

COVID-19, A MISFORTUNE FOR THE MEDICAL VALUE TRAVEL
(MVT) IN INDIA.

SUMMER TRAINING REPORT

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ABBREVIATIONS

ABBREVIATIONS	MEANING
Covid-19	Corona Virus Disease
MVT	Medical Value Travel
CAGR	Compound Annual Growth Rate
WHO	World Health Organisation
FTA's	Foreign Tourist Arrivals
AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy
IMTJ	International Medical Travel Journal
OPD	Out Patient Department
PPE	Personal Protective Equipment
API	Active Pharmaceutical Ingredient
DMT	Diasporic Medical Tourism

PART I

COVID-19, A MISFORTUNE FOR THE MEDICAL VALUE TRAVEL (MVT) IN INDIA.

INTRODUCTION

Travelling from one place to another for medical needs is an age-old concept. Although with the developments in transportations, technology, healthcare, and increased willingness of people to do so, medical value travel has emerged as not just a practice but an industry. Medical value travel is **often described as the practice of travelling to another country (or geographical location), for the purpose of obtaining healthcare.** The motivations of people to do so vary from one to another, with better facilities and cost benefits being the most influential ones.

People are increasingly travelling from western to developing countries for medical needs. In 2017, India ranked 5th Globally among 41 major medical tourism destinations, as per Medical Tourism Index Overall ranking and 2nd in Asia, among the most preferred destinations for medical travel. The attraction towards India lies in the cost benefit (almost a difference of 50%, then western countries), trained manpower, cultural richness, and holistic medicine (Ayurveda, wellness). The cities that attract most medical tourists coming to India are Delhi, Mumbai, Chennai, Bangalore, Hyderabad, and Kolkata. Nearly 27 percent of India's medical tourists head to Maharashtra, out of which 80 percent go to Mumbai. Chennai accounts for treating nearly 15 percent of the incoming foreign patients while Kerala handles around 5 percent to 7 percent. South-East Asian countries, the Middle East, Africa, and SAARC countries are the major source countries for India. More than 50 percent of medical travellers coming into India are from Bangladesh.

Encouraged by government and catalysed by the increase of corporate firms in healthcare (Private hospitals make up 80% of Health facilities available in India it), India has undoubtedly become an attraction. Medical tourism in India was projected to grow at a CAGR of 200% by 2020, hitting \$9 billion. In 2017, 495,056 patients visited India to seek medical care.

But covid-19 has become an eclipse for the promising industry of Medical value tourism. WHO declared covid-19 as a global pandemic on 11th march 2020. India started to see a steady rise in the number of positive cases in March too, after which a nationwide lockdown was imposed on 24th march 2020 as a preventive measure to halt the spread of virus. Followed by three more lockdowns which lasted till 31st of May 2020. Post this the government has started easing restrictions in a phased manner. But the virus continues to spread in the country. **At the time of writing this article the total number of covid19 positive patients in the country stands at- 746,824.**

Tourism, MVT and hospitals co-depend on each other. With lockdowns imposed on many countries and the world trying hard to deal with the crisis, travel and tourism has come to a nil. MVT is bound to take a blow due to this and along with it the international patient revenue that hospitals generally make.

This research focuses on the effect of Covid -19 on Medical Value Travel and its implications on the private hospital sector that indulges in the international patient business. The research

will also briefly cover the anticipations for the future face of MVT and list some recommendations that may help it survive the crisis of covid-19.

STUDY OBJECTIVES:

- 1)To study the ramifications of Covid-19 on MVT in India.
- 2)To study the implications of these ramifications on Indian Hospitals.
- 3)To figure out some recommendations that may help in the current and coming times.

METHODOLOGY

A narrative review of literature was conducted using research papers and articles from various databases like- google scholar, PubMed, Wikipedia.

Internet searches of professional organization and government www-sites, unpublished research studies, discussion papers, media releases were also conducted. Almost 25-30 documents were reviewed, of which 18 were used in this report.

The selection was made primarily on the following basis-

- 1)Most recent news items & press releases(2016-july2020).
- 2)Those written in English.

The selected pieces were then analysed and used to put together the ramifications of covid-19 on MVT industry, implications of these ramifications on Indian private hospitals, future trends in MVT.

KEY WORDS USED: Medical Value Travel, Medical Tourism, Covid-19, Private Hospitals, Corporate Hospitals, India

LIMITATIONS

A secondary data search was done to analyse all existing journal articles and publications. However, the number of articles found on the exact issue of “impact of covid-19 on MVT”, were limited. Probably due to the recency of situation. Therefore, the review is mainly from news articles, and limited research papers that were found.

Also, the report focuses on the impact of covid-19 on Mvt and implications for private hospitals. Hence, how the scenario effects public healthcare was not taken into consideration.

FINDINGS

Medical Value Travel sector depends on two verticals – hospitals that treat patients, and MVT companies that are responsible for facilitating the travel of international patients to India. With lockdowns in place, tourism has come to a standstill. Private hospitals, who were already spiralling downwards with patient footfall shortage, decrease in bed occupancy, no elective surgeries hence no revenues, have been sent plummeting down due to a blow to medical tourism. Big hospitals in India almost squeeze out a 10-20% of their revenue from international patients, (1, 2) which has gone down to almost a nil.

EFFECT OF COVID-19 ON MVT

In 2019, India was ranked as the third most preferred destination for medical tourism, with the industry set to reach \$9 billion in valuation in 2020. (3)

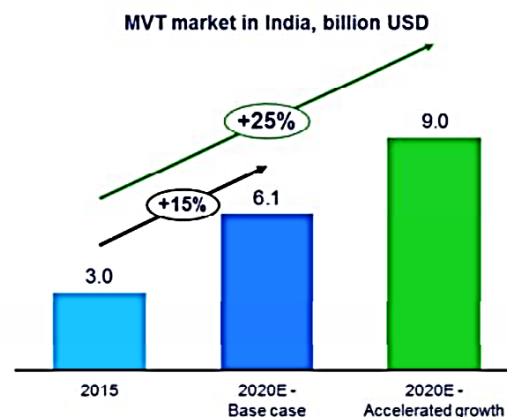


FIG: GROWTH PROJECTION FOR MVT

Source: ficci.in

But with the coronavirus pandemic, MVT is now one of the worst-hit sectors with its survival being questioned.

Global transport and its status are fundamental for MVT industry. In 2018, Ministry of Tourism started to derive purpose of Arrivals by clubbing various visa type categories in which foreign tourist travel to India. In 2018, as per the analysis 6.1% of all tourists that arrived in India, came for medical purpose. Foreign tourist arrivals in India on medical visa during 2016 and 2017 were estimated at 4,27,014 and 4,95,056 respectively.

24.2% arrivals from West Asia was for 'Medical Purpose' followed by Africa (14.6%). (4)

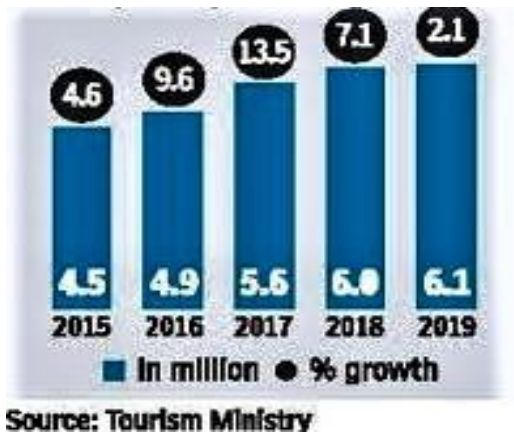


FIG: FOREIGN TOURIST ARRIVALS IN INDIA (JANUARY-JULY)

The number of tourist arrivals in the country (after touching a record high in December 2019) had already started falling in Jan 2020, owing to the spread of virus from china to other countries. Due to cessation of International Travel during the lockdowns in India as well as other affected countries has only worsened the situation for MVT industry.

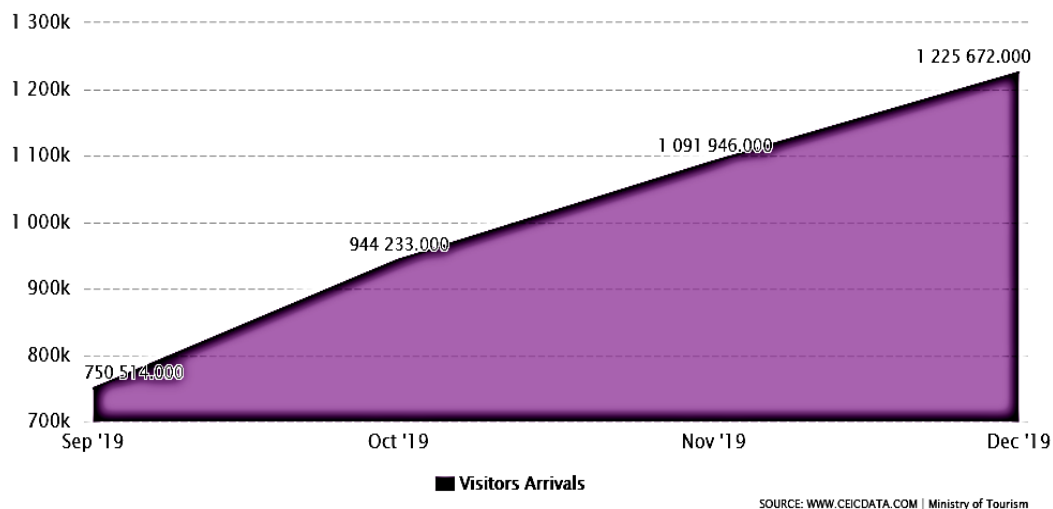


FIG: FTA'S IN INDIA (SEPT'19-DEC'19)

Above figure shows the FTA's to India from September 1st, 2019 to December 31st, 2019. An increasing trend in the number of FTA's per month can be noticed. The figure below, shows the number of FTA's from December 2019 to March 31st, 2020. The number started decreasing even before the lockdown in India started March, probably due to many parts of the world already being affected by then. March 24th onwards, there were obviously zero FTA's.

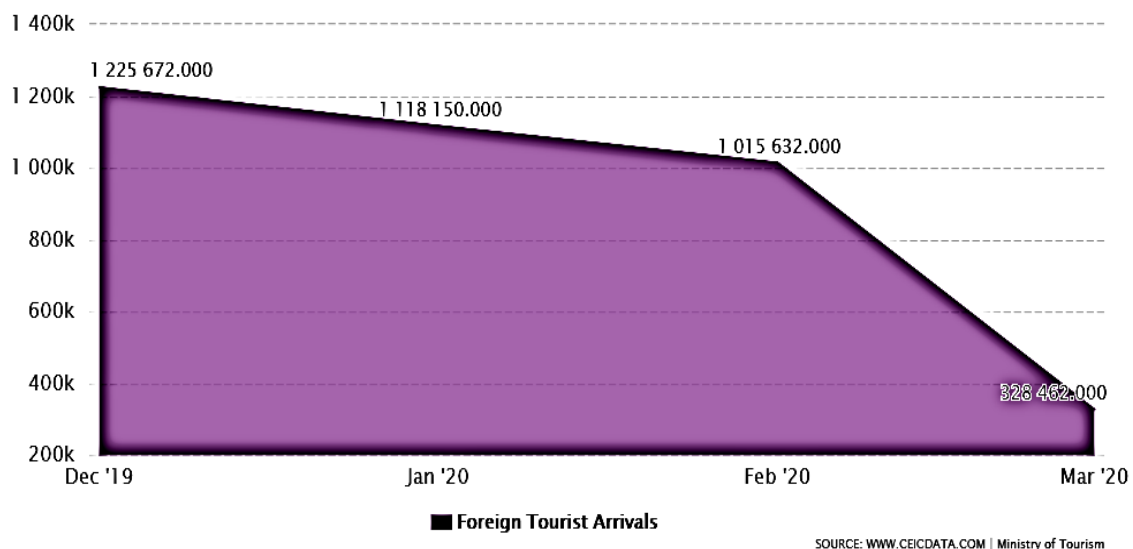


FIG: FTA'S IN INDIA (DEC'19-MAR'20)

Since March 15 (around the time when corona started spreading massively around the world), international patients have not been coming to India. There has been zero revenue since before the beginning of the lockdown, but the expenses are still there. If the corona conditions persist across the world for six months, the fiscal damage to the MVT industry has been estimated at almost \$2.5 billion. This is equivalent to the revenue that could have been generated over eight months if the business had progressed at the usual pace, without the unusual disruption caused by COVID-19. (5)

The revenue of MVT industry is expected to have gone down by 80% and if India is hit by a second or third wave it may even go down to 95% (as International travel ban may be re-imposed). Even if there is no second wave, MVT is not expected to return to normalcy until March 2021. (6)

MVT to India also includes people traveling to India for treatment accounted for \$3 billion for the AYUSH sector (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) before this pandemic. But the prohibited traveling on flights have declined the occurrence of patients to India.

According to report 96% of international borders are closed to deal with the pandemic which has reduced the number of people seeking medical treatment in other countries resulting in an adverse impact on MVT market. (7)

COVID-19 outbreak will turn out to be a major restraint for the MVT industry during 2020 and 2021. According to the WHO report, 213 countries are affected by the COVID-19 outbreak. The government of various countries has banned travellers from affected countries, barred flights to certain countries, and changed the visa requirements. The American Centres for Disease Control and Prevention (CDC) predicted that the situation could last into 2021 and is likely to impact the MVT industry significantly. (8)

IMPLICATIONS OF THESE RAMIFICATIONS ON HOSPITALS

COVID-19 outbreak drastically impacts medical tourism and that is likely to hurt private hospitals.

Our country relies greatly on private hospitals for healthcare needs. Approximately, 80% of all hospitals in India are either private hospital chains or standalone players. Private hospitals also account for almost 60% of total hospital beds and 80-85% of all doctors in India. With private hospitals catering most of our healthcare needs, it is indeed seen as a pivotal industry.

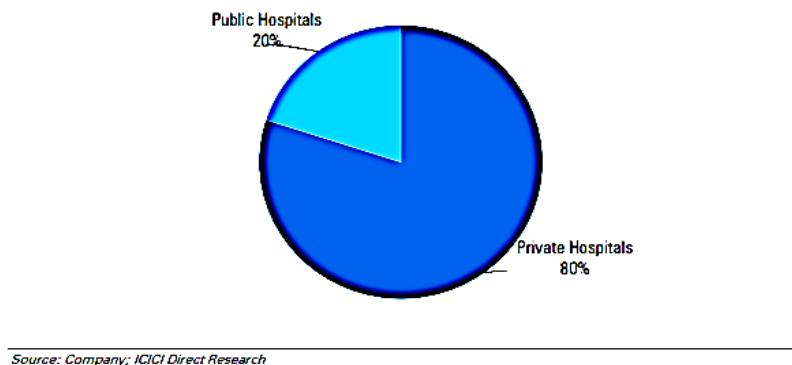


FIG: SHARE OF PRIVATE HEALTHCARE IN TOTAL HEALTH MARKET

MVT is thought to have a crucial role in the overall growth of Health care industry amounting to the revenue it generates. MVT is lucrative for private hospitals, and its growth in the last decade has helped the business of these hospitals.

10-20 % revenue generated by large hospitals is accounted to international patients. Not just that but the price bands for these patients are different (mostly higher) from the ones for domestic patients. Treating international patients therefore more profitable for these hospitals.

Even though health care services did not stop post declaration of lock down, priority was to develop COVID recovery units. All major hospitals were functional, but almost all of them were doing only emergency procedures or indulged in treating Covid patients. So, given the current situation in India and other parts of the world, no noteworthy activity in the medical value travel industry took place.

Another challenge faced by Hospitals in India was development of COVID cases among their doctors and supporting staff through direct contact of COVID patient or indirectly through asymptomatic patients who visited Hospital for other reasons. **Indian Medical Association revealed that so far 99 doctors have died and 1300 are infected due to covid-19 in India.**

(9) This is not just an alarming situation among those who are treating COVID patient but also

a question on safety measures against the disease. These points are critical for the reputation of Hospital which cater international patients. (10)

Max Healthcare, the hospital chain had been growing at a CAGR of 15% for the past five years, before the covid-19 outbreak. But, After the halt on visas for foreigners visiting India, the number of international patients has declined to zero. The loss in average revenue due to a pause on the international medical travel business is predicted to be ₹25 crore per month. Another report by IMTJ claims this loss to be around US\$5 million per month (11).

Fortis Healthcare is also in a similar situation. They are facing a 90% drop in daily admissions, while new enrolments have boiled down to zero. The normal inpatient numbers are accounted for to have dropped by 64%. With respect to mvt, the revenue has gone down by 35% in March. And in April they are expecting it to be down by 80%. (12)

Private hospitals had been struggling with their financial output even before Covid. The pandemic has further worsened the situation for them by reducing the OPD footfall. Even elective surgeries have been suspended, and the bed occupancy rate is below 25%. Given that hospitals generate a good amount of revenue from OPD services and elective surgeries, the revenue drop for many hospitals has reached 50-80% since March 2022.

Meanwhile the expenditure on various protective equipment, consumables and other resources required to guarantee a safe yet efficient hospital environment have doubled up. Owing to this double burden of revenue loss on one hand and increased investments on the other, the business for private hospitals has become quite unpredictable.

Besides that, the prices of basic sterile PPE (personal protective equipment) and cleaning products have gone up due to high demand. Also, prices of drugs requiring imported API (even generics) or final dosage form have risen due to an increase in the logistic costs, decreasing the profit margin. (13)

Add loss from international patient revenue to all the above problems, private hospitals sure will have to see a tough time for a while at least.

HOW WILL COVID-19 CHANGE THE FACE OF MVT (FUTURE TRENDS)

A speedy recovery for medical value travel is unlikely. Nations will have to re-think their strategies. Thus, the face of MVT industry will look different from what it has been. Targeting numbers will not work. The focus will be on safety and value-based care. MVT will possibly develop from medical to health travel. (14)

1. More thought on choosing a destination:

People will make more conscious choices whilst planning for their treatment. Medically safe and the countries that have had a lower number of covid-19 cases and fewer deaths relating to the virus are likely to have a faster recovery. (The scale of medical travel will instead not only be dictated by the opening of countries to tourism, but also how they have been seen to deal with the virus.)

2) Domestic medical travel will be the first medical tourism sector to return

In adversities people always look towards the familiar and the known for comfort. Once tourism starts again, it will initially be strongly domestic and sub-regional, to neighbouring countries. Travel choices will be guided by distance and people will not want to go too far.

3) Pre-travel health checks could reduce patient flow (a health passport system)

At least for 2020 and probably into 2021, countries may test for COVID-19 and possibly other diseases at their borders before allowing entrance. Entrance may be refused unless a traveller has a certificate of immunity (showing recovery from an infection or vaccination, once there's vaccines available). Wristbands with barcodes and apps on phones are a possibility. A system of issuing health passports may be seen.

4) Wellness sectors will grow:

Wellness tourism was already seeing a substantial growth even before the pandemic, and there will be further growth potential for this sector in all its forms. Especially owing to the mental health crisis in the times of covid-19.

5) Opportunity for accreditation companies:

Healthcare quality assurance has now become unnegotiable as patients will prefer hospitals that provided safe environment during Covid crisis. Some big hospitals have been incapable to contain the spread and seen their own staff get infected. COVID-19 will be the hard lesson learnt for providers to improve and become safer for the patients and their own people as well.

(15,16)

RECOMMENDATIONS

1) FOCAL FOR LOCAL

Post-pandemic, individuals will be hesitant to travel, especially over longer distances. Air travel will become costly. With social distancing protocols in place, airlines will face limitations on the number of passengers on each flight., centring around neighbouring countries and cross-border travel can help. (A bulk of this foreign inflow to India comprises of patients from Asian and African countries such as Bangladesh, Afghanistan, Iraq, Yemen, Sudan, Kenya and Nigeria, among others.) Keeping a keen eye on what is happening in the closest markets and how this may impact healthcare demand once the restrictions are lifted is a must.

2) EMPHASIS ON SAFETY

“Is it safe?” will be the first question posed by patients considering travelling to a foreign country for any form of treatment. How the country has fared in the battle against COVID-19. A safe environment, whether in a country as a whole or in an individual hospital or clinic, will be frontal when patients are comparing destinations or providers.

Having hospitals with many national and international accreditations send out a strong message to medical travellers about the safety and quality of care. Hospitals in India must work towards acquiring national and international accreditations to improve their standing at the global medical tourism platform.

3) FROM MEDICAL TOURISM TO HEALTH TOURISM (a more holistic approach that will involve wellness tourism)

Analysts believe that there will be a major move towards wellness within travel, with people increasingly seeking refuge in nature. Especially after being cooped up within their homes for months on end. The demand for wellness tourism has been rapidly growing since 2013 and in 2018 it was growing more than twice as fast as general tourism. With prevention through alternate medicine, especially Ayurveda gaining more attraction, this demand is only set to rise after the risk.

Hence, the providers must focus on more holistic health packages for international patients.

4) WHAT CAN THE GOVERNMENT DO?

Recognise MVT as an independent industry. Grant fiscal stimulus to provide much-needed liquidity like providing bailout packages, etc. Accelerate the process of tax refunds for the institutes involved.

Relax the medical travel visa fees. That can be an incentive to medical tourism patients to visit India.

Relax the policies for telemedicine and offer loans without collaterals. Facilitate air travel from coronavirus low risk but high-volume medical tourist countries. (17)

5) DIASPORIC MEDICAL TOURISM (DMT)

Travel of migrants to their countries of origin with an intention to use healthcare and access to it through their own volition- Mathijssen, 2017

Diasporic medical tourists constitute an attractive segment of consumers that is still not well understood and targeted. In countries like India, Jordan, Mexico, Turkey, etc diasporic travellers may even be the majority. They simultaneously participate in bi-lateral healthcare systems via return visits which impact the health systems of sending and receiving countries in a substantial way. (18)

6) VIRTUAL HEALTHCARE

A positive effect on healthcare systems, resulting from COVID-19, is the much-awaited acceptance of the adoption of virtual healthcare – online and video consultation.

In a post-pandemic world, the hospital, clinic or medical travel agency having the technology in place to enable video consultation and communication with potential and existing patients throughout the patient journey – from enquiry through to post-treatment care will fare better.

“MVT companies that have offices overseas have already started interacting with governments in other countries, seeking permission to start telemedicine services. So far, they have been able to roll out these services to their clients in Myanmar and Uzbekistan, after getting their doctors accredited with Myanmar Medical Council and the Uzbek health ministry. (19)

7) FOCUSING ON INNOVATION TO KEEP COST LOW:

As cost of labour and other medical inputs increase, there is bound to be a gradual increase in costs of medical services over time. However, hospitals must put special thrust on innovation to keep treatment costs low. Devising low cost diagnostic solutions, boosting capacity in minimally invasive surgeries, and minimizing hospital acquired infections can India maintain its edge in cost effectiveness.

The government must also play a role in fostering innovation in healthcare not just in reducing costs of medical products but also brainstorm on devising innovative process/paradigm solutions.

CONCLUSION

Given the multifaceted impact of Pandemic COVID-19 in form of Health care crisis, falling economy, cessation of International Travel followed by restricted International travel with due risk of infection, MVT industries around the globe are sure to endure much. From the beginning of this disaster in China till now the growth of mvt industry has hit the bottom. Private hospitals in India are facing a dual burden from increased costs and falling revenue. Though lockdowns have started to lift, and hospitals are getting back to functionality, but it will still be while before they see any revenue from international patient business. The big MVT companies and big hospitals may survive this if they hang in tight, control costs, and employ innovative strategies. Unfortunately, not all businesses will survive by the end of this. Things will be especially difficult for the small businesses. For almost all countries revival of MVT industry will probably not be at the top of the priority list and may even be sacrificed for broader economic and tourism recovery.

So, is there hope?

This is the time that calls for change. When the world does not know if it will get back to normal or establish a new normal, the providers need to be prepared for both. It is quintessential for businesses to use this lag time to improve their practices, processes and communication with the consumer will fare better than the ones who sit and wait for the storm to pass. Our country has always been the best at adapting and coming up with ground-breaking solutions. It may take time, but the industry is bound to revive.

This might also be an opportunity for all countries that cater international patients to move from medical value travel to Sustainable Health Value Travel.

REFERENCES

1. Pilla, V., (2019, December 10). Medical tourists help Indian hospitals beat slump in domestic market. *Moneycontrol*. Retrieved from <https://www.moneycontrol.com/news/business/companies/medical-tourists-help-indian-hospitals-beat-slump-in-domestic-market-4713281.html>
2. Rajagopal, D., & Balakrishnan, R., (2020, April 6). Treatments that can wait make private hospitals wait for revenue. *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/treatments-that-can-wait-make-pvt-hospitals-wait-for-revenue/articleshow/74998673.cms?from=mdr>
3. FICCI. (2016). Medical Value Travel In India, Enhancing Value in MVT. *IMS Health India*. Retrieved from <http://www.ficci.in/Medical-Value-Travel-Report.pdf>
4. Ministry of Tourism, Government of India. (2019). INDIA TOURISM STATISTICS AT A GLANCE. Retrieved from <http://tourism.gov.in/sites/default/files/Other/India%20Tourism%20Statistics%20at%20a%20Glance%202019.pdf>
5. "COVID- 19 proving fatal for medical tourism industry". (2020, April 1). *Express Healthcare*. Retrieved from <https://www.expresshealthcare.in/covid19-updates/covid-19-proving-fatal-for-medical-tourism-industry/418100/>
6. Biswas, D. (2020, June 24). In dire straits: India's medical tourism companies find no business amid COVID-19. *YOURSTORY*. Retrieved from <https://yourstory.com/2020/06/coronavirus-medical-tourism-industry-lockdown-business>
7. "IMPACT ANALYSIS OF COVID-19 ON MEDICAL TOURISM MARKET". (2020). *Research Dive*. Retrieved from <https://www.researchdive.com/covid-19-insights/248/global-medical-tourism-market>
8. Medical Tourism Global Market Report 2020-30: COVID-19 Growth and Change. (2020, May). *Research and Markets*. Retrieved from <https://www.globenewswire.com/news-release/2020/06/02/2042344/0/en/Global-Medical-Tourism-Market-2020-to-2030-COVID-19-Growth-and-Change.html>
9. "99 doctors died, over 1,300 infected due to coronavirus in India so far". (2020, July 16). *India TV News Desk*. Retrieved from <https://www.indiatvnews.com/news/india/doctors-death-toll-coronavirus-health-workers-covid19-indian-medical-association-ima-634589>
10. Sharma, A., Vishraj, B., Ahlavat, J., Mittal, T. & Mittal, M. (2020, May). Impact of COVID-19 outbreak over Medical Tourism. *IOSR Journal of Dental and Medical Sciences*, 19(5):56-58. Retrieved from https://www.researchgate.net/publication/341708845_Impact_of_COVID-19_outbreak_over_Medical_Tourism
11. Pollard, K. (2020, May 12). HOW ARE MEDICAL TRAVEL PLAYERS RESPONDING?. *International Medical Travel Journal*. Retrieved from <https://www.imtj.com/blog/how-are-medical-travel-players-responding/>

12. Sharma, N.C. (2020, April 15). Private hospitals stare at losses amid Covid outbreak. *Livemint*. Retrieved from <https://www.livemint.com/news/india/private-hospitals-stare-at-losses-amid-covid-outbreak-11586889225780.html>
13. Khadayate, P. (2020, May 19). Understanding the looming financial distress for private hospitals in India. *Express Healthcare*. Retrieved from <https://www.expresshealthcare.in/blogs/guest-blogs-healthcare/the-looming-financial-distress-for-private-hospitals-in-india/420588/>
14. Youngman, I. (2020, June 23). IF CHEAP AIR FARES ARE NO MORE, WHAT OF MEDICAL TRAVEL?. *International Medical Travel Journal*. Retrieved from <https://www.imtj.com/articles/if-cheap-air-fares-are-no-more-what-medical-travel/>
15. Georga, M. (2020, March 18). HOW WILL COVID-19 SHAPE MEDICAL TOURISM DEVELOPMENT?. *International Medical Travel Journal*. Retrieved from <https://www.imtj.com/articles/how-will-covid-19-shape-medical-tourism-development/>
16. "HOW WILL MEDICAL TRAVEL BE DIFFERENT IN 2021?". (2020, April 15). *International Medical Travel Journal*. Retrieved from <https://www.imtj.com/articles/how-will-medical-travel-be-different-2021/>
17. Biswas, D. (2020, June 24). In dire straits: India's medical tourism companies find no business amid COVID-19. *YOURSTORY*. Retrieved from <https://yourstory.com/2020/06/coronavirus-medical-tourism-industry-lockdown-business>
18. Mathijssen, A., & Mathijssen, F.P. (2020, March 30). Diasporic medical tourism: a scoping review of quantitative and qualitative evidence. *PubMed Central*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7106793/>
19. "Medical tourism companies turn to telemedicine in wake of Covid-19". (2020, May 16). *Hindustan Times*. Retrieved from <https://www.hindustantimes.com/cities/medical-tourism-companies-turn-to-telemedicine-in-wake-of-covid-19/story-YA0OpXnbjgmVZfsRoHOBRP.html>

PART II

REPORT ON ONLINE COURSE

COURSE NAME: e-Health, more than just an electronic health record. (By the University of Sydney)

PLATFORM USED: Coursera

COURSE DURATION: 15 HOURS (5modules,5weeks)

COURSE DESCRIPTION: The MOOC, "eHealth: More than just an electronic record!", is multidisciplinary in nature, and aims to equip the global audience of health clinicians, students, managers, administrators, and researchers to reflect on the overall impact of eHealth on the integration of care. It explores the breadth of technology application, current and emerging trends, and showcases both local and international eHealth practice and research.

The entire eHealth Course consists of 5 modules and takes about 5 weeks to complete.

OBJECTIVES OF THE COURSE:

- The fundamentals of eHealth and where it is heading
- What kind of health data we are currently collecting and how it will transform healthcare in the future
- How new technologies are helping health consumers participate in their own healthcare
- How eHealth can improve the coordination and efficiency of healthcare and what the barriers might be

Self-paced 5-week course Study time commitment: 3 hours per week Assessable components: Assignment 1 in Module 2 (40%) and Assignment 2 in Module 5 (60%).

COURSE CONTENT:

Module 1 - What is eHealth?

Key question: “What are the fundamentals of eHealth and where is it heading?” To complete this introductory module, you will need to view the video lectures for each lesson and complete the four listed ungraded learning activities. It is also recommended that you sample the module reference and further resource list to consolidate your learning.

Module 2 - Health in our Hands

"How are new technologies helping consumers 'participate' in healthcare?" To complete this module, you will need to view the video lectures for each lesson and complete the two listed ungraded learning activities. You are also required to complete the graded Peer Review Assignment 1 (40%) for submission as per the assignment instructions. It is also recommended that you sample the module reference and further resource list to consolidate your learning.

Module 3 - Data and the "Quantified Self"

"What kind of health data do we collect now and how will it transform healthcare in the future?"

Module 4 - Interacting with Health Professionals using New Technologies

"How can eHealth improve the coordination and efficiency of healthcare and what are the barriers?"

Module 5 - eHealth in Professional Practice

"How can eHealth principles and technologies be applied in my own professional practice?"

LEARNING METHODOLOGY USED IN THE COURSE:

- Video lectures
- Reading material
- Quizzes
- Applicative Assignments

KEY LEARNINGS FROM THE COURSE:

The course in general instils a learning about how digital technology, especially apps, data, and communication technology, are being used to support health and healthcare management and how it is being deployed to improve healthcare delivery and quality. It also teaches objective methods of reviewing apps. For instance, how to use MARS Analysis to rate health apps.

Key learnings from

Module 1-

- Compare definitions of eHealth from both health consumers and professionals
- Visualise an eHealth model which illustrates how key eHealth domains intersect to impact on health care
- Gain an insight into the fundamental principles of eHealth
- Rate your own awareness of eHealth in current practice
- Appreciate the current and future challenges of eHealth for both health consumers and health practitioners

Module 2-

- Understand the potential of mobile technology to support the shift from “healthcare” to “health”
- Describe examples of “wellness” and “healthcare” mobile apps currently in use
- Consider strategies for including mobile health apps in your professional practice
- Be aware of issues around the design and evidence for effective health apps

Module 3-

- Understand the potential of mobile technology to support the shift from “healthcare” to “health”
- Describe examples of “wellness” and “healthcare” mobile apps currently in use
- Consider strategies for including mobile health apps in your professional practice
- Be aware of issues around the design and evidence for effective health apps

Module 4-

- Describe a range of innovative eHealth interactions between consumers and healthcare professional
- Evaluate the advantages of technology-based eHealth services in improving access and communication in healthcare
- Appreciate the differences between online and face to face health service interactions
- Consider new models of healthcare supported by tele-health, social media, and personalised apps
- Appreciate how eHealth can be used to support professional development

Module 5-

- Reviewed a variety of case-based examples of eHealth in professional practice
- Provided an evidenced based rationale for adopting an eHealth strategy suitable for your own professional practice
- Described how you would anticipate this strategy improving healthcare services for both yourself and healthcare consumers
- Used eHealth principles from previous modules to review and comment constructively on those eHealth strategies suggested by other course participants.

ASSIGNMENTS DONE FOR THE COURSE



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assignment 2, case study.docx

Thank You.