Macro-Market Analysis of Fast-Moving Healthcare Sub-Sectors

By

Ankit Nayankumar Thakkar

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2018-2020

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

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TO WHOMSOEVER MAY CONCERN

This is to certify that **Ankit Nayankumar Thakkar**, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone Dissertation Training at **PricewaterhouseCoopers Services LLP, India** from **10th February** to **30th June 2020**.

The Candidate has successfully carried out the study designated to him "**Macro-market analysis of fast-moving healthcare sub-sectors"** during his dissertation and his approach to the study has been sincere, scientific, and analytical.

The Dissertation is for fulfilment of the course requirements.

Dean, Academics and Student Affairs The IIHMR University, Jaipur	Associate Professor The IIHMR University, Jaipur

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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "**Macro-market analysis of fast-moving healthcare sub-sectors"** and submitted by **Ankit Nayankumar Thakkar** Enrollment No**. IIHMR-U/01/2018-20/0720** under the supervision of **Dr. Seema Mehta** for award of MBA in Hospital and Health carried out during the period from **February – June 2020** embodies my original work and has not formed the basis for the award of any degree, diploma associateship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Ankit Nayankumar Thakkar

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Contents

Abbreviations

Bn	**“Billion”**
CAGR	**“Compound Annual Growth Rate”**
CY	**“Calendar Year”**
EBIDTA	**“Earnings before Interest, Taxes, Depreciation and Amortization”**
FY	**“Financial Year”**
GDP	**“Gross Domestic Product”**
HH	**“Home Health”**
INR	**“Indian Rupee”**
IUI	**“Intrauterine Insemination”**
IVF	**“In Vitro Fertilization”**
Mn	**“Million”**
MS excel	**“Microsoft excel”**
NSSO	**“National Sample Survey Office”**
OOPE	**“Out-of-pocket Expenditure”**
OPD	**“Out-patient Department”**
PwC	**“PricewaterhouseCoopers”**
USD	**“United States Dollar”**

ABSTRACT

Introduction - A **market analysis** is a quantitative and qualitative assessment of a **market.** It investigates the size of the market both in volume and in value, the different client sections and purchasing behaviors, the opposition, and the monetary condition regarding hindrances to passage and guideline.

The sub-sectors considered in the study are Home Health Care, In Vitro Fertilization (IVF) and Primary Health Care.

Objectives –

1. To determine the financial condition of the healthcare sub-sectors (Home health care, IVF and Primary health care) to assist in strategic investment

2. To compare the financial parameters of healthcare sub-sector (Home health care, IVF and Primary health care)

3. To determine the financial conditions of the organization in these healthcare sub-sectors (Home health care, IVF and Primary health care)

Methodology – Retrospective descriptive study was carried out in PricewaterhouseCoopers (PwC) Services LLP where secondary data was collected by internet's various sources of financial parameters like Revenue and EBIDTA. Inclusion criteria includes key market players whose revenue is available for a financial year 2018 and above and also the organization should be established before 2015 to compare the CAGR for last 4 years.

Conclusion -

Home Health Care - Home health is a nascent sector which is in a growing stage. Almost all organized players are growing at >40% per annum but are still making losses.

IVF - With lifestyle changes increasing, the infertility problems in India are bound to increase. The market is seeing a higher preference towards corporate chains and all of them are showing a healthy increase in revenue year on year.

Primary Health Care – Primary health care is an unorganized market with high costs and attrition.

1. INTRODUCTION

"A **market analysis** is a quantitative and qualitative assessment of a **market"**. It investigates the size of the market both in volume and in value, the different client sections and purchasing behaviors, the opposition, and the monetary condition regarding hindrances to passage and guideline.

A market analysis may appear to be mind boggling, yet it's vital on the off chance that you need to lead your business toward progress.

The market analysis can represent the moment of truth the beginning up. Investigating markets assists with diminishing dangers since it can more readily comprehend the clients and economic situations.

The analysis additionally assists with explaining what makes customer not quite the same as the opposition. That way, it's smarter to realize what makes the examination stick out.

Regardless of whether the customer is beginning another endeavour, presenting another item, or growing a private company, market research can help take it to the following level.

Factors

"The most well-known factors are the SWOT which is an abbreviation for; Strengths, Weaknesses, Opportunities, and Threats". A strategy can be formed on the factors by evaluating the organization's strengths and weaknesses. A good marketing strategy can be formed by a good labour force, advertising agents and ample investment. In the same way, it's better to avoid the things if the technology lacks online presence. External factors assessment is equally important to provide an opportunity or threat. Financial elements, political dangers or even social changes can give an opening which you can seize and improve. Likewise, this can make dangers which can hamper the professional interactions.

"Dimensions of Marketing Analysis"

"There are few dimensions which helps to perform a detailed marketing analysis". All these things help to understand the market in a better way. Following are the dimensions;

- "Market Size"
- "Growth rate of the market"
- "Market trends"
- "Market profitability"
- "Key success factors"
- "Distribution channels"
- "Industry cost structure"

- **Market Size – "**The size of the market is a key factor in a marketing analysis. The bigger the market the more competitors you are likely to have. For a big market, you need to make sure your products and services stand out. Otherwise, the customers can easily switch to a rival product. Not only that, a bigger market makes you rethink your pricing policy. Set your price too high then you are going to lose your customer base to other competitors. Set it too low and people will think that you are just providing cheaper poor-quality goods. If the market size is small then you can get away with charging a high price. All these facts are kept in the marketing analysis. Based on that you go ahead with your marketing plan".

- **Growth rate of the market** – "The market growth rate is a huge factor in any sort of marketing analysis. This is because you get the idea of how long the said market will last. Before you make an investment, you need to analyze the market's growth rate. If it is likely to grow over time then you can invest more in it. If it has no growth then you are likely to be discouraged from investing anything at all. How much time and importance you give to the market depends on its growth rate".

- **Market Trends** – "Market trends are a significant part of the marketing analysis. Having knowledge about the trends help you to decide what kind of product you are going to sell. When you are starting off a business you need to know what the current trend is. What is the thing that the customers like? How much they are willing to spend? What other trends may capture their attention? These are the sort of things which will go on your analysis. On the other hand, market trends can change any day. This can turn out to be an opportunity for your business. If that's the case then you can seize it and make the most of it. Changes in trend can also be a threat for you. If you are comfortable producing one kind of good then a market trend change will affect you the most".

- **Market Profitability – "**Most companies' motive to get into the business is to make a profit. In other words, they are profit-motive businesses. So before getting into a business you need to analyse the profitability of the market. If the market has a good profitability then only you are going to invest heavily. Otherwise, it would be a waste of your time and capital. In order to calculate the profitability of the market, there are a few things one has to consider. These things include; buyer power, supplier power, barriers to entry and so on".

- **Key Success Factors –** "The key success factors are those elements which help the business to achieve great success in the market. Such elements are required to stand out among the rest of the competition. These are things which you did well that have enabled you to produce great results".

- **Distribution Channels** – "Distribution channels are very important for a business. Without those, you won't be able to get your products to your customers. So, it becomes a big factor in a marketing analysis. This is because you need to assess how well the channels are. If the existing ones are good enough or you need to develop newer ones. Sometimes you come up with brand new channels like online marketing".

- **Industry Cost Structure – "**The industry cost structure is a significant factor while running a business. It basically sees how much cost is required to get your products for sale. Sometimes firms can come up with ways to decrease that cost and thereby make a bigger profit without increasing the market price. Doing a marketing analysis will help you to come up with newer ways to reduce cost. At the same time, it helps to create strategies for developing a competitive advantage of your rivals".

1.1 Home Health Care

Home care incorporates any expert help benefits that permit an individual to live securely in their home. In-home care services, administrations can help somebody who is maturing and needs help to live independently; is overseeing incessant medical problems; is recuperating from a clinical difficulty; or has unique needs or an inability. Professional caregivers such as nurses, aides, and therapists provide short-term or long-term care in the home, depending on a person's needs.

Home care can be the way to accomplishing the highest caliber of life possible. It can empower wellbeing, security, and expanded freedom; it can ease the executives of a progressing ailment; it can help maintain a strategic distance from superfluous hospitalization; it can help with recuperation after an ailment, injury, or hospital stay remain—all through consideration given in the solace and nature of home. Home care includes:

- "Help with daily activities such as dressing and bathing"
- "Assistance with safely managing tasks around the house"
- "Companionship"
- "Therapy and rehabilitative services"

- "Short- or long-term nursing care for an illness, disease, or disability—including tracheostomy and ventilator care"

1.2 IVF

In vitro fertilization (IVF) helps with fertilization, embryo development, and implantation, so you can get pregnant.

- **How does IVF work?**

IVF stands for in vitro fertilization. It's one of the more broadly known kinds of helped assisted reproductive technology (ART). IVF works by utilizing a mix of prescriptions and surgeries to assist sperm with treating an egg, and help the prepared egg embed in your uterus.

It starts with taking a medicine that makes a few of your eggs develop and prepared for treatment. At that point the specialist removes the eggs from your body and blends them in with sperm in a lab, to enable the sperm to treat the eggs. At that point they put at least 1 treated eggs (embryos) straightforwardly into your uterus. Pregnancy occurs if any of the incipient embryos embed in the covering of your uterus.

- **Side effects of IVF**

IVF has some risks and possible side effects similarly all other medical procedures. These include:

- "bloating"
- "cramping"
- "breast tenderness"
- "mood swings"
- "Headaches"
- "bruising from shots"
- "allergic reaction to medicines"
- "bleeding"
- "infection"

IVF can likewise be troublesome inwardly, both for the individual having the procedure and for their accomplice as well as family. Numerous individuals doing IVF medicines battle with discouragement and uneasiness all through the procedure.

1.3 Primary Health Care

Primary care is that care given by doctors explicitly prepared to and talented in far reaching first contact and proceeding with care for people with any undiscovered sign, side effect, or wellbeing concern (the "undifferentiated" quiet) not restricted by issue beginning (natural, conduct, or social), organ framework, or conclusion.

Primary care includes health promotion, disease prevention, health maintenance, counselling, patient education, diagnosis and treatment of acute and chronic illnesses in a variety of health care settings (e.g., office, inpatient, critical care, long-term care, home care, day care, etc.). Primary care is performed and overseen by an individual doctor regularly teaming up with other wellbeing experts, and using discussion or referral as fitting. Primary care gives tolerant support in the human services framework to achieve practical consideration by coordination of medicinal services administrations. Primary care advances successful correspondence with patients and supports the job of the patient as an accomplice in medicinal services.

2. RESEARCH PROBLEM

Nowadays, it's a trend investing in a business either in green field or in a brown field. It becomes very important to assess the financial aspect of the market before investing in a particular sector. It needs an in-depth financial assessment of the sub-sectors (Home health care, IVF and primary health care) in terms of profitability and sustainability to warrant a monetary investment.

3. AIM

The aim is to study the financial environment of a healthcare sub-sector for better investment opportunities.

4. RESEARCH QUESTION

1. What is the financial condition of healthcare sub-sectors (Home health care, IVF and Primary health care)?
2. What are financial parameters for comparison of healthcare sub-sectors (Home health care, IVF and Primary health care)?
3. What is financial condition of the organization in these sub-sectors (Home health care, IVF and Primary health care)?

5. RESEARCH OBJECTIVES

1. To determine the financial condition of the healthcare sub-sectors (Home health care, IVF and Primary health care) to assist in strategic investment

2. To compare the financial parameters of healthcare sub-sector (Home health care, IVF and Primary health care)

3. To determine the financial conditions of the organization in these healthcare sub-sectors (Home health care, IVF and Primary health care)

6. RESEARCH METHODOLOGY

- **Location of Study Area**

  PricewaterhouseCoopers Services LLP, India located in Mumbai, Maharashtra

- **Study Design**

  This is a retrospective, descriptive type of study

  "A retrospective study looks backwards and examines exposures to suspected risk or protection factors in relation to an outcome". Here the financial data is collected of the previous four-five years.

  "A descriptive study is one in which information is collected without changing the environment (i.e., nothing is manipulated)". It is used to obtain information concerning the current status of the phenomenon to describe "what exists" with respect to variables or conditions in a situation.

- **Type of Research**

  Hybrid research (Qualitative and Quantitative)

- **Sources of Data**

  Secondary data was collected by the internet's various data source sites like research gate, zaubacorp, money control, etc. for the review of literature.

- **Data Considered**

  Financial parameters like Revenue, EBIDTA are taken for top three-seven key market players in each healthcare sub-sectors (Homecare, IVF, Primary care)

- **Inclusion Criteria**

  Key market players whose revenue is available for a financial year 2018 and above and also the organization should be established before 2015 to compare the CAGR for last 4 years

- **Exclusion Criteria**

  Organization established after 2015 and whose financial parameters are not available

7. LITERATURE REVIEW

Indian Brand Equity Foundation (2020) throws light on road ahead of Indian healthcare market as "India is a land full of opportunities for players in the medical devices industry. India's healthcare industry is one of the fastest growing sectors and it is expected to reach $280 billion by 2020. The country has also become one of the leading destinations for high-end diagnostic services with tremendous capital investment for advanced diagnostic facilities, thus catering to a greater proportion of population. Besides, Indian medical service consumers have become more conscious towards their healthcare upkeep. Indian healthcare sector is much diversified and is full of opportunities in every segment which includes providers, payers and medical technology. With the increase in the competition, businesses are looking to explore for the latest dynamics and trends which will have positive impact on their business. The hospital industry in India is forecasted to increase to Rs 8.6 trillion (US$ 132.84 billion) by FY22 from Rs 4 trillion (US$ 61.79 billion) in FY17 at a CAGR of 16-17 per cent".

Jasal Shah, CEO, Managing Director of Markelytics and Velocity MR (2018) concluded that "healthcare industry has a consistent impact on the sector. Higher-performing hospitals control a greater market share and experience higher growth over time than their lower-performing counterparts. This correlation between performance and market share substantiates the idea that patients are not simply passive participants when receiving medical care. He also found that even during emergency situations, patients are willing to travel to higher-performing hospitals to receive better care".

Dr. L. Ganesan, R. Senthamizh Veena (2018) concluded "While the Make in India initiative is directionally right, its impact on improving access to affordable quality healthcare depends on how it is framed, developed and implemented over the period. Also, it is important to look over the fact that does India only needs the manufacturers to make in India or also to make for India. On the whole, with judicious plans and efficient implementation, the private sector and government need to work hand in hand as one team to make further progress and make India one of the global hubs of innovation, manufacturing and providing required healthcare services".

Allied Market Research (2019) throws light on "the India IVF services market Size was valued at $478.2 million in 2018 and is estimated to reach $1,453.0 million by 2026, registering a CAGR of 14.7% during the analysis period. By gender, female fertility in India in vitro fertilization services market accounted for largest share in 2018. By procedures, ICSI IVF in India IVF services market accounted for largest share in 2018. By cycle type, fresh IVF cycles in India in vitro fertilization services market accounted for largest share in 2018. By end user, fertility clinics segment in India IVF services market accounted for largest market share in 2018. By offering, IVF and IUI Services in India in vitro fertilization services market accounted for largest market share in 2018".

8. MARKET ANALYSIS OVERVIEW

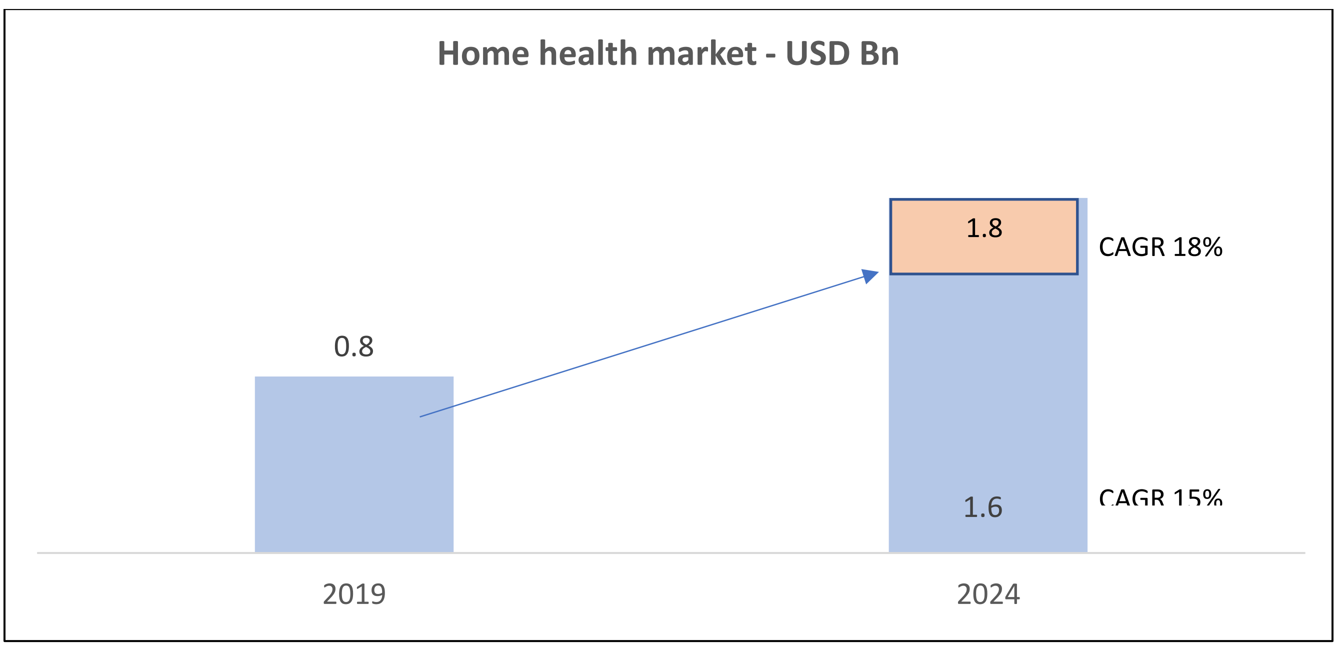
8.1 Home Care in India

⇒ **Home healthcare comprises of the following services:**

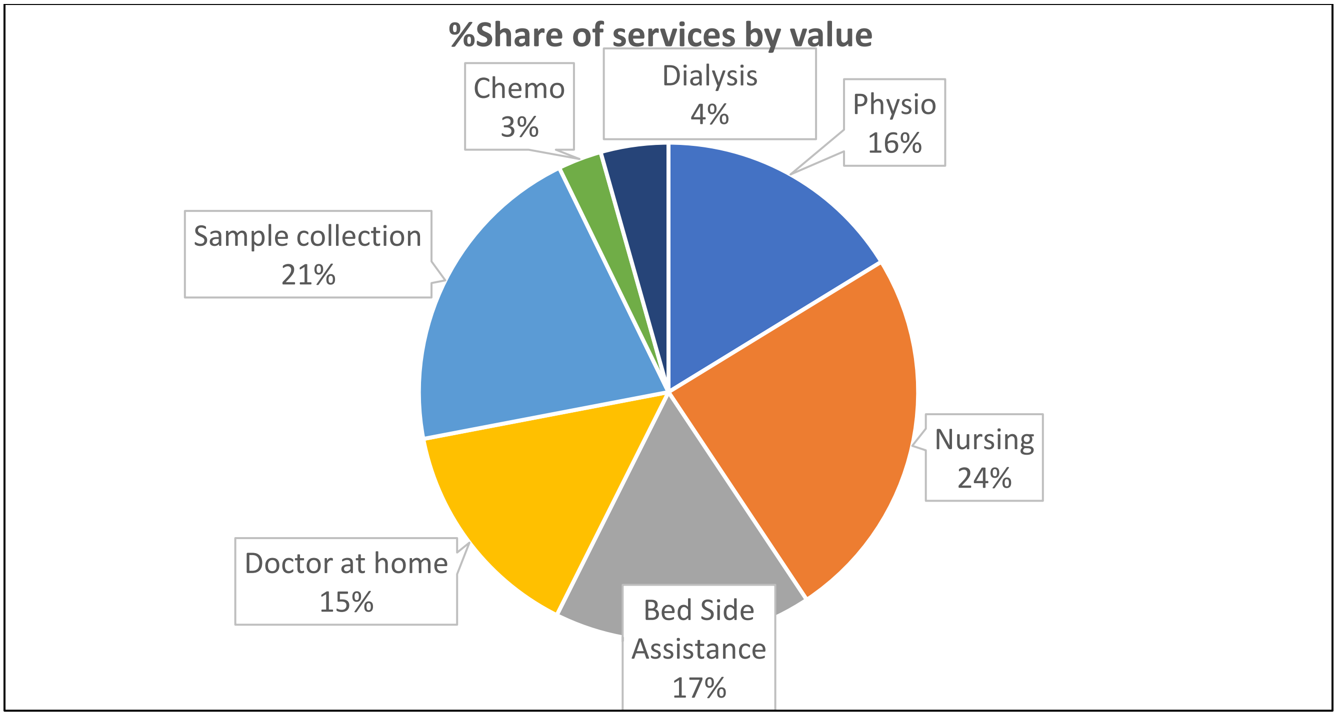
1. Doctor at home
2. Nursing at home
3. Rehab at home
4. Bed side assistance
5. Diagnostics
6. Medical equipment – purchase & rentals
7. Dialysis at home
8. Chemotherapy at home

8.1.1 Market Size

'Indian home healthcare market' is valued at **~0.8 Bn** and is expected to grow at a 15% - 18% CAGR over the next 5 years; The sector is still in its early stages with most organised players entering post 2012



Source: PwC analysis



Source: PwC analysis

There are over 5,000 agencies which provide low end services making the market unorganised and fragmented.

% share of organised sector is 7-9%. But with more spends on marketing this is expected to grow according to PricewaterhouseCoopers (PwC).

8.1.2 Homecare demand drivers

⇒Homecare is being driven by growth in nuclear families and lack of time

1. **Growth of nuclear families**
    - During the last 2-3 decades, there has been a gradual disintegration of the joint family system to nuclear families.
    - With this the demand for caregivers at home is increasing

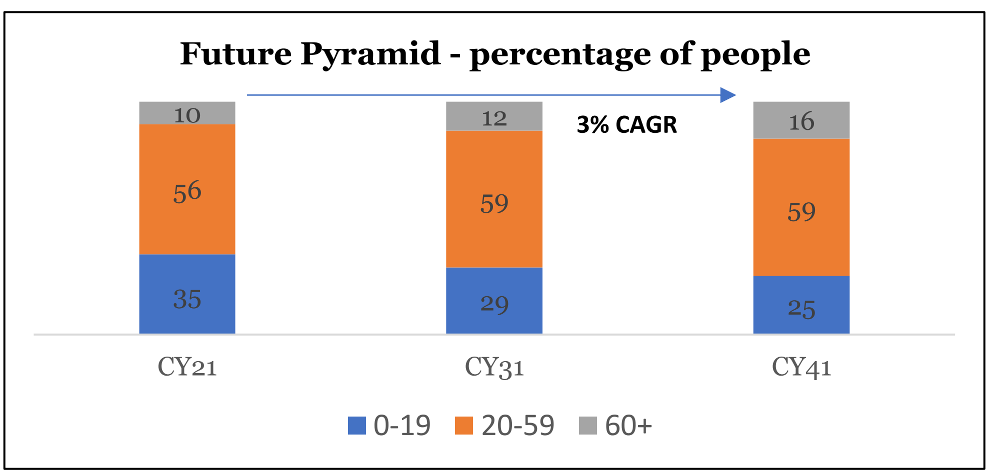
2. **Growth in income and awareness**
    - According to Economic Survey 2018-2019, India's GDP is growing in the range of 5-9% over the last decade with population growing at ~1% thus increasing income per capita. There is also an increase in awareness

3. **Demand for personalised care**
    - Various customer surveys in India have pointed out that customers in India value personalization
    - Indians value personalization, followed by integrity as key essentials for a good customer experience
    - Home healthcare companies fill this requirement

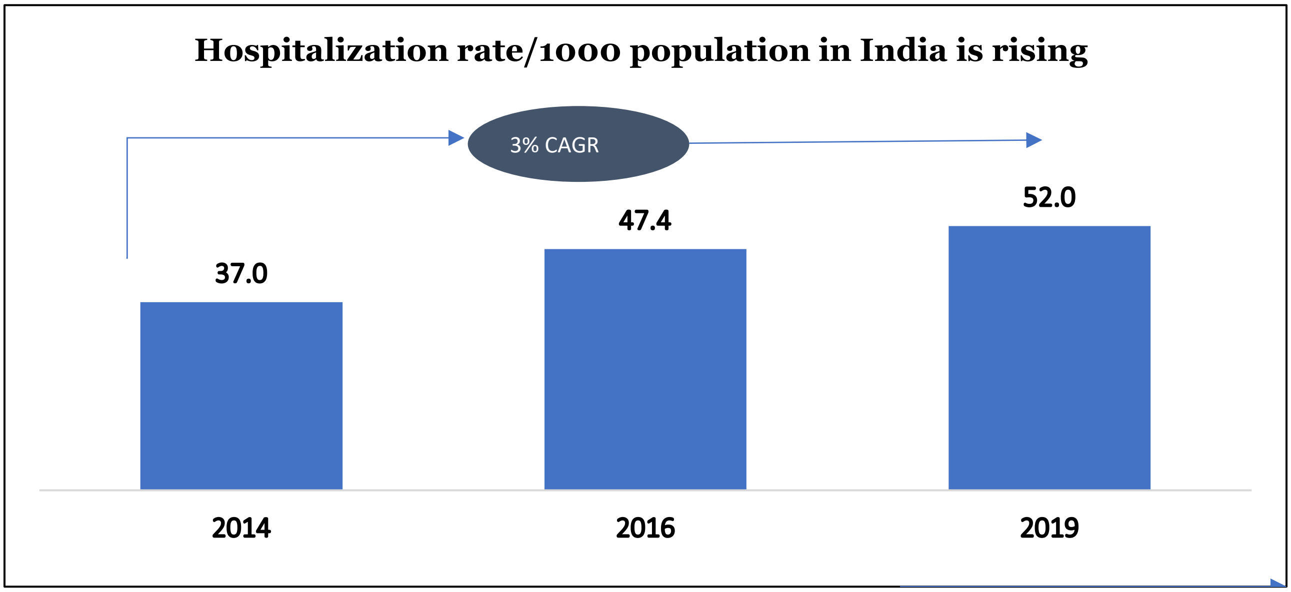
4. **Time compression**
    - With smaller families and busier lifestyles, there is a need to do more in less time.
    - Home healthcare services take services home which save time for patients/attenders

5. **Growth in geriatric population**
    - ➢ According to Economic Survey 2018-2019, percentage of people above the age of 60 will grow at a CAGR of 3% between now and 2041

      Thus, the need of geriatric specific care will be increasing in the near future



6. **Increase in hospitalization rate**
    - According to NSSO, India is the world's 2nd largest populated country but has a rate of 37 per 1000 as of 2014. This is 104 per 1000 in USA. The figure for India is expected to grow at 3%



Total Population – **1.3 Bn** **1.5 Bn** **1.52 Bn**

Source: NSSO

Post Hospitalization HH market contributes to 7.5% of overall demand, primarily driven by growth in key procedure volumes.

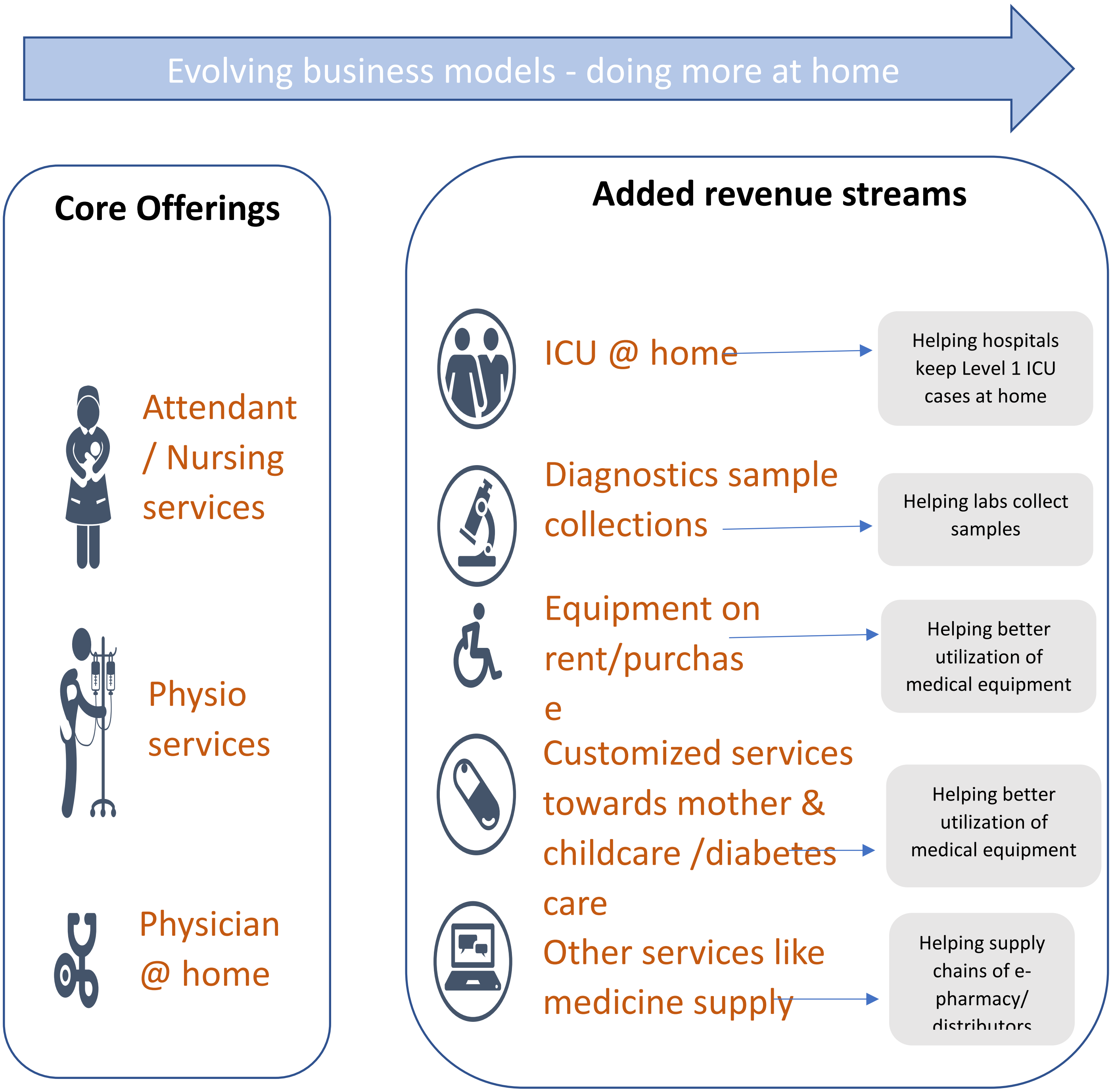
- Hospitals are entering home care market to make use of economies of scale and ready patient base; The challenges leading to attrition of key manpower from homecare companies as follows:

1. **Employee retention - Attrition of service professionals (nurses, physiotherapists, doctors):**
    - Leaving for better opportunities with hospitals, etc.
    - Servicing customers directly for services to a lower rate

2. **Forward integration by hospitals** - Lot of hospitals are expanding their umbrella of services and are entering home healthcare via their own employee base to leverage existing economies of scale
    - Aim is to be able to reach the customer more for repeat services
    - They have an advantage of available patient base

3. **Insurance coverage -** Most home healthcare services are not covered by insurance and becomes a high OOPE for patients. This is especially relevant in post hospitalisation cases where staying in the hospital may cover costs
    - Some of the corporate insurance policies do cover expenses 2 weeks pre-admission and 2 weeks post discharge.

⇒**<u>Homecare is evolving its business model to do '*More at Home*'</u>**:



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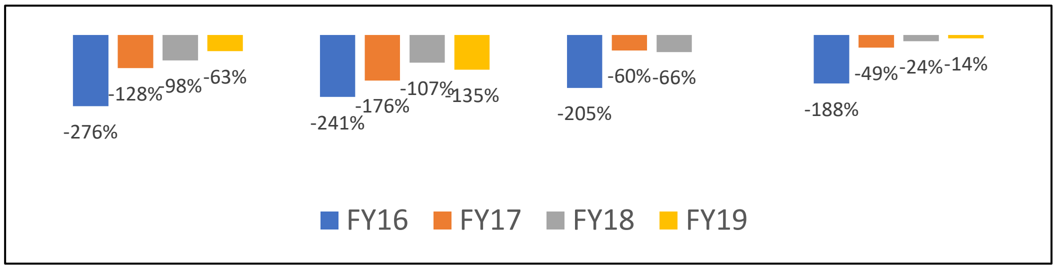
⇒The home health care players are having negative EBITDA margins, though they are improving year on year:

Key indicators	Company 1	Company 2	Company 3	Company 4	Company 5
Year of establishment	2012	2014	2012	2014	2014
Revenue (FY19) (USD Mn)	12.4	4.4	3.9	5.1	0.8
Revenue CAGR (4 years)	27%	45%	92%	82%	106%
EBITDA Margin (FY19)	-63%	-135%	-124%	-14%	-71%
Total funds raised (USD Mn)	80	31	40	-	4.25

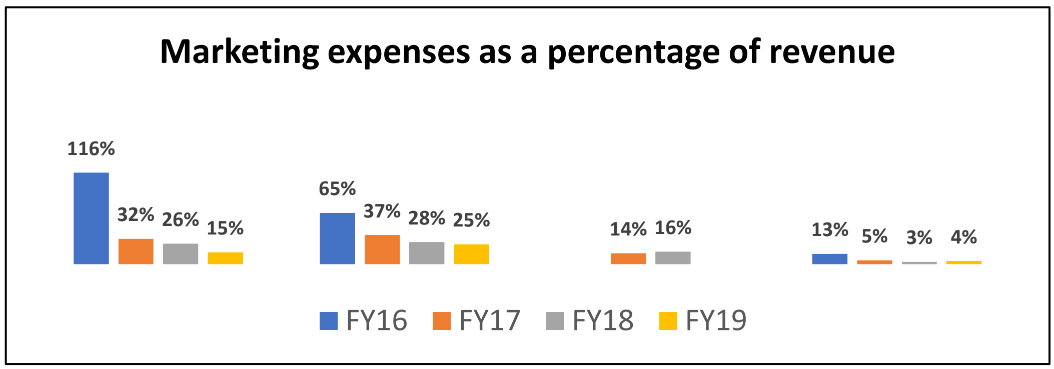
⇒ **<u>Currently operating margins are negative of all players but are improving as efficiencies are being developed; Most companies are profitable at a city/unit level:</u>**

Company 1	Company 2	Company 3	Company 4

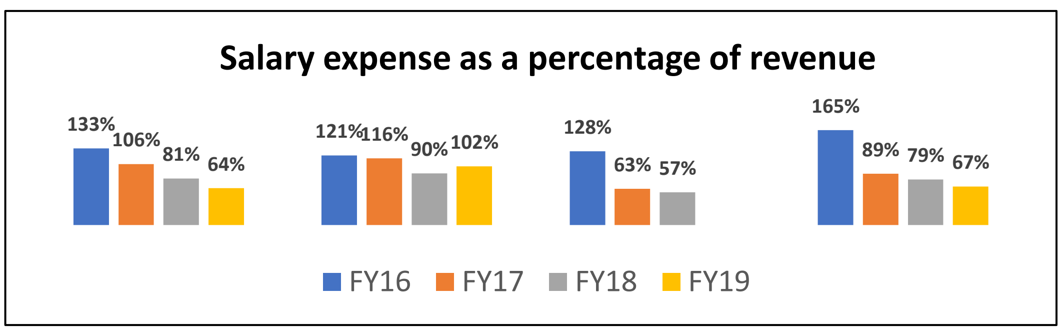
EBITDA trend



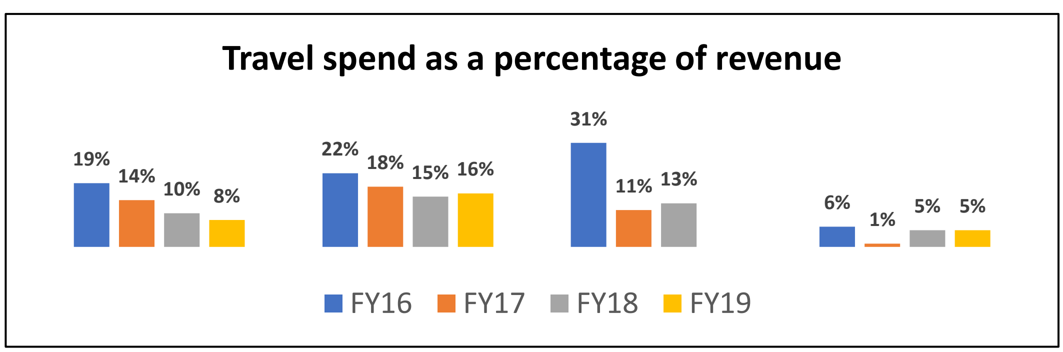
Marketing costs are going down year on year



Decreasing salaries spend



Decreasing travel spends



8.1.3 Key risks and challenges in investment space

1. **Evolving Business Model**
    - Most companies are less than 10 years old and are 'yet' to establish a profitable business model

2. **Limited number of organised players**
    - There are not many players in the organised space as the market is fragmented and unorganised
    - Not too many options to invest

3. **Risk of and from medico-legal cases**
    - Home health companies are now offering services where there is a risk of infection and other complications such as dialysis at home. Home health companies are offering many of these services in tie up 3rd parties/ doctors. There is lack of clarity on who would be held responsible for such complications. Any claims arising from such claims will further dent cash availability for these companies along with damaging reputation

8.1.4 Recommendations

Category	Key Indicators	Attractiveness Criteria	Criticality
Financials	Revenue CAGR	Steady Growth>=40%	High
	EBITDA Margin (For City/ Cluster)	Near to and improving profitability	High
	Average revenue per episode	Upwards of Rs 650 (dependent on type of service)	High
Customer	New Registrations	No. of new registrations- 20% of total consultations	High
	No. of repeat visits	Churn of chronic patients < 2%	High

Attractiveness:	Low-Moderate	Moderate High	High

8.2 IVF in India

⇒ **<u>Causes of infertility in males:</u>**

- Excessive exercise
- Environmental Factors
- Emotional stress/ Physical stress
- Marijuana or other drugs abuse

↓

Poor sperm quality

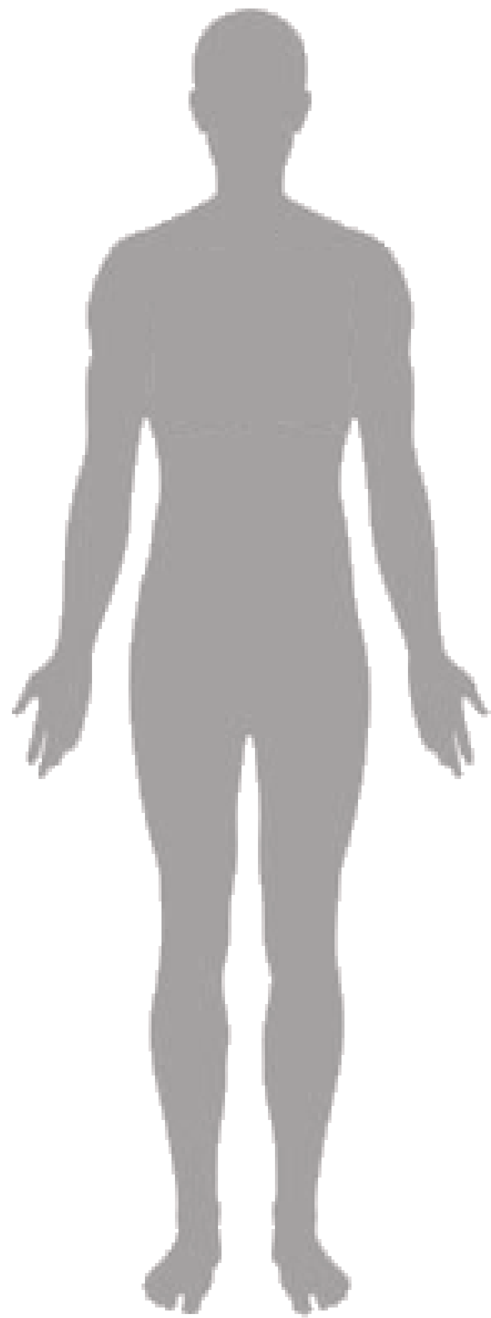
Low sperm count

Abnormal sperm morphology

Congenital birth defect

↓

No sperm formation



⇒ Causes of infertility in females:

Uterine Causes

- Abnormal anatomy of the uterus
- Presence of polyps and fibroids

- Emotional stress
- Inadequate diet, extreme weight loss & gain
- Hormone misbalance

Polycystic ovary syndrome

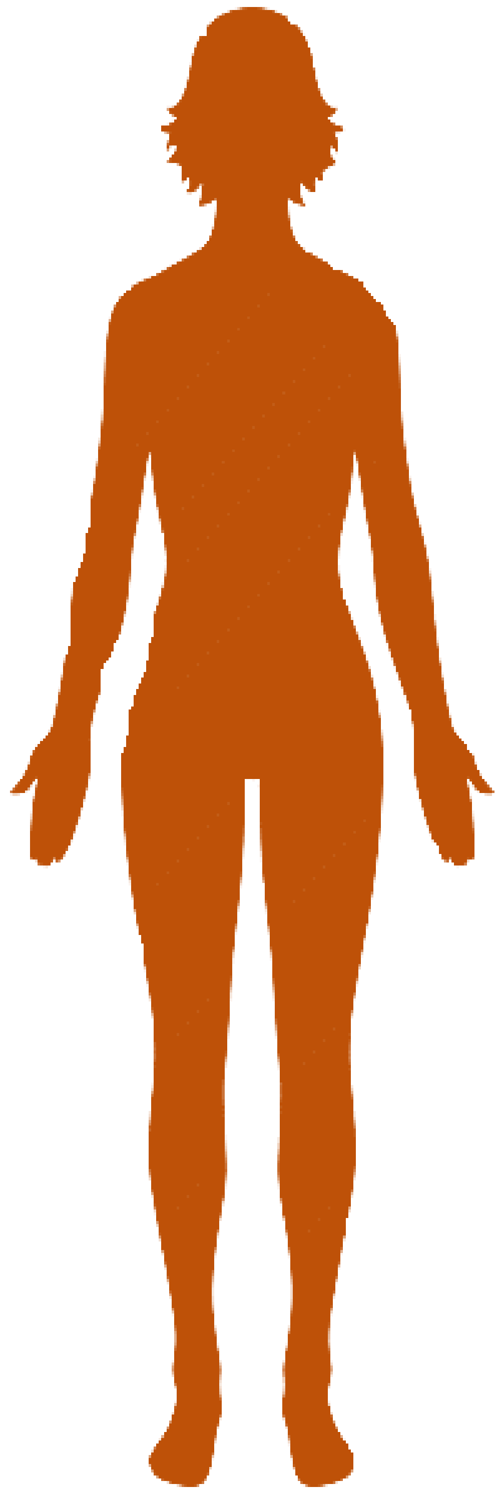
Functional hypothalamic amenorrhea

Diminished ovarian reserve

Inadequate mucous production

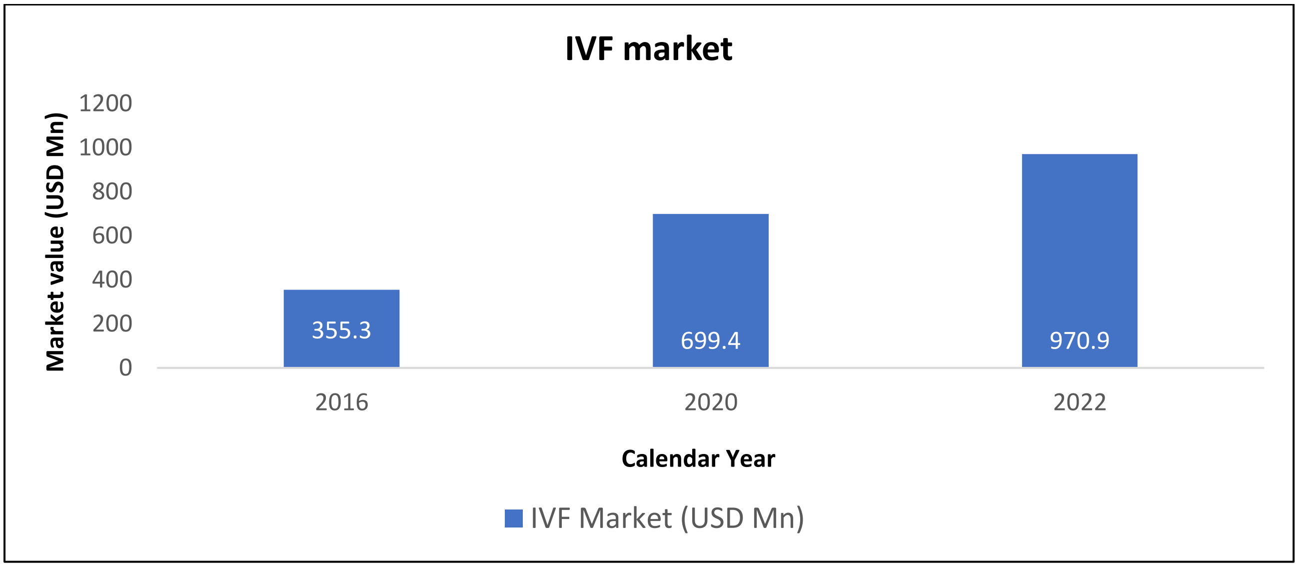
- Pelvic inflammatory disease
- Endometriosis
- Sexually transmitted infections

Damage to Fallopian Tube



8.2.1 Market size

According to Allied Market Research – Fertility Services, the infertility treatment market is sized around ~ USD 700 Mn; The market is expected to grow at 18% and reach ~USD 1 Bn by 2022



8.2.2 Trends in IVF

1. **Private players expanding to tier 2/3 cities**
   - With a huge demand of patients travelling to tier 1 cities for treatment a lot of players like Indira IVF are expanding in smaller towns

2. **Players being less dependent on surrogacy**
   - With new regulations the players dependent on surrogacy are finding it tough to survive

3. **Move towards lower pricing**
   - With growing competition and volume increase, prices to patients have decreased

4. **Hospitals entering IVF space**

- Due to high margins associated with IVF hospitals are looking to open clinics within their setups

5. **Doctor practices being bought out by chains**
    - Practice of some top doctors are being bought out by chains with the aim of expansion

⇒ **Growth has been driven by lifestyle changes and growth of treatment centres:**

1. **Improved Access**
    - Increase in the number of couples visiting an IVF center owing to increase in the number of IVF centers opening in tier 2 and 3 cities

2. **Increasing incidence of Infertility**
    - According to the Indian Society of Assisted Reproduction, "infertility currently affects about 10% -14% of the Indian population, there are higher rates in urban areas where one out of six couples is impacted"

3. **Decreasing treatment costs and new payment options**
    - Increasing number of players has brought down prices of treatment making it more affordable to patients
    - A lot of IVF chains tie up with financial institutions to give treatment options to patients via EMIs

4. **Lifestyle changes**
    - Growth in number of couples delaying parenthood due to professional commitments
    - Trend of late marriages
    - Increased stress levels and lifestyle diseases like diabetes and hypertension

5. **Flow of international patients due to low treatment cost**
    - Cost of an IVF cycle is among the lowest in India thus driving foreign patients to India

Countries	Cost per IVF Cycle (USD)
India	2857
USA	12857
UK	10714
Singapore	8571

Source: Allied Market Research – Medical Value Tourism

8.2.3 Regulations around IVF market

1. **Surrogacy Regulation Act 2016**
    - Banned all foreign applicants to use India for surrogacy
    - Aimed at avoiding exploitation of Indian women
    - India's surrogacy market was removed from the medical tourism horizon

2. **Surrogacy Regulation Bill 2020**
    - "Proposes to regulate surrogacy in India by establishing National Board at the central level and State Boards and Appropriate Authorities in the States and Union Territories"
    - "Commercial surrogacy will be prohibited including sale and purchase of human embryos and gametes, ethical surrogacy to the Indian Married couple, Indian Origin Married Couple and Indian Single Woman (only widow or Divorcee) will be allowed on fulfillment of certain conditions"
    - Surrogacy business may suffer as only "close relatives" may act as surrogates reducing the pool and making some unorganised players redundant

3. **Assisted Reproductive Technology Bill 2020**
    - Aims to regulate IVF clinics in the country
    - Sets a upper age limit of 50 for women to undergo these procedures
    - Law will look at standardizing protocols among clinics

- Reporting would be mandatory
- It would be mandatory for clinics to register under the national and state boards
- Multi location clinics will need to do multiple registrations and reporting

8.2.4 Key challenges

Key challenges faced include shortage of embryologist and social acceptance:

1. **Social acceptance**
    - People perception of infertility diseases is negative
    - 'Infertility' is still viewed in India as an inability rather than a disability
    - Lot of couples do not want to admit they need help

2. **Entry of Mother and child as well as multi-speciality hospitals into IVF**
    - Due to higher margins, hospitals are entering this sector and taking away share of standalone centers due to higher patient reach
3. **Lack of skilled manpower**
    - There is a shortage of embryologists and well as trained IVF specialists

4. **Low success rate**
    - Currently India records around 30-40% success rate in IVF cycles
    - This brings a high probability of repeat procedure

- **Snapshot of Companies Profiled**

Key Indicators	Company 6	Company 7	Company 8	Company 9	Company 10	Company 11	Company 12
Year of Establishment	1988	2010	2008	1990	2010	2009	2000
Revenue (FY 19) (USD Mn)	96.2	26.7	10.8	9.6	5	5.5	3.4
Revenue CAGR (4 year)	73%	16%	63%	17%	36%	6%	-7%
EBITDA Margin (FY 19)	32.8%	-10.5%	31.6%	17%	2.3%	3%	6.1%
No. of Centers	80+	25+	18	9	13	28	-8

8.2.5 Key risks & challenges in the investment space

1. **Regulations may hurt surrogacy flow**
   - Surrogacy was already banned for international patients 2016 which has stopped international business
   - With the new Surrogacy law coming up Indian patients may find it difficult to get surrogate mothers in India
   - Reduction will impact top line as well as margins

2. **Increasing competition**
   - The format has seen entry of mother and child players as well as multi-speciality hospitals. Increasing competition can impact growth and profitability

3. **Decreasing prices**
   - Pan India players are pushing prices of IVF cycles down which will impact the margins

8.2.6 Recommendations

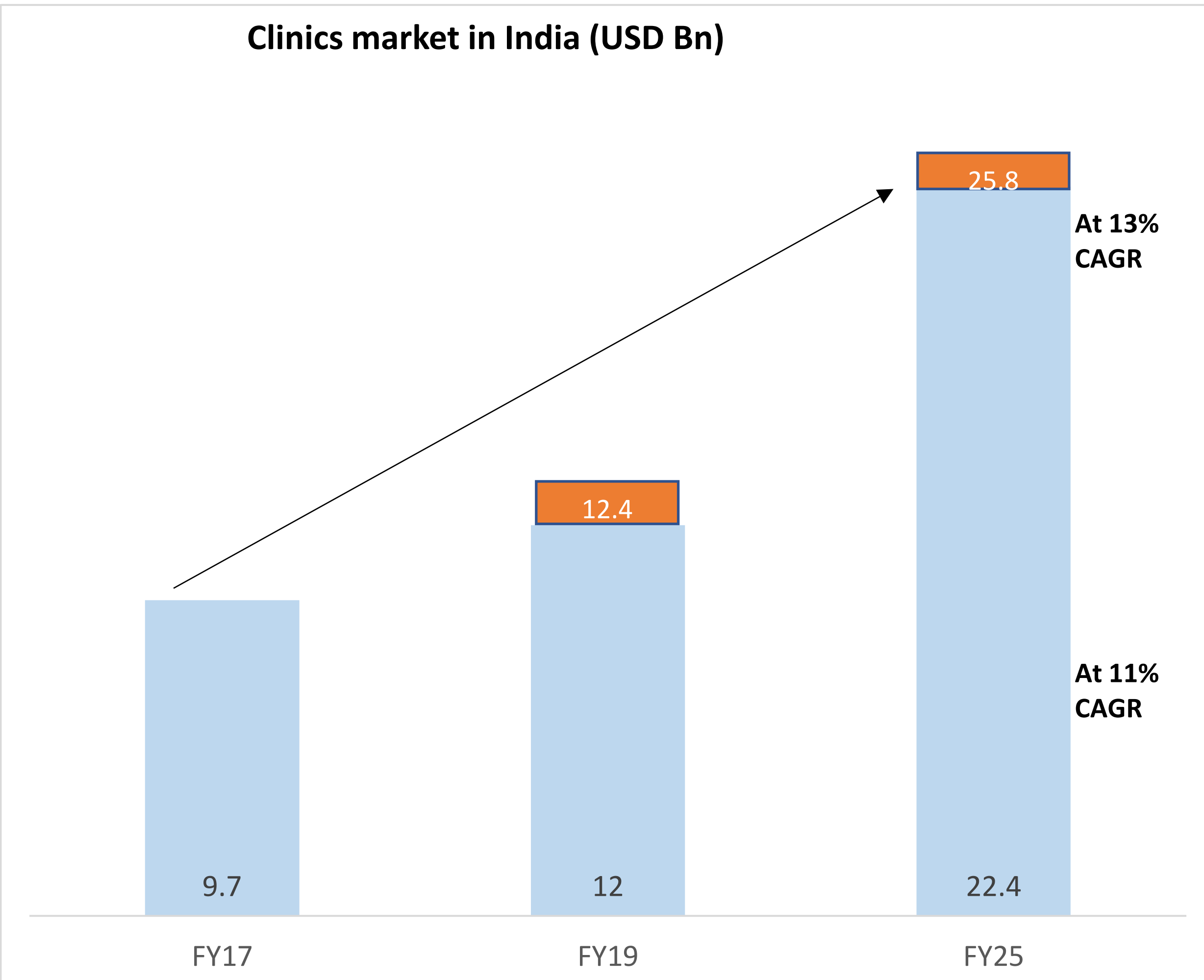
Category	Key Indicators	Attractiveness Criteria	Criticality
Financials	Revenue CAGR	Steady Growth>=30%	High
	EBITDA Margin (For mature centers)	Margins >=25% (Benchmark with EBITDA of peers)	High
	ARPC	Average Revenue per IVF cycle (INR 1,20,000-1,50,000)	High
	IUI to IVF conversions	>25-30%	
Customer	Success Rate	% of IVFs leading to pregnancy >35%	High
	Expansion of canters	Opening up in new geographies	High

Attractiveness:	Low-Moderate	Moderate High	High

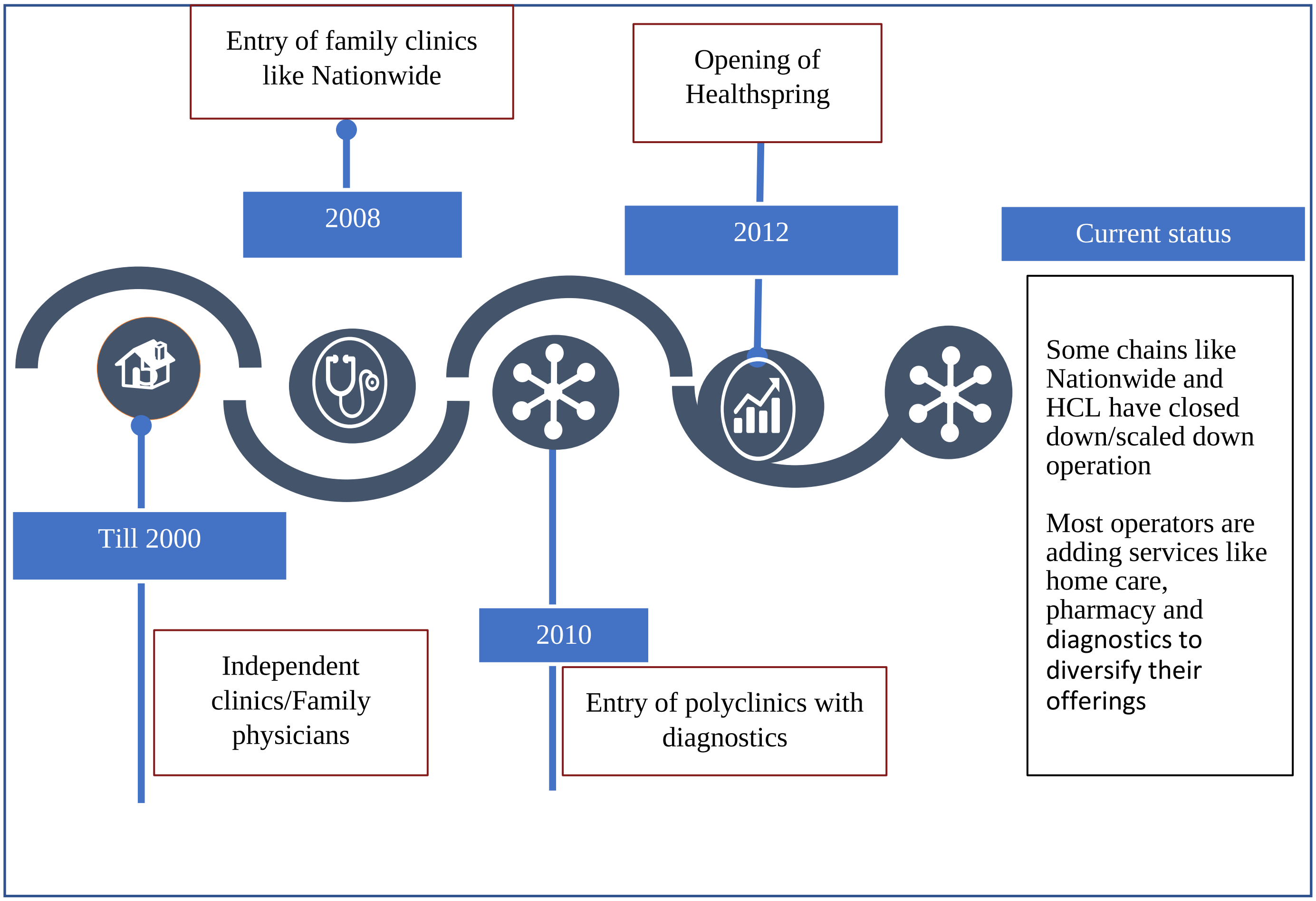
8.3 Primary Care in India

8.3.1 Market Size

According to National Health Accounts, Primary care clinic's market in India is valued at ~USD 12 Bn; Corporate primary care clinics constitute less than 1% of the market



⇒ Till the 2000's, single doctor setups dominated the sector; Corporate groups started entering this space from 2008



8.3.2 Key Challenges

Primary Care Clinics are hit by high rental and doctor costs

1. **High rental costs with low ticket size**
   - Clinics must open in high end commercial/residential areas which lead to a higher rental per sq ft. Clinics also need to compete with other high-end commercial establishments like salons/restaurants and bars for the same location

- The average bill size of clinics is small as compared to other healthcare delivery models leading to a lower realisation as compared to single speciality hospitals needed similar size areas for operations

2. **High doctor/manpower costs**
    - The physician takes away a major share of the fees since OPD consultation is the major source of revenue for clinics, this outflow leads to high manpower costs overall

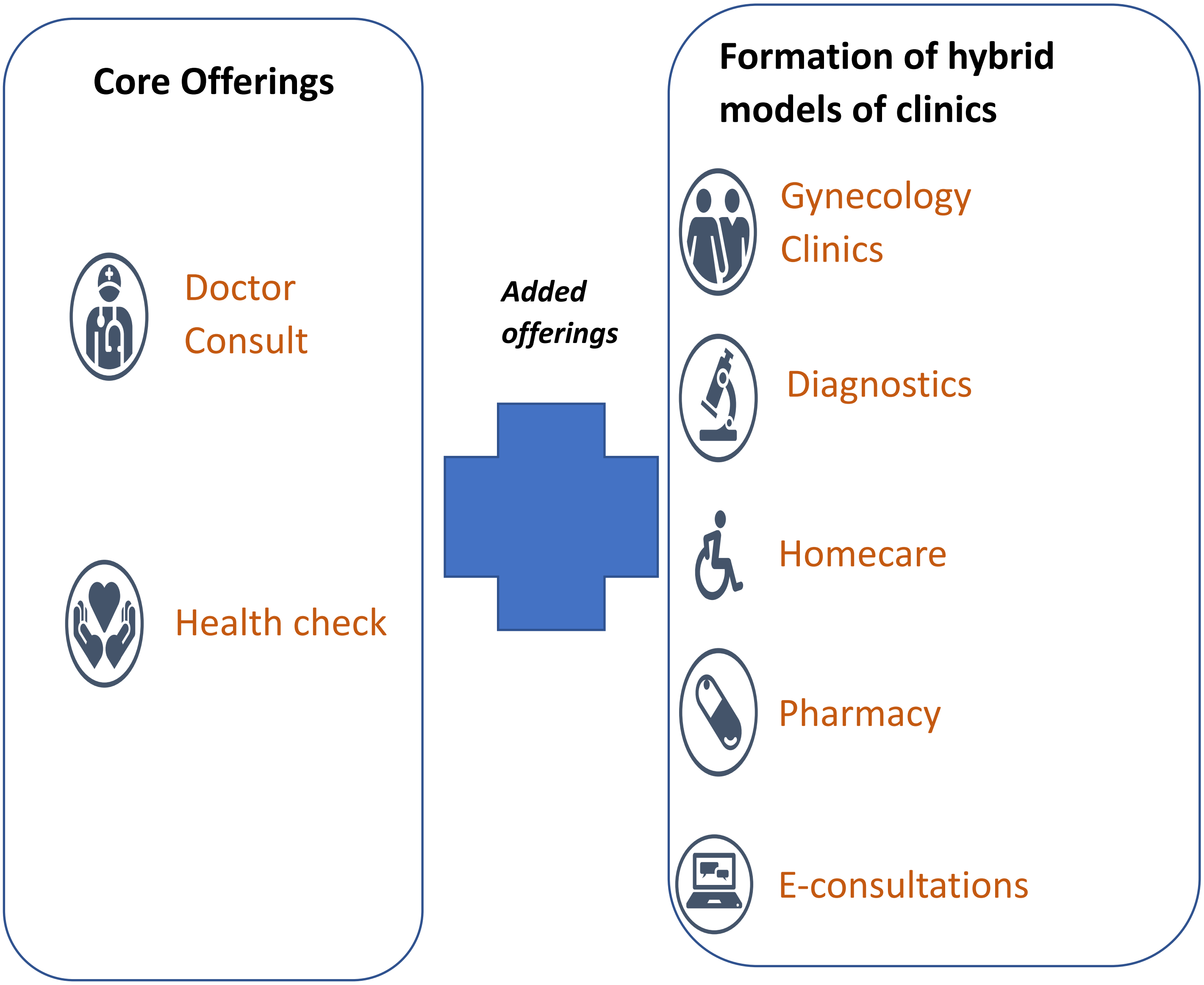
➢ High attrition amongst doctors and preference towards hospitals are further impacting the organized clinics

1. **High attrition**
    - Once a doctor gains patient base, he/ she opens his/her **own clinic in the vicinity** thus significantly affecting footfall of the primary care chain where he/ she was earlier attached to.

2. **Ease of entry**
    - Due to low set up costs, it is easy for individual doctors who set up their own clinics for OPD consultations and become competition to primary care chains
    - Some of the doctors are not exclusive and available in multispecialty hospitals

3. **Hospitals directly reaching out to patient even for primary care**
    - Many multi-speciality hospitals are focusing on primary care/preventive health. Thus, even for regular consults, patients are now directly connected to the hospital

⇒ **Due to these challenges, organized clinics have been trying to look at other revenue options**



- **The challenges faced by the are reflecting in their negative EBIDTA margins**

Key Indicators	Company 13	Company 14	Company 15
Revenue (FY19) (USD Mn)	7.5	3.3	1
Revenue CAGR	58%	28%	1%
EBITDA Margin (FY 19)	-108%	-41%	-41%
No. of Centers	24	25	25

8.3.3 Key Risks and Challenges in the investment space

1. **Unproven Business Model**
    - None of the companies have been able to scale up in a cost-efficient profitable manner. Most companies have had to scale down initial plans/ even operations.

2. **Limited number of organised players**
    - There are not many players in the organised space as the market is fragmented with a lot of doctors setting up their own clinic
    - Not too many options to invest

3. **Competition from other verticals of the healthcare ecosystem**
    - With a lot of companies/aggregators offering e-consultations at an attractive rate with rated doctors' patients are getting consults on their mobile phone
    - Less effort for patients as compared to visiting clinic

- Multi-speciality hospitals are reaching to patients via health check packages and even otherwise for normal consults
- Home health companies are providing doctors at home

8.3.4 Recommendations

Category	Key Indicators	Attractiveness Criteria	Criticality
Financials	Revenue CAGR	Steady Growth>=15% As dialysis market is growing at 12-14%	High
	EBITDA Margin (For City/ Cluster)	Near to profitability	High
	Rental Costs	<20% of topline	High
Customer	Growth in reach via new centers	No. of new canters opening per month	High
	New registrations	No. of new registrations – 20% of total consultations	Low-Moderate

Attractiveness:	Low-Moderate	Moderate High	High

➢ **SUMMARY VIEW**

Sub-sectors	Market size (FY19) USD Bn	Sector Growth (Next 5 years)	Investment Rationale	Key Challenges
Home Healthcare	~0.8	15-18%	• Demand to do more in less time • Growing dependent population • Increasing nuclear families	• Evolving business model • Majority market consist of low value services
IVF	~0.7	18%	• Rising incidence of fertility – lifestyle and delayed pregnancy • Growing organised sector • Increasing reach in tier 2/3 cities	• Competition from mother and child hospitals for standalone players • Lack of qualified manpower
Primary Health Care	~12	11-13%	• Large Market	• High costs -rentals, doctors • Competition from all formats – hospitals/home healthcare • High doctor attrition coupled low entry barrier

➢ **Attractiveness – Healthcare delivery**

Segment	Market growth rate	Profitability/ Returns	Saleability	Challenges/ Risks	Attractiveness Index
Home Health Care	**Moderate-High**	**Low**	**Low-Moderate**	**Moderate-High**	**Low-Moderate**
IVF	**High**	**High**	**Moderate-High**	**Low-Moderate**	**Moderate-High**
Primary Health Care	**Low-Moderate**	**Low**	**Low**	**High**	**Low**

9. CONCLUSION

➢ **Home Health Care**

1. **Continuum of Care**
    - Home health market estimated at ~0.8 bn USD was largely an unorganized market till 7-8 years ago; The market is growing in high teens

2. **Strong growth drivers**
    - Aging population, preference for personalisation along with rising affordability is leading to growing demand for homecare

3. **Challenges around manpower attrition and competition from hospitals**
    - Companies in this sector continue to face the challenge of high attrition. Entry of hospitals has further accentuated this problem
    - This is visible in the P&L of the large players which are still in the red

4. **Private players expanding services, but challenges remain**
    - Private organized players are growing revenues in high double digits though profitability is still a concern. Given the focus on market expansion, companies are raising cash every 2-3 years

Home health is a nascent sector which is in a growing stage. Almost all organized players are growing at >40% per annum but are still making losses. While the path to profitability is not truly visible, investors should keep an eye on the sector given the strong macro tailwinds and the significant revenue growth that companies are delivering

- **IVF**

1. **Growing market**
   - The IVF market is growing at ~18% and is expected to be USD 1.2 Bn by 2022.

2. **Increasing access and lifestyle changes**
   - The market is driven by chains expanding to a pan India level and even reaching tier 2 and 3 cities and lifestyle changes like delayed pregnancies

3. **Move to chains from standalone doctor clinics**
   - Patients are preferring chains for treatment due to increased quality and reducing costs

4. **New regulations**
   - The Surrogacy Regulation Bill is going to make surrogacy business tough in India and Assisted Reproductive Technology Bill is going to make the business more organised.

5. **Players**
   - Indira IVF is the market leader and Almost all players are growing at >20% with opening of new centres

With lifestyle changes increasing, the infertility problems in India are bound to increase. The market is seeing a higher preference towards corporate chains and all of them are showing a healthy increase in revenue year on year. The sector will continue to grow and is a good place for investment of funds.

➢ Primary Health Care

1. **Unorganized market**
    - Clinics market is majorly unorganised with individual doctors having the higher share in the private sectors

2. **Entry of corporate chains**
    - Corporate chains started entering the space in the late 2000's

3. **Challenges to values proposition**
    - Clinics were supposed to give customers an ease of access and standard of service, they were faced with challenges from other formats

4. **High costs and attrition**
    - Clinics are hit by high rental and manpower costs along with high attrition, especially amongst doctors

5. **Private players expanding services, but challenges remain**
    - Almost all players are diversifying their service line with diagnostics, pharmacy and home health
    - Revenue growth of most players are >20%
    - All are hit by significant negative EBITDAs
    - There have been PE investments in companies like Healthspring but no exits

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11. ANNEXURES

Market Size Calculation – 2019 (Home Health Care)

Annual orders - Mn		Avg Revenue Per Episode (USD)		Total market size (USD bn)
131	×	6.15	=	~0.8

Orders have grown 15% year on year

Price is constant due to largely fragmented and unorganized market