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patient contacts of HCWs who were confirmed to have COVID-19 also screened negative. No in-hospital clusters resulted from the HCWs with COVID-19. During this period, 35 acute respiratory illness clusters in HCWs were identified, but SARS-CoV-2 was not detected. One-time screening of 1378 asymptomatic housekeeping, facilities, information-technology, and security staff identified one (0.07%) person with COVID-19 infection. Since May 6, 2020, all HCWs with acute respiratory illness have been tested for SARS-CoV-2, further reducing the risk of nosocomial transmission. In hospitals that have staff who are well trained and supplied with personal protective equipment, have comprehensive sickness-surveillance systems, and have a universal mask policy, testing of asymptomatic HCWs would not be indicated.

We declare no competing interests.

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### Authors' reply

Kevin Fennelly and Christopher Whalen emphasise that health-care workers (HCWs) are at a higher risk of severe acute respiratory syndrome coronavirus 2 infection than are the general population. Angela Chow and colleagues describe their experience in Singapore of very low rates of HCW infections and nosocomial transmission when effective personal protective equipment is implemented. We agree with both perspectives, and our Correspondence<sup>1</sup> did not contradict either of these viewpoints.

Front-line HCWs have a reported hazard ratio of more than 3 compared with the general community.<sup>2</sup> This risk is variable between studies, with reported seropositivity rates in the UK ranging from 6% to 43% across different hospital settings.<sup>3,4</sup> Explanations for this variation include confounding by sampling timepoints during an emerging epidemic wave, participant selection (random vs symptomatic), and rates of self-isolation, and differences in the nature of exposures, policies for infection control, and use of personal protective equipment.

Our study was done when symptomatic HCWs were already required to quarantine. We sought to address the need for repeated mass screening of staff without disease-defining symptoms to help to reduce transmission associated with health care. Therefore, we focused on asymptomatic or pauci-symptomatic infection in HCWs at sequential timepoints during the first epidemic wave in London, UK, sampling only HCWs who attended work because they did not meet the symptomatic criteria to self-isolate. PCR-positive results peaked one week before the PCR-positive peak in London (which was at that time reflected mainly by symptomatic patients presenting to hospitals). We inferred from this that the peak of asymptomatic infection in our HCW cohort coincided with the peak of virus circulation in the community.<sup>1</sup>

Thereafter, the rates of prevalent asymptomatic infection in our cohort reduced in line with the decline in community cases, despite a persistent number of patients with COVID-19 within the hospital. Further serial swabbing of HCWs over 16 weeks to mid-August, 2020, showed no new cases (appendix p 1) and neither did extension to two further hospitals and a total of 731 participants who were studied longitudinally (data not shown). The number of HCWs who were self-isolating fell to nearly zero over this time period. Despite some persistent hospitalised cases, zero cases were identified by PCR and nearly zero HCWs were self-quarantining by approximately 4 weeks after the peak, suggesting that nosocomial transmission had ceased. A key contributor to the absence of ongoing nosocomial transmission was likely to be the effective implementation of infection control practices.

Our approach to focus on asymptomatic infections underestimates the absolute incident rate of infections among HCWs, but it identifies the scale of infection missed by case-definition criteria and is likely to be a fair surrogate for the trend of incident infections. These data suggest that tracking community prevalence to trigger asymptomatic screening of HCWs is more informative than monitoring hospital caseloads.

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## Organ procurement and transplantation in Germany during the COVID-19 pandemic

The COVID-19 pandemic has introduced unique challenges to health-care systems worldwide. Organ procurement and transplantation activities were affected in this context as previously described by Alexandre Loupy and colleagues.<sup>1</sup>

However, COVID-19 and organ transplant data from Germany,<sup>2</sup> the Robert Koch Institute, and Eurotransplant paints a different picture. With the increase in the number of COVID-19 cases, organ procurement and transplantation activities in Germany remained

robust (appendix).<sup>2</sup> Moreover, compared with the previous year, the cumulative numbers of deceased organ donors and transplants show no significant reduction. Kidney transplantation numbers were stable, while the numbers of heart, lung, and liver transplantations from deceased donors even increased from January to April, 2020, when compared with the same period of the previous year. In contrast, transplant activities in Italy and Spain were reduced by 30–50%.<sup>2</sup>

We believe that this stability is highly related to adequate intensive care resources and largely benefits from the prophylactic measures and control strategy against COVID-19 in Germany. Elective surgeries were postponed or reduced. Therefore, the intensive care and ventilation resources could be allocated to organ procurement and transplantation during this crisis. In addition, a step-by-step plan and recommendations were applied in the early pandemic with close attention to the development and changes of the epidemic situation. The living donation programmes were only temporarily paused, whereas deceased organ donor transplants were continued throughout Germany. As a treatment to end-stage organ failure, transplantation should be regarded as an emergency treatment that should not be discontinued during a pandemic with a careful risk-benefit assessment.

We declare no competing interests.

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See Online for appendix

## Transplant programmes in areas with high SARS-CoV-2 transmission

We read Alexandre Loupy and colleagues' account of a significant reduction in transplant activity in France and the USA with interest.<sup>1</sup> The UK also has a high burden of COVID-19 with high severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission leading to a significant reduction in organ donation and transplant activity. In the UK, in April, 2020, only five out of 23 kidney transplant centres were active during lockdown.<sup>2</sup> According to NHS Blood and Transplant, on May 8, 2020, deceased-donor organ retrieval was down by 63% and kidney transplantation by 57% compared with 2019.

The Oxford Transplant Centre is located in a hospital without an emergency department and is maintained as a COVID-19-free site—any suspected cases are isolated on a designated ward, and if confirmed are rapidly transferred to the main acute hospital. We have made profound system-wide changes to our practice covering donor and recipient selection, hospital logistics, and perioperative management to enable our transplant programme to continue, which are summarised in the appendix (pp 1–2). These changes have been highly effective. Between March 16 and May 12, 2020, we did 38 deceased-donor kidney transplants—27 from donation after brain death and 11 from donation after cardiac death. This compares with 16 kidney-alone transplants



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For more on **NHS Blood and Transplant** see <https://www.nhsbt.nhs.uk/>



For **Robert Koch Institute COVID-19 data** see [https://www.rki.de/Content/InfAZ/N/Neuartiges\\_Coronavirus/Fallzahlen.html](https://www.rki.de/Content/InfAZ/N/Neuartiges_Coronavirus/Fallzahlen.html)

For **Eurotransplant statistical data** see <https://www.eurotransplant.org/statistics/monthly-statistics/>

See Online for appendix