The Rt Hon Boris Johnson MP; Prime Minister
The Rt Hon Rishi Sunak; Chancellor of the Exchequer
Professor Chris Whitty; CMO, England
Dr Frank Atherton; CMO, Wales
Dr Gregor Ian Smith; CMO, Scotland
Dr Michael McBride; CMO, Northern Ireland
Sir Patrick Vallance; Government Chief Scientific Adviser

Subject: a targeted and evidence-based approach to the COVID-19 policy response (an open letter)
21st September 2020

Dear Prime Minister, Chancellor, CMOs and Chief Scientific Adviser

We are writing with the intention of providing constructive input into the choices with respect to the COVID-19 policy response. We also have several concerns regarding aspects of the existing policy choices that we wish to draw attention to.

In summary, our view is that the existing policy path is inconsistent with the known risk-profile of COVID-19 and should be reconsidered. The unstated objective currently appears to be one of suppression of the virus, until such a time that a vaccine can be deployed. This objective is increasingly unfeasible (notwithstanding our more specific concerns regarding existing policies) and is leading to significant harm across all age groups, which likely offsets any benefits.

Instead, more targeted measures that protect the most vulnerable from COVID, whilst not adversely impacting those not at risk, are more supportable. Given the high proportion of COVID deaths in care homes, these should be a priority. Such targeted measures should be explored as a matter of urgency, as the logical cornerstone of our future strategy.

In addition to this overarching point, we append a set of concerns regarding the existing policy choices, which we hope will be received in the spirit in which they are intended. We are mindful that the current circumstances are challenging, and that all policy decisions are difficult ones. Moreover, many people have sadly lost loved ones to COVID-19 throughout the UK. Nonetheless, the current debate appears unhelpfully polarised around views that COVID is extremely deadly to all (and that large-scale policy interventions are effective); and on the other hand, those who believe COVID poses no risk at all. In light of this, and in order to make choices that increase our prospects of achieving better outcomes in future, we think now is the right time to 'step back' and fundamentally reconsider the path forward.

Yours sincerely,

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SPECIFIC COMMENTS ON THE EXISTING POLICY PATH

- There should be a clearly stated objective for the overall response to COVID-19. Without this, neither the overarching strategy, nor individual policy choices within it, can be evaluated. At the time of the initial major policy interventions (the March 23rd lockdown), the objective was primarily framed around 'flatten the curve' and 'protect the NHS'. For some time, however, there has been an absence of a similarly clearly articulated objective.

- Any objective should be framed more broadly than COVID itself. To place all weight on reducing deaths from COVID fails to consider the complex trade-offs that occur: (i) within any healthcare system; and (ii) between healthcare, society and the economy.

- Individual policy choices within the strategy should be informed by an evidence base. The absence of similar policy interventions to those now being implemented in the past, coupled with the novel nature of the virus, means there is limited existing empirical evidence to inform the effectiveness of said measures. This means most weight should be placed on: (i) analysing what is actually occurring in relation to the *outcomes* we are targeting; (ii) metrics that can be most accurately measured and reported; and (iii) robust evaluations of interventions imposed, to ensure they deliver actual benefits. We are therefore concerned about the sole reliance on 'case numbers' and the 'R' to inform national and local policies, as these metrics are subject to significant measurement and interpretation challenges (and further, neither is an *outcome* that matters to society).

- The most pertinent epidemiological feature of COVID-19 is a greatly varying mortality risk by demographic. Mortality risk is highly age variant, with 89% of COVID mortalities in the over 65s[1]. Mortality risk is also concentrated in those with pre-existing medical conditions (95% of COVID deaths)[2]. This large variation in risk by age and health status suggests that the harm caused by uniform policies (that apply to all persons) will outweigh the benefits.

- Blanket COVID policy interventions likely have large costs, because any adverse effects impact the entire population. These include: (i) short and long-term physical and mental health impacts; and (ii) social and economic impacts.
  - In relation to health, the impact on cancer is especially acute. '2-week-wait' cancer referrals decreased 84% during lockdown. The impact of this alone has been estimated to be up to an additional 1,200 cancer deaths over 10 years (23,000 life-years lost)[3]. Cancer Research UK estimated there are 2 million delayed or missed cancer screenings, tests or treatments[4]. The impact of this broader disruption is uncertain. However, estimates indicate it could be as high as 60,000 lives lost[5].
  - In terms of the economy, the OBR's forecasts are for unemployment to reach 11.9% by Q4 2020. As of July 2020, net debt had risen to £2 trillion for the first time, and public sector net debt is expected to be 106.4% of GDP at the end of the year[6].

- Set against the high costs of these policies, their effectiveness in reducing COVID deaths remains unclear. Focusing on the UK, there is no readily observable pattern between the policy measures implemented to date and the profile of COVID deaths[7]. Caution should therefore be exercised in any *presumption* that such policy measures will successfully lower future COVID mortalities.

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[1]   ONS 'deaths involving COVID' measure, up to 28th August 2020.
[2]   NHS 'deaths in a hospital setting' data, as of 9th September 2020.
[3]   Sud, A; Tarr, B; Jones, M; Broggio, J; Scott, S; Loveday, C; Garrett, A; Granthoud, F; Nicol, D; Jhanjo, S; Boyce, S; Williams, M; Riboli, E; Muller, D; Kipps, E; Larkin, J; Navani, N; Swanton, C; Lyratzapoulos, G; McFerran, E; Lawler, M; Houlston, R; Turnbull, C. *'Effects of delays in the 2-week-wait cancer referral pathway during the COVID-19 pandemic on cancer survival rates in the UK: a modelling study'*. The Lancet: Oncology (August 2020). Figures rounded.
[4]   https://www.cancerresearchuk.org/about-us/cancer-news/press-release/2020-06-01-over-2-million-people-in-backlog-for-cancer-care
[5]   Sikora, K; *'The potential impact of COVID-19 on cancer mortality in the UK'*. Oncology Central (May 2020).
[6]   OBR 'Public Sector Finances: July 2020.' 21st August 2020.
[7]   The best available evidence indicates lockdown occurred after the infection peak. As such, deaths would not have continued rising without the lockdown and the lockdown could not have mitigated the impact of peak demand on the NHS, as originally intended. Similarly, as lockdown measures have been eased, we do not observe any discernable impact on the downwards trajectory of COVID-19 mortalities.

- In light of the above, our strategy should therefore target interventions to protect those most at risk. For example, Germany's case fatality rate among patients over 70 is the same as most European countries. However, its effective reduction in deaths is based around a successful strategy of limiting infections in those older than 70.
- Finally, behavioural interventions that seek to increase the personal threat perception of COVID should be reconsidered, as they likely contribute to adverse physical and mental health impacts beyond COVID. Consideration should also be given to whether policies that are intended to 'reassure', may in fact reinforce a heightened perception of risk. Providing the public with objective information on the actual risk they face from COVID-19, by age and health status, would be preferable.