

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:<https://orca.cardiff.ac.uk/id/eprint/131045/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Jones, Daniel, Neal, Richard D., Duffy, Sean R. G., Scott, Suzanne E., Whitaker, Katriina L. and Brain, Kate 2020. Impact of the COVID-19 global pandemic on symptomatic diagnosis of cancer - the view from primary care. *Lancet Oncology* 21 , pp. 748-750. 10.1016/S1470-2045(20)30242-4

Publishers page: [http://dx.doi.org/10.1016/S1470-2045\(20\)30242-4](http://dx.doi.org/10.1016/S1470-2045(20)30242-4)

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



## **Comment: Impact of the COVID-19 global pandemic on symptomatic diagnosis of cancer – the view from primary care**

*Daniel Jones MRCGP,<sup>1</sup> Richard D Neal FRCGP,<sup>1</sup> Sean RG Duffy FRCOG,<sup>2</sup> Suzanne E Scott PhD,<sup>3</sup> Katriina L Whitaker PhD,<sup>4</sup> Kate Brain PhD<sup>5</sup>*

- <sup>1</sup> Leeds Institute of Health Sciences, University of Leeds, Worsley Building, University of Leeds, Leeds, LS2 9NL
- <sup>2</sup> West Yorkshire and Harrogate Cancer Alliance, White Rose House, West Parade, Wakefield WF1 1LT
- <sup>3</sup> Faculty of Dentistry, Oral & Craniofacial Sciences, King's College London, Floor 18 Tower Wing, Guy's Hospital, London, SE1 9R
- <sup>4</sup> School of Health Sciences, University of Surrey, Kate Granger Building, Guildford, Surrey GU2 7YH
- <sup>5</sup> Division of Population Medicine, College of Biomedical and Life Sciences, Cardiff University, Heath Park, Cardiff, CF14 4YS

Corresponding author:

Dr Daniel Jones, NIHR Academic Clinical Lecturer  
Leeds Institute of Health Sciences  
University of Leeds  
Worsley Building  
University of Leeds  
Leeds  
LS2 9NL  
Email: d.j.jones@leeds.ac.uk  
Telephone: +44(0) 113 343 6905

The entire landscape of cancer management in primary care, from case identification to the management of those living with and beyond cancer, is evolving rapidly in the face of the coronavirus (COVID-19) pandemic.<sup>1</sup> In a climate of fear and mandated avoidance of all but essential clinical services, delays in patient, population and healthcare system responses to suspected cancer symptoms seem inevitable.

### Screening, case identification and referral

UK national cancer screening programmes - accounting for approximately 5% of all cancer diagnoses each year - have been suspended.<sup>2</sup> As a consequence, early diagnoses from screening will be delayed, and symptom-based diagnosis of cancer becomes more important.<sup>3</sup> Postponing screening sends a message to the public and primary care that cancer can wait.

Timely presentation with symptoms is driven by a combination of appraising symptoms as warranting attention, perceived or actual ability to consult a healthcare professional, perceived consequences of seeking help, and priority over competing goals.<sup>4</sup> It is likely that patients with well recognized 'red flag' symptoms such as a new lump or rectal bleeding will continue to present to primary care. However with COVID-19 at the forefront, vague cancer symptoms such as fatigue, change in bowel habit and weight loss may be dismissed by the patient as trivial.<sup>5</sup> Respiratory symptoms including persistent cough may be attributed to COVID-19 and not acted on. Patients may be reluctant to present due to fear of mixing with others, limited capacity to use video/teleconsultations and worry about wasting the doctor's time.<sup>6,7</sup>

For GPs, the COVID-19 pandemic is affecting all aspects of normal working life, including a reduced workforce due to illness and self-isolation, and the availability of appointments and investigations in primary and secondary care. The huge shift to telephone triage and video consultations may result in missed cues, reduced examination findings and loss of the clinician's 'gut feeling'. Remote consulting may also be less suited to more vulnerable patients and those from lower socioeconomic backgrounds, compounding inequalities already apparent in early cancer diagnosis.<sup>8</sup> If patients with cancer symptoms do present to primary care, there is no consensus on how they should be managed during the pandemic, or safety-netted. When patients are referred, they are likely to be triaged or delayed.<sup>9</sup> For example, the cancellation of all but emergency endoscopy will inevitably prolong the diagnosis of gastrointestinal cancers.

#### Cancer patient management and follow up

Many patients with cancer, especially those undergoing chemotherapy, radical radiotherapy and immunotherapy, are at greater risk from the symptoms and sequelae of COVID-19. NHS guidelines state that patients will want to discuss whether the benefits of continuing active cancer treatment outweigh the risks of potentially being seriously unwell if they contract COVID-19 - a role that could well fall to primary care.<sup>9</sup> The UK cancer charity Macmillan reports that a quarter of calls to its support line are from patients with cancer, anxious about coronavirus.<sup>10</sup> While cancer charities provide a vital support role, primary care needs to support the physical and mental health of patients for whom potentially lifesaving cancer treatments are being postponed.

Cancer treatments remain a priority in the healthcare system, but as any system becomes increasingly occupied with caring for COVID-19 patients, prioritisation inevitably becomes the norm. Patients needing immediate care are receiving treatment, but where it is possible to delay treatments, then this will happen. Guidance to help these difficult decisions may become variable, inconsistent and hurried, with the inevitable risk to patient outcomes. In all of this, the psychological impact on patients and clinical staff will be enormous.

#### Implications for primary care

The COVID-19 pandemic crisis has highlighted potential solutions for dealing with future global health threats. Though we are in uncharted waters, it is likely that the use of remote consulting will grow. Greater flexibility in accessing healthcare may serve to advantage some population groups, but risks disadvantaging others. If done well, it could benefit previously underserved patient populations such as those living in remote areas.

Behavioural interventions to encourage the timely symptomatic diagnosis of cancer are important. Public awareness campaigns should signal that early help-seeking is welcome and legitimate, and may utilise social media and community networks that have grown in response to COVID-19. Clinicians must be aware of ‘diagnostic overshadowing’ from COVID-19, remember that patients may have significantly delayed presentation already, and may need additional support navigating next steps in terms of their referral and safety-netting.

If cancer is suspected, clinicians should not be deterred from referring patients urgently because of COVID-19 or other future global health threats. However, they may have to accept triage and risk stratification of patients with potentially serious disease. Biomarker and machine learning approaches may support this, enabling prioritisation of patients who are at greatest risk and diverting healthcare resources towards managing seriously ill patients.

When patients are diagnosed with cancer, or are living with or beyond cancer, primary care may have to accept enhanced roles in supporting decisions on cancer treatment, palliative care and advanced planning around resuscitation and preferred places of care.

Lastly, once ‘normal service’ resumes at a population and health service level, there will be a huge backlog of patients with potential cancer symptoms needing urgent assessment. Planning for recovery should commence as soon as possible.

#### Acknowledgement

This research is linked to the CanTest Collaborative, which is funded by Cancer Research UK [C8640/A23385], of which RDN is an Associate Director and SS is a Co-investigator. It also comes under the auspices of the Health and Care Research Wales funded Primary and Emergency Care Research Centre [517195] and Wales Cancer Research Centre [517190], in which KB is Co-investigator and Collaborator.

#### Contributors

All authors have contributed equally to this manuscript

#### Declaration of interests

We declare no competing interests

#### References

- <sup>1</sup> COVID-19: global consequences for oncology. *Lancet Oncol* 2020; **21**: [https://doi.org/10.1016/S1470-2045\(20\)30175-3](https://doi.org/10.1016/S1470-2045(20)30175-3).
- <sup>2</sup> National Cancer Registration and Analysis Service. Routes to Diagnosis. [http://www.ncin.org.uk/publications/routes\\_to\\_diagnosis](http://www.ncin.org.uk/publications/routes_to_diagnosis). Accessed 30<sup>th</sup> March 2020.
- <sup>3</sup> Hamilton W, Walter FM, Rubin G, Neal RD. Improving early diagnosis of symptomatic cancer. *Nat Rev Clin Oncol* 2016; **13**: 740–749.

- <sup>4</sup> Scott SE, Walter FM, Webster A, Sutton S, Emery J. The model of pathways to treatment: conceptualization and integration with existing theory. *Br J Health Psychol* 2013; **18**: 45–65.
- <sup>5</sup> Whitaker KL, Scott SE, Winstanley K, Macleod U, Wardle J. Attributions of cancer ‘alarm’ symptoms in a community sample. *PLoS One* 2014; **9**: 1–17.
- <sup>6</sup> Forbes LJJ, Simon AE, Warburton F, et al. Differences in cancer awareness and beliefs between Australia, Canada, Denmark, Norway, Sweden and the UK (the International Cancer Benchmarking Partnership): do they contribute to differences in cancer survival? *Brit J Cancer* 2013; **108**: 292–300.
- <sup>7</sup> Llanwarne N, Newbould J, Burt J, Campbell JL, Roland M. Wasting the doctor’s time? A video-elicitation study with patients in primary care. *Soc Sci Med* 2017; **176**: 113–22.
- <sup>8</sup> Public Health England. COVID-19: interim guidance for primary care.  
<https://www.gov.uk/government/publications/wn-cov-guidance-for-primary-care/wn-cov-interim-guidance-for-primary-care>. Accessed 1<sup>st</sup> April 2020
- <sup>9</sup> Public Health England. Specialty guides for patient management during the coronavirus pandemic Clinical guide for the management of noncoronavirus patients requiring acute treatment: Cancer.  
<https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/specialty-guide-acute-treatment-cancer-23-march-2020.pdf>. Accessed 30<sup>th</sup> March 2020
- <sup>10</sup> Extance, A. Covid-19 and long term conditions: what if you have cancer, diabetes, or chronic kidney disease? *BMJ* 2020; 368 doi: <https://doi.org/10.1136/bmj.m1174>