#CatchUpWithCancer

Calculating the actual cumulative cancer backlog which has built up during the Covid-19 pandemic
March - August 2020

Background

In the UK Covid-19 social distancing measures introduced on 16th March 2020 resulted in the suspension of cancer screening, deferral of routine diagnostic and endoscopic investigations, outpatient appointments and some diagnostic surgery. Urgent 2 week wait cancer referrals for patients with suspected cancer from GPs decreased by up to 80% [1] and had recovered to only 60% for some cancers by June[2]. Waiting list have risen and in July there were 600,000 scans in the backlog and rising[3], with 100,000 in Scotland waiting for a diagnosis.[4] Up to 40% of cancer is diagnosed via non cancer referrals and it has been anticipated that in this group alone the delay in diagnosis will be 6 months[5]. It is estimated that there may be as many as 35,000 extra cancer deaths due to the measures introduced to protect the NHS being overwhelmed due to Covid[6].

On 27th April all the Cancer All Parliamentary Groups (APPGs) wrote to Matt Hancock warning of the cancer crisis[7] and in June it was recommended by independent scientists that planning for recovery should commence as soon as possible.[3] In July NHS England said they hoped that cancer services would be up and running by the end of the year[5]. With the cancer backlog increasing every day and services not back up and running over 300,000 members of the public have signed a petition urging the Government to catch up with cancer and boost services like radiotherapy to deal with the backlog[8] and over 100 MPs wrote to the Prime Minister on 21 August urging him to intervene[9].

On 29th August the Health Secretary announced that the cancer backlog had halved and would be cleared within months[10] and repeated this announcement in the House of Commons.

Concern

The concern if that with a large and rising cancer backlog and cancer services not even near running up to pre-covid levels now in September, the backlog can only increase even further every day. No information has been provided as to the true level of the cancer backlog by the NHS. A calculation has therefore been made based on the most recent figures cited by the

[1] https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(20)30388-0/fulltext
[2] https://www.ft.com/content/21250aa2-1985-4463-80f4-74d59d75649b
[3] https://www.theguardian.com/society/2020/jul/14/english-nhs-hospitals-in-urgent-need-of-more-scanners-and-staff-to-deal-with-backlog
[4] https://www.thetimes.co.uk/article/backlog-of-100-000-patients-are-waiting-for-cancer-diagnosis-9dbc3w60l
[5] https://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(20)30242-4.pdf
[6] https://www.bbc.co.uk/programmes/m000kqzv
[7] https://e8604b0e-5c16-4637-907f-3091e4443249.filesusr.com/ugd/4fcdc3_baa17605ce6a486d856210246ea0acd9.pdf
[8] https://www.change.org/p/the-secretary-of-state-for-health-matt-hancock-stop-unnecessary-cancer-deaths-caused-by-the-covid-disruptions-and-save-thousands-of-lives
[9] https://e8604b0e-5c16-4637-907f-3091e4443249.filesusr.com/ugd/4fcdc3_89c315287ba340099c609a813b36ea98.pdf
[10] https://metro.co.uk/2020/08/29/backlog-cancer-patients-awaiting-treatment-will-cleared-within-months-13194601/

Government to provide a guide as to the size of true cancer backlog as of beginning of September which needs to be cleared.

Methodology used

Calculations of the number of cancer patients in the actual cancer backlog were made using a comparison between expected number of cancer patients needing treatment (both for patients with a primary diagnosis and those needing treatment for relapse), based on previous years, compared to the actual number of cancer patients treated during the Covid crisis. Cancer does not go away without treatment and so the difference between the figures are the number of cancer patients who are yet to be diagnosed and treated =the actual cancer backlog. This cancer backlog can only be cleared if the cancer patients either are treated or die without treatment. To treat a cancer backlog, cancer services obviously need to be running at supra-normal level of capacity and activity.

Information available

On 3rd September the Leader of the House, Jacob Rees-Mogg announced that "*85,000 people started treatment for cancer from March to June, and urgent referrals are increasing again as people come forward for a cancer check*".[11] It is not clear whether the 85,000 figure is for England or the UK and so both scenarios have been considered.

Calculation

1. **Expected number of new cancer patients needing treatment in the UK:** Using the most up to date UK figures from CRUK cancer statistics 2015-2017, the new cancer patients diagnosed per year in the UK would be expect to be at least 367,167 in 2020. To get a figure for the four-month period March -June we divide this by three to get an expected number of new cancer patients needing treatment in the UK of 122,389

2. **Expected number of new patients needing treatment in England:** Using the most up to date England figures from ONS cancer registration statistics England 2017, the new cases diagnosed per year in England would be expected to be at least 305,683 in 2020. To get a figure for the four-month period March-June, we divided this by three to get an expected number of new cancer patients needing treatment in England of 101,894

3. **Actual number of patients treated in the period between March and June 2020 as announce in HOC**= 85,000.

4. **Therefore, backlog of new cancer patients March-June**
   UK backlog = 37,389 patients (122,389 - 85,000)
   Or
   England backlog = 16,894 patients (101,894 - 85,000)

Note: As the expected number of new cancer patients is based on 2017 data, and as the cancer rate increases by around 3500 a year, by 2020 there may be 10,500 more patients a

[11] Hansard https://bit.ly/3k4x6fI

year, so these number may be higher by 3,500 for March-June (10,500 divided by 3), so 40,889 (UK) or 20,394 (England).

5. **Likely additional backlog July and August 2020**
   The data on cancer patients starting treatment July-August has not been provided. The monthly treatment rate during Covid can be estimated from the 85,000 figure (for the four months March-June) by dividing by 4, but the March figure includes 2 weeks of normal service and another 2 weeks as services winded down at the start of lockdown and so the average monthly treatment start figure March-June will overestimate the true monthly cancer treatment rate after lockdown. However, cancer services have increased in July and August. It therefore seems reasonable to use an average monthly figure for March-June for the period July and August. This means an additional backlog July and August

   UK backlog = 18,695 patients (61,195-42,500)
   Or
   England backlog= 8,447 patients (50,947 -42,500)

This gives an estimated new cancer patient backlog March -August of at least:

In scenario 1 the UK - **56,084 new cancer patients** (37,389 + 18,695)

In scenario 2 in England - **25,341 new cancer patients** (16,894 + 8,447)

6. **Additional cancer patients who have cancer and relapse and need treatment**.
   The number of cancer patients who relapse and are actively treated is around 15-25% with these patients also requiring treatment.
   If as a very conservative estimate, we use the lower end of the relapse estimate (15%), we can calculate, using the CRUK and ONS data that the number of patients requiring treatment on relapse each year to estimate the likely minimum number of patients with relapse cancer who actively need treatment March-August:

   UK= (367,167 x 15%) divide by 2 = number in 6 months = **27,538 relapsed patients**
   Or
   England= (305,683 x 15%) divide by 2 = number in 6 months= **22,926 relapsed patients**

7. **Additional cancer patients treated during covid with holding treatment pending the covid crisis to recede.**
   A number of cancer patients were treated with holding treatment such as hormone therapy (many prostate cancer patients and some breast cancer patients) so that their definitive treatment -usually surgery or radiotherapy-could be delayed until later in the covid crisis. These patients will be recorded as having started treatment (hormone treatment) but they need to be counted as they are awaiting their definitive treatment and so are additional cancer patients who need to be counted as part of the treatment backlog. As there are around 20,000 men treated with prostate cancer with radiotherapy or surgery in the UK each year (10,000 in a six month period), even if only a quarter were among those who

had treatment delayed by the initial use of hormones, this group of additional patients may be **2,500 postponed patients (say 2,000 England)**

Total number of patients in backlog =new patients + relapsed patients + postponed patients

UK Total True backlog = **56,084 + 27,538 + 2,500 =86,122**
Or
England True Backlog = **25,341 + 22,926 + 2000 = 50,267**

This is a conservative estimate. Sense checking with the reports from most cancer charities of referrals in all the big number cancer such as lung, prostate breast etc being down by 50% during lockdown and that there are so many backlogs in diagnostic services this may still be an underestimate of the true cumulative backlog As cancer services are not up and running fully again, this backlog grows each day.

Ability of the cancer services to catch up

In order for the UK to catch up with the last 6 month cancer backlog over the next six months, even if cancer services were up to 100% capacity in September (which they will not be) to treat in excess of an extra 55,000 patients in the backlog, cancer services would need to be working at around 135% to catch up with this estimated cancer backlog.

Relevant Hansard transcripts:

- Matt Hancock quotes 1st September that the cancer backlog is half done: https://bit.ly/2Fpi2Kk
- Jacob Rees-Mogg announced that "*85,000 people started treatment for cancer from March to June, and urgent referrals are increasing again as people come forward for a cancer check*": https://bit.ly/3k4x6fI
- Matt Hancock repeats "*We have been working on it intensively and, as I say, the backlog has come down by about half, but clearly there is much more to do.*" on 8th September: https://bit.ly/3bIuTU0

Catch up with Cancer Campaign
10 September 2020