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## Backing the Telehealth Industry: Outlook on the Financial Aspects Fueling Growth

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### INTRODUCTION

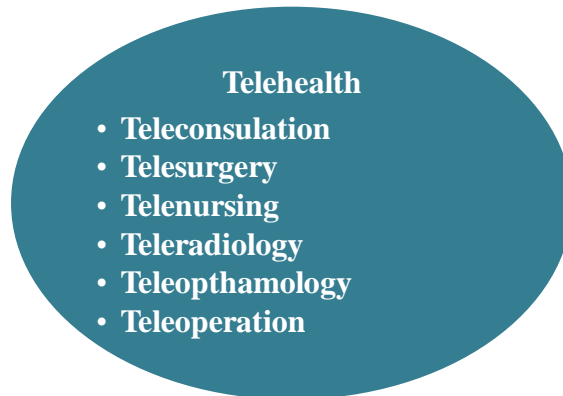
Telehealth services existence can be drawn from the 1960s and the current flourishing global market with a promising future. The principal focus of this research is on the *commercial perspective of telehealth in India*. According to the Reuters report, the global telemedicine market accounted for \$21.56 billion in 2017 and is anticipated to grow by \$93.45 billion in 2026 at a CAGR of 17.7%. (Wilson, 2018). *Telehealth is the utilization of telecommunication services to serve the end users with efficient diagnosis, treatment, consultation, education, and more.*

- Financing and funding telehealth or telemedicine is quite essential to address the health disparities in India. The emerging trend is all set to reduce the inequalities of facilitating quality healthcare to every stratum of society. Telehealth is the incorporation of telecommunication service to the traditional healthcare service; thereby telemedicine also regarded as telehealth is a bridge between the service providers and acceptors.

**Keywords:** Telemedicine, Teleconsultation, Venture capitalists, Funding, Series Funding, Grants, Telecommunication, Information communication technology, Seed funding, CSR

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**Telehealth can be of the following types:**



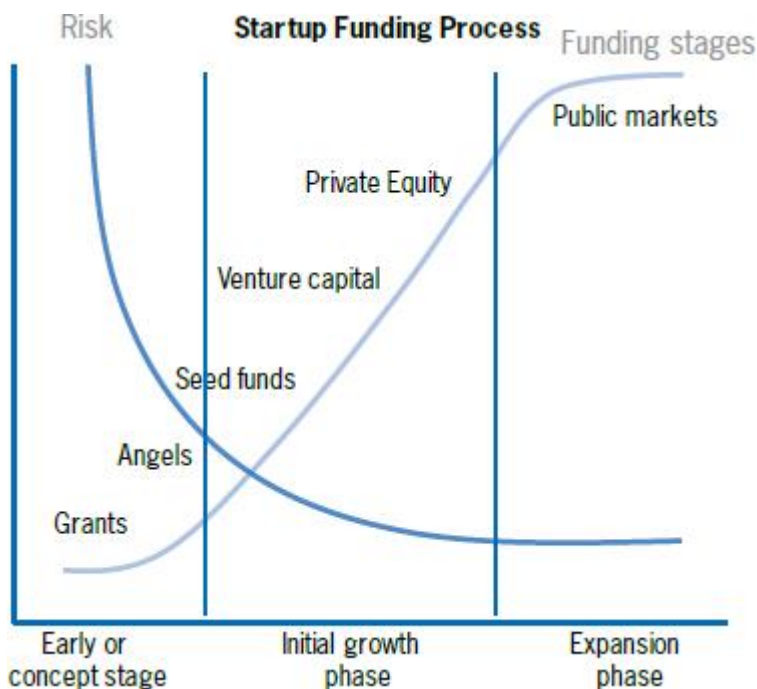
- The research paper proceeds with an assessment of capital funding to various applications of telehealth services and allied services in India.
- The Indian healthcare market as an outcome of greater health awareness, more significant income, greater healthcare insurances is set to reach the US 372\$ billion by 2022.. (IBEF, 2018).

Healthcare investors are much attracted to high ROI(Return on Investments). The inclination of investors towards e-health ventures is evolving.

**Access to capital for telemedicine :**

**a) Start-up Ecosystem**

- The Telehealth start-up ecosystem is backed extensively by venture capital, private equity, angel investors, seed funds, grants.



(FOUNDATION I. B., 2018)

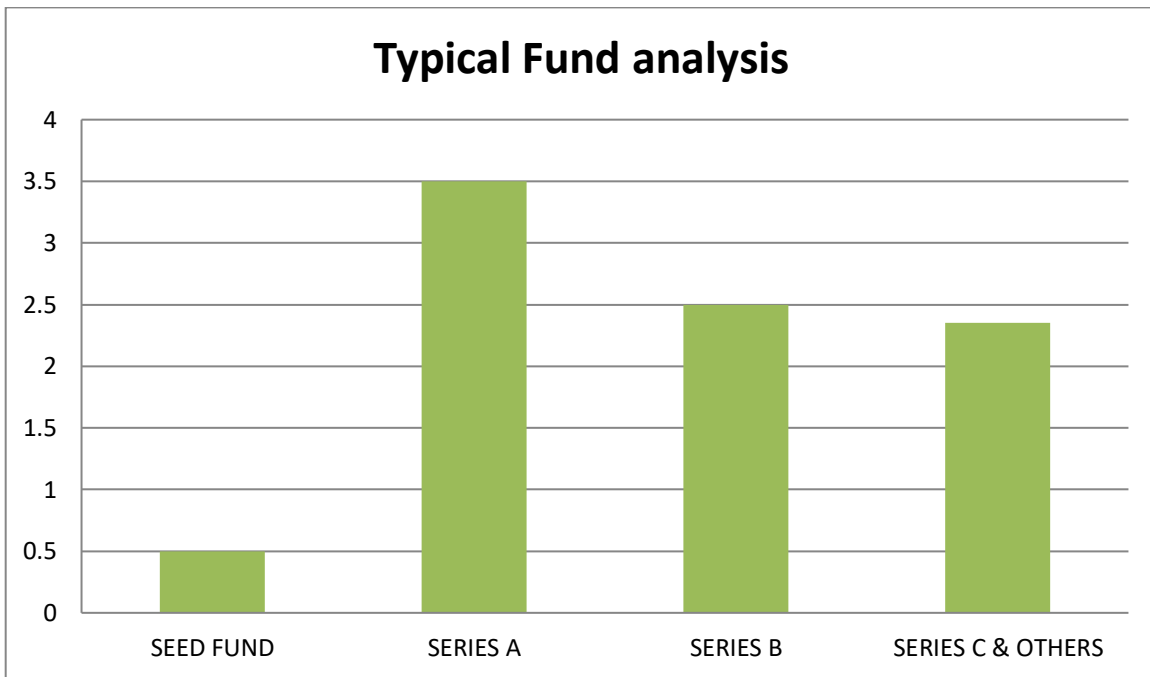
- The *Venture capitalists* funding encompasses seed funding, series A, series B, and series C funding types. External funding for start-ups is imperative to validate their vision.
- The success story of Practo Backed by upto ten venture capitalists and the recent investment of \$55 million in series D round is exemplary for the upcoming start-ups.
- *Seed funding stage* is subject to uncertainty, and so the interests of investors remain comparatively low. Once the ideation funding stage transverses and the business has set up its customer base, it becomes slightly easier to get funding for building up the business.

The following list comprises of few telehealth start-ups with typical VC funding:

S.no	Company	Profile	Type of funding(latest)	Amount raised(INR)	Lead Investors
1.	medEcubepvt ltd	Teleconsultation: Provides concierge coordination service.	Series A	40 lakhs	Artiman Ventures
2.	Alterna Care	Provides personalized healthcare treatment.	Seed Investment	5lakhs	Eros lab
3.	See Doc	Video based healthcare consultation platform	Series A	10 lakhs	Your nest angel fund,Sunil K Goyal
4.	eKincare	AI driven personal health assistance	Series A	15lakhs	Eight Roads Ventures, VenturEast,Endiya partners, Bitkemyventures,BVR Mohan Reddy
5.	Doctor Insta	Brings healthcare to everyone's tip; first video medicine company in India.	Series B	40lakhs	BrahmaX ventures

(crunchbase)

- The above assay signifies that one out of four investments take place in the seed funding round, therein indicating the trend of VC's movement towards type A, B, C series funding is more likely to occur.

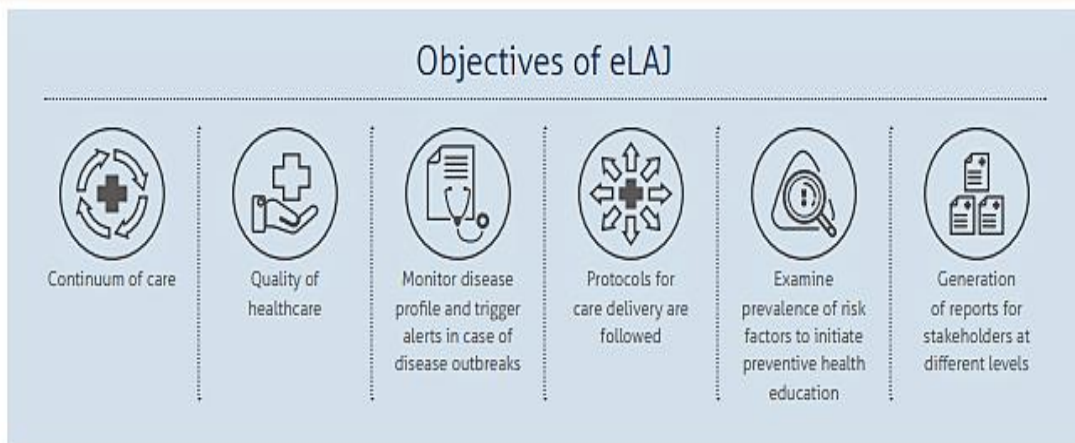


**b) CSR activities and e-health :**

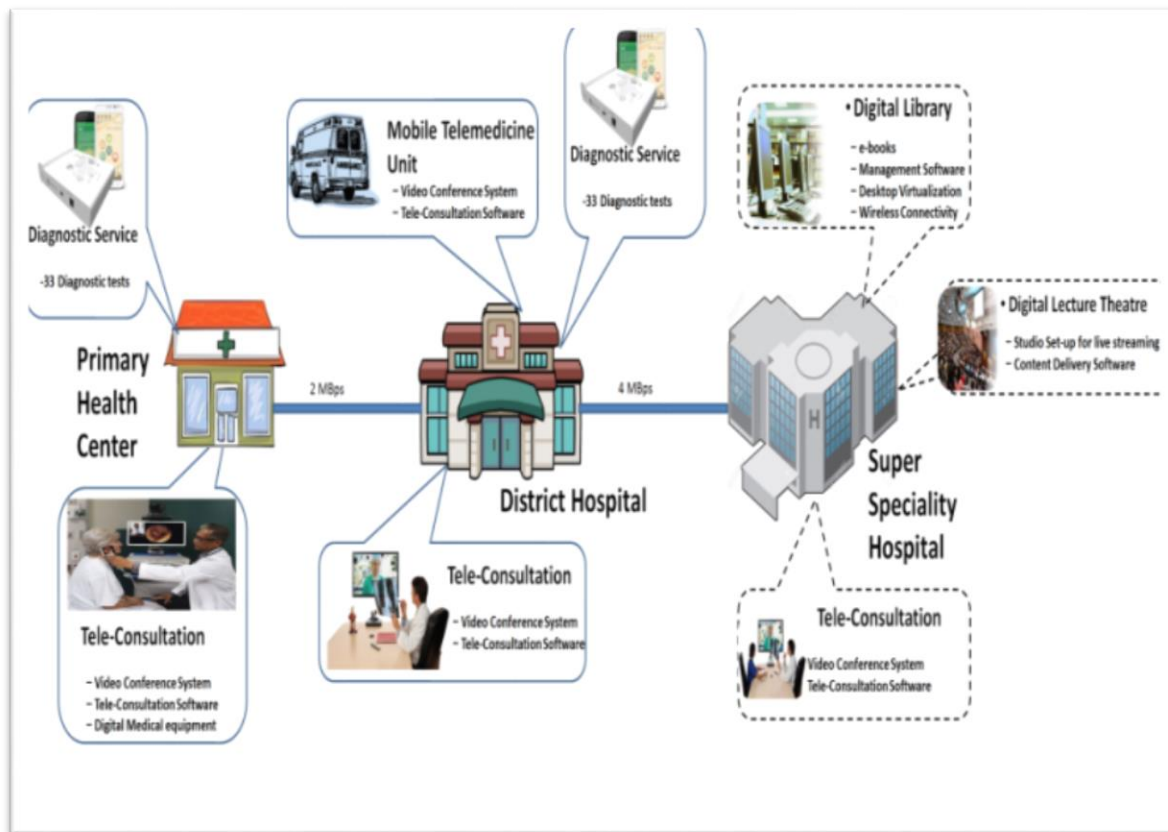
- CSR activity has driven the driven telehealth service upto a considerable amount. Nowadays, when the healthcare costs are rising the CSR activities help in providing the general public with healthcare cost benefits accommodating telehealth in their lives.
- The cost at which teleconsultations are provided is 10percent less than the traditional form of service. *Teleconsultations* is a win-win situation for both the provider as well as the consumer. The number of investments in teleconsultation business is also high.
- Some of the CSR activities and their outreach have been listed.

Project	Company/Organisation	Project Details	Project cost	Outreach
e-Health centres	HP (Hewlett Packard)	e-health centres with access to specialised doctors,EMR system(Electronic medical record system),equipped medical diagnosis	1.37cr	48,000 patient visits(2014)
Telemedicine centres/ Telehealth centres	JSPL Foundation (Jindal steel power plant)	Cloud enabled healthcare infrastructure, easy transport to remote areas,EMR system, Automated health data upload system,Sms medication reminders	5.75L	500,000 individuals (as 2015-16 CSR report)
e-Swasthya/Piramal swasthya	Piramal Group	44 telehealth centres with aim to serve primary health services.	1.1cr	15254 beneficiaries
e-Laj clinics	Biocon	Mobile early detection and prevention of oral cancer,EMR system	8.37cr(in Rajasthan and Karnataka)(Biocon ltd, 2017)	8540 people screened,1097 positive pre-cancerous lesions detected

**eLAJ efficiency:**



(Biocon ltd, 2017)



The flow of telehealth service :

(<https://mohfw.gov.in/sites/default/files/NTN.png>)

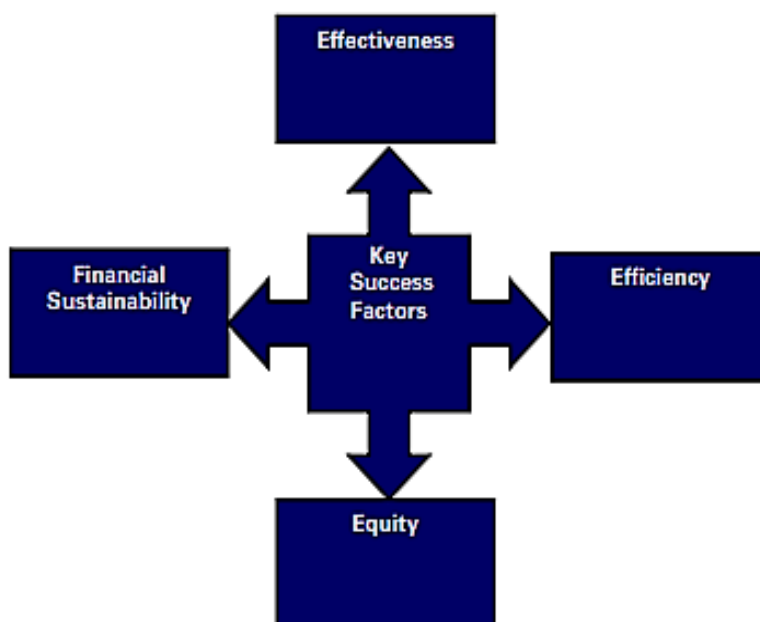
a) **Public-Private-Partnership :**

The amalgamation of Public and Private institutions to integrate ICT(Information and communication technologies) to give away healthcare services.

Project	Project Overview	Organisations involved	Outreach	Expenditure
<b>eVaidya</b>	The project runs medical consultation over phone, email instant messaging, forums and more ,Ephc's (electronic primary urban healthcare centres) set up	Ephc's PPP model with State Government of Andhra Pradesh (pilot project)	500-700 remote consultations through Dial your doctor initiative(2016)	Paid up capital:6.52cr
<b>Glocal Digital Dispensaries</b>	Digital dispensaries for improved accesability to medicines in underdeveloped regions.	PPP model with State Goverments	100+dispensaries in Rajasthan,Odisha, West Bengal and Jharkand	UNDISCLOSED
<b>Narayan a hrudayal aya</b>	Fully equipped eHC's,biometric patient identification,EMR systems installed.	PPPmodel with	45,000 patients for teleconsultations and 12,000 patients	73 lakhs cummulative expenditure(Narayanhealth.org, 2017-18)

			screened.(Narayanahealth.org, 2017-18)	
<b>Apollo Telehealth Service</b>	Access to specialist doctors, upgradation of UHC's.	PPP Model With State government of Andhra Pradesh	115 telemedicine units across countries like India, Oman, Nigeria and more.	UNDISCLOSED

- PPP model is substantial for the remodeling of the healthcare system in India. This partnership is profitable for end users. The collaboration between the private players and the public body is integral for the analysis of risk, growth, and expansion of the business. In the healthcare industry and life sciences, industry risk associated with blooming business is high in comparison to any other field.
- Therein, PPP is a strategic measure for the private players and on the other side, it helps in attainment of the government's objectives.
- Benefits of PPP for the providers are also the key actors to success.



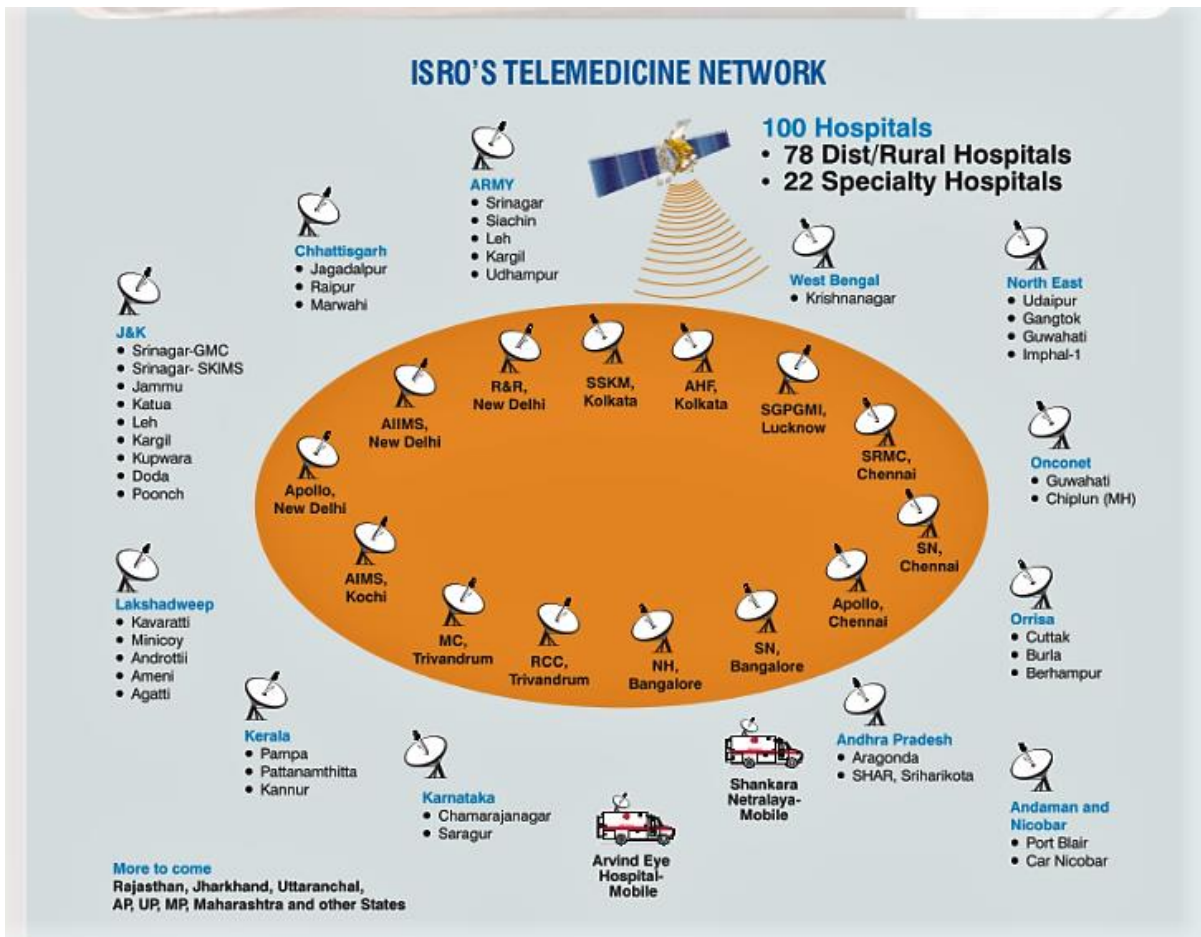
(<https://www.ibef.org/download/PolicyPaper.pdf>)

**d) Government as a stakeholder :**

Government plays a vital role in intensifying the development of telehealth in India. ISRO began the telehealth initiative in the year 2001, building a transit between the remote places and hospitals using satellites.

ISRO facilitates the tele-education system by initiating *EDUSAT*, which offers an array of education delivery modes.

*EDUSAT initial expenditure was 549.09 cr.*



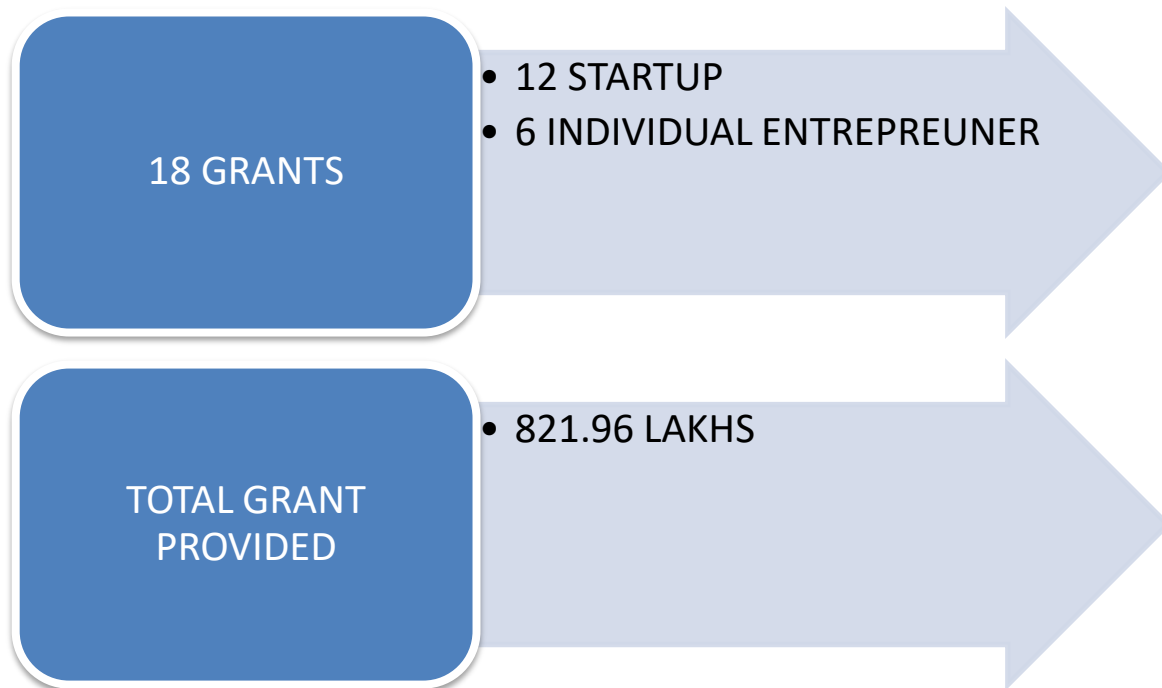
(<https://e-smartsolution.co.uk/blog/wp-content/uploads/2014/04/isro.png>)

- The lately formed start-up ecosystem compelling innovation needs to be funded to retain the enthusiasm amongst the entrepreneurs. The Indian government is actively financing the dynamic models of the e-health system.
- Under the biotech umbrella, the financing of healthcare start-ups can take place by *BIRAC*(*Biotechnology industry research assistance council*), which provides seed fund, infrastructure, and other valuable assistance to foster research capabilities.

Under Birac, BIG-Big Innovation Grant which provides 50 lakhs grant to the innovators, with *commercialization potential within 18 months*.

(BIRAC, 2019)

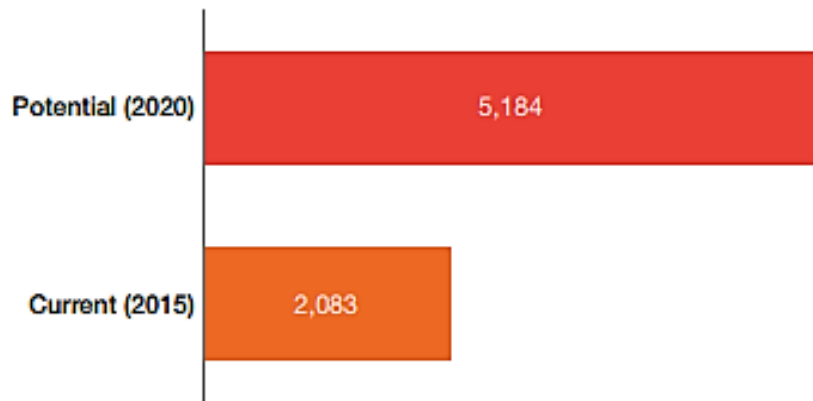


**Discussion :**

- Scaling-up of sustainable Telehealth in India requires adequate capital for operation, management, and proper implementation. Often, the investors step back to finance the telehealth projects owing to lack of sustainable models, and as a result of this the Government grants, Public-private-partnerships, CSR activities are much recommended.
- Attracting potential seed investors and Venture capitalists is possible by providing value proposition in the disrupting technology era and aiming to ensure utmost customer satisfaction based business model.

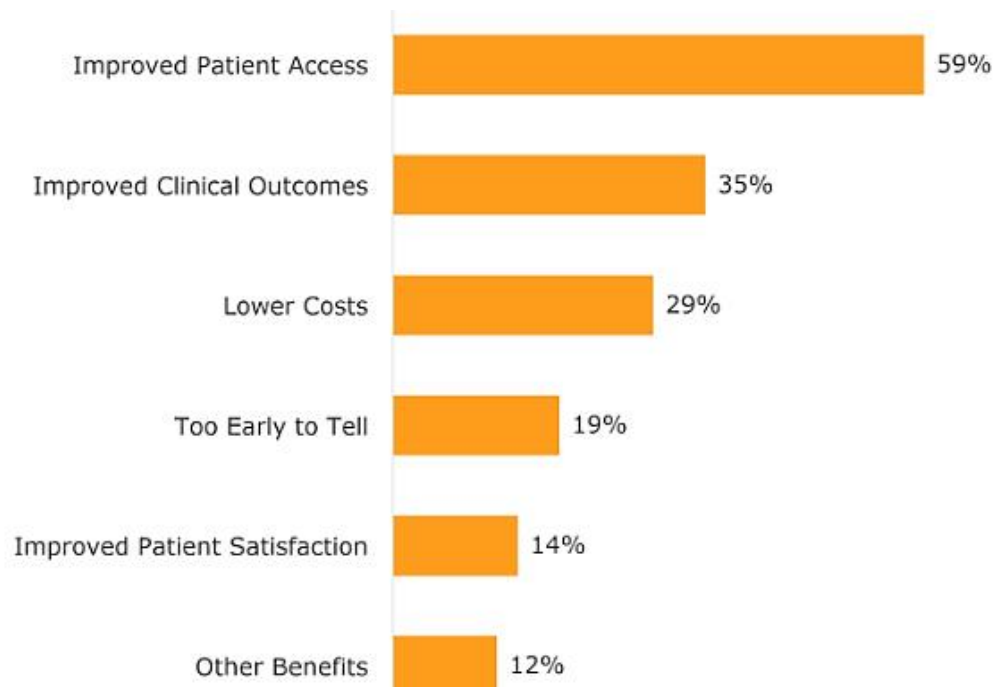
**Prognosis :**

- With increased investments in the Telemedicine industry owing to higher success rates of projects and businesses, investments in the healthcare sector, especially in the telehealth service, can form an opportunity for the substantial cash returns for the investors. Adequate time is required for these projects and businesses to show gains since they are capital intensive.
- The m-Health market has a high potential with the dawn of health and fitness concerns among the people.

**The Current and the future market potential :**

(<https://www.pwc.in/assets/pdfs/publications/2015/the-healthcare-agenda.pdf>)

- The welfare to investing in telehealth service can be derived from the benefits available to the providers.



(<https://klasresearch.com/report/telehealth-virtual-care-platforms-2017/1332>)

- Telemedicine service can be a valuable platform for the investors, also beneficial for innovators with a series of alternatives for funding from seed stage to the on-going reimbursement services.

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Mayuri Bhattacharya is Pursuing an MBA in Biotechnology from Amity University Noida. Her graduation is in Science background from Delhi University which has given her a broad base interest towards technological applications towards biology.

Mayuri, 22 years, born and brought up in Uttar Pradesh in a cosmopolitan city is a multi-talented girl, who is a distinct debater and speaker. She is a talented trained Kathak dancer, holding a degree from PrayagSangeetSamiti. She has a keen interest and dream of developing a substantial business in Biotechnology and be a woman entrepreneur.