

Internship & Dissertation

At

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Presenting Report On

A study to understand, research, compare and analyse various telehealth solutions available in NA, EU and APAC market, also analysing need gap for TEngage

By

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MBA IN HEALTH AND HOSPITAL MANAGEMENT
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Declaration by Student

I hereby declare that this dissertation titled ‘A study to understand, research, compare and analyse various telehealth solutions available in NA, EU and APAC market, also analysing need gap for TEngage’ is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Astha Poddar)

Name of Student: Astha Poddar

Date: 23rd June, 2022

Abstract

Introduction: Telehealth is in the booming stage around the world. North America, European Union, Asia Pacific region has seen a constantly increasing number of people using telehealth, the patients, providers, healthcare organizations, healthcare facilities are enhancing their experience with teleconsultation. Pandemic has given a rigorous push to the virtual consultation since it gives an opportunity to skip the physical meetings and cross contamination. Therefore, all new versions of teleconsultation are emerging across the world post pandemic. There are many telehealth platforms functioning in NA, EU, APAC regions. Cisco, Amwell, Doxy.me, Allscripts, Teladoc, Biotelemetry, AMD Global Telemedicine, iCliniq, Dhanush Healthcare are major companies in these areas.

Study objective:

- A. To understand the required features on Telehealth platforms for customers need
- B. To find out different business models for these platforms
- C. To understand the need gap wherein TEngage could play a major role

Methodology: The method for this research is secondary desk research and intense literature review.

Key results: Tata Elxsi has developed their own telehealth platform named 'TEngage' which has some similar features as their competitors and few unique features for their customers.

The marketing strategy is designed for TEngage:

The product variant of TEngage includes TEngage Basic, TEngage Advance, TEngage Premium and TEngage Super premium, according to the needs of the customers which is majorly hospitals.

Price: Based on our competitive analysis, pricing could be:

- Subscription based pricing
- Fixed rate pricing

Target Population (B to B)

Immediate:

- Public & private hospitals (small, medium size), specialized or multispecialty hospitals, hospitals in a network

Later:

- District hospitals, CHCs, PHCs, government clinics, maternity centers, rehabilitation hospitals, government digital health programs

- Fitness & Wellness center; to keep their customers informed and updated, solve queries
- Pharma companies; to directly connect with their customers for research and feedback
- Medical device manufacturer; for seamless integration of telehealth platform with the organization system

Place

- India specific: Andhra Pradesh, Tamil Nadu & Karnataka has the highest adoption to digital health services, followed by Kerala, Maharashtra, Gujarat. Therefore, initial focus needs to be at the target population in these states.
- Singapore: Bedok, Jurong West and Tampines are major cities. Other two areas Woodlands and Hougang
- Australia: Sydney, Melbourne, Brisbane, Perth

Conclusion: 'TEngage' by Tata Elxsi is a new telehealth platform in the market, therefore, market penetration is a significant step to reach out to customers. With all available market competitors, need gap analysis reveals that we are not the price givers but the price takers. So, the pricing is done in accordance with that. However, there are certain challenges and barriers with teleconsultation and being new market player, these two would play the key challenging role for TEngage.

Acknowledgement

I acknowledge the efforts of all supporters, with a deep sense of gratitude, who in one way or the other, has contributed to the success completion of the Summer Internship.

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Acronyms

APAC: Asia Pacific

ATA: American Telemedicine Association

BC: British Columbia

DHP: Digital Health Platform

EU: European Union

GDPR: General Data Protection Regulation

ICT: Information and Communication Technologies

NA: North America

HIPAA: Health Insurance Portability and Accountability Act

RPM: Remote Patient Monitoring

A. Internship Report

Introduction

At the end of 2nd year MBA in health and hospital management at IIHMR University, the students are supposed to join an organization for Internship for three months period with certain objectives. The objectives are as follows:

- To understand and learn day to day micro-level operations management of a hospital/ health care/pharma/rural organizations.
- To identify issues/problems associated with some specific operational area/programmes.
- To provide some solution to the identified problem(s).

Objectives of Internship

The intern joined in the Medical Electronics Department at Tata Elxsi and was assigned the various responsibilities, such as,

- Understanding Telemedicine in NA, EU and APAC and various available platforms/products. Comparison study of features, market segmentation and pricing strategies among Telehealth solution competitors. Applicable geo-specific standards for Telehealth.
- Gap analysis for TEngage in comparison with its competitors. Applicable geo-specific standards for Telehealth given by health/govt authorities. Expectation from Telehealth solutions by healthcare ecosystem stakeholders. A primary/secondary survey to strengthen your observations on healthcare market expectations. Geo-specific EMR/EHR applications and its integration with TEngage.
- 4 Ps of marketing for TEngage, market outreach, taking to the masses. What is needed to make TEngage growth sustainable in Telehealth space. Leveraging other healthcare verticals for TEngage growth, like Pharma, Home patient care, critical care, diagnostics, clinical research, AI & ML, preventive care etc.
- Geo-specific business model and pricing menu for TEngage. Enhancement of TEngage and collaboration opportunities including Govt initiatives.

However, it was Work from Home (WFH) internship.

Organizational Profile

Tata Elxsi

Technology + Design

Tata Elxsi is a renowned leader in design and technology services industries, including broadcast, automotive, communications, transportation and healthcare. Manoj Raghavan is the CEO and Managing Director.

Tata Elxsi was founded on May 5, 1989, in Bangalore.

Tata Elxsi puts forward together the latest technology and user-centric design to assist companies in delivering innovative solutions and exceptional customer experiences. From strategy through consumer research and insights to service and experience design, technology implementation, integration, launch, and beyond, their integrated Design and Technology teams help businesses rethink about their goods and services.

From highly advanced R&D in new technology and system design research to originally developing, validation, and implementation, Tata Elxsi works very closely with customers. IoT (Internet of Things), cloud, smart mobility, and artificial intelligence are examples of developing technology. As a result, businesses will have new options to increase operational efficiency, cut costs, and provide new services to their customers.

This is carried out by supreme product development processes and methods that have evolved and grown over the last 30 years, as well as a big ecosystem of partners, design facilities, and other resources that helped customers get access to the latest technology and tools while also minimizing time-to-market.

Healthcare Products & Services

Integrated design and engineering, Digital and Connected health, Regulatory compliance

Key Activities & Learnings

Weeks	Tasks	Objectives	Learnings
1st week March 23 - 30	Brief on Telehealth	Understand the Telehealth and its market	Secondary research about telehealth and its available platforms
2nd week March 31- April 6	Brief on Telehealth	Understand the Telehealth and its market	Secondary research about telehealth and its available platforms
3rd week April 7-13	Brief on Indian Telehealth	Understand the Telehealth and its market in Indian context	Secondary research about telehealth and its available platforms in India, its market segmentation, features & pricing
4th week April 14-20	Brief on Indian Telehealth	Understand the Telehealth and its market in Indian context	Secondary research about telehealth and its available platforms in India, its market segmentation, features & pricing
5th week April 21-27	Telemedicine in NA, EU and APAC	Comparison study of features, market segmentation and pricing strategies among Telehealth solution competitors	Secondary research about telehealth and its available platforms in all regions, its market segmentation, features & pricing
6th week April 28- May 4	Telemedicine in NA, EU and APAC	Comparison study of features, market segmentation and pricing strategies among	Secondary research about telehealth and its available platforms in all regions, its market segmentation, features

B. Dissertation

Title

A study to understand, research, compare and analyze various telehealth solutions available in NA, EU and APAC market, also analysing need gap for TEngage

Research Question:

What are the major available Telehealth platforms in APAC region in terms of features, positioning and pricing which could be a competitor to TEngage?

Research Objectives:

- A. To understand the required features on Telehealth platforms for customers need
- B. To find out different business models for these platforms
- C. To understand the need gap wherein TEngage could play a major role

Methodology:

The method for this research is secondary desk research and intense literature review.

Telehealth is “*the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health and health administration.*” Telehealth is commonly used other way round with telemedicine and eHealth. Telehealth, on the other hand, is a larger phrase than these other categories; telemedicine and eHealth are in branch of telehealth.



[Image source:
<https://www.ipeglobal.com/pahal/resources/media/2018/Business-Models-in-Telemedicine.pdf>]

The Federation of State Medical Boards define Telemedicine as “*the practice of medicine using electronic communication, information technology, or other means between a physician in one location, and a patient in another location, with or without an intervening health care provider.*” The WHO defined eHealth as “the use of information and communication technologies (ICT) for health.”

Telemedicine enables people to obtain healthcare services through the usage of telecommunications and IT, regardless of distance between the health care provider and the patient. Telemedicine is largely used to overcome geographical obstacles and increase access to medical services that are not always available in remote rural or metropolitan areas. Residents of these places frequently have poor access to speciality healthcare, owing to the fact that specialist physicians are more likely to be found in densely populated urban areas. Telemedicine has recently gained popularity in the field of critical care procedures.

Telehealth market size during forecast period

What will the Telehealth Market Size be During the Forecast Period?



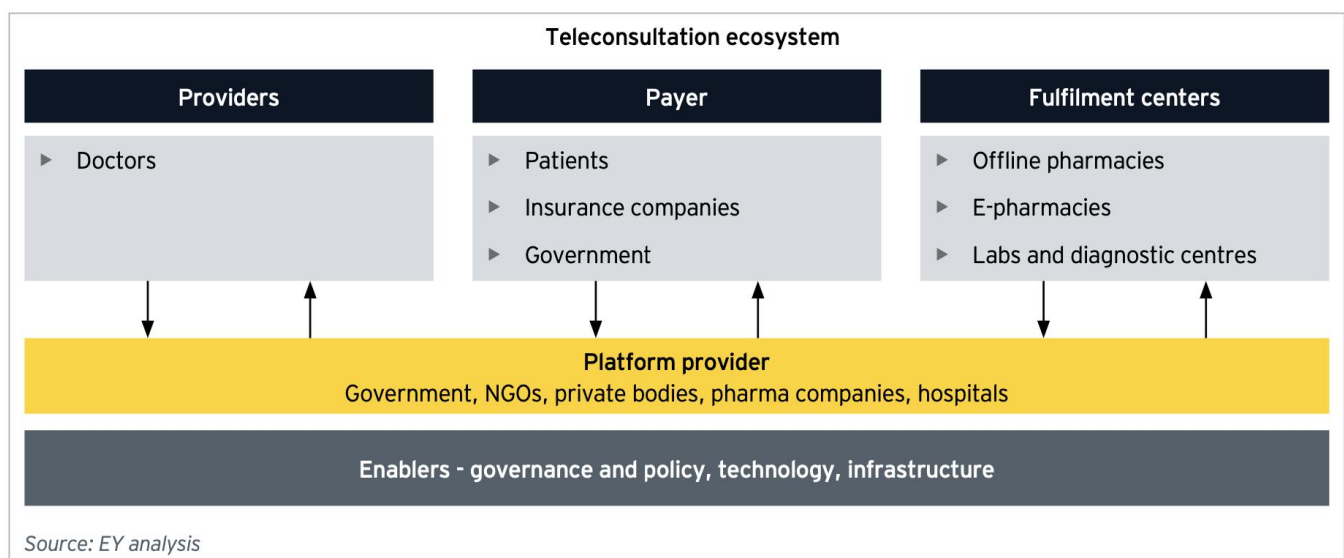
Key Telehealth Market Driver

The rising prevalence of chronic conditions has increased demand for telehealth services and solutions, which has fuelled the worldwide telehealth market growth.

The number of cancer cases is on the rise all across the world. According to the CDC, 23.31 million persons aged 18 and up in the United States were diagnosed with cancer in 2018. Sufferers and governments are bearing a greater financial burden as the number of cancer patients grows. The telehealth industry is predicted to expand rapidly over the forecast period.

Key Telehealth Market Trend

Another important aspect boosting the global telehealth industry is the increased demand for technology. Technology is being widely used by healthcare professionals to provide high-quality, remote patient care. The market will continue to develop as internet access improves and smartphone penetration rises. Furthermore, research institutions are focused on sophisticated technologies for RPM, such as mobile health (mHealth) technology.



Telehealth Market Value Chain Analysis

The information on the telehealth market's value chain analysis, which manufacturers can use to acquire a competitive advantage over the projected period. Profit margin optimization and company strategy evaluation need an overall understanding of value chains.

The following core components make up the global healthcare technology market's value chain:

- Manufacturers of medical devices and software developers
- Network services
- Connectivity and enablement
- Application platforms and middleware
- Storage
- Channels of distribution
- Service providers and system integrators
- Application maintenance and support
- Marketing and sales
- Innovation

The key market for telehealth:

- US
- Japan
- China
- UK
- Germany

Tata Elxsi's TEngage

TEngage

Omnichannel care simplified

The first-ever digital health platform for omnichannel care that offers a unified patient experience, and remarkable ease of use to patients and HCPs.

Feature

Enter the New Age of Digital Healthcare

Break free and stop allowing your infrastructural restrictions to define you. Adopt a cutting-edge integrated care management technology to seamlessly shift from traditional outpatient to digital, personalised, and predictive care.

A Digital Front Door to Healthcare Services

Increase your reach for better business and clinical outcomes. Create a platform that serves as a "digital front door" to all important healthcare services.

Deliver Healthcare Anytime, Anywhere

Deploy a platform that enables you to provide a consistent experience across the patient journey and care continuum on any device, at any time.

Maximize your Operational Efficiency

Experience unprecedented operational efficiency. Collaboration with existing hospital IT infrastructure and operations is simple because to seamless integration and interoperability.

Privacy and Security at its Core

the platform is HIPAA and GDPR compliant, with technical safeguards including as access restrictions, integrity controls, audit controls, and transmission security.

Highly Customizable Platform

The days of large, expensive platforms are long gone. Maintain a lean and straightforward approach with an open platform architecture that allows you to pick and plug workflow modules based on your hospital's individual requirements.

Leverage your Technology Ecosystem

With our technology-agnostic platform, you may avoid the hassle of changing your technology ecosystem. Use any cloud platform (AWS, Azure, GCP) or on-premise server to deploy.

Hassle-free Support and Maintenance

Enjoy complete post-deployment onboarding, maintenance, and support with complete peace of mind so you can focus on creating excellent patient experiences.

Region Specific Study Of Telehealth platforms

A. North America (NA)

US Telehealth

The telehealth market of U.S is forecasted to expand at a CAGR of over 28% by revenue during 2020-2026.

The United States, major players' significant investment on healthcare IT infrastructure contributes majorly to the market's growth. COVID-19 has tremendously increased physician acceptance of telemedicine in the US. Virtual care services and private payers are covered by Medicaid in most of the states, helping teleconsultation grow.

The use of ICT has the potential to tackle significant difficulties that the United States faces in providing patients with high-quality, cost-effective, and accessible healthcare.

The remote patient monitoring market is forecasted to be of worth more than USD 13 billion by 2026.

In 2020, the web/app-based telehealth segment will cater more than 77% of the telehealth market in the United States. Requirement of minimum software and hardware components for delivering telehealth solutions is increasing the need for web-based delivery models quite strong since they lower upfront installation costs by requiring. As a result, the market is seeing a growth in the use of web-based services.

Chronic healthcare management will grow for approximately 36% of telehealth market in the United States by 2020. One of the primary issues for healthcare providers is chronic diseases. For doctors, managing disorders like diabetes, hypertension, and cancer has become a serious issue.

By 2026, the healthcare providers are expected to rise by more than \$13 billion. In 2020, the teleconsultation had a share of around 42%.

Major Players of Telehealth Platforms in U.S

- American Well (Amwell)
- MDLive
- Doctor On Demand

- Teladoc
 - GlobalMedia Group
 - Carena
 - Philips
 - Medtronic
 - Vivify Health
-
- Snap MD
 - Zipnosis
 - AMD Global Telemedicine
 - BioTelemetry

According to market share in US, list of companies are:

[Image source: <https://www.definitivehc.com/resources/healthcare-insights/top-telehealth-companies-market-share>]

1. Zoom for Healthcare

One platform that connects your healthcare company. Zoom for Healthcare enables a hybrid workforce to stay connected.

Zoom is HIPAA, PIPEDA/PHIPAA, GDPR compliant.

Feature

Healthcare administration

- Board meetings
- Recruitment & interviewing
- Project management
- Supplier & vendor
- Real-time crisis communication

Medical education

- Practitioner education
- Continuing medical education
- Discharge planning
- Internal training
- Professional development
- Prevention e Wellness

Patient-centered care

- Case management
- Discharge planning
- Collaborative care teams
- Multidisciplinary teams
- Health coaching
- Group therapy

For small organization: \$14.99 per month, up to nine licenses.

Prepaid packages are available for mid-sized, large, and enterprise organizations

2. CISCO

Cisco is placed in more than 17,000 healthcare organizations. It is also HIPAA complaint

Feature

- Digital front door
- Remote observation services
- Telehealth and virtual care
- Mobile experiences

3. American Well (Amwell)

Amwell, a telemedicine start-up situated in Boston, Massachusetts, was founded in 2006 and links patients with doctors via encrypted video.

Amwell is selling its platform as a subscription based service to healthcare providers who want to acquire virtual consultation, system connectors allow clients to integrate telehealth into their existing processes.

Features		
✓ High performance video and phone modalities	✓ Self-service purchasing, registration and training	The us th A m er ic
✓ Secure HIPAA compliant and HITRUST certified platform	✓ Self-activated provider enrollment	
✓ Unlimited visits with up to 20 participants	✓ Reimbursement guidelines	
✓ Patient, provider and staff capabilities	✓ Patient engagement assets	
✓ Patient and guest invitations by text or email	✓ Patient Privacy and Terms of Use	
✓ In-visit screensharing, patient chats and nudges	✓ Account Support	
✓ Advanced in-visit security controls	✓ Standard reporting	
✓ On-demand and future visit scheduling	✓ Patient address book	
✓ Floating window and gallery view	✓ Patient tech-check	

an Well platform to document, that paperwork will be able to be transported into the system of record. It's safe and HIPAA-compliant. Amwell also have a set of APIs.

Partnerships of Amwell

- Apple:
- Cleveland Clinic:
- Cisco:
- Cerner & Epic:
- Google Cloud:
- Philips:
- TytoCare:

Services and cost

There is no need to make an appointment; can speak with any doctor who is available.

Prescriptions are sent to the pharmacy of choice, choosing through email.

- Make an appointment with a doctor for \$79 each visit.
- Licensed Therapist: \$109 for a master's degree and \$129 for a doctorate.
- Psychiatrists: \$279 for the initial visit, \$109 for follow-up.

Doctors onboarding

Doctors might choose to join the Amwell Medical Group or practise as independent practitioners.

Pricing

- For user 1-10: \$49 per practice user per month
- For user 11-20: \$44 per practice user per month
- For user 21-75: \$39 per practice user per month

4. Doxy.me

Doxy.me is HIPAA, GDPR, PHIPA/PIPEDA, & HITECH compliant.

Feature

For small, medium and large organization:

- Text and email invites sent via doxy.me
- HD video
- Audio calls
- Room passcode
- Edit waiting room
- Text & email notifications
- Photo capture

For medium and large organization:

- Personalized subdomain
- Transfer patient
- Customized branding
- Room access control
- Admin controls
- Shared rooms

There are more added features for large organization.

Pricing

For individual providers – 35\$/month.

For 2-50 providers – 50\$/month per provider.

For large organization - Customized.

5. Teladoc

It was created 15 years ago and has sold its telemedicine service to large self-insured enterprises, health plans, and, more recently, hospitals and health systems.

It's designed to share data, collecting data from their record or other form of clinical data repository and giving it back out.

Features

- Virtual care programmes will be powered by software: provide highly tailored, data-driven, collaborative, and complete healthcare experiences to enable care delivery.
- Request for consultation: alerts and communication in real time
- Smart comments: with EHR connectivity, you can document virtual care consults across your system, as well as unaffiliated care sites.
- Imaging: obtain diagnostic-quality studies right away.
- Analytics: based on real-time data, increase operational efficiency, clinical results, and financial performance.

6. VidyoHealth

VidyoHealth provides solutions to many healthcare organizations all around the world, which include Kyushu University, Massachusetts General Hospital, and More. Each of them had specific challenges that limit their ability to provide support to patients and collaborate between different regional teams.

It is HIPAA complaint.

Features

Virtual Sitter - RPM

VidyoHealth provides custom-built remote patient monitoring development services that will increase patient observation. Improve patient pleasure while also keeping physicians safe in an unpredictable healthcare environment.

- Virtual coordination of care
- Early intervention options for patients
- E-ICU monitoring to protect healthcare providers
- Virtual rounding and consultations

Video White-Labeling & Custom Branding

- Logo change within the application
- Removal of certain features or buttons
- App name change
- Custom features
- Changing placement

7. MDLive

MDLive, was founded in 2009. Miramar, Florida, United States of America is where the company's headquarters are located.

Patients come to MDLive from 3 sources:

- health systems,
- employers, and
- health insurance

MDLive also receives telemedicine patients as a result of a partnership with Walgreens, which allows Walgreens customers to consult with a doctor via MDLive video technology. Also, MDLive integrate with EHRs.

Feature

MDLive is free to join and there is no monthly membership cost.

The cost of insurance varies depending on the user's insurance coverage and plan details. Some insurance policies cover every visit with no co-pay or a minimal co-pay.

- Psychiatrist appointment – \$284

- General medical issue – \$82
- Dermatologist appointment – \$75
- Therapy appointment – \$108
- Psychiatrist appointment – \$284

Doctor Onboarding

MDLive has a rigorous hiring process for its network of doctors. All physicians must be board-certified in their specialties.

All physicians must have at least four years of post-residency work experience before they qualify to work with MDLive, and therapists must have had their independent licenses for a minimum of four years.

Medical doctor salary – \$84/hour approximately

Mental health therapist – \$70/hour approximately

8. Maple Telemedicine Canada

Maple is an app that connects with a doctor fast and effortlessly so can get back to feeling better. It's free to create an account, but if you're not covered by your work or insurance, it'll cost \$49 to schedule an appointment.

Person can describe symptoms and needed help with by logging into maple on a desktop or mobile device. After reviewing your request, the doctor will evaluate whether they can assist you and, if so, will proceed with the appointment. Any prescriptions or sick notes will then be available in the Maple app, where they can be delivered to your home or instantly sent to a nearby pharmacy for pickup.

They can help with bladder infections, urinary tract infections, cold and flu symptoms, skin problems, and more. Psychiatry, paediatrics, and allergy and immunology are among the specialties available to them.

B. European Union (EU)

Germany, the UK, France, as well as the rest of Europe, make up the European telemedicine market. In the worldwide Telemedicine market, the region has a sizable market share. The increasing use of smartphones and the development of various mobile platforms, as well as the rising prevalence of chronic and lifestyle-related diseases, are all contributing to market growth. Telehealth and telemedicine technologies, including electronic prescriptions, have been effectively adopted in several European nations. The growing mechanisation of care processes is generally regarded as a good thing.

Europe Telemedicine Market Size (2022 to 2027)

By 2027, the European telemedicine market is forecasted to rise from \$11.32 billion in 2022 to \$ 21.80 billion. Over the following five years, the compound annual growth rate (CAGR) is expected to be 14%.

Healthcare is integrated with sophisticated technologies such as IoT and data analytics which has expanded the telemedicine market's potential opportunities in Europe. In addition, the introduction of home care equipment and social media platforms has facilitated information and physiological data sharing between consumers and experts. Home care devices may track patients' health and send data to doctors on a regular basis, resulting in increased demand for these devices.

Furthermore, due to the continually expanding cases of chronic diseases that can be treated at home, private and public organisations are focusing more on creating new technology for real-time patient monitoring.

The absence of internet access in remote regions, a lack of knowledge, and higher installation costs for telemedicine systems are all limiting factors for the European Telemedicine market's growth.

Key Market Segments

Type, product and service, speciality, delivery mode, and country are all segments of the European telemedicine market. Based on product and service, the European telemedicine market is divided into software and hardware, teleconsulting, telemonitoring, and tele-education/training. The software and hardware sector held the biggest market share in 2020. The telemedicine market in Europe is divided into two types: tele hospital and tele home. The tele hospital sector held the greatest market share in 2020.

The European telemedicine market was divided into cardiology, gynaecology, orthopaedics, neurology, mental health (psychiatry), and others depending on specialty. The European telemedicine market was divided into three categories based on distribution mode: mobile, web, and call centres. In 2020, the mobile sector will have the biggest market share. Based on country, the Europe telemedicine market is split into France, Germany, Italy, Spain, UK, and rest of Europe. In 2020, the rest of Europe had the biggest market share.

1. Allscripts Healthcare Solutions

Allscripts delivers practise management and EHR technologies to hospitals and other healthcare providers.

Allscripts has received \$100 million in investment in one round.

It is CCHIT Certified

Product & Feature

Sunrise EPR

- A scalable electronic patient record as unique as your organisation can help you improve outcomes, patient safety, and digital maturity.

bMotion

- The dbMotion™ Solution enables organisations to combine patient data from various care contexts, such as health and social care, into a single longitudinal patient record, regardless of IT provider.
- dbMotion is a company that delivers semantically normalised data, point-of-care solutions, and an analytics gateway.
- Lowers the cost of care
- Allows physicians to give better informed patient care
- Improves clinical outcome and
- Aids in the move to accountable care.

Care Director

- This web-based solution assists your company in managing entire population health, assuring appropriate care across all care venues, and achieving high-quality outcomes.

Customers can choose from a variety of flexible plans, with the cost of a license starting at \$150 per provider.

2. Cisco Systems

Cisco, the market capitalization was set at \$213.2 billion. It had a profit of \$0.1 billion on annual revenue of \$49.3 billion. Cisco has raised \$2.5 million in one round of investment. On January 1, 1987, a Series A round was raised. Cisco is traded on the NASDAQ under the symbol CSCO. Sequoia Capital has invested in Cisco.

Product & Feature

- Patient care anywhere
- Transformation of operations
- Security, privacy, and compliance
- Data-driven clinical workflow

3. AMD Global Telemedicine

It is a B-B company.

Clinical healthcare practitioners working remotely can use a single web-based platform to gather and share in real time the medical device data, exchange documents and medical images.

AMD Global Telemedicine is certified to ISO 13485:2003.

Product & Feature

AGNES Connect: It is AMD's flagship software

Connect N' Care: It's a customisable telehealth tool

Integrated Medical Devices

AGNES Vitals Connect System

- Frees up time and resources for personnel to take and document patients' vital signs, allowing them to focus on clinical observation and patient contact.
- Cuts total capture and recording time in half, from 5 minutes to 2 minutes each patient.
- Integrates seamlessly with the Point ClickCare EHR, removing the danger of typical data entry errors.

- Additional telehealth features, such as video conferencing and connected medical devices, can be incorporated.

Video Visit Cart:

- Lightweight and slim form makes it easy to transfer from room to room and position near to a patient.

PAT Wall Unit

- It is a telemedicine consult wall mounted system. It's perfect applications that require a stationary set-up for video consultations, whether or not medical instruments are connected.
- PAT stands for Patient Assessment Terminal.

4. Biotelemetry, Inc

Biotelemetry has a market cap of \$0.01 Billion.

Revenue in 2020 (TTM):\$0.42B

BioTelemetry is registered under the ticker FRA:C25.BioTelemetry has acquired 4 organizations. Their most recent acquisition was Geneva Healthcare on Jan 28, 2019.

HIPAA-compliance

Product & Feature

MCOT®

- Proprietary MCOT algorithm

ePatch®

- Holter Monitoring with Extended Wear
- Comfortable wear alternatives
- Universally adaptable
- The Most Popular [SaaS] Platform
- Eliminates the paper process by streamlining the data deluge
- RMaaS (Remote Monitoring as a Service)
- Manages data with the practise • Provides technical resources on demand
- Manages device alarms on a daily basis

EMR

- HIPAA-compliant

5. Medtronic

Cardiacom was bought by Medtronic which used to offer telemedicine services for remote patient monitoring and disease management on a daily basis.

Product & Feature

IHS Managed Services

An integrated and modular service offering for the establishment and maintenance of cutting-edge catheterization labs and operating rooms, including:

- Complete clinical department setup
- Purchasing and managing equipment
- Material administration
- Advisory on operational excellence
- Advanced cardiovascular information systems and OR management systems are being implemented.

IHS Pathway Accelerator

A complete solution for a wide range of diseases and processes

- Follows a tried-and-true approach and framework based on years of expertise and a great track record of accounts, which is suited to your specific circumstance and path.
- Supports the project and ensures that hospital teams remain linked during the transition.
- Allows for remote patient management and digital interaction along the whole care pathway, from treatment planning to follow-up.
- Allows you to draw on the experiences of others in the change process for benchmarking, cooperation, and coaching.

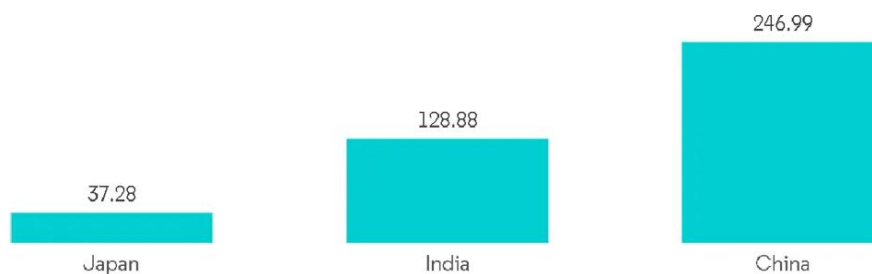
C. Asia Pacific (APAC)

The Asia Pacific digital health market is divided into four categories based on technology:

- telemedicine,
- mobile health,
- health analytics, and
- digital health systems

Between 2019 and 2025, the telehealth care segment is expected to increase at a 31.8 percent CAGR. The causes driving the segmental expansion are rising funds for telemedicine, a shortage of doctors, a quickly developing telecommunications sector, and growing awareness of telehealth. Tele-healthcare facilities are becoming more popular in Asia Pacific as a result of their accessibility in rural places and real-time treatment programmes

Estimated Number of People Aged 65 years and Above (in million), By Country, 2030



Source: World Population Ageing Report, 2019



Market's expansion is also aided by rising disposable income and changing lifestyles. However, a lack of awareness and a strict regulatory framework may stifle market growth in the near future.

The Asia Pacific digital health market is divided into Thailand, Singapore, India, China, Australia, Malaysia, Japan, South Korea, Indonesia, and the Philippines, according to the geographical landscape.

About INDIA

India is a country with a diversified population from various socioeconomic backgrounds. According to interpolation of the most recent United Nations data, India's current population is 1,403,309,872.

India's public healthcare system is woefully inadequate, accounting for only 22% of overall health expenditure. Because India's government spending on health has remained low, private out-of-pocket (OOP) spending is among the highest in the world. The majority of healthcare spending is out of pocket (82.2%), with 74.7 percent going to pharmaceuticals. The average out-of-pocket payment is 4.8 percent of total household spending, rising to 6.5 percent in the wealthiest 20% of the population. This is concerning because nations that rely heavily on OOP financing for healthcare have the highest prevalence of catastrophic payments (i.e., spending more than 10% to 20% of household income on healthcare).

Top telehealth companies in APAC region

- InTouch Technologies Inc – 13% market share
- Allscripts Healthcare Solutions – 4.92
- Resideo Technologies Inc
- AMD Global Telemedicine
- CISCO Systems

INDIA SPECIFIC:

- Practo Technologies Private Limited
- iCliniQ
- Dhanush Healthcare
- Doxy.me
- AMC Health

1. InTouch Technologies Inc

InTouch Health, a telehealth services company, gives healthcare providers tools to deliver virtual care. It was named [Best in KLAS for Virtual Care Platforms in 2019](#). It was started in 2002, headquarter in CA, United States.

Intouch, is a part of Teladoc Health, B to B company which has market share of 13% in APAC region. It has strong presence in South Korea, India

- v GE Healthcare working with InTouch Health
- v HITRUST CSF Certified

Product & Feature

[Solo™ - Is industry's first fully integrated, virtual care platform](#)

Solo, which is based on a cloud-based network, provides a seamless and scalable virtual care experience for every, care environment, or budget.

- It is a SaaS platform which is available on web, desktop, and also on mobile devices
- Full coordination with configurable user workflows
- EHR interoperability
- Patient-centric architecture

Pricing

- Set-up charges begin at \$10,000
- Provider costs - the licencing arrangement is based on the number of users per month. Customers' unique requests are used to establish final cost.

2. Allscripts Healthcare Solutions

B to B company with market share of 4.96% in APAC region. It is partnered with Microsoft, Apple

- v Strong presence in India , Australia, Singapore
- v Technology partner – Microsoft
- v CCHIT Certified product

Much of Allscripts' historical EHR business is included in this category, which accounts for nearly three-fifths of the Chicago-based company's overall revenue. Sunrise, Paragon, Touchworks, Opal, Star, HealthQuart, and Db Motion are all being sold by Allscripts. In 2021, those enterprises generated \$928 million in total.

Product & Feature

Sunrise EMR™ For hospitals and health organisations, to give

- Computerized Physician Order Entry
- note and flowsheet documentation
- keeps track of important activities including referrals, scheduling, current orders, prescriptions, results, and papers
- real-time updates
- identifying and resolving patient flow issues
- ensure that entire clinical and operational team is up to date.

Allscripts Opal - Allscripts Opal is a digital health record (DHR) designed to help companies speed their digital transformations by combining elegance, performance, and flexibility to improve patient outcomes.

Opal by Allscripts is a tried-and-true system used in more than 100 Australian hospitals.

Allscripts Pro - Allscripts Professional EHRTM is the industry-leading solution for medical practises looking to improve patient safety, streamline operations, and increase income. It is designed for medium to large healthcare companies.

Sunrise, Paragon, Touchworks, Opal, Star, HealthQuart, and Db Motion are all being sold by Allscripts. In 2021, those enterprises generated \$928 million in total.

3. Resideo Life Care Solutions

Resideo Life Care Solutions provides telehealth sector.

Product & Feature

Resideo's LifeStream 5.4 software

- Patient Health Questionnaires (PHQ) — Using a calendar-based scheduling interface, PHQ screeners can be tailored and assigned to help monitor behavioural health and other disorders remotely.
- Pain Monitoring — Telemonitored patients with chronic pain can be given the Wong-Baker FACES® Pain Rating Scale
- Educational Videos

Clear Arch Health

The **MobileVitals Touch** system offers a new set of benefits to both doctors and patients, including:

- Remote Patient Monitoring
- Virtual Video Visits: One of the tablet's telehealth features is the ability for patients and healthcare practitioners to engage via video. Patients can also utilise this feature to communicate with family and friends.
- Drug reminders
- Emergency Response: Assistance is only a button push away, with emergency monitoring available 24/7/365. Our US-based emergency response operators will recognise you and deliver the right assistance.
- Messaging: The tablet has an intuitive messaging interface that allows users to communicate easily.
- Educational resources
- Spanish Language Support: The MobileVitals platform can be used in Spanish. Simply pick Spanish on the patient enrollment form, and all voice instructions will be announced in Spanish. The patient profile will also be annotated to allow Spanish-speaking nurses to respond to blood pressure, weight, glucose, and other warnings. There is no need to stock language-specific equipment because the language options are enabled over the web.

Vitals Peripherals: a full-featured suite of wirelessly connected peripherals for monitoring chronic illnesses such as CHF, COPD, hypertension, diabetes, and more.

4. AMD Global Telemedicine

AMD Global Telemedicine is the B to B company, headquarter in Massachusetts, United States. In Asia Pacific region, it has its presence in India, Malaysia, China, Australia, Singapore, Thailand. It is HIPAA compliant.

Product & Feature

AGNES Connect® AMD's primary software solution, Clinical Encounter Telemedicine Platform.

- Cloud based
- E-Prescribing
- Video Conferencing
- Appointment Scheduling
- Multi-Provider Practice
- HL7, FHIR supported

Connect N' Care®

The telehealth platform which automatically gathers data from connected device, diagnostics and securely sends it to a remote consulting physician in the real time.

When the assigned clinician receives notified of a new patient case, they can log in via the Connect N' Care® app or web-based interface to check the SOAP notes, then do a fast video consult to see the patient. The telehealth encounter can then be logged in the EMR via APIs, HL7, or FHIR protocols at the conclusion of the consultation.

5. CISCO

It is B to B company, headquarter in CA, United States. It has strong presence in India, Indonesia, Japan, Australia Malaysia, Singapore in the Asia Pacific region. It has partnership with Samsung.

It is HIPAA/BAA compliance, FedRAMP Authorized, ISO/IEC 27001 certified

Product & Feature

Webex for Healthcare

Physicians can launch Webex video visits directly from the Electronic Health Record/Electronic Medical Record

- Patients can launch Webex video visits from a browser or mobile device
- Track, analyse and enhance patient experience across multiple touchpoints – pre-consultation, post-consultation, and more

Pricing

	Starter	Business	Enterprise
Price	₹1049 license/month	₹2099 license/month	Need based
Number of hosts	1 to 50	1 to 100	Customizable
Meeting length	24 hours	24 hours	24 hours

6. Practo Technologies

It is a B to B & B to C company, headquartered in Bengaluru, founded May 2008. It is running in 15 countries. It is HIPAA compliance, ISO 27001 certified, BSI authorized.

Product & Feature

Practo Ray - Hospital and clinic practise management software

- Refer to the patient's previous history
- Automated appointment SMSs to the patient
- Control and monetize post consultation

The enormous library of help articles and training videos is simple to learn and use and serves as a quick reference for doctors and their employees.

Practo Prime - Provides excellent visit experience

- 15-minute wait time
- Instant booking 24/7
- Smart Calling system; connects automatically if connection fails
- Free follow-up through chat, phone, or video call
- Ray & Qikwell Lite – utilised to improve efficiency
- Assured meeting with doctor of choice
- The hospital and clinic are charged a one-time technology fee the first time a patient uses it to communicate with them.

Pricing

7. iCliniq

It was founded June 2012, located in Coimbatore, Tamil Nadu, India, B to B company has its presence in Singapore. Its revenue is 2.4 million USD. It is HIPAA and GDPR compliant.

Product & Feature

iCliniq Connect - For hospitals, a global second opinion/online medical consultation platform. It assists hospitals in allowing doctors and patients to consult online.

- **Dedicated URL** - Your hospital will be given a link that lists all of the doctors and consultation options available to them online.
- **Convenient Communication Channels** - You can complete the entire process of submitting your case and receiving your report without having to travel around in uncomfortable settings.
- **No annual management fees** - Hospitals will only be paid a monthly affiliation cost for each doctor.
- **Round-the-clock tech assistance** - iCliniq Connect is simple to use, and we have a 24/7 tech support team available to assist you.
- **Health Tools** - We are always improving our product to make it more user-friendly. Your patients will have access to all of the health tools, including the COVID-19 tracker.
- **App-based access** - We provide iOS and Android apps for doctors. Doctors can use the app to answer questions, communicate, and conduct phone or video consultations.

8. Dhanush Healthcare

Founded in February 2020, Hyderabad India, this B to B company has its presence in US, Europe, Australia, Middle East, Africa. It has social care partners like UNICEF, Bill and Melinda Gates Foundation, Ministry of Health and various state governments (India). It is HIPAA compliant.

Product & Feature

Dhanush EHR – Electronically handles patient's history, screening, diagnosis, prescription, advice, and allergies; ability to merge diagnostic lab data, imaging reports, and images into a single integrated medical record

- Innovative: With our integrated feature, you may achieve new levels of efficiency and production.
- Affordability
- Powerful
- Versatile: The EHR system is based on the most recent Federated Electronic Health Record specifications and regulations
- Interoperability: When you use an EHR, you can rest assured that your practise will be able to readily communicate with other practises.

9. Doxy.me

Doxy.me, a free, secure telemedicine service, for healthcare providers to connect with their patients remotely, promising to improve the health care experience during this vital time. Doxy.me was created to be simple to set up and use; no downloads or apps are required, and patients are not required to register accounts. Because the process is automated, clinicians can begin practising telemedicine almost immediately.

Doxy.me, situated in Salt Lake City, Utah, and Charleston, South Carolina, was founded by Brandon Welch, MS, PhD. Patients can visit Doxy.me for a virtual clinic experience that is quite similar to the traditional consulting format. Doxy.me is compliant with HIPAA, GDPR, PHIPA, and HITECH rules, and it works on mobile devices (Safari/Chrome) as well as most desktop browsers. Doxy.me is now available as a licenced version with additional features and unique branding.

Product & Feature

Doxy.me provides a lot of appealing features that make it a straightforward and complete telemedicine solution. It is HIPAA compliant system that uses encrypted point-to-point communications. A Business Associate Agreement (BAA) is given.

Pricing

Doxy.me provides both a free trial and a free tier of service.

The free trial relates to the Professional tier, which costs \$35 (£27) per month and is also for an individual provider.

While the lower tiers are confined to a single practitioner, the top tier, Clinic, is available for a practise with numerous clinicians. The fee per clinician is \$50 (£38), with a discount available for practises with more than five providers.

10. AMC Health

It has its headquarters in New York. Since 2002, this organisation has worked with a wide range of consumers, including supporting the medical requirements of US veterans through VA services (Veterans Affairs). It has also taken part in a number of clinical trials.

Product & Feature

Medical treatment has traditionally been provided in a medical facility, such as a doctor's office or a hospital. Doctors' house calls, like the little black bag in which they carried their stethoscopes and other instruments, are also a thing of the past. However, healthcare is becoming more complicated as the population ages, patients require more care, and for at

least certain disorders, patients and providers must interact more frequently to manage their condition.

Pricing

Need Gap Analysis

Feature list of TEngage

About Platform

•White labelling	Yes
•Cloud platform	Yes
•Easy deployment	Yes
•Web/desktop/ mobile	Yes
•EHR interoperability	Yes
•Multi-Lingual	No
•Multiple services	Yes

Compliant with

•HIPAA	Upcoming
•GDPR	Upcoming
•ISO	Upcoming
•CPT	Upcoming
•HL7	Upcoming

Patient's dashboard

•Updated info on the patient condition	Yes
•Assigned virtual room	No
•Chief complaints	Yes
•Ongoing medication	Yes
•Insurance information	Yes
•History of visits	Yes
•Easy UI design	Yes

Doctors catalogue

•Specialization & Experience	Yes
•Patient Queuing prioritized	No
•Appointments	Yes
•Care location	No
•Patient health record	Yes
•Patient referral	No

Online Consultation

•Dedicated Link for teleconsultation	Yes
•Separate dashboards for doctor and patient	Yes
•Room passcode	No
•Automated reminders	No
•Virtual waiting room	No
•Appointment Scheduling	Yes
•Edit waiting room	No
•Calendar integration	Yes
•Patient Engagement	Yes
•Patient waiting notification	No
•Audio calls	No
•HD video	Yes

•Group calling	Yes
•Virtual backgrounds	No
•Whiteboard	No
•Screen share	No
•Turn Off Participant	No
•Screen Image Capture	No
•Integrated Clinical Documentation	Yes
•Spotlight	No
•Speech to text control	Yes
•Real Time Text/Chat	Upcoming
•Real time file transfer	Yes
•Real time vitals data transfer	Yes
•Imaging	No
•Notes	Yes
•E-Prescribing	Yes
•Assign lab tests	Yes
•Live support assistance	No
•Recordings & transcriptions	No
•Noise removal	No
•AI enabled Gesture recognition	No
•Automatic transcription	No
•Picture in Picture for multitasking	No
•Analytics portal	Yes
•Shows consultation timing	Yes
•Time extension, if needed	No
•Re-joining update	No
Payment	
•Insurance Management	Upcoming
•Easy payment & verification	Upcoming
•Geolocation	No
•Previous payment record	No
•Post-Visit Patient Rating/Reviews/Survey	No

For APAC Telehealth companies

	Intouch	AMD	CISCO	Resideo	iCliniq	AMC
About Platform						
White labelling	Yes					
Cloud platform	Yes	Yes				
Easy deployment	Yes					
Web/desktop/ mobile	Yes	Web based		Tablet based	Cloud/App	Cloud/Web
EHR interoperability	Yes	Yes				
Multi-Lingual						
Multiple services	Yes					
Compliant with						
HIPAA	Yes	Yes	Yes	Yes	Yes	Yes
GDPR					Yes	
ISO		Yes	Yes			
CPT						
HL7	Yes	Yes				
Patient's dashboard						
Updated info on the patient condition	Yes					
Assigned virtual room	Yes					
Chief complaints						
Ongoing medication	Yes					
Insurance information						Yes
History of visits	Yes				Yes	Yes
Easy UI design	Yes					
Doctors catalogue						
Specialization & Experience	Yes				Yes	
Patient Queuing	Yes					

prioritized						
Appointments	Yes				Yes	
Care location	Yes					
Patient health record	Yes					
Patient referral						
Online Consultation						
Dedicated Link for teleconsultation	Yes		Yes		Yes	
Separate dashboards for doctor and patient	Yes					
Consent from patient						
Room passcode						
Automated reminders	Yes				Yes	Yes
Virtual waiting room	Yes					
Appointment Scheduling	Yes	Yes				
Edit waiting room						
Calendar integration			Yes			
Patient Engagement				Yes	Yes	Yes
Patient waiting notification	Yes					
Audio calls			Yes			
HD video	Yes		Yes			Yes
Group calling	Yes			Yes		
Virtual backgrounds			Yes			
Whiteboard			Yes			
Screen share			Yes			
Turn Off Participant						
Screen Image Capture						
Integrated Clinical Documentation	Yes					
Spotlight						

Speech to text control						
Real Time Text/Chat	Yes		Yes		Yes	Yes
Real time file transfer	Yes	Yes			Yes	Yes
Real time vitals data transfer	Yes	Yes				Yes
Imaging	Yes	Yes				
Notes	Yes					
E-Prescribing	Yes	Yes		Yes		
Assign lab tests					Yes	
Live support assistance					Yes	
Recordings & transcriptions			Yes			
Noise removal			Yes			
AI enabled Gesture recognition			Yes			
Automatic transcription			Yes			
Picture in Picture for multitasking			Yes			
Analytics portal	Yes		Yes			
Shows consultation timing						
Time extension, if needed						
Re-joining update						
Payment						
Insurance Management						Yes
Easy payment & verification					Yes	Yes
Geolocation						
Previous payment record						
Post-Visit Patient Rating/Reviews/Survey						

Geo-specific EMR/EHR applications

These are the major players in the APAC region.

India specific EHR/EMR applications are:

- Omni MD
- Allscripts
- MD Synergy
- Millennium
- Spigot
- DocEngage Informatics Pvt. Ltd
- Gem3s Technologies Pvt. Ltd
- Practo Technologies Pvt. Ltd
- CernerHealthcare Solutions Pvt. Ltd
- Philips India Limited
- Siemens Healthcare Pvt. Ltd
- Healthlink Technologies

Survey on healthcare market expectations – INDIA

According to the survey conducted by Royal Philips, which surveyed almost 3,000 healthcare leaders from 14 countries in December 2020 to February 2021. From India 200 participants were there.

- 75% of Indian respondents said that the shift to remote or virtual care is a top priority
- 94% said their health centres would like to invest in AI technologies soon
- 65% said that there is difficulties with data management, and 55% the lack of interoperability across technological system

Survey on healthcare market expectations – AUSTRALIA

According to the survey conducted by B2B software comparison website Capterra with more than 1,000 Australians, trying to understand their perspectives about telehealth

- 5% less risk of catching contagions, 15% remote access
- 81% mobile device is the most used device, 21% will not use after pandemic
- 16% poor virtual consultation sessions and technical glitches while teleconsultation

Marketing strategies & sustainable growth

4 Ps of marketing for Tengage

The 4 Ps of marketing for Tengage are as follow:

Product

TEngage Basic

- Cloud based platform
- White-labelling
- EHR interoperability
- Calendar integration
- Appointment scheduling
- Patient visit history
- Doctors' detail
- Video call
- Group calling
- Integrated clinical documentation
- Analytics portal
- Easy payment
-

TEngage Advance

- On-premises server-based platform
- Care location
- Multilingual
- Virtual waiting room
- SMSs alerts/notifications
- Real time file transfer
- E-prescribing
- Assigning lab test
- Screen share

TEngage Premium

- On-premises server-based platform
- Speech to text control
- Real time vital data transfer
- Whiteboarding
- Advanced analytics portal

TEngage Advance

- VR integrated platform
- AI enabled gesture recognition

Price

Based on our competitive analysis, pricing could be:

- Subscription based pricing
- Fixed rate pricing

Target Population (B to B)

Immediate:

- Public & private hospitals (small, medium size), specialized or multispecialty hospitals, hospitals in a network

Later:

- District hospitals, CHCs, PHCs, government clinics, maternity centers, rehabilitation hospitals, government digitals health programs
- Fitness & Wellness center; to keep their customers informed and updated, solve queries
- Pharma companies; to directly connect with their customers for research and feedback
- Medical device manufacturer; for seamless integration of telehealth platform with the organization system

Place

- Andhra Pradesh, Tamil Nadu & Karnataka has the highest adoption to digital health services, followed by Kerala, Maharashtra, Gujrat. Therefore, initial focus need to be at the target population in these states.

- Later, focus would be on covering the target group from major parts of the country
- Gradually entering rural areas with lack of healthcare facilities to provide affordable remote care via telehealth platform
- Singapore: Bedok, Jurong West and Tampines are major cities. Other two areas Woodlands and Hougang
- Australia: Sydney, Melbourne, Brisbane, Perth

Promotion

- Conducting research with target group; to understand their requirements better
- Pushing its unique features to the potential customers
- A high-performance website which provides an information rich projection of its expertise into the marketplace
- SEO, social media and advertising
- Promoting our product in national and international conferences
- Purchase may not happen in 1 day, so it is essential to keep potential buyer updated by sharing related graphs and infographics to raise awareness.
- Also, promoting the benefits of virtual platform in old and existing patients

Global Market Outreach

Target Audience

- Clinical Providers
- Management Administration
- Nurses and other staffs.

Places these audience can be targeted

- Social media such as Facebook, LinkedIn, YouTube.
- Digital Newsletter
- Medical magazines
- News, Guest blogs, op-eds

Activities to perform

- Conferences with medical associations.
- Campaigns collaborated with hospitals.
- Campaigns collaborated with smaller clinics.
- Social media campaigns.
- Media activities
- Website.
- Demos with satisfaction surveys from providers and administration.

Opportunity exploration

Geo-specific business model

The SWOT analysis for telehealth solution TEngage:

Strength:

- Product of a highly trusted Tata Group
- Provides white labelling solution for giving look and feel of the respective organization
- Provides speech to text feature, for proper capture of verbatims and decrease chances on missing out the important details
- Many upcoming features which would improve the usage of virtual consultation

Weakness:

- Many features are yet upcoming
- Provides similar features which is already existing

Opportunity:

- Huge market in India due to large population
- Government of India is heavily investing in digital healthcare
- Major population lives in rural India where there is lack of proper health facilities
- There is large number of small and mid-size hospitals, which is our major initial target group
- Increasing population of old age people for whom continuous travel/commute is difficult
- Telehealth in India is in evolving phase; therefore, it is good to experiment with needed features
- Yet again increasing cases of Covid-19 in some states

Threat:

- Post pandemic virtual consultation is decreasing
- Lack of acceptance for virtual healthcare consultation
- Less satisfaction with online consultation
- Difficult to operate mobile/laptop by old age people
- Telehealth in India is in evolving phase; therefore, knowledge and awareness is less
- Lack of proper internet facilities in rural areas
- lack of interoperability across technological systems
- Lack of strong government guidelines and regulation pertaining to telehealth

Pricing menu for TEngage

TEngage Basic

Rs 999- Rs1199/provider/month

Rs 899 - Rs 1099/ provider annually

TEngage Advance

Rs1299 - Rs1399/provider/month

Rs 1099 - Rs 1299/ provider annually

TEngage Premium

Rs1499 – Rs1599 /provider/month
Rs 1299 - Rs 1499/ provider annually

Sustainable growth

The telehealth market is projected to grow from \$ 90.74 billion in 2021 to \$ 636.38 billion in 2028 at a CAGR of 32.1% in the forecast period, 2021-2028

European Telemedicine market was worth \$14.85 Billion in 2020 and is further projected to reach \$ 57.37Billion by 2027, at a CAGR of 21.30% during 2021-2027 (forecast period).

Leveraging Global Healthcare

Home Care

Home health telehealth has become a more popular care model since the COVID-19 pandemic hit.

Example:

- Apollo Homecare provides Home Visit Programs, Home Partnership Programs, Home Nursing Programs
- Foster Healthcare: Occupational therapy, Speech Therapy, Physical Therapy
- Aurora Healthcare: Helping Hearts at Home Package, Diuretic heart failure program, Rapid recovery program, Personalized Home care for chronic conditions

Clinical Research

A streamlined trial process and the recruitment of a diverse population for studies within the secure confines of trial participants' homes were made possible by the introduction of modalities like remote patient recruitment, remote consenting, video conference assessments, and at-home phlebotomy by means of digital transformation.

Any modern technology's long-term success depends on making it simple, standardized, patient-centered, and with an adaptive regulatory framework design that takes important considerations like privacy and cybersecurity into account.

Example:

Through the telemedicine application Doxy.me, clinicians and researchers may communicate visually.

Elder Care

Elder care is typically required when an elderly person's health slowly deteriorates with age, although it may also be required in emergency situations. When your health begins to decline and you become more and more dependent on others for daily activities, getting older may be a challenging experience. The elderly are in need of the most compassion and care at this time.

Eldercare Includes –

- Doctor teleconsultation
- Nutrition teleconsultation
- Physiotherapy Video Consultation
- Remote health monitoring
- Home lab test service
- Emergency coordination

Home lab test

Collaboration with diagnostic centers to help them provide home medical tests and quick delivery of results through a web based user interface.

Options for bookings, patient profile, diagnosis and digital report might be kept in the interface.

Practo provides a similar service.

Some of the services available are:

- Covid RT-PCR test
- Fasting Blood Sugar
- Beta HCG
- Vit b12 test
- HbA1c
- Liver Function test

Pharmaceuticals

By 2023, the Indian pharmaceutical market is projected to be valued 33.18 billion USD and rank ninth in the world.

In FY20, Abbott India generated \$34.60 billion.

Abbott India oversees producing a wide variety of nutritional goods, diagnostic gadgets, branded generic medications, diabetes, vascular devices, and more. A wide range of therapeutic categories, including women's health, gastrointestinal, cardiology, metabolic

diseases, and primary care, can be used to group Abbott's products. One of the major MNC pharmaceutical businesses and one of the oldest pharmaceutical firms in India is Abbott.

Pfizer Pfizer Patient Assistance Program (Pfizer PAP) Connect- PAP Connect enables US patients and their healthcare providers to apply and maintain their enrollment for certain primary care medications totally online via their mobile device or PC. Insured and uninsured patients who qualify and are in financial need can receive some medications for free thanks to the Pfizer Patient Assistance Program.

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