Leveraging AI and digital technologies
to establish compassionate-cognitive contact center in healthcare

Abstract

The healthcare industry has already been on the back foot in adopting digital technologies to optimize business process operations and patient engagement. The crisis wrought by COVID-19 has bought in a plethora of extraordinary challenges due to virtual clinical trials. This white paper examines the challenges faced by the contact care centers of CROs (Clinical Research Organizations) due to the onset of COVID-19 and how it has become imperative to transform contact centers into proactive and interactive experience hubs. With the discrepancy between the number of incoming requests and the demand the organizations can handle, adoption of AI and digital technologies to gain short- and long-term resilience is no longer an option. There is an urgent need to re-assess the patient journey, while re-imagining and rethinking the entire process in terms of touch points, interactions and experiences. With AI and digital technologies at the heart of the customer care experience, CROs would be able to personalize the interaction and gain more intimacy with the customer, thereby gaining a competitive edge.

COVID-19 has made it unavoidable for the clinical trial industry to evolve from the traditional approach of conducting trials and adopting new-age digital technologies to meeting the complex cost, quality and operational requirements of virtual trials. Digital contact center transformation is the pivot to fast-track the virtual clinical trials. There is a sharp need for organizations to augment their ability to serve queries from the patients and other stakeholders efficiently while balancing the trade-off between cost and patient experience.

88% of global pharmaceutical companies and CROs are investing in remote trial monitoring solutions.

Enterprise contact center call volumes jumping over **800%** from normal levels during COVID-19 trials.

Per day delay in clinical trial caused due to inefficiencies in patient support and engagement causes revenue loss of approx. **$8 million.**

Challenges faced by Customer Care Centers in CROs

Capacity Management

Spike in demand and decreased capacity are making patients to either face long wait times or route from one channel to another and still not have their problems resolved. The issue of scaling capacity is not only about handling a surge in volume, but more about handling it cost-effectively while still delivering the quality service the patients deserve.

Disjointed support to offerings built to engage patients remotely

Ever since the onset of virtual clinical trials, CROs have been adopting IT solutions/systems from multiple vendors which are very disjointed in nature. This brings in a lot of inefficiencies. Having an integrated solution that fits into the existing system itself remains a challenge.

High cost of support holding back investments in digital & AI

Most organizations think that while automation reduces costs in terms of manual work, it increases cost in several other ways such as infrastructure maintenance, adapting inputs to structured formats required by automation, and handling automation failures. They fail to realize that when implemented by leveraging customized tools and a robust partner ecosystem, the benefits of automation outweigh these extra costs.

It's time
Transform to thrive

To be able to conduct optimized trials, improve coordination between various stakeholders such as clinical research associate, principal investigator and patients; make decisions quickly, achieve robust performance and provide a 360-degree view to sponsors, it is imperative for CROs to break out of legacy infrastructure. Developing a more agile and resilient approach to patient engagement by ensuring seamless integration of modern technologies such as robotic process automation (RPA), AI, and machine learning (ML) with traditional contact center solutions is no longer an option.

Although the value artificial intelligence brings to contact centers is unmatched, it can become a headache and cause considerable frustration when it is not implemented with the appropriate parameters – or if it isn't intuitive. Just because one can automate something does not mean one should. Asking the right questions, considering the integration of various channels, and knowing which tasks to turn over to a machine is a challenge, as one must balance the power of humans and bots to provide exceptional customer experience. Merging a computer's brute-force ability to remember and calculate a staggering number of options and outcomes with human intuition, creativity, and empathy in the right way is itself a strategic task to undertake.
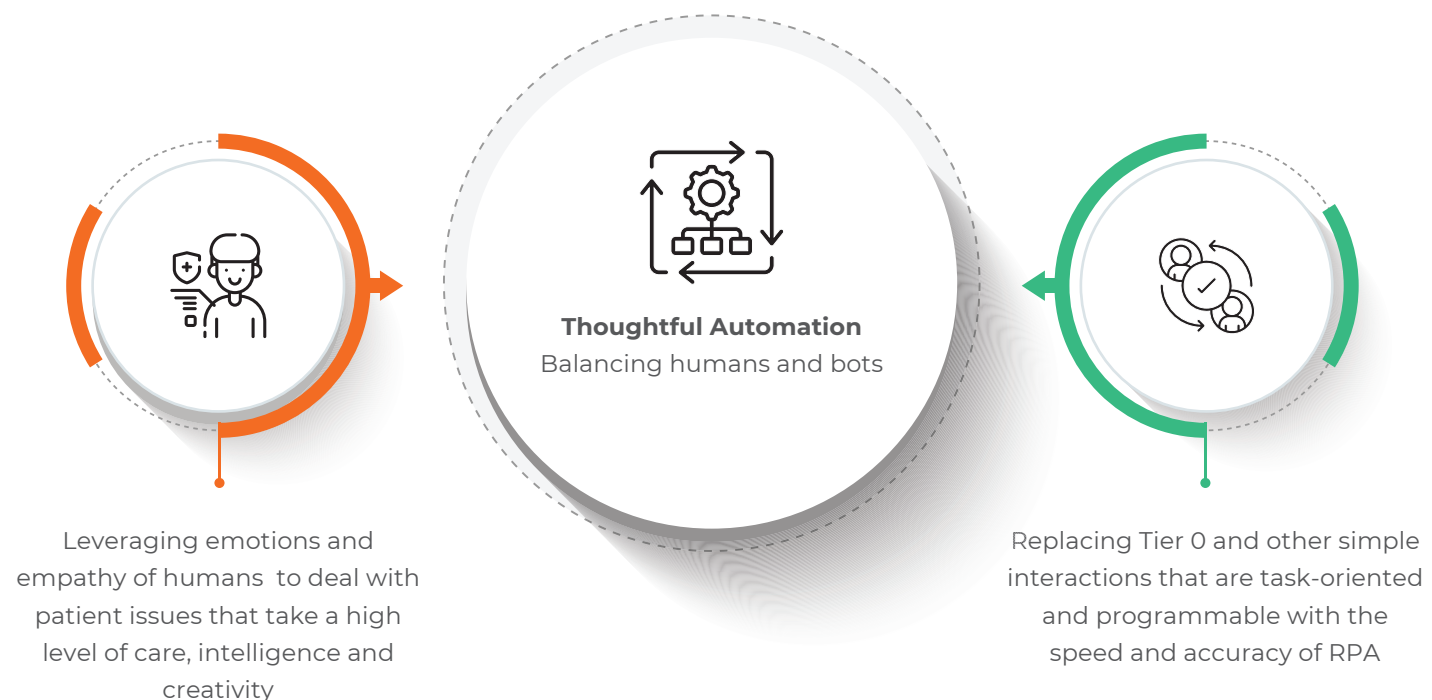
Redefining patient interactions using AI and digital technologies

Automation changes what success looks like in the contact center by adding new customer care channels such that the stress on employees is reduced, and they can focus their attention on more important or complex issues to serve the subjects. It moves the focus from handle time, calls per hour and other operational KPIs to outcome-based metrics like patient satisfaction, first contact resolution, and NPS.

Let us look at the transformation enabled by AI through two vantage points: data aspect and the process aspect.

Process aspect: Automate smartly to balance bots and humans

The process aspect entails leveraging automation and AI to transform the business process operations of contact centers.

Thoughtful Automation
Balancing humans and bots

Leveraging emotions and empathy of humans to deal with patient issues that take a high level of care, intelligence and creativity

Replacing Tier 0 and other simple interactions that are task-oriented and programmable with the speed and accuracy of RPA

Enabling cognitive interactions using RPA

Incorporating ML-enabled cognitive interventions into a contact center's chatbots and IVR interface enables common, less complex questions to get deflected through quick, efficient and accurate low-cost digital channels. These channels are a substitute to real agents who not only resolve issues but solve them by interacting with the customers through a natural language audio (e.g., phone or PC microphone) interface. These virtual agents can also analyze sentiments and provide an accurate assessment of the emotional state of the customer.

Intelligent routing using AI for Tier 2 problems

Large amounts of data can be parsed quickly using ML models, which then pairs the most likely agent that can handle a particular customer's problem because of prior experience with the customer or specific knowledge about the problem.

Providing assistance using Self-Service Channels

With the increase in digitalization, customers are moving away from call/voice-based support and looking for self-service or peer-assisted support systems as their first form of interaction with a business. These self-service channels such as portals, mobile apps, text and videos reduces costs by providing members with the tools and interfaces necessary to help them get information and solve problems without contacting customer service. They also improve patients' satisfaction by putting the control in customers' hands to resolve their own issues quickly.

Data aspect: Understand, reason and learn more about your patients

A successful, digitally-enabled, analytics powered contact center understands what first triggers a call, installs and trains ML-enabled digital solutions to deflect it, predicts what future issues may arise to enable first-call resolution, and empowers agents to ensure that future contacts are mitigated. It changes the face of the contact center by enabling the following:

Proactive resolution of queries

Predictive Analytics

+

Speech Analytics

+

Text Analytics

→ Understand more about "Why" and leverage valuable insights from data in contact center operations to transform

Data analytics can help organizations transform their contact centers into interactive and experience hubs by proactively solving patients queries rather than reacting to them. A comprehensive understanding of who, how, why, and when customers connect with the contact center can be used to increase the use of lower-cost self-service digital channels including chatbots and virtual assistants for simple task-oriented and programmable queries. For instance:

By analyzing the questions, complaints or requests patients call in with, contact centers can determine what causes a specific call from a specific patient persona.

Based on the patients' historical data, determining which patients are most likely to experience an issue, contact centers can resolve it in advance through the most apt digital channels, thereby increasing first-call resolution when the patient calls.

Ensuring personalized level of support

Aligning data on why patients repeatedly reach out to customer care centers with other crucial information such as patient demographics, life events, and past issues creates a unified view of the patient. This centralized and curated intelligence allows contact centers to customize digital and human solutions to the patients calling for assistance. This highly personalized level of support serves as a value-proposition enhancer and builds long-lasting customer loyalty.

Monitoring KPIs to measure impact

Contact center analytics allows to monitor and improve a variety of service metrics ranging from call times, efficiency, employee performance and patient satisfaction.

With automation and AI being used to deflect lower complexity inquiry, the average unit cost of interaction dramatically reduces. Such technologically advanced contact center operations require new metrics to measure performance:

Volume and usage of digital channels

Number of calls resolved by cognitive interactions with IVR containment, chatbots and virtual assistants

First-call resolution

Data analytics can also be used to measure the impact of intelligent routing system by closely monitoring the following KPIs:

Average response time

Abandonment rate

Average call time
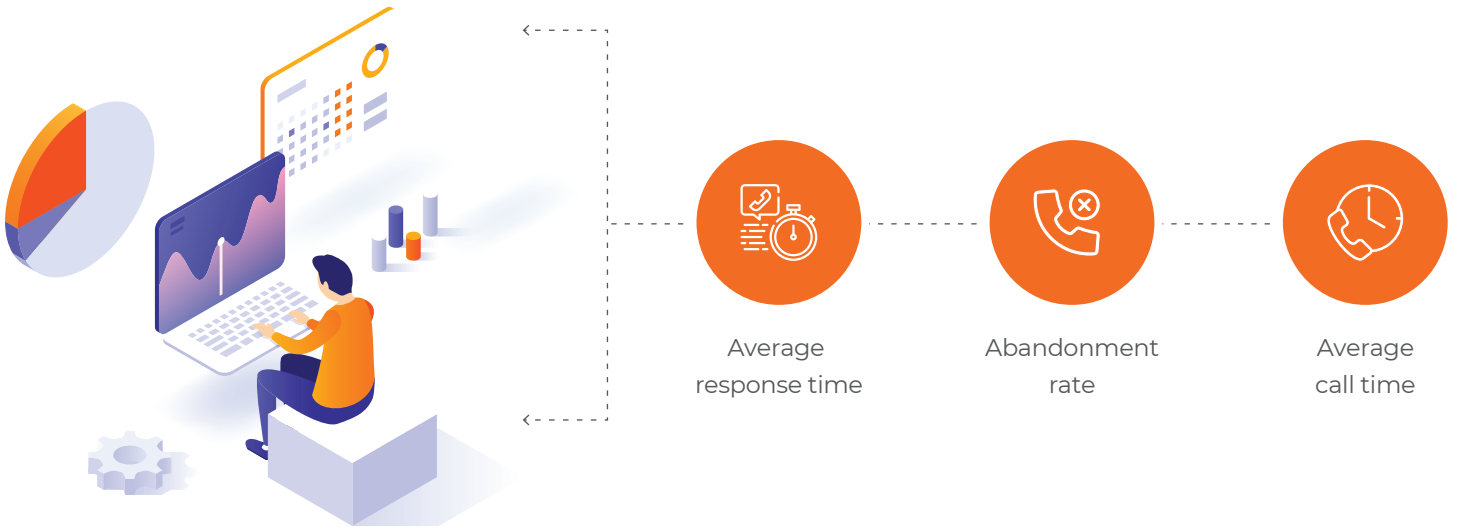
What changes for the customer service representative?

After leveraging proactive status alerts, data analytics and automation to increase call deflection, cognitive interactions and first-call resolution, customer service representatives will mostly receive customer issues that require a high level of care, intelligence, creativity and human touch. Thus, smart automation won't eliminate the need of customer service representatives, instead demand enhanced skill sets. New skill sets include product expertise training to help solve problems, where AI will present and summarize telemetric data and knowledge articles. Besides this, inculcating soft skills to be more customer-centric is also critical because this is where humans have advantage over bots.

Automation would also increase employee satisfaction as agents would be diverted to focus on more interesting tasks than routine, repetitive ones that are boring and time-consuming. This would solve the problem of high attrition rate in the contact center industry.

The way forward for a Compassionate Cognitive Contact Center

By keeping patient-centric operations, language flexibility and accelerated ramp up at the forefront, industries can fast-track their patient support journey and leverage cost efficiencies via purposeful transformation.

Planning the transition

Re-assesing end-to-end patient journey, re-imagining and re-thinking the entire process in terms of touch points, interactions and experiences

Deploying the technologies

Off-the-shelf cloud contact center platforms, chatbots, automated FAQs, virtual assistants, email automation supported across multiple languages

Managing the remote workforce

Gig workforce model, screening and hiring based on ideal skill mix, onboarding and induction, agent domain and digital support training, professional development and retention, forecasting staffing to control headcount costs

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NA Headquarters
Metro 101, Suite 600,101
Wood Avenue South, Iselin,
New Jersey - 08830
Tel: +001-609-409-6950
Fax: +001-609-409-6910

India Headquarters
152, Sector – 3
Millennium Business Park
'A' Block, TTC Industrial Area
Mahape, Navi Mumbai – 400 710
Tel : +91-22-67919595
Fax : +91-22-67919500

EU Headquarters
Level 19, 40 Bank Street,
Canary Wharf,
London - E14 5NR
Tel: +44-020-77154100
Fax: +44-020-77154101

APAC Headquarters
#09-01, One Finlayson
Green, 1 Finlayson Green,
Singapore - 049246
Tel : +65-63253020
Fax : +65-6222728

Australia Headquarters
Level 3, 80 Mount St
North Sydney NSW 2060
Australia
Tel : +61 2 9089 8959
Fax : +61 2 9089 8989