

White Paper

Firestorm to Burnout: The Impact of the Pandemic on Healthcare Professionals

MEIKE MADELUNG, Engagement Manager, EMEA Thought Leadership, IQVIA

BETTY ONIMOE, Account Director, Medical Communications, IQVIA

HELENA BAYLEY, Analyst, EMEA Thought Leadership, IQVIA



Table of contents

Introduction: Healthcare systems and healthcare professionals under stress	3
The impact of COVID-19 and its aftermath on healthcare professionals	4
IQVIA surveyed 720 physicians in six countries	4
Development of caseload and drivers	4
Impact on non-COVID-19 health services	8
Healthcare professionals' wellbeing is affected by post-pandemic stressors	9
Where HCPs are getting support and where they are expecting it	11
Support from pharmaceutical companies to manage post-COVID-19 burden	14
Summary	17
Conclusions & Recommendations	18
References	20
About the authors	21

Introduction: Healthcare systems and healthcare professionals under stress

Healthcare professionals (HCPs) have been regarded by many as heroes during the pandemic, demonstrating extraordinary tenacity, resilience, and dedication. Although the most critical stage of the pandemic is now largely behind us, both healthcare systems and HCPs are currently facing huge stresses, many of which have been exacerbated rather than caused by the pandemic and are unlikely to be resolved in the near future.

The increase in patient demand is perhaps one of the most visible consequences of the pandemic: there are serious patient backlogs for both diagnosis and treatment. Furthermore, patients are presenting later in their disease courses, due to recent widespread fear of infection causing reluctance to seek medical advice from healthcare providers. As a result, healthcare professionals face a greater caseload and more patients with more advanced diseases requiring more complex and expensive treatment. On top of this, healthcare systems have to contend with the ongoing demands of patients with COVID-19 and Long COVID, including treatment, vaccinations and hospital beds.

Also exacerbated by the pandemic is the pre-existing staffing crisis. The combination of staff shortages and the patient backlog has created an unsustainable workload for remaining HCPs, and a consequent lack of work-life balance. Already exhausted by the relentless physical demands and trauma of pandemic, many HCPs are now burnt out. There is high turnover, and greater numbers are leaving the profession than entering; the WHO reports that many more staff are considering leaving. In the NHS in England, for example, vacancy rates rose from 103,800 to 133,446

in the year to September 2022, a 29% increase year-on-year.^{1,2} The pressure felt by HCPs has been especially evident in the past year, with strike action in many countries, including France, Germany, the UK, and parts of the US.^{3,4}

The financial impact of the pandemic on healthcare systems is ongoing: there have been costs associated with measures taken to mitigate the spread of COVID-19 within clinical settings, but also reduced revenue due to cancellations of routine appointments and elective surgeries, for example. Global spending on medicines has increased and is projected to exceed the pre-pandemic outlook for 2020 to 2027 by \$497Bn, largely due to spending on COVID-19 vaccines and therapeutics.⁵ However, this is likely to leave other areas of unmet need under-resourced.

Finally, broader global challenges are contributing to the pressure on healthcare systems — namely the current global economic crisis and soaring inflation rates, an aging population requiring more treatment, and innovative therapies which are more complex and expensive. The cumulative stresses on healthcare systems are reflected in the responses of the HCPs IQVIA surveyed.

The impact of COVID-19 and its aftermath on healthcare professionals

IQVIA surveyed 720 physicians in six countries

In the first quarter of 2023, IQVIA conducted a survey of primary care and specialist physicians across six countries to better understand how healthcare providers and their patients are affected by the COVID-19 pandemic and its aftermath, what their expectations for future developments are, and how other stakeholders in the healthcare arena can support them.














All in all, 720 physicians participated. Countries covered were the US, the UK, Germany, France, Italy and Spain.

In addition to GPs, the sample included nephrologists, oncologists, pulmonologists, neurologists, cardiologists and endocrinologists / diabetologists.

The participating doctors were surveyed on the development of caseloads during and after the pandemic, the impact of COVID-19 on health services in general, and on patient backlogs. They were also asked about the current and expected level of support from healthcare stakeholders including governments, payers, and industry.

Figure 1: Survey sample

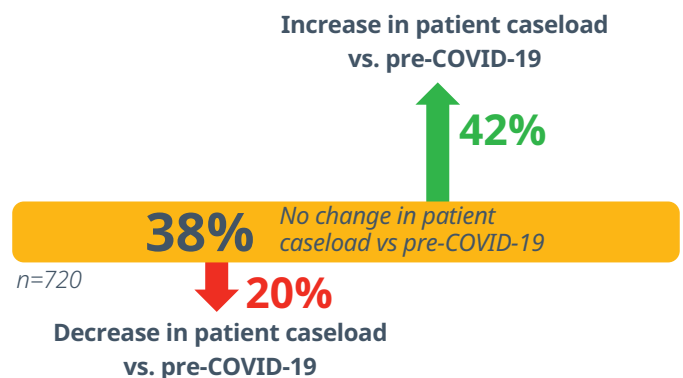
LOI: 4-5 mins
Methodology: Online survey
Total sample: 720 HCPS

		 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)
 General Practitioner	22%	28%	21%	19%	22%	28%	14%
 Nephrologist	13%	49%	55%	51%	41%	55%	53%
 Oncologist	17%	45%	49%	45%	33%	53%	52%
 Pulmonologist	11%	39%	33%	37%	36%	45%	46%
 Neurologist	10%	35%	38%	33%	33%	29%	46%
 Cardiologist	18%	33%	15%	23%	43%	44%	35%
 Endocrinologist/Diabetologist	9%	33%	25%	38%	28%	39%	42%

Development of caseload and drivers

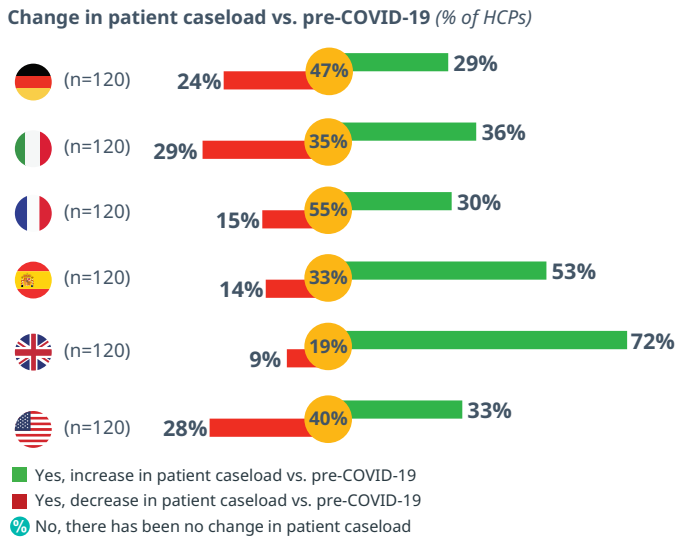
Overall, healthcare providers report an increase in caseload but there are distinct differences by country. Of the physicians surveyed, 42% reported an increase in caseload, 38% reported no change and 20% reported a decrease. The average number of patients seen per week increased from 118 before the COVID-19 pandemic to 124 at the time of the survey, an increase of 5.1%.

Figure 2: Reported changes in caseload



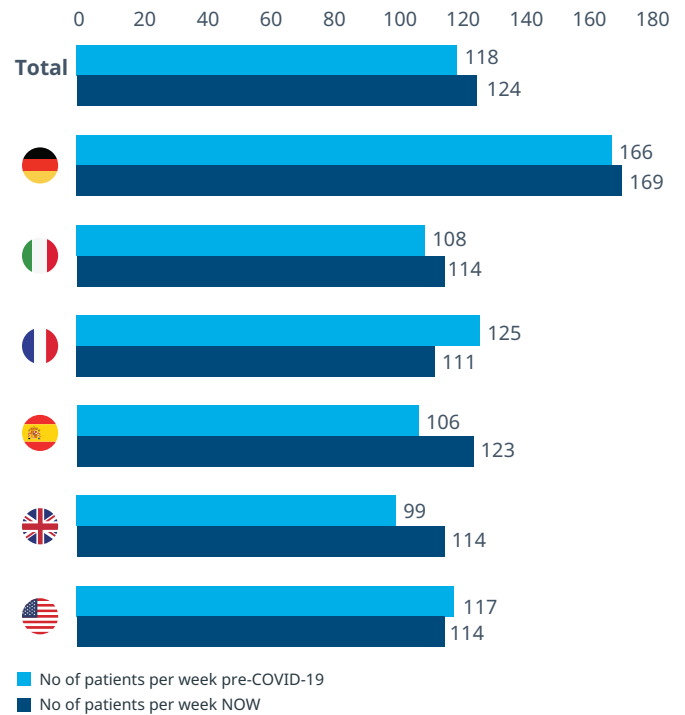
However, whereas a majority of 72% in the UK and 53% in Spain reported an increase in caseload, only around one third of doctors in the US, Italy, Germany and France reported an increase, with between 15% and 29% reporting a decrease.

Figure 3: Reported changes in caseload by country



The development of case numbers follows a similar pattern: while overall physicians reported an increase of 5.1%, from 118 to 124 in patients seen per week, Spain and the UK report an increase of 16% and 15.2% respectively. In France, the weekly caseload decreased by -11.2% and US physicians reported an overall decrease of -2.6%. Germany had the highest number of patients seen per week but with only a minor increase from 166 to 169.

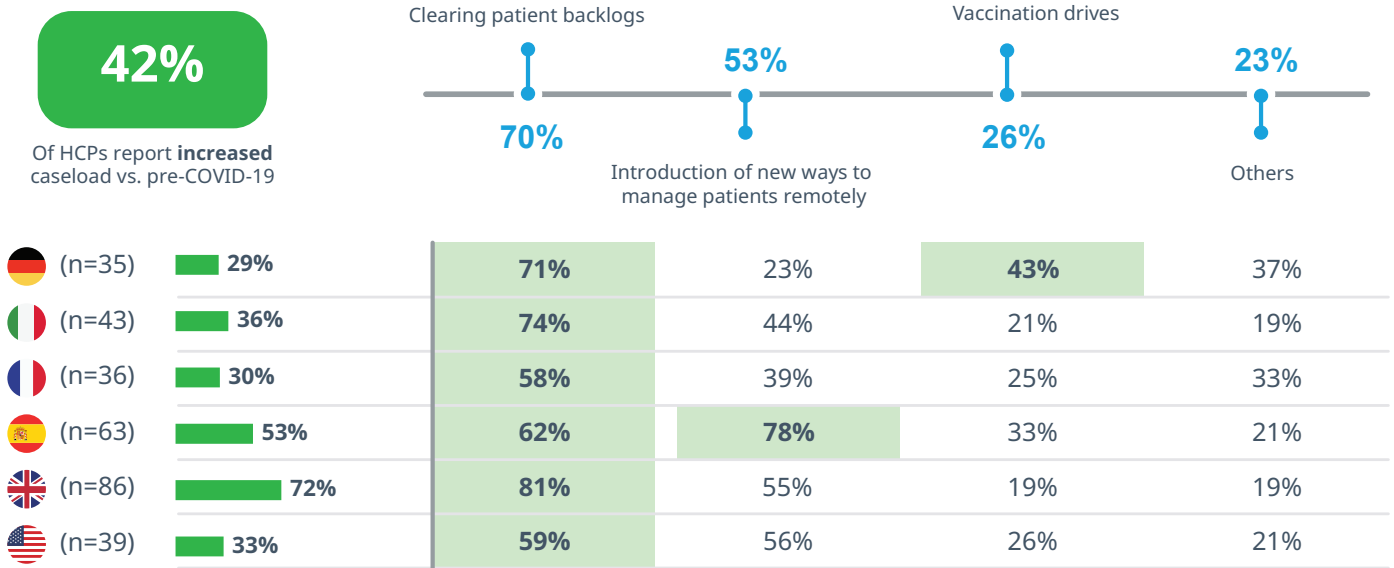
Figure 4: Reported changes in weekly no of patients seen



Increases in caseload are largely driven by clearing the backlogs of patients who did not present during the pandemic or whose treatments were delayed, reported by 70% of participating physicians, and by the introduction of new ways of managing patients remotely, reported by 53%. Decreases, on the other hand, are caused by fewer patients presenting or being referred (69%) and complying with new guidelines and COVID-19 restrictions (62%). The latter in particular means that lower caseload does not necessarily translate into lower workload since these guidelines may mean additional effort per patient.

Here, too, there are noticeable differences between countries.

Figure 5: Drivers of increased patient caseload

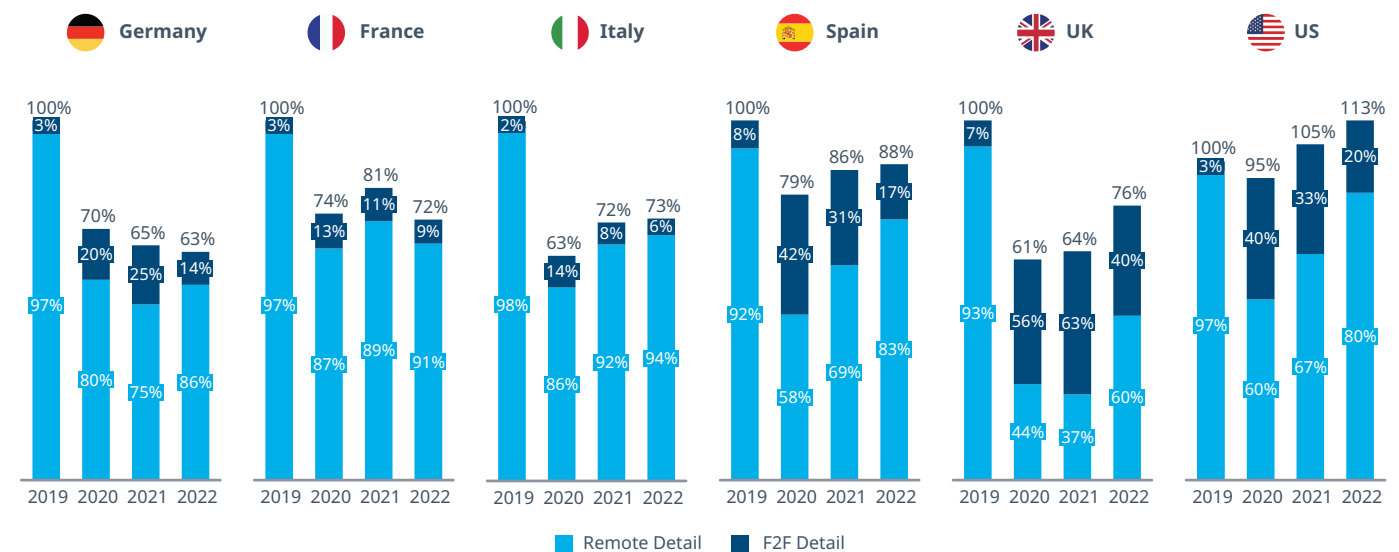


In the UK, Germany, and Italy, over 70% of HCPs report clearing patient backlogs as one reason for the increased patient caseload. In Spain, 78% also report managing patients remotely as a key reason; this likely reflects the increased uptake of remote consultations fostered by a number of government initiatives during the pandemic. IQVIA promotional data also shows that in Spain along with the UK, the pivot to remote

interactions with HCPs was strongest although based on the most recent figures, this trend is reversing somewhat. Overall, this indicates there may be stronger and more sustained shift towards remote interactions in Spain compared to the rest of the EU4.

In Germany, for 43% vaccination drives also play a role. In the US, 59% and 56% give clearing patient backlogs and managing patients remotely as reasons.

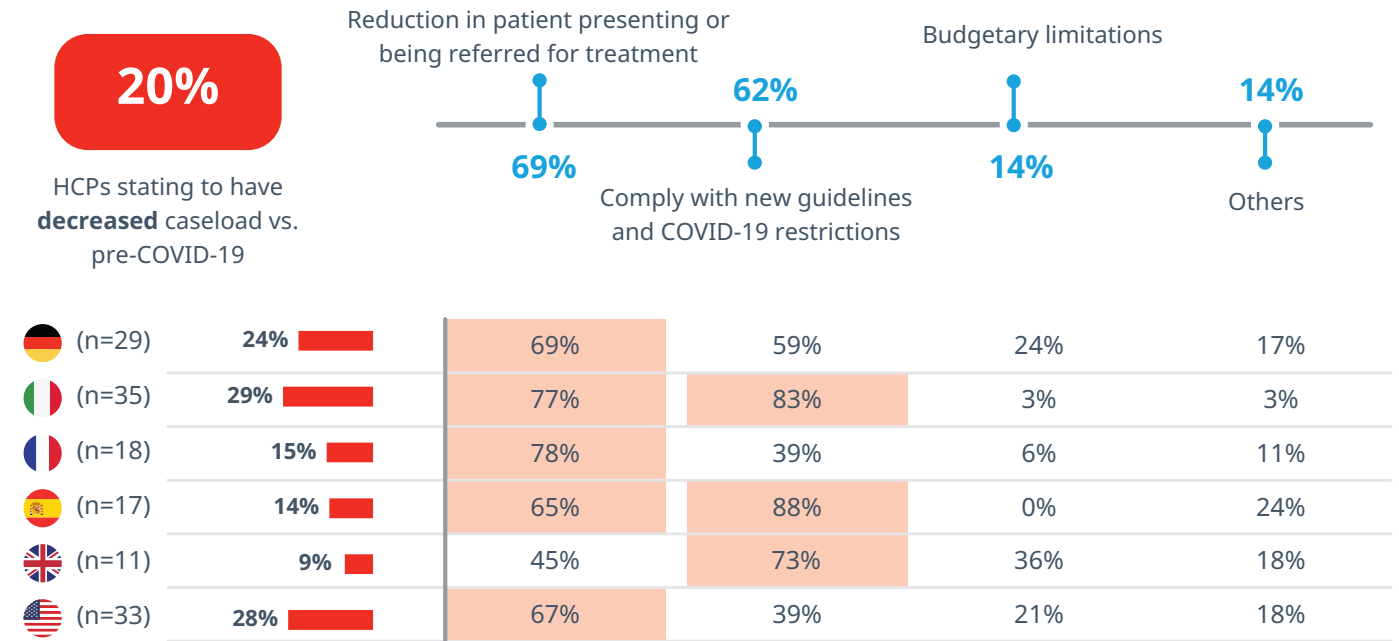
Figure 6: Interactive contact time with HCPs by type



For patient caseload dips, over 65% of HCPs report fewer patients presenting or being referred for treatment, with the exception of the UK, where only 45% report this. The UK is also the only country where a significant minority (36%) of HCPs report budgetary

limitations as a reason for lower caseloads. The UK along with Italy and Spain also reports new guidelines and COVID-19 restrictions as a leading cause of lower case numbers (73%, 83% and 88% respectively).

Figure 7: Drivers of reduced patient caseload

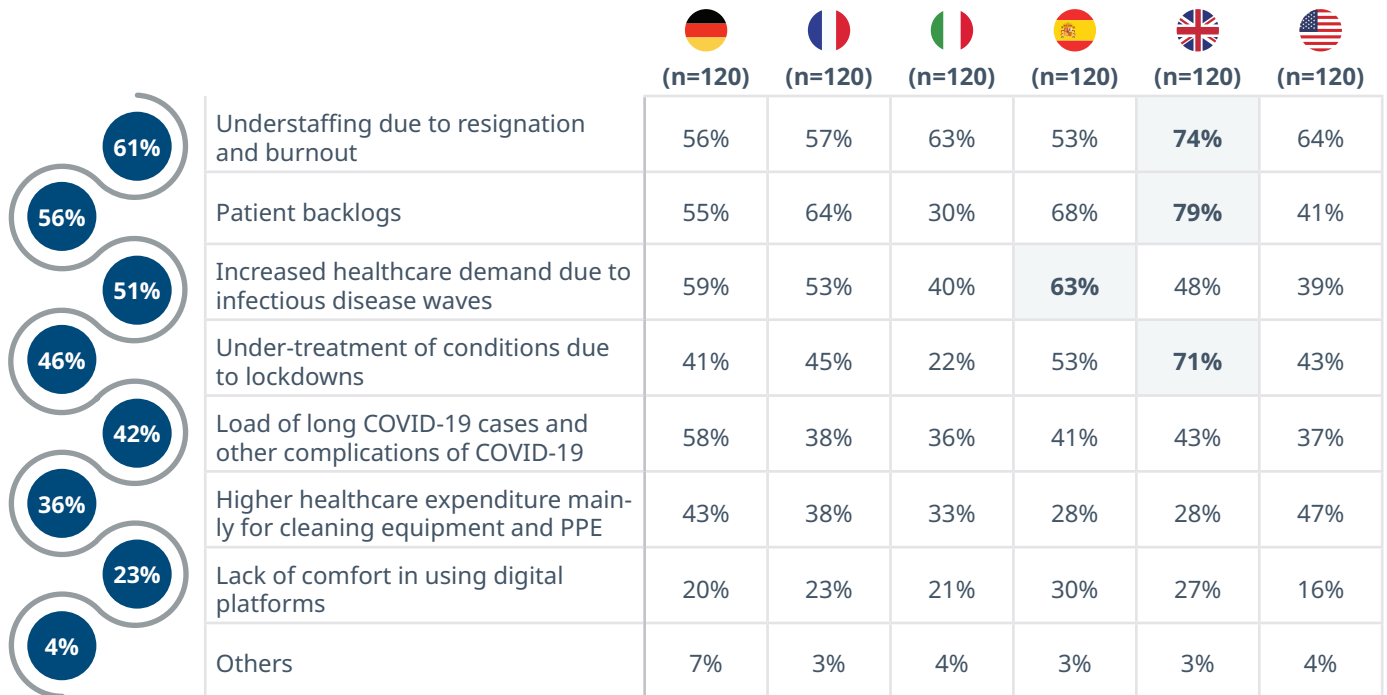


Impact on non-COVID-19 health services

Healthcare systems are still impacted by the fallout from the pandemic. This is also reflected in the responses from the participating physicians, who were asked about the key impacts on non-COVID-19 health

services that are still a consequence of COVID-19. The HCPs reported understaffing due to resignation and burnout, patient backlogs, and increased healthcare demand due to infectious disease waves as leading causes.

Figure 8: Ongoing impact of COVID-19 on non-COVID-19 health services



At country level, the UK stands out with regard to the reported impact of understaffing, patient backlogs and under-treatment due to lockdowns. Patient

backlogs and increased healthcare demand due to infectious disease waves also play an above average role in Spain.

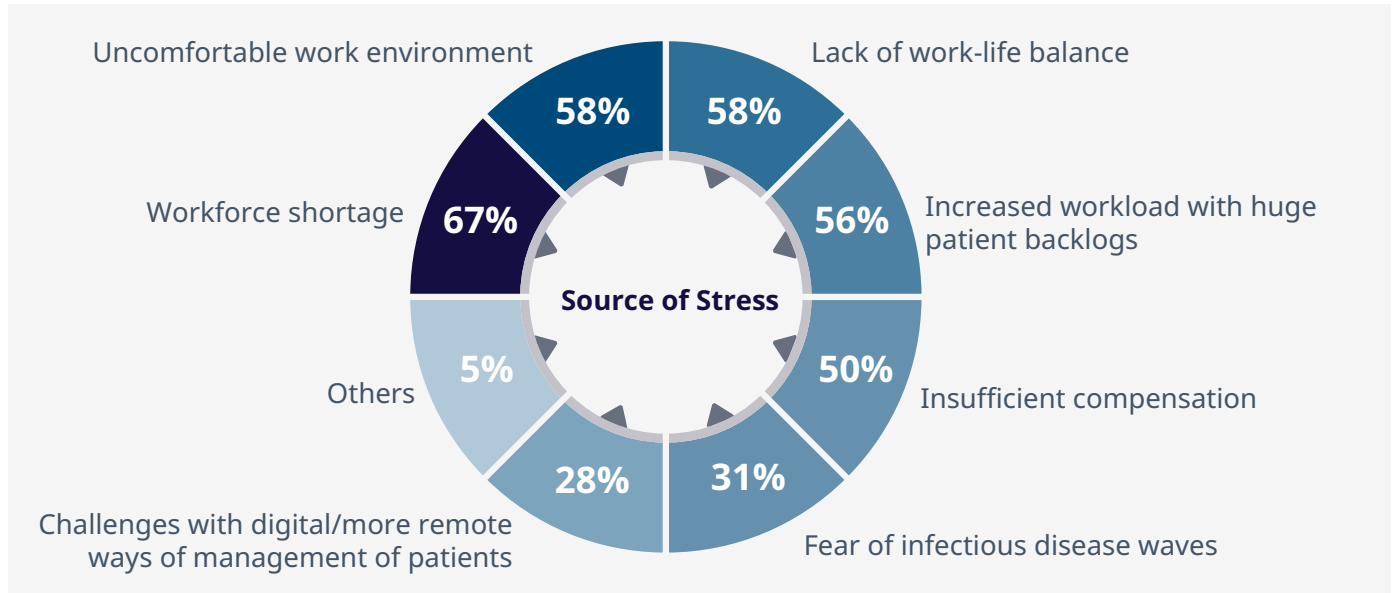


Healthcare professionals' wellbeing is affected by post-pandemic stressors

Unsurprisingly, the pressure on healthcare systems to cope with the pandemic and post-pandemic environment has also left its mark on healthcare professionals. Many healthcare sectors already







suffered from understaffing and poor working conditions, and the additional demands of coping with the pandemic have also resulted in healthcare workers leaving the profession. In a vicious circle, this has increased the burden on those who remain.

Figure 9: Sources of stress affecting HCPs' physical and psychological wellbeing



The main stressors physicians report are the workforce shortage, increased workload and patient backlog and the resulting lack of work-life-balance, and an uncomfortable work environment.

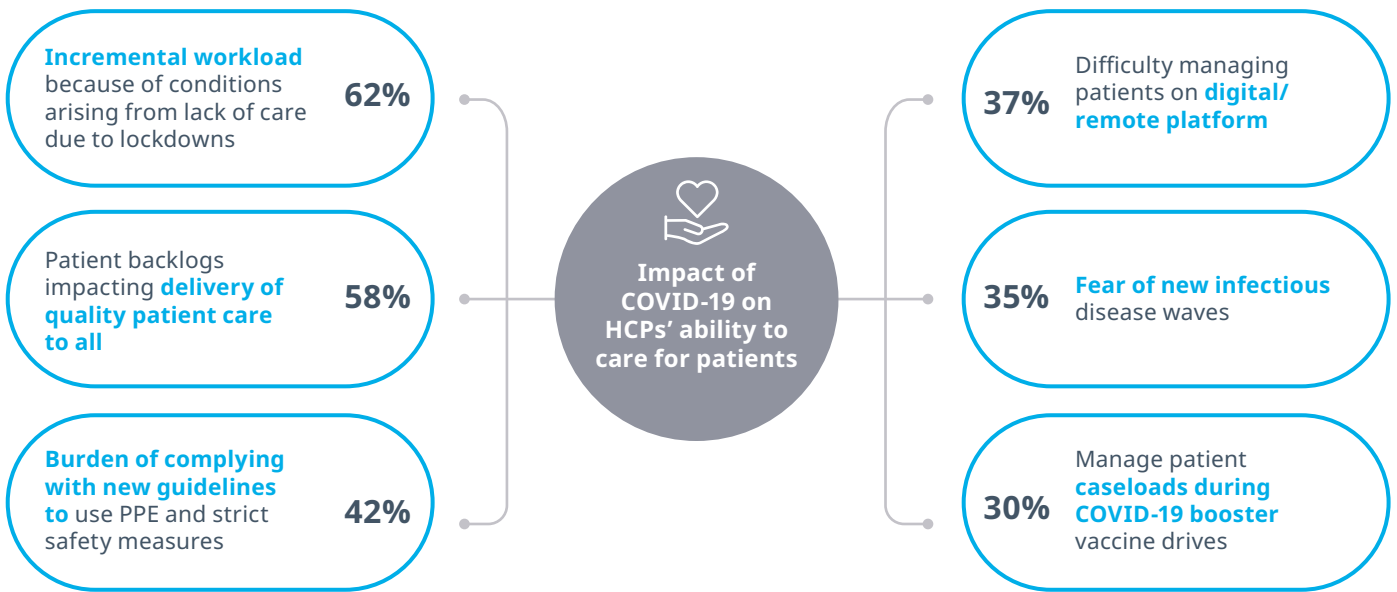
Figure 10: Sources of stress by country

	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)
Workforce shortage	80%	61%	58%	53%	78%	68%
Uncomfortable work environment (e.g., patient aggression, colleague stress, management, facilities)	58%	63%	59%	58%	60%	52%
Lack of work-life balance	61%	58%	48%	59%	64%	58%
Increased workload with huge patient backlogs	37%	65%	52%	70%	70%	43%
Insufficient compensation	48%	49%	43%	61%	54%	44%
Fear of infectious disease waves	31%	28%	25%	33%	33%	38%
Challenges with digital/more remote ways of management of patients	24%	24%	18%	36%	40%	27%
Others	8%	0%	6%	8%	3%	4%

The workforce shortage is a particular problem in Germany, the UK and the US, whereas increased workload and patient backlogs affect a disproportionate

number of physicians in the UK, Spain, and Italy. The UK and Spain also report a slightly higher level of issues with remote patient management.







Figure 11: Impact of stress on physicians' ability to care for their patients



Worryingly, these stressors do not only have an impact on physicians directly, but they also affect their ability to care for their patients. Here, too, the incremental

workload and the patient backlogs are major contributors to physicians' reduced ability to deliver quality care to all patients.

Figure 12: Impact of stress on physicians by country

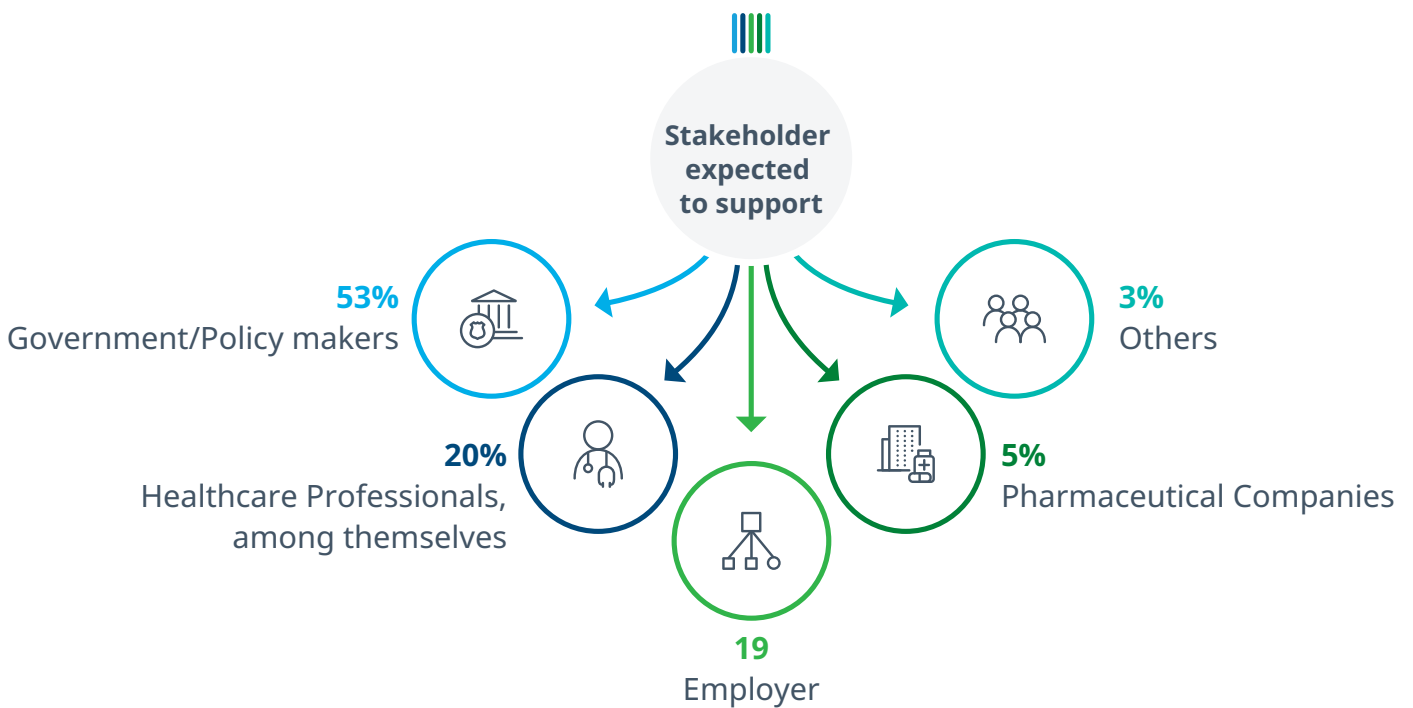
	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)
Incremental workload because of conditions arising from lack of care due to lockdowns	59%	70%	58%	74%	63%	50%
Patient backlogs impacting delivery of quality patient care to all	40%	60%	46%	77%	78%	48%
Burden of complying with new guidelines to use PPE and strict safety measures	53%	41%	45%	38%	34%	41%
Difficult to manage patients on digital/remote platform	23%	39%	39%	38%	46%	39%
Fear of new infectious disease waves	32%	27%	36%	38%	32%	45%
Manage patient caseloads during COVID-19 booster vaccine drives	43%	24%	26%	30%	33%	21%
Others	6%	3%	4%	2%	3%	5%

Incremental workload is reported particularly by HCPs in Spain, Italy, and the UK while patient backlogs are a leading cause in Spain and the UK. Vaccination drives have a higher impact in Germany than in other countries while the impact of remote patient management is lower, possibly because of an overall low uptake of remote consultations and other digital management tools.

Where HCPs are getting support and where they are expecting it.

In terms of easing the burden of COVID-19 on HCPs and the health system, 53% of HCPs expect government or policy makers to provide major support; they have relatively low expectations from pharmaceutical companies at 5%.












Figure 13: Stakeholders to support ease of COVID-19 burden on HCPs



From a country perspective, the US differed slightly as support from employers was rated more important than government/ policy makers' support to help ease the burden of COVID-19 stress. The nature of the health system could play a role here. The resilience of

health systems cannot be overlooked, as more resilient health systems are able to adapt to sudden changes both in how they utilize existing resources and in the transformation of their existing functions because of unexpected changes.⁶

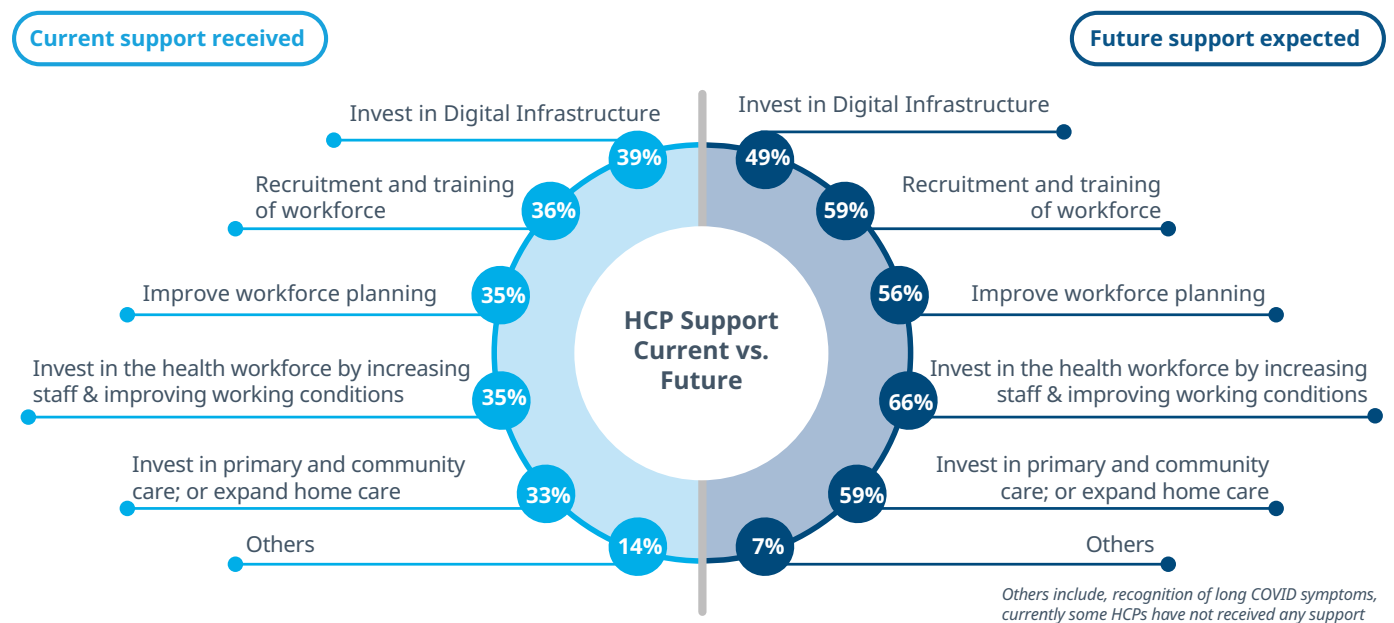
Figure 14: Stakeholders to support ease of COVID-19 burden on HCPs by country

	 53% Government/Policy makers	 20% Healthcare Professionals	 19% Employer	 5% Pharmaceutical Companies	 3% Others
 (n=120)	58%	15%	20%	4%	3%
 (n=120)	54%	20%	19%	5%	2%
 (n=120)	54%	29%	7%	5%	5%
 (n=120)	61%	13%	18%	5%	3%
 (n=120)	63%	18%	16%	2%	1%
 (n=120)	28%	26%	36%	7%	4%

More support is required with alleviating the burden of the pandemic ranging from recruitment and training workforce to investing in primary and community/home care. One-third of respondents cited currently getting support to manage the COVID-19 burden, these range from investment in digital infrastructure

(39%), recruitment and training of workforce (36%), to investment in health workforce (35%). In the meantime, two-thirds of respondents expect future support mainly in recruitment, training, and improvement of the workforce.

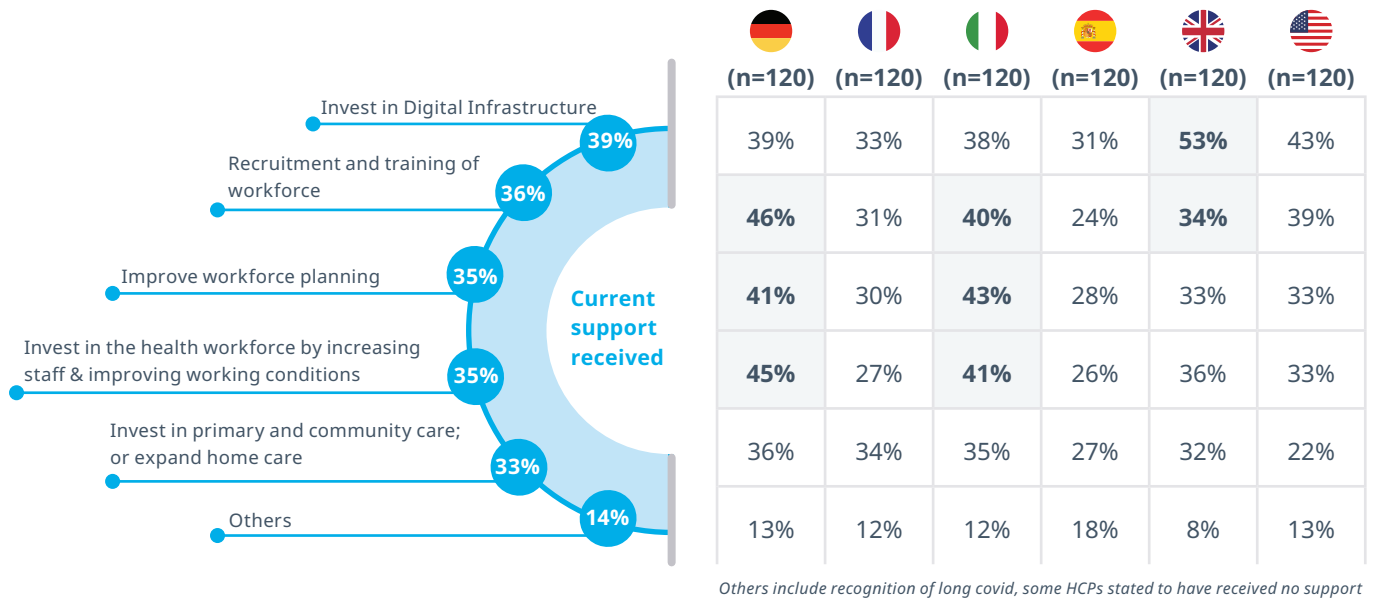
Figure 15: Sources of current and future support to manage the burden of COVID-19



In the UK, more support has been provided through investment in digital infrastructure – the UK government are making an investment of £2 billion to digitize NHS England, with at least £150

million of this invested in supporting the digital transformation of social care.⁷ In Germany and France there has been more prominent investment in the healthcare workforce.

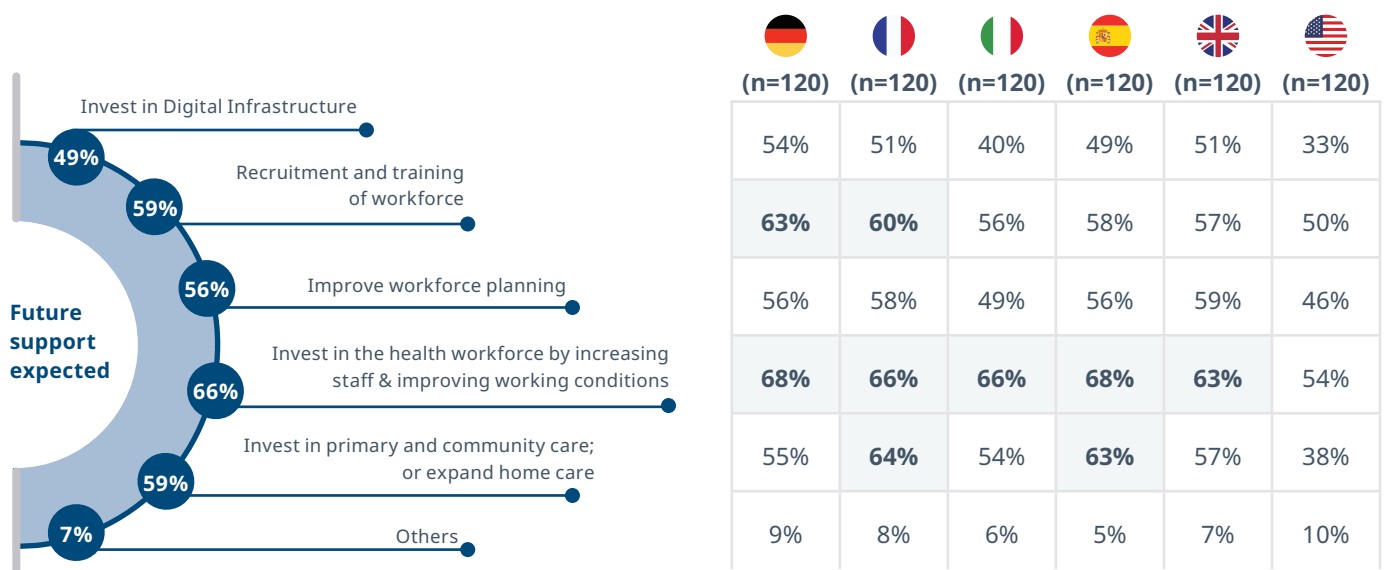
Figure 16: Sources of current and future support by country



Employers, government, and policymakers have a huge role to play in managing the burden of COVID-19, with healthcare professionals indicating that support

is needed in improving work conditions and increasing the health workforce across all countries surveyed.














Figure 17: Future support expected in managing the burden of COVID-19



In terms of what support is needed to ease the post COVID-19 stress, HCPs across all countries surveyed expect their governments to provide better compensation and effective programs such as

increased staff support. Adequate reimbursement policies for innovative products which can reduce time spent by HCP in patient care is important for HCPs in Germany and the UK.

Figure 18: Support to ease the post COVID-19 stress on HCPs

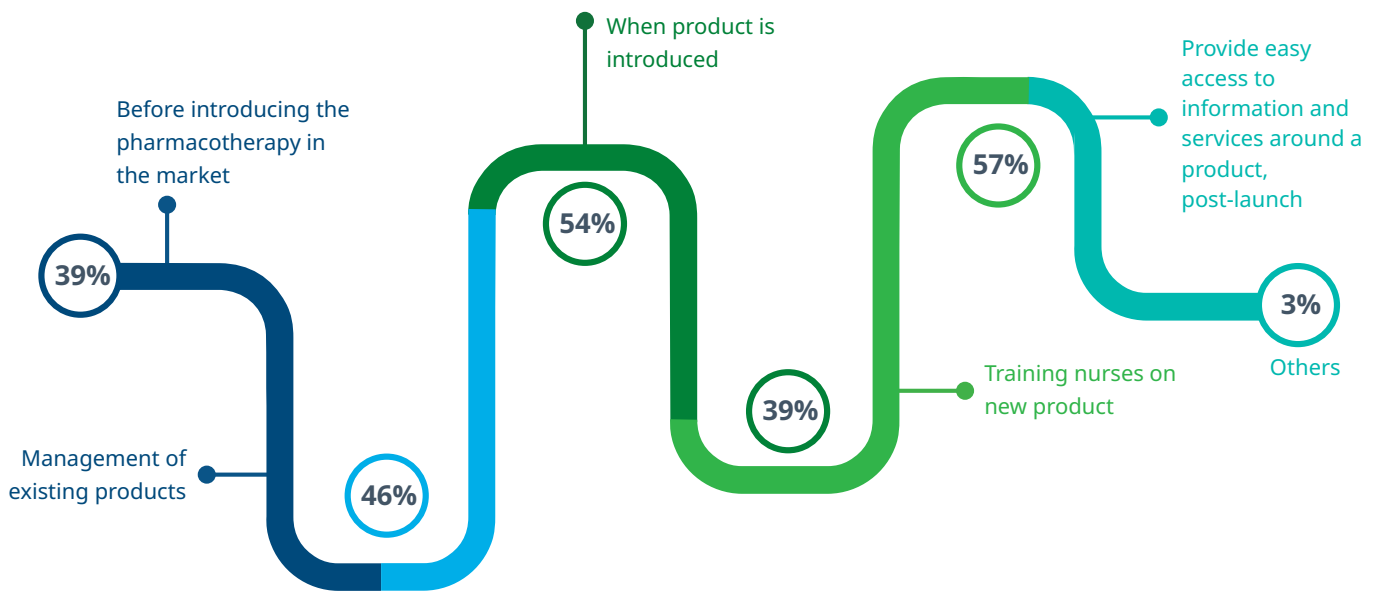
		TOTAL (n=720)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)
 Provide better compensation		50%	37%	58%	40%	49%	58%	58%
 Effective programs to ease burden of HCPs such as increased support staff		49%	55%	51%	41%	55%	53%	37%
 Adequate reimbursement policies for innovative products which can reduce time spent by HCP in patient care		45%	49%	45%	33%	53%	52%	38%
 Training healthcare staff on new products		39%	33%	37%	36%	45%	46%	35%
 Easy access to information on latest updates of therapies and new developments in healthcare sector		35%	38%	33%	33%	29%	46%	31%
 Provide funds to keep stock and manage inventory		33%	15%	23%	43%	44%	35%	38%
 Others		33%	25%	38%	28%	39%	42%	25%

Support from pharmaceutical companies to manage post-COVID-19 burden

Pharmaceutical companies engage with healthcare professionals on various levels. These engagements include but are not limited to scientific exchange, research collaboration, disease awareness, best clinical practice, continuing medical education and updates on new therapeutics. The process of lockdown during the COVID-19 pandemic prevented the usual in person interactions between HCPs and pharmaceutical companies and as such post-pandemic, the expectations of HCPs have changed, as they now prefer personalized experiences that reflects their preferences and needs.⁸

To ensure pharmaceutical companies are meeting the needs of HCPs, it is important to understand what support healthcare professionals expect when treating patients in a post-COVID-19 environment. In the product lifecycle, 54% of HCPs indicated they need resources when the product is launched to alleviate the burden of treating patients while 57% of HCPs expect pharmaceutical companies to provide easy access to information and services around a product post-launch.

Figure 19: Resources from pharmaceutical companies to alleviate treatment burden post-COVID



In the UK, a higher proportion of HCPs expect pharmaceutical companies to provide resources for

managing existing products as well as when new products are introduced.
















Figure 20: Resources from pharmaceutical companies to alleviate post-COVID-19 burden by country

	39%	46%	54%	39%	57%	3%
	Before introducing the pharmacotherapy in the market	Management of existing products	When product is introduced	Training nurses on new products	Post launch, easy access to information & services about product	Others
(n=120)	42%	28%	63%	39%	53%	4%
(n=120)	37%	48%	38%	28%	60%	1%
(n=120)	36%	25%	57%	45%	50%	3%
(n=120)	38%	48%	49%	35%	68%	1%
(n=120)	48%	58%	62%	49%	62%	3%
(n=120)	33%	48%	57%	38%	48%	3%

Overall to help ease the stress post the COVID-19 pandemic, 50% of HCPs expect support from pharmaceutical companies in the form of patient support programs (PSPs). This is closely followed by a desire for innovative products to reduce time spent on

patient care and for insights based on Real World and Clinical data coupled with recommendations for patient management. In France, 43% of HCPs primarily expect support in stock keeping and inventory management.

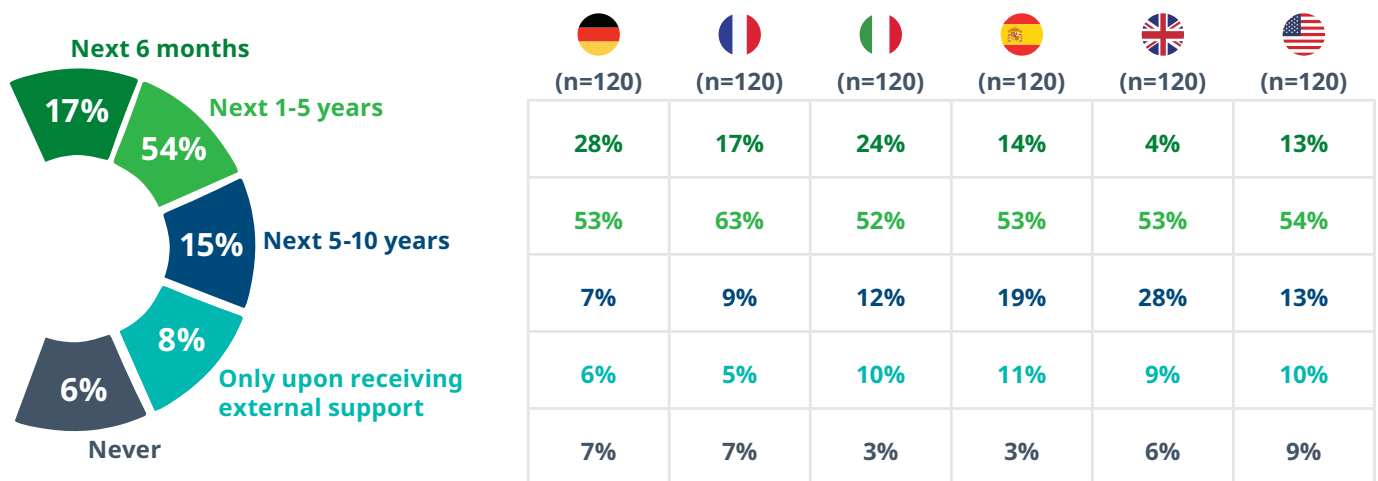
Figure 21: Pharmaceutical companies support to ease the stress of post-COVID-19 on HCPs

		TOTAL (n=720)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)	 (n=120)
 Patient Support programs		50%	37%	58%	40%	49%	58%	58%
 Launch innovative products to reduce time spent by HCP in patient care		49%	55%	51%	41%	55%	53%	37%
 Producing insights from real world and clinical data and recommendations to manage patients		45%	49%	45%	33%	53%	52%	38%
 Research on treatment outcomes with more remote patient management/ and long COVID-19 symptoms		39%	33%	37%	36%	45%	46%	35%
 Training nurses on new products		35%	38%	33%	33%	29%	46%	31%
 Helping to keep stock and manage inventory		33%	15%	23%	43%	44%	35%	38%
 Provide training on remote patient management		33%	25%	38%	28%	39%	42%	25%
 Personalized engagement from sales representative or Medical Affairs		27%	25%	23%	24%	34%	32%	22%
 Others		4%	5%	3%	5%	3%	3%	5%

The COVID-19 pandemic created long-term challenges for healthcare systems globally and healthcare providers have continued to struggle with the burden of the pandemic from managing COVID-19 patients to the additional burden of treating patients with long COVID (long-lasting symptoms of COVID-19).⁹ Despite the struggles and hardship faced due to the pandemic,

there is hope that the burden and stresses to the health systems will be alleviated in coming years. Of the HCPs surveyed, >50% of HCPs expect that the burden of COVID-19 will be resolved in the next 1 to 5 years; while 6% of HCPs had a less optimistic view and expect that the burden of COVID-19 will never be resolved.

Figure 22: Expected time for ease in COVID-19 burden



Summary

From the responses of the 720 physicians who participated in the IQVIA survey, it is clear that the aftermath of the pandemic is still with us and is likely to be so for some time to come.

Overall, a large minority of physicians are reporting an increase in patient caseload as a consequence of the COVID-19 pandemic, with patient backlogs and remote management of patients the leading causes of the increase. A smaller number of HCPs report a decrease in patient numbers largely caused by fewer patients presenting or being referred for treatment and by having to comply with new guidelines and COVID-19 restrictions.

Participating physicians also confirmed the ongoing impact of COVID-19 on non-COVID-19 health services. They reported understaffing due to resignations and burn-out, patient backlogs, and increased demand due to infectious disease waves as the main drivers of this impact.

Not surprisingly, HCPs report that their physical and psychological wellbeing is affected, with workforce shortage, increased workload and patient backlog and the resulting lack of work-life-balance the leading causes. They also report that this situation affects their ability to care for their patients.

In general, more support is needed in alleviating the burden of the pandemic on HCPs and health systems. Investments are needed in key areas particularly in improving work conditions and increasing the health workforce.

The survey confirmed that pharmaceutical companies have a role to play in providing resources and support that will ease the burden COVID-19 at several points in a product's lifecycle, especially during and post-launch.

More physicians were optimistic that the burden of the COVID-19 pandemic will be resolved in the next five years.

Conclusions & Recommendations

Existing stresses on healthcare systems were exacerbated by the pandemic although individual systems weathered them differently based on factors including adherence to public health measures, demographic characteristics, government response, population density and demographic. Nevertheless, health systems were understaffed during the pandemic and the burden on health systems and consequently HCPs could lead to many health workers leaving the field.¹⁰

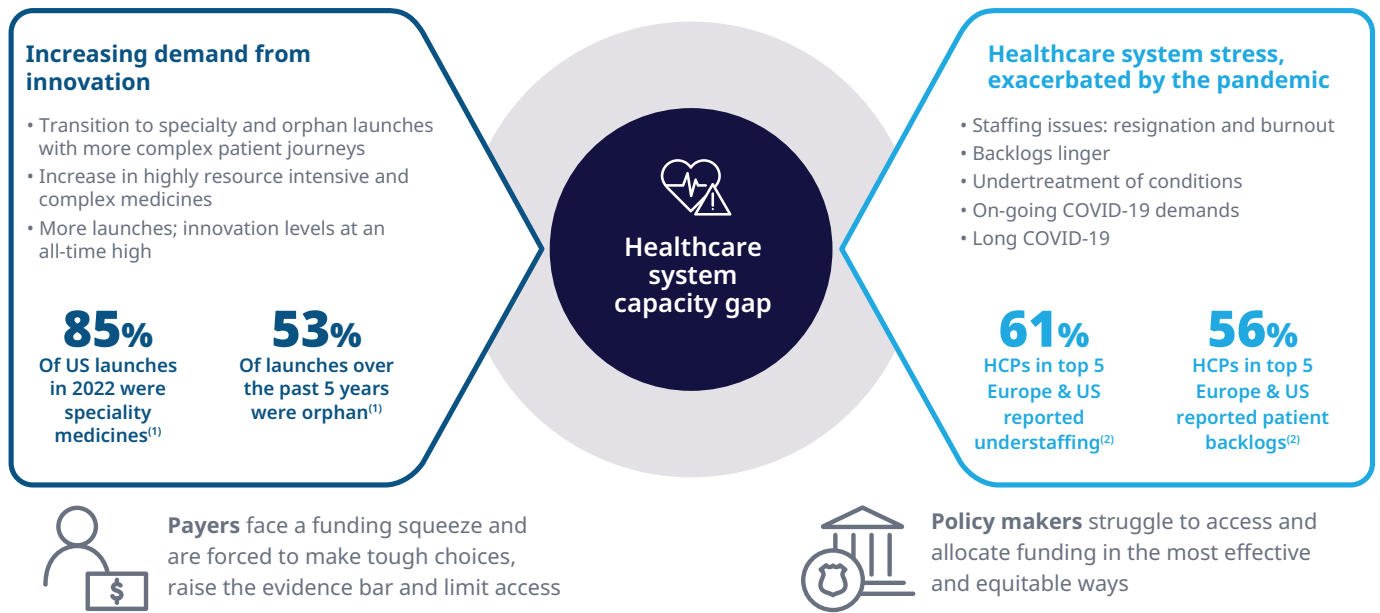
Unsurprisingly, this situation is reflected in the responses from frontline physicians to the IQVIA survey, with HCPs reporting how they are affected personally as well as in their ability to care for their patients. However, the survey also gives some insights into the kind of support HCPs are already receiving from various stakeholders including governments, other healthcare professionals, employers, and the pharmaceutical industry, and what kind of support they expect in the future to be able to persist in the post-pandemic environment.

Although challenging in times of squeezed healthcare budgets, to ensure the future resilience of healthcare

professionals, continuous support is needed from the government, policy makers and employers in providing the resources needed to alleviate the post-COVID-19 burden, especially around improving the work environment and increasing the health workforce.

This has direct relevance for pharmaceutical companies. Medicine innovation is increasingly sophisticated and makes ever greater demands of healthcare systems, not just in terms of budgets, when introduced. New oncologicals which improve patient outcomes for patient subgroups identified by biomarkers require more extensive infrastructure, cell therapies require hospitals to invest in high levels of staff training, infrastructure and logistics. New classes of medication in existing therapy areas — for example biologics and mRNA therapeutics in the statins market, mean HCPs must change well established treatment practice and invest in education of patients on new approaches. These ever more sophisticated treatments enter healthcare systems at a time when their resources have never been more stretched, and the burnout that many healthcare professionals currently report is a key element of that. Addressing this capacity gap will be critical to restoring an environment where new advances in treatment can reach the patients that need them, and addressing healthcare professional needs is a critical element of that.

Figure 23: Healthcare professional burnout is a key aspect of the capacity gap which must close to optimize care and innovation uptake



Source: IQVIA EMEA Thought Leadership; 1. IQVIA Institute, Global Trends in R&D 2023: Activity, Productivity, and Enablers 2. IQVIA Primary Research, Impact of COVID-19 on Healthcare System in EU4, UK & US, March 2023

For pharmaceutical companies, there is considerable scope for engaging with HCPs by providing support throughout the product lifecycle, provided it is tailored to HCPs’ needs and preferences. Expectations of support focus more heavily on the launch and post-launch phases, but support is also expected before introducing products and for the management of existing products, and includes a wide range of potential measures, from patient support programs to insights on managing patients and provision of innovative products which reduces time requirements for patient care.

In a world where the success of future products hinges on establishing partnerships with health systems nationally and locally and on developing a deep understanding of local health systems and priorities,¹¹ and where at the same time the opportunities for direct engagement with HCPs are scarcer than before the pandemic, this is an opportunity pharma cannot afford to miss.

References

1. "Health and care workforce in Europe: time to act" Copenhagen: WHO Regional Office for Europe; 2022. <https://www.who.int/europe/publications/i/item/9789289058339>
2. IQVIA white paper "Hospital Capacity Management: Making Best Use of Available Resources" <https://www.iqvia.com/library/white-papers/hospital-capacity-management-making-best-use-of-available-resources>
3. WHO article "The health workforce crisis in Europe is no longer a looming threat – it is here and now. The Bucharest Declaration charts a way forward" <https://www.who.int/europe/news/item/22-03-2023-the-health-workforce-crisis-in-europe-is-no-longer-a-looming-threat---it-is-here-and-now.-the-bucharest-declaration-charts-a-way-forward>
4. Healthcare Dive tracker "Tracking Healthcare Worker Strikes" <https://www.healthcaredive.com/news/labor-strikes-healthcare-workers-2022/626965/>
5. IQVIA Institute Report "Global Use of Medicines 2023" <https://www.iqvia.com/insights/the-iqvia-institute/reports/the-global-use-of-medicines-2023>
6. Lessons From the First Two Years of the Pandemic. Int J Health Policy Manag. doi:10.34172/ijhpm.2022.6659
7. NHS England. (2022, June 29). A plan for digital health and social care. Retrieved from <https://www.gov.uk/government/publications/a-plan-for-digital-health-and-social-care/a-plan-for-digital-health-and-social-care#:~:text=We%20are%20making%20investment%20in,crucial%20cyber%20and%20connectivity%20foundations>
8. IQVIA White Paper "Medical Affairs' Next Frontier: Unlocking Omnichannel Engagement" <https://www.iqvia.com/library/white-papers/medical-affairs-next-frontier-unlocking-omnichannel-engagement>
9. Willems SH, et al. Digital Solutions to Alleviate the Burden on Health Systems During a Public Health Care Crisis: COVID-19 as an Opportunity. JMIR Mhealth Uhealth. 2021 Jun 11;9(6):e25021.
10. OECD (2023), Ready for the Next Crisis? Investing in Health System Resilience, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1e53cf80-en>.
11. IQVIA White Paper „Launch Excellence VIII: The challenge of change: building excellent launches in the post-pandemic environment" <https://www.iqvia.com/library/white-papers/hospital-capacity-management-making-best-use-of-available-resources>

About the authors



MEIKE MADELUNG

is an Engagement Manager with the EMEA Thought Leadership team and based in Frankfurt, Germany.

She develops and presents insights and analyses on a range of key topics based on IQVIA's data assets and expertise with a particular focus on health systems support and patient engagement.

Meike has been with IQVIA for over fifteen years in a variety of roles both in London, UK and in Frankfurt, Germany. She has expertise in RX and Consumer Health data and markets both at the national and international level.

Meike has an MA from the University of Bonn, Germany and an MBA in International Management from the University of London.



BETTY ONIMOE

is an Account Director with the Medical Communications team and based in London, United Kingdom.

Betty has over 10 years' experience working in client services within medical communication. Betty's achievements include successfully planning and delivering medical affairs and commercial programs on a regional and global level.

Betty's expertise is in engaging internal and external stakeholders to create and deliver impactful and market-shaping medical education activities and programs.

Betty has a degree in Biological Sciences from the University of Abuja, Nigeria, and an MSc in Biotechnology, Bioprocessing and Business Management from the University of Warwick, UK.



HELENA BAYLEY

is an Analyst in the EMEA Thought Leadership team, and is based in London.

Helena joined IQVIA in May, although she also interned with the Thought Leadership team two years ago, where her projects included co-authoring a white paper on haematological cancers, and analysing trends in head-to-head trials in auto-immune indications.

Since her internship, Helena has completed her degree in Physics at the University of Oxford, specialising in Biophysics in her Master's year there.

CONTACT US
iqvia.com