Do Pharma Companies Need to Rethink Their Sales Operations Design?

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EXECUTIVE SUMMARY

The COVID-19 pandemic has brought about many long-term changes to the pharma industry. One area that has seen effects directly caused by COVID-19 has been in sales operations design, management, and engagement with customers due to increased access restrictions of sales reps to physicians. COVID-19 has also accelerated institutional rethinking of the level and role of direct sales forces in the pharma industry. This white paper explores why pharma companies need to explore these changes. Companies need to prepare for changing the size and objective of direct sales forces given the effects of COVID-19 and the impact of existing environmental trends highlighted by the pandemic.

1. What Was the Original Role of Pharmaceutical Detailing Versus Today?
   - 1.1 COVID-19 has Forced Changes in Pharma Sales Force Strategy
   - 1.2 White Paper Objectives
   - 1.3 How and Why Pharma Detailing Originally Started
   - 1.4 Developments in Pharmaceutical Detailing to Current Practice
   - 1.5 Today's Primary Function of Sales Reps Despite Environmental Trends
2. What Does This Mean for the Future of Pharma Sales Reps?
   - 2.1 Long-Term Changes to Role of Pharma Sales Reps Related to the Coronavirus Pandemic
     1) Long-term changes brought about directly from COVID-19
     2) Long-term changes induced by COVID-19
     3) Long-term changes accelerated by COVID-19 on forces that already existed before the pandemic
   - 2.2 What Should Clients Do?
     1) Anticipate that permanent changes in pharmaceutical business practices will occur
     2) Review the intent, design, and makeup of pharma sales forces
     3) Develop different segmentation schemes that ultimately drive sales force strategy to account for the long-term effects outlined in Section 2.2 1) and 2)
     4) Create new analytics that support sales force optimization (SFO) and sales operation processes built on value-based metrics
     5) Anticipate that the increase in financial distress followed by consolidation of physician group practices and hospitals will adversely affect the pharma industry
     6) Build an efficient database structure to enable a broader set of analytical applications
     7) Institute early-warning detection systems for changes happening in the pharma commercial environment that require quick sales force adjustments
     8) Leverage analytic methods to employ Next Best Action (NBA) decision-making
     9) Develop a first-in-class analytics Center of Excellence (CoE) to improve the robustness of sales force decision-making
     10) Generate expertise in specific higher-order analytical methods to sustain a long-term competitive advantage
     11) Expand the use of health economics and outcomes research (HEOR) and real-world evidence (RWE) by infusing these methods into the development of sales, marketing, and payer commercial strategy development
     12) Create highly customized and coordinated sales force promotional campaigns
     13) Need for experimentation of new sales models in the field, and its implications on all associated support services for brand team/commercial leadership decision-making
     14) Incorporate digital engagement initiatives as face-to-face engagements between sales reps and HCPs become more limited
     15) Reassess representative recruiting profiles as sales rep engagements shift to value-based information discussions
     16) Upgrade training automation related to new methods of sales rep engagements
3. Concluding Remarks

Given the dynamic nature of this pandemic and its effect on the pharma industry, please read articles on the *Axtria Research Hub* (https://www.axtria.com/axtria-research-hub-pharmaceutical-industry/) and *Axtria Blogs* (https://insights.axtria.com/blog) for updates.

> Necessity is the mother of invention.
>
> **An old and famous English-language proverb.**
>
> How could we cultivate an environment that nourishes ideas? The recipe starts with creating a culture that encourages informal questioning and inquiry, tolerates mistakes and promotes innovation.
>
> **From "Where Do Ideas Come From?" by Abraham Loeb published in *Scientific American*, posted online July 23, 2018[1]**

1. What Was the Original Role of Pharmaceutical Detailing Versus Today?

1.1 COVID-19 has Forced Changes in Pharma Sales Force Strategy

There has been much written of late about the effects of COVID-19 on the pharma industry, such as articles published by Axtria (see various posts on the *Axtria Research Hub* https://www.axtria.com/axtria-research-hub-pharmaceutical-industry/ and *Axtria Blogs* https://insights.axtria.com/blog. One clear effect on the industry has been an increase in pharma sales force access restrictions to physician offices and hospitals, forcing companies to allocate and measure sales rep activities, develop sales force strategy, conduct operations, and employ sales analytics. The recent surge in COVID-19 cases and hospitalization as we approach the winter months will mean a tightening of access restrictions into physician offices and hospitals. Some pharma companies see this latest surge as lasting through Q1 2021, and combined with a vaccine, will enable a return back to

"normal." However, the reason to think longer-term is not that COVID-19 is spiking, but because COVID-19 is and will create a "new normal" where pharma companies cannot keep doing the same things as done before the pandemic. This "new normal " will require pharma companies to rethink longer-term alternative approaches to disseminate needed drug information to doctors and their patients through direct sales forces that will be increasingly constrained in conducting future sales calls. The result will be the use of indirect sales forces and digital/ tele-engagements between sales reps and physicians continuing to increase in prevalence.

1.2 White Paper Objectives

The questions this paper will ask are can/should pharma companies continue to utilize sales forces as it did pre-pandemic? The need to change was already there, but COVID-19 has certainly been a catalyst. These questions are also especially relevant, given the longer-term effects COVID-19 is expected to have on the pharma industry. Furthermore, these questions also follow discussions that have been previously asked about changes in the traditional commercial model design (CMD).

1) Do pharma companies need to rethink the size and objective of direct sales forces as currently employed?
2) How should pharma companies move forward if the use of direct sales forces need to be more radically restructured and repurposed?

1.3 How and Why Pharma Detailing Originally Started

The system of pharmaceutical detailing to physicians has been around for almost 70 years (see an excellent survey of the history of marketing to physicians by Greene published in 2007).[2] The system of detailing was developed in collaboration between the medical profession and the pharmaceutical industry as a mechanism primarily designed to disseminate information on the latest drug developments to physicians. Physicians became the

focus of pharmaceutical marketing by sales reps after the passage of the Durham-Humphreys Amendment of 1951, which required a physician to authorize the dispensing of a prescription drug. Pharmacists were the focus of sales rep activity prior to this amendment. Pharma companies quickly adapted their sales force strategy because of this amendment. However, granular data on physician prescribing activity, like it exists today, was unavailable (reps had some general idea by talking to pharmacists). Thus, limitations existed on the use of analytics to help support efficient and effective sales force management.

1.4 Developments in Pharmaceutical Detailing to Current Practice

Fast forward to 2020, the practice of detailing has essentially remained the same with sales reps still calling on physicians, with of course, numerous developments. The pharma industry has seen the following innovations (non-exhaustive list) over the past 70 years:

1) Creation of prescription data at the physician, patient, managed market, and product levels, as well as a wide range of pharma commercial activity databases. In addition, there are now patient-oriented databases such as claims and electronic health records that can associate pharmaceutical use with outcomes and treatment costs.
2) Application of advanced analytics (a consequence of new databases) to support a whole host of strategic and operational sales and marketing activities.
3) Innovation in improved physician segmentation and targeting that can better reach and serve patients that would most benefit from drug therapy.
4) Generation of refined sales force optimization/strategy/operation processes that produce business outcomes for more efficient sales force management and driving greater effectiveness from sales force activity.
5) Implementation of technology improvements used across the entire range of sales force management and execution, message delivery, and physician/patient customer relation management.
6) Introduction of real-time advanced analytics as the underlining algorithms used in artificial intelligence (AI), machine learning (ML), and NBA for predictions and improvements for earlier and more effective decision-making.
7) Education and recruitment of sales reps with a broader range of skills than originally required: a) softer interpersonal skills needed for effective selling, b) analytical skills required to review and generate business insight from data, c) technological skills to use sophisticated platforms, d) greater insights into how modern specialty medicines operate and interact with the human body, and e) business acumen to develop more effectively a business plan that best utilizes their time and company resources.
8) Creation of a commercial promotion system where sales rep activity is still seen as the chief mechanism to generate drug sales.

1.5 Today's Primary Function of Sales Reps Despite Environmental Trends

This last aspect is different from the original role of sales reps, to disseminate not only drug information but also and more importantly, employed to generate sales. For example, every major pharma company is using prescriptions or other sales measures as a key metric in determining the at-risk portion of the incentive compensation (IC) for sales reps. GSK, for a period, eliminated this metric in their sales rep IC plan design, instead of using management by objectives (MBOs) related to the quality of rep-physician engagement. GSK has since returned to using a rep-territory sales volume metric. The medical journals over the past 15 years have almost universally derided this financial motivation driving sales rep behavior, suggesting the results are negative consequences for physicians seeking unbiased information from pharma companies, and thus serves as a justification to increase access restrictions (see two articles, one containing a survey review of the literature and its implications on sales force management and outcomes in Chressanthis).[3-4] An inside-industry view suggests conflicting motivations at work that are causing access restrictions. Access has been getting more restricted in response to pharma companies excessively deploying reps (e.g., through "mirroring" of sales teams and greater contacts built into sales rep call plans) trying to get HCP/staff time to drive greater sales, while HCPs financially need to see more patients/day to maintain/increase their income. The latter motivation by HCPs has been especially driven by managed care plans capitating HCP service

reimbursements. Published empirical evidence has shown that physician prescription volume has the largest effect in driving greater access restrictions.[5] Lastly, access restrictions tend to be set at the administrative level, like by the chief medical director of a healthcare system, in response to increased congestion and disruption that greater rep calling activity may cause in physician offices.

Sales reps today are engaged in primarily "persuasive" and then secondarily "informative" promotion to physicians, as evidenced by sales-generation as the chief metric in rep IC plans. This primary motivation exists despite many longer-term environmental trends that would suggest a diminishing role for "persuasive" sales rep promotion. These trends include but are not limited to the following increasing factors:

1) Access restrictions of sales rep to physicians.
2) Influence of managed care that restrains physicians on what to prescribe.
3) Movement from a volume to value-based pharma CMD.
4) Proportion of Rxs that are generic and/or biosimilar drugs (about 90% of the total dispensed Rxs).
5) Shift to specialty medicines, now comprising about 50% of all US drug spending (orphan drugs alone comprise about 10%).
6) Growth of introducing patient-centricity into the pharma commercial model, as opposed to one that has historically been physician-centric.

Interestingly, despite this "persuasive" motivation of sales reps, increased access restrictions has been empirically shown to reduce significantly both the amount and speed of physician prescription response to new medical information events.[6] These prescription-response effects also exist with the occurrence of both negative or positive new information events,[6] and thus such access restrictions may not be in the best interests of patients.[7]

The above trends about the changing role of sales forces were echoed in 2015 survey results from pharma industry practitioners questioned on the client and consulting sides involved in sales force analytics (co-published in a 2017 *Axtria Research Hub* and *Journal of the Pharmaceutical Management Science Association* article).[8] Emerging issues (those identified as important more than two years out beyond the mid-2015 survey) were revealed by survey participants in the areas of sales force strategy, sales force operations, sales force analytics, big data, and environmental changes. Survey results all pointed to a changing purpose of pharma sales forces. Interestingly, an important insight from the survey was that those involved in pharma sales force activities, whether from the client (company) or consulting side, acknowledged that new developments would likely come from outside pharma companies. Yet, consulting company survey respondents acknowledged little expertise to execute on the emerging issues identified in the survey.

Moreover, speaking as an economist and the importance on how incentives drive behavior, who within pharma or consulting companies will ask the difficult questions on whether the industry truly needs to rethink the use and purpose of direct sales forces? Or, who will propose a promotion model where the sales rep is not the primary channel of commercial execution on the brand strategy? Economic incentives, individual corporate cultural backgrounds, tradition, and inertia all work against those in field sales, sales management, and sales strategy and operations to note dramatic changes that reduce their existence or significantly change the status quo. Nor will these provocative questions be asked by those in commercial leadership who have ascended the pharma corporate ladder through the sales organization. Nor should we expect most consulting companies to offer vastly new perspectives and a CMD paradigm shift, where a large proportion of their revenue base comprises traditional sales force analyses and where lower margins prevent intensive R&D investments in developing new commercial model designs for execution. Developing new CMDs require experimentation in the field and at headquarters, thus companies need to be willing to invest in real tests. This latter point may explain the 2015 survey results noted earlier on why many companies are ill-equipped to provide support for a different CMD approach. Finally, as observed by the lead author over the past 25 years involved in pharma, changes to our industry come more incrementally. As one executive colleague once explained, a herd mentality exists in our industry, as there is resistance for any one individual or company to go out

ahead of the pack unless others have already done it or will follow suit. And when some companies do, like GSK did with a change in their IC design, others still may not follow. This attitude, of course, makes it difficult to be in the vanguard and push the envelope curve beyond current boundaries. These previous points may also explain why more fundamental changes to pharma are likely to come from outside the industry, such as the tech industry, as explained in a prior *Axtria Research Hub* white paper, that are less encumbered by internal resistance as seen in pharma against revolutionary changes.[9]

2. What Does This Mean for the Future of Pharma Sales Reps?

2.1 Long-Term Changes to Role of Pharma Sales Reps Related to the Coronavirus Pandemic

COVID-19 and the resulting sales rep access restrictions to physician offices has either required a rethinking by pharma companies of the objective and execution of pharma sales reps, or, companies doing the best they can until restrictions are decreased as concerns about COVID-19 reduce. The industry has been forced to adapt to effects brought about by COVID-19 on how sales forces address three types of long-term changes brought by COVID-19 (sales force-related examples and implications have been included under each type of long-term change):

1) **Long-term changes brought about directly from COVID-19**.
   a) The reduction in direct sales force contacts with healthcare professionals (HCPs). While a good portion of direct sales rep-physician contacts may return, there will be a permanent loss of in-person engagements.
   b) There will be a movement to digital channels and indirect (virtual) engagements between industry personnel and HCPs due to a permanent decrease of in-person engagements between sales reps and physicians.

2) **Long-term changes induced by COVID-19.**
   a) The deep economic recession has produced significant market access effects (loss of health insurance due to high unemployment), affordability effects (decrease in disposable personal income), and a shift in insurance coverage for people severely affected economically from private third-party commercial to Medicaid. These effects will

increase the importance of how economic dynamics affect sales force deployment, given changes in regional variations in drug demand. Service reps will also be critical to help with patient access to disease management programs, coupons and discount cards, patient assistance programs, and knowledge of co-pays by managed care drug plans. An alternative approach to pricing is emerging from some companies, such as going to flat pricing and not contracting for discounts, rebates, and using co-pay programs. These approaches are costing both pharma companies and payers a significant amount of money, and in the end, may not really be in the best interest of patients.

b) There will be decreases in patient health outcomes due to the preceding market access and affordability effects, but also due to reductions in patient visits to their physicians, reductions in maintaining regular checkups and diagnostic tests, etc. Longer-term patient health outcome effects were also seen from the Great Recession of 2007-2009. How can sales force deployment be used as an instrument to help physicians improve the outcomes of their patients given these changes through the dissemination of value-oriented information?

3) **Long term changes accelerated by COVID-19 on forces that already existed before the pandemic.**

a) There will be a continuing movement to a government single-payer system. The very high unemployment that occurred during this recession and the resulting loss of health insurance for individuals have shown a weakness in the system of employer-sponsored health insurance. An optional or mandated government-provided single-payer system will dramatically influence managed market dynamics, decreasing the ability of sales reps to engage in persuasive detailing activities aimed at highlighting favorable payer coverage.

b) There is a stronger likelihood that we will see permanent government-directed drug price controls. This policy change will reduce net drug prices, thereby decreasing drug margins and profitability of promotion, reducing the overall level of sales force promotion since it has the highest cost per contact relative to other sales and marketing channels.

c) Shift to a value-based/outcomes-based CMD as the cost of healthcare rises relative to affordability (both at the private individual and public sector levels). This will move the intent of promotion from persuasive to informative detailing.

The overall effect of the above long-term changes will mean both a reduction in the level of direct sales forces and repurposing of their role from persuasive to informative detailing. These implications are not new to pharma executives, as environmental changes affecting sales forces have long generated discussions about the need for a different approach. What has changed is the COVID-19 pandemic added further uncertainty and challenges to the pharma industry on top of what was already there. While COVID-19 has introduced new long-term changes directly caused by the pandemic, many other changes are induced

from this event and accelerating changes that were already brewing in the pharma environment.

2.2 What Should Clients Do?

What should pharma clients do to prepare for a change in the size and refocus of direct sales forces? An earlier *Axtria Research Hub* white paper published in July 2020 outlined four major areas (with detailed subpoints within each area) where COVID-19 will affect future pharmaceutical business planning:[10]

1) General COVID-19 related environmental trends.
2) Long-term economic disruptions.
3) Changes in the pharmaceutical commercial model.
4) Applications of analytics and development of newer databases.

The following points are more specific expansions of implications noted in that paper as they pertain directly to direct sales force size and role:

1) **Anticipate that permanent changes in pharmaceutical business practices will occur.** For example, the industry will experience some long-term loss of sales representative access to physicians. Thus, a greater proportion of digital discussions, or an increase in patient-physician interactions to virtual engagements, will change the nature of how physician practices operate. Pharma companies must quickly adapt to these environmental changes and develop long-term expertise in the broader applications of technology in the commercial model.

2) **Review the intent, design, and makeup of pharma sales forces.** In-person detailing will be used to build relationships with customers, while virtual engagements will be used to provide relevant information to the physician at the right time [see 14) for further details]. This means sales productivity assumptions will need to be reevaluated as well as the promotion-response relationship of in-person versus virtual engagements on prescribing. Physician channel and content preferences will also need to be accounted for in developing the commercial engagement strategy of pharma reps [see 14) for further details]. In addition, to gain better physician access, sales reps will need to communicate how the information they provide can improve their practice and treatment of patients to generate better outcomes. Scientific messages from HEOR and RWE analyses are generally disseminated through medical science liaisons (MSLs). Sales reps of the future will also likely need to be more scientifically trained, similar to MSLs, especially given the industry's shift to specialty medicines. In addition, sales reps must be able to communicate measures of value, outcomes, and relative risk versus benefit in the proper context that is appropriate to be shared by them [see 15) for further details].

3) **Develop different segmentation schemes that ultimately drive sales force strategy to account for the long-term effects outlined in 1) and 2).** Simple Rx volumetric segmentation schemes will no longer suffice in a world more driven by "informative" promotion, where the objective functions are to affect health and economic outcomes as value-based measures. This will inform value-based messaging to customers. In addition, segmentation on customer-channel preferences will also inform the best method to reach the customer.

4) **Create new analytics that support sales force optimization (SFO) and sales operation processes built on value-based metrics.** How will SFO and Sales Operations be conducted in a world that is more value-based in objectives? Currently, SFO and Sales Operations processes are driven by traditional Rx volume and traditional sales-response models. There needs to be a merging of traditional econometrics designs used in current sales-response models with paradigms applied in HEOR and RWE biostatistics, if value-based outcomes are to be developed. An important intermediate metric of how sales force activity can affect outcomes is through changing drug compliance and adherence. The application of econometric models to measure and sales force behavior to drive effects on drug adherence is different than those based on Rx volume.

5) **Anticipate that the increase in financial distress followed by consolidation of physician group practices and hospitals will adversely affect the pharma industry.** Social distancing mandates greatly reduced patients going in to see their physician, putting off routine diagnostic tests, and/or delaying elective surgeries deemed as "non-essential." The result has been a negative financial shock to group practices, hospitals, and healthcare systems. Market reactions in response to this economic shock will be further consolidation of these services and movements toward instituting greater cost-control measures. Pharma companies will need to demonstrate empirically how the utilization of their drugs is aligned to the changing economic incentives of group practices, hospitals, and healthcare systems. These changes have effects on the design and intent of sales forces. These preceding arguments provide another reason for pharma companies to go to flat pricing in the hopes that payers would simplify administrative needs that are costly to providers and typically provide limited value to patients.

6) **Build an efficient database structure to enable a broader set of analytical applications.** The expansion of digital technologies to account for greater virtual patient and sales rep engagements with HCPs, and movement towards value/outcomes-based analyses, will mean an exponential increase in the generation of data and analyses. Further, techniques will need to be developed to link these newer databases with traditional pharmaceutical commercial data to build a complete picture for analysis of sales force activity.

7) **Institute early-warning detection systems for changes happening in the pharma commercial environment that require quick sales force adjustments.** This means using AI and ML as prediction tools to detect early changes occurring in the pharmaceutical environment that impact sales force strategy and operations.

8) **Leverage analytic methods to employ NBA decision-making.** The use of NBA can increase the speed of reactions and generate greater options for decision-makers in response to changes in the pharma environment and their effects on sales force strategy and operations.

9) **Develop a first-in-class analytics Center of Excellence (CoE) to improve the robustness of sales force decision-making.** Future business questions will be more complex, where the application of advanced analytical methods will be required to develop actionable and successful solutions. The creation of such analytical excellence and its application for all decision-making is a strategic asset that will provide a long-term competitive advantage.[11]

10) **Generate expertise in specific higher-order analytical methods to sustain a long-term competitive advantage.** Pharma companies must understand the reasons behind, and effects from environmental changes brought about by COVID-19, and most importantly, what actions should be taken. This means alignment between commercial analytical innovation and effective execution of resulting plans will be key. Prior research has empirically measured the positive effects of pharmaceutical commercial innovation and execution working together to enhance business performance.[12] Developing expertise with these analytical methods will be crucial for long-term success, e.g., optimization, forecasting, prediction, simulation, mathematical, and statistical modeling.[12]

11) **Expand the use of HEOR and RWE by infusing these methods into the development of sales, marketing, and payer commercial strategy development.** Traditionally, the use of these methods has been restricted to clinical trial work and associated demonstration of value. More recently, these methods have found their way into commercial targeting of resources toward physicians to ensure their patients who are most in need of more effective treatments receive drug therapy. This is especially important for patients with rare diseases. The next step, and what is currently lacking, is the infusing of such

methods to affect the intent and content of sales and marketing strategy and operations. The industry's shift toward specialty medicines, especially in areas like oncology, means promotional activity should be more informative rather than persuasive in intent. The dissemination of unbiased and fair-balanced scientific, clinical, and medical information will drive brand success. Pharma companies will need to measure how this informative process not only generates more sales, but also and more importantly, how novel medicines create better health and economic outcomes. Thus, HCPs listening to company sales reps disseminating information about drug therapies represents a valued resource for the successful treatment of their patients.

12) **Create highly customized and coordinated sales force promotional campaigns.** Such campaigns seek to tailor content and flow as well as timing and delivery mechanisms to maximize customer engagement and sales. Coordination across various pharmaceutical engagement channels is key and starts with breaking down silos and understanding customer needs and preferences across the continuum (e.g., clinical trials, sales, marketing, etc.). Customization is also required as the industry has shifted to the development of personalized medicines, with each patient segment requiring different messages that are salient with the healthcare needs and the associated drug benefits versus cost/risk for that group.

13) **Need for experimentation of new sales force models in the field, and its implications on all associated support services for brand team/ commercial leadership decision-making.** The only way new sales force models can be developed along with all the associated analytics to support strategy and operations would be to invest in field and headquarter experimentation. This requires a partnership with an external group that has experience in the execution of sales force strategy and operations, application of advanced analytics, development of database management, and creation of technology/ platforms for a complete sales force system.

14) **Incorporate digital engagement initiatives as face-to-face engagements between sales reps and HCPs become more limited.** Pharmaceutical companies will need to integrate seamlessly digital channel engagements along with face-to-face rep interactions. In-person rep interactions will primarily be used for relationship building or responding to requests from the customer, while additional follow-ups can continue through phone, email and other virtual channels. A good understanding of all the touchpoints a customer has with the company, and the customer's needs, interests, and preferences will be key in enabling this seamless orchestration across digital and in-person interactions.

15) **Reassess sales representative recruiting profiles as sales rep engagements shift to value-based information discussions.** The profile of reps being hired will also change as sales rep engagements shift to more value-based informational discussions with multiple decision-makers in accounts. The rep of the future will need to be more scientifically trained, have a higher level of business acumen to navigate the complex stakeholder environment in accounts, and be able to use data/analytics and technology to make the right decisions to engage with their customers.

16) **Upgrade training automation related to new methods of sales rep engagements.** Upskilling of reps for more scientific content, value-based selling, business acumen, as well as new engagement strategies will require a mindset of continuous learning from the entire sales force. The training curriculum will need to be designed and provided on-demand and in an automated manner, and to make it more impactful for the reps without significant time away from their customers. First-line sales manager emphasis on training along with an assessment of key skills will ensure the entire sales force quickly adapts to the new ways of working.

3. Concluding Remarks

While the preceding list may appear daunting, the good news is that all the changes and preparations noted above are addressable and solvable. Axtria has expertise in all aspects of sales force management (strategy and operations), pharma analytics, commercial operations, and business information management to help companies navigate through this time of change. Axtria has invested in people with commercial model design experience, processes, and technology to help and ensure that your resource investments in direct sales forces are properly optimized during these challenging times. Further, we can ensure that your innovative medicines continue to get to the appropriate patients so that they and the healthcare system may receive indicated benefits on patient health outcomes, improved quality of care, and lower overall treatment costs.

Given the dynamic nature of this pandemic and its effect on the pharma industry, please read articles on the *Axtria Research Hub* (https://www.axtria.com/axtria-research-hub-pharmaceutical-industry/) and *Axtria Blogs* (https://insights.axtria.com/blog) for updates.

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