countries between the Islamic Development Bank and the IAEA. The initiative’s goal is to use the relative expertise of the two organisations to resource ‘bankable’ cancer projects. This picked up on the points raised by Mr Rafael Mariano Grossi around the work of the IAEA to improve access to cancer care and support the development of innovations through partnerships that utilise the unique skills and technical capacities of partner organisations.

One further area where partnerships were in the spotlight was a session exploring how different actors across government, civil society and the private sector and working to address anti-microbial resistance by improving awareness, availability and guardianship in order to safeguard future cancer treatment options.

Investing in innovation

Dr Andrea Feigl shared her insights on how the best decisions can be made around investing in innovation. She highlighted that the right investment is not simply about the right metric but must identify the opportunities to maximise health and outputs. She said that cancer runs up against two challenges. The first involves discounting future benefits, which means that long-term investments have less appeal; the second is that many decision-makers lack the time to fully comprehend the evidence and don’t realise the potential benefits of cancer investments. To drive equitable innovation therefore the cancer community must become more adept at combining economic arguments with ethics to determine which kind of financing will work best in which setting. Continuing this conversation, ‘Data approaches to improve efficiency and access’ examined some of the challenges surrounding investments in cancer globally, in particular around how to best monitor the efficiency and effectiveness of budget allocations for existing and emerging data sources.
Necessity driving innovation: learning from COVID-19

COVID-19 posed a substantial challenge to health services and the continuation of cancer detection, diagnosis and treatment around the world. In the US,Ms Loyce Pace described how breast and cervical cancer screening participation dropped by up to 80% compared to 2020 figures. She said the country is still trying to determine the ramifications of the pandemic on diagnosis and care, particularly for minority groups such as Pacific Islanders, Native and Asian Americans. In response to this situation, actors across the country are required to take stock of innovations and rethink both what is possible within the health system and how to deploy resources to address disparities immediately, with people-centred care coming to the fore in the response.

Focusing more specifically on the lessons learned during the development of COVID-19 vaccines, Dr Stephen Hahn emphasised the incredible importance of the relationship between governments, academia, the private sector and civil society. Learning from the pandemic, he suggested that there is no need to sacrifice quality for speed when it comes to the development of new vaccines. From a cancer perspective, he suggested that many of the lessons learned, including reducing the costs and time taken to complete regulatory processes, could help boost the speed of innovation dissemination in order to address developing challenges. Exploring this further, Mr Andy Schmeltz suggested that COVID-19 has demonstrated the power of collaboration. But all actors need to consider the logistics, resources and coordination needed to deliver innovations. Bringing in local voices, collaborating to integrate services and building local leadership for cancer offer a critical starting point.
The COVID-19 pandemic pushed health planners to rethink the development and delivery of services. Looking ahead, the onus is on governments and other health stakeholders to not just build back but deliver better and more effective cancer services. Sharing experiences from France, Mr Thierry Breton discussed how the four goals set out in the recent French cancer strategy are integrated into the national pandemic recovery to ensure that vulnerable populations, such as older adults and children with cancer, are protected. France is also striving to identify and integrate new practices, in which the national cancer and COVID-19 committees worked with oncologists to provide weekly data, tailor recommendations to local needs and support healthcare providers to tailor care.

Providing perspectives from around the world, a panel on safeguarding and strengthening cancer care looked at which innovations can be taken forward to improve the quality and equity of cancer care in post-pandemic responses. Dr Norman Sharpless commented on how clinical trials and research on cancer were adapted to continue during the pandemic. He argued that now is the time to look at how many of these innovations were implemented, such as telemedicine, to continue delivering progress in the pandemic response. Echoing this theme, a session organised by the Canadian Partnership Against Cancer (CPAC) on ‘Modelling our way out of the pandemic’ explored how modelling supported planning during the pandemic and looked at its potential as part of efforts to ‘build back better’.

Speaking from the Brazilian context, Dr Ana Cristina Pinho focused on the importance of adapting existing protocols to continue delivering quality care in the midst of the pandemic and after. Given the pressure on resources, she argued that there was little space to be creative, instead health planners focused on taking the most effective steps possible. Dr Gamal Amira shared his thoughts about how the pandemic response was fortified by recent investments in a comprehensive women’s health initiative. This is shaping the pandemic recovery, which will seek to protect more cancer patients as part of a new national health insurance package and UHC and increase the capacities of cancer centres.
Regional perspectives on innovation and equity

As part of the Summit, two panel discussions provided UICC Board members with the opportunity to share regional perspectives on innovation and equity in cancer. Each identified a different key theme or issue relevant to the region drawing on some of the successes of UICC members: building better regional collaborations for equity across Europe, improving access to medicines and clinical trials in North America, and creating opportunities to advance women’s cancer in the Eastern Mediterranean.

The second session highlighted the shortage of healthcare workforce as a key challenge to innovation and service development across Africa, in particular oncology staff, and the continued loss of healthcare staff to high-income countries due, in part, to underinvestment. However, COVID-19 has demonstrated that countries can invest in health and that this momentum must be sustained in order to improve equity. In Latin America, law is being used to drive innovations in cancer control, including support for patients and their families, as well as to protect and guarantee access to care for marginalised or vulnerable groups. In Asia-Pacific, the role of new technologies, including AI and digital health, was at the forefront. The presentation explored the range of applications from virtual tumour boards to support clinical decision making, together with mHealth to improve survivorship.
Women’s cancers

Recent global initiatives on breast and cervical cancers mobilised political, financial and technical resources to drive innovation and equity. Dr Roopa Dhatt argued that women and girls are key change agents and that work on women’s cancer must engage women and girls as equal partners; in doing so, countries will be benefit from a ‘triple dividend’. Focusing more particularly on women in fragile settings, Dr Denis Mukwege called on all participants to recognise the role of gender in global health and how discrimination across societies contributes to poorer health outcomes and underinvestment. As a result, programmes must build in actions across governments and stakeholders and recognise that improving women’s health is a common goal.

Exploring similar collaborations for cervical cancer elimination, a session organised by Jhpiego on ‘Accelerating equitable access to innovative technologies’ picked up on the role of stakeholders in developing new technologies and shaping markets to improve access, but also the critical importance of coordinating support for countries around a national strategy. Building on this, ‘Financing for cervical cancer elimination’ took a deeper dive into global regional and national perspectives. In particular, the discussion emphasised the importance of collaborations across governments and stakeholders to mobilise the resources necessary for the elimination effort, including integrating cervical cancer into women’s health or universal health coverage service packages. Reflecting on work both in the US and overseas on cervical cancer, Ms Holly Kuzmich urged participants to recognise the importance of integrating services to meet women where they are by working creatively with local groups to develop bottom-up strategies that respond to local inequities and community needs.
Cancer in older adults

Older adults with cancer constituted the second key population discussed at the Summit. As populations age globally, there is a need to recognise and respond to the diverse needs of this group in order to drive improvements in cancer services equitably. ‘Investing in the future’ explored this topic further, building on a forthcoming report looking at the socioeconomic benefits of investing in cancer services for older adults. Effective action will require countries and health systems to respond to the unique needs of older adults, stemming from co-morbidities and additional physical challenges, as well as the impact of ageism and ageist beliefs on the provision of services for older adults. Echoing this, Ms Zsuzsanna Devecseri made the case that meeting the needs of older adults with cancer is not an individual responsibility, instead we need a coalition which can drive change, utilising the ‘build back better’ movement to improve age inclusivity.
Drawing the World Cancer Leaders’ Summit to a close, Prof. Anil D’Cruz and Dr Blair Holladay reflected on the power of collaborations and the potential that innovations of all kinds have to improve equity in cancer control. Looking ahead, Prof. D’Cruz invited all World Cancer Leaders’ Summit participants to connect with the new cohort of UICC Young Leaders, a committed group of professionals who may be the innovators of tomorrow.

Innovation and equity will remain at the centre of UICC’s work with the launch of the 2022-2024 World Cancer Day theme ‘Closing the care gap’, which focuses on how actors around the world can step up to help ensure that all cancer patients, everywhere, can access the care and services they need. Prof. D’Cruz also announced the development of a special edition on innovation driving equity in the International Journal of Clinical Global Oncology which will be published at the World Cancer Congress in October 2022.

Outstanding contributions to cancer control

Once again, the World Cancer Leaders’ Summit wishes to recognise the outstanding contributions made to cancer control across two categories: Policy-makers and Civil Society. Out of a very diverse and competitive field for both awards, President Paul Kagame was recognised as a Policy-maker for the outstanding work taking place in Rwanda to deliver comprehensive cancer care, including the implementation of the human papillomavirus vaccine for young women. The Civil Society award was given to Ms Pat Garcia Gonzalez, CEO of the Max Foundation, for her outstanding work to accelerate equitable access to cancer treatment and care across more than 70 low- and middle-income countries.
In 2021 World Cancer Leaders’ Summit went fully virtual for the first time. This enabled far greater and more diverse participation by UICC members, partners and the broader cancer community including:

- **Over 600 participants**
- **410 organisations from across 104 countries**
- **107 speakers sharing their expertise across 47 sessions**
- **4 unique live rap performances summarising discussions by Baba Brinkman**
- **21 WCLS Partners and Sponsors**

Through the online platform:

- **1,160 contacts made**
- **956 discussions created**
- **2,613 messages exchanged**

“Collaboration is an integral part of ASCP’s work as we have seen that the only way to address the challenges that cancer inflicts on individuals and communities is to work together.

The World Cancer Leaders’ Summit is the ultimate expression of the value and impact of collaboration. These few days of continuous networking and interactions, which have followed a month of vibrant online interactions, have refreshed and renewed our organisation’s vigour around efforts to defeat cancer, wherever it is.”

Dr Blair Holladay, CEO, American Society for Clinical Pathology World Cancer Leaders’ Summit Host, 2021