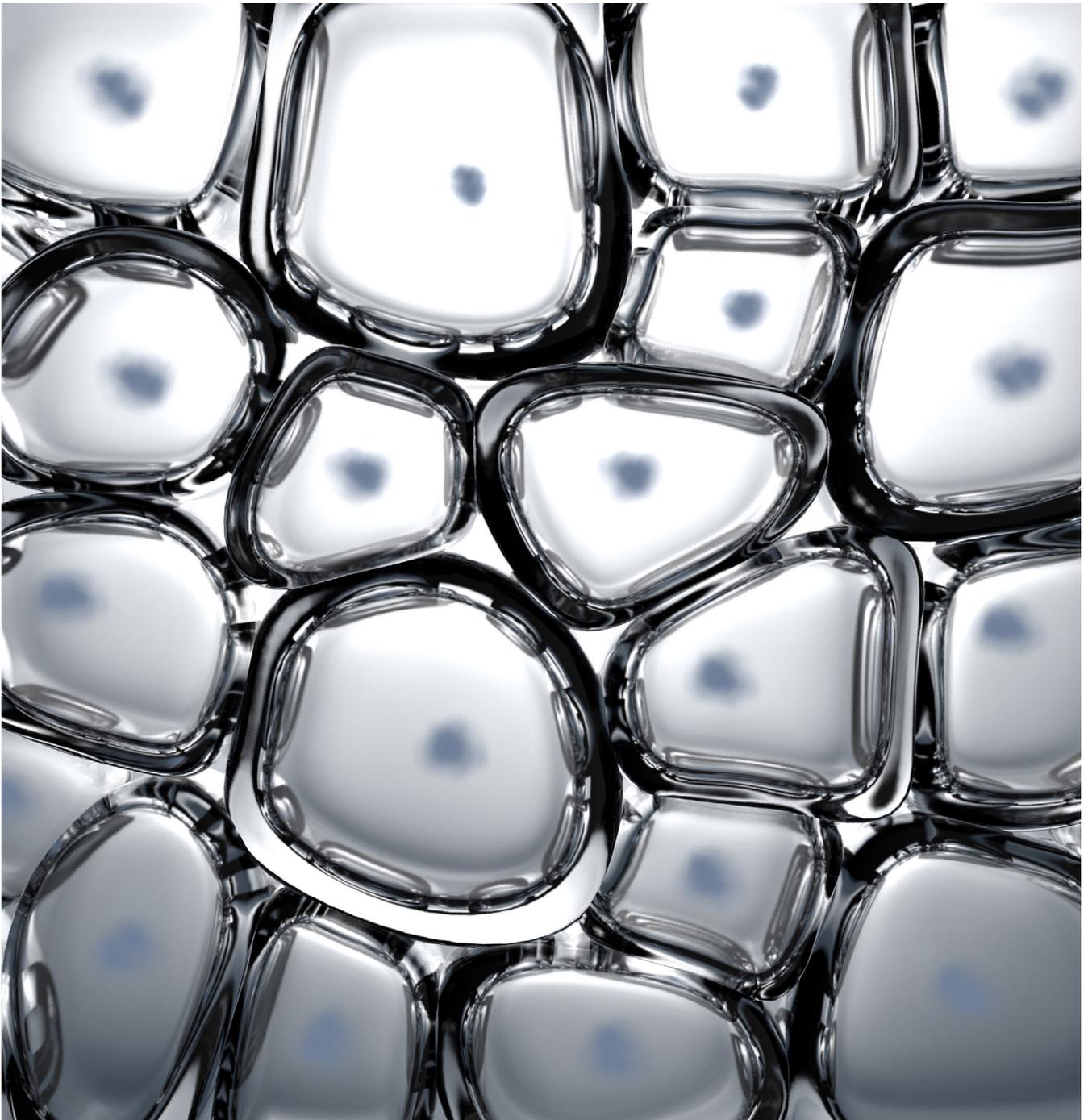


Beyond COVID-19: Life sciences reimagined



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FOREWORD

The COVID-19 pandemic has transformed entire industries in just a few short months, and life sciences is certainly no exception. From payer-mix changes to pricing and profitability concerns, the industry is fraught with market and other pressures. In particular, biopharma companies have faced significant challenges due to constrained access to key customers and largely grounded sales teams. However, these circumstances have also presented new opportunities for these organizations, including accelerated adoption of digital tools and approaches. Biopharma companies are naturally seeking effective strategies to navigate the uncertain landscape ahead, and a three-pronged approach to manage priorities is one highly effective option:

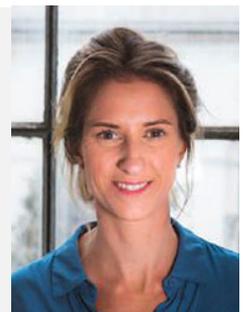


- **Today:** Evaluate the current state and determine how to stabilize the business
- **Tomorrow:** Find efficiencies and set up for the future
- **The road ahead:** Retool your go-to-market model to be more digital and customer-centric

With all of this in mind, Ernst & Young LLP and Reuters Events Pharma surveyed over 550 biopharma executives to gain practical insights on the current state and long-term outlook for the industry. This report highlights key findings from our analysis and is intended to help establish a framework for more patient-focused, sustainable care delivery. Below we outline fundamental challenges and opportunities that every company should assess in exploring this three-pronged approach.

Susan Garfield, US Consulting Principal and Life Sciences Sector Commercial Leader, **EY**

The life sciences sector adapted rapidly to the sudden challenges of a locked down world, ensuring supply chains continued to function, essential medicines reached those in need and the support of healthcare partners continued under emergency conditions.



The industry also pivoted with remarkable poise to remote working, as our new survey demonstrates.

But the survey also outlines the pandemic's deep impact. It has forced HCPs to work under great pressure and in radically different ways, obliging Commercial and Medical Affairs teams to fundamentally rethink how they engage.

Patient teams, meanwhile, find themselves in sudden demand in a remote setting and R&D are trying to work out what the post-pandemic impacts will be on trials.

Digital has become a central part of the adjustment to these new realities and this process of adaptation has already begun. Life sciences companies are increasing investments *en-masse* into digital customer engagement.

While almost every pharma business was already somewhere on this innovation and transformation journey before 2020, the imperative to adapt is now urgent.

Pharma leaders have the unenviable task of investing today for a very uncertain tomorrow.

We hope this report serves to provide insights that will help them to navigate the risks and to capture the opportunities that lie ahead.

Blair Gottscho, Managing Director, **Reuters Events Pharma**

INTRODUCTION

As our survey of more than 550 senior life sciences leaders in the US makes clear, the pandemic has forced the life sciences industry to adapt almost overnight to a new way of working.

Commercial and Medical Affairs teams have had to fundamentally rethink not only how they engage with HCPs and patients, but also how to maintain momentum for products being launched at a time of decreased access. Patient engagement teams find themselves rushing to serve unmet patient needs remotely. R&D folk, meanwhile, are trying to work out what the pandemic and post-pandemic impacts will be on trials.

It is clear that a range of technologies have, or soon will, become a central part of the adjustment to these new

realities. Life sciences businesses will need to adapt to the rapid adoption of telemedicine and near-home care.

Their commercial approach will become more digitally weighted in a future where face time with doctors will be far more limited. They will also need to harness ways both to engage digitally and to adapt to the accelerated adoption of technologies such as wearables.

While almost every pharma business was already somewhere on this innovation and transformation journey, the imperative to adapt is now urgent. The challenge is to exploit these new circumstances to capture the considerable opportunities to help HCPs drive better outcomes and save them time and stress in the process; to engage with them more meaningfully and

effectively; and to build on any lessons in clinical innovation arising from the race to develop vaccines for COVID-19.

This process of adaptation has already begun. Life sciences companies are increasing investments en-masse into digital customer engagement (84% are increasing investments here) and in the technology to support this, such as data and analytics capabilities (79% are investing more). Well over half (58%) are also investing more in patient engagement.

Many of the technology trends that were coming are moving, or already have moved, from early pilot stage or tactical applications to become central to the strategic plans for many.

COMMERCIAL OPERATIONS

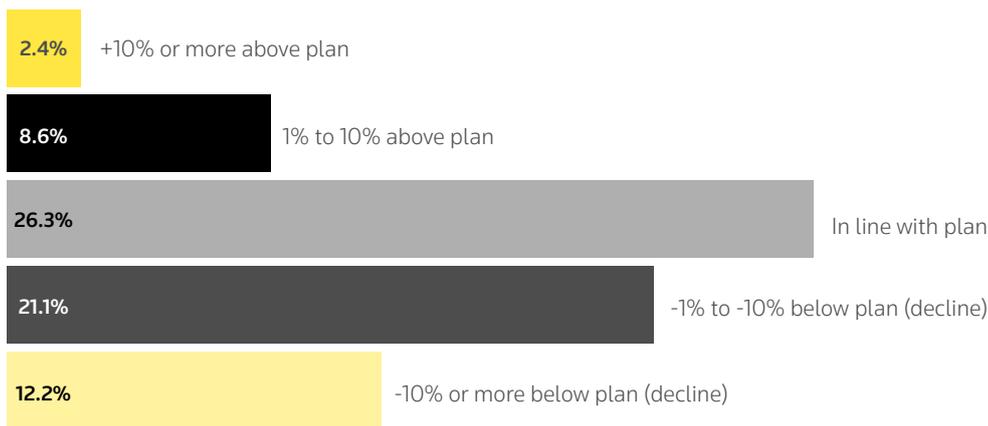
Today

Commercial operations have experienced significant uncertainty, which is anticipated to impact operations for the next year. Most respondents (64.9%) think there will be permanent downsizing in salesforce headcounts, although

most don't expect big cuts in the near term. Just 3% think their salesforce faces a significant downsizing of 25% or more in the next year. The current unpredictable environment has negatively impacted revenues across regions (at varying degrees).

At the same time, many sector players are contemplating strategic investments, while some simply do not have the funding to invest at pre-pandemic levels and others have seen encouraging growth.

How has your business revenue been impacted since COVID-19?



Despite short-term fiscal limitations for some, there is clearly ample appetite for emerging digital technologies, which quickly became central to strategic operations for many entities after the COVID-19 crisis began. "The worldwide pandemic lit the afterburners," said Karan Arora, Chief Commercial Digital Officer, AstraZeneca. "In the past, technology was a tactic for driving efficiency and automation in health care. Today, it must be part of C-level strategies that reimagine how we work and how we interact with patients and providers for the best possible outcomes."

Tomorrow

Companies that allocate funding to digital technologies and staff to adapt to new ways of working will be best positioned to navigate the near-term uncertainty around the COVID-19 pandemic while also futureproofing the business to help guard against future disruption. This is certainly in the process of happening for most. The survey showed that 85% of respondents expected digital engagement investments to grow and 80% anticipated more spending on the technology and data analytics capabilities that would support remote capabilities.

For example, as noted by Sheila Frame, Vice President of Marketing, Market Access & Patient Services with Sandoz, "the sharp decline in engagement via medical congresses and field force visits affords pharma the opportunity to rethink its approach to geography."

The road ahead

In the long term, companies must begin to reimagine commercial models, as investment in digital tech for both internal and external customer engagement will be a top priority across functions. This includes the widespread adoption of digital platforms to support telemedicine.

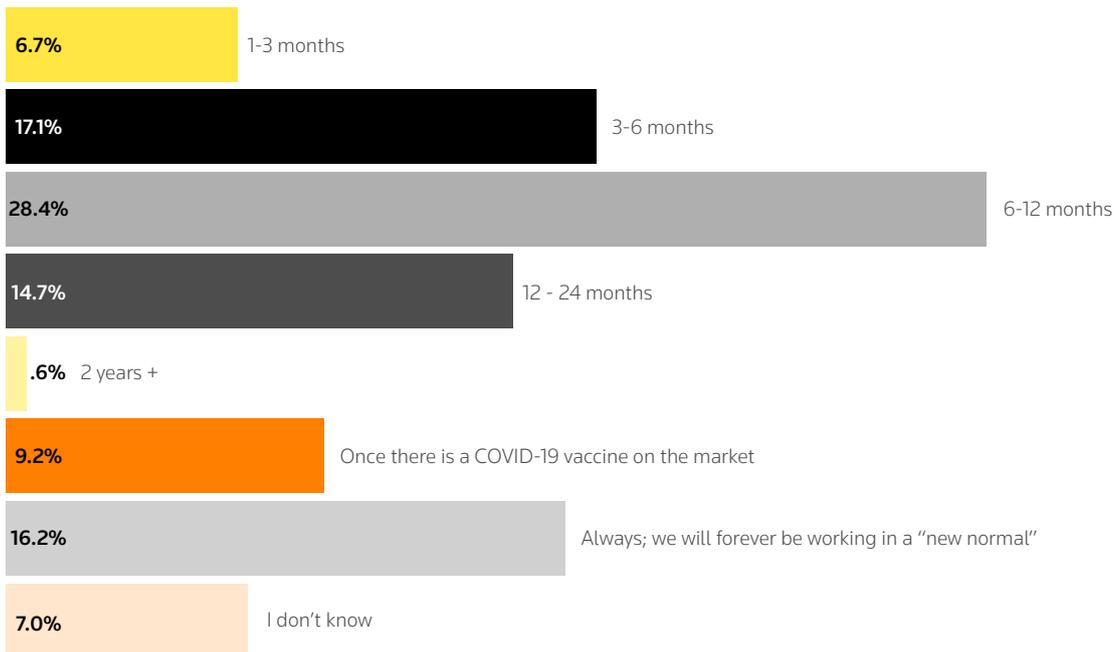
However, it is not yet clear how widely HCPs will employ telemedicine after the pandemic in the US compared to Europe, says AstraZeneca's Arora.

"Outside the US that trend will continue because the economics are in place as centralized payer systems are reimbursing for it, so it will become part of the permanent care paradigm."

It is not just a question of whether and how telemedicine will be reimbursed long term in the US, adds Arora. "Providers have invested in bricks and mortar to get economies of scale, so they want patients to come in."

The continued embrace of telemedicine is likely to be more common in certain areas such as chronic diseases or oncology, however, he adds.

How much longer do you think commercial operations will function under a state of COVID-19-related uncertainty?



"It is not just a question of whether and how telemedicine will be reimbursed long term in the US. Providers have invested in bricks and mortar to get economies of scale, so they want patients to come in."

Karan Arora, Chief Commercial Digital Officer, AstraZeneca

HCP NEEDS AND RELATIONSHIPS

Today

HCP engagement with biopharma has continued to evolve, as have HCP practices. An emerging trend is HCPs increasingly seeking answers from medical affairs teams, who have been responding to a much higher volume of requests for information from doctors. This parallels a more general demand for insight-rich content. “The clear request from customers

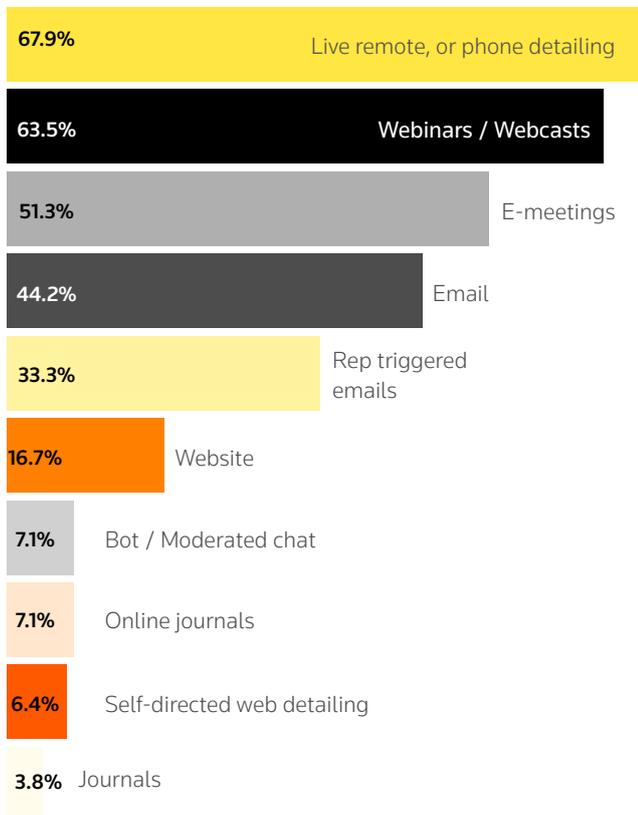
has been that they want more value-added content. In pharma, value added equals more science,” says Harmony Garges, Chief Medical Officer with ViiV Healthcare.

The life sciences sector has had to quickly adapt to virtual-only engagement and accelerate its use of digital tools. Across almost

every area – customer and patient journeys, content, channel mix, e-skills training, data and analytics capabilities – the survey reveals extensive efforts to engage virtually.

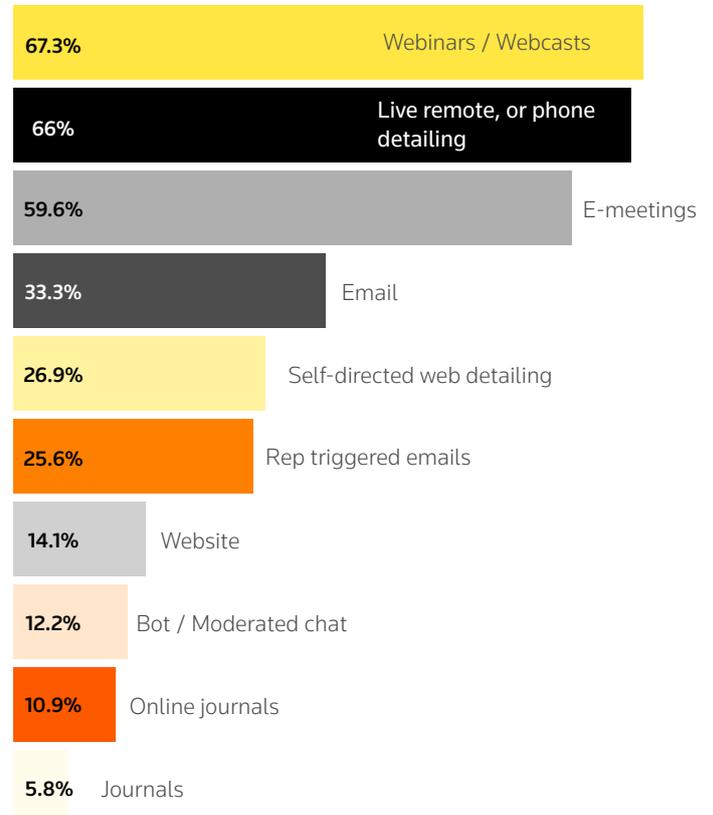
These efforts look set to continue since HCPs’ ways of working are unlikely to revert to how they were.

Which three channels have been the most impactful for remote HCP engagement during the COVID-19 pandemic?



(Respondents were able to choose more than one answer)

Looking ahead, which three channels do you believe will be leveraged the most for HCP engagement?



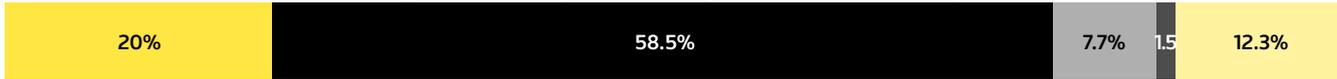
(Respondents were able to choose more than one answer)

What impacts to HCP engagement have you observed?

HCPs who historically preferred F2F engagements are transitioning smoothly to remote engagement efforts



We are enacting specific strategies to encourage HCPs to try out new digital channels



We anticipate and are planning for HCPs to prefer fewer to no face-to-face interactions with reps when things get back to "normal"



Remote engagement will become routine for commercial pharma teams

The survey respondents show a clear expectation that the way HCPs engage with reps now is likely to remain after pandemic restrictions lift. More than seven in ten (72%) either agree or strongly agree that HCPs are likely to reduce their face-to-face interactions with reps from hereon in.

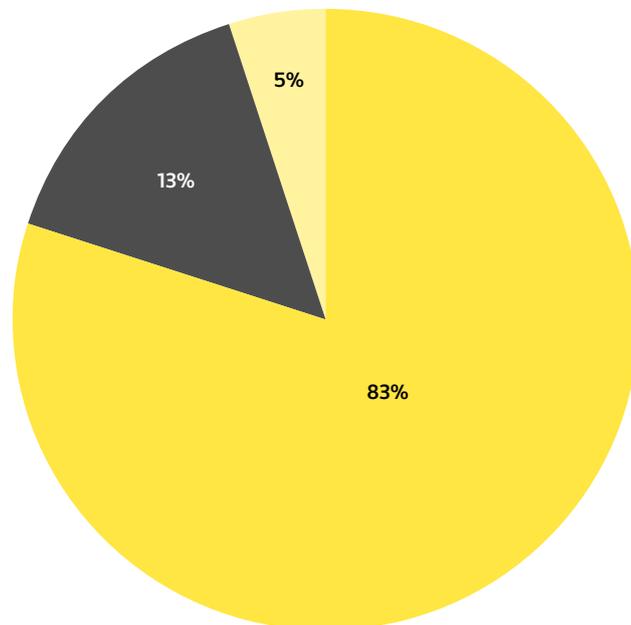
Tomorrow

An overwhelming majority (83%) expect face-to-face access to HCPs will become more difficult post-COVID-19. This has of course been an underlying trend for years, but while the extent of change is still unclear, most (72%) anticipate HCPs will prefer fewer to no face-to-face interactions post-COVID-19.

HCPs are now looking beyond brand pitches for deeper value

It is not just the channel – more remote interactions, far fewer face-to-face – that will change either. The nature of this engagement is also changing. The most effective avenues of engagement during the pandemic offer a clue as to the ways HCPs will seek to engage from now on, led by live remote or phone detailing, webinars, e-meetings and email.

Face-to-face (F2F) access to HCPs will be more difficult post-COVID-19



These references are a sign that they are looking for insights not sales pitches or collateral. “Customer expectations are changing,” says Susan Garfield, Principal, US Commercial Leader, EY.

“They are expecting a more integrated, personalized experience, and are looking for value-driven interactions as opposed to brand-driven interactions.”

The road ahead

HCPs will still value face time with MSLs

While the survey revealed that the sales rep’s face-to-face visits with HCPs will probably not return to how they were pre-pandemic, respondents predict that digital interactions are not widely expected to replace face-to-face MSL visits. Only 30% of respondents agreed or strongly agreed with the suggestion that digital HCP engagement tools will permanently replace the majority of face-to-face MSL interactions. “I still believe that you need face-to-face interactions [when it comes to] medical education, particularly so for new concepts, new treatments,” says Christoph Glaetzer, VP Global Market Access, Janssen.

Competition for HCPs’ attention

Investing in the quality as well as the modularity of content is therefore essential. This requires starting with the disease rather than the usual product-led approach to content.

The most successful platforms will also build in capabilities for HCPs to engage virtually with peers, for example, during virtual medical congresses, which have seen attendance numbers soar during the pandemic, says Arora. “We are seeing much higher attendance rates. That’s a massive positive in terms of driving share of voice of medical information dissemination and they like the virtual interaction.”

Another requirement here is the ability to integrate features such as the ability to field virtual questions and to offer easy ways for attendees to follow up and request and receive information. Such capabilities will become competitive differentiators.

Those who provide the best content in a particular area stand to win a disproportionate level of engagement and attention. “There is a need to provide rich, experience-driven platforms that become a destination at a disease level rather than being specifically product-based. It’s a big opportunity for those that get it right,” says Arora.

Only 30% of respondents agreed or strongly agreed with the suggestion that digital HCP engagement tools will permanently replace the majority of face-to-face MSL interactions.

“I still believe that you need face-to-face interactions [when it comes to] medical education, particularly so for new concepts, new treatments”

Christoph Glaetzer, VP Global Market Access, Janssen

MARKETING AND THE SALES MODEL

Today

The sales model is being redefined.

How do you anticipate your company's salesforce headcount to be impacted as a result of COVID-19 (N = 99)



The conventional field force model, already under pressure, has suddenly also been rendered unfit for purpose. "It is clear that the selling model and the rep's role have fundamentally changed," says Chetak Buaria, Global Head of Customer Engagement & Channel Evolution, Biopharma Global, Merck.

"In the field force era, a face-to-face rep visit may have been the organization's only touchpoint with a customer," he says. "Now you might connect with that customer through

alternative digital means and other touch points. How do you read all those into your call and structure, that conversation to adapt to this multichannel world?"

In a multichannel world where HCPs engage in various other ways, pharma needs to work out how the rep best fits in, says Buaria. "That fundamentally raises the bar for the rep. From the HCP's point of view, how do you add value to my practice through this conversation?"

The other factor pharma needs to think about is who else is now customer-facing in addition to the rep and what training and resources they may need. Marketeers who are sending out emails, or conducting webinars are directly engaging in new ways with customers, for example, or IT colleagues may be helping customers get onto webinars.

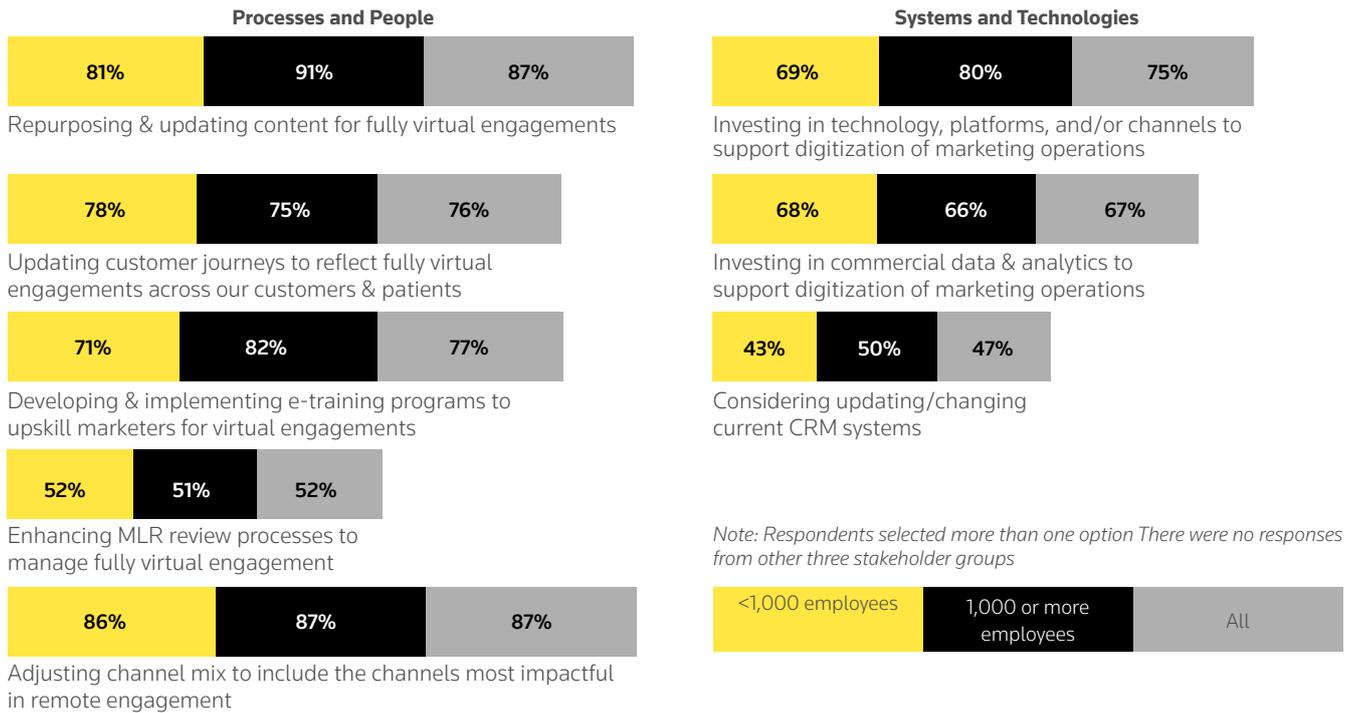
"In the field force era, a face-to-face rep visit may have been the organization's only touchpoint with a customer. Now you might connect with that customer through alternative digital means and other touch points."

Chetak Buaria, Global Head of Customer Engagement & Channel Evolution, Biopharma Global, Merck.

Tomorrow

The commercial field force: rationalized or repurposed?

How is your marketing team responding to the impacts of COVID-19? (N = 238)



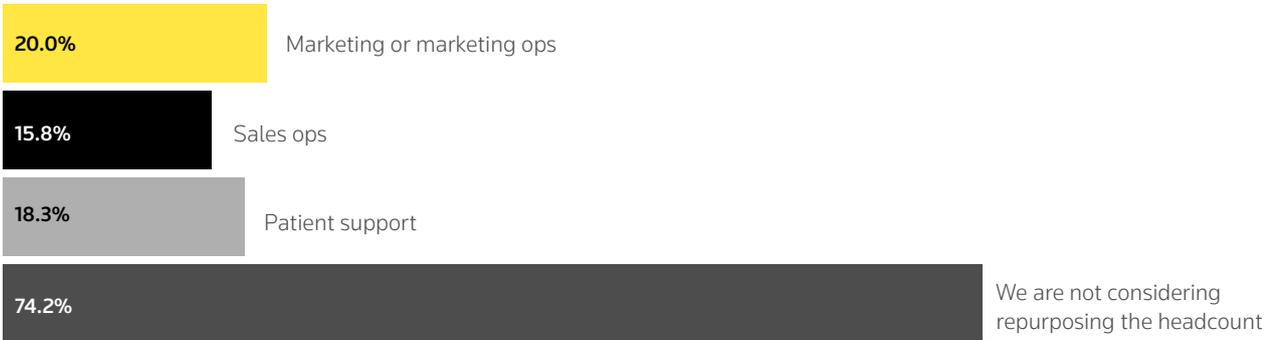
New investments, approaches and skills are being implemented and adopted. Sales and marketing folks are adapting what they do to make the most of the uptake of new channels. 51% of respondents agree or strongly agree that reps are making a smooth transition to remote engagement, while 72% say they are skilling rep teams up to be able to engage remotely.

The size and disposition of sales teams is under review and smaller field forces look likely, although in the short term the reductions may not amount to the reckoning some may have predicted.

Only 27% of respondents expect a decrease in sales personnel this year, without much focus on repurposing. In the medium term (12 to 24 months), respondents expect a decrease in salesforce headcount (35%). A bigger change is likely in the longer term, however, since 63% of respondents say that salesforce headcount will ultimately decrease as a result of the pandemic.

It is clear that many organizations are taking their time, rather than rushing through dramatic rationalizations, and they will also be considering evolving sales reps into new roles, divided roughly equally into marketing or sales operations or patient support, among those who are planning to repurpose salesforce teams.

What functions are you considering for repurposing of salesforce headcount?



The road ahead

The commercial function will need to adopt new technical, content and internal capabilities suited to the new digital first environment, entailing far-reaching reorganizations.

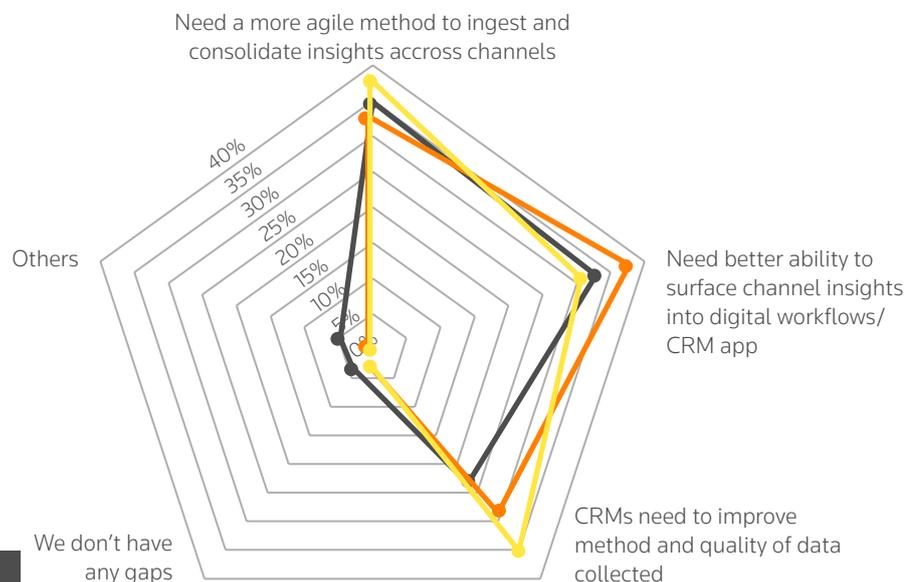
Competitive advantage in commercial has moved from being about the scale and resources of the field force under the old model, to the mastery of digital technology. This will define success in future, says Arora: "This can drive massive economies and sustainable competitive efficiencies."

The most effective participants in the new commercial environment will be those who use technology to provide the richest customer experience and provide HCPs with the best content. The ultimate destination for pharma businesses is highly responsive, highly flexible engagement platforms. These will serve HCPs the content they need, when they need it, in the format and medium they want it. They will be mobile-first, sometimes incorporating elements of augmented reality.

What are the commercial data and analytics gaps that you need to fill to enable commercial operations to transition to digital channels? (N=444)

67% are investing in commercial data & analytics solutions

There remains scope for improving agile capabilities for ingesting, consolidating, integrating and reporting data & insights



Note: respondents selected more than one option. There were no responses from the other three stakeholder groups

A content platform capable of providing information in a variety of media in different formats with a smooth user experience is suddenly a pre-requisite, but alone is not sufficient. "The platform will become a commodity. Everyone will need a slick platform," says Arora.

Building the new platforms

The engine of such smart orchestration will be a platform's ability to segment, analyze and rapidly respond to these disparate digital customer interactions, which existing systems were not built for. There is a great opportunity to rebuild CRM capabilities that provide a more joined up internal process and that can yield deeper insights.

Such systems will be capable of big data mining and insight-driven analytics that enable commercial teams to use data to iterate their commercial interactions in an agile way.

"Lots of individual discussions were happening in person, and data was fragmented and siloed before. With more virtual interaction, we can get smarter and provide more personalization to our customers. It can help us become more efficient and create better insights into how we launch and where we go," says Arora.

The challenge is not just technological. Getting previously discrete functions and roles to work together to make the customer experience coherent whenever they consume content will also require an assessment of internal roles and more cross-team collaboration.

New compliance processes enabling reviewers to handle different versions of the same content in a timely way are also essential, says Buaria. "There is extra volume and extra load coming to all those reviewers. The underlying substance might be very similar, it is just that every piece needs to be looked at."

How different roles within marketing work together must also be considered, he adds. Product management, channel execution, running a webinar, doing email marketing or running a website may seem like very different roles, but they need to work hand in hand.

CRMs no longer fit for purpose

Many sales teams are finding their CRM systems are not up to scratch. More than 40% admit that their CRM data cannot support comprehensive HCP engagement in the absence of in-person field force insights.

The chief CRM gaps revealed in the survey related to their ability to consolidate insights and then build these into digital workflows. Almost two thirds (63%) admit they lacked agility in gathering and consolidating insights across channels and more than half (53%) agreed they needed to be better able to build channel insights into digital workflows.

But progress is taking place. The process of developing a more responsive offering for HCPs, enabled by the adoption of digital, is already underway at ViiV. "In our old model they used to have to say, 'I will have my MSL get in touch,' now the rep can dial in medical in real time, helping the MSL," says Garges.

Many sales teams are finding their CRM systems are not up to scratch. More than 40% admit that their CRM data cannot support comprehensive HCP engagement in the absence of in-person field force insights.

PATIENT ENGAGEMENT

Today

The impact of global lockdowns and the severe restrictions to health care access that resulted have left patients struggling to address a range of conditions.

While the health care sector has done a remarkable job of keeping the supply of vital medicines flowing, many needs remain unmet. These range from long waiting lists in chronic disease and oncology owing to a backlog in care, to access to information on condition management without the usual face-to-face support to which they are accustomed.

The full extent of the impact this will have on ongoing disease or condition progression, and the mental health of those who may be struggling to cope with a range of complex and distressing symptoms, is still uncertain.

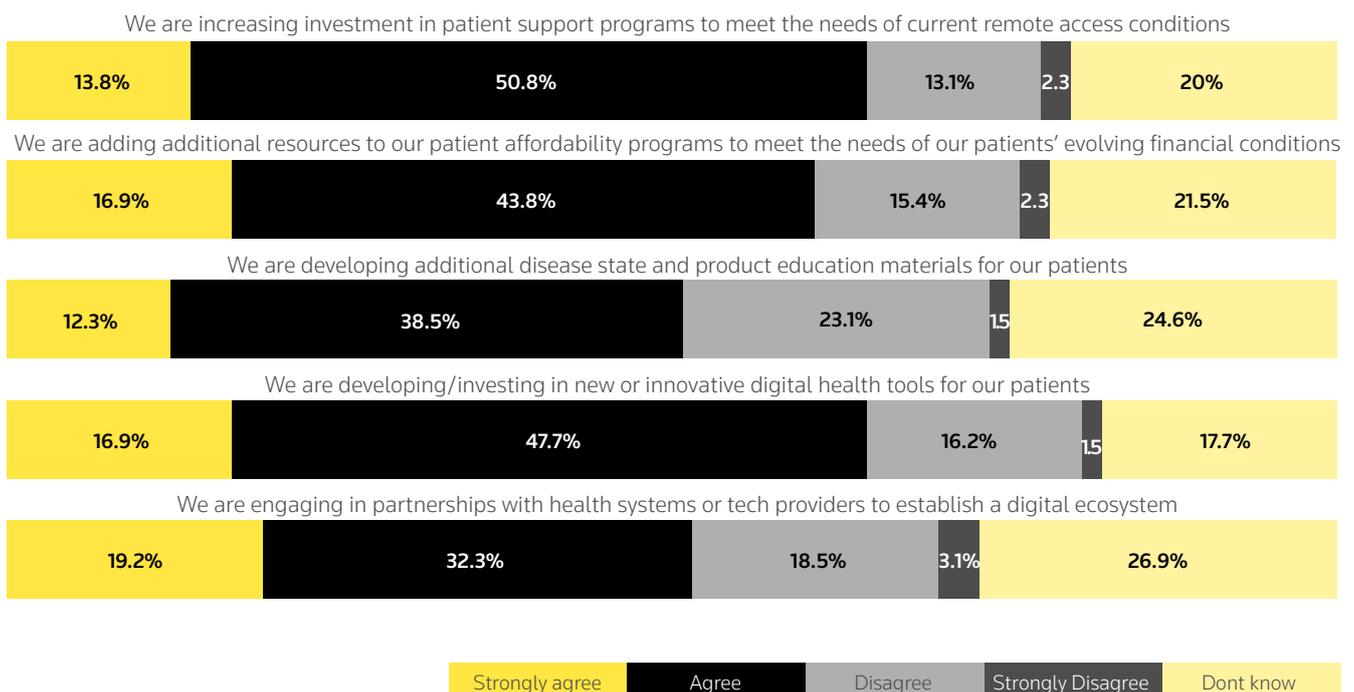
What is clear is that there is an urgent unmet need for remote and digital care and information that HCPs and pharma have both been racing to provide. Some pre-pandemic concerns have now become urgent, says Garfield: "Given the constraints on accessing physicians, patients have become an even more important customer in the life sciences ecosystem.... Figuring out how to actively engage

with and leverage them as end users driving product choice is critical. This shift had been in process, but it has accelerated now."

Tomorrow

Just over two thirds of survey respondents (65%) agree or strongly agree they are developing innovative digital patient health tools, while just over half agree or strongly agree they are developing partnerships with health systems or tech providers to establish a digital patient ecosystem. Almost two thirds (65%) also agree or strongly agree they are increasing their patient support program investments to help meet current remote access needs.

How patient engagement and patient advocacy is adapting



The road ahead

Glaetzer agrees that compared with its HCP engagement capabilities, pharma's patient engagement approach is still very much under development. "On the HCP side, it is in place, active and accelerating. When it comes to patient engagement, we are still in the exploring/learning phase as an industry overall. Direct interaction with patients is very different globally speaking. In the US you can do it via business-to-consumer advertising, but it is not targeted. There is room for everyone to learn how to engage in the most effective and compliant way, often with patient associations, in digital formats. The questions are: what is the right venue, what is the right medium and how do you create an engagement format that is two-way? There is still lots to do."

Post-pandemic: new possibilities in patient engagement

As pandemic restrictions ease, there is every sign pharma will build on what it learned in 2020 and that it will be able to maximize the benefits of digital engagement while focusing the face-to-face engagement

element to be far more effective, says Glaetzer: "It's a question of finding the optimal balance. Where does digital help you? One advantage is it can increase your outreach in digital education more than in traditional face-to-face settings, and that can let us reach broader audiences. That will then enable us to make the actual face-to-face interaction even more targeted, for working sessions rather than information sessions."

Such an approach should lead to a greater frequency of engagement with patients, that is also more effective and efficient from a resources point of view.

Another factor that established life sciences businesses will have to try to build into their planning is the move of technology players into the health care sector, armed with data and advanced digital engagement capabilities.

"Big tech players and data aggregators are going to help patients become more sophisticated purchasers and identify points of comparable value, alternative choices and help patients connect to communities of care. We will see

an enormous amount of connectivity here that changes the dynamics of the current health care system," says Glaetzer.

These new dynamics may include novel ways of managing chronic disease, shorter drugs supply chains and a greatly expanded role for technology, adds Garfield: "Imagine disease management programs where people with diabetes, for example, will have a more technology-led experience end to end that provides support in education, adherence, feedback, supply ordering, clinical check-ins and more. The possibilities are significant for biopharma to add tremendous value for the patient experience."

As such, life sciences companies are placing significant bets and developing capabilities to compete in the technology war and maintain their relevance in a patient context. Their deep understanding of the practical requirements of health care technology in a clinical setting and the overall patient experience, could provide a significant advantage if leveraged.

Many companies are reimagining their go-to-market model and finding ways to drive better patient outcomes through a combination of therapy and digital health tools.

Some companies, such as AstraZeneca – which is reimagining its go-to-market model and finding ways to drive better patient outcomes through a combination of therapy and digital health tools – are already reinventing their approach with this future in mind. In a partnership with BrightInsight, for example, it is developing a chronic disease management platform, comprising a patient-facing app to gather patient-reported outcomes plus a population health dashboard showing data from devices. This provides drill-down views for care teams, providers, and clinicians, closely coupled with their existing clinical workflows. The goal is a more holistic view of patients, allowing more precision in suggesting therapy for patients as well as optimizing clinical workflows based on real-world data.

Health care providers (HCPs) will need access to centralized patient information in order to capture a rounded view of an individual's condition, including comorbidities. The platforms that do this best will streamline the process for HCPs, not just by offering integrated information at their fingertips, but also by easing workloads by helping analyze and triage the patients most in need of care.

According to Arora, AstraZeneca has already begun to engage clinical partners around building the clinical algorithms that will facilitate these features as well as the potential to deploy digital therapeutics to complement and improve on other therapies: "It is an emerging space and an important space for pharma. Pharma understands how to drive evidence and to build clinical workflows. There is some meaningful dialogue going on as to how you leverage digital in a way that does not make extra work for the provider."

AstraZeneca has already inked codevelopment partnerships with HCPs to build digital disease management solutions and introduce them into clinical workflows, says Arora.

The question remains, however: who will ultimately fund such services? Until payers see strong enough evidence of their efficacy, they will not reimburse for them. "Providers in the US want these solutions but can't pay for them, yet there is no way they'll manage patients [remotely] without them," says Arora. The likely way out of this impasse is that pharma will subsidize this model until it has developed robust medical-grade platforms and fit-for-purpose remote monitoring methods that payers will be content to reimburse for, he adds.

"Pharma will subsidize this model until it has developed robust medical-grade platforms and fit-for-purpose remote monitoring methods that payers will be content to reimburse for."

Karan Arora, Chief Commercial Digital Officer, AstraZeneca

MEDICAL AFFAIRS AND R&D

Today

The continued ascendance of medical affairs

While sales field forces face repurposing and even reduced headcounts over time, their colleagues in medical affairs are likely to continue to be in demand. “The focus for many products will now be a scientific-based conversation, more frequently done by an MSL,” says Garfield. “Talking to practitioners on a peer-to-peer basis covering studies, comparative clinical impact and incorporation into care may likely have more resonance, especially if access is limited more generally.”

This insight is reflected in our survey, in which 100% of respondents report that the need for medical affairs has never been greater within company strategy. The majority (77%) state that the COVID-19 pandemic will permanently increase the perceived value of medical affairs within their company, and 88% also report increased openness from commercial colleagues to collaborate with those in medical affairs.

Most life sciences decision makers who contributed to this report, have confirmed that medical affairs has become of even greater importance to HCPs during the pandemic. “We have seen massive appetite from medical providers in this shift of priorities from COVID-19,” says Arora.

The nature of medical congresses has changed permanently

Medical congresses are another matter. In our survey, 84.6% of respondents agreed or strongly agreed that medical congresses will never be purely physical events and that there will always be a virtual element from now on. Most (65.4%) expect medical congress budgets to shrink as a result.

The pandemic and its attendant lockdowns also posed significant challenges for existing trials. Trials have been hit with 80% of respondents agreeing or strongly agreeing that timelines have been slowed. Almost half (49%) agree that they were able to save trials from being canceled, although a quarter have not (24%).

Compared with commercial colleagues, the adoption of digital has been much slower in R&D: Less than half in our survey (47%) agreed that sites have enabled and supported a speedy transition to digital trials, while 38% said they had not.

Unsurprisingly, the pandemic hit clinical trial timelines with 80% of respondents reporting delays. The underlying issue may be a lack of agility within the supply chain. A significant minority (40%) lack confidence in the ability of large CROs to make a fast transition as a result of COVID-19. The experience of lockdown may well be a defining moment for the adoption of new technology in trials, however. It is also clear that the pandemic is shaping the planning for future trials. Almost three quarters of respondents (73%) say their site mix strategy will change permanently as a result of COVID-19.

Tomorrow

When it comes to longer-term horizons, more are optimistic as to the impact of digital and technology on R&D. A standout majority (80%) believe COVID-19 has driven greater digital adoption that can boost long-term cost efficiencies of trials.

A third (33%) expect all trials in their organization to be decentralized/virtual in the next 12 months, while most (71%) expect to see a significant increase in the number of wearables or other remote capture devices for data collection used in trials in the next 18 months. This use of digital devices is expected by almost two

thirds (62%) of respondents to result in the discovery of reliable novel endpoints in the near future.

The experience of the pandemic has clearly boosted the determination to use technology to speed trials and make them more efficient. New approaches to trials are now far more likely, says Garfield.

How is your medical affairs function changing as a result of COVID-19? (N = 58)

% of respondents who strongly agreed and agreed



Inclusion of medical affairs leadership in company strategy



Higher openness of collaboration from commercial team



Increased desire of collaboration from R&D team



Growing focus on real-world sources of evidence



Openness of HCPs to interact with MSLs



Permanently increase the perceived value of medical affairs



Digital HCP engagement tools will permanently replace the majority of F2F MSL interactions



Medical congresses will never be only physical events, but include a virtual element

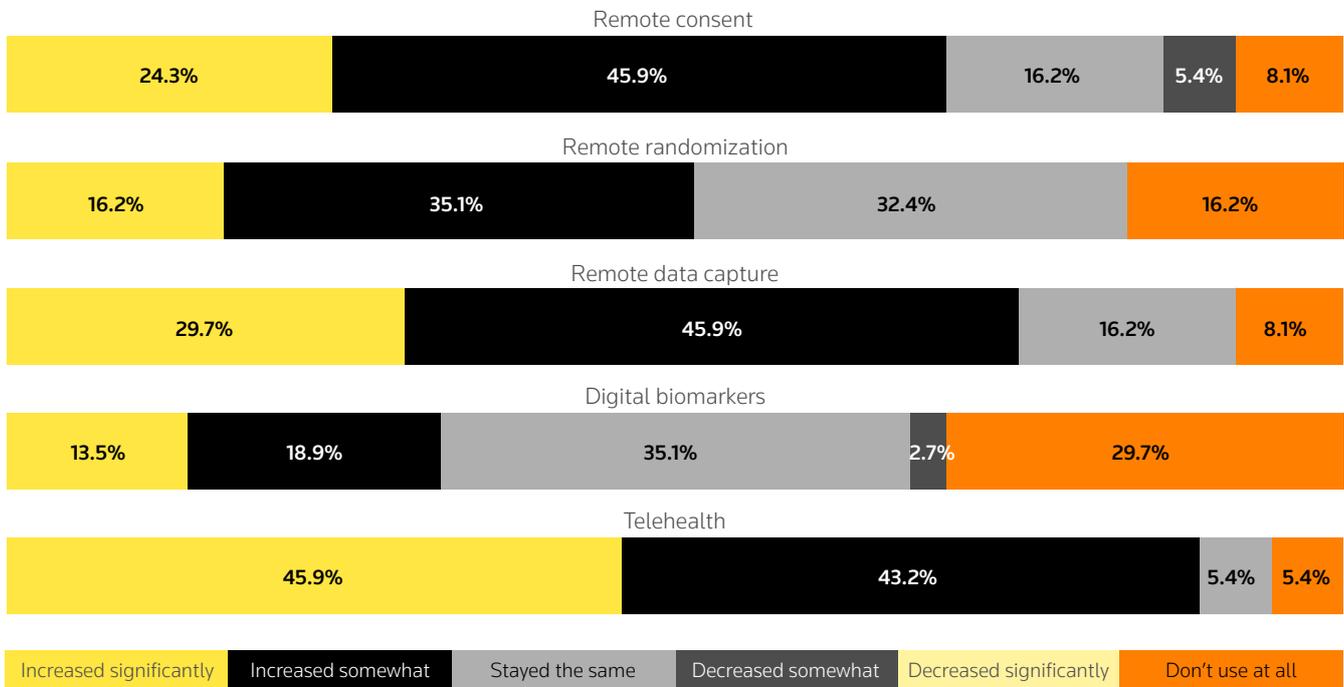


Medical congress budget expected to decrease

Provider perspective (N = 72) 76%



What has increased, decreased or stayed the same because of COVID-19?



“Technology will enable all sorts of new trial designs with virtual recruiting and more dynamic endpoint assessment incorporating RWE. This should offer a more holistic view of impact and value and a better way to reach people and populations, especially in rare diseases.”

There will clearly be a greater openness to adopting remote monitoring, says Kabir Nath, President, Otsuka North America Pharmaceutical Business, as well as making clinical trials less dependent on a specific site and a specific individual investigator.

The increased focus on technology and the use of the data it gathers is also likely to focus minds in R&D on the increasingly important factors beyond regulatory approval. Says Garfield: “FDA approval is not the only outcome of interest or

necessity for a successful product. You also need to be thinking about reimbursement outcomes when managing trial design, endpoints and data capture.”

The road ahead

The explosion in remote healthcare this year and the wider awareness of the potential for wearables in treatment, diagnosis, trials and monitoring may well end up smoothing the path for life sciences businesses developing digital therapeutics (DTx).

A brighter future for DTx R&D

While technology will be brought to bear on the development and testing of conventional pharmacotherapies, the new realities are also likely to favour those developing digital therapeutics (DTx), says Nath.

“Looking at the pill is only *part* of a solution. There are other treatment options needed to augment the physician’s toolbox. Within a three-to-five-year time horizon, investing in advancements in our digital therapeutics in psychotherapy and cognitive behavioural therapy digital health will, over the long term, improve patients’ experience with the healthcare system and, one day, allow for an enhanced understanding of diseases, leading to better treatments.”

“The idea that you can engage with health care without actually being in the same office as a physician is more important now, along with the degree of comfort the regulators have.”

The problem of misaligned incentives

The lack of incentives for payers to reimburse for remote healthcare and DTx remains a significant stumbling block for the adoption of new technology-led approaches, however.

“In some single-payer systems in Europe, you may actually have more opportunity to bring something like

a digital therapeutic to life more quickly,” says Nath. “We’ve seen examples of that in Germany. In the US we still need the right incentives for a provider to write a prescription for a digital service.”

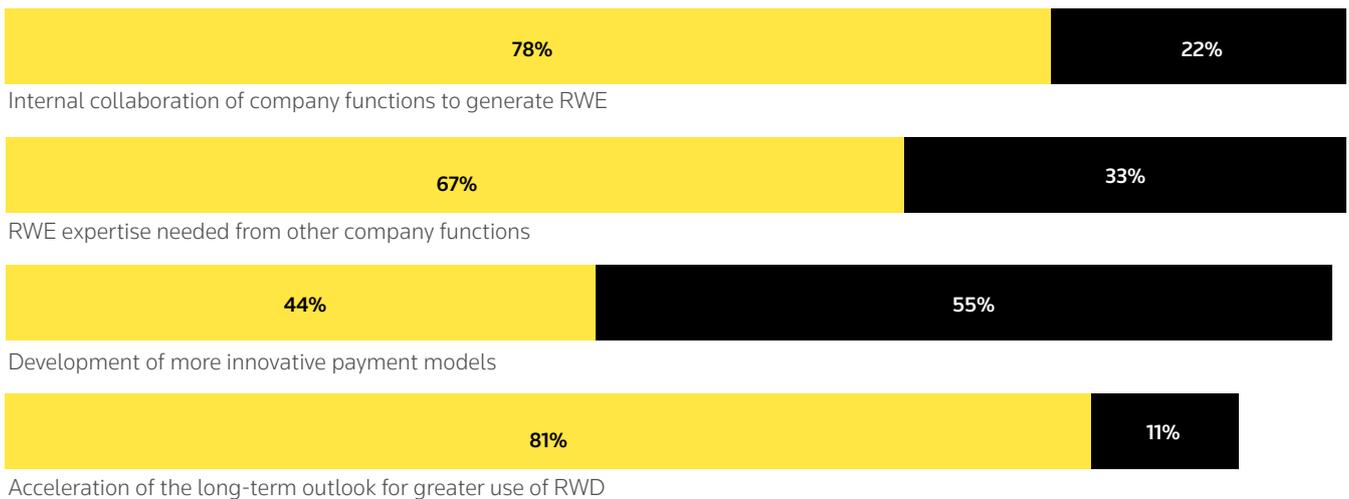
Expectations and optimism that life sciences businesses will be able to fast-track future drug development in the light of the rapid advances in developing COVID-19 vaccines have

to be tempered however, adds Nath.

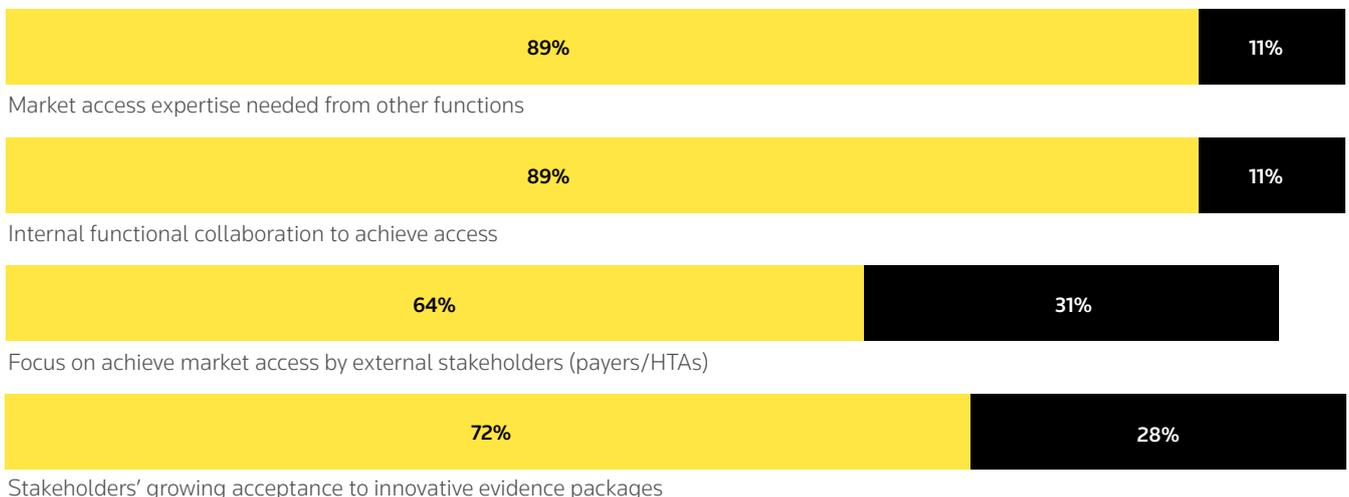
“Some of the collaborations in science, with antibodies and vaccines for example, have moved discovery at a speed that is astonishing, but I don’t think that’s going to be the norm. I suspect those companies that have done that, will have lessons for how parallel processing, and for how agile processes and technology can inform discovery in the future.”

Impact of COVID-19 having on evidence and access (N = 82)

Evidence rated initiatives



Access related initiatives



CONCLUSION: THE POST-PANDEMIC OUTLOOK FOR PHARMA

The COVID-19 pandemic has ushered in a paradigm shift of epic proportions, but as this survey shows, agile organizations and stakeholders have already begun to prepare for the road ahead – even if the destination isn't quite clear yet.

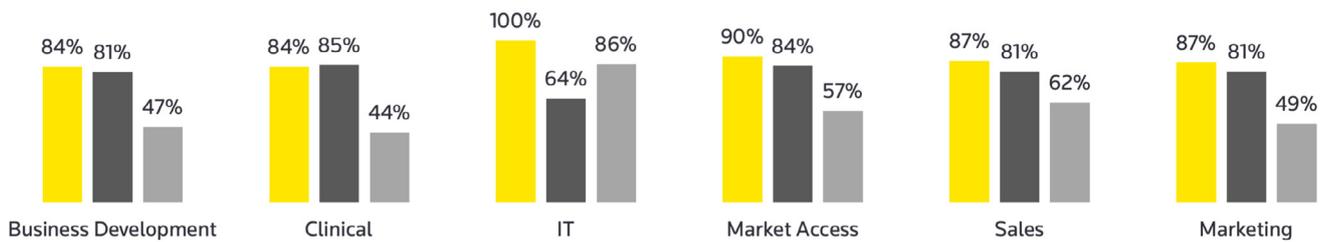
In the short term, savvy companies are evaluating their capabilities – from workforce to process, technology and data – and making significant investments now with an eye toward salesforce transformation and commercial model evolution.

The road ahead is all about finding new ways of working through upskilling people and enabling

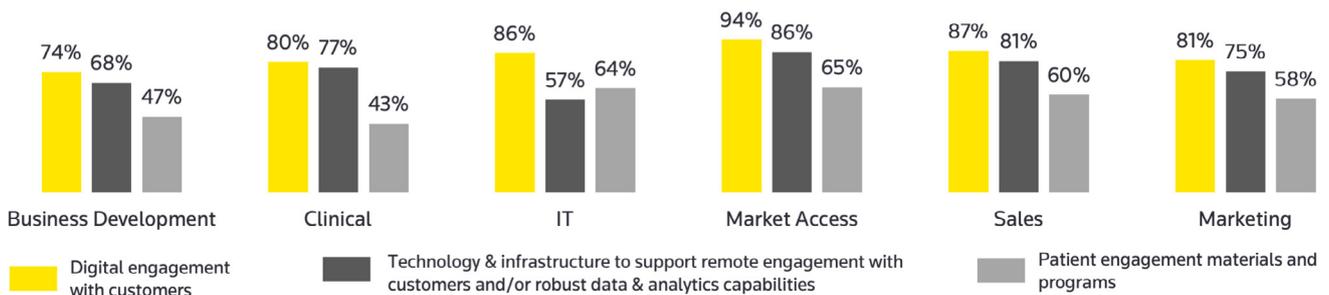
infrastructure optionality, because the digital-driven biopharma organization of the future will meet patients and customers wherever they are. And as the industry forges new go-to-market strategies with all of these objectives in mind, one thing is abundantly clear – adaptability will be key.

Significant investment is already in train over the next two years across the major functions. Investment among the majority life sciences businesses is especially focused on digital engagement and the data and analytics capabilities that supports an enables it.

Evolution of investments over the next 6-12 months



Evolution of investments in the 12-24 months



■ Digital engagement with customers
 ■ Technology & infrastructure to support remote engagement with customers and/or robust data & analytics capabilities
 ■ Patient engagement materials and programs

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How EY's Global Life Sciences Sector can help your business

As populations age and chronic diseases become commonplace, health care will take an ever larger share of GDP. Scientific progress, augmented intelligence and a more empowered patient are driving changes in the delivery of health care to a personalized experience that demands health outcomes as the core metric. This is causing a power shift among traditional stakeholder groups, with new entrants (often not driven by profit) disrupting incumbents. Innovation, productivity and access to patients remain the industry's biggest challenges. These trends challenge the capital strategy of every link in the life sciences value chain, from R&D and product supply to product launch and patient-centric operating models.

Our Life Sciences Sector brings together a worldwide network of 23,000 sector-focused professionals to anticipate trends, identify their implications and help our clients create competitive advantage. We can help you navigate your way forward and achieve sustainable success in the new health-outcomes-driven ecosystem.

APPENDIX

Figure 1. Which of the following describes the organization you are employed by?

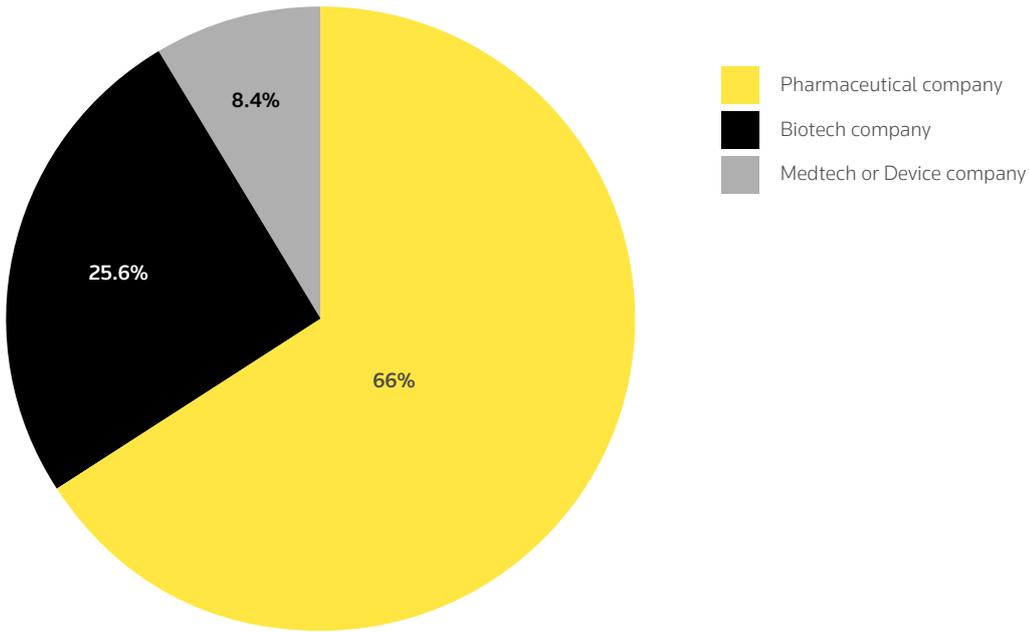


Figure 2. What is your seniority level within your organization?

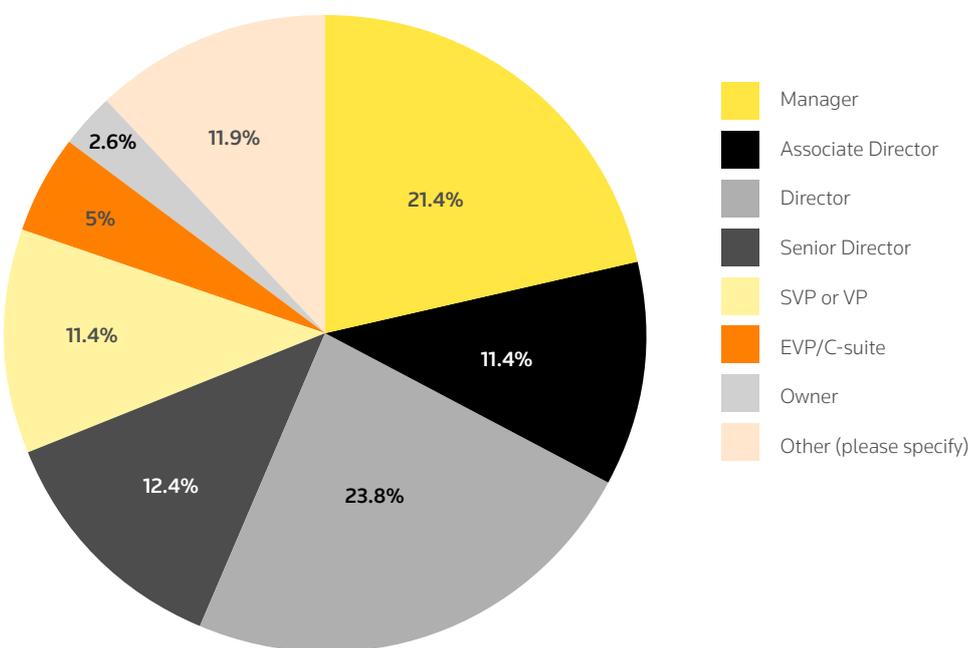


Figure 3. How big is your company in terms of headcount?

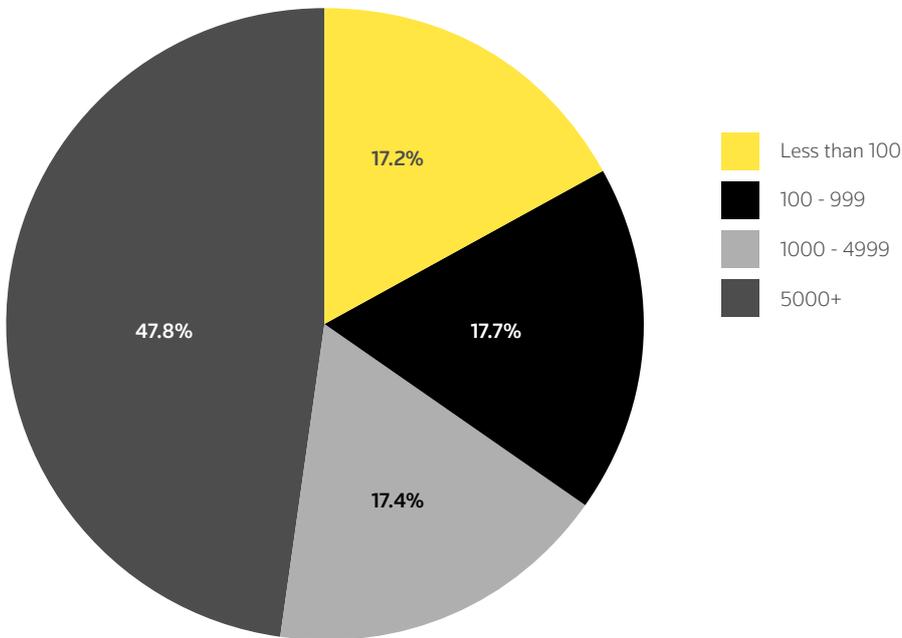


Figure 4. Which function are you most closely aligned with at your organization?

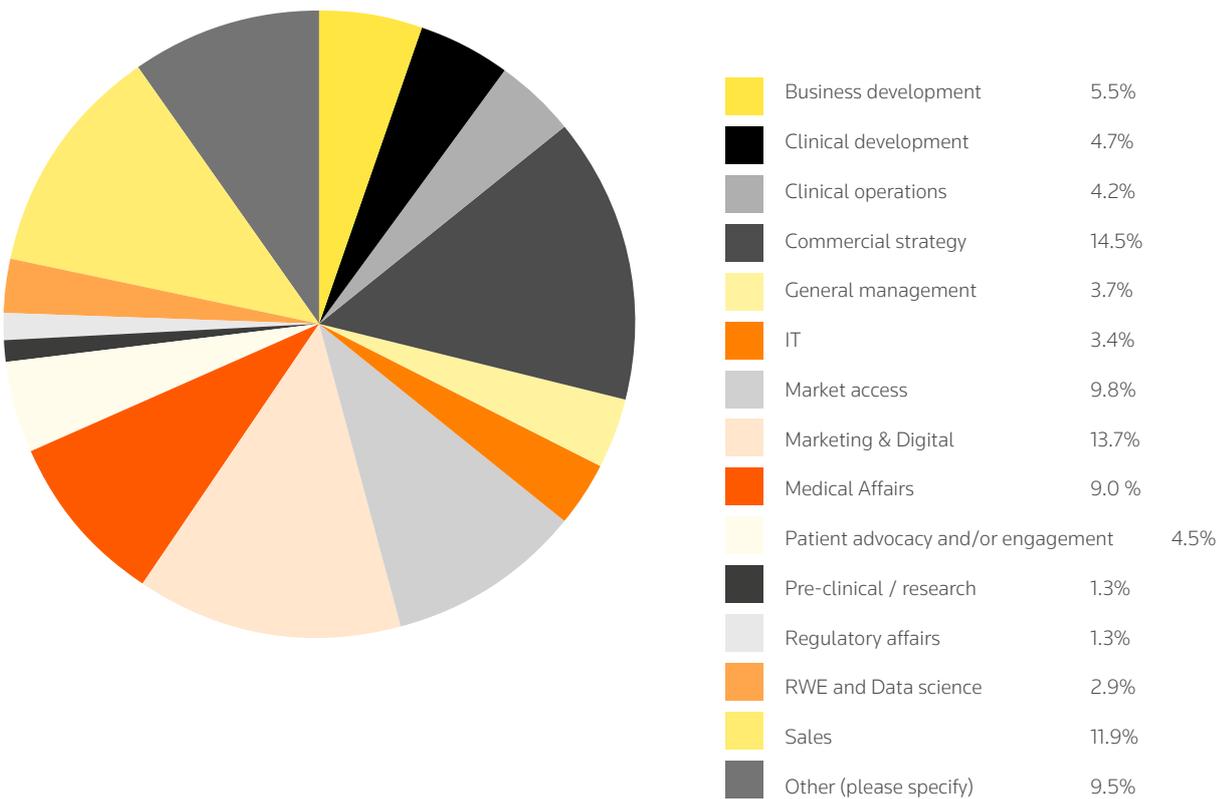


Figure 5. In which field do you work?

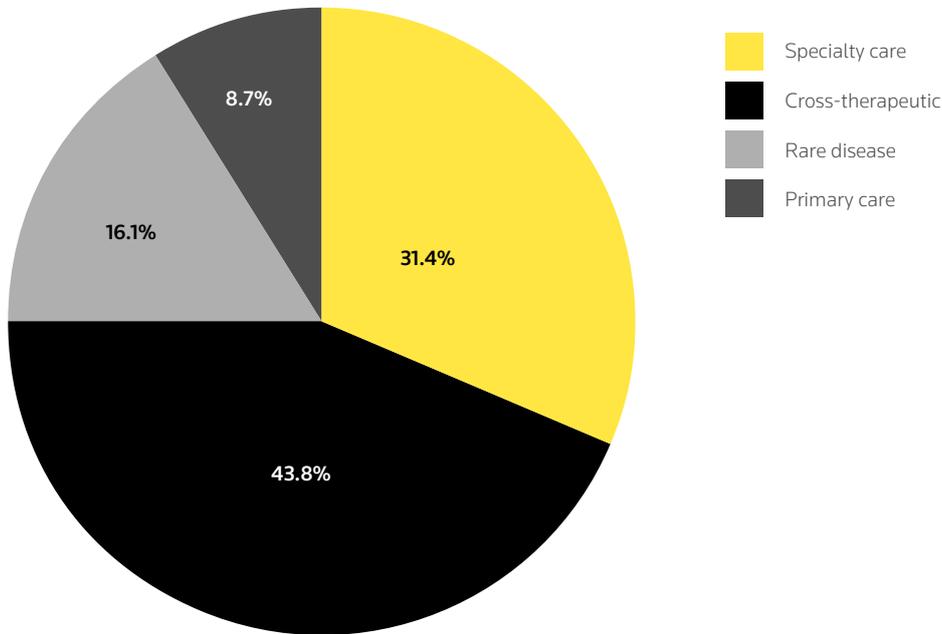


Figure 6. What do you think?

Drug development time lines will be accelerated permanently as a result of COVID-19



Salesforce headcount (in the field) will permanently decrease as a result of COVID-19



Face-to-face access to HCPs will be more difficult post-COVID-19



Budget for attending and exhibiting at medical conferences will be reduced as a result of the pandemic



There is an increasing number of patient advocates/groups who understand industry models and ways of working



Figure 7. How has your business revenue been impacted since COVID-19?

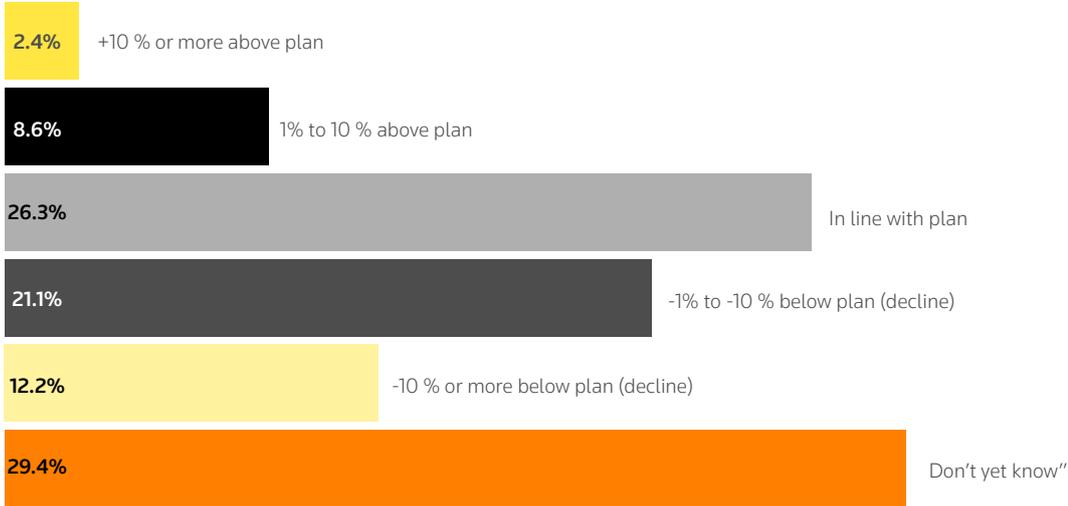


Figure 8. How much longer do you think commercial operations will function under a state of COVID-19-related uncertainty?

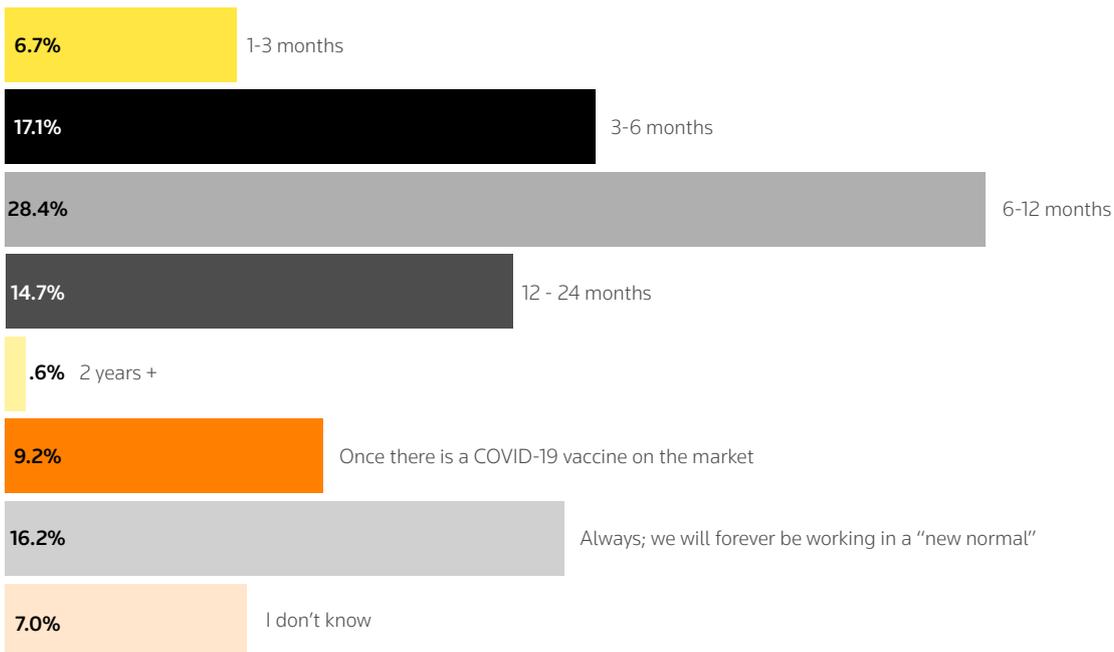


Figure 9. Do you anticipate a permanent transition to remote/virtual work in your organization?

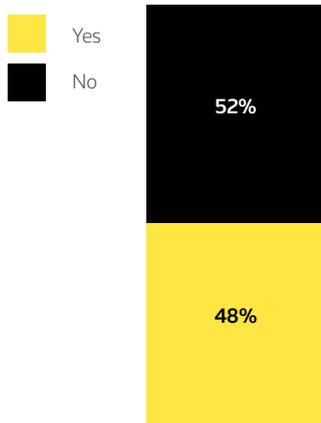


Figure 10. Is your organization well-equipped to support a more permanent transition to remote/virtual work?

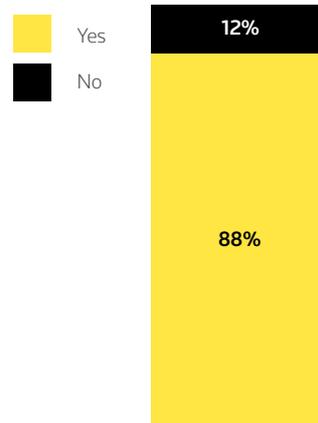


Figure 11. How has COVID-19 impacted your budget?

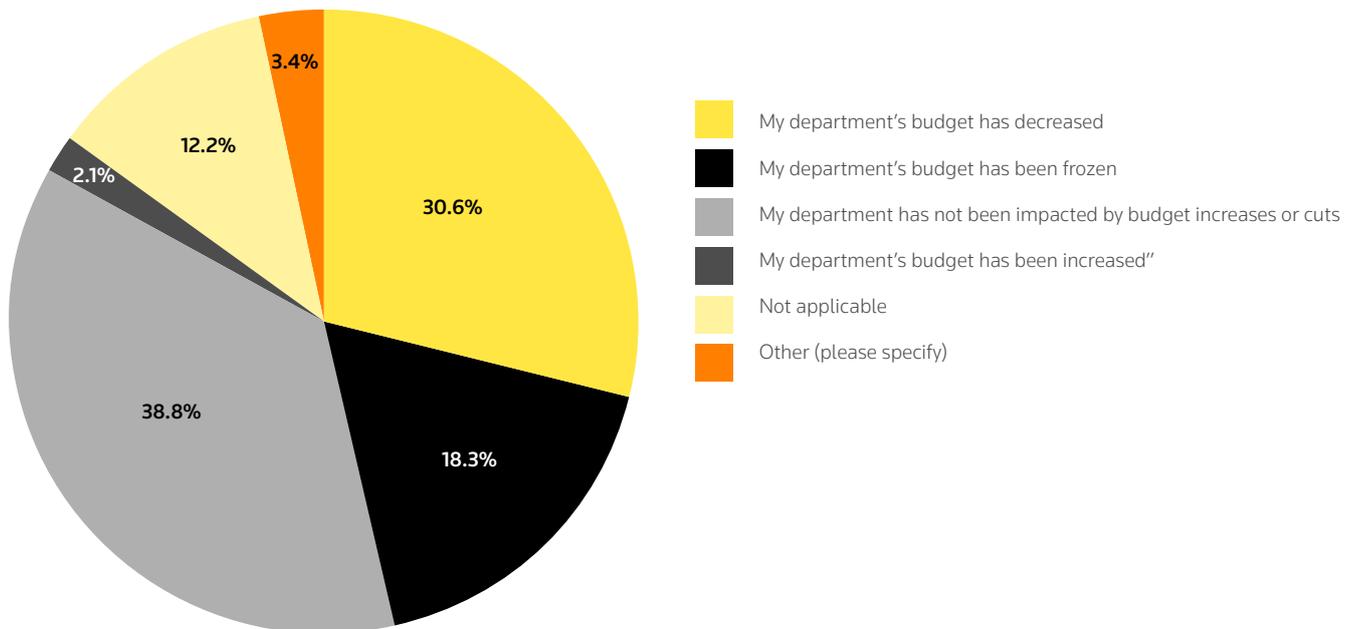


Figure 12. How will your investments in the following areas evolve over the next 6-12 months?

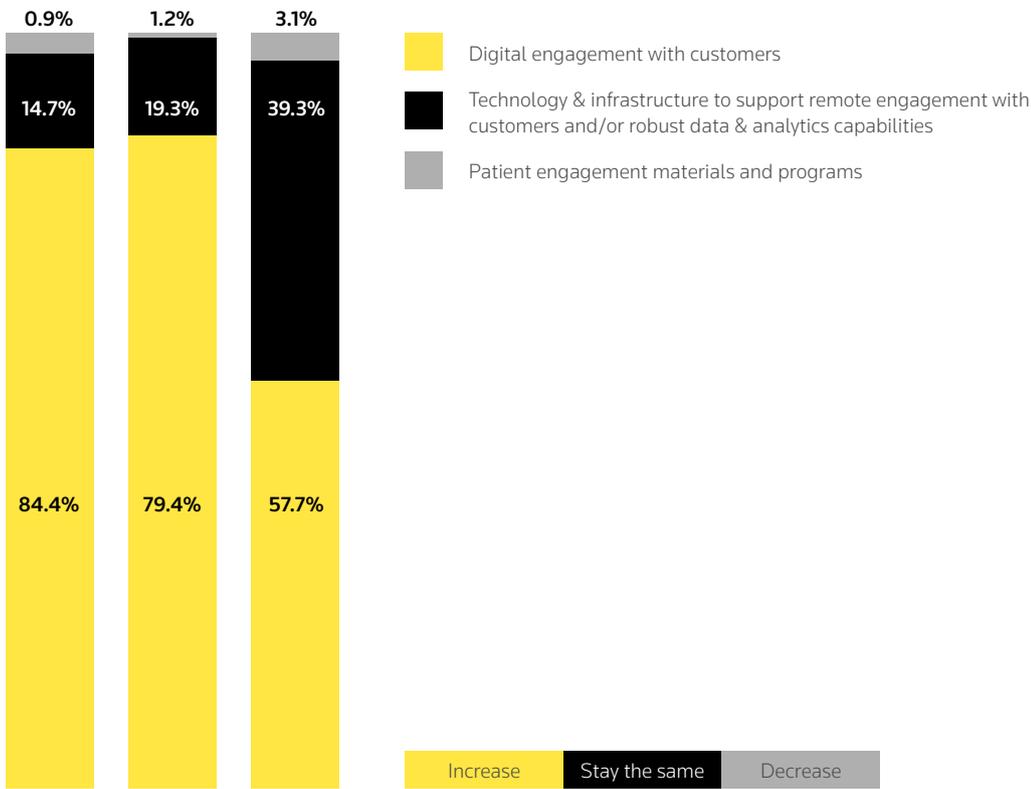


Figure 13. How will your investments in the following areas evolve over the next 12-24 months?

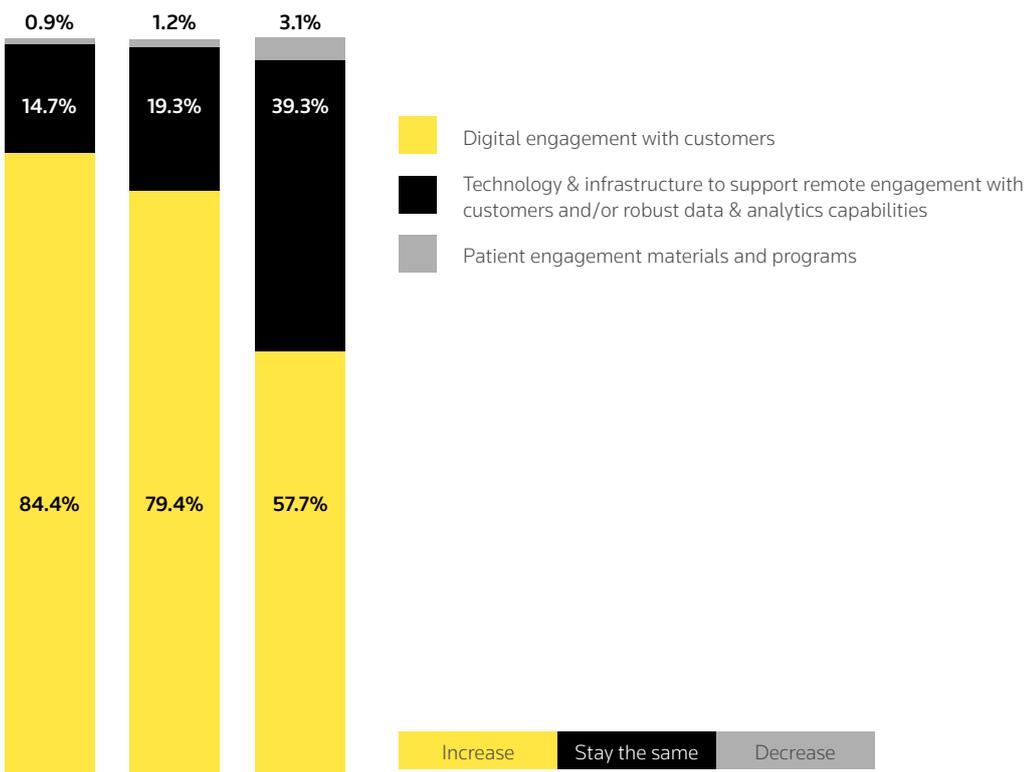


Figure 14. What impacts to HCP engagement have you observed?

HCPs who historically preferred F2F engagements are transitioning smoothly to remote engagement efforts



HCPs feel that we are providing them with the right information and resources to continue treating their patients with our products



We are enacting specific strategies to encourage HCPs to try out new digital channels



We anticipate and are planning for HCPs to prefer fewer to no face-to-face interactions with reps when things get back to "normal"



Figure 15. Which three channels have been the most impactful for remote HCP engagement during the COVID-19 pandemic?

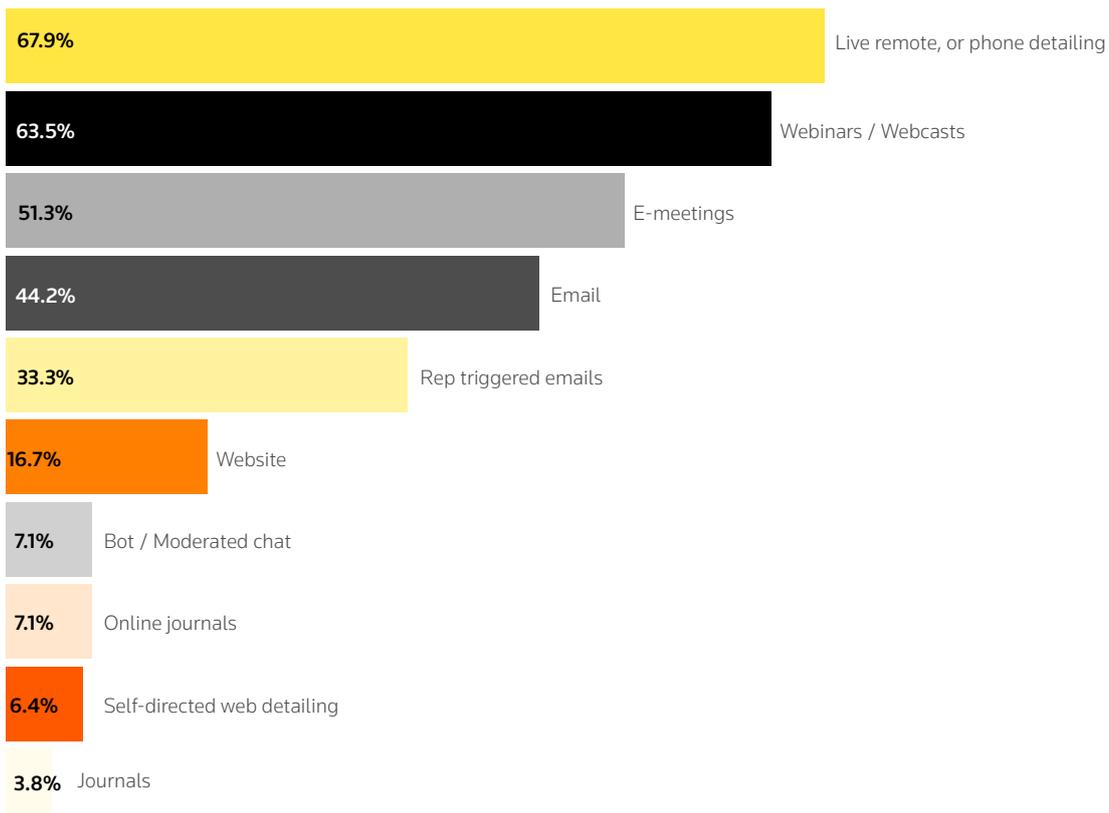


Figure 16. Looking ahead, which three channels do you believe will be leveraged the most for HCP engagement?

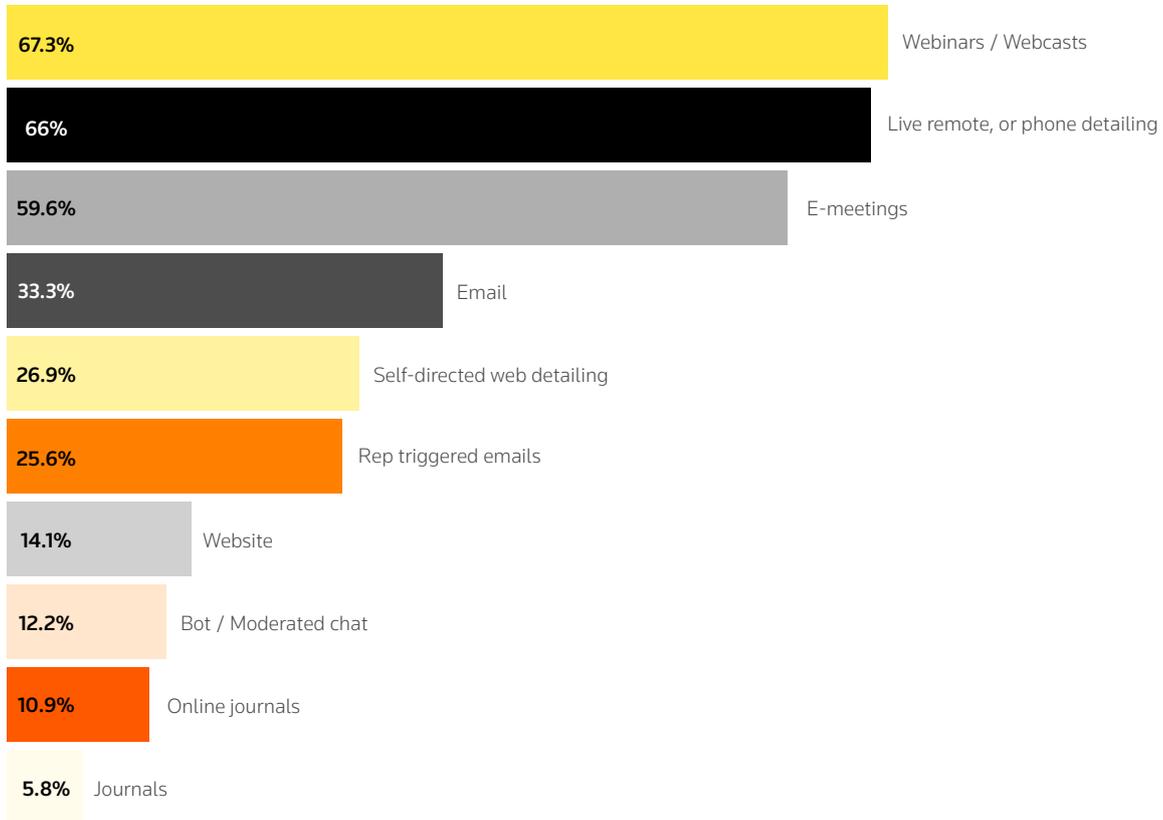


Figure 17. How sales teams are adapting

Our reps are transitioning smoothly to remote engagement efforts to replace F2F engagements



Our current CRM data can support a complete virtual HCP engagement journey with minimal reliance on in-person field force intelligence



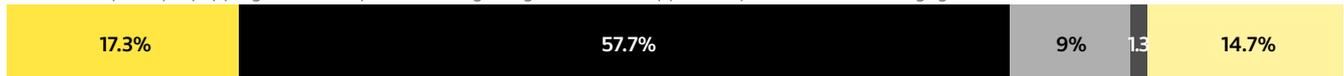
We are developing and implementing an e-training program to upskill our field force on new remote engagement technologies



We are looking at ways to redo our geographic segmentation of our sales teams



We are adequately equipping our sales reps with the right digital tools to support fully remote / virtual engagement



We have established and are providing online sample ordering



Figure 18. How do you anticipate your company's salesforce headcount to be impacted as a result of COVID-19 in 6-12 months?

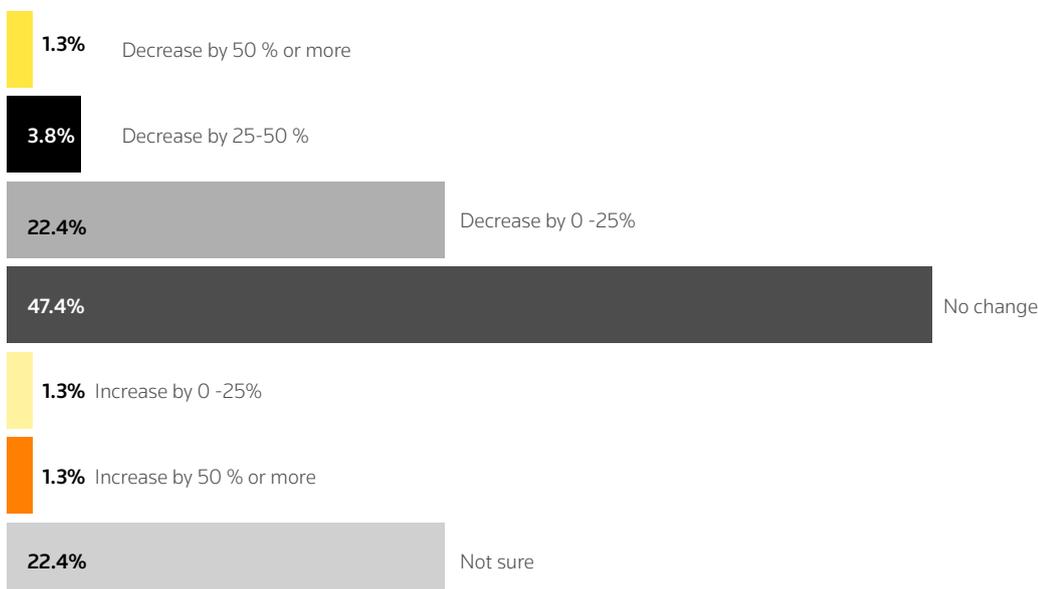


Figure 19. How do you anticipate salesforce headcount be impacted as a result of COVID-19 in 12-24 months?



Figure 20. What functions are you considering for repurposing of salesforce headcount?

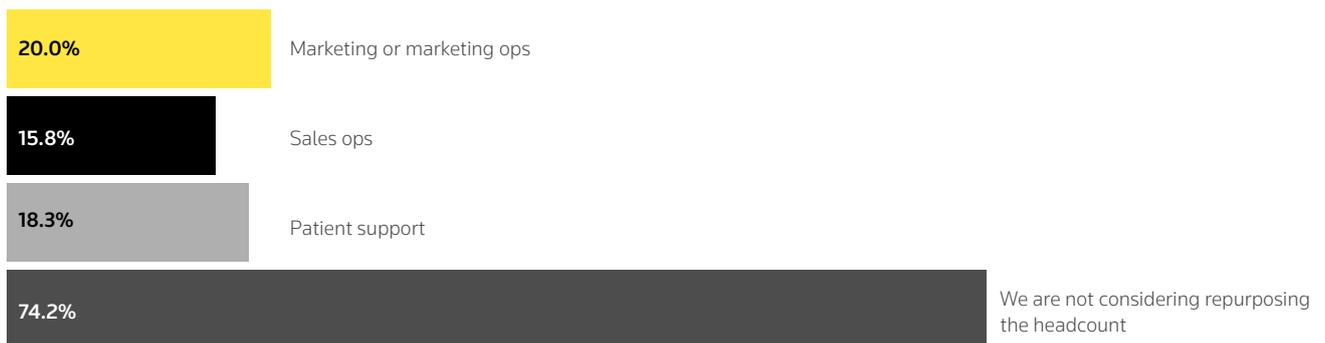


Figure 21. How marketing is adapting

We are updating our customer journeys to reflect fully virtual engagements across our customers & patients



We are in the process of repurposing & updating content for fully virtual engagements



We are adjusting our channel mix to include the channels most impactful in remote engagement



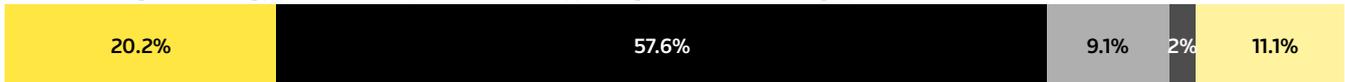
We are developing & implementing e-training programs to upskill marketers to support fully virtual engagements



We are investing in commercial data and analytics capabilities to support digitization of marketing operations



We are investing in technology, platforms, and/or channels to support digitization of marketing operations



We are considering updating/changing our current CRM



We are enhancing our MLR review processes to manage fully virtual engagement

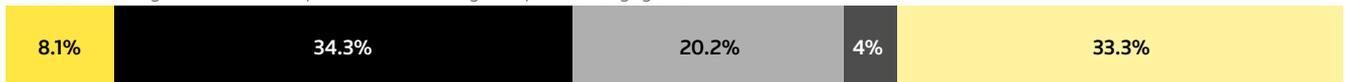


Figure 22. Which of these commercial data and analytics gaps do you need to fill in order to enable your commercial operations to transition to digital channels?

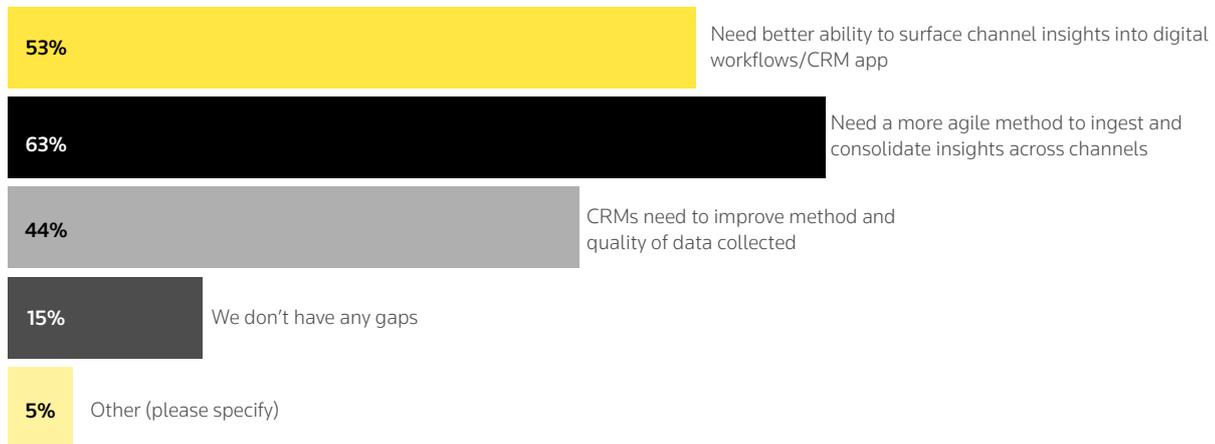


Figure 23. How patient engagement and patient advocacy is adapting

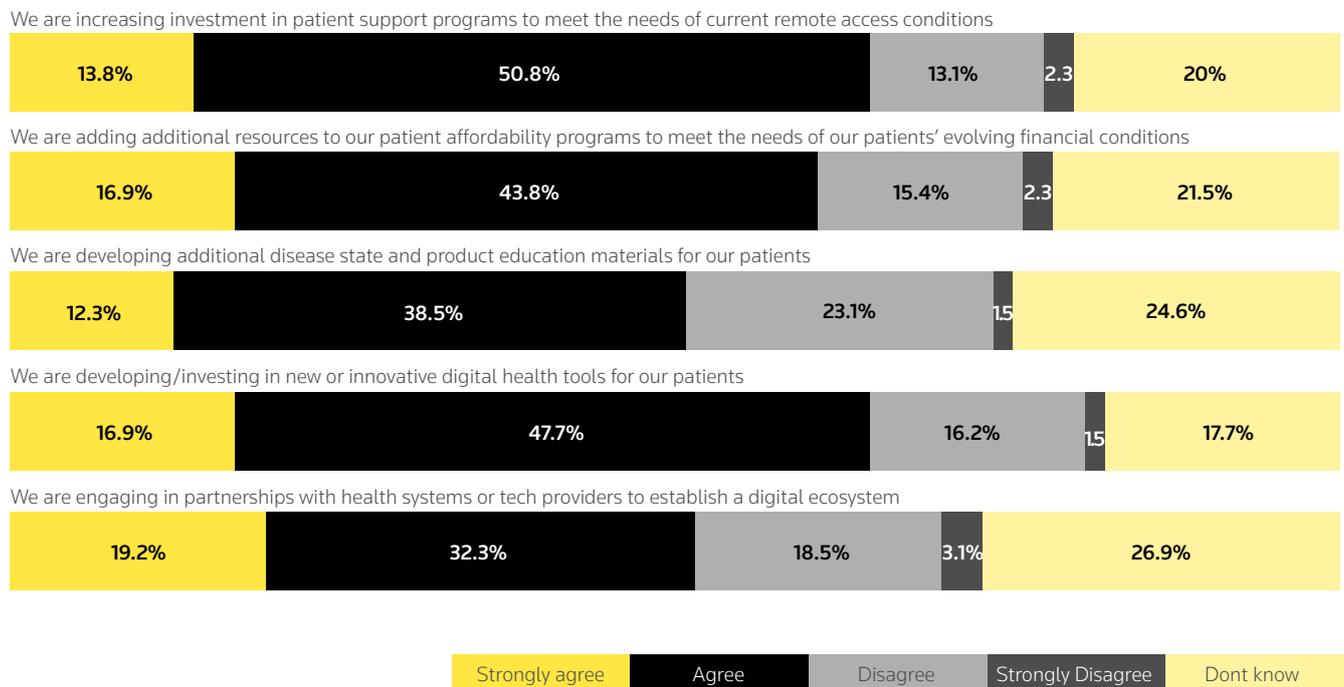


Figure 24. How medical affairs is adapting

The need for medical affairs leadership in company strategy has never been greater



I am seeing increased openness from my commercial colleagues to collaborate



I am seeing increased desire from my R&D colleagues to collaborate



COVID-19 will permanently increase the perceived value of medical affairs within my company



My role is increasingly focused on real-world sources of evidence



Digital HCP engagement tools introduced due to Covid-19 will permanently replace the majority of face-to-face MSL interactions



HCPs are currently more open to interactions with MSLs



Medical congresses will never be only physical events - a virtual element will always be present



I anticipate our medical congress budget to decrease



Figure 25. How evidence and access is changing

I am seeing more openness from stakeholders to more innovative evidence packages



I am seeing more openness from other functions for internal collaboration to generate RWE



My RWE expertise has increasingly been needed from other functions



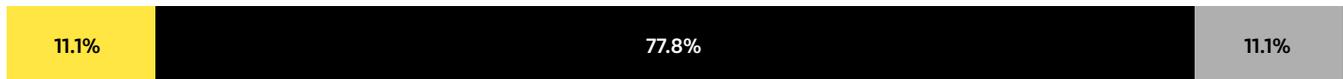
COVID-19 will significantly accelerate the long-term outlook for greater use of RWD across pharma / healthcare



I am seeing an acceleration of the development of more innovative payment models



I am seeing more of an openness from other functions for internal collaboration to achieve access



My market access expertise has increasingly been needed from other functions



I am seeing more of an openness from external access stakeholders (payers/HTAs) to achieve market access



Figure 26. How clinical trials are changing

The site mix strategy will change permanently as a result of COVID-19



Sites have enabled and supported a speedy transition to digital trials



The timeline across our clinical trials has been negatively impacted because of COVID-19



I am seeing more of an openness for collaborate between commercial teams and clinical teams



I believe the increased use of digital technologies in clinical trials, as a result of COVID-19, will have a positive impact on the long-term cost-effectiveness of trials



We have been able to save the majority of our trials from being cancelled due to speedy translation to digital processes



I expect all our trials to be designed as decentralised/virtual trials in the next 12 months



I expect to see a significant increase in the number of wearables or other remote capture devices for data collection used in our trials in the next 18 months



The rapid, necessary change in clinical trial design is likely to make them more patient-centric in the short term



We believe we will find reliable, novel endpoints through our use of digital capture devices in the near future



We are confident in the ability of large CROs to make a fast transition as a result of COVID-19



Figure 27. What has increased, decreased or stayed the same because of COVID-19?

