Call for Expressions of Interest: COVID-19 and Cancer Taskforce
Global Modelling Consortium

Supported by UICC, The International Agency for Research on Cancer (IARC), The International Cancer Screening Network (ICSN, the Canadian Partnership Against Cancer (CPAC) and Cancer Council NSW, Australia

Dear colleagues in the modelling community,

We are witnessing unprecedented times in the age of COVID-19 and its emerging worldwide impact. We know that many of you have been impacted in a profound way by the current crisis in your personal and working lives and that many of you are involved in the ‘front line’ of modelling activities.

We are all aware that in addition to the acute challenges health systems are now facing, the ‘secondary’ impact of the crisis on cancer and other non-communicable diseases, over the longer term, has potential to result in an even greater loss of life. Currently, there are little robust data at the global level on the impact on health services access and cancer outcomes. A COVID-19 and Cancer Taskforce has been established by cancer leaders in many countries and working under the umbrella of UICC. Two streams of work are aiming to coordinate efforts to synthesise and rapidly disseminate data to inform clinical judgements and support patient decision-making as well as health worker support while facing lockdowns and potential irregular access to treatment and care providers.

In parallel with these efforts, the COVID-19 and Cancer Taskforce would like to invite you to express your interest in being part of a coordinated effort by the modelling community to support decision-making in cancer control both during and after the crisis. Our aim is to help to configure modelling platforms and teams that can provide more informed advice to our governments, particularly those in low- and middle-income countries as they rise to this overwhelming health systems challenge. Our focus on the longer-term, as well as the shorter-term, recognises that recovery strategies will be required as countries move beyond the acute phase of the crisis.

We hope to connect teams who are already working on the infectious disease dynamics in various countries, with a collaborative effort to develop a global platform for cancer control. This would utilise the best available registry and Globocan data, synthesising this information with emergent evidence on treatment uptake and evidence on the effectiveness of new therapies for cancer patients impacted by COVID-19.

The consortium concept note is included as an appendix to this letter of invitation. To submit an expression of interest to join the COVID-19 and Cancer Taskforce Global Modelling Consortium, please complete the online form.
If you have any queries, please contact the Coordinating Centre, Cancer Council NSW, Australia, on cancerandcovid@nswcc.org.au.

We aim to have a first call of interested parties on **Tuesday the 5th May** (details to follow).

Please share the invitation with appropriate colleagues either in the infectious disease or cancer control modelling communities.

Yours sincerely, on behalf of the COVID-19 and Cancer Taskforce,

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<tr>
<th>Professor Karen Canfell</th>
<th>Dr Freddie Bray</th>
<th>Dr Julie Torode</th>
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<td>Cancer Council NSW, Sydney</td>
<td>IARC, Lyon</td>
<td>UICC, Geneva</td>
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**COVID-19 and Cancer Taskforce:**

- Bello Abubakar Mohammed, President AORTIC, National Hospital, Abuja, Nigeria
- Zippy Ali, Kenya Hospices and Palliative Care Association
- Michael Baumann Director DKFZ, Germany
- Freddie Bray, Head of Cancer Surveillance, International Agency for Research on Cancer Lyon, France
- Nirmala A/P Bhoo Pathy, Department of Social and Preventive Medicine, University of Malaya, Malaysia
- Christopher Booth Cancer Professor Research Institute, Queen’s University Kingston, Canada
- Karen Canfell Director, The Daffodil Centre, University of Sydney, Australia
- James Cleary, Professor and Director of Supportive Oncology, Indiana University School of Medicine and IU Simon Cancer Center, Indiana, USA
- Jan-Willem Coebourgh Professor em. of Cancer Surveillance, Head of Research at IKZ Erasmus University Rotterdam, Netherlands
- Sakari Karjalainen, Secretary General, Cancer Society of Finland
- Tezer Kutluk Director of Paediatric Oncology, Hacettepe University, Ankara, Turkey
- Valery Lammens, Member of the Board of Directors at IKNL / Comprehensive Cancer Organisation the Netherlands
- Dorothy Lombe, Cancer Diseases Hospital, Zambia
- Deborah Mukherji, American University of Beirut, Lebanon
- Raul Murillo, National Cancer Institute, Colombia
- Groesbeck Parham, Centre for Cervical Cancer Prevention in Zambia
- CS Pramesh, Tata Memorial Centre, Mumbai and coordinator for the National Cancer Grid
- Diana Sarfati Interim Chief Executive, Cancer Control Agency, and University of Otago, New Zealand
- Omar Shamieh, Director Palliative Medicine, King Hussein Cancer Centre, Amman, Jordan
- Richard Sullivan, Director, Institute of Cancer Policy, Kings College London, UK
- Julie Torode, UICC Switzerland
- Audrey Tsunoda Director of Gyn. Onc. Erasto Gaertner Hospital, Curitiba, Brazil
- Verna Vanderpuye, Executive Council AORTIC and National Center for Radiotherapy and Nuclear Medicine, Korle-Bu Teaching Hospital, Accra, Ghana
- Mieke Van Hemelrijck School of Cancer & Pharmaceutical Sciences, King’s College London, UK
- Aasim Yusuf, Chief Medical Officer, Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan

**Appendix**

COVID-19 and Cancer Taskforce Global Modelling Consortium, research themes concept note.
COVID-19 and Cancer Taskforce Global Modelling Consortium

Concept Note: Research themes

The below research themes will inform our efforts to coordinate and share learnings from work being done in countries – issues will be considered across LMIC and HIC, although it is recognised that some issues (e.g. screening disruptions or prevention issues) may be more relevant to HIC.

**Theme 1. Characterising health and resource outcomes in cancer patients.**

Models will be informed by the latest data as it emerges, or in the absence of such data, scenario modelling can be done, informed by expert clinical opinion and infectious disease model outcomes. A central platform will be configured, which will incorporate new inputs and be responsive to new evidence as it emerges. The focus will be on estimating the impact of the crisis for each cancer type and estimating the effect of crisis mitigation strategies (social distancing, future treatments for infection or cancer in context of infection, future vaccines) on short- and long-term cancer outcomes. Modelling will be informed by 2020 estimates of prevalent and incident cancers, and impact of the crisis in cancer patients will be predicted for 2020 and over next 5-10 years. Outcomes will include additional deaths, impact on LYS, HALYS and health services/resources. The focus will be on both LMIC and HIC.

Considerations will include:

a. Specific modelling of COVID-19 acquisition in cancer patients over time (which might differ from the general population either due to additional exposure risks or due to immunocompromise or other factors)

b. Survival/mortality due to immunocompromise or other non-treatment-related factors

c. Impact on survival/mortality due to changes in access to (or uptake of) treatment services, due to:
   - Local diversion of health care resources
   - Patient treatment ‘hesitancy’
   - Supply chain interruption including drug shortages and changes in access to diagnostic workup tests.
**Theme 2. Modelling impact on cancer screening: health and resource impact of crisis, and 'catch-up' strategies for recovery**

Considerable work is already underway in HIC. Here, the efforts of the consortium will be on coordinating approaches, comparative modelling if applicable, and sharing insights and learnings between groups. Again, models will be informed by the latest data as it emerges, or in the absence of such data, scenario modelling can be done (informed by expert clinical opinion and infectious disease model outcomes). The focus will be on HIC initially, but insights might be relevant to MIC and LIC.

Considerations will include:

a. Specific modelling of health impact of disruptions to screening for cervical, bowel and breast cancer (and if applicable consideration of impact on emerging programs e.g. lung cancer screening). These will include
   - Delayed diagnoses
   - Additional deaths
   - Characterising impact on referrals to diagnostic services

b. Prioritising referrals to diagnostic services

c. Modelling of impact and cost-effectiveness of catchup strategies (e.g. alternative catchup prioritisation strategies, and/or screening campaigns).

**Theme 3. Longer term impact of COVID-19 on NCDs, including cancer risk, and primary prevention approaches**

Models will be informed by the latest data as it emerges, or in the absence of such data, scenario modelling can be done, informed by expert clinical opinion and infectious disease model outcomes. The central modelling platform to be developed can be harnessed, which will incorporate new inputs and be responsive to new evidence as it emerges. The focus will be on estimating the impact of the crisis for each cancer type and estimating the effect of crisis mitigation strategies (social distancing, future treatments, future vaccines) on long term cancer outcomes. Modelling will be informed by 2020 estimates of prevalent and incident cancers, and impact of the crisis in cancer patients will be predicted for 2020 and over next 5-10 years. Outcomes will include additional deaths, impact on LYS, HALYS and health services/resources. The focus will be on HIC initially, but insights might be relevant to MIC and LIC.

Considerations will include:

a. Specific modelling of the impact of increased risky behaviours during crisis (considering smoking, alcohol, nutrition, physical activity). Modelling will focus on the longer-term impact on cancer and other NCDs given a range of assumptions

b. Primary prevention with vaccination e.g. catch-up HPV vaccination and delays to the cervical cancer elimination agenda (with specialist groups)

   c. Modelling impact of catch-up strategies for prevention campaigns after crisis passes.