

COVID-19 and Cancer Taskforce

COVID-19 and Cancer Global Modelling Consortium (CCGMC)

Working Group 1 & 3 combined meeting

First Call: Wednesday 1st July 2020

The call will start at 3:00 EDT / 8:00 BST / 09:00 CEST / 10:00 EAT / 17:00 AEST

While waiting, please introduce yourself via the comments - including your name, institution, country, and professional background.

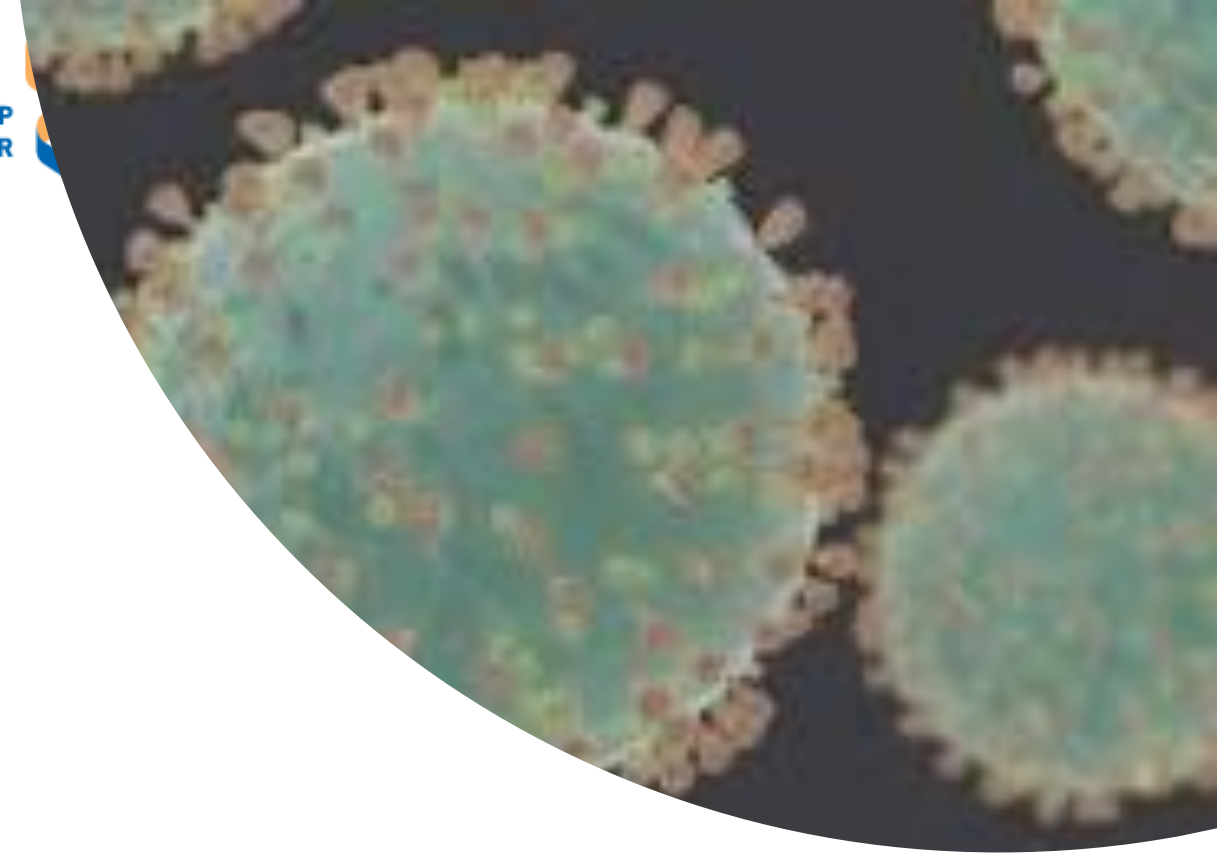
Secretariat email: covidandcancer@nswcc.org.au



Agenda

- 1. Welcome and Introductions**
Prof Karen Canfell and Dr Freddie Bray (first call), and Dr Ophira Ginsburg (second call)
- 2. Overview of the Covid-19 and Cancer Taskforce**
Prof Richard Sullivan
- 3. Update on broader CCGMC activities**
Prof Karen Canfell, CCNSW
- 4. Review of draft Terms of Reference & Disclosures**
Prof Karen Canfell, CCNSW
- 5. Intended goals and actions: Overview of proposed approach for working groups 1 & 3**
Prof Karen Canfell, CCNSW
- 6. Review of platforms & early published results**
Dr Julia Steinberg, CCNSW
- 7. Concept for new global platform**
Dr Michael Caruana
- 8. Discussion of potential data sources**
Dr Isabelle Soejomataram, IARC
- 9. Discussion, questions and perspectives**
Moderated by Dr Freddie Bray, Dr Ophira Ginsburg and Prof Karen Canfell
- 10. Future call schedule**
Prof Karen Canfell
- 11. Any other business**
All





Item 2. Overview of the Covid-19 and Cancer Taskforce

Covid-19 and Cancer Taskforce

CCGMC Brief
1st July 2020
Richard Sullivan

Our priorities?

Addressing the covid-19 and cancer gap in the current response and future resilience

1. Direct Risk of Covid-19 to Cancer Patients
2. Modelling the Indirect Impact; Recovery and Mitigation (*note: contributing expertise to newly established WHO non-covid-19 health impacts modelling effort*)
3. The direct impact on oncology health workers as the pandemic progresses

Cross-cutting issues:

Research, New Practices, Economic Impact Assessment, Inequalities

Direct risk of COVID-19 to cancer patients

The NEW ENGLAND JOURNAL of MEDICINE

CORRESPONDENCE

COVID-19 NOTES

To rapidly communicate short reports of innovative responses to Covid-19 around the world, along with a range of current thinking on policy and strategy relevant to the pandemic, the Journal has initiated the Covid-19 Notes series.

Cancer Management in India during Covid-19

The Covid-19 pandemic has created major dilemmas for providers in all areas of health care delivery, including cancer centers. The rapid spread of SARS-CoV-2, combined with an unprecedented, near-complete global lockdown, has laid bare the weaknesses in health systems. Lack of adequate health care infrastructure and human resources, serious supply-chain disruptions, and widespread fear among patients and health care workers have resulted in patient care and safety being compromised. Throughout the world, health systems

Table 1. Summary of Covid-19 Measures Taken at Tata Memorial Centre.

Administration

Creation of a core Covid-19 action group
Daily debriefings and formulation of action plans

Cancer care

Avoidance of complex surgeries likely to require multiple blood transfusions and prolonged intensive care unit stays
Use of hypofractionated regimens whenever possible

Joint analysis of two patient cohorts:
Guy's Hospital, London
& Tata Memorial Centre

Mieke Van Hemelrijck
CS Pramesh



International Agency for Research on Cancer



CANADIAN PARTNERSHIP
AGAINST CANCER



PARTENARIAT CANADIEN
CONTRE LE CANCER



Potential mechanisms of impact on cancer outcomes



The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis: a national population-based modelling study

- Dis
- pro
- Del
- pre

Dr. Camille Maringe¹ PhD, Prof. James Spicer^{2,3} PhD, Dr Melanie Morris⁴ PhD, Prof. Arnie Purushotham^{2,3} MD, Prof. Ellen Nolte⁴ PhD, Prof. Richard Sullivan^{2,3,5} PhD, Prof. Bernard Retcher¹ PhD, Dr Ajay Aggarwal^{3,4,5} PhD.



<https://researchonline.lshtm.ac.uk/id/eprint/4657274/>

Cancer centre health worker survey

Focus on stress and anxiety, resilience, sources of stress including fears, moral, financial as well as the impact on work and home.

- Target: the full staff of the cancer centre
- Distribution from leadership is key
- Canadian and UK IRB/EC approval
- Package of materials ready to go

All countries welcome to join
Christopher.Booth@kingstonhsc.ca

Part 1					
Please indicate how much you agree with the following statements as they apply to you <u>over the last week</u> .	0 Not at all	1 Rarely True	2 Some-times True	3 Often True	4 True Nearly All the Time
1. I am able to adapt when changes occur.					
2. I can deal with whatever comes my way.					
3. I try to see the humorous side of things when I am faced with problems.					
4. Having to cope with stress can make me stronger.					
5. I tend to bounce back after illness, injury, or other hardships.					
6. I believe I can achieve my goals, even if there are obstacles.					

7.
8. **Stress, Resilience and Moral Distress among Health Care Providers in Oncology during the COVID-19 Pandemic**
9. **Brundage, Booth, Soares, Hanna, Aggarwal, Sullivan**
10. **Queen's University (Kingston, Canada) and King's College London (London, UK)**

1. Background and Rationale

Since the COVID-19 outbreak was first reported in Wuhan, China in December 2019, health care providers (HCP) have been faced with a number of challenges, many of which are largely unprecedented. Some of these challenges create stressors by directly threatening the provision of high-quality care. Some of these stressors include patient case presentations exceeding capacity of available resources, inability to provide usual standards of care, or caring for patients who are isolated from their loved-ones. Additional challenges relating to other work-life considerations include long shift hours, fears of acquired infection (coupled with a lack of

Other Working Groups

Global qualitative survey

Aasim Yusuf, Pakistan

‘Silver’ linings

Dorothy Lombe, Zambia

Economic impact

Michael Schlander, Germany

Raul Murillo, Columbia

Nirmala Bhoo-Pathy, Malaysia

Research Impact

Debbie Mukherji, Lebanon

Verna Vanderpuye, Ghana



Zambia’s National Cancer Centre response to the COVID-19 pandemic—an opportunity for improved care

Dorothy C Lombe^{1,a}, Catherine K Mwaba¹, Susan C Msadabwe¹, Lewis Banda¹, Maurice Mwale¹, George Pupwe¹, Paul Kamfwa³, Mulape Kanduzi⁴, Harry Munkupa⁵, Biemba Maliti⁶, Kalyoka Simbeye⁷, Pious Hachizo⁷, Lillie Lin⁸, Elizabeth Chiao⁹ and Kennedy Lishimpi^{1,2}

¹Department of Oncology, Cancer Diseases Hospital, Lusaka 10101, Zambia

²Ministry of Health Zambia, Lusaka 10101, Zambia

³Department of Gynaecology Oncology, Cancer Diseases Hospital, Lusaka 10101, Zambia

⁴Department of Medical Physics, Cancer Diseases Hospital, Lusaka 10101, Zambia

⁵Department of Radiation Therapy, Cancer Diseases Hospital, Lusaka 10101, Zambia

⁶Department of Nursing, Cancer Diseases Hospital, Lusaka 10101, Zambia

⁷Pharmacy Unit, Cancer Diseases Hospital, Lusaka 10101, Zambia

⁸Department of Radiation Oncology, MD Anderson Cancer Center, University of Texas, TX 77030, USA

⁹Department of Epidemiology, MD Anderson Cancer Center, University of Texas, TX 77030, USA



[Our Work](#)

[Our Experts](#)

[Commentary & Analysis](#)

[About Us](#)

[Search](#)



[← Back to Commentary and Analysis](#)

Healthcare Technologies and COVID-19: Speed is Not Always a Good Thing

JUNE 29, 2020

Kalipso Chalkidou, Damian Walker, Richard Sullivan, Edwine Barasa, Dalia Dawoud, Francis Ruiz, Benjamin Uzochukwu, Y-Ling Chi, Peter Baker, Hiral Anil Shah, Justice Nonvignon and Amanda Adler

CANA

The COVID-19 and Cancer intelligence hub

Already providing a platform for the cancer community for rapid sharing of new country data and reports as well as pre-review data-sharing channels, supported by bi-weekly literature scans

Dedicated sections on:

- Risk factors for cancer patients
- Management during the pandemic
- Impact of lockdown and self-isolation measures
- Covid-19 registries and links to best sources of other information

**Coming soon:
Expert digests as national data / themes emerge**

The screenshot shows the website's navigation menu with 'News' selected. Below the menu is a search bar and a row of category tabs: Breast, Prostate & urology, Lung & pleura, Colorectal & gastro, Melanoma & skin, Head & neck, and Ovary & gyn. A prominent yellow button says 'Register now for more information'. The main heading is 'COVID-19 and cancer intelligence hub' with social media share icons. The date '5 May 2020' is displayed. A paragraph states: 'In these difficult times it is more important than ever to keep information flowing about the latest research and we will keep an updated list on COVID-19 related journal articles available on this page.' Below this, it says 'If you have something to share, please email news@ecancer.org.' The 'Latest' section features four article cards, each with a thumbnail image, a title, and author information.

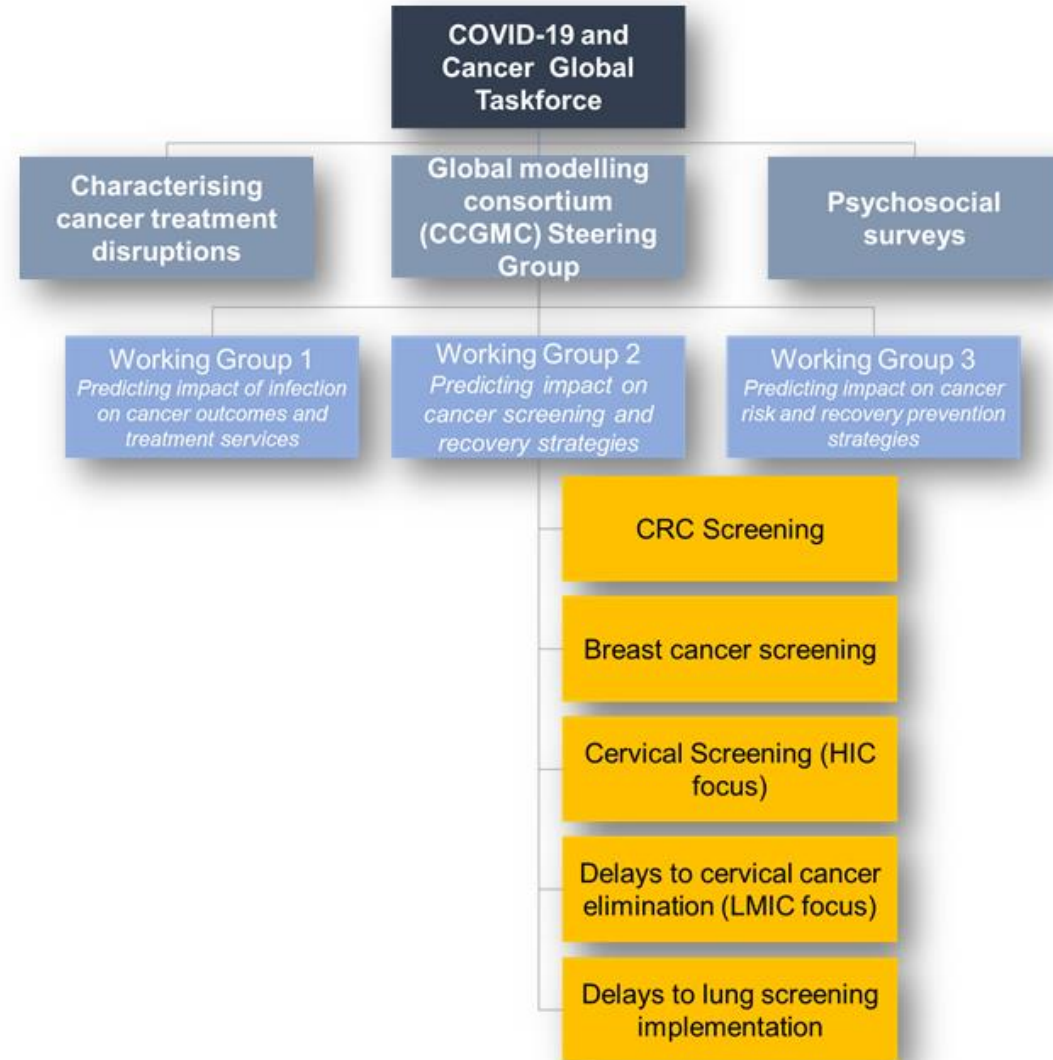
Article Title	Journal	Date	Author
COVID-19: impact on cancer workforce and delivery of care	The Lancet	20th April	Susan Mayor
Managing patients with cancer in the COVID-19 era	EJCancer	20th April	Ling Peng et al.
COVID-19 in persons with haematological cancers	Leukaemia	24th April	Wenjuan He et al.
Challenges in lung cancer therapy during the COVID-19 pandemic	The Lancet	9th April	Luana Calabrò et al.

Item 3. Update on broader CCGMC activities

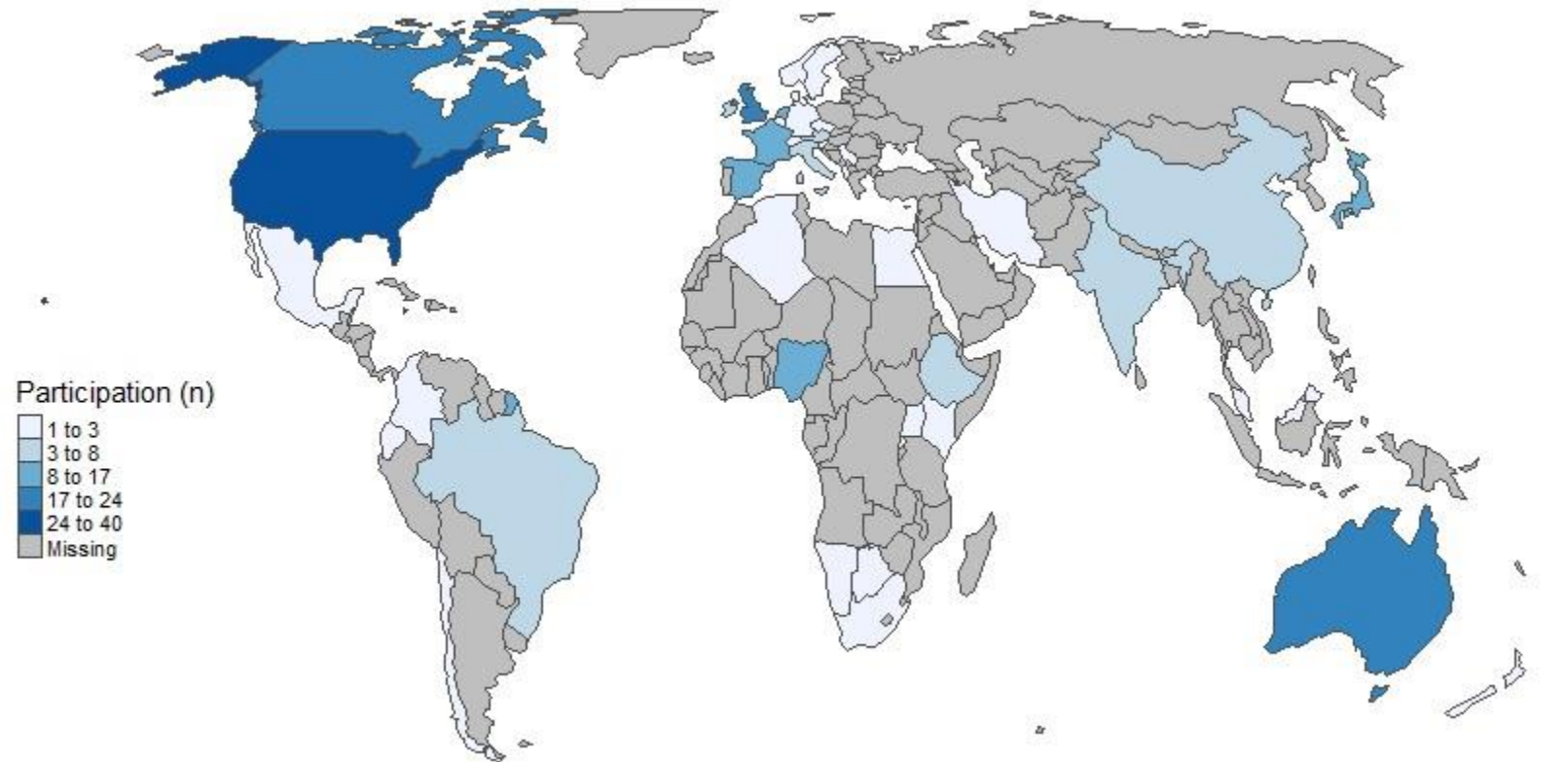


COVID-19 and Cancer Taskforce structure

The CCGMC is one of several streams of Taskforce activity



CCGMC: 252 registrants, 43 countries, 153 institutions



As at 29 June 2020



Proposed working group structure

Overarching responsibility: Steering Group representing the Covid-19 and Cancer Taskforce & CCGMC Partners

WG1 Cancer treatment

WG2 Screening

WG3 Prevention

All WG to access expertise to inform modelling of future scenarios for infection rates and societal/health services disruptions

Infectious disease modeller reference group

Clinical expert reference group

All WG to access expertise to inform modelling of impact of disruptions or changes in cancer

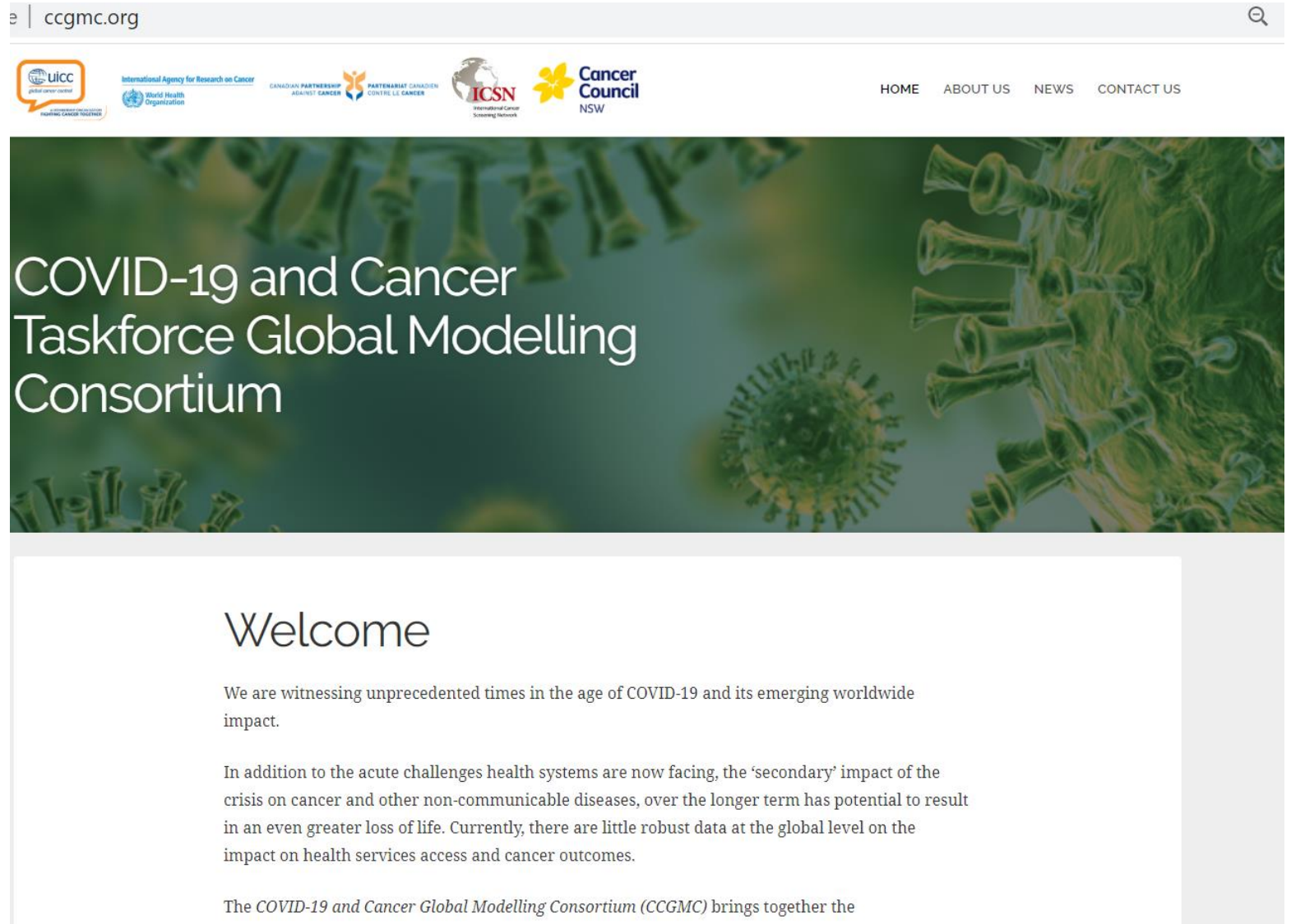
Secretariat support at Cancer Council NSW, Australia

Access to ongoing scoping/systematic reviews of emergent clinical data on cancer outcomes

CCGMC website is live

ccgmc.org

Shared workspace is
being set up via
Microsoft Teams.
Invitations will be
sent this week.



The screenshot shows the homepage of the COVID-19 and Cancer Taskforce Global Modelling Consortium (CCGMC) website. At the top, there is a search bar with the URL 'ccgmc.org' and a magnifying glass icon. Below the search bar is a navigation menu with links for 'HOME', 'ABOUT US', 'NEWS', and 'CONTACT US'. The header features logos for UICC, International Agency for Research on Cancer (IARC), Canadian Partnership Against Cancer (CPAC), Partenariat Canadien Contre Le Cancer (PCC), ICSN, and Cancer Council NSW. The main content area has a green background with a microscopic view of a virus. The text reads: 'COVID-19 and Cancer Taskforce Global Modelling Consortium'. Below this is a 'Welcome' section with the following text: 'We are witnessing unprecedented times in the age of COVID-19 and its emerging worldwide impact. 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. The COVID-19 and Cancer Global Modelling Consortium (CCGMC) brings together the



Item 4. Summary of proposed Terms of Reference

- **An open and collaborative approach is envisaged, with key principles involving:**
 - Sharing our learnings
 - Co-publication of joint work (whilst recognising that many groups will bring in their own models and IP)
 - Capacity building
 - Taking the longer-term perspective - we are not just here for the acute response but to inform longer term planning & recovery
 - Development of tools that will be widely useful for policy-makers in understanding the impact of the crisis and the optimum recovery strategies



Item 4. Summary of proposed Terms of Reference

Key additions to note, following feedback period:

- Inclusion of strong emphasis on a crosscutting equity lens (country income level, cultural, ethnicity, gender, and other aspects)
 - Industry and commercial representatives to take an observer role
 - Authorship guidelines section now included
 - The WG Chairs will determine whether minutes and presentations will be posted on the website in full, whether confidential results will be removed prior to posting, or whether to share only on the shared workspace on Teams.
- See draft ToR (circulated with meeting agenda). Please contact the Secretariat with questions, concerns or suggestions to be considered by the Steering Group on covidandcancer@nswcc.org.au by this **Friday 3rd July**.
 - Following feedback, ToR to be ratified on **10th July 2020** by the CCGMC Steering Committee.



Item 4. Review of Disclosures

Name	Category for Disclosure	Disclosure of Interests
Prof Joanne Atiken	Employment, consulting and advisory	Member of Advisory Council at Cancer Australia
	Other relationships	President, International Association of Cancer Registries
Professor Oguzhan Alagoz	Research Support	Receives grant support from National Cancer Institute
Dr Gnana K Bharathy	Research support	Involved in collating COVID related data from multiple organizations and have been developing epidemiological and post-recovery models. These were done as part of building up research, and provide information in public interest to NSW Government. No remuneration was received.
Dr Adam Brentnall	Employment, consulting and advisory	Receives royalty payments from Cancer Research UK for commercial use of the Tyrer-Cuzick (IBIS) breast cancer risk evaluator.
	Research support	Funded by two project grants for work on breast cancer risk assessment through UK charities: Cancer Research UK and Breast Cancer Now. 3y, supports two post-docs.
Dr Emily Burger	Other relationships	CISNET (Aligns with work of CCGMC)
Dr Christina Chapman	Research support	Supplement to existing Breast CISNET U01, United States National Cancer Institute, 3/2018-9/2019, direct costs for salary support and travel
Prof Karen Canfell	Other activities	KC is co-principal investigator of an unrelated investigator-initiated trial of cervical screening in Australia (Compass; ACTRN12613001207707 and NCT02328872), which is conducted and funded by the VSC Foundation (VSC), a government-funded health promotion charity. The VSC Foundation received equipment and a funding contribution from Roche Molecular Systems USA. However, neither KC nor her institution on her behalf (Cancer Council NSW) receives direct funding from industry for this trial or any other project.

Item 4. Review of Disclosures

Name	Category for Disclosure	Disclosure of Interests
Prof Ton Coolen	Employment, consulting and advisory	<p>Currently employed at Saddle Point Science Ltd (spin-out of King's College London, created by Prof Coolen and other academic colleagues)</p> <p>Presently co-director and majority shareholder (but not receiving a salary).</p> <p>Has an academic post at Radboud University.</p>
Prof Anne Cust	Partner/Spouse /Immediate family members	Receives support from Australian National Health and Medical Research Council Project grant and Fellowship
Dr Kota Katanoda	Research support	Received a JMWH Bayer Grant from Sep 1 2017 to Aug 31 2019 (unrelated to this project)
	Other	Received the third Kiyoko and Paul Bourdarie-Goto Scientific Prize in 2015 (unrelated to this project)
	Partner/Spouse /Immediate family members	Partner is an employee of The Japan Research Institute, Ltd (unrelated to this project)
Prof Patricia Fitzpatrick	Employment, consulting and advisory	Part-time employee of National Screening Service, Ireland
A/Prof Erich Kliewer	Employment, consulting and advisory	Merck Frosst Canada GlaxoSmithKlein
	Research support	Merck Frosst Canada
	Other relationships	Associate, Vaccine and Drug Evaluation Centre, University of Manitoba
Mr Tom Lee	Employment, consulting and advisory	<p>Received consultancy fees from University College London, University of London, to conduct research into national cancer policy</p> <p>Investment interest: Mr Lee has holdings (but no direct involvement in Volpara Health Technologies, a breast and lung screening firm based in New Zealand)</p>
Dr Talia Malagon	Research support	<p>Research unit has in the past received unconditional research funding by Merck-Frosst Canada Ltd and Merck & Co Ltd</p> <p>Also a Board member of International Papillomavirus Society</p>

Item 4. Review of Disclosures

Name	Category for Disclosure	Disclosure of Interests
Dr Ethna McFerran	Employment, consulting and advisory	Receives salary support via grant funds from Health Data Research UK and Cancer Focus Northern Ireland (NI)
	Research support	Receives salary support via grant funds from Health Data Research UK and Cancer Focus Northern Ireland (NI)
A/Prof Rafael Meza	Research support	Grants on cancer modeling from NIH
Dr Ana Molina-Barcelo	Other relationships	<p><i>Member of:</i></p> <ul style="list-style-type: none"> Spanish Cancer Screening Network (http://www.cribadocancer.es/): national network formed by those responsible of regional cancer screening programmes in Spain with the main objective to share experiences on cancer screening. Spanish Society of Epidemiology (https://www.seepidemiologia.es/): multidisciplinary scientific society with different working groups. A current member of the Working Group on Screening, with the main objective to provide scientific advice on cancer screening.
Ms Vivienne Mulema	Research support	Working on a demonstration project with BMS, AstraZeneca and Roche. They will provide medicines and in-kind support eg trainings
Prof David Preen	Research Support	NHMRC project grant funding
Prof Youlin Qiao	Employment, consulting and advisory	MSD: Global advisory board meeting related support
Dr Carolyn Rutter	Partner/Spouse /Immediate family members	National Cancer Institute Grant U01CA199335

Item 4. Review of Disclosures

Name	Category for Disclosure	Disclosure of Interests
Dr Eiko Saito	Research support	Pfizer research grant
Dr Dolores Salas Trejo	Other relationships	<p><i>Member of:</i></p> <ul style="list-style-type: none"> Spanish Cancer Screening Network (http://www.cribadocancer.es/): national network formed by those responsible of regional cancer screening programmes in Spain with the main objective to share experiences on cancer screening. Spanish Society of Epidemiology (https://www.seepidemiologia.es/): multidisciplinary scientific society with different working groups. A current member of the Working Group on Screening, with the main objective to provide scientific advice on cancer screening.
Dr Farah Seedat	Other relationships	Employed by the UK NSC and hosted by Public Health England.
Ms Priyanka Singh	Research support	<p>Institution: University of Technology Sydney(UTS), Australia</p> <p>Have not received any grants yet on working for projects related to impact of COVID-19 on breast cancer screening programs in Australia.</p>
Assistant Prof Glen Taksler	Research support	National Institute of Aging (NIA) of the National Institutes of Health (NIH)
Prof Martin Tammemagi	Employment, consulting and advisory	<p>Dr Tammemagi has served as consultant for the following companies: Johnson & Johnson/Janssen, Medial EarlySign, NUCLEIX, bioAffinity Technologies,Inc., AstraZeneca. providing advice on the design and analysis of biomarker or lung cancer screening studies or on cancer risk prediction modelling.</p> <p>IP: The PLCOm2012 and related models are open access and are available free of charge to non-commercial users. For commercial users licensing has been assigned to Brock University. To date, MCT has not received any money for use of the PLCOm2012 or related models, nor does he anticipate any payments in the future.</p>

Item 4. Review of Disclosures

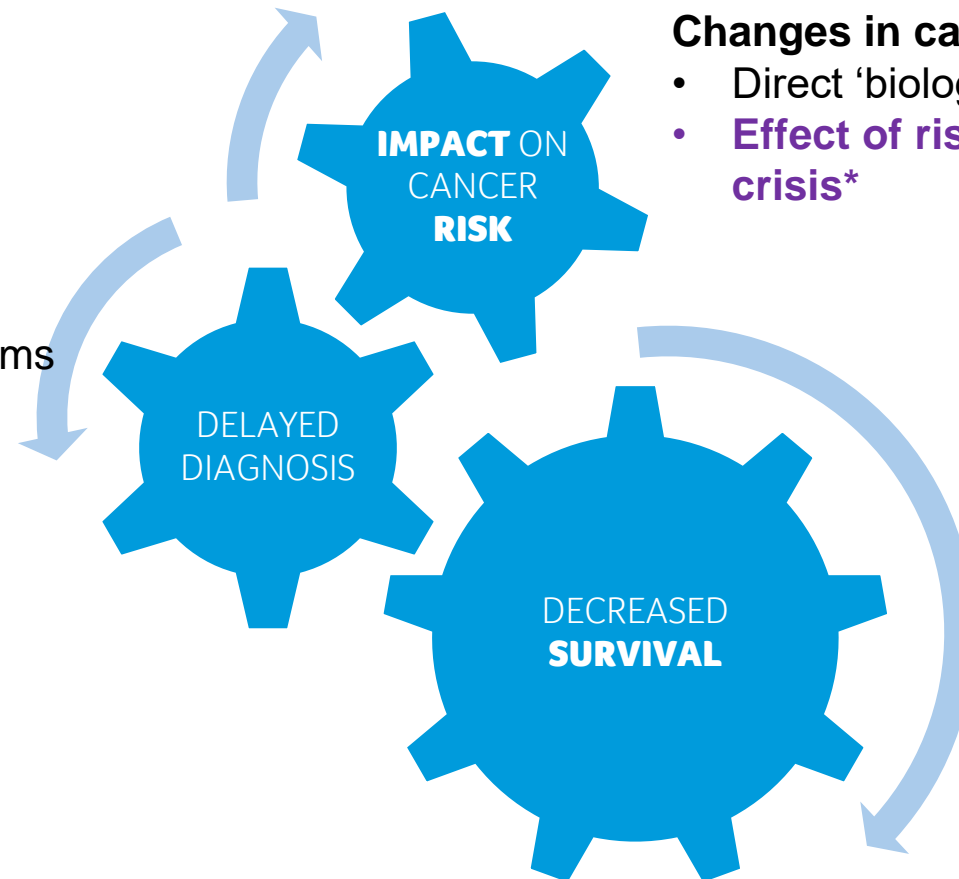
Name	Category for Disclosure	Disclosure of Interests
Dr Kevin ten Haaf	Research support	<ul style="list-style-type: none"> Member of the Cancer Intervention and Surveillance Modeling Network (CISNET) Lung working group (grant 1U01CA199284-01 from the National Cancer Institute). Researcher affiliated with the Dutch-Belgian Lung Cancer Screening Trial (Nederlands-Leuvens Longkanker Screenings onderzoek; the NELSON trial) and the 4-IN THE LUNG RUN trial (towards Individually tailored Invitations, screening Intervals, and Integrated co-morbidity reducing strategies in lung cancer screening). Received a grant from the University of Zurich to assess the cost-effectiveness of CT lung cancer screening in Switzerland. Was involved in the Cancer Care Ontario Health Technology Assessment Study for CT Lung Cancer Screening in Canada. Involved in the Selection of Eligible People for Lung Cancer Screening using Electronic Primary Care DaTa (SELECT) study sponsored by Cancer Research UK.
	Other (e.g. gifts, reimbursements)	<ul style="list-style-type: none"> Was an invited speaker at the 17th, 19th, and 20th World Conferences on Lung Cancer, as well as the 5th Russian Society of Clinical Oncology conference, for which travel expenses were paid (in part). Was an invited speaker at Tagung Thorakale Tumore. Travel expenses paid by Biomedical Research in Endstage and Obstructive Lung Disease Hannover (BREATH). Erasmus University Medical Center received speaking fees.
Dr Anne Thuret	Other relationships	<ul style="list-style-type: none"> In charge of the surveillance of skin cancers (based on data from cancer registries and medico-administrative databases), as well as the surveillance of ultraviolet (UV) exposure, the main risk factor for these cancers. Currently advocating to the Health Ministry to develop primary prevention of excessive UV exposure.
Prof Guido Van Hal	Other relationships	<ul style="list-style-type: none"> R&D manager of the Centre for Cancer Detection Flanders, which organises the three Flemish cancer screening programmes. Member of the Flemish Task Force Lung Cancer Screening which wants to pilot a Lung Cancer Screening programme in Flanders.

Item 5. Intended goals and actions for WG1 and WG3

Pandemic impact on cancer outcomes

Changes in cancer detection & staging (WG1&2)

- Disruptions to screening programs (WG2)
- **Delays in symptomatic presentation (WG1)***



Changes in cancer risk (WG3)

- Direct 'biological' impact on risk
- **Effect of risky behaviours during crisis***

Changes in cancer outcomes (WG1)

- **Impact of treatment disruptions***
- Direct 'biological' impact on survival
- Effects on co-morbid conditions
- Competing mortality risk from infection

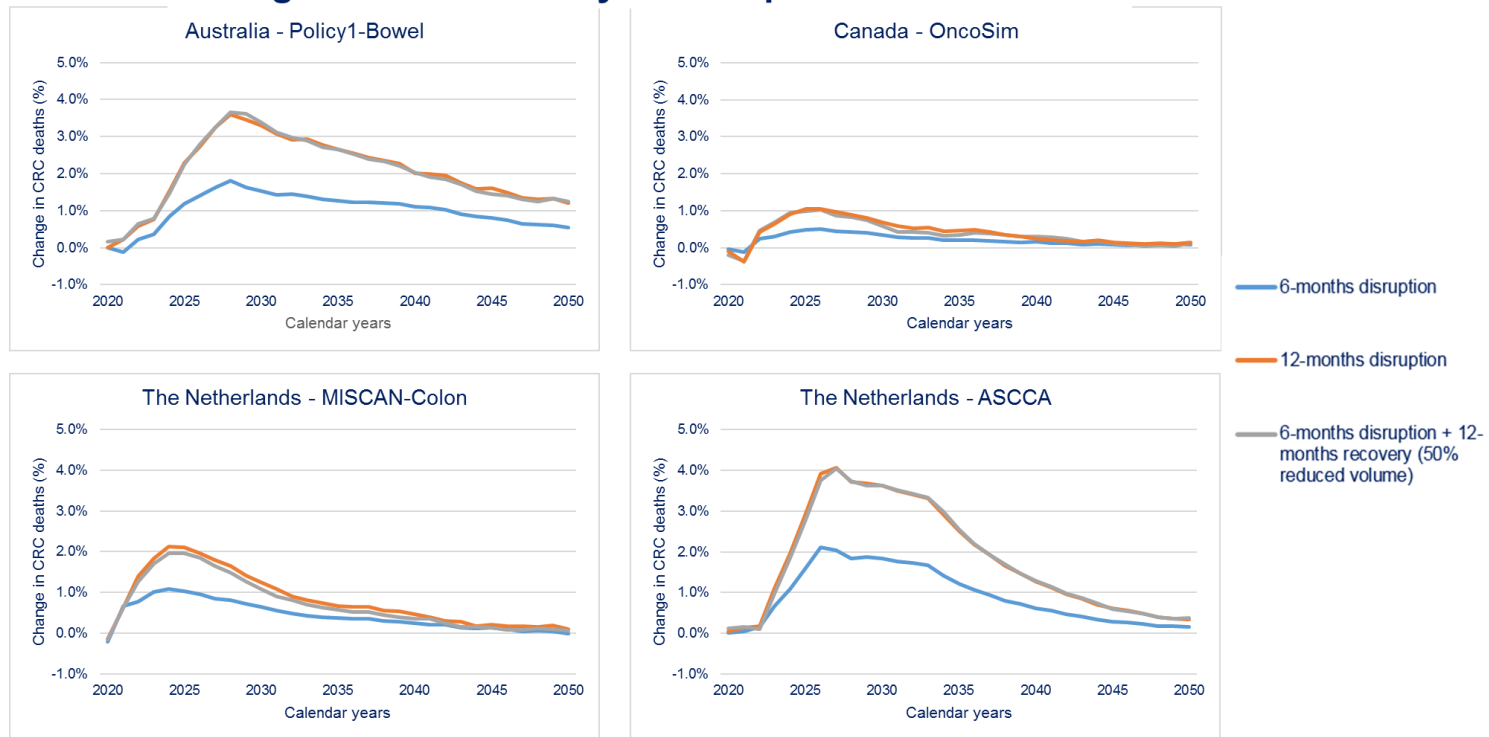
*Proposed initial focus areas for WG 1 & 3

Item 5. Intended goals and actions for WG1 and WG3

Note that the activities will complement those already underway for WG2 - which in its initial stages will focus on comparative modelling with established comprehensive microsimulation platforms

As presented by Prof Iris Lansdorp-Vogelaar at Working Group 2 meeting, with full acknowledgement to the authors and teams at Cancer Council NSW, Canadian Partnership Against Cancer & Statistics Canada, Decision Modeling Center, Amsterdam UMC and Erasmus Medical Center, Rotterdam

Change in CRC mortality for comparator scenarios



Item 5. Intended goals and actions for WG1 and WG3

We will focus on bringing together consortium members and teams to jointly construct a comprehensive platform to quantify the effects of the pandemic on cancer risk, prevention, treatment, incidence and mortality outcomes.

The initial activities of each WG are envisaged as follows:

WG1 - Cancer treatment and outcomes

- Reach out to those who have published modelling/predictions of the impact on cancer outcomes and who are not already involved in the CCGMC.
- Collate the available data sources on:
 - Synthesised data on impact of effective treatment on survival
 - Disruption nature, extent, specific service-delivery aspects & timing in countries (or modelled projections of these)
 - Observational data on impact on diagnostic delays & up-staging information on outcomes
 - Centralised registry data collection on outcomes over time (IARC)
- Collaborate on developing a global platform, using the above data sources
 - Tapping into the expertise and platforms already developed by others for cancer outcomes modelling for validation, or to inform the design of what we do



Item 5. Intended goals and actions for WG1 and WG3

We will focus on bringing together consortium members and teams to jointly construct a comprehensive platform to quantify the effects of the pandemic on cancer risk, prevention, treatment, incidence and mortality outcomes.

The initial activities of each WG are envisaged as follows:

WG 3 - Prevention and cancer risk behaviours:

- Focus on understanding research priorities, including issues around equity in risk/exposures and prevention opportunities
- Focus on synthesising and assessing information on changes in risk behaviours during 'lockdown' or otherwise during the crisis
- Information collated will be able to be incorporated in the collaborative model platform to assess impact on cancer risk & outcomes



Item 6. Review of platforms & early published results

From CCGMC members:

Ton Coolen (Radboud):
SaddlePoint Signature analytics pipeline

Cancer and COVID-19 outcomes

(breast, prostate, lung, head and neck cancers;
UK, Sweden, Netherlands)

Russ Wolfinger (JMP)

Machine learning

Forecasts of COVID-19 deaths

(major global regions; Kaggle competitions)

Mieke Van Hemelrijck (KCL)
COVID-19 severity and death in cancer patients

medRxiv 2020.05.12.20094219
(all cancers, UK)

Alfredo Polo, Eduardo Zubizarreta (IAEA)

Regional impact of COVID-19 pandemic on the supply of radiotherapy services and cancer outcomes

(globally, by region or country)

Nickhill Bhakta (St Jude's)

Microsimulation models

Long-term multimorbidity among adult survivors of childhood cancer

Chronic health conditions in childhood cancer survivors

Lancet 2017, PMID 28890157
(USA)

Adeseye Akinsete (UoLagos)

Finance options and pediatric cancer outcomes

(Lagos, Nigeria)

As of 29 June 2020

Plus other research (please send completed model description forms to Secretariat at covidandcancer@nswcc.org.au)



Infectious disease modelling: COVID-19 in LMIC

Projections of COVID-19 epidemics in LMIC countries

Status: report | First online: 30-04-2020 | Last update: 05-06-2020

Authors: *Carl A.B. Pearson**, *Kevin van Zandvoort*, *Christopher I Jarvis*, *Nicholas Davies*, *Francesco Checchi*, *CMMID nCov working group*, *Mark Jit* & *Rosalind M Eggo**.

* corresponding author






This study has not yet been peer reviewed.

We have generated country-specific reports of projected COVID-19 epidemics with and without interventions.

Science

RESEARCH ARTICLE

The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries

 Patrick G. T. Walker^{1,*†},  Charles Whittaker^{1,†},  Oliver J Watson^{1,2,†},  Marc Baguelin^{1,3},  ...

+ See all authors and affiliations

Science 12 Jun 2020:
eabc0035
DOI: 10.1126/science.abc0035



Infectious disease modelling: COVID-19 in HIC



Forecasting the impact of the first wave of the COVID-19 pandemic on hospital demand and deaths for the USA and European Economic Area countries

IHME COVID-19 health service utilization forecasting team, Christopher JL Murray
doi: <https://doi.org/10.1101/2020.04.21.20074732>

USA:

60,308 (34,063-140,381)

COVID-19 deaths

[25 June actual: 121,979]

Peak usage: 9,356 ICU beds,
16,545 ventilators

European Economic Area:

143,088 (101,131-253,163)

COVID-19 deaths

[25 June actual: 175,720]

Peak usage: 32,291 ICU beds,
28,973 ventilators



Global population at increased risk

THE LANCET
Global Health

Log in



Based on WHO, UK, US guidelines and GBD 2017 data:

ARTICLES | ONLINE FIRST

Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study

[Andrew Clark, PhD](#)   • [Prof Mark Jit, PhD](#) • [Charlotte Warren-Gash, PhD](#) •

[Prof Bruce Guthrie, PhD](#) • [Harry H X Wang, PhD](#) • [Prof Stewart W Mercer, PhD](#) • et al.

[Show all authors](#) • [Show footnotes](#)

[Open Access](#) • Published: June 15, 2020 • DOI: [https://doi.org/10.1016/S2214-109X\(20\)30264-3](https://doi.org/10.1016/S2214-109X(20)30264-3) •

1.7 billion people
(22% of global population)
at increased risk of severe
COVID-19 if infected

includes cancer with
immunosuppression (direct or
possibly through treatment)



Excess mortality due to cancer diagnosis delays in England

Accepted Manuscript 19.06.20. *The Lancet Oncology* (in press)

The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis: a national population based modelling study

Dr. Camille Maringe¹ PhD, Prof. James Spicer^{2,3} PhD, Dr Melanie Morris⁴ PhD, Prof. Arnie Purushotham^{2,3} MD, Prof. Ellen Nolte⁴ PhD, Prof. Richard Sullivan^{2,3,5} PhD, Prof. Bernard Rchet¹ PhD, Dr Ajay Aggarwal^{3,4,5} PhD.

<https://researchonline.lshtm.ac.uk/id/eprint/4657274/>

Delays of diagnosis for breast, colorectal, lung, and esophageal cancer
- 3 possible scenarios
reallocate screening and routine referral pathways to urgent and emergency pathways

3,291 to 3,620 excess deaths
within the next 5 years
59,203 to 63,229 life years lost



Excess mortality due to cancer surgery delays in England



ORIGINAL ARTICLE | [ARTICLES IN PRESS](#)

Collateral damage: the impact on outcomes from cancer surgery of the COVID-19 pandemic

[Amit Sud](#) * • [Michael Jones](#) * • [John Broggio](#) * • ... [Georgios Lyratzopoulos](#) •

[Richard Houlston](#) • [Clare Turnbull](#)   • [Show all authors](#) • [Show footnotes](#)

[Open Access](#) • Published: May 19, 2020 • DOI: <https://doi.org/10.1016/j.annonc.2020.05.009>

Modelling deaths due to delayed surgery across all Stage 1-3 cancers for England (13 cancer types)

3-month delay:
>4,700 excess deaths


6-month delay:
>10,700 excess deaths

Excess mortality in cancer patients in England (and USA)

medRxiv

THE PREPRINT SERVER FOR HEALTH SCIENCES

Estimating excess mortality in people with cancer and multimorbidity in the COVID-19 emergency

 Alvina G Lai, Laura Pasea, Amitava Banerjee, Spiros Denaxas, Michail Katsoulis, Wai Hoong Chang, Bryan Williams, Deenan Pillay, Mahdad Noursadeghi, David Linch, Derralynn Hughes, Martin D Forster, Clare Turnbull, Natalie K Fitzpatrick, Kathryn Boyd, Graham R Foster, Matt Cooper, Monica Jones, Kathy Pritchard-Jones, Richard Sullivan, Geoff Hall, Charlie Davie, Mark Lawler, Harry Hemingway

doi: <https://doi.org/10.1101/2020.05.27.20083287>

Weekly multi-centre data to April 2020 (England, Ireland):
chemotherapy ↓ 45-66%
urgent referrals for early cancer diagnosis ↓ 70-89%

If 40% of newly diagnosed cancer cases impacted at 1.5-fold higher mortality: estimate
>6,200 excess deaths in England
>33,800 excess deaths in the US within 1 year



Cancer treatment delays in Australia

medRxiv

THE PREPRINT SERVER FOR HEALTH SCIENCES

An inverse stage-shift model to estimate the excess mortality and health economic impact of delayed access to cancer services due to the COVID-19 pandemic

 Koen Degeling,  Nancy N Baxter,  Jon Emery,  Fanny Franchini,  Peter Gibbs,  G Bruce Mann,  Grant McArthur, Benjamin J Solomon,  Maarten J IJzerman

doi: <https://doi.org/10.1101/2020.05.30.20117630>

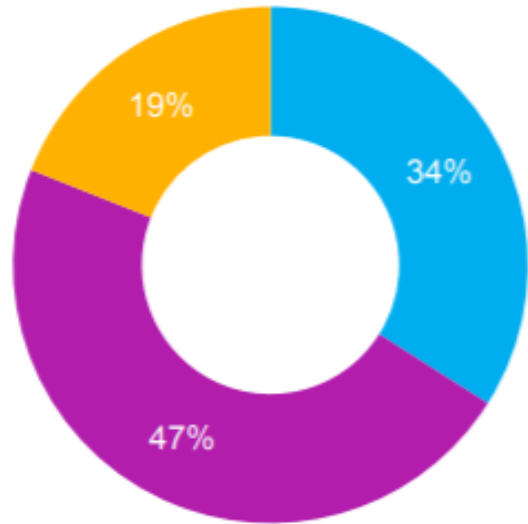
Modelling 3 and 6-month delays for patients diagnosed in 2020: stage I breast, colorectal, lung cancer, and for T1 melanoma

3-month delay: 90 deaths, \$12m healthcare costs 2020-2024

6-month delay: 350 deaths, \$46m healthcare costs 2020-2024



Alcohol consumption during lockdowns



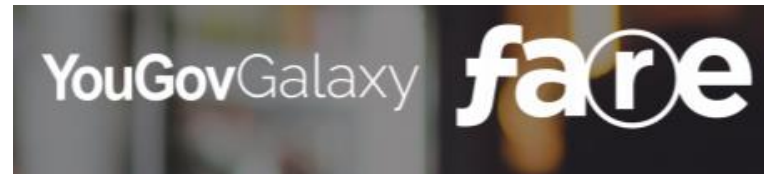
- Less than usual
- Same as usual
- More than usual



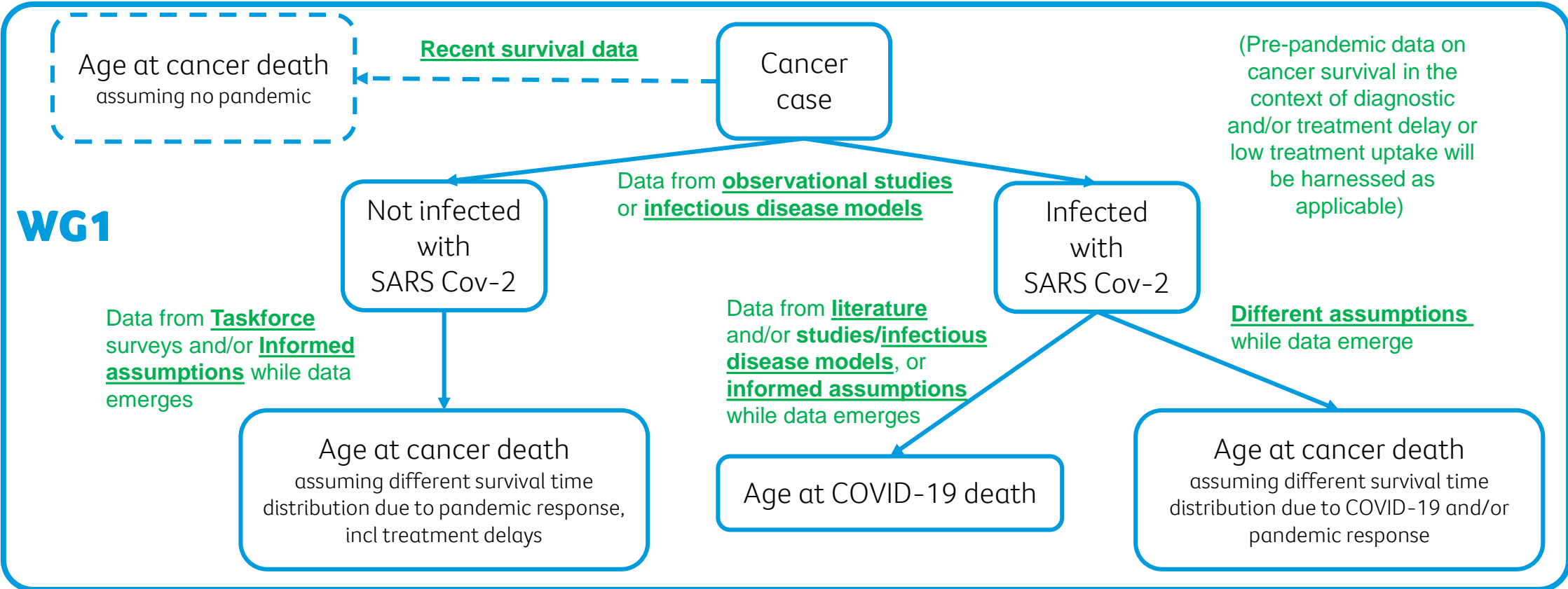
Initial surveys:

- About 1 in 5 people report drinking more alcohol during lockdowns
 - Similar in UK, NZ, Australia
- But: some people also report drinking less
 - About 1 in 3 in UK, NZ

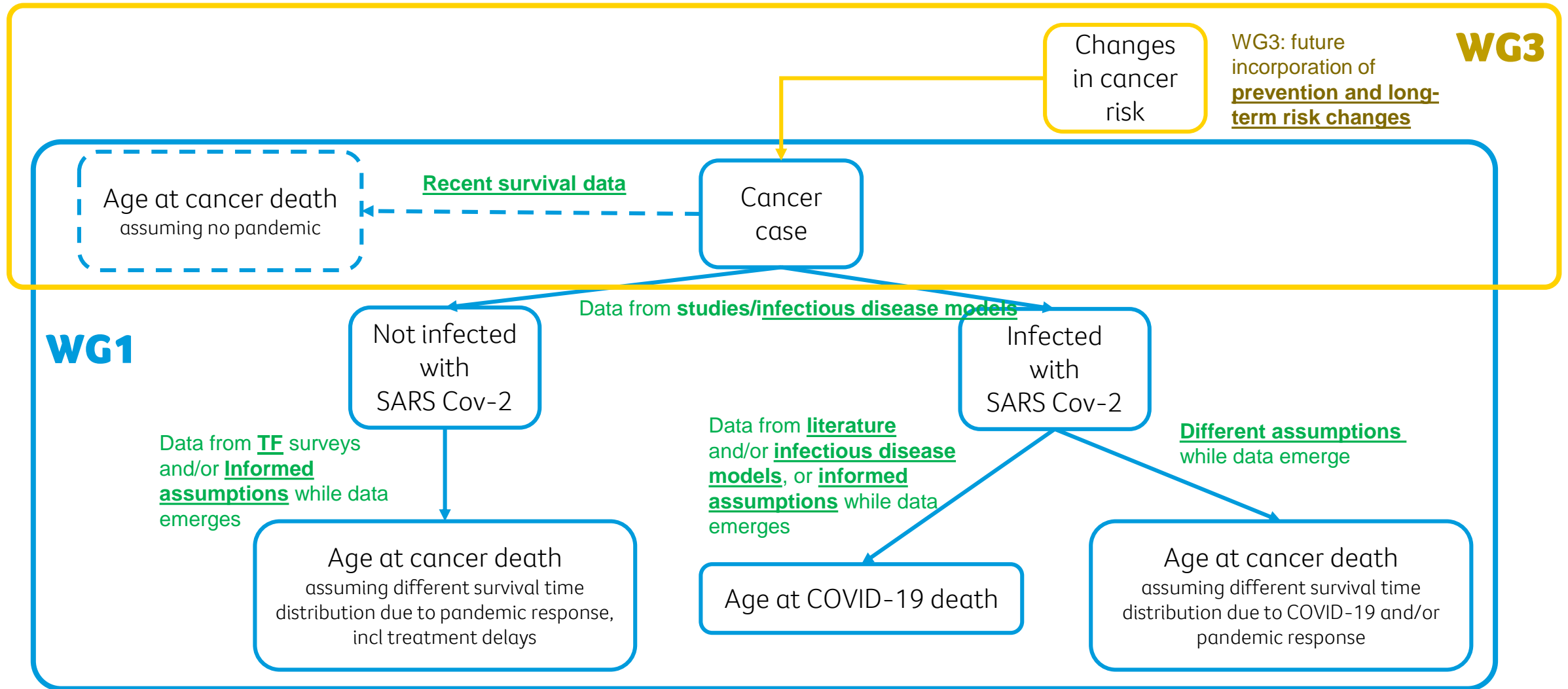
→ Impacts on cancer risk



Item 7. Concept for new global platform



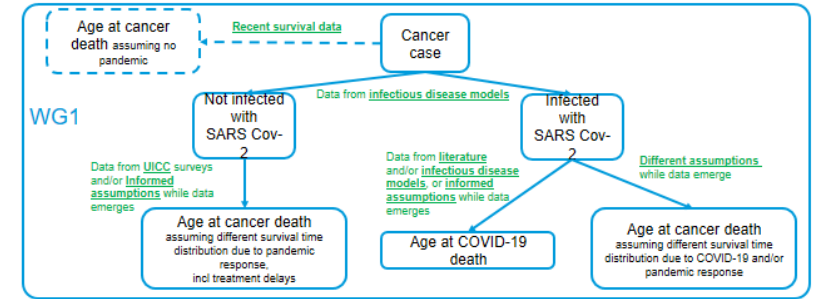
Item 7. Concept for new global platform



Item 8. Discussion of potential data sources



WG 1: Cancer treatment & outcomes



Cancer burden & outcome

- Incidence, mortality, and survival → National estimates and observed data from population-based cancer registries (PBCRs)

Cancer Treatment

- Treatment among cases, changes in approach/regimen → PBCRs, surveys, literatures
- Pathways to treatment → delays during COVID and impact on survival → PBCRs, surveys, literatures

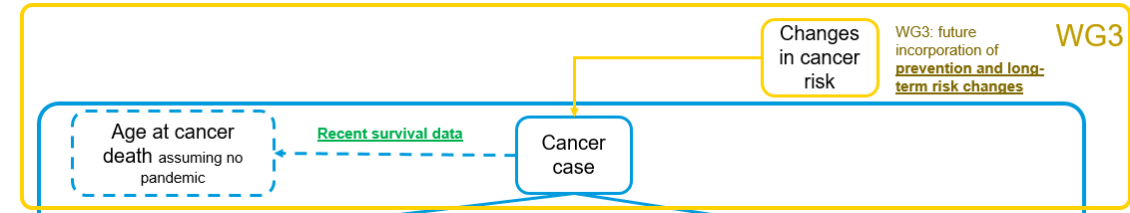
Infectious disease & Cancer

- Cases infected by COVID → literatures, infectious disease models (rate, prevalent)
- Excess mortality among cancer patients → literatures

Item 8. Discussion of potential data sources



WG 3: Cancer risk & prevention



Cancer & cancer outcome

- Incidence & mortality → National estimates and observed data from PBCRs

Risk factors

- Risk factors prevalence → National estimates e.g. WHO, GISAH, NCD-RisC
- Changing risk factors (probability) → before, during and after lockdown → Literatures

Relative risks

- Risk factor to cancer → Meta-analysis e.g. IARC Monograph, CUP WCRF, literatures
- Changing risk factor changes to cancer risk change → (prevention) literatures

Item 9. Discussion, questions and perspectives

Secretariat email: covidandcancer@nswcc.org.au

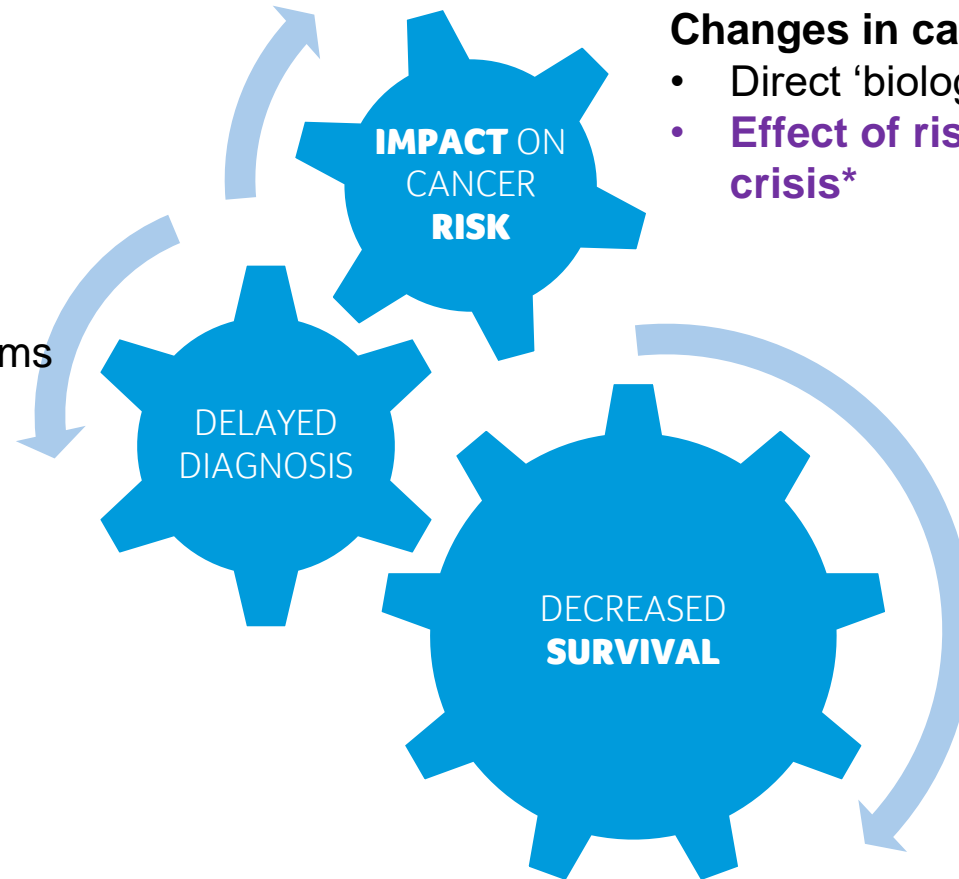


Intended goals and actions for WG1 and WG3

Pandemic impact on cancer outcomes

Changes in cancer detection & staging (WG1&2)

- Disruptions to screening programs (WG2)
- **Delays in symptomatic presentation (WG1)***



Changes in cancer risk (WG3)

- Direct 'biological' impact on risk
- **Effect of risky behaviours during crisis***

Changes in cancer outcomes (WG1)

- **Impact of treatment disruptions***
- Direct 'biological' impact on survival
- Effects on co-morbid conditions
- Competing mortality risk from infection

*Proposed initial focus areas for WG 1 & 3

Item 10. Future call schedule & next steps

- Each Working Group will aim to hold a call for more detailed discussion within the next 2-4 weeks (Doodle polls to be sent by Secretariat).
- The coordinating center will follow-up with:
 - Completion of disclosure forms
 - More comprehensive 'audit' of model platforms developed by members
 - Invitations to the shared workspace, to be made available via the Microsoft Teams platform.
- Full Consortium call for next week has been postponed following the WG calls this week. Secretariat will send Doodle poll and placeholder for the next meeting, where each WG will report back on updates and results.

Item 11. Any other business?

www.ccgmc.org

Secretariat email: covidandcancer@nswcc.org.au



Thank you

www.ccgmc.org

Secretariat email: covidandcancer@nswcc.org.au



International Agency for Research on Cancer



CANADIAN PARTNERSHIP
AGAINST CANCER



PARTENARIAT CANADIEN
CONTRE LE CANCER

