

# Impact of MedTech in India during the COVID-19 Pandemic

**October 2021**



## Joint Message from APACMed and MTAI

Medical Technologies (MedTech) are a critical part of well-functioning healthcare systems. They can save lives, improve health outcomes, quality of life, and contribute to sustainable healthcare – all key drivers of healthy societies and strong economies.

As COVID-19 persists globally, the response of the healthcare industry as a whole has been phenomenal. While fighting a pandemic or any health crisis, the MedTech industry acts as the first line of defense and it plays a critical role within this ecosystem in responding to the unpredicted and rapidly evolving challenges through multiple interventions and innovations. It ensures that the right technologies are available, at speed and scale, for providers and patients, to diagnose, treat and manage the disease. In India, our MedTech industry members have been at the forefront to combat the crisis and have proven to be an integral pillar supporting the healthcare systems of the nation through our people, products and partnerships.

This paper is a joint initiative between The Asia Pacific Medical Technology Association (APACMed) and The Medical Technology Association of India (MTAI) and has been developed with an aim to increase the understanding of the medical technology industry and elucidate the vital role that it plays within the healthcare systems and broader economies, drawing on recent examples from the COVID-19 experience in India.

We hope that this will be an informative tool for the government, healthcare providers, patients, and other stakeholders of the healthcare ecosystem and will encourage collaboration among them to pursue the shared objective of saving lives and creating value for everyone during, and beyond, this pandemic.

The MedTech industry deeply appreciates the tireless efforts put in by the Government of India to manage the current COVID-19 crisis and pledges to remain fully committed to better health, better systems, and a better society for patients in our country and beyond.

# CONTENTS

## Member Case Studies . . . . . 4-64

Baxter . . . . .	4
B. Braun Medical . . . . .	8
Becton Dickinson . . . . .	14
Bausch & Lomb . . . . .	15
Boston Scientific . . . . .	18
Edwards Lifesciences . . . . .	19
Fresenius Medical Care . . . . .	24
Johnson & Johnson Medical . . . . .	27
India Medtronic . . . . .	34
Ortho Clinical Diagnostics . . . . .	36
Roche Diabetes Care . . . . .	41
Roche Diagnostics . . . . .	47
Siemens Healthcare . . . . .	51
Teleflex Medical . . . . .	56
Terumo . . . . .	58
Vygon . . . . .	64

## Member Case Studies



**Company:** Baxter

**Author:** Ravinder Dang

**Designation:** VP, Commercial Excellence

### INNOVATIONS/R&D

Baxter India's Sharesource is a cloud-based patient management platform with 2-way communication platform that enables clinicians to have remote access of Automated Peritoneal Dialysis patients treatment data, track therapy compliance and allow proactive management of complications to avoid emergency situation which leads to better therapy outcomes. This is useful for healthcare providers to verify consumption of fluids and accessories.

- This initiative now provides an option and opportunity to doctors and patients to choose a mode of therapy that improves clinical outcomes along with quality of life through integrated technology. While this is new in India and Indian doctors are yet to come out with published Indian data, there is enough compelling global evidence to support its usage. Following are the links to a few articles on remote patient management.
  - Remote patient management of peritoneal dialysis during COVID-19 pandemic - <https://journals.sagepub.com/doi/full/10.1177/0896860820927697>.
  - Remote patient monitoring in peritoneal dialysis helps reduce risk of hospitalization during COVID-19 pandemic - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7417857/>.
  - Remote patient management in peritoneal dialysis: An answer to unmet clinical need - [https://www.researchgate.net/publication/332280619\\_Remote\\_Patient\\_Management\\_in\\_Peritoneal\\_Dialysis\\_An\\_Answer\\_to\\_an\\_Unmet\\_Clinical\\_Need](https://www.researchgate.net/publication/332280619_Remote_Patient_Management_in_Peritoneal_Dialysis_An_Answer_to_an_Unmet_Clinical_Need).
  - Remote patient management in peritoneal dialysis: Opportunities and challenges - <https://www.karger.com/Article/Fulltext/496309>.
- This service is currently being used by 120 patients and aims to be availed by 100% of total APD patients in next 5 years.



## ■ Period of Impact

- The initiative has shown quick impact in government institutes where the doctors are burdened with high patient numbers visiting them and patients avail either employee or policy reimbursement.
- IRDA announced coverage of Peritoneal dialysis by private insurance in July 2020 which is expected to drive adoption of Sharesource in private health institutes faster in coming years.

## NEXT STEPS

- The Sharesource is web based and it can be scaled up to need of the Indian market. Current penetration of Sharesource is about 30% amongst APD population and 1% amongst PD population. Baxter India plans to increase Sharesource penetration to 70% in next 2 years and 100% in next 5 years.
- Currently around 60 clinicians have experienced the advantage of remote patient management through Sharesource and Baxter India expects to have 200 clinicians as users by 2021.
- Considering the number of patients with kidney failure and need of Renal Replacement Therapy - there is huge scope for clinicians and patients to avail the benefits of Sharesource. With right technology and able infrastructure and expertise, Baxter can help more and more users.

## TESTIMONIES

### Patients appreciate Baxter's patient centric approach towards "Save & Sustain Lives"



Thank you each and everyone for training us during this crucial period of COVID 19 with love, care and hardwork.

*Pumzagin Tombing  
Manipur*

## Patients appreciate Baxter's patient centric approach towards "Save & Sustain Lives"

At this stage Baxter clinical team is supporting us fully. They are giving full instructions and support through video calling.

*Arun Das  
West Bengal*



## Patients appreciate Baxter's patient centric approach towards "Save & Sustain Lives"



I am very thankful to Baxter team for giving me training for PD, even during lockdown you people are always available through video calls

*Yumnam Nando  
Imphal*

## **Patients appreciate Baxter's patient centric approach towards "Save & Sustain Lives"**

We are very satisfied with  
the service. In the lockdown  
situation we are getting call  
and support thanks a lot to  
entire Baxter team.

*Sanjib Das  
Ranchi*





**Company:** B. Braun Medical  
**Author:** Indranil Mukherjee  
**Designation:** Managing Director

## PHILANTHROPIC CONTRIBUTIONS

- **Pandemic Relief Action** - Distribution of relief food packages containing wheat, rice, pulses and other items to 400 beneficiaries to help them overcome the losses due to the lockdown in an industrial zone at one of their plant's locations in Bhiwadi.
- **Mobile Medical Unit** - B. Braun India operated Mobile Medical Unit (MMU) in Bhiwadi to conduct check-ups including monitoring of blood sugar, blood pressure and haemoglobin for the people residing in twelve surrounding villages of their plant. During the lockdown, B. Braun stopped its MMU operations abiding by the government guidelines and started on-call consultations with doctors for their regular patients to address health issues and questions related to COVID-19 across all locations. As the situation improved and COVID containment norms were relaxed, the MMU teams resumed operations and assisted government in conducting COVID-19 tests across different locations in Bhiwadi along with their Community Health Centre (CHC) team.
- **Community Health Centre** - B. Braun partnered with the CHC in Bhiwadi to help manage their labour room in a constructive way and abide by the physical distancing measures by making basic alterations like dismantling internal walls and changing the floor to ceiling height which expanded the usage area in the OPD area, allowing the common OPD room to have different chambers for three doctors to assist patients separately. B. Braun also supported in the modifications of the post-natal/ labour room.

## INNOVATION/R&D

- **Digital Dialogues** - Through their learning platform - Aesculap Academy, B. Braun has been disseminating knowledge for over 25 years. Last year they adapted to the new normal and conducted digital dialogues under the categories of scientific dialogue, health and economics, patient information, application/therapy/ process safety and product competency training. They successfully trained over 8,700 healthcare professionals in 2020.
- **Customer Centricity** - B. Braun developed an IVR system to enable customers to reach them through a single contact number and be directed to the right person from the company who is trained to handle the query.

- **Track on** - In order to support their customers on a timely basis during the pandemic, B. Braun India came up with a solution to empower their distribution partners by introducing a progressive technology of SIM card tracking system to track and trace their full truck orders. This simple technology ensures complete transparency in the delivery process and builds trust among their customers.

## PRODUCTS

- Infusion therapy is an essential part of medical treatments. The delivery of medication to the patient in the infusion therapy requires a set-up of a complex system of medical devices in a closed system environment from bottle to patient. This becomes more important in the current environment where any increase in nosocomial or 'hospital-acquired infections' is unwarranted. This is a key differentiator for B. Braun that they can offer a portfolio across each stage of the care where it is adapted for use in a closed system environment thereby protecting the patient.
- Although there are many disinfectants in the market today, B. Braun India's Softaman CHG is unique with 80% ethanol, 0.5% chlorhexidine gluconate and 3 high-grade emollients. With its virucidal properties, Softaman is one of the most effective disinfectants in the market. This is how they play a very active role together with healthcare professionals in combating the pandemic with their products and services and by way of supplying them from not only their global facilities but also their local capabilities in India.
- With the requirements of vaccines to control the pandemic, there was a need for water as a diluent to be used in lyophilized to cater to this requirement B Braun quickly moved to produce sterile water in one of their local factories. Through another local factory, B Braun manufactured and ensured continued supply of syringes and needles and are currently also exporting some components, to their plants in Germany to cater to global vaccination requirements.

### Certifications

- Amidst the pandemic, B. Braun continued with its mandatory industry obligations and successfully completed the ISO and Russia MOH Audit for two of its facilities.

### ATS Workshop

- To enhance the servicing and maintenance requirements of surgical instruments and medical devices in India, B. Braun inaugurated its new Aesculap Technical Service (ATS) workshop in 2020. With this modernized workshop, B. Braun intends to work in collaboration with the hospitals to improve the service efficiencies.

## PEOPLE

### Dealer-to-Partner

- As part of B. Braun's Dealer-to-Partner program, they identified the top dealers of their existing 600+ distributors to provide them with additional support. This was intended to help in increasing the dialogue with the distributors and eventually lead to an increased engagement.



## Society of Fluid Therapy Meetings

- B. Braun India developed a concept to offer clinicians an academic platform for brainstorming on the best practices in fluid management in various clinical situations. This society was brought together during the pandemic to draft a therapy shaping review article based on the clinical experiences of eminent anesthesiologists from across India on the use of the balanced solution in major GI surgeries. Reputed KOL's from prominent hospitals across India attended this meeting and actively participated in the discussion on the topic "Intra-Operative Fluid Management in Gastrointestinal Surgery and the Role of Balanced Crystalloids".

## Awards

- B. Braun won four awards in 2020. Winning such awards proves that B. Braun India is on the right path of building a working culture suitable for all employees and giving them the opportunities within the company.
  1. Great Place to Work For certified
  2. Dream Companies to Work For award at the World HRD Congress
  3. 100 Best Workplaces for Women 2020 by the Great Place to Work-Certified™ Institute
  4. 2020 Working Mother & Avtar 100 Best Companies for Women in India

## PARTNERSHIPS

- B. Braun India's Managing Director has been leading all the B. Braun group entities in India since 2017 and has contributed to different industry forums and associations, which are mentioned below. These associations are instrumental in engaging with the government to resolve challenges and shape better policy for the patient as well as the industry
  - Chairman - European Business Group (EBG) Healthcare Sector Committee
  - Board Member - Medical Technology Association of India (MTAI)
  - Executive Committee member - Indo-German Chamber of Commerce (IGCC)

## Association Events

- B. Braun India is a key player in the industry associations and government bodies for shaping policies and frameworks for the industry. B. Braun participated in industry events to discuss on the COVID-19 situation in the country and devise plans to improve business working conditions.
  - **FICCI** - As part of B. Braun's industrial partnership with FICCI, they participated in the FICCI's Annual Expo 2020 (FAE 2020) as an exhibitor. They also participated in the India Medical Expo where B. Braun was the session sponsor for a discussion on Increasing Access to Quality and Innovative Medical Devices. B. Braun India's MD attended the CEOs' Roundtable in virtual mode along with the Minister of Chemicals

& Fertilizers, Secretary & Joint Secretary - Department of Pharmaceuticals, Joint Secretary - Ministry of Health & Family Welfare and Drugs Controller General of India (DCGI) and was also a panelist in the session on 'Paving the Road for India's Self-reliance in Medical Devices'. B. Braun's representative from Health Economics & Outcomes Research department was also a panelist in the session on 'Increasing Access to Quality and Innovative Medical Devices'.

- **IGCC** - B. Braun India partnered with IGCC as an exhibitor in organizing the 'German Days Digitales - The Digital Experience', a digital campaign under the umbrella concept of the German Days in India 2020. Managing Director of B. Braun India participated as a speaker in a session on 'Tapping the potential of the Healthcare Sector - Integrated Health Services' at the event. This session covered topics on implementation of affordable healthcare coverage, solutions to multiple complex issues which impacts the ability to successfully implement cost-effective programs, maintain efficient operations and services, staff and trained employees, and support other healthcare initiatives.
- **CII** - B. Braun India participated in the virtual exhibition "Health Tech India" organized by Confederation of Indian Industry (CII) as the Principal Partner. Owing to the unprecedented shift in the global landscape, Health Tech India gained significance as it aimed at providing a conducive environment for growth of the sector. B. Braun India's Managing Director chaired the Plenary Session IV - 'Reality Check - Are Indian Regulations keeping pace with the rapid changes in Health Technologies?'

## CHALLENGES & BARRIERS

Due to the lower occupancy in hospitals, lower OPD footfalls and a smaller number of elective surgeries, B. Braun India faced a significantly weaker demand leading to revenue erosion. This was compounded by challenges of liquidity and solvency issues in the market, thus, impacting their working capital and cash flow. However, from September 2020, they have seen a gradual positive momentum with the improvement in footfalls in the hospitals and the start of planned surgeries and chronic care treatments.

## NEXT STEPS

In these changing times, customer behaviours have changed and hence, working norms need to be adapted to. B. Braun India believes that a good balance of pragmatism and resilience will enable them to overcome all odds, recoup business setbacks and support them with renewed vigour. Agility is part of B. Braun's DNA. They are looking at opportunities to leverage technology to protect and improve lives, by focusing on patient care and using digitalization to enhance effectiveness.

## LESSONS LEARNED

- As a partner to the healthcare industry, B. Braun India is providing support to the front-line working staff at the hospitals who are helping patients and containing COVID-19. B. Braun understands that their employees are at the centre of all these activities. As a family-owned business, their people are their greatest assets and employee safety, and welfare has always been their priority. B. Braun India is undertaking all precautionary actions to ensure a safe working environment for their employees. B. Braun teams while at work follow social distancing norms and take personal hygiene measures to ensure everyone's safety.

- In order to help employees manage the additional financial impact of the pandemic, they also took immediate steps to provide an additional Special COVID-19 Insurance Cover for its employees and provided a safety kit for each employee.
- B. Braun is also helping employees upgrade their skills on competencies to explore new ways of customer engagement. They are using the PHYGITAL approach; which means they are engaging with their customers using the physical mediums of knowledge management wherever possible and otherwise adapting to the digital methods.

## TESTIMONIES

### **B. Braun India's Service technician - Shardul Puranik speaks**

During the pandemic, there were several queries which were raised for servicing products - few included breakdown calls, installations and user training. We had to address customer queries by responding to them quickly, asking the right questions to understand the problem and accordingly offering the solution. In order to service these queries, we faced the following challenges :

- Travel - During pandemic, travelling to hospitals was difficult and we often used our private vehicles to travel to the hospitals. For machine breakdowns at outstation hospitals, we consulted the hospital staff virtually to resolve them.
- Working in COVID wards & ICU - The major challenge was working in the COVID wards and ICU. We had to ensure that we follow all safety precautions and infection control guidelines provided by the respected hospitals. i.e. use of 3-ply mask within hospital area, use of PPE kits within COVID wards and ICUs, sanitisation protocol after working in infectious areas and sanitising service tools after using them to repair machines.

### **B. Braun India's Customer - Karuna Moorthy, Manager - Biomedical from Rela Institute speaks**

B. Braun extended their seamless service and quality improvement initiatives during the pandemic time to run our dialysis machines effectively.

### **Dialysis patient - Dr. Vasanth using B. Braun machine speaks**

I am undergoing Home Hemodiafiltration for past one year, after nearly 10 years of hospital based hemodialysis. B. Braun helped me in setting up home Hemodiafiltration during pandemic time, which protected and improved my quality of life in renal health. It has been a year since I started the home dialysis by B. Braun's Hemodiafiltration machine first on 24th April 2020. B. Braun's team has provided a lot of information and have been a moral mentor for me since we met. Without B. Braun, it would have been tough for me.

## ANY OTHER SIGNIFICANT STORIES

- As a partner in the healthcare industry, B. Braun is trying to provide all the support to help their customers who are the front-line working staff at the Hospitals. Due to this, B. Braun India could keep their factories operational during the crisis and ensure that supplies are not affected. Their employees faced a lot of

constraints starting from their homes as they had to reassure their family of their safety while working during the lockdown. The employees understood that shortage of their products can adversely impact the supplies of the healthcare industry. Hence, smooth running of their factory operations was important to avoid any unavailability of medical devices. They assured their family that B. Braun India was undertaking all precautionary actions to ensure a safe working environment for its employees like ensuring regular hand hygiene, maintaining social distancing, etc.



**Company:** Becton Dickinson

**Author:** Pavan Mocherla

**Designation:** Managing Director, India,  
South Asia Becton Dickinson

## PHILANTHROPIC CONTRIBUTIONS

- BD donated 500 Pulse Oxymeters to Gurugram administration
- BD provided financial aid in COVID-19 relief fund to Rewari District administration

## PARTNERSHIPS

- BD partnered with FICCI and took the lead in drafting holistic recommendations on COVID patient care pathway from symptom onset all the way to the final patient outcomes. The enhanced recommendations included patient screening, appropriate diagnostics, in-patient care and HCW & Patient Safety. The recommendations along with the suggested solutions were shared with the Industry partners for their inputs and subsequently handed over to FICCI along with a ready reckoner dossier of available relevant technologies to be taken forward with MOH and ICMR. The enhanced recommendations resulted in influencing the subsequent versions of the COVID-19 care guidelines for significantly improved patient outcomes.
- To support the GoI's COVID-19 vaccination efforts, BD developed a comprehensive module on the safe injection best practices to be followed while administering the COVID-19 vaccine. This was submitted to FICCI by BD to be taken forward with the relevant stakeholders.





**Company:** Bausch & Lomb  
**Author:** Sanjay Bhutani  
**Designation:** Country Manager

## PHILANTHROPIC CONTRIBUTIONS

“Experience Vision” - A CSR Initiative by Bausch & Lomb India Pvt Ltd that provides eye care awareness to the needy to make future of India SEE BETTER!

## INNOVATION/R&D

With approximately 30% of India's population being children, uncorrected refractive errors and childhood blindness are known to be among the leading causes of vision impairment. Bausch & Lomb's program, Experience Vision which aimed to increase eye care awareness among the school going children and educate them regarding refractive errors and common eye ailments was launched. As an extension to the program, the Eye Screening Protocol was designed to detect and diagnose such eye conditions in children. This program was fully funded by Bausch & Lomb India Pvt Ltd.

## PRODUCTS

Experience Vision Project was spread across three phases.

- **Phase 1** was dedicated to developing IEC (Information, Education and Communication) material and implementing the training at various government schools in India.
- **Phase 2** of the project was focused on creating an Optometry centric, Eye Screening Protocol that was designed to detect and diagnose various eye conditions in children.
- **Phase 3** Implemented the screening protocol by conducting eye screening camps covering close to 10,000 school children in Government schools and counselling school children about Optometry as a healthcare profession.

## PEOPLE

Phase - 1 of Experience Vision Project was aimed to educate close to 1,00,000+ school children and their teachers across India on eye care awareness.

## PARTNERSHIPS

Bausch & Lomb's CSR initiative with Optometry Council of India made a positive impact on spreading eye care awareness among 1,00,000+ school children and their teachers across India. During this project Optometry Council of India (OCI) partnered with Various Optometry institutes to achieve the desired results across the country.

## CHALLENGES & BARRIERS

Some challenges that Bausch & Lomb India faced during their Experience Vision Initiative included -

- Like every large-scale study, there was missing data in Phase-II of the study and on further evaluation Bausch & Lomb realized that perhaps modifications in trainings would benefit the future studies towards accuracy and completeness of data acquired.
- Convincing School authorities to adopt the IEC material and eye Screenings was one of the many challenges Bausch & Lomb India faced during this Program.
- Additionally, language of the IEC material was an issue. Hence, Bausch & Lomb India translated the IEC material to nine (9) different languages to reach the maximum beneficiaries at the grass root level.

## NEXT STEPS

- Bausch & Lomb believes a follow up for activities from all three phases of the Experience Vision project would be highly beneficial to evaluate the effect this program has had on various levels of the community.
- While paediatric and adolescent groups were targeted in this project, another part of the community on the geriatric side also has a specific vision assessment requirement that needs structured attention.

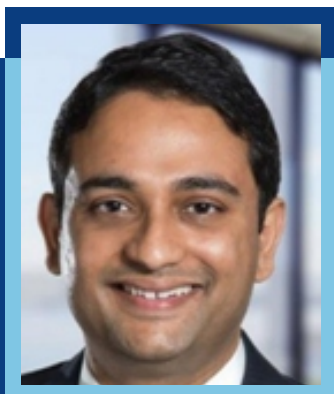
## LESSONS LEARNED

The awareness drive launched by Bausch & Lomb India reached more than 100,000 people that included students and educators. The protocol was successfully developed and tested on over 16,000 school children and the awareness of optometry as a career option was completed in 30 target schools. All these activities were completed in the short span of 1.5 years and spanned across different regions of India. The project was successful in bringing together optometrists from all parts of India and work towards a common goal under the supervision of Optometry Council of India and Bausch & Lomb's Leadership.

## TESTIMONIES

- Optometrist Divya from SRM, Chennai: "We visited a deaf and dumb school and the school teacher translated our speech and what we had to inform the students. This experience was such a great learning for us both as an optometrist and as a health care provider. It gave us such an immense sense of satisfaction".

- Ms. Vibha: "Respected Sir/Madam, It was great for me to be part of experience vision through which I could interact with students, make them aware about my wonderful profession, 'OPTOMETRY' as the program's name "Experience Vision "itself justifies lots of experiences associated with this, and I felt all those after doing the sessions in different schools. Students were very happy and satisfied after each session and even teachers highly appreciated the work done by us. Every student was eager to know about the colleges that offer Optometry as a course and other details of optometry. After seeing all these I felt fortunate to join Experience Vision and I am grateful to OCI and Optom. Lakshmi Ma'am & other team members for arranging this project and giving me the wonderful opportunity through which I could contribute a bit for Optometry. I will be very happy in doing such kinds of activities in the future too. Thank you very much. Kudos!!! To all teams for successful completion of the project."



**Company:** Boston Scientific  
**Author:** Manoj Madhavan  
**Designation:** Managing Director, India

## PHILANTHROPIC CONTRIBUTIONS

- Boston Scientific India partnered with The Akshaya Patra Foundation, a non-profit organization and Directorate of Civil Defence (Govt. of India) in providing essential grocery kits to the under-privileged people and families who have been affected severely due to the lockdown and prevailing COVID-19 situation. Each grocery kit contained staples and hygiene products to serve 2 people with 42 meals for 21 days.
- They also distributed 30 sewing machines to rural women, on the occasion of International Women's Day, in partnership with NARI Panchayat Foundation, a non-profit organization working for women's social and financial independence.

## PEOPLE

- The sales workforce at Boston Scientific supported more than 600 cases during 2020, the peak of the pandemic that involved several high risk COVID-19 centres and patients.
- 60+ online sessions were conducted resulting in 3,000+ hours of learning, development and coaching to mentor the sales, marketing, and functional work force.
- 20,000+ Healthcare Professionals engaged in 300+ learning events via Boston Scientific's online therapy education platform, the Virtual Training Institute.
- Engaged 10,000+ Healthcare Professionals in learning events in 2020, from India and international countries.

## PARTNERSHIPS

- Boston Scientific India joined hands with NIPER Ahmedabad, Invest India and Dept of Pharmaceuticals, Govt of India to support the prestigious Healthcare Start-up Grand Challenge 2021.

The challenge endeavours to foster innovation in the medical devices industry and is a significant step towards advancing self-reliance & innovation in healthcare in India.

- Boston Scientific India is an Industry partner in the GI Technicians Upskilling Program, a collaborative effort led by The Society of Gastrointestinal Endoscopy of India (SGEI) and the Healthcare Sector Skill Council (HSSC).

The initiative aims at providing skill enhancement to participants through a certification program, and build a pool of skilled endoscopy technicians for the country.



**Company:** Edwards Lifesciences

**Author:** Wee Yao Ng

**Designation:** Director, Intercontinental Strategy

## PHILANTHROPIC CONTRIBUTIONS

Edwards Lifesciences made the following contributions during the covid times and in general, supporting society at large as an integral part and commitment of our company credo:

Donation of stationary items like school bags, notebooks, colours, water bottles etc. to 160 students from a District Zilla Parishad School near Lonavala.

- Contribution directly towards the PM CARES fund in March 2020.
- During the Pandemic Wave 1, when the whole country was struggling in some way or other (June 2020), Edwards India employees came forward to help and donated generously to feed the daily wage labourers who were most affected by the lockdown. We partnered with Akshaya Patra and donated more than 25000 meals to the affected communities.
- Further in November 2020, our employees donated more than 3700 kgs of donatable items like used clothes, books, toys, furniture, food grains, blankets, etc. to Goonj Foundation. Goonj uses these items as currency to carry out community work in urban and rural areas.
- In March 2021, Edwards India identified that a lot of funding was being diverted for COVID relief leaving cancer patients without much support. We partnered with Tata Memorial Centre and identified their needs. Edwards India donated 20 Infusion pumps to their paediatric ward. Infusion pumps are vital part component of paediatric oncology.
- During Pandemic's wave 2, India was facing an unprecedented challenge. The medical infrastructure and fraternity were under tremendous strain. Edwards Foundation funded imports of oxygen cylinders and oxygen concentrators and simultaneously funded trainings of general physicians to manage critical care patients.
- Parallely Edwards India again partnered with Akshay Patra to feed the marginalized communities who were not having a stable income since almost one and a half years now. We also funded cooked meals distributions to care givers, patients, nurses and staff at COVID hospitals.





## INNOVATION/R&D

Edwards Lifesciences is a global leader in patient-focused medical innovations for structural heart disease, as well as critical care and surgical monitoring. Driven by a passion to help patients, the company collaborates with the Country's leading clinicians and researchers to address unmet healthcare needs, working to improve patient outcomes and enhance lives.

We partner with physicians to innovate products designed to help patients live longer, healthier and more productive lives. We focus on medical technologies that address large and growing patient populations in which there are significant unmet clinical needs.

The Edwards proven family of PERIMOUNT surgical valves are the world's most frequently implanted valves. Decades of clinical experience and peer-reviewed data on Edwards valves provide robust evidence of long-term durability and proven hemodynamics of the PERIMOUNT valve platform. Last year amidst covid, India launched the first in a new class of resilient heart valves – INSPIRIS RESILIA Aortic Valve. INSPIRIS valve is designed to offer enhanced tissue anti-calcification technology that will potentially allow the valve to last longer.

Edwards leadership in transcatheter heart valve replacement includes a commitment to meaningful innovation, rigorous scientific study, extensive clinician training and education, and significant investment in new applications of the technology. The Edwards SAPIEN valve platform continues to raise the bar as the most widely studied transcatheter heart valve worldwide.

Edwards has been advancing the care of the acutely ill for more than 40 years. Starting with the development of Swan-Ganz advanced hemodynamic monitoring devices for measuring cardiovascular performance in high-risk surgical and critically ill patients, Edwards continues to evolve to less-invasive and noninvasive devices to provide valuable hemodynamic insight for an expanded patient population. Edwards has continued to advance hemodynamic monitoring platforms to enable proactive clinical decisions for surgical, anesthesia and critical care clinicians. Edwards is focused on helping clinicians enhance knowledge and standardize practice to improve the quality and efficiency of care. Edwards provides evidence-based programs such as Enhanced Surgical Recovery Program that support the implementation and compliance to protocolized care pathways in the OR and ICU.

Edwards LifeSciences launched a new technology based on Artificial Intelligence, Acumen Hypotensive Prediction software that predicts the likelihood of a hypotensive event for patients in Critical care, to supplement their established advance Hemodynamic monitoring system. Hemodynamic monitoring is a treatment protocol suggested for patients suffering from Sepsis (both for COVID and non-COVID patients who are critically ill).

## PRODUCTS

- Surgical Structural Heart Valves – Replacement and Repair
- Transcatheter Aortic Heart Valves
- Hemodynamic monitoring technologies for critically ill patients during surgical and critical care monitoring



INSPIRIS Aortic Valve



SAPIEN 3 Valve



Hemosphere hemodynamic monitoring system

## PEOPLE

Edwards LifeSciences' team of technical experts commuted with required permissions within the cities and across states, often driving long distances in their personal vehicles and risking personal health and security, even in the height of the lockdown to support:

- Transcatheter Heart Valves urgencies
- Structural Heart Valve Replacement and Repair surgeries
- cases in both ICU/OR for patients requiring Advance Hemodynamic monitoring or for servicing Critical caremonitors



## AWARDS and RECOGNITION

**2021 World's Most Ethical Companies** For the fifth consecutive year, Edwards Lifesciences was honored as one of the **2021 World's Most Ethical Companies®** by the Ethisphere Institute, a global leader in defining and advancing the standards of ethical business practices. Companies are recognized for their unwavering commitment to business integrity and Edwards was the only U.S. company recognized in the medical device industry.

**Top 100 Companies Supporting Healthy Families and Communities** We're proud to be in the Top 100 Companies Supporting Healthy Families and Communities by JUST Capital and supported by the Robert Wood Johnson Foundation.

**Barron's 2021 Most Sustainable Companies** For the second year, Edwards Lifesciences appeared on Barron's annual list of the **100 Most Sustainable Companies** in the United States.

## PARTNERSHIPS

Edward LifeSciences India worked directly with the Government and Private hospitals.

## CHALLENGES & BARRIERS

The major challenge faced by Edwards LifeSciences during the lockdown was the unpredictability in travelling rules as these kept getting changed frequently with very short notices due to which sometimes our employees/technical staff were stopped and hence were unable to travel and support cases and deliver goods in timely fashion.

## NEXT STEPS

Edward LifeSciences plans to continue with their efforts to partner with healthcare workers and hospitals to serve the patients in post covid times. At the same time, we are better equipped to tackle anticipated 3rd wave with more than 68% of our employees vaccinated and aim is to have 100 % Coverage by December so as to achieve dual objective of safeguarding our employees and standing tall for our Credo in testing times. We will also

continuously look forward to associate with right partners to do our bits in order to achieve faster road to recovery during post covid scenario in the country.

## **LESSONS LEARNED**

- Dedication to serve the patients prevails in toughest of times possible and the desire to help over comes all obstacles
- Alertness in understanding the changing rules and restrictions and quickly adopting to the changes are particularly important in such a situation

## **ANY OTHER SIGNIFICANT STORIES**

There are many, concerning how being called upon for help by the hospitals/ healthcare professionals, Edward LifeSciences' staff undertook long journeys to get the devices out of the warehouses even during odd hours and rushed to the hospitals to complete the delivery as well as offer technical support of the devices-thus, saving lives of patients with timely interventions.



**Company:** Fresenius Medical Care

**Author:** Punit Kohli

**Designation:** Managing Director  
FMC India and Cluster Head- South Asia

## PHILANTHROPIC CONTRIBUTIONS

FMC India conducted an employee donation drive in India for PM CARES Fund launched by Honorable Prime Minister Narendra Modi.

## PRODUCTS

In emergency situations, on government request, FMC has been able to ensure the supplies and installation of Dialysis Machines at COVID-19 centres and enabled the start of dialysis within 1 day. This was applauded by the government for organization commitment to help patients in a difficult situation.

## PEOPLE

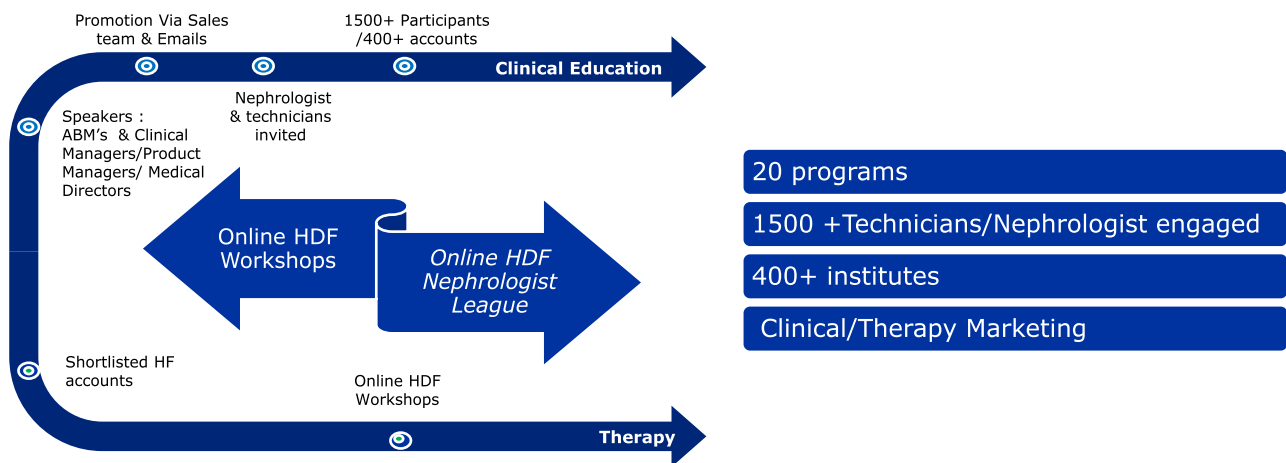
- Dialysis Services division of FMC ensured all COVID-19 positive patients receive regular dialysis treatment while maintaining all safety measure for employees and other patients.
- Created dedicated COVID-19 wards in >50% of FMC's clinics within in a week to provide dialysis to COVID-19 positive patients.
- Arranged HD machines to be placed and installed in these dedicated wards for COVID-19 patients.
- Ensured availability of renal care nurses and technicians, even under scenarios of quarantine of clinic staff.
- Training on utilization of Hydroxy chloroquine according to the ICMR guidelines.
- Adapted guidelines for Dialysis of COVID-19 patients developed by the Ministry of Health and Family Welfare.
- Value addition to patients by educating them - wearing a mask, protecting yourself and others, cough etiquettes and hand hygiene, early detection to stop spread of the virus etc.



## LESSONS LEARNED

### Journey for Online HDF Customer Trainings and Engagement

During COVID time, we continued our journey for Customer Trainings and Engagement through series of online sessions. More than 20 virtual educational webinars were conducted by clinical team and still continues. These programs were planned to cover state/region wise manner to ensure proper understanding of HDF therapy and concept. The participants of these webinars were Nephrologists and their teams, to ensure correct therapy, correct patient and correct prescription. These webinars were very well appreciated by the Nephrology community and their clinical teams.



## TESTIMONIES

Sandeep Bansal, National Technical Manager shared, "In March 2020 full country went into lock down, but everyone in our technical service team was out in fields to keep every single Dialysis machine running, so that patients get treatment on time. Despite challenges of not getting movement pass approval, transport to reach customer locations and even working in COVID-19 Zones, team had provided timely services to each and every service request. All this was done without compromising on internal process and safety guidelines."

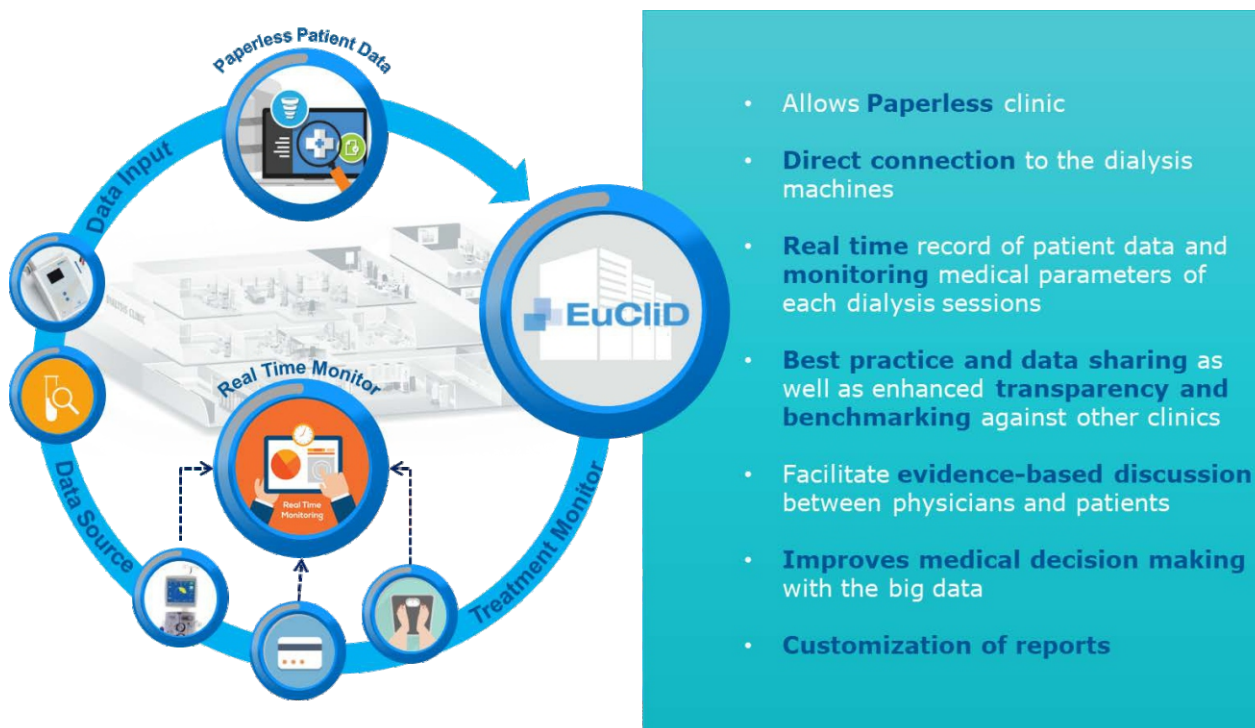
## ANY OTHER SIGNIFICANT STORIES

Patients stories, Hospital Stories, Community stories

### Patient's safety through use of technology:

During the COVID-19 outbreak, all states were under lockdown during different times and it was very difficult for us to travel to all the clinics in different states. It was also extremely difficult to track patient vitals and laboratory data. We overcame this challenge by utilizing the technology at its best. At Fresenius Medical care dialysis clinics, we have clinical database management software's like Euclid&Nephroweb. These database systems enabled us to capture and store the data, and with the help of this database, we were continuously analysing patient's data.

Even during lock down this technology tool has helped FMC and Nephrologist to understand the patient conditions, and do the necessary intervention which helped in providing best possible Dialysis treatment.





**Company:** Johnson & Johnson Medical  
**Author:** Sandeep Makkar  
**Designation:** Managing Director

## PHILANTHROPIC CONTRIBUTIONS

- With the support of Johnson & Johnson's partners, they were able to deploy their strategies and programs in various focused areas of health and societal challenges where they were able to make a large impact- Close to 17 lakh lives touched.

### 2021 CSR Leadership Awards for Best Relief package announced for COVID-19



- A total of 200 Johnson & Johnson employees contributed a sum of around Rs. 13.8 lakhs through payroll to their designated partner NGO - AmeriCare India Foundation. This received a matching contribution from the company. This was appropriately utilized for providing PPE kits, masks, gloves, and hand sanitizers to hospitals, frontline healthcare workers, and communities in need.
- Together, Johnson & Johnson India, along with Johnson & Johnson Global, contributed over Rs.7 crores to various NGOs - AmeriCare India Foundation, The Indian Red Cross Society, ISKCON, and UNICEF towards combating the pandemic.

- Johnson & Johnson India showed strong support by donating PPE kits, N95 masks, and surgical masks worth Rs. 78 lakhs to the Government of Maharashtra and the Government of Madhya Pradesh, and 44,000 packs of sanitary napkins to frontline workers and communities in containment zones, in partnership with state governments and non-government organizations.
- Johnson & Johnson India, in partnership with Americares, reached out to the Mumbai Waste Collectors with its timely and generous donation of masks and reusable gloves and supported the Mumbai Police force working on the ground (comprises of 118K constables, 60K Police Naik, and 8K head constables) with masks and sanitizers.
- The Indian Red Cross Society runs the Bel-Air Hospital at Panchgani, Maharashtra. With the support from Johnson & Johnson India, the hospital became a major nodal center in Satara District in responding to the COVID-19 outbreak.
  - 229 people were quarantined and screened, and sent home from the quarantine facilities under Bel-Air. The centers are managed by staff from Bel-Air Hospital
  - 620 COVID positive patients were admitted to the COVID-19 Care Center and COVID-19 Health Center at Bel-Air. 417 were discharged, 158 were referred to higher centers, and 45 were undergoing treatment in the hospital.
- Johnson & Johnson India through ISKCON provided meals to 24,390 poor and needy beneficiaries during the lockdown.
- In partnership with UNICEF, Johnson & Johnson India provided psychosocial support to the health care workers. This project works on improving healthcare workforce resilience in India by ensuring that 45,000 healthcare workers across about 6,500 dedicated COVID-19 hospitals and 1,200 COVID-19 health care centers have access to a Mental Health and Wellness program and dedicated psychosocial support.

## INNOVATION/R&D

Development of Indigenous High-Quality Testing Swabs During COVID-19 Pandemic Situation

## PRODUCTS

### COVID-19 Testing Swabs:

Johnson & Johnson India partnered with nine government ministries, scientific institutions, and the private sector to manufacture COVID-19 testing swabs that were in critically short supply during the initial phase of the pandemic. Johnson & Johnson India's contribution in all of this was that it brought resources, engineering, developing expertise to the table, and putting efforts behind a local MSME to produce the swabs. The whole idea to launch process was completed in 7 days which was an exceptional achievement for all stakeholders involved.

## PEOPLE

- Gaurav Sahni received a frantic call from a surgeon who had to perform a complex gall bladder surgery in Lucknow during the initial days of the lockdown last year. The Ethicon sales representative at Johnson &



Johnson India drove for hours to pick up the medical equipment and then covered an even greater distance to deliver and demonstrate the product. He did this despite the logistical challenges and knowing that hospitals were not safe to visit because of the coronavirus. Johnson & Johnson's business thrives when they put the needs and well-being of the people they serve first: Their patients, customers, doctors, nurses, and employees. It is their recipe for business success, and that's how they live up to their purpose. Sahni is one of their many employees who worked night and day to ensure that patients and doctors got the equipment they needed.

- Johnson & Johnson India was also one of the first companies in India to volunteer support to the Government, frontline health workers, and communities to help manage the outbreak by donating surgical masks, gloves, face shields, personal protective equipment kits, and hand sanitizers.
- They helped the Indian Government by supporting the manufacturing of high-quality COVID-testing swabs within seven days-from conceptualisation to production-at one-tenth the price of imported swabs.

## Support to Employees:

- Johnson & Johnson's Credo defines their responsibility to their employees. As employees settled into remote working for the long haul due to the pandemic, Johnson & Johnson India revisited employee well-being strategies and engagement models. Benefits like ergonomic furniture, reimbursement of home gym equipment and activity trackers, COVID care packages, and enhanced leave policies were provided to employees.
- Additional insurance cover and special medical coverage were offered to support their financial health at no cost to employees and families.
- Globally, Johnson & Johnson India rolled out telemedicine assistance in addition to their existing employee assistance programme to resolve physical and mental health issues.

## Training for HCPs

- 376 Digital Training Initiatives spanning 657 Hours
- 35, 553 HCPs trained through these initiatives across JJMI
- More than 950 expert faculties were a part of the faculty pool
- Develop ideas for Hybrid training programs (Digital + Hands-on)

## PARTNERSHIPS

- For the development of high-quality COVID-19 testing swabs, Johnson & Johnson India partnered with the Ministry of Textiles, Department of Pharmaceuticals, Department of Health Research (DHR); Indian Council of Medical Research (ICMR), and National Institute of Virology (NIV), and CDSCO.
- They also partnered with various NGOs - AmeriCares India Foundation, The Indian Red Cross Society, ISKCON, and UNICEF, to support the needy during the pandemic.

## CHALLENGES & BARRIERS

### CONTRIBUTIONS

#### Challenges:

- In the initial days of the pandemic and during the lockdown, there was a complete disruption in supply chain activities which led to an exuberant increase in the cost of the products (like PPE Kits) to be distributed to the needy. Due to a lack of clarity in the lockdown guidelines, it became challenging to move the materials to the remote areas.
- Since, internal policies were not flexible to fast-track the donations and were not designed for situations like this pandemic, this was a major challenge that they had to overcome.

#### Solutions:

- Johnson & Johnson's Teams worked tirelessly and coordinated with various state governments and arranged necessary approvals for the movement of the products to be donated.

### TRAININGS:

#### Challenges:

- The pandemic changed the complete scenario and made in-person training impossible; however, the training needs of the HCPs continued to exist and even grow.
- Due to the restricted movement and decrease in the number of surgeries, the need for training for healthcare professionals (HCPs) increased.
- Due to the sudden availability of time with these HCPs, they were now ready to look at different platforms for training that could be provided without the need for travel.

#### Solutions:

- Modifying some of the existing and critical training programs like the Surgical Site Infection Symposium (SSI Symposium), Science of Tissue Management (SoTM) workshops to a digital mode.
- Constructing newer training programs based on the current needs and on the current available platforms (Webex, Zoom, etc).
- On boarding the faculties on to these digital platforms and conducting preparatory sessions for the faculties.
- Internally, formulating the approval and compliance process to do these programs in the correct way.
- Continuously learning from these programs, of the proper training content, duration, mechanism of delivery to pass on the maximum benefit to the participants.

### NEXT STEPS

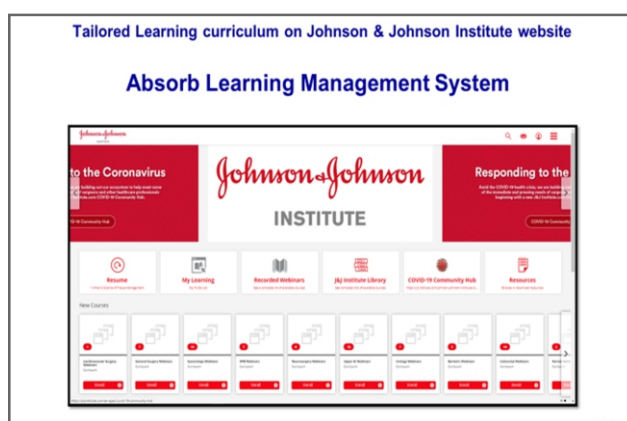
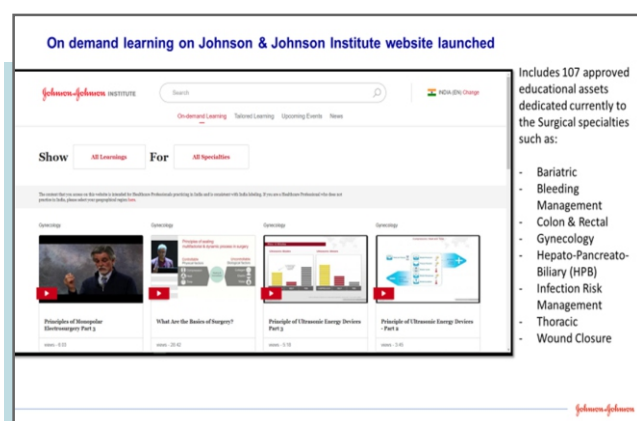
The pandemic was a good lesson for companies to be better prepared for future situations. The company policies need to be flexible and broad-based so that necessary contributions can be made on time.

## Training:

- Johnson & Johnson India started connecting with the faculties that were most comfortable with the digital medium for training and organized the first few training episodes.
- The learnings from not only these faculties but also from the attending participants was collected through surveys to further improve these programs.
- Based on these learnings, JnJ started looking at more topics and more faculties to conduct the digital training initiatives and used platforms like ZOOM.
- Some of the significant changes JnJ made in the training programs are as follows:
  - Duration of the program
  - The ideal number of faculties
  - Types of topics
  - The ideal number of participants
  - Increasing the interactivity of these sessions through polls and surveys
  - Flipped training involving the participants to present their cases for learning from the faculties

## LESSONS LEARNED

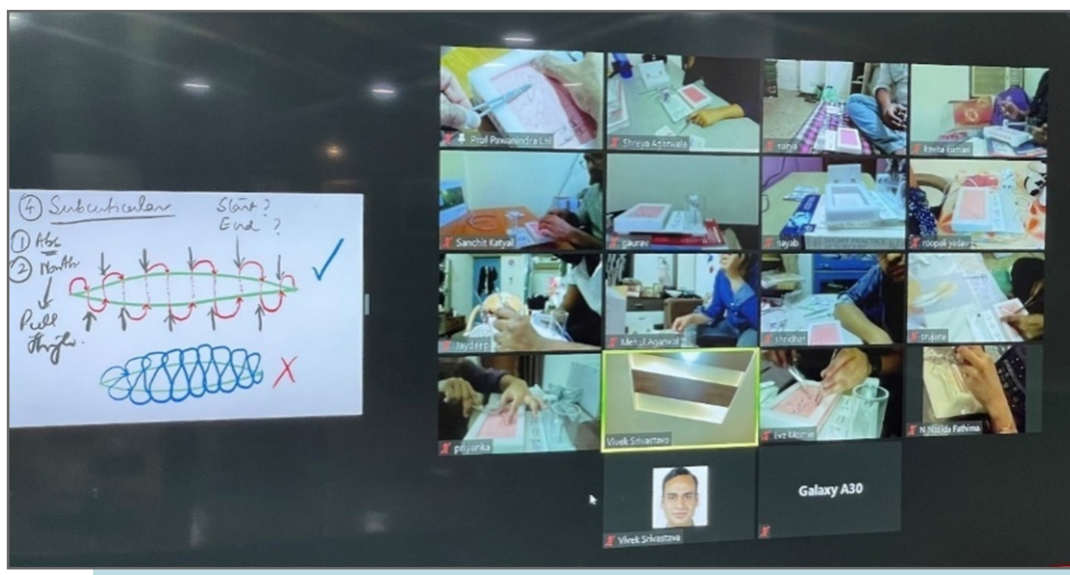
- Digital Platform for on Demand access to HCPs
- By the end of 2020, Johnson & Johnson had built an asset pool of great surgical training sessions by eminent faculties, which were the recordings of the initiatives.
- Some of the HCPs came back to JnJ to ask for a repeat viewing of these trainings.
- This led them to create a digital library for on-demand viewing for the Surgeons.
- Johnson & Johnson also launched the Johnson and Johnson Institute online portal, where these videos were available for on-demand viewing in addition to some global training modules that could be accessed.





## DIGITAL ETHICON SUTURE PRACTICUM

- The pandemic has showcased the need for Digital Hybrid models to be at the centre of any healthcare training going forward. As part of the commitment to upskilling professional education in India, Johnson & Johnson India (Ethicon) team piloted a live home-based Digital Hybrid Suturing Skills Program. They conducted hands-on training by using a combination of newly designed cost-effective suturing pads (sent to the homes of the surgical participants and for them to keep). These lectures were being delivered by a leading faculty using Jbox and iPads.
- Digital Ethicon Suture Practicum introduces basic principles of suturing techniques and different suture materials in surgical practice. The program provides participants, pursuing their post graduation in surgery, an opportunity to know about various suture materials and practice knotting and suturing techniques suturing pads and models safely. They were scored using a standardized template and certified accordingly.
- 70% of participants rated the overall course excellent, and 30% rated it very good. 92% were most likely to adopt the course learnings into their daily routine. 77% of the participants rated the effectiveness of the hybrid training program as excellent, and rest 23% rated it very good.



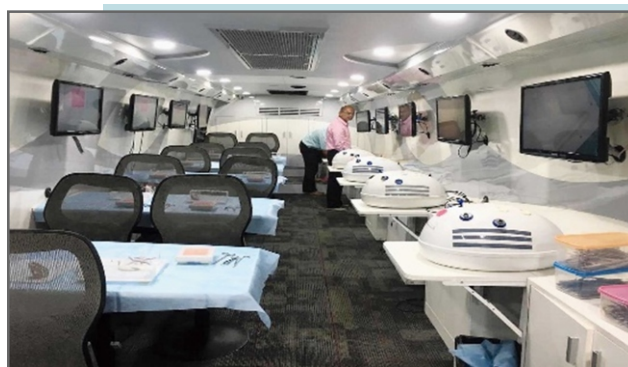
## TESTIMONIES

"Launching a medical product within seven days is an exceptional feat for any government or company. Normally, it takes around 24 weeks for the market launch of any similar medical product, from conceptualization to design, development, and testing. This was an exceptional feat considering the nationwide lockdown, entirely new development (polyester swab, 25 cm thick stick extender, and high-grade bonding material) engagement of nine public and private institutional enterprises. The quality of Reliance, design inputs by Johnson & Johnson India, technical inputs and review by leading institutions like NIV, ICMR, production by one of the quality-focused MSMEs (Adi Enterprises) resulting in direct employment to 70 people has led to the development of a

robust product at a fraction price (10%) of the imported piece from China. This, definitely, is a different India today having the ability and zeal to bring out the best in the world" - Sandeep Makkar, Managing Director, Johnson & Johnson Medical India (JJMI)

## ANY OTHER SIGNIFICANT STORIES

- To close the skill gap in healthcare, Johnson & Johnson India launched the path-breaking initiative named Johnson & Johnson Institute on Wheels (JJIW) in February 2018. It was India's first mobile state-of-the-art, self-sufficient, versatile, world-class surgical excellence training center. This unique facility was created by repurposing a Volvo bus to travel across India. The mobile institute upskills and trains medical professionals in general surgery, laparoscopic surgery, gastrointestinal surgery, cardio-thoracic surgery, infection prevention, and OT management. Each JJIW vehicle - as of now, there are two - can accommodate up to 20 participants at a time and is equipped with workstations to conduct a variety of hands-on training courses. These two JJIW have covered more than 50,000km across India, visiting more than 184 institutes in over 110 cities and towns, and have enabled the training of 23,421 healthcare professionals.
- Johnson & Johnson India, in partnership with NGO Humana People to People India, has initiated the project "Strengthening Anganwadi for Healthy & Educated Community" in Baddi and Nalagarh blocks of Solan District Himachal Pradesh. The project was focused on bringing sustainable changes in maternal and child health and quality improvement to the accessibility and service delivery of comprehensive early childhood development resources. The project spans three years and will reach more than 64,000 people through 80 Anganwadi centers and 10 Government Health Sub-centers located around the manufacturing unit of Johnson & Johnson India in Baddi and Nalagarh.





**Company:** India Medtronic  
**Author:** Madan Rohini Krishnan  
**Designation:** VP, India Subcontinent

## INNOVATION/R&D

The unprecedented situation created by COVID-19 pandemic caught Healthcare systems around the world including India underprepared. One of the major illnesses caused by COVID-19 was acute respiratory illness and as the virus spread exponentially, healthcare systems were overwhelmed.

### ■ Medtronic's solution: Open sourcing of Ventilator Design

Medtronic realized that a global crisis needs a global response and even as it ramped up production of their Puritan Bennett™ 980 ventilators, they felt they should do more. Medtronic decided to publicly share the design specifications for the Puritan Bennett™ 560 (PB 560) to enable participants across industries to evaluate options for rapid ventilator manufacturing to help doctors and patients dealing with COVID-19.

The PB 560's design was particularly well-suited for inventors, startups, and academic institutions looking to spin up production in short order and create their own adapted designs as it is smaller and simpler than the other ventilator models and utilizes fewer components. This also made it the best candidate for companies newer to the field looking to pivot to ventilator manufacturing with limited or no prior experience.

### ■ Impact of the effort

In just 3 months after open sourcing its designs, Medtronic received over 100,000 registrations for the design specifications for its PB560 ventilator including several registrations from Indian startups.

The open sourcing of its ventilator designs helped startups to obtain:

- Deeper understanding of the ventilator mechanism
  - Testing mechanisms for determining safety and efficacy of ventilators
  - Faster adaption of their design matrix to production lines
- Medtronic also partnered with other leading ventilator manufacturers to launch the Virtual Training Alliance (VTA) application which connects respiratory therapists, nurses and other medical professionals with

ventilator training resources including instructional how-to videos, manuals, troubleshooting guides, and other ventilator-operation expertise critical to helping responders treat patients suffering from COVID-19-related respiratory distress.

## CONTRIBUTIONS

- **Expansion of current R&D Center for Medical Device Software and Engineering Solutions facility with an investment of INR 1200 crores in Hyderabad, Telangana.** In the middle of the pandemic, Medtronic's investment in India is a testament to the commitment to the region which is also aligned with the government's vision to improve access to healthcare for patients in India. In August, Medtronic announced its investment of INR 1200 crores in scaling up and expanding the current R&D center into a state-of-the-art engineering and innovation center in Hyderabad. Medtronic Engineering & Innovation Center (MEIC) will be the largest global R&D center outside of the United States for Medtronic.

### Long term impact of the effort:

- This investment planned over 5 years will provide a boost to Telangana's MedTech plans and cement Hyderabad's position as the Medical Devices hub in India
- Create 800+ jobs in the next few years
- Support in energizing the medical devices innovation ecosystem in India.

## PARTNERSHIPS

- **Medtronic and Apollo Hospitals Partner to Integrate Artificial Intelligence (AI) for Advanced Stroke Management.** There is a huge unmet need with regards to Non-communicable Disease (NCD) awareness and therapy in India. With the pandemic, significant challenges were faced in terms of delivering NCD therapies particularly stroke. Medtronic announced its partnership with Apollo in October to integrate AI for advanced stroke management. Through this partnership, Medtronic will help in bringing in stroke technologies, technical expertise, training and comprehensive stroke management with the integration of AI platform at the Apollo Institute of Neurosciences at ten locations in Apollo Hospitals across the country, taking stroke management to the next level by standardizing stroke diagnosis and empowering clinicians to make faster, more accurate diagnosis and treatment decisions.
- Medtronic has been partnering with hospitals to create centers of excellence in the country so that patients are identified faster, and they receive the best treatment.

### Impact of the effort

- Digital innovations leading to faster, more accurate diagnosis and treatment decision
- Reduction in door to needle time
- Increased awareness and reach of therapy and technology for better patient outcomes



**Company:** Ortho Clinical Diagnostics

**Author:** Ravi Anand Sinha

**Designation:** Country Director - India & SAARC

## PHILANTHROPIC CONTRIBUTIONS

- Ortho India made charitable contributions as CSR to Various NGOs such as "Karunya Trust", "Child Help Foundation", "SAAD Foundation" and "Change Initiatives" towards various projects for healthcare and education.
- Donation of daily-need items to "Sneha Sadan Orphanage" during the COVID-19 pandemic.
- Made voluntary contributions by employees from their salaries to "Rami Society", "Rastrahit SewaSamiti" and "Change Initiatives" to support those affected by the COVID-19 pandemic.
- Several Ortho India employees, in their individual capacity made monetary, daily-need items and labour contributions to NGOs such as "Sahyog care for you", "MSF India", "Serve All Foundation", "LifeSaver Foundation", "Care & Concern", "Shapath - Sundorbon - Sundormon" and "Freemasonry" in various parts of the country primarily to support daily needs and healthcare during the COVID-19 pandemic.

## INNOVATION/R&D

- Ortho's most recent innovation came as the COVID-19 pandemic caused devastation across the globe. In March 2020, while most of the world was only beginning to grasp the potential scale and scope of the infections caused by the SARS-CoV-2 virus, Ortho's R&D scientists began working tirelessly to develop a mass-scale, COVID-19 diagnostic solution that could help medical professionals and public health officials gain an understanding of the spread of the virus by detecting the presence of key proteins (antibodies) in a patient's blood sample. Working around the clock, Ortho progressed from initial concept to securing a Food and Drug Administration Emergency Use Authorization (EUA) for its VITROS® Anti-SARS-CoV-2 Total Antibody Test in just 19 days. This was the first high-throughput COVID-19 antibody test and Ortho made history as the first IVD company in the world to receive FDA EUA for a high-throughput COVID-19 antibody test.
- Unwilling to rest on its laurels, Ortho immediately began pursuing additional innovations. About two weeks later, the company received a second FDA EUA for its VITROS® Anti-SARS-CoV-2 IgG Antibody Test, a



serological test that detects the presence of the IgG antibodies in a patient's blood sample. Both of Ortho's COVID-19 antibody tests provide 100% specificity, providing confidence in results and helping reduce false positives.

- Relentlessly supporting labs that were still backlogged with tests, Ortho then developed a third assay: a high-volume coronavirus antigen test, which detects the active virus that causes COVID-19 in late 2020. The VITROS® SARS-CoV-2 Antigen test has utility for mass-scale testing and delivers same-day results, helping hospitals and reference labs to reduce testing backlogs, supply shortages, and delayed results reporting that were evident in the early months of the pandemic.

Ortho received CE Mark approval to commence marketing its COVID-19 antigen test in Europe and commenced shipping millions of tests throughout Europe in October 2020. This was followed in January 2021 with an FDA EUA for the test, making Ortho the first company to receive FDA EUA for a high-throughput COVID-19 antigen test.

The VITROS® Anti-SARS-CoV-2 Total & IgG assays were registered for emergency use and launched in India in June 2020 thus helping >5 lakhs of patients/individuals requiring diagnostic testing. The VITROS® SARS-CoV-2 Antigen assay is also registered for emergency use and launched in India in March 2021.

## PRODUCTS

- Both of Ortho's antibody tests (VITROS® Anti-SARS-CoV-2 IgG Antibody Test & VITROS® Anti-SARS-CoV-2 Total Antibody Test) offer 100% specificity, which provides an extremely high level of confidence for both patients and doctors, have utility to help health care teams identify high-titer CCP (COVID-19 Convalescent Plasma--Ortho's VITROS® Anti-SARS-CoV-2 IgG Antibody test was the first assay to receive FDA EUA for CCP therapy), can aid monitoring through seroprevalence surveys and help track post-vaccination immune response. To date, Ortho's antibody kits have impacted more than >5 lakhs of lives in India.
- In addition to its antibody tests, Ortho also offers the first FDA EUA high-volume coronavirus antigen test which detects COVID-19 infection. The VITROS® SARS-CoV-2 Antigen Test has utility for mass-scale testing and delivers same-day results to help hospitals and reference labs address testing backlogs, supply shortages, and delayed results. U.S. distribution of the test commenced in November 2020 under an FDA Emergency Use Notification (EUN); the test was granted CE Mark in November 2020 and received FDA EUA on January 11, 2021.
- VITROS® Anti-SARS-COV2 IgG Quantitative test is a highly accurate test for the qualitative and quantitative detection of COVID-19 antibodies. Clinical laboratories can confidently measure the antibody response for patients and trust the 100% specificity and excellent sensitivity. Further the test provides numerical values calibrated to the WHO standard NIBSC 20/136
- VITROS® Immunodiagnosics Systems Interleukin-6 (IL-6) Assay enables a lab, the detection and evaluation of inflammatory diseases in the most sensitive auto-immune disorders, critical sepsis patients, and critically ill patients of severe respiratory infections from COVID-19 and community acquired pneumonia(CAP) .
- All the above tests are available on a high-throughput, waterless, random access and fully automated VITROS® systems

## PEOPLE

- Ortho India took several steps during the COVID-19 pandemic to enable the labs and hospitals to serve their patients and to help its own team members; Because Every Test Is a Life™. Some examples of these include remote working arrangements, supply/re-imbursement for PPE, sanitizers during customer visits; Stress and Anxiety management workshops and company-sponsored online counselling.
- Ortho India also increased medical insurance cover for all team members, provided regular training webinars through its new DDK (Daily Dose of Knowledge) and Friday Forum programs, initiated COVID-19 safety protocols and awareness programs in warehouses and offices and launched new reward and recognition programs like thank you notes, "Calmer of the Storm awards," etc.

## PARTNERSHIPS

- Among its many partnerships, Ortho collaborated with the Biomedical Advanced Research and Development Authority (BARDA), during the COVID-19 pandemic. BARDA is part of the Office of the Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services. BARDA played a key role in supporting the development of Ortho's antigen and antibody tests as part of BARDA's and the federal government's ongoing COVID-19 medical countermeasure development efforts.
- Ortho partnered with several central and state government authorities and leading hospitals, creating awareness and delivering CCP therapy, assisting with sero-surveys and immunity testing before and after vaccination using the antibody assays. The notable ones are sero-surveys conducted by ILBS (Institute of Liver and Biliary Sciences) for Delhi Government, and TNMSC.

## CHALLENGES & BARRIERS

When developing its inaugural antibody test, Ortho knew it was critical to select the right viral protein that could be used to detect antibodies the body creates in response to the infection. The team experimented with viral proteins to make sure the test was sensitive enough to detect even low levels of the antibodies and specific enough to only react with the specific antibodies that are developed against COVID-19. Ortho's tests target the coronavirus' S1 spike protein, considered the most unique part of the SARS-CoV-2 virus.

Two different factors helped expedite the process:

- The unprecedented widespread nature of the pandemic meant the virus was quickly sequenced and published, making it easier to gain information about it, and Ortho's global network of healthcare professionals which facilitated fast, effective action.
- Following the selection of the viral protein and collection of blood samples from infected patients, the company applied its previously successful designs (such as those for HIV and Hepatitis C) toward COVID-19 tests, quickly resulting in high-quality assays.

Ortho launched both of its high-volume antibody tests with 100% specificity. In India, the nationwide lockdown, international flight disruption and movement restriction in containment zones posed several challenges for the supply chain and on-site service and support teams worried about the fear of infection. These challenges were



addressed through meticulous supply chain planning, web-based meetings and trainings or problem-solving sessions with customers, applying for e-pass for team members, vendors and goods movement from local administration, remote service through smart service tools, wide spread usage of PPE and sanitizers by team members, and virtual awareness and training initiatives for customers and team members.

## NEXT STEPS

Ortho India plans to continue its efforts to support its team members, customers, (labs and hospitals) and the larger community, as together we continue to navigate through this crisis. As the world moves into a new phase of the COVID-19 pandemic, understanding the immune response from vaccination and natural infection will be critical to get the world back to the new normal. An important factor in understanding immune response is being able to quantify the immune response for individuals and the population over time after exposure or vaccination

## LESSONS LEARNED

- The speed and agility with which three COVID-19 assays were developed and launched provided Ortho with an opportunity to revisit their internal processes. A lot of the best practices that helped them develop and launch these 3 assays in record time will get integrated into their SOPs for implementation in future as well.
- The quick adoption of SMART service (remote service tool/app) and utilising virtual platforms to stay connected with employees and customers, are the lessons learned from this pandemic.

## TESTIMONIES

The following testimonials have been received from few of Ortho India's esteemed customers. Many more can be seen on their social media handles.

"Would want to appreciate the support extended by the engineering, application and the sales team for the smooth functioning of the instruments and test parameters in our laboratory. During the lockdown, the team has extended support by their presence in person whenever required by the laboratory and provided remote support at the oddest hours."

"Our association with Ortho Clinical Diagnostics has been a very long one. With the passage of time, the partnership with Ortho has become even better. Their guidance is a mark of "Excellence in Profession". The uninterrupted services ensures we are able to deliver reports on time to our clients and that too packed with quality. They stand as a backbone to ensure our efforts are not wasted. We wish that this relationship of ours with Ortho Clinical Diagnostics nurtures with time and matures to the best."

"I take this opportunity to place the following on record. I know members of Ortho Clinical Diagnostics Team since last 10 years. They are highly dedicated and hard-working and have supported us in maintaining the uptime of equipment/s in our lab, round the clock, through the year. They have made their valuable contribution in patient care particularly during this existing pandemic. I wish them all the best."

"Our association with Ortho dates back as far as 2004. Since then we have been continuing to use Ortho

equipment because of the constant support they give us in terms of engineering services, application and trainings. They have even helped us in improving the processes in our lab. This has helped us to improve the quality of our services. Now in 2020, with the start of COVID-19, when the whole country was in lock down and transportation was and still is a major problem- the support of Ortho continues uninterrupted. The proactive software used by Ortho has helped us a lot in early identification of any problems in the instruments and thereby reducing the downtime of these analyzers. Be it supply of reagents or services or training of the staff, the support of Ortho team is always there. I would like to extend my sincere thanks to the whole team."

"The prompt, timely and expert approach towards servicing of the analyzers has left a ray of hope, confidence and assurance while dealing with the diagnosis and treatment of Patients. An experience regarding the e-connectivity of the analyzer where the Engineer has identified problems in the instrument remotely, has helped us to take corrective measures before time, thereby reducing the TAT of the test and have thus assisted us in the effective treatment of patients. Keeping your goal foremost in making the Customer satisfied with accurate diagnosis, we wish Ortho Clinical Diagnostics all the best for your Future Endeavors and Growth in Business."

## **ANY OTHER SIGNIFICANT STORIES**

Patients stories, Hospital Stories, Community stories

Ortho India ran several social media campaigns, as COVID-19 safety protocols, CCP therapy, Kidney care, Mental health, Cancer, through subject matter specialists, doctors and patients.

Awareness drive for donating blood and recognizing the frequent donors through "Blood Donor day" celebrations across the blood banks in India.



**Company:** Roche Diabetes Care  
**Author:** Omar Sherief Mohammad  
**Designation:** GM India

## PHILANTHROPIC CONTRIBUTIONS

Donated PPE Kits to 8 COVID-19 BMC hospitals – 2,500 units including the following. Value INR 1,800,000/-

Item Description	Quantity
Surgical Gown	2500
Hood Cap	2500
Nose Mask Venus with respirator	2500
Hand Gloves	2500
Full face goggle	2500
Face shield	2500
Hand Sanitizer	250000 ml
Shoe Cover	2500

## PRODUCTS

Roche Diabetes Care is a pioneer in providing integrated Personalised Diabetes Management solutions, which includes -

- Connected glucometers
- Telemedicine solutions
- Insulin pumps

## PEOPLE

### Awareness activities

People with diabetes are at high risk of developing COVID-19 related infection. Considering this fact, Roche Diabetes Care started several initiatives to spread awareness among patients and healthcare professionals.

- **Glucovigilance campaign:** During these trying times, people living with diabetes (PwD) are at a higher risk of complications, if infected. Hence, it is critical for PwDs to maintain good glycemic control. As one of the leading players in the diabetes management category, Roche Diabetes Care India stepped up to help PwDs with authenticated information from leading KOLs to empower them to manage their condition better. This educational initiative was titled '**Practice #GlucoVigilance**'. Through this initiative, they reached out to around 3 Million PwDs through a 360° campaign across newspapers, digital and social media, SMS to consumers, patients' webinars, emailers to trade partners, etc. The campaign garnered an overwhelming response from consumers due to the high relevance and credibility of the content (survey among the consumers post-campaign showed that ~95% of consumers found the content relevant, useful, and trustworthy).

## Training

### Diabetes and COVID-19 awareness by key opinion leaders to healthcare professionals

- **Continuous medical education webinars on integrated personalised diabetes management (iPDM) for healthcare professionals (HCPs):** In 2020, Roche Diabetes Care conducted more than 30 webinars to cascade the importance of glucose monitoring, structured self-monitoring of blood glucose and integrated personalised diabetes management. These series of webinars helped them to cascade iPDM strategy to more than 5,000 HCPs in India.
- International speakers meet focusing on telemedicine and iPDM approach for healthcare professionals: International and Indian key opinion leaders shared their best practices and gave a holistic approach on taking care of patients during these stressful times. Attended by more than 1,000 HCPs across the globe.

### Building team capabilities during these times for better service

#### Changing Behaviors, Changing Results & Business Transformation through Capability Building

Sales Training is a critical function, which has the responsibility of bringing about positive behavior changes in the sales team members through constant Learning & Development initiatives. The task at hand was challenging on account of two developments:

- Transformation in business model from two different sales channels (HCP & Retail) to one Hybrid sales team. This meant that a large section of the sales team has to quickly develop, not only new knowledge and skills to face the HCP customers, this also called for a shift in mindset among the erstwhile Retail sales colleagues.

With the help of technology and IT capabilities available to them, the training team initiated a series of **Virtual Training Programs**. It was the first time that a virtual training program was initiated, and it was important that the **impact and effectiveness of the intervention should be no less than that of a physical classroom training**.

- **Innovation:** The hangout sessions turned out to be quite successful going by the participant engagement that these sessions achieved. It is quite an innovation from the training team that all the components of a physical training session such as Role-play exercises, small group discussions, participant presentations, quiz, feedback sharing, besides the trainer led sessions were carried out in the virtual environment.

- **Shared responsibility & Teamwork:** The unique advantage of virtual training sessions is that one can engage participants regardless of the geography they are in; the team took advantage of this and lent their training support to sales colleagues who may not be in their zone of influence. This way the team ensured that all the training requirements are fulfilled by sharing responsibility and demonstrating teamwork.
- **Teach-back a yet another innovation:** In order to see how well the knowledge and skills are retained and reproduced, Teach-back sessions were initiated. These are sessions where the participants present a topic related to a knowledge or skill aspect of their functional domain. These sessions helped the trainer to understand the extent to which the learner can use the knowledge gained by them on their job. For the learner it helped them to transition from being passive recipients of knowledge to active users of knowledge.

### Joint Call Support:

- The sales teams were unable to call on customers because of the pandemic situation. They were not used to making virtual calls and not many virtual calls were happening in the month of April & May. This is when the training team came up with a support plan after identifying the issue behind the difficulty faced by sales teams in making virtual customer calls. They created scripts, which could be used to make virtual calls and help engage customers. The sales teams were supported with practice of these scripts in their respective teams. These practice sessions were facilitated by Field Training Managers (FTM) and went a long way in instilling confidence in Training Managers (TMs) and building trust in their managers that virtual sales calls can also be engaging and productive. Eventually with joint call support and well-rehearsed sales scripts, the sales teams started clocking more virtual calls and accomplish successful call outcomes. Sales team transition to hybrid was complete by June 2020.
- Roche Diabetes Care, India had a vast majority of TMs in the organization who had no experience of HCP engagement were now required to interact with HCPs. To make matters worse they had to do it virtually. Once again joint call support from the training team in terms of a sales script for HCPs, followed by practice sessions, brought about the behaviour and mind-set change required. Soon the sales teams started making more virtual calls not only through telecons, but also through hangout meets.

The Field training Managers have adapted admirably well to the challenging situations. They have used technology well to engage the internal stakeholders in various learning sessions in a planned and structured manner. They have together managed the training requirements of the sales organization and provided in time training solutions. Be it equipping the sales teams to all products, all channels, or building the knowledge and skill base of Hybrid teams. The training team has played a very influential and significant role in facilitating the transformation of the sales organization into a hybrid team.

### Frontline support by customer care team

- Roche Diabetes Care were regularly coordinating with their Courier partner to ensure that the replacements are delivered to maximum locations. For any urgent replacement requirement of the customers, they took help from the Sales team to arrange the replacements locally through distributors, where courier services had not resumed.
- They also introduced reverse pick-up service for customers. This is one of the unique services provided by Roche Diabetes Care India Pvt Ltd. For all replacement cases, they collected the non-working meters from

customer's residence and provided new replacement meters. This eliminated the patient's need to visit the courier agency/chemist for replacement of the meter.

## PARTNERSHIPS

- In order to provide continuous patient care during these times, Roche Diabetes Care collaborated with several organizations such as UDAAN, THB, Pharmarack, Pharm easy, Tech Mahindra, Wellthy, AWACS, Phable care.
- Collaborated with Edelman and SHARP NGO to drive awareness of Type 1 Diabetes among children through schools - 9 schools in 3 cities (Delhi, Bangalore & Chennai). Through this initiative, they were able to impact more than 2,000 school children.

## CHALLENGES & BARRIERS

There were several challenges initially however, the Roche team tackled them to provide the best possible service during these stressful times.

### Challenges faced by the customer service team

- Roche Diabetes Care's call center was forced to shut on 21st March 2020 due to Covid-19 lockdown & was operational from 27th March with 8 agents working from home. From April - May 2020, the call center was functional with 72% staff working from home. June onwards 100% staff was working from Home.
- Customer Service team provided support to customers via Inbound Calls, Emails and SMS from Monday to Saturday between 7.30 AM to 9.30 PM. During the pandemic, customer service was functional on Sundays as well. Roche hired additional agents in September 2020 to answer maximum calls.

### CSR Challenges

- Initially the school education programme was planned for pan India in the form of interactive workshops. Due to nation-wide lockdown since March 2020, Roche had to re-look at a new model to conduct this awareness and education campaign. They then worked with an NGO and various schools to modify the programme into virtual sessions.
- Creating and retaining attention of children through virtual sessions was a challenge, as it would affect message retention. To overcome this, Roche designed engaging content, which specially catered to the target age group of 8-10 year old children. The sessions were planned to ensure enough interaction through videos, games and activities to make sure that the messages were conveyed effectively.

## NEXT STEPS

Roche Diabetes Care has been taking necessary steps in an agile way to serve their patients efficiently during COVID-19. They plan to collaborate with more like-minded partners who can help cascade their iPDM strategy, keeping patients at the centre.

## LESSONS LEARNED

- Working in an agile format to quickly respond to the changing external environment.
- Identifying and joining hands with partners who had experience of working with the target audience and who could share valuable insights to make their programs a success.

## TESTIMONIES

Feedback for Roche Diabetes Care from schools where DiaBeaters programme was held:

- Dominic Savio Matriculation Hr. Secondary School, Chennai - "It was engaging and informative. I told smiriti to take one more session and she managed immediately. Coordination was also good. God bless!"
- Maharishi Vidya Mandir Senior Secondary School, Chennai - "Children enjoyed the fun based activities and they very well took up the super hero concept."
- Narayana e-Techno School, Bangalore - "It was great initiative to teach students about diabetes. It was informative session and kids were also enjoying."
- Sri Ram Global School, Delhi - "It was really good. We will be interested for future like these sessions."
- VelammalVidyalaya, Chennai - "Thank you for the session. it was informative and even down towards the students' level."
- Vidya Bharati School, Delhi - "Session was well organized and very informative for students."

Feedback for Roche Diabetes Care from BMC hospitals after donation of PPE kits:

- BYI Nair Ch. Hospital, Mumbai Central: "It is with much pride and gratitude that we inform you that this activity was a resounding success and has immensely benefitted our doctors and staff in the hospital. Doctors and staff were indeed impressed and benefitted immensely with the supply of requisites during pandemic."
- Seth GSMC & KEMH, Mumbai: "It is with our utmost sincerity that we convey our thanks and gratitude to Roche Diabetes Care India and team for their assistance and unconditional support during the pandemic."

Feedback for Roche Diabetes Care received via Customer Service

- "Thanking you very much for the prompt response. I am pleasantly surprised to receive a same day reply from you, considering the current situation of total lock down. Now that's what is "Customer Focus & Customer Response" in the true sense. " 30-Mar-2020
- "Thank you for your response and I appreciate your prompt resolution and sensitivity to the situation." 26-Mar-2020



- "Thank you very much for the cooperation of your trusted and good behaved team member who solved my difficulties with patiently on phone yesterday evening and I am very much satisfied with your service . Hope your cooperation in future also."
- "Very glad to receive the replaced machine sent by you. We want you know that we are very much pleased with the quality of service you provided. We sincerely appreciate your responsiveness and the way you have cared for our health and needs of a customer. Thank you for your excellent service. Your service made us to continue as a proud member of Accu-Chek family."



**Company:** Roche Diagnostics

**Author:** Narendra Varde

**Designation:** Managing Director, India and Neighbouring Markets

## PHILANTHROPIC CONTRIBUTIONS

To support the COVID impacted families, Roche Diagnostics in India supported the 295 families in the Saphale region affected by the lockdown by distributing basic necessities and safety needs. This was a part of the CSR initiative - Project Roshni.

- Provided basic provisions to 100 farmers with no livelihood.
- Supported 62 ASHA workers working in the areas on COVID-19, so that they build their immunity as they go about their jobs.
- Supported 133 daily wage labourers, with no jobs nor income.





## INNOVATION/R&D

- Globally, Roche recalibrated the supply plans to address the medium-term testing requirements for India.
- Despite the severe manufacturing constraints, Roche has increased the supply of cobas 6800 /8800 instruments to meet the order requirements.
- At an India level, Roche Diagnostics expanded their voice in the market by making their non-sales functions also perform sessions with their partners on antibody testing to secure a better future for our community.

## PEOPLE

- Roche Diagnostics India rapidly worked towards increasing the possible supply of key tests. They partnered with local authorities and organisations to support front line healthcare providers and continued to help make sure that patients - many of whom have very serious illnesses - receive the care they need.
- During the initial months of lockdown, there was a restricted supply of materials, Roche liaised with their Swiss-Indian Chamber of Commerce (SICC) members to ensure the supplies were delivered from their manufacturing locations on time.
- The sites for Roche's PCR machines were given priority access to **dedicated service teams and training professionals from across the globe**. To keep the RT PCR labs running 24/7, the spares were stocked at local warehouses & if needed flown from different cities using Government chartered flights to keep the laboratories running during the COVID pandemic. These instruments were later testing 1,500 samples a day.
- Internally, to further safety & confidence, Roche as an organization offered its Antibody tests to its employees across the world. They also recognized their Roche heroes who risked their lives and were out on the ground making sure that India could ramp up its testing rates.



During the lockdown, people of **Roche Diagnostics India** have played roles no less than of "Heroes".  
Proud to present two such stories of courageous endurance.



**Sanjay Singh**  
Project Specialist - MBSS

**Sanjay** is a project specialist. During the COVID-19 situation, he took up many roles or tasks to help in rolling out the COVID testing in India. From rigorously working on the field along with other institutions to begin the initial sample testing of our diagnostic solutions, to working with the Government teams on managing the ground execution, including arranging special flights for timely delivery of our solutions to different States, he has completely handled different profiles during such trying times. Sanjay, your commitment to patients' needs continues to make a huge difference to not just Roche Diagnostics India but to the country at large. Thank you!

Until the COVID-19 lockdown was announced, **Arun Kumar** was managing our Chennai warehouse, which acts as the mother warehouse to support the rest of the regions. During lockdown, Arun is almost a permanent figure at the warehouse. With flight and cargo operations almost at a standstill and the multiple new steps and approval included in the entire logistics process, all amidst reduced manpower in the cargo handling areas, Arun has been at the forefront managing workarounds to get our diagnostics solutions within the country. Arun and his team's commitment and focus continue to make a huge difference to the organisation. Arun, thank you!



**A. Arunkumar**  
Senior Manager -  
Imports & Warehousing

*Such are the warriors who have rigorously been on duty and continue to make a huge difference to our organization and our society*

## PARTNERSHIPS

- During the pandemic, Roche Diagnostics partnered with their service providers to keep their warehouses functional even during the lockdown period. Roche's service providers supported them whenever needed during a pandemic, right from making arrangements for workforce pick up and drop, taking all necessary precautions, obtaining permissions from local authorities to operate, procurement of packing materials and delivering goods to customers and ensuring business continuity. They understood the constraints under which the team worked during the peak of the pandemic and they were really appreciative of all the hard work and commitments.

Everything finally came together, and they were able to serve their esteemed customers, thanks to the hard work of ground level people and their service providers, which established their reputation as key healthcare service providers.

## CHALLENGES & BARRIERS

- **For Customers**
  - Roche's immediate step was to adopt digital tools to ensure service continuity
  - Engaging with customers digitally to ensure continued communication
  - They looked at their existing portfolio and engaged with doctors to ensure relevance of some of their tests is understood (e.g., implications of COVID in patients with co-morbid conditions)
- **Partnership with Trade Chambers:** Focused on advocacy to expand testing in India, Roche Diagnostics published white papers and worked with trade partners to push for increased scale of testing.



## LESSONS LEARNED

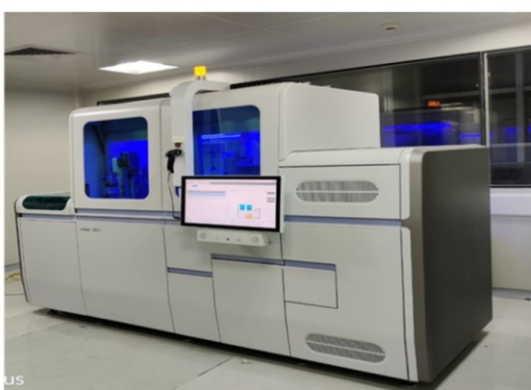
At Roche Diagnostics, they work with an urgency, passion and purpose each and every day to improve the situation and help each other amidst an unprecedented global pandemic.

They bravely continued to work around the clock to ensure that patients receive their solutions as fast as possible. It is uncharted territory with many challenges but they are determined to continue providing healthcare systems, communities and individuals the tools they need to overcome COVID-19.

## TESTIMONIES

"We, at Roche Diagnostics are committed to support the Indian healthcare system in its battle against COVID-19, by scaling up supply and enabling access to quality diagnostic solutions at various stages of disease progression. We are committed to explore public-private partnerships to build scale and thereby access to improve access to world class diagnostics solutions across women's health, oncology, cardio metabolism and infectious diseases including COVID."

- Narendra Varde, Managing Director, Roche Diagnostics India & Neighboring Markets



- Installations across National Institute of Biologics, Noida, RMRC Bhubaneswar, NCDC, Delhi
- Dr. Harsh Vardhan (Health Minister) inaugurating the site at NCDC
- Above & beyond – Service Member' disregarding persona loss; & focused on installation of instrument



**Company:** Siemens Healthcare  
**Author:** Vivek Kanade  
**Designation:** Managing Director

## PHILANTHROPIC CONTRIBUTIONS

In such tough and uncertain times, Siemens Healthineers could support the fight against COVID-19 through various CSR initiatives of Siemens Ltd. While Siemens Ltd front-ended the philanthropy part, Siemens Healthineers provided the necessary expertise, tests and resources to implement these initiatives.

Following are some of the key contributions that ensured continued operations and enhanced capabilities at various healthcare facilities across India -

- Set up of a Molecular Lab for AIIMS National Cancer Institute, Jhajjar.
- 40,000 RT-PCR Molecular Tests donated to National Institute for Research in Reproductive Health (NIRRH).
- 5000 SARS-CoV-2 Total Antibody Tests for Sardar Vallabhbhai Patel Institute of Medical Sciences and Research Hospital, Ahmedabad.
- 20000 SARS-CoV-2 Total Antibody Tests for AIIMS National Cancer Institute, Jhajjar.
- 9000 SARS-CoV-2 Total Antibody Tests to Lok Nayak Jai Prakash Narayan Hospital (LNJP) & Guru Teg Bahadur Hospital (GTB).
- 4000 Ferritin tests to LNJP & GTB Hospital.
- 6000 Procalcitonin tests to LNJP & GTB Hospital.
- 7000 IL-6 tests to LNJP & GTB Hospital.
- 4000 Troponin I Ultra to LNJP & GTB Hospital.
- 9600 FTD SARS-CoV-2 RT PCR tests to LNJP & GTB Hospital.

## INNOVATION/R&D

- Siemens Healthineers India, being part of a global organisation, draws most of the innovations from its globally spread research & development footprint. For COVID-19, they were pioneers in bringing out high sensitivity RT-PCR tests that evaluate multiple gene expressions.
- As a part of the India initiative, Siemens Healthineers offered Remote Scanning capabilities for imaging equipments that enabled their staff and clinicians to perform CT Scan/MRI procedures from secure and



secluded facilities within the hospital. This was instrumental in enabling these institutes to remain operational and to allow their key-personnel to remain socially-distant from the effected patients who required these CT Scan/MRI procedures. This capability was provided free of charge for 90 days to Sree Chitra Tirunal Institute of Medical Science and Technology, Trivandrum and Medanta, The Medicity, Gurgaon.

- Siemens Healthineers also developed a prototype based on Machine-learning that enabled imaging facilities to evaluate the progression and remission of pneumonia induced by COVID-19. This Prototype was provided to nine imaging facilities in government and private hospitals across the country for a period of at least 90 days.

## PRODUCTS

One of the effective ways to control the spread of pandemic is early diagnosis leading to timely treatment. Siemens Healthineers was quick to come up with solutions that helped in early diagnosis and confirmed infection for further treatment. Below are the solutions offered by the organisation:

- **SARS-CoV-2 RT-PCR Tests:** The molecular assay uses real-time PCR to detect RNA from the virus in determining infection.
- **SARS-CoV-2 Total Antibody Assays:** Rapid and accurate antibody testing on a large scale is vital to address the challenges of the COVID-19 pandemic. The COV2T assay detects both IgM and longer-lasting IgG antibodies with high sensitivity of recent and prior infection. This allows for identification of patients who have developed an adaptive immune response, which indicates recent infection or prior exposure.
- **IL-6:** Interleukin-6 (IL-6) is an early indicator of inflammatory response to illness or injury. An important mediator of the immune response to pathogens, IL-6 is a member of the cytokine class of chemical messengers that induces both pro- and anti-inflammatory responses. It plays a significant role in the development and escalation of CS in COVID-19 patients.
- **Procalcitonin:** Sepsis is a leading cause of death in hospitals worldwide, placing a significant health and economic burden on both patients and healthcare institutions. An early and accurate diagnosis can save precious time, expense, and most importantly, lives. The Siemens Healthineers B-R-A-H-M-S Procalcitonin (PCT) Assay can aid healthcare providers in the diagnosis of sepsis. As PCT is a critical marker in Sepsis diagnosis and monitoring, there is a high chance of secondary bacterial infection in COVID-19. Hence monitoring the PCT levels of a COVID-19 patient is critical.
- **Ferritin:** Measurement of ferritin aids in the diagnosis of diseases affecting iron metabolism, such as hemochromatosis (iron overload) and iron-deficiency anemia. The ferritin test is typically ordered to assess iron stores in the body. The test is sometimes ordered along with an iron test and a TIBC to detect the presence and evaluate the severity of an iron deficiency or overload. Ferritin is a key mediator of immune dysregulation. Many individuals with diabetes exhibit elevated serum ferritin levels while infected with COVID-19 and are likely to experience serious complications.
- **Troponin I Ultra:** The detection of a rise and/or fall of cardiac troponin (cTn) plays a key role in the earlier diagnosis of myocardial infarction (MI). Cardiac troponins are markers of myocardial necrosis, and, because of their high cardiac-specificity, are the preferred biomarker for the diagnosis of MI. Elevated Cardiac Troponin I levels indicate cardiac injury and was associated with several fold increase in mortality risk in COVID-19 patients.

## PEOPLE

### Silently ensuring safety of their employees

An unprecedented time requires unprecedented steps to combat the deadly virus. While anticipating this was difficult, Siemens was prompt enough to take quick actions to ensure safety of their employees.

- In February 2020, when the first case was discovered in Kerala, their field employees were exposed to the risk of infection. The organisation was quick to arrange Personal Protective Equipment (PPEs) for them, and then for the entire India team, on a war-footing basis.
- With the virus spreading fast across other states, a need to procure higher number of PPEs looked inevitable. Estimating the total requirement of PPEs for the frontline employees, the organisation evaluated the comprehensive demand while assessing the distribution possibilities. The suppliers were identified, negotiated and their production was reserved for Siemens Healthineers, to ensure smooth supply on a timely basis.
- Siemens' warehouse partners, spares Logistics and Schenker also extended excellent support through their staff, to accomplish the target of acquiring and distributing 525,750 PPEs in different parts of the country.

### Regular communication with the frontline employees emphasising their safety and the safety at workspace

Understanding the criticality of their work and support to healthcare professionals, Siemens' employees were willing and proactively helping their partners in the war against COVID-19. The organisation used all possible mediums like emails, messages, newsletters, videos etc. to regularly communicate on the importance of safety and how to keep themselves, family as well as workplace safe amidst the pandemic.

### Trainings and upskilling

Until 2019, digital adoption was slow and varied significantly across the countries. Since the COVID-19 situation put a hard-stop to the "Onsite" events, the teams were prompt in adopting the digital platforms to engage with the customers and Radiology community.

- The Customer Service (CS) Team played an important role in the commissioning of new labs for COVID -19 testing
- On the other hand, the Application Support Team helped in training of staffs to perform COVID-19 testing in the newly commissioned labs
- To ensure sustained engagement in these unprecedented times, the CS Apps team conducted 35 plus webinars reaching out to approximately 5,000 plus technologists and provided 12 plus online customer trainings.
- The CS Apps team and BL teams together launched Webinar for Radiologists and reached out to 600 plus physicians via Knowledge sharing platforms.

## PARTNERSHIPS

Siemens' key partnerships during the pandemic include the following:

- **ICMR:** Supplied RT-PCR tests which were distributed across the various ICMR sites in India. At some locations, Siemens' application support team worked in tandem with ICMR officials for validation purposes.

- **NCI-AIIMS Jhajjar:** Helped them in setting up a molecular lab.
- **LNJP & GTB + SVP Hospital:** Donated Immunoassay tests at these institutes and Siemens' application team assisted the respective lab personnel to configure the parameter on their system.

## CHALLENGES & BARRIERS

- Due to the pandemic, there was a complete disruption of logistics support, as globally movement was restricted. The challenge to cater to the constant and ever-increasing demand for reagents and consumables was the most daunting task on hand. Siemens Healthineers was also facing severe challenges when it came to importing and distributing of essentials to its customers.
- The organisation was entrusted with the responsibility of urgently arranging the COVID-19 testing kits in the country and distributing them to the medical professionals to examine the infected people. The task was extremely critical in nature as the kits would help identify the infected people and thereby controlling further advancement of the disease.
- Lack of commuting options, strict actions by cops on all the personal and commercial vehicles across interstate borders, limited staff at customs and scarcity of loaders and special handling equipments at ports made the clearance and transportation operations far more challenging.
- Taking the situation as "Mission Critical" to mitigate the challenges, the organisation aligned with all concerned government authorities to get necessary approvals for the flawless clearance of shipment. The team responsible for delivery showcased some remarkable work by handing over the kits on the same day to the customers in Mumbai and arranging a special flight with Air India for carrying the kits from Mumbai to Tamil Nadu Medical Services Corporation Ltd.

## NEXT STEPS

COVID-19 has changed our lives and the way we perform. Patience, and empathy is a key while addressing any customer issue especially during these challenging times. Little efforts can go a long way to create big impact. Customer service has become imperative for Siemens especially in difficult times like these, when their customers are overburdened with patients and saving lives have become the only motto of the day. Helping in a time of need and enabling healthcare professionals has always been their prime focus.

At Siemens Healthineers, Today is about Tomorrow. Keeping this in mind, they promised to put their best foot forward each day and work closely with the front-line warriors, enabling them in their fight till we all overcome this pandemic.

## LESSONS LEARNED

A constant and relentless TEAM effort helped Siemens synchronize to deliver their best. The most important lesson learnt was - Expect the Unexpected.

## TESTIMONIES

**Sri Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum,** wanted to run the operations with optimum staff to ensure safety of their employees and optimum usage of PPEs. Siemens facilitated them with the option of remote scanning by using SHS syngo Virtual Cockpit Lite. The software ensured minimum chances of employees getting infected as only one person interacts with patients, vis-à-vis three during a normal

MRI scan. It also reduced the chances of getting further infection due to aerosol contamination for a large group of paramedical staff and thereby leading to a minimal demand for PPE. Siemens received the following appreciation from the customer:

**Dr. C. Kesavadas, Professor & Head of Radiology, SCTIMST, Thiruvananthapuram** said, "Thank you for providing us with Syngo Virtual Cockpit Lite. The tool has been of immense use during the present COVID-19 pandemic time. Usually when we do MRI studies, we have 3 personnel in the console room - the radiologist and two technologists. With the capability of remote scanning assistance, only one technologist with the protective gown and mask stays in the console. The radiologist and the second technologist work from the first floor of imaging complex having a separate air-conditioning. As a result, the number of per patient professional protection equipment required is less. At the same time, safety of personnel scanning the patient is better because of social distancing and working in a remote environment."

**CSI Kalyani Hospital, Chennai**, was facing an issue with its CT Scanner. Post the Government declaring it as an exclusive hospital for treating COVID-19 patients, all the private diagnostic centres refused its patients for any chest CT cases as they were treating patients suffering from the deadly virus. This led to an urgent requirement of a fully functional CT scanner within the hospital.

While the defective spare-part was identified and ordered by the hospital, delivering the same from Mumbai warehouse to the client's location was a challenge. Due to the lockdown, the courier partner was operational only select days in a week and hence attending to the customer's CT machine looked impossible.

Rather than waiting for the spare part from the Mumbai warehouse, Siemens' team quickly analysed the situation, compared the time span to receive the order in Chennai and took the initiative to identify and locate an alternate closer location from where it was delivered in the shortest possible span of time. They received the following appreciation from the customer:

**Dr. J. J. Jayant, The Medical Director, CSI Kalyani Hospital in Chennai**

"Thank you, sir. We are doing all our pending CT Chest studies. No standalone scan centre is willing to do CT chest for us. Thank Siemens for all your extraordinary steps taken to solve the problem"



**Company:** Teleflex Medical

**Author:** Praneet Mehrotra

**Designation:** Managing Director - South Asia  
South East Asia / Hong Kong / Taiwan

## PHILANTHROPIC CONTRIBUTIONS

- Teleflex has donated Rs. 16.5 Lakhs to the PM-CARES Fund to support the nation's fight against the coronavirus onslaught. In addition to this, many of their employees also contributed to the PM-CARES Fund.
- Teleflex has donated medical supplies to employees & their family members through its Humanitarian Donations program, such as PPE including face masks with shields, gowns masks, hand sanitizer to meet the urgent needs.

## INNOVATION/R&D

Over the years, customers, clinicians and others have been a source of great product ideas. Teleflex's global research and development teams have collaborated with these experts to bring new products to market advancing innovation and patient care.

## PRODUCTS

### Treatment:

Several Teleflex products have been used in the hospital setting to treat conditions associated with COVID-19 including:

### Respiratory Therapy

- HudsonRCI® passive humidification & filtration products
- Voldyne® Incentive Spirometer

### Airway Management

- LMA®Protector™
- LMA®Gastro™
- LMA®Fastrach™ Airway
- LMA®Protector™ Airway

## Cardiac Care

- AutoCAT2WAVE® & AC3Optimus™ intra-aortic balloon (IAB) pumps and Arrow® IAB catheters

## Vascular Access

- Arrow®EZ-IO®Intraosseous Vascular Access System
- Arrow®central venous catheters, peripherally inserted central catheters and arterial lines
- Arrow-Clark™ VectorFlow® Chronic Hemodialysis Catheter

## PEOPLE

### Training and Knowledge Sharing:

- Teleflex was involved in several initiatives such as in education on safe and effective use of products, supporting healthcare professionals through a virtual platform to be able to effectively learn and implement best practices. The Virtual learning was through live interaction programs, on demand educational programs on Teleflex-academy.com as well as through live procedural demonstration using technology.
- Supported with global clinical programs and regional level programs, bringing in the subject matter expert virtually with best clinical practices in ICUs and respective therapy areas, to enable HCPs remotely learn and adapt in their clinical practices during the challenging times of COVID-19.
- Supported employees who are health care professionals and who have volunteered to return to the frontlines of their healthcare specialty to help in the fight against COVID-19 across India.
- Teleflex encouraged employees to focus more on self-development during the pandemic times by engaging themselves in online learning tools like Skillsoft E-Learning, LinkedIn E-Learning etc.
- Teleflex supported & encouraged employees to work from home during pandemic situation.

## PARTNERSHIPS

Teleflex celebrated World Disability Day in 2020 at Tamahar Centre for children with developmental disabilities, by constructing wheelchairs from scratch to enable greater access for needy people.

## NEXT STEPS

Teleflex continues to monitor the COVID-19 outbreak, while ensuring employee and their family members health and safety remains a top priority. Teleflex has encouraged all employees to work from home (wherever possible) and support government's efforts in controlling COVID-19 outbreak. In addition, employees are encouraged to take advantage of remote learning opportunities from the Teleflex Learning portal.

## LESSONS LEARNED

Teleflex has introduced flexible work arrangement policies for employees keeping in mind the health & safety of employees & their family members.





**Company:** Terumo  
**Author:** Shishir Agarwal  
**Designation:** Managing Director

## PHILANTHROPIC CONTRIBUTIONS

Terumo India Pvt Ltd (TIPL) was involved in various activities, few of them are mentioned below:

- Promoted education including special education and employment enhancing vocational skills among under privileged children, in collaboration with Narayana Hrudayalaya Foundation.
- Collaborated with NGO, Aishwarya Trust, based out of Bangalore, to conduct 1) Pre-screening camps in order to identify children suffering from Congenital Heart Disease (CHD) and 2) Support children diagnosed with CHD for surgical correction.
- Prepared SOPs/guidelines for hospitals about precautions to take care of HCPs and Patients during COVID-19.
- Prepared disease awareness articles and circulated them through social media.
- Participated/sponsored social media campaigns and creating awareness among general public to have confidence in the healthcare industry (Hospitals, Clinics, industry) and to win their trust for controlling COVID-19.
- Launched eTISL (clinical education online platform) for educating doctors in terms of expertise/different techniques virtually which was otherwise not feasible due to lack of physical meetings because of COVID-19 restrictions.
- Terumo a global leader in medical technology with a mission of "Contributing to Society through Healthcare" for 100 years is supplying USD 340,000 worth urgently needed medical equipment towards COVID-19 relief in India. Terumo Corporation's India subsidiary donated 100 Oxygen Concentrators to Sardar Patel Covid Care Centre, New Delhi and 100 oxygen concentrator to Armed Forces Medical Services, New Delhi. Terumo has also started supplying 150 BiPAP to various COVID Care Centres in the country.



## INNOVATION/R&D

Consistent with their corporate mission of "Contributing to Society through Healthcare", Terumo India Pvt Ltd (TIPL) believes in providing strong scientific value to HCPs in India, through periodic clinical and educational endeavors, for better patient care.

- To achieve this vision during the pandemic, they extended their skill enhancement programme to HCPs via eTISL-their next generation digital connect portal -to scale-up its medical education reach and impact. In a large country like India, there is no doubt that eTISL provides immense value to patients and the overall healthcare ecosystem of the country. Through eTISL, TIPL team has trained 8350+ HCPs during COVID pandemic in 2019. eTISL is a platform which helps in:
  - Knowledge Library to provide vast information
  - Patient Awareness information
  - Articles from top international journals under Journal Coverage
  - Online webinars, including past recordings to help HCPs learn at their convenience
  - Calendar View for all the upcoming events
  - Products related information with IFU's of different Business Units
- Previously TIPL had launched Terumo India Skill Lab (TISL) - "an educational platform designed to provide advanced clinical solution training and cutting edge techniques to deliver improved patient care", which was inaugurated in 2018. TIPL team trained ~2,500 HCPs in the first two years through 80+ programs.

## PRODUCTS

TIPL imports their products from the parent company factories in Japan, UK, USA, Europe, Vietnam, China and Philippines. The following are some of the products supplied by TIPL in India -

- **Interventional systems** - Introducer Sheath, Guide Wire, Angiographic Catheter, Radial Artery Compression Device, PTCA Guide Wire, PTCA Guiding Catheter, Aspiration Catheter, PTCA Micro Catheter, PTCA Balloon Catheter, Drug Eluting Stent, Micro Catheter, Guiding Sheath
- **Cardiovascular Group** - Oxygenators, Heart Lung Machine, Beating Heart Products, Hemoconcentrators, Bubble Trap, Arterial Filters, Cooling and Heating Devices, Stabilization and coronary artery isolation during OPCAB, Blood Parameter Monitoring Systems

- **Aortic** - Vascular grafts, endovascular stent graft systems
- **TPS** - Hypodermic Needles, Infusion Pump, Syringe Pump

## PEOPLE

Being one of the largest cardiac surgery solution providers, Terumo believes in skill building activities that impact patient lives. A Perfusionist, is a skilled allied health professional educated as a member of an open heart surgical team. In India, there is a need of good perfusionists.

- Terumo Scholarship Programme has been developed with a focus to promote education and employment enhancing skills among children. The programme has been conducted in collaboration with Narayana Hrudayalaya Foundation, one of country's leading and most respectable cardiac institutes, to give scholarship to students belonging to below poverty line segment to pursue a B.Sc. Perfusion Technology Programme. This initiative began in year 2016 and today 30 students are benefitted annually with this scholarship to study B.Sc. Perfusion Technology Programme.
- Additionally, TIPL conducts Volunteers Day where all associates have an opportunity to give back to society through different outreach programs. A number of them have been contributed by partnering with the Earth Saviours Foundation and Pragati School.

## PARTNERSHIPS

We are conducting pre-screening camps and surgeries and even during COVID-19, supported 72 under privileged children with surgeries for treating CHD Congenital Heart Defect along with close to 300 children in the last 3 years.

Terumo has collaborated with:

- Narayana Hrudayalaya Foundation for promoting education including special education and employment enhancing vocational skills among under privileged children,
- Aishwarya Trust, NGO based out of Bangalore, to conduct
  - Pre-screening camps in order to identify children suffering from CHD
  - Support children diagnosed with CHD for surgical correction.

## CHALLENGES & BARRIERS

- Terumo team has been instrumental in providing support through the following activities/initiatives:
  - Supporting the PHC (Primary Health Care) staff and Fortis team in organizing registration desks
  - Data entry of children enrolled for the camp
  - Distribution of patient education booklets on CHD

Due to COVID-19 situation, TIPL could not perform these activities effectively.

They were unable to collaborate with Narayana Hrudayalaya Foundation due to COVID-19 and the convocation also could not be planned during the pandemic.

## NEXT STEPS

TIPL is planning to digitize the processes for Narayana Hrudayalaya Foundation and Aishwarya Trust.

## LESSONS LEARNED

It was important that TIPL continue to support their partners for a long period of time. They have continued collaborating with Aishwarya Trust and Narayana Foundation for several years which has aided in building a strong partnership with shared values of societal care.

## TESTIMONIES



Narayana Hrudayalaya Foundation and Terumo partnership Picture of convocation organized at NH



### Pre Screening Camps supported by Terumo India Pvt Ltd



## ANY OTHER SIGNIFICANT STORIES

### Patients stories, Hospital Stories, Community stories

Terumo India's 'Volunteer Day' wherein the entire team spends the day at an NGO centre helping out those in need. In 2019, they went to Pragati School for Volunteer Day to spend time with kids at the School, and in 2018 they visited Mr. Ravi Kalra's Earth Saviour Foundation Centre, wherein they ran a clothes donation drive and a full day of volunteering camp.



With Humanity and compassion, our Associate volunteered for noble cause



### Volunteer Day at Pragati School







**Company:** Vygon

**Author:** Pavan Choudary

**Designation:** CEO and MD

## INNOVATION/R&D

- At the beginning of the pandemic, Vygon realized that hospitals would eventually have shortage of ventilators. Thus, they launched an innovative disposable CPAP, which needs no special training to operate and avoids the risk of volotrauma and barotrauma in patients. This was helpful in reducing the load on ICUs. After adding some simple connections to the device, this CPAP assembly becomes very effective and safe for patients and healthcare workers.
- Apart from this, to ascertain deeper vital statistics of the patient Vygon introduced an advanced Haemodynamic monitor based on PRAM technology, which is easy to calibrate and low on consumable consumption

## PRODUCTS

Vygon produces several other single-use medical devices which are proving valuable in the pandemic, like:

- Arterial catheters
- Smart Midlines
- Peripherally Inserted Central Catheters
- Central Venous Catheters
- Antimicrobial catheters
- Bacterial Filters
- Needle less connectors

Just a snapshot of Vygon's life-saving product, CPAP at work.



## CHALLENGES & BARRIERS

Since hospital access was restricted, Vygon organised a full canvass of digital outreach to the healthcare workers.

Further, by seeking support from the government bodies, they cleared the logistical hurdles and provided their products to all those who needed these.

## NEXT STEPS

Vygon will continue ensuring timely availability of products and training to help the healthcare workers in this time of need.

## LESSONS LEARNED

Knowledge, Quality and desire to serve are the keys to growing relevance.

## APACMed's Contribution to COVID-19 response in India

In a matter of months, COVID-19 has profoundly changed the world we live in. The pandemic has stretched healthcare systems, closed schools, grounded flights and brought global economies to a near halt. In India, the second wave of the pandemic has been particularly devastating.

In line with our mission to facilitate increased access to critical healthcare products and services for patients across the Asia Pacific region, APACMed supported the COVID-19 response in India by linking local trade associations and government agencies to APACMed members (manufacturers of medical devices, equipment, diagnostics), distributors of COVID-19 essentials in APAC, start-ups and SMEs, manufacturers in China, as well as international NGOs, such as the Singapore Red Cross, for supply of critical medical supplies.

We also received a number of individual requests from different stakeholders who were either seeking help or wanted to contribute to the response. Leveraging our network in the region, APACMed connected these stakeholders with different contacts to support with different needs and requests.

APACMed also published a paper, 'The Critical Role of Diagnostics in COVID-19 Management', which helped to elucidate the different testing tool sets available to support different pandemic scenarios, including community surveillance and hotspot management, economic resilience and recovery, travel resumption and vaccination rollout. The paper highlighted the utility of these tools in practice regionally and globally and provided recommendations on how these could be utilized to help societies work towards public health and economic recovery.

## MTAI's Contribution to COVID-19 response in India

MTAI through its committed and round-the-clock efforts, collaborated with the Department of Pharmaceuticals (DoP), Central Drugs Standard Control Organisation (CDSCO), and other government stakeholders for quick resolutions on logistical and operational challenges while mobilizing resources to assist patients during the lockdown.

It also advocated for customs duty and health cess removal to improve access of critical medical devices to patients.

MTAI also helped many of its members attain oxygen concentrators, oxygen cylinders, and critical COVID-19 medicines at the time of scarcity of these essential goods and its members have also made multiple philanthropic efforts during the pandemic.

In January 2021, MTAI collaborated with Price Waterhouse Coopers (PwC) to launch a comprehensive report on the "Impact of COVID19 on the MedTech industry".

This association, comprising of some of the most reputed global MedTech companies in India continues to robustly collaborate with the government on diverse projects like preparing for COVID-19 3<sup>rd</sup> wave, while at the same time trying to increase the Ease of Doing Business in India

## About Asia Pacific Medical Technology Association (APACMed)

Founded in 2014, the Asia Pacific Medical Technology Association (APACMed) is the only regional association to provide a unified voice for the medical technology industry in Asia Pacific, representing both multinational corporations as well as small and medium enterprises, together with local industry associations across the region.

Headquartered in Singapore, APACMed's mission is patient-centric, and we strive to continuously improve the standards of care for patients through innovative collaborations among stakeholders to jointly shape the future of healthcare in AsiaPacific. We are committed to working with governments and other stakeholders to facilitate patient access to innovative and life-saving medical technologies, supporting strong and thriving healthcare systems across the region, and promoting a robust and sustainable regional ecosystem that encourages investment, trade, and innovation.

[www.apacmed.org](http://www.apacmed.org)

## About Medical Technology Association of India (MTAI)

MTAI is an association of research-based medical technology companies that have made remarkable investments through a large number of R&D centres, manufacturing plants, and Healthcare worker training initiatives in India. MTAI represents a wide spectrum of the medical device, equipment, and IVD industry.

MTAI is a part of several important Government taskforces and advisory committees and is considered an informed voice of the industry. MTAI is also committed to finding a space for all the medical technology companies commensurate to their contribution to healthcare in India.

[www.mtaiindia.org](http://www.mtaiindia.org)

## Contact Us



Asia Pacific Medical Technology Association (APACMed)

1st Floor, Tower B, Unitech Business Park, Block F, South City I  
Sector 41 Gurugram, 1220002, Haryana, India

2 Science Park Drive, Ascent Tower A, #02-07, Science Park I  
Singapore S118222

### **Anirudh Sen**

Country Lead, India & Director, Regulatory Affairs APAC  
APACMed  
[anirudh\\_sen@apacmed.org](mailto:anirudh_sen@apacmed.org)



Medical Technology Association of India (MTAI)

B-17 Infocity, Sector-34, Gurgaon,  
Haryana 122001, India

### **Pavan Choudary**

Chairman and Director General  
MTAI  
[dg@mtaiindia.org](mailto:dg@mtaiindia.org)