



**Our Impact and Footprint in India** 





Message from the CEO

#### The Value of Medtech

#### Impact Areas

#### Public Health

Economic Development, Skill & Infrastructure

Social & Environmental

Research & Development

#### Way Forward

"Member companies are committed to working with governments in the region to shape policies that provide patients timely access to high quality and lifesaving medical technologies."



# Message from the CEO

Guided by the principles of Access, Innovation and Collaboration, the Asia Pacific Medical Technology Association (APACMed) and its member companies are committed to working with governments in the region to shape policies that provide patients timely access to high quality and lifesaving medical technologies. We believe that improving health outcomes contributes to sustainable healthcare systems, resulting in healthy societies and stronger economies.

APACMed members have over the years made a significant contribution to the Indian healthcare sector and overall economy through their people, products, and partnerships. Our members are committed to providing innovative solutions to cater to the evolving demographic, epidemiological and public health needs of the country.

This book intends to highlight the journey of our APACMed members and their impact and contribution on the healthcare industry in India. We continue to encourage collaboration amongst healthcare stakeholders so our shared objectives of saving lives and creating value for patients and health systems is realized.

> APACMed members remain fully committed to partner with Government of India to realize the vision of a future ready India@2047!

> > - Harjit Gill





# Defining Medical Technology

### Every day, medical technologies help save the lives of patients across the country.

Medical technologies can be defined as the technologies that diagnose, treat and/ or improve a person's health and wellbeing, encompassing both low- and high-risk medical devices – products from tongue depressors, surgical gloves and medical thermometers to insulin pumps, pacemakers and in-vitro diagnostics – and used to save the lives of patients across the world every day.

Medical technologies can assist healthcare professionals to diagnose and treat patients with a higher level of accuracy and in a timelier fashion, and can help patients overcome sickness and disease, improving their quality of life.

#### With You Every Step of the Way

#### Prevention

Recent advances in sensors (wearables), imaging and genomics, along with big data, inform personalised recommendations to help people to stay healthy and prevent disease.

MedTech is present at every stage across the treatment spectrum from bandages and optical lenses in everyday use, to highly complex interventions like cardiac and orthopaedic implants.

#### Diagnosis

Timely and accurate diagnosis, using imaging and laboratory tests, empowers healthcare professionals with the information they need to make clinical decisions and provide care that optimises patient outcomes.

New models of care, underpinned by digital health solutions and other medical technologies, have enabled patients to access 'care anywhere' and empowered patients with the tools they need to become active participants in the management of their own healthcare.

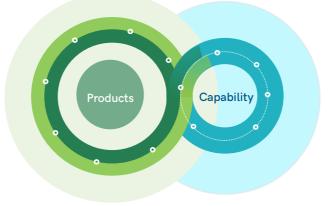
#### Management



#### Treatment

# Dimensions of Medtech Contribution

Strong healthcare systems underpin healthy societies and drive economic prosperity Supporting healthcare systems by providing essential products and capability to deliver care effectively



#### Strong Healthcare Systems

Key building blocks of well-functioning healthcare systems:

- Policy and governance
- Financing
- Essential medical products and technology
- Human resources
- Technical knowledge and skills
- Infrastructure and services







#### 

#### Healthy Societies

Strong healthcare systems lead to:

- Better clinical outcomes and patient experience
- Healthy individuals, families, communities and populations
- Protection against disease
- Individuals and communities empowered to manage their own health

#### Economic Prosperity

Healthy societies lead to:

- Increased productivity
- Reduced absenteeism
- Reduced unnecessary healthcare utilisation
- Protection against the financial consequences of ill-health

The global medical devices market size valued at USD 488.98 billion in 2021, is projected to grow from USD 495.46 billion in 2022 to USD 718.92 billion by 2029, exhibiting a CAGR of 5.5 per cent during the forecast period<sup>1</sup>. Medical devices constitute a multi-disciplinary sector with the broad classification including Electronic equipment, Implants, Consumables and Disposables, Surgical instruments and In-Vitro Diagnostic Reagents. The current market size of the medical devices sector in India is estimated to be USD 11 billion and its share in the global medical device market is estimated to be 1.5 per cent<sup>2</sup>. The sector in India is witnessing fast growth with a CAGR of 10-12 per cent over the last decade, as per government data<sup>3</sup>. The Indian medical devices industry was given the status of independent industry, and accorded the status of 'sunrise' sector in Make in India campaign in 2014<sup>4</sup>.

The Indian medical devices sector has a great potential to grow, especially in the high-end complex devices segment. The current demand supply dynamics of the Indian medical devices sector offer a great opportunity for investments for manufacturing in India. With support from the Government, the medical technology industry is determined to ensure self-reliant India reach its potential of attaining self-reliance, expanding its benefits to all stakeholders viz, patient community, healthcare sector, industry players, scientists, academia, etc.

- 2 Medical Devices Industry in Sunshine Sector, Civils Daily, 2023
- 3 Indian Medical Devices Industry, Business Today, 2022
- 4 Medical Devices Industry Analysis, IBEF, 2022



In its commitment to this growth journey, the APACMed member companies have marked their presence in India for over 80 years and have invested in setting up regional offices, production centres, R&D centres, training facilities and marketing offices across the length and breadth of the country. With a conscious understanding of the healthcare needs in India along with the Government direction to promote 'atma nirbharta', the companies stand aligned to serve the interest of the country as its core strategy. From local investments to a gender and culturally balanced manpower, the APACMed member companies have ensured their all-round commitment. The companies have worked closely with the Government to understand and contribute strategically to the programs of National Health Mission, Digital India, Make in India, Skill India and Ayushman Bharat. It hopes to increase its contribution with supportive ecosystem and closer engagement with ministries.

This document presents the journey and key areas of contribution by the APACMed member companies, categorised across the themes of Public Health, Economic Development, Skill & Infrastructure and Social & Environmental, Research & Development.

The medical devices sector in India has the potential to grow 4x the current market size by FY30, backed by growing healthcare needs and government's commitment to facilitate growth.<sup>5</sup>





<sup>1</sup> Medical Devices Market Size, Fortune Business Insights, 2022

<sup>5</sup> Medical Devices Sector, Invest India, as accessed on Feb 2023

# A Partner in Health and Prosperity in India

#### Snapshot of Healthcare Needs



- Rising population concentrated in Tier 2 and Tier 3 cities
- Moving towards an **ageing population** with increase in life expactancy
- Largest patient population with **chronic** diseases
- Limited access to care in many

regions

• High out-of-pocket medical

expenses



Member companies are present pan-India offering robust platforms for R&D, Production and Marketing of medical devices.

Members presence in India includes 20+ headquarters/corporate offices,





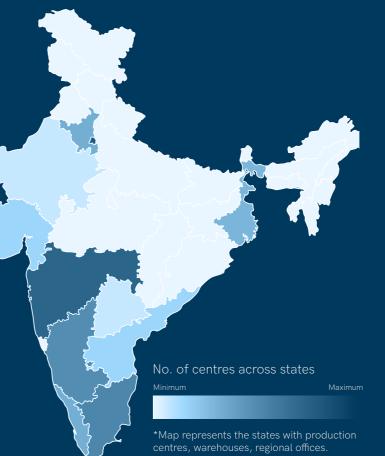


15+ manufacturing units





60+ regional offices



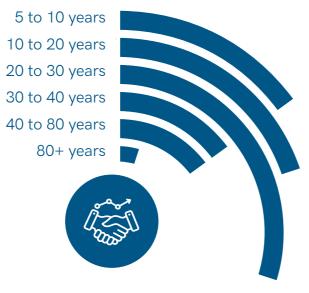
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# Years of Dedicated Service

#### APACMed Members Serving the Nation Over Decades

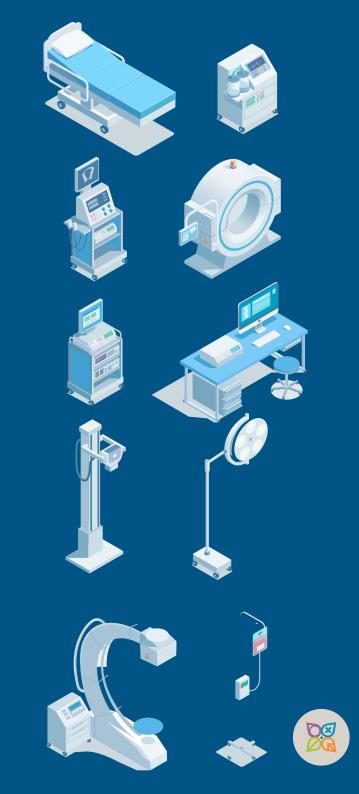
The members have a long and committed history of working in India, starting pre-independence. With many member companies contributing to the Indian growth story for more than 3 decades. \*The bars represent the percentage of APACMed Member Companies' engagement over the years





# Areas of Specialization





Public Health

Public Health is the "science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices" (WHO). Through innovative devices and diagnostics, the industry delivers value to patients, healthcare professionals, and healthcare systems and society. Medical technology innovations support patients through the cycle of **prevention**, timely and accurate diagnosis, offering a range of treatments and ensuring care and management. This section captures the contributions made by the APACMed member companies in this space.

# Economic Development, Skill & Infrastructure

The rapid growth of the MedTech industry has created a ripple effect on upskilling the manpower and health force. APACMed member companies have supported MedTech start-ups and SME to leverage their expertise and network to help them grow. This section demonstrates how the member companies are playing an active role in skill enhancement, creating partnership avenues for meaningful and sustainable engagement of stakeholders and partners, thereby ensuring contribution to economic development as a whole.



# Social & Environmental

APACMed member companies have exhibited a firm commitment to ensure the fulfilment of their corporate social and environmental responsibilities. The companies aim to address and manage social, economic, environmental issues ensuring social inclusion. There's been a willingness to collaborate with all sections of civil society. The companies have made a conscious effort to execute comprehensive energy saving interventions. The section presents the CSR efforts on the ground and a glimpse of the measures implemented to reduce the environmental impact.

## Research & Development

The medtech sector is defined by its strong history of research and innovation (R&I). Industry investment in R&I delivers life-enhancing devices, diagnostics and digital solutions. APACMed members' support for R&I offers valuable opportunities for academia and industry to generate new knowledge and use it to **tackle** the biggest healthcare challenges facing our societies. The section shares the long-term commitment of APACMed member companies, their investment in research and innovations and the life chnaging impact on patients.





# Public Health

# Harnessing the Power of Technology

Through pathbreaking innovations in medical technology, the member companies, have nurtured and strengthened the public health system across the nation. Keeping the patient at the centre, the futuristic technologies have ensured timely diagnosis and quick recovery. The companies have ensured linkages with National Programs to reach the patients across the length and breadth of the country.

Training, R&D and local production has ensured that the companies bring the global expertise and know-how and root them within the local system ensuring empowerment and sustainability. Positive patient voices and industry accolades over the decades have created a legacy of trust. The companies have stood shoulder to shoulder to guard and protect in the times of Covid, stepping up to go beyond the call of duty in their responsibility towards the community and the nation.



Draeger Equipment, Draeger India Pvt. Ltd.

Technology for Better Health Possibilities, Abbott India

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## Accelerating Access to Healthcare Technology and Saving Lives Innovative devices, diagnostics and medical technologies

The **transforming power of the MedTech** in the healthcare sector is immense, with much potential to grow. The adoption of technology in healthcare has contributed to **better diagnosis and treatment** of patients which contributes to improvement in quality of life. The increasing life expectancy and ageing population has led to high demand for innovation and technology in the healthcare sector.



# Strengthening Health Systems, Improving Health

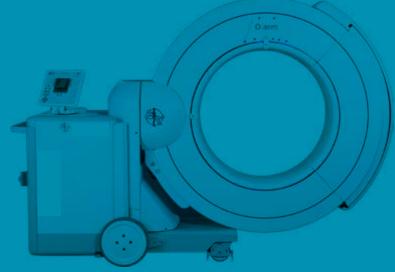
Member companies have a **long-term commitment** and engagement to understand the health needs and ensuring **multi-sectoral engagement** with the national health programs. They have set up local units to produce medical equipment ranging from point of care devices to high-end imaging equipment e.g. CT scanner, diagnostics equipment e.g. assays, and treatment equipment e.g. C-Arm













# Rethinking intensive care workplaces

With its one-stop solution, medtech products introduced by B. Braun there is seamless integration of one pump into a variety of therapy fields. Ranging from Infusion to Nutrition as well as Pain Therapy to Anti-Cancer, Pediatrics and Neonatology. Across all therapies, the technology provides healthcare professionals with a secure, digitally-enhanced solution that optimizes patient comfort, reduces staff times and handling, while being intrinsically reliable at all times.





# Groundbreaking Health Technologies -Ensuring Widespread Access

A glimpse of member products and technologies available on the GeM platform

Minimally Invasive & Open Surgical Visualization Solutions	Power Tools     Surgical Instruments
Non-invasive ventilation (NIV) Masks     In vitro di	iagnostic (IVD) - Equipment's & Reagents • 4K Lens
Arthroscopy System     Shaver System     X-ray Ma	• Computerized Tomography (CT)
Magnetic Resonance Imaging (MRI)         • C-Arm • Ca	atheterization Laboratory • Nephrology products
Ethicon range of products         • RT-PCR analysers         • I	Electro-Chemiluminescence Immunoassay (ECLIA) Analysers
Automated Stainers     Intravascular Ultraso	ound Machine (IVUS) • Rotablator
Implantable Cardioverter-Defibrillator (ICD)     Cardiac	Resynchronization Therapy(CRT) Device • Spyglass
Drug Eluting Stents     Infection Prevention     Wo	ound Care • Device reprocessing







# Commitment to Scale: Linking with National Programs

- Skill India
- National Health Mission
- Digital India
- Pradhan Mantri Jan Arogya Yojana
- Make in India



Aligned with the Government of India's Skill Development Mission to strengthen existing skills and make the youth self-reliant, Becton Dickinson India Pvt. Ltd., in partnership with the HOPE Foundation is helping upskill young adults in Tally and as Nursing Assistants in East Delhi. Initiated in 2018, this project has trained over 1200 students from diverse socio-economic backgrounds and enabled employment for over 70% of beneficiaries, largely women.

 Ensuring 'National Health Mission' coverage through CSR initiatives on TB drug susceptibility testing under the National Tuberculosis Elimination Program (NTEP), HIV & Hepatitis National Programs and providing access to Innovative Diagnostics solutions through AIIMS smart labs, with the aim to improve diagnostic processes, optimizing lab throughput, helping patients, and enabling digital result access, thereby positively shaping the healthcare ecosystem

in India's largest public hospital. Companies have developed medical technology devices including Gas chromatography-mass spectrometry (GC-MS) and DNA. During the pandemic, Roche Diagnostics worked closely with the government bodies to support hospitals and clinicians with biomarkers to accurately determine infection, severity levels, and the future course of treatment to optimise limited resources.







**'Digital India' and Skill India supported through the launch of Digital portfolio of products** including Digital Education, training, skilling and upskilling. As part of the medical facilities provided under the 'Ayushman Bharat' Scheme, support for Endoscopy and Interventional Cardiology was provided by the member companies





As part of the **'Make in India' i**nitiative, member companies have established **production and R&D facilities**, developing diagnostic equipments like CT Scanners, C-Arm, and lab equipment, etc. creating an empowered healthcare system.



Member Companies have supported and **established linkages with diverse national schemes** through partnerships with Institutions. E.g. the National Forensic Sciences University (NFSU) and Food Safety and Standards Authority of India (FSSAI). In support of national health programs, there has been provision of Radiotherapy Units, devices for the Comprehensive Cancer Care Program, medtech products for the National HIV Scale-up programs and NHM (Hepatitis control-SDG and STATE NATBlood Bank Projects). MedTech at the forefront in the fight against COVID-19 Our people, products and

partnerships in the fight against COVID-19

On a mission to facilitate increased access to **critical healthcare products and services** in the region, APACMed supported the COVID-19 response in India by adopting a **multi-pronged approach** touching innumerable lives in India by linking local trade associations and government agencies to APACMed members.





COVID-19 has profoundly transformed the world we live in. The pandemic has stretched healthcare systems, closed schools, grounded flights and brought global economies to a near halt. Yet, amongst this, we have seen the healthcare community rise together to do truly phenomenal things – and the medical technology industry has played a critical role within this response.

Diagnostic testing has helped experts understand the epidemiology of the disease and aided in curbing its spread;

Personal Protective Equipment (PPE) has reduced risk of infection for frontline healthcare workers; and MedTech products and solutions have played a critical role in treating and managing the disease for patients globally.

Through our people, products and partnerships, the MedTech industry unites to support patients, providers and systems during this unprecedented time.





# Our People

Agilely adapting new ways to support healthcare professionals

# Training and Knowledge Shaing for the Management of COVID-19 Patients Remote training programs, webinars and learning modules to support clinicians to acquire the latest information and best practices for: Diagnosis and management of COVID-19 cases Clinic and hospital operations to manage COVID-19 cases Development and provision of handbooks and reference kits App-based ventilator training Supporting Clinicians in Managing Non-COVID-19 Patients

- Digital tools for clinicians to connect with patients for:
- a) Virtual monitoring
- b) Treatment
- Operational workflows for delivering virtual care

#### Other Support to Providers

- Remote service support
- Flexible financing options
- Support in setting up testing facilities

# Our Products

Supporting Diagnosis, Treatment and Management





#### DIAGNOSTIC ASSAYS

Test kits for the detection of SARS-COV-2 or antibodies (with development of rapid tests)

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#### PERSONAL PROTECTIVE EQUIPMENT

Masks, gloves, other PPEs (innovative approaches with 3D printing, reusable PPEs, newer production methods)

#### INFECTION CONTROL

Anti-bacterial infection control products, sterilisers etc for maintaining sterility

#### EQUIPMENT

R&D equipment, medical equipment, beds and accessories customised for existing and pop-up clinical sites

#### IMAGING, ANALYSERS AND MONITORS

Blood analysis systems, CT scanners, vital monitoring systems to continually assess patients' health condition.

#### RESPIRATORY AIDS INCL. VENTILATORS

Ventilators supporting patients with the breathing process (further development of reusable ventilators and 3D printed ventilators)

#### VASCULAR ACCESS SOLUTIONS

Infusion pumps, IV sets etc for drug infusion and nutrition to manage patients in ICU

#### **DIGITAL TOOLS**

Digital support tools for patient triaging and testing







# Rising to the Occasion

# Securing essential supplies for healthcare systems

Collaboration with federal and local agencies to secure essential supplies

MedTech associations set up taskforces with governments and industry stakeholders to assist in securing essential supplies of ventilators, test kits, Personal Protective Equipment (PPE) and other ICU supplies required by the healthcare system to manage the growing COVID-19 situation.

## Planning to meet expected national demand of ventilators

MedTech associations, with their linkages to MedTech companies, hospitals and distributors, were integral in providing governments with the baseline information that underpinned planning for provision of ventilators in the country against COVID-19 medical treatment forecasts; as well as helping countries to understand and address gaps. Coordination with international and domestic suppliers on policy standards and commercial requirements

MedTech associations worked with stakeholders to harmonise policy standards and coordinate commercial operations. Working with the industry, they went further to develop frameworks for streamlining logistics' workflows up to the last mile delivery.





Responding to the Call of Duty



Partnership with ministries and scientific bodies, Industries, and MSME to help manufacture Covid-19 testing swabs.

Provision of 24 lakh 3-ply masks, 2 lakh surgical masks, 87500 N-95 masks, 1.46 lakh PPE kits, 3000 face shields, 1.3 lakh gloves, and 7000+ hand sanitizers to frontline health workers. Supporting the provision of medical equipment and kits, prompt delivery of medical equipment, oxygen concentrators, ventilators, VTM kits with swabs etc. for COVID-19 relief, pan-India coordination with government to contribute expertise towards research, development and deployment

Mobilizing through on ground activities by donating to PM-CARES Fund and organizing food, safety and medical supplies for communities, healthcare staff and organizations





# Reaching the Unreached

Member companies ensured continuous supply of COVID-19 testing assays for PCR Testing (gold standard for COVID-19 diagnosis), Serosurveillance (Antibody Tests - Rapid and Automated Assays), Self-test kits across the country to improve COVID testing. Roche Diagnostics, for instance, supplied 2 million RT-PCR kits to the ICMR during the critical period and installed 18 Cobas 6800/ 8800 analyzers across the country to enhance testing infrastructure. They also launched REACH, a wellness platform supporting the well-being of the frontline workers amidst the pandemic providing access to self-help content.

- Donation to PM Cares Fund for Covid Relief, local authorities and NGOs
- Pandemic relief action through distribution of food packages
- Operate Mobile Medical Unit (MMU) to conduct check-ups
- Partnering with community health centres to enable effective patient management
- Launch of **CSR Initiative** called "Experience Vision" to provide eye care awareness and designing an Eye Screening Protocol to help detect and diagnose eye conditions in children
- Funded cooked meals distributions to care givers, patients, nurses and staff at COVID hospitals
- Emergency response & assistance for employees
  - PPE donation for primary healthcare providers in rural areas
    - Collaboration with UNICEF to help improve healthcare workforce resilience in India by working with the professional association of psychiatrists like National Institute of Mental Health & Neurosciences (NIMHANS) and psychiatric social workers to provide access to a Mental Health and Wellness program and dedicated psychosocial support to 45,000 healthcare workers across about 6,500 dedicated COVID-19 hospitals and 1,200 COVID-19 health care centres.
      - Provision of mental healthcare to frontline workers in India during COVID-19
      - Partnership with The Indian Red Cross Society to help with Training Auxiliary Nurses and Midwives
        Enhancing healthcare facilities and enabling employment opportunities for rural, underprivileged girls
      - Extending support to farmers and daily wage labourers during the pandemic
      - Trainings of general physicians to manage critical care patients
      - Johnson & Johnson MedTech India (JJMI) with Reliance and Adi Industries launched a COVID-19 test swab that was robust, high-quality and a fraction of the price of those being imported from China. An exceptional feat that involved design, development and testing and a collaborative effort of nine public and private institutional enterprises.





# Voice of Patients

MedTech companies have taken the initiative to come forward and promote point of care instruments for the patients. Use of medical technology has made medical procedures less invasive, accelerated patient recovery and reduced hospital stay. To increase the coverage and availability, greater inclusion of these technologies in the public healthcare system will ensure wider reach and better access and therefore there is a need for a more inclusive procurement regime to include such technologies. It is also important to create greater awareness and knowledge about new technology and advances, their uses and benefits to the public, healthcare professionals and patient groups at large and APACMed can play a key role in creating more awareness, training healthcare professionals on these products and procedures with a focus to work collaboratively with the government.

#### Dr. Ratna Devi

Director, Patient Academy for Innovation and Research, Chairwoman ISPOR Patient Council



# Emerging Stronger Than Ever

Diagnosed with stage-four cancer, Ms. Manju fought the disease bravely. through 16 chemotherapy and 33 radiation sessions, not letting herself be dejected or feel weak by the intensity of the treatment with support. Manju proudly states that she feels better now than she did before, for **she now is able to experience life** and its beauties with a renewed sense of excitement and passion.

Chemotherapy and Radiation Treatments by Varian Medical Systems

# A Life Saver Machine; Awaken Your Best!

For people suffering from obstructive sleep apnea – fatigue, risks and injuries remain high as the body tries to get adequate rest. Supreet Singh, a businessman who had been struggling with getting quality rest and sleep for nearly a decade, ResMed's CPAP (Continuous Positive Airway Pressure) machine has been a lifesaver. The autonomous machine works in a digitalized, convenient manner as Supreet has to just wear the mask while going to bed, and the machine continuously ensures that the airways remain open, ensuring a comfortable, high-quality sleep. Supreet is now happier and healthier than before. Being able to work, drive and enjoy indoor and outdoor activities without persistently feeling fatigued or sickly.

"It has been a life changing experience to use this machine, I don't snore, I am not tired, and I can drive by myself" Supreet recalls with fondness and ease.

"It has changed my life, forever" he says.

CPAP (Continuous Positive Airway Pressure) Machine by ResMed India Pvt. Ltd.



# Making a Comeback

As a decorated veteran of the Indian Air Force, Vir Chakra awardee and retired Air Marshal Vinod Patney was no stranger to dealing with challenges with determined grace and fixity of purpose. Diagnosed with Abdominal Aortic Aneurysm, Vinod Patney recalls that positive thinking, one brought about by advancing years helped him through the surgery and the trying times that it brought forth. With support from the advanced medical devices, the treatment and recovery became a reality.

Abdominal Aortic Stent Graft by Medtronic

# Recovering from Tachycardia with Implantable Cardioverter Defibrillator Therapy

The life of businessman Sameer Patel, a soft-spoken spiritually guided individual, was turned asunder on the day he was diagnosed with Tachycardia. Anxious and breathless, Sameer Patel wondered what life awaited him, if a life at all. Over a decade later, Sameer Patel wanders the same things, however this time he knows that he'll be there, and he'll be happy. "*The cardioverter implant/device is like a doctor that stays with me all the time, I exercise, I do yoga and I drive, just as I did before. There's no pain, there's no strain for everything just works, as if nothing had happened before. I always feel safe, that I'm being looked after and in good hands."* 

Implantable Cardioverter Defibrillator by Medtronic



# Easy Reading on your Fingertips

At the age of 9, Amisha's life changed when she discovered that she was a diabetic. The process of continuously testing her levels, the strips, the prickly needles and the pain, however, were onerous and she always wondered if there were better ways of handling it more efficiently. Now an aspiring model and an adventurous individual, Amisha leads her life without the hassles of the past, thanks to Abbott's FreeStyle Libre monitoring system. The **slim sensor attached to the back of her upper arm and a reader, provide readings of her blood sugar levels**, whenever she wants, without using painful lancets or cumbersome strips. With FreeStyle Libre, Amisha is now relaxed and knows that she doesn't have to worry, as her blood sugar can now be monitored easily and conveniently.

#### FreeStyle Libre Monitoring System by Abbott India



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Since 2004 we have been using Ortho equipment thanks to their excellent support provided in engineering services, application and trainings. In 2020, despite the pandemic, the support of Ortho continued uninterrupted. The proactive software used by Ortho has helped us easily identify instrument problems and reduce downtimes. Be it supply of reagents or services or training of the staff, the support of Ortho team is always there.

**Customer of Ortho India** 

Young cardiovascular surgeons have uninterrupted support and learning in the field of cardiac surgeries and catheter skills by Terumo India

Chief Cardiovascular Surgeon, Manipal Hospital, Delhi

Thanks to the syngo Virtual Cockpit Lite by Siemens, we could utilize remote scanning and run our operations with optimum staff, ensuring everyone's safety. 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.

Sri Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum





# Recognition in Public Health

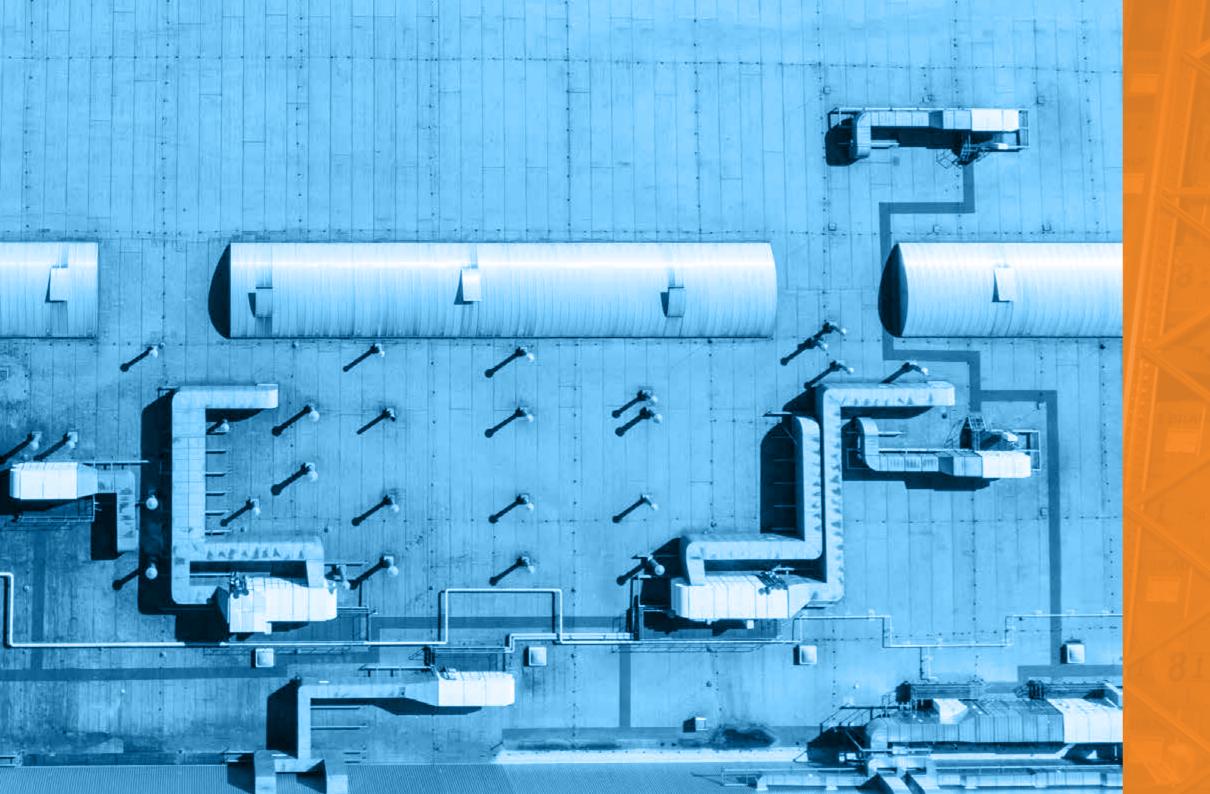
Range of awards received by the member companies in the last few years

Best Overall Medical Device Product
Economics Times Award in Best Product Category

Zinnov award
Medical Design Excellence Awards
R&D 100 award for scientific innovation
The Prix Galien Innovation Award for PanOptix

Fast Company's "World Changing Company of 2020"





# Economic Development, Skill & Infrastructure

# Greater Good Through Better Health

Member companies, through their product innovations in medical technology, setting up local infrastructure and facilities for production, generating large-scale employment, building skills, investing in partnerships and start-ups, stand committed to contribute to the economy.

To create an overall ecosystem that supports growth and development of the economy, the companies lead by example in supporting local entrepreneurship, collaborations and consortiums.



Suture Production (Chengalpet), B. Braun Medical India Pvt. Ltd.













# Scaling Up with Local Partnership

The MedTech sector in India, being at its nascent stage, possesses the ability to be a regional leader in medical technology through local partnerships and **supporting innovative solutions to address the growing demand** of domestic and global markets. The sector provides multiple opportunities for several local large, mid-sized and small companies to work with global markets. This creates a **cascading increase in employment opportunities** with the start-ups and manufacturing facilities. Playing its Part in Supporting Start-Ups and MSMEs in India's Growth Journey





# Creating Employment and Building Sustainable Livelihood

57% of the member companies have around 100 employees in their training centers across the country.

Around **76%** of the member companies have around **100-300 employees** in their **warehouses**.

Members have also established **additional facilities** with around **500+ employees**.











# Building a Future Ready Healthcare Workforce

Most member companies have partnered with training facilities in India to build capacity on product research, product awareness and marketing.

Member companies dedicate about 5-15% of total revenue towards upskilling of healthcare professionals each year.





# Key Training Areas

#### Other\*

#### Personnel

#### Operations

\*Therapy based training, scientific/ medical training, behavioral training, endoscopy technician training, physician training, training to HCP through ophthalmic institutions, leadership training, and other upskilling programs Image: Project REACH, Fresenius Medical Care (India) Pvt. Ltd.

#### Product Research

#### Product Marketing

Product Awareness



**Regular trainings** imparted to physicians, paramedics, and diagnosticians to efficiently use their technology and deliver high quality services.

The **upskilling initiatives** include classroom learning, labs, and handson clinical training which widens horizons and unlocks future learning and career paths.

# Impact through Quality Professionals

Trained a total of **30 thousand+** physicians, **2.5 lakh+** paramedics, **12 thousand+** diagnosticians, and **4.4 lakh+** other healthcare professionals



Johnson & Johnson Institute in Chennai has organized over 90 thousand training interactions and trained over 3.80 lakh HCPs

# Creating Agility for Development

Members provide Global IT services in India as part of their additional capabilities, in sectors of finance, supply chain management, consulting and others.

39% of the **member companies support software development centers** based in cities like Pune, Chennai and Bangalore.

22% of the member companies also provide global back-office services support from India.





# Building the Value Chain

APACMed members closely work with local ancillary companies in India, leading to increased business opportunities and global exposure for local companies

Member companies engage with diverse local companies ranging from Adler, Goldwin, KMS, Virchow, Browndove, Waste Management companies, Transportation, Warehouse management and others. Member companies collaborate with the Healthcare Sector Skill Council (HSSC) to facilitate training assessment and certifications for healthcare professionals and partner with government bodies involved in Skill Development.



# Ushering in a New Era through a Surgical Skill Lab in Srinagar

Medtronic and Sher-i-Kashmir Institute of Medical Sciences (SKIMS) joined hands together to usher in a new era for **minimally invasive surgeries**. The surgical skill lab is part of SKIMS' setup in Srinagar and it **supports training and development of young surgeons** across Jammu and Kashmir. The lab features comprehensive instrumentation and equipment such as **endotrainers**, **laparoscopic suturing stations and airway management systems**. This initiative is designed to highlight how **patient-centricity** can be enhanced by providing a simulated environment for budding surgeons to deepen their expertise and technical skills in minimally invasive surgery. The partnership aligns with the **Skill India vision** of the Government.

#### Medtronic and Sher-i-Kashmir Institute of Medical Sciences (SKIMS)



### Upskilling Today's Technicians for a Healthier India Tomorrow Hands-on clinical training widens horizons and unlocks future learning and career paths

Society of Gastrointestinal Endoscopy of India (SGEI) and Healthcare Sector Skill Council (HSSC) signed a Memorandum of Agreement (MoA) to launch Gastrointestinal Endoscopy Technician Training (GETT) - India's first ever on-the-job training course to upskill G.I Technicians. GETT is SGEI and World Endoscopy Organization (WEO) certified, contains 4 modules with 72 hours of training. The course **participants**  will have the opportunity of getting accustomed to cuttingedge technologies through industry, study high-quality materials and assist during procedures to refine and learn new best practices. The program, a great success in major cities, is now expanding to Mumbai, Pune and Lucknow.

#### Boston Scientific and Olympus Medical Systems



## Nurturing the Start-ups Ecosystem

As institutions of national importance, IITs remain prolific for STEM leaders of tomorrow, across technologies and disciplines. As India embarks on a journey of **self-reliance** (Atmanirbhar Bharat), it is critical to promote and inspire entrepreneurship. Boston Scientific STEM collaborated with e-Cell, Indian Institute of Technology (IIT), Ropar to organize and conduct Aavishkar (Invention) – The Ideation Challenge.

Hundreds of students participated and learnt about ideating start-up ideas, legal aspects, intellectual property rights (IPR), investment strategies local technology products developed in India to cater to the local needs and requirements.

Boston Scientific STEM and Indian Institute of Technology (IIT), Ropar





## Strength of Partnerships

Increasing cancer rates and infrastructure gaps on the radiation therapy across India, need attention. Varian Medical Systems, a Siemens Healthineers India company, extending its support to the Central and State governments has set up radiotherapy centers in the Government Hospitals under a **Public Private Partnership** (PPP) model. Space and physical infrastructure provided by the Government, while the radiation therapy equipment and the clinical services provided by the private operator, treating patients at a mutually-agreed price. With the aim to scale up the model, the **need to develop a PPP policy** for this model has been stressed.

Varian Medical Systems has also developed intelligent cancer care solutions powered by artificial intelligence (AI) and machine learning (ML) to provide customized and precise treatments. Siemens Healthineers, India having the most comprehensive cancer care portfolio brings unique capabilities to fight against increasing cancer rates.

Varian Medical Systems, a Siemens Healthineers India Company Addressing the growing need for personalized, data-driven diagnosis and precision care





# Recognition in the Sector

As recognition for their work, companies have been included in the following award categories in the last few years

• 100 Best Companies to Work for by Great Places to Work 2022

• 100 Best Companies to work for in India in large business category by Great

Places to Work, 2022

Great Place to Work (GPWI)

• AoN Hewitt- Best Employer 2015

Global-FORTUNE World's Most Admired

#### Companies

Medical Products and Equipment industry
 category

#### category

- Forbes Best Employers for Diversity
  - Forbes World's Best Employers
    - FORTUNE 500
- Fortune's "Most Admired Companies"
- "Top 20 Employer," Science magazine
- Business Today "Best Places to Work" for 8

consecutive years

Awards from Government and trade bodies

- FICCI award for "Excellence in patient safety"
- NATHealth CSR Award
- ASSOCHAM Medical Technology Excellence Award
- Confederation of Indian Industry National Level
   Appreciation for Energy Excellence
- E-India Award for working with Government & NABH

#### Media Awards

- 2022 Companies that Care, People Magazine;
  - 2021 Change the World `Fortune Magazine''
    - Economics Times Award in Best Product Category
      - The Economic Times Best Healthcare Brand
      - ET Diagnostics Award
      - ABP News Healthcare
      - Leadership Award
      - Business Standard STAR MNC Award





# Social & Environmental

## Building a Better World

Making a meaningful difference through inclusion and equity.

> Owning its role in nation building and environment conservation, the member companies have made sincere efforts to design and implement CSR programs on health, education, livelihood, environment, gender equality, energy conservation, etc.

> The programs undertaken by the member companies have created a meaningful, tangible and long-term community engagement.

> > workers, Abbott India

Capacity building of healthcare



# Contribution and Impact in Social Development

The Corporate Social Responsibility (CSR) commitment

Integrating the social and environmental concerns as part of the business operations, the member companies remain **committed to sustainability and giving back to the society.** 

Member companies, as part of their CSR plans, include interventions that focus on giving back to the society. Integrating corporate performance with economic, social and environmental performance has helped the companies to align themselves to the goals of sustainable global development. Member companies reflect the philosophy, that to be sustainable, they must be financially secure, reduce adverse environmental impacts and act in conformity with societal expectations.

Corporate responsibility and sustainability are an integral part of the member company's operations. The diverse CSR activities undertaken by them shows focus and intent to make meaningful changes in the lives of the community.













## Key Sectors of Engagement



Healthcare



Livelihood

Education



Environment



Women and child

 $^{\ast}$  Highlighted ring exhibits the range of projects within the sector



#### Programs

**Perfusion training:** Promoting education including special education and employment enhancing vocational skills among under privileged children

**ACT - Action to Change Together:** Community-based health education, screening and referral model for prevention of Diabetes and Hypertension with help of community institutions and improve continuum of care for NCD services

Hygiene and personal care: Awareness program on health and hygiene to parents of cancer detected childrenHello Periods: Conducting menstrual workshops in govt schools & giving comic books of the sameBiocon Academy: Motivating school-going children to pursue STEM education

Advancing STEM learning and promoting healthy living

among children: Build a strong STEM community by offering STEM experience through an integrated media outreach campaign "IDEATHON" as a platform that helps young minds in STEM make a mark

## Empowering Children

Orissa Karnataka Rajasthan Telangana Tamil Nadu Maharashtra

\*The highlighted states are the ones in which member programs are run

#### Programs

Underprivileged girl child education: The initiative provides educational aid towards the upliftment of underprivileged girl children with the support of a local NGO. Support for children: Donation drive (Bag, stationary, cloth etc.) for needy children in rural schools. **Empowering Students:** Funding education for students with disabilities. Providing bags, books, benches, cupboards, chairs, tables, dining tables, science tables for laboratory & fans for students of Primary & al. secondary schools. Child in Need Institute (CINI): Improving the health of vulnerable mothers and children in several slum areas of Kolkata, funding health care workers and supporting their training and development.



## Promoting Inclusion & Diversity

Jttar Pradesh Karnataka Rajasthan Telangana Tamil Nadu West Bengal

\*The highlighted states are the ones in which member programs are run





# Project Srujal, Creating Equitable Access for Drinking Water, Ahmedabad Baxter Pharmaceuticals India Pvt. Ltd.

## Creating Shared Value for Society







Johnson & Johnson MedTech India (JJMI) supports the project **"Raising Healthy & Educated Community"** which aims to improve the quality of life, preventive healthcare and education. The project has successfully organized static clinics and health camps to reach 15,000 beneficiaries. It also focuses on strengthening preschool education for 3-6-year-old children.

UDAAN (United Dialogue and Action Against

**Noncommunicable Diseases):** Project HOPE worked with Boston Scientific in the Ranchi District of Jharkhand State to reduce the burden of three of the most common noncommunicable diseases (NCDs) – diabetes, hypertension and cardiovascular disease.



Mobile Medical Unit operating (MMU) in 12 villages near
Ahlcon Parenterals (India) Ltd., Bhiwadi, Rajasthan (a
B. Braun Group company) provides primary healthcare
services to people. B. Braun has touched more than 55,000
lives of people in the last four years and has worked towards
protecting and improving the health of people in the region.

Ensuring Blood Safety in India through its **#IpledgeREDcampaign**, Roche Diagnostics engaged with the youthand the state governments to improve blood safety andincrease voluntary blood donations. Apart from this, anationwide campaign was initiated to improve awareness and sensitise women on cervical cancer prevention and screening.







Give India, a program by Thermofisher Scientific India providing advanced access to quality and affordable NCD care among low-income communities by upgrading PHCs, conducting capacity building of healthcare workers. Screening of TB Patients: With the aim to support Government of India's TB elimination program, Project SANKALP, rolled out in August 2022 by Becton Dickinson India Pvt. Ltd., is a community-based initiative in Rewari, Haryana. It aims to bring TB diagnostics closer to patients through a state-of-the-art mobile screening van and technology for door-to-door Active Case Finding, presumptive TB cases identification through a mobile van equipped with Teleradiology, CBNAAT, and Blood sugar testing. The program has ensured end to end follow up of identified TB cases and their contacts for complete evaluation (as per national guidelines).















Clockwise from top left: Annual blood donation drive in association with Lions Club, Teleflex Medical India; Jmitra training initiative for women, J&J; Tree plantation drive, Teleflex Medical India; National nutrition month celebration, CSR Initiative, Biomerieux India Pvt. Ltd.; Ocean cleaning drive, Teleflex Medical India; World Disability Day event, Teleflex Medical India

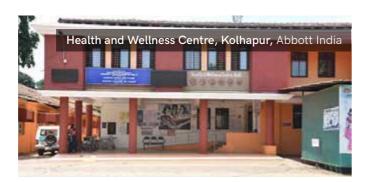


#### Building Quality and Affordable Healthcare Delivery

In partnership with Americares Foundation, Abbott is supporting the upgrade of 75 Primary Healthcare Centres across 9 states to Health & Wellness Centres, providing healthcare access to about 2.5 million people. The program also focusses on capacity development of community healthcare workers, who serve as a critical link between healthcare institutions and communities.

#### Abbott India







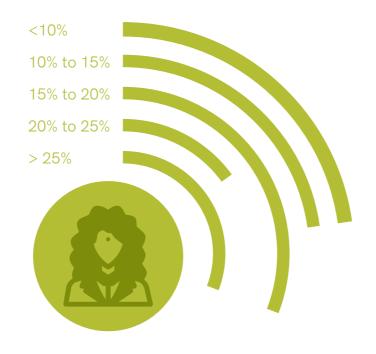


## Shattering the Glass Ceiling Promoting Gender Equality

Members are committed to diversity and inclusion to promote greater representation and voice of women within leadership positions. Women have played an integral part in advancing the MedTech industry across functions and operations.



#### Women in Leadership Roles



\*The green bars represent the percentage of member companies with women in senior positions





## Committed to Environmental Sustainability

Caring for the Planet

**Green Buildings –** To minimize environmental impact and disturbance, reduce energy and reduce water usage, APACMed members have adopted Green Buildings which promote health benefits through clean and sustainable environments.

**Solar energy supply to plants/ buildings** - Solar panels and Solar thermal panels in MedTech plants and buildings are used for a variety of uses including preheating ventilation air, water heating, solar cooling and lighting and electricity.

Water conservation/ recycling plants - A large
number of member companies have adopted water
conservation practices in their campuses and plants.
Waste management and reduction - Many companies
have adopted waste management and water
reduction techniques in their plants to promote
recycling and re-use.

**Sustainable technology** – Adoption of sustainable technologies for operation and production in plants to have lasting and positive environmental impact.





### BADLAAV -Transforming Communities in Ahmedabad

This five-year project seeks to intervene to construct and restore a selected site every 6 months. The interventions focus on toilet facilities, **construction and restoration** of dilapidated sites and organizing **awareness campaigns** in NGOs, schools and community centres located in Ahmedabad and its peripheries.

#### Medtronic

#### The Roshni Project – Adopting Villages for Greater Good

Using a multi-dimensional strategy for interventions, the project has successfully persuaded, facilitated and enabled the vulnerable population residing near Mumbai in the areas of health, livelihoods, education among others, facilitating positive outcomes and improved health.

#### Roche Diagnostics

#### Vaccine on Wheels

Vaccine on Wheels – a mobile vaccine initiative that operates mobile vaccine units, with doctors, to **provide vaccination to the underserved** and vulnerable communities. 3M India along with United Way of Bengaluru, supported efforts towards providing vaccination to the remote, unreachable population groups and individuals across India.

#### 3M India

Project Niramayah - Supporting those who Secure our Lives

Boston Scientific and SEWA International distributed Aarogya Kits in 3,000 villages across the states of Delhi, Haryana, Maharashtra and Uttar Pradesh.

#### **Boston Scientific**



Operation Smile India, Vijaywada, Stryker India

Community Farming CSR Activity, Abbott India

## Recognition in the Sector

#### Best place for women employment

- Forbes Best Places to Work for Women
  Avtaar, for Working Mother & Best Place to work for women
- Johnson & Johnson MedTech India
   (JJMI) featured in the list of `100 Best Companies for Women in 2021' by Working Mother & Avtar Best Companies for Women in India (BCWI)'
- ET Best Organizations for Women 2022
- "100 Best Companies," Working Mother magazine

#### Other Awards

- Best Public Health Initiatives of the year by Indian CSR Awards
- Silver Award in the CSR COVID-19 Relief category at the 5th CSR Health Impact Awards 2021.
- ET Now World CSR Day Award for Capacity Building of Frontline Workers to Enhance Maternal and Child Health at Bel Air Hospital, Panchgani
- Mahatma Award: For multi-pronged COVID response program in India
- CSR Health Impact Award: For Efforts towards combating the Covid-19 Pandemic
- ET Now World CSR Day Awards
  - DL Shah Award
    - Frost and Sullivan 2021 Competitive Strategy
      - Leadership Award
        - DiversityInc 2020 and 2019 Hall of Fame
        - Company for Diversity
        - Awarded Best in Class Award for
        - Employee Resource Groups by Diversity
        - Best Practices
        - Affinity Inc. named J&J 2016 Top
        - Corporation for LGBT Economic
        - Development
        - Employer with Best Health and
        - Wellness Initiatives by SHRM HR
        - Excellence Awards





# Research and Development

## Driving Innovation to Create an Impact



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The Medical Technology industry is driven by constant innovation to address the challenges faced by the healthcare industry. Member companies are focused on investing in innovations that make patient treatment timely, effective and less invasive.

To ensure that the Research and Development efforts have the best minds behind it, member companies have ensured active collaboration with all stakeholders, academic institutions and think tanks.

**X** Micra™ Transcatheter Pacing System by Medtronic - world's smallest pacemaker

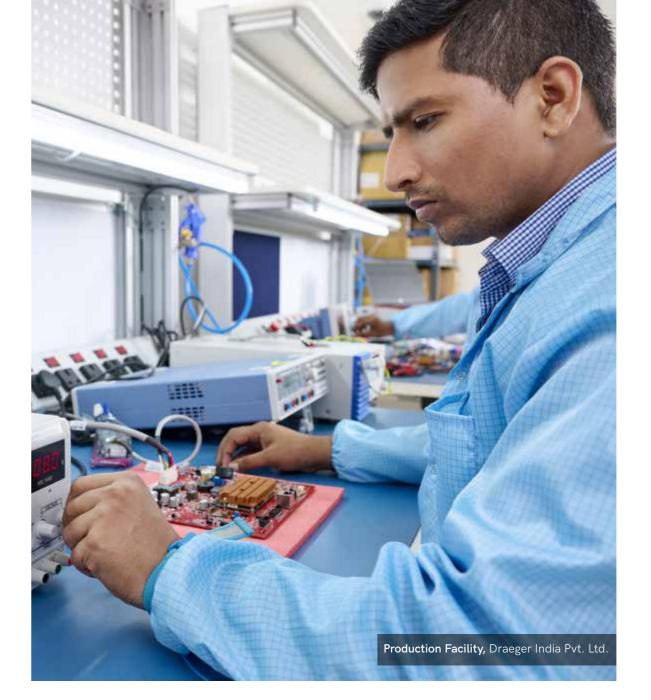
## Innovation the Life-blood of MedTech

The MedTech sector is defined by its strong history of research and innovation.

Conditions which were once considered incurable have now become manageable owing to MedTech's constant pursuit of innovation.

By turning scientific ideas into solutions for patients, health professionals and health systems, MedTech has progressively contributed to better outcomes and greater efficiency in healthcare. From everyday products like adhesive bandages and braces, to technologies like MRI, artificial organs, and robotic surgery, MedTech innovation has made a sizeable impact in the field of healthcare. MedTech is also transforming conventional approaches to healthcare innovation. Combining the power of big data, predictive analytics, artificial intelligence and genomic information, MedTech innovation is driving a disruptive and forwardthinking transformation of care delivery models. Innovation today requires a broad coalition of healthcare stakeholders to explore new approaches that combine devices, diagnostics, medication, digital tools and big data to deliver the best outcomes for patients. MedTech, in partnership with other healthcare system leaders, consistently explores disruptive solutions to ensure patients have access to the right care, at the right time.





### Acting as a Catalyst Partnering with industry to academia

Member remains **committed to fostering new partnerships** and alliances with diverse institutions and agencies. Lead partners include Indian Institute of Technology (IIT), Research Society for the Study of Diabetes in India (RSSDI), Healthcare Technology Innovation Centre (HTIC), HCG Hospitals and other prominent entities across industry and academia.

## Innovating for the World

APACMed Members invested around 5-10% of their total revenue towards Research and Development (R&D)

Investing into research and development to drive unconventional, pathbreaking ideas shows commitment towards driving excellence.







## Innovation through Ideas, Brilliance through Execution

APACMed members were granted 70% of the patents filed globally and 10% of the patents filed in India

Determination to transform and shine, remains a guiding principle. With cutting-edge innovations like Accelerator Beam Centreline (ABC), Thyratron, QuikClot, surgical instrumentations, methods and other novel interventions, APACMed members paves the way towards a healthier and sustainable future across the entire healthcare value chain.







## Advancing Together Through a Digital Future

Member companies leverage cutting edge advances in technology to drive and deliver forward

Growth for the future requires dedication towards unexplored, experimental and emerging technologies and innovations. Harnessing the power of Artificial Intelligence (A.I.), Machine Learning (ML), Deep Learning (DL), 3D Printing, Simulation, Digitalization, Antibodies, Laboratory Instruments, Adhesive & Abrasive, etc. are all offerings making significant contribution to the diagnosis and treatment for patients. APACMed members remain committed to delivering breakthroughs using its state-of-the-art facilities and research centers.



Improvement of Parkinson's Care through NeuroNAV (by Alpha Omega) in South Asia

Aster Medcity and Medtronic have partnered to build a comprehensive Deep Brain Stimulation (DBS) program. Using a collaborative approach, the program will utilize Medtronic's surgical and technical expertise to **develop a comprehensive, personalised and data-driven treatment program** for patients suffering from Parkinson's and Movement Disorders. Through this partnership, Medtronic and Aster Medcity seek to provide patients in India with cutting-edge specialized care and provide greater assistance in disease management.

Deep Brain Stimulation (DBS) program by Medtronic and Aster Medcity



## Best New Technology Solution

- Economics Times Award in Best Product Category
- Top 100 Global Innovators by Clarivate Analytics
- ASSOCHAM Medical Technology Excellence Award
- Red Herring Life Science Most Innovative Company 2012
- Armenian Eyecare Project Honorée "Decades of Dedication to the Armenian Eye Care Project"





## Sustainable Development Goals (SDGs)

#### Impact Snapshot

17 interlinked objectives that emphasize the environmental, social and economic aspects of sustainable development. The figure highlights the SDGs where the member companies are making a notable contribution through their work.







## Way Forward

The MedTech ecosystem is changing, and rapid technological advancements are opening new avenues for progress in the healthcare industry, providing solutions to the real-world problems. The APACMed member companies are looking at **meaningful ways to engage and contribute to the national programs** led by the Government across the sector. Indian medical devices industry has the power to emerge as the global leader in manufacturing and innovation in coming decades. Turning this ambition to reality requires a supportive and trusted ecosystem.

As defined by WHO, 'Medical Device' means any instrument, apparatus, implement, machine, appliance, implant, reagent for in-vitro use, software, material or similar article intended by the manufacturer to be used, alone or in combination, for human beings, for one or more medical purposes of:

DIAGNOSIS • PREVENTION • CARE • REPRODUCTIVE HEALTH • SUPPORTING LIFE • DISINFECTION INFORMATION • INVESTIGATION





## About the 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 several local industry associations across the region. Headquartered in Singapore, APACMed's mission is patientcentric, 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 Asia Pacific.

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.

Website - APACMed - The Voice of MedTech in Asia www.https://apacmed.org/

## APACMed Corporate Members





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