

July 2021

# viewpoint

## COVID-19 medical claims analysis What can we all learn from early paid claims data?

While so much has been written about COVID-19 – and the volatility that this would cause to the private medical insurance industry, particularly with regards to medical utilisation and trends – one piece of the jigsaw missing so far has been actual analysis of medical claims data. What can payments so far tell us about the effect of the pandemic on claims? And, most importantly, what does it all mean for you as a multinational employer?

We already know that the pandemic has impacted the world profoundly. At the time of writing, there have been over 184 million confirmed cases of COVID-19 with 3.9 million deaths, according to the World Health Organization (WHO).<sup>1</sup> The good news is that 3 billion vaccine doses have been administered and there seems to be a little light at the end of the long COVID-19 tunnel.

To begin the lengthy process of understanding the impact of COVID-19 on medical claims, we've started looking at our paid claims data from around the world in 2020 and the early part of 2021 and have summarised some of the initial findings in this Viewpoint. It makes for an interesting read...

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### About the data

Before we get started, we need to point out that these are early findings based on paid claims from 17 of our network members around the world, including a number of emerging economies, in Asia, the Middle East and Central and South America. The claims data received is anonymised and aggregated to give us a snapshot of claims paid by our local partners in these countries.<sup>2</sup>

Of course, our data does not incorporate the significant amount of publicly available COVID-19 data released by governments and similar bodies, and only covers private medical claims, so doesn't give a full representation of COVID-19 in these countries.



## The significant effect on rates of respiratory system diseases

As most people would probably expect from a respiratory virus, our analysis of paid claims data has shown that in many countries, COVID-19 has had a material impact on respiratory system diseases. Mexico is a really interesting example from our data, so let's start by looking at that.

It has been affected the most so far with 9% of all paid claims in 2020 being COVID-19 related, the highest of any country in our data. Respiratory diseases accounted for 15% of total claims paid in Mexico in 2020 compared to only 6% in 2019 – a 135% year-on-year jump. COVID-19 was cited as a factor in 64% of all respiratory claims in the country, while non-COVID claims accounted for the other 36% (see chart).

Of course, there are significant variations between countries, with some countries like Mexico (64%) and Pakistan (60.6%) seeing more respiratory claims being linked to COVID-19 – as shown in the table to the right – while others, such as Singapore (0.01%) and Kuwait (1.1%), appearing to be far less impacted in 2020.

This could mean any number of things – it could reflect health equity differences between ethnic groups and how deadly the virus has been in each country, the capacity of the public health systems to cope with the pandemic, the speed of implementing lockdown measures, vaccination efforts etc. The UK, for instance – although not featured in all of our data sets due to the National Health Service's (NHS) treating COVID-19 patients – has had one of worst rates of infections and deaths in the world, with part of the blame put on factors such as a late lockdown, a lack of PPE and similar protective equipment, the poor state of public health, and high levels of obesity – all in spite of its well-developed NHS.<sup>3</sup>

### What does this mean for employers?

For a multinational employer, this information is critical as it helps to plan the measures needed to keep employees healthy and productive. By looking at COVID-19 claims data, you can understand your employee needs in each market and plan wellness interventions to give your employees access to the care they require. That can mean adding telemedicine services so that employees can continue to have medical access despite lockdowns or implementing employee assistance programmes and other services to help support employees' mental health.

## How else have COVID-19 claims been classified?

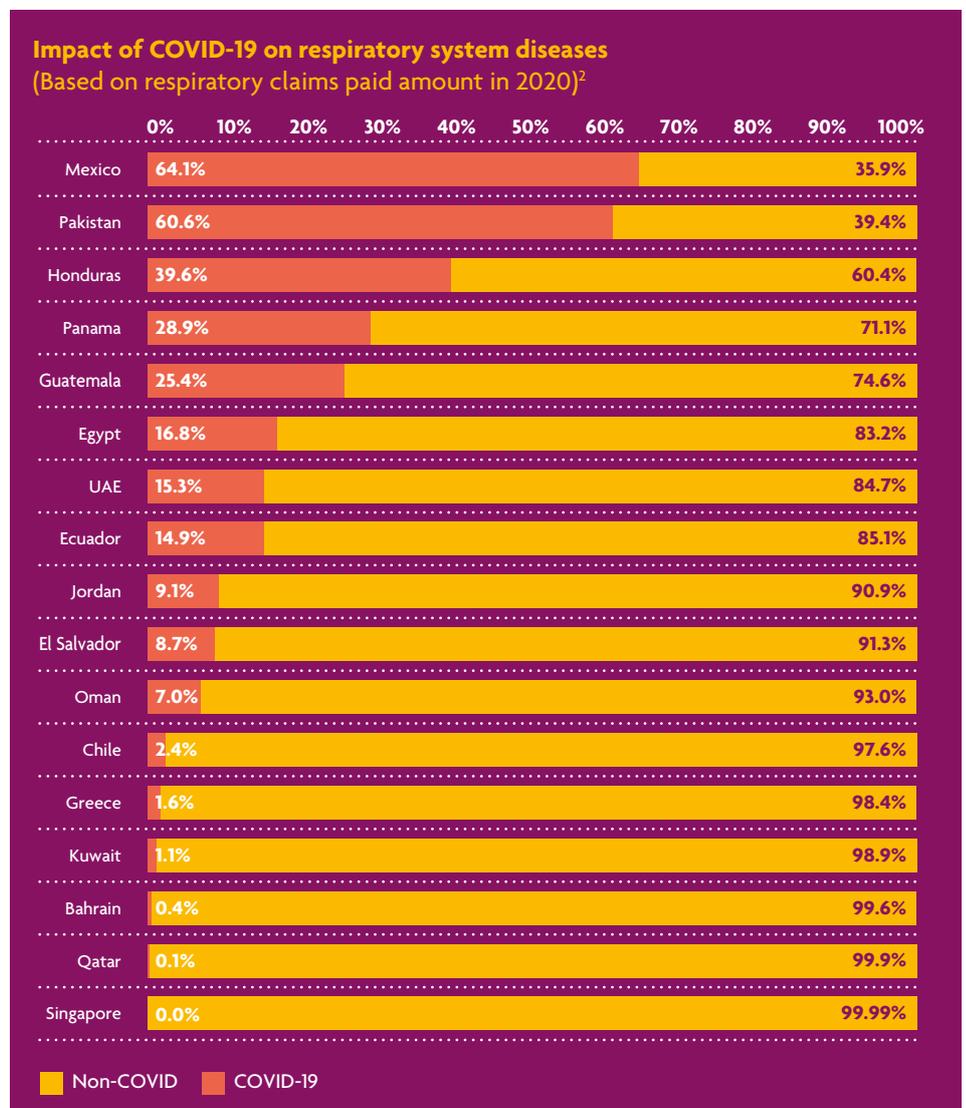
As well as being classified as a respiratory system disease in the formal ICD coding, the virus has also been identified under other ICD categories, including:

- ICD 10 Chapter 1 “Infectious and parasitic diseases”
- ICD 10 Chapter 18 “Symptoms, signs and abnormal clinical and laboratory findings, not classified elsewhere” – this speaks to the different forms in which the disease manifested itself and the confusion early on when an as-yet unknown pathogen was causing illness.

### What does this mean for employers?

To truly understand the impact that the pandemic has had on your medical claims, you need to look beyond respiratory disease ICD codes.

Respiratory diseases accounted for 15% of total claims paid in Mexico in 2020 compared to only 6% in 2019 – a 135% year-on-year jump.



## The impact on chronic diseases

The link between COVID-19 and chronic diseases is one that has been widely talked about. The virus has been particularly deadly for those that suffer from chronic conditions like diabetes, obesity, hypertension, asthma etc.<sup>4</sup> And so it's hardly surprising that we have seen a link between chronic disease and COVID-19 in our claims data. Let's look at Mexico again to see some of the impacts.

Even though the number one driver is respiratory disease, if we combine all of the chronic diseases that have played a significant contributory role in increasing the severity of COVID-19, we see they total 32% of total costs. These include circulatory system diseases, malignant cancers, kidney diseases, diabetes, cardiovascular disease, liver diseases and asthma – all pre-existing diseases that worsened the virus's outcome in affected individuals.

As well as COVID-19 being more deadly and more likely to lead to hospitalisation for patients with these conditions, lockdowns and a lack of access to their usual treatments, among other factors, could also have led to worsening of chronic illnesses.

The second round of a WHO pulse survey, published in April this year, found that over one year into the pandemic, substantial disruptions to healthcare delivery persisted, with about 90% of countries still reporting delays to essential health services.<sup>5</sup> But the WHO added: "Countries have been working to mitigate disruptions. More than half the countries consulted say they have recruited additional staff to boost the health workforce; redirected patients to other care facilities; and switched to alternative methods to delivering care, such as... increasing the use of telemedicine."

And the picture is similar for musculoskeletal conditions. As a percentage of total paid claims, musculoskeletal claims have also increased year-on-year in many markets. No doubt poor ergonomic working environments, limited mobility and less exercise – all due to vast numbers of people suddenly working at home with limited access to gyms – have all been contributory factors in this increase.

### What does this mean for employers?

Given the impact of chronic diseases on paid claims in a 'normal' year, it's hardly surprising that there's been an additional impact in 2020. Employers could consider targeted wellness programmes aimed at reducing some of their biggest chronic disease cost drivers. These can be delivered via educational campaigns or online programmes and can help employees better manage their chronic diseases or musculoskeletal conditions, keeping people healthier and at lower risk of costly treatments.

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## A decrease in cancer claims... might not be good news after all

As the world has prioritised the fight against COVID-19, one consequence has been that people with other serious diseases have not been getting the right treatment.

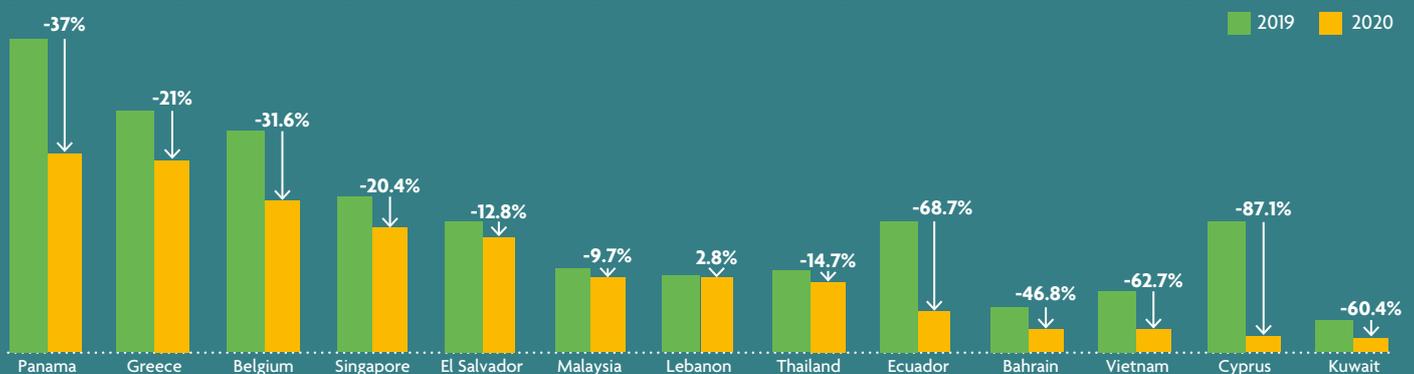
Our data shows, that as a percentage of total paid claims, neoplasms – or cancers – have decreased year-on-year in many markets. While at first this might seem like a positive result, this isn't necessarily the case.

Delays in cancer screenings, diagnosis and treatment due to COVID-19 lockdowns and disrupted health services may have contributed to a fewer number of patients receiving the cancer diagnosis or care they need. As the graph below shows, there has been enormous reductions in paid claims in some countries with an 87% reduction in Cyprus, 69% in Ecuador and 37% in Panama.

### What does this mean for employers?

As the world begins to open and medical facilities are less overwhelmed by COVID-19 patients, employers could consider promoting the benefits of cancer screenings to employees to help with early diagnosis or catching anything that has been missed as soon as possible. Not only good for employees, this could be beneficial in the long term as the costs of late-stage cancer treatment could become very costly for employers.

**Proportional share of paid claims by neoplasms**  
(Based on % paid for neoplasms out of total claims paid)<sup>2</sup>



## High rates of in-patient claims

We've looked at some of the different ways – direct and indirect – that COVID-19 has shown up in our claims, but our analysis also found some interesting changes to inpatient and outpatient claims rates.

The majority of COVID-19 cases have so far been dealt with through inpatient channels, with patients needing hospitalisation to deal with the effects of the virus. This was particularly the case in Mexico, Panama, Egypt, Ecuador and the UAE.

Inpatient hospitalisation costs are far higher than outpatient care and it will be interesting to see how these relatively high rates drive changes in costs and benefits going forward. It may be that outpatient channels are used more as the world learns to accommodate and treat the virus in different ways.

### What does this mean for employers?

Inpatient treatments were particularly prevalent during the worst peaks of the COVID-19 pandemic as patients needed admitting to intensive care units, to be put on ventilators and needed specialised drug treatments to combat the virus. As we know, chronic conditions often led to worse outcomes for COVID-19 patients and there could be a link between high cases of these conditions and increased inpatient claims in markets. The link between chronic conditions and inpatient claims is worth investigating for multinationals.

Inpatient hospitalisation costs are far higher than outpatient care and it will be interesting to see how these relatively high rates drive changes in costs and benefits going forward.

## Mental health – a growing part of the COVID-19 story

The last 18 months has not only affected physical health, mental health has been severely impacted too. While we can't be certain, it's very likely that effects of the COVID-19 pandemic: social isolation, job loss, the death of loved ones and the constant barrage of negative news may have contributed to an increase in mental health conditions.

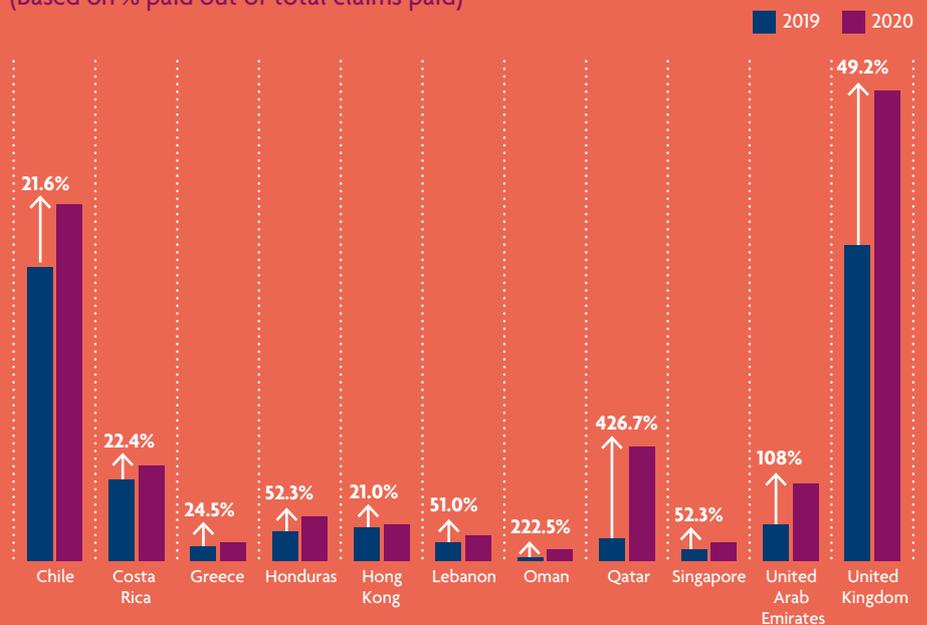
The graph below shows that, as a percentage of total paid claims, mental health costs increased year-on-year in many markets. For instance, in Chile, mental health claims have increased by 22% from the year before and in the UK, mental health claims representation has gone up by 49% when compared to 2019. As mental health conditions become more widely talked about and attitudes change, the stigma around coding for mental health could be being removed. In Taiwan we saw mental health claims for the first time. Has COVID-19 made people more comfortable in talking about their mental health and getting treatment for it?

A recent study by Willis Towers Watson found that, in the UK, nearly nine-in-ten organisations (87%) are concerned about an increase in mental health issues among their employees. Over three quarters (78%) of companies said that enhancing mental health and stress management services was their immediate employee benefits priority over the next six months. While almost two-thirds (64%) said that raising awareness of their existing benefits and wellbeing programmes was a short-term priority.<sup>6</sup>

### What does this mean for employers?

As mental health becomes a bigger part of the overall conversation, whether linked to COVID-19 or not, employers could consider looking at the support they're providing their employees. Is it enough? Is it communicated well? These benefits are going to be vital to support staff not only in these turbulent times, but as life begins to go back to pre-COVID norms as well.

**Proportional share of paid claims by mental health**  
(Based on % paid out of total claims paid)<sup>2</sup>



## Rates continuing to rise in 2021

So that was 2020, but what do we see happening as we move into the new year? While the main part of our analysis has focused on comparing 2020 with 2019, we have also already begun to look at the first quarter of 2021 and, specifically at how respiratory diseases claims rates are changing. The indications are that rates are rising – which may not come as a complete surprise.

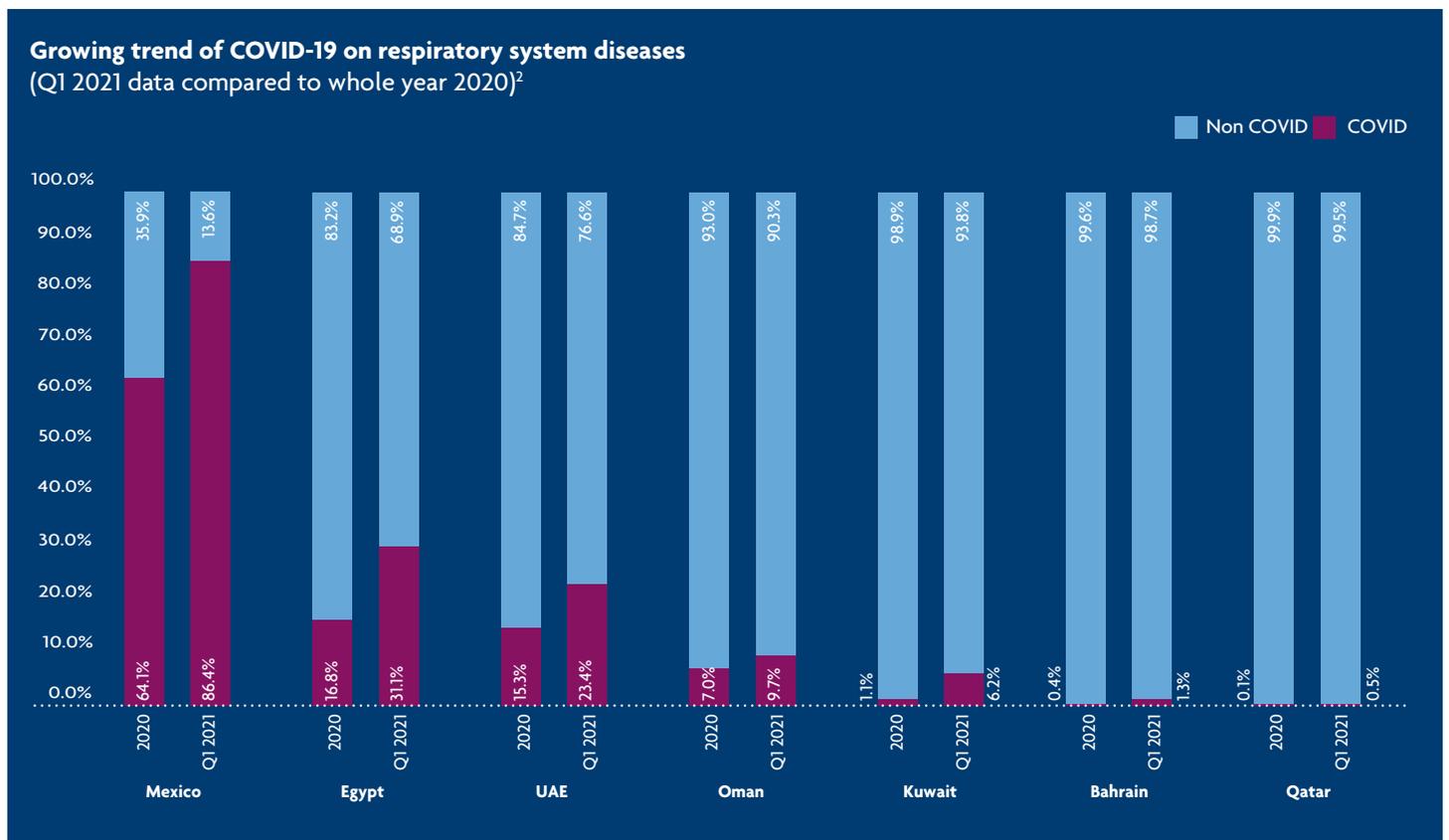
If we look at just the first quarter of 2021, we see that the COVID-19 share in respiratory claims has gone up to 86% in Mexico, 31% in Egypt and 23% in the UAE. Even in countries that showed a limited impact such as Kuwait, there has been a marked rise in COVID-19-related respiratory paid claims. And this is based on just one quarter – rates could rise further as many countries saw a deadly (and often more deadly) second wave of the virus in late 2020 and early 2021.

### What does this mean for employers?

Given the significant rise in claims in the early part of 2021, we could be looking at COVID-19 continuing to impact respiratory and other claims throughout the year and potentially – particularly with long COVID – well into the future.

Employers might want to plan for this continued impact and be wary that these trends might last for a little while yet.

And this is based on just one quarter – rates could well rise further as many countries saw a deadly (and often more deadly) second wave of the virus coming in late 2020 and early 2021.



## Key considerations for the future

Although these are early COVID-19 findings based on just 17 of our network members, we believe that there are some interesting themes starting to appear and even some disconcerting trends. Future analysis will likely reveal an even bigger impact from COVID-19, particularly if we factor in delayed care – and claims – for diseases such as cancers, chronic disease conditions and musculoskeletal problems, as well as mental health impacts. There is also long COVID to think about – no one knows quite what the impact of that will be. These are likely to be a major focus for governments, healthcare professionals, multinationals and societies as a whole as the pandemic subsides and we try to ensure we are better prepared should there be another.

And while we may not have all the answers right now, it does give us an opportunity to put data behind some of the big questions the pandemic has asked. Here's some things that, as a multinational employer, you might want to think about.

- The impact of COVID-19 on claims for both life and medical will last for a while and will undoubtedly impact underwriting processes and benefits terms and conditions. It's important to understand the impact COVID-19 has had on life and medical claims, so make sure you have conversations with insurers and other benefits partners about this crucial topic.
- We don't yet know what the full impact of long COVID will be. It may go well beyond just affecting respiratory system diseases and could even potentially cause future increases in disability claims too.
- Offering virtual access to healthcare – telehealth services and chronic disease management services will take centre-stage for today's employee – both during a pandemic and into the future. It's important for employers to consider these areas when thinking about wellness opportunities that will have a positive effect on employee health and productivity.
- Offering mental health services, including access to counselling, should be considered as a must-have rather than a nice-to-have. We see that the stigma associated with mental health claims is slowly beginning to change in many countries and employers could use this as an opportunity to work with local HR leaders to promote access to mental health services.

While the data may only give us a partial picture of the claims impacts right now, it's interesting to see the early trends and perhaps get some indications of what the future might hold. As more and more data continues to come through, we hope to be able to build a better global picture of the impact of the pandemic – and that will not only help employers better understand what has happened with COVID-19 but also to help them to be ready for whatever might come next. We'll be in touch...

1 Anon, The World Health Organization, <https://covid19.who.int/> (Sourced June 2021)  
 2 MAXIS GBN anonymised and aggregated claims data from 2020 and Q1 2021 from 17 of our network members around the world. Data analysed by MAXIS GBN Health & Wellness team in May 2021.  
 3 Nick Triggle, Christine Jeavons & Robert Cuffe, BBC News <https://www.bbc.co.uk/news/health-55757790> (sourced June 2021)  
 4 Anon, Centers for Disease Control and Prevention <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html> (sourced June 2021)  
 5 Anon, World Health Organization <https://www.who.int/news/item/23-04-2021-covid-19-continues-to-disrupt-essential-health-services-in-90-of-countries> (sourced June 2021)  
 6 Anon, Willis Towers Watson <https://www.willistowerswatson.com/en-GB/News/2021/04/pandemic-prompts-overhaul-of-employee-benefits-as-uk-companies-focus-on-mental-health> (sourced June 2021)

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