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INFRASTRUCTURE
CLOUDNINE HOSPITAL, PUNE

MANAGEMENT
EVALUATION METRICS
IN HOUSEKEEPING

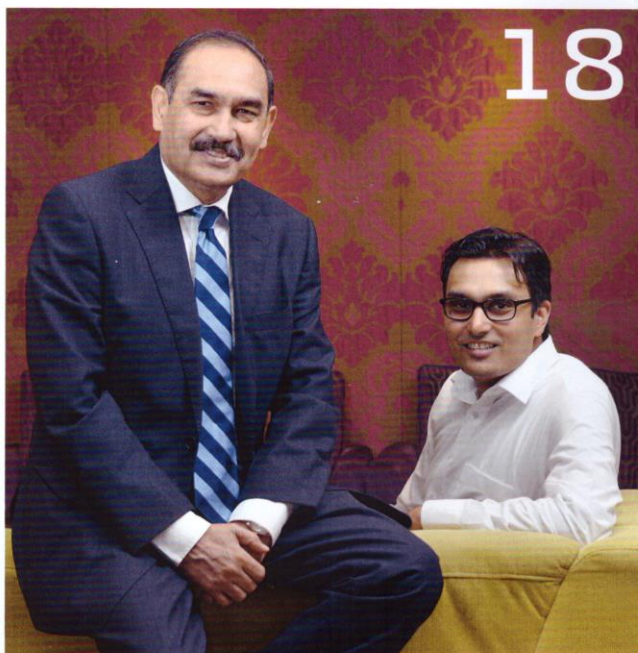


CRACKING THE CODE

DR VIDUR AND DR HARSH MAHAJAN OF MAHAJAN IMAGING PVT LTD ON
WAYS TO SUCCESSFULLY SCALE UP DIAGNOSTIC IMAGING BUSINESS

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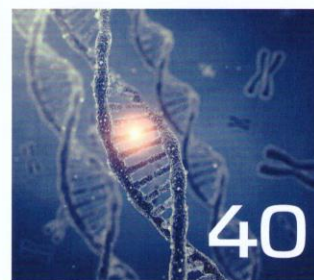
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Cracking the code

What makes a few diagnostic imaging groups to succeed and others to exit the business?

BY RITA DUTTA

Renowned radiologist Dr Harsh Mahajan unveiled one of the first MRIs in the country, when he started Mahajan Imaging Private Limited on Delhi's Pusa Road in the year 1992. The second imaging centre with functional MRI came up five years later at Green Park in south Delhi. Subsequently, the third centre was kick-started in the year 2000 with nuclear medicine at Sir Ganga Ram Hospital.

However, it was only after Dr Mahajan's two sons, Vidur (after completing his MBA with dual majors in finance and healthcare management from the Wharton School of Business) and Kabir (after completing his graduation from SRCC in Delhi and PG Diploma from Delhi School of Economics) joined the group after 2010 that Mahajan Imaging was on the growth trajectory.

Today the chain has nine centres in Delhi-NCR and Dehradun with the latest centre inaugurated in Gurgaon last month. Except for the centres located at Dehradun, Hauz Khas, Gurgaon, and Defence Colony, most of the imaging centres of the group are housed within a hospital where the space is provided by the hospital and the investment and oper-

ations are by Mahajan Imaging. The brothers have been instrumental in inking the group's healthcare Public Private Partnership (PPP) deal with the Central Government in Safdarjung Hospital, New Delhi in 2009. The group, which has been on the forefront of technology, has introduced India's first standing weight bearing MRI, cone beam dental CR, silent MRI and dual CT scanner with cardiac spectral imaging.

Another leading diagnostic imaging chain, started three decades back, is Mumbai's NM Medical. The group, founded by Dr Nilesh Shah, started its first diagnostic imaging centre in 1981 in south Mumbai. In the 80s, NM Medical was the first to introduce ultrasound in the private domain in Mumbai. In the 90s, NM Medical forayed into pathology into the diagnostic centre model as well as CT Scan and MRI for the first time outside a hospital setup. Much like Mahajan Imaging, the group spread its tentacles after Rahil Shah, son of Dr Nilesh Shah, joined the company in 2008. On his return from the US, after completing his management from Wharton School of Business, Rahil looked at aggressive expansion as well widening the spectrum of tests in

1. Dr Harsh and Dr Vidur Mahajan of Mahajan Imaging are determined to stay focused on high-end imaging.



COVER STORY

radiology and pathology.

Today the group has 15 high-end imaging centres spanning the cities of Mumbai, Pune and Bengaluru. Except for five centres that do not offer MRI and CT, all others offer both high-end pathology and imaging services. Their investment per centre with only imaging and pathology is around Rs 20 crore, while without MR and CT ranges from Rs 5 crore to Rs 6 crore. Most of the centres are standalone, except two within hospitals at Sancheti Hospital, Pune, and Cloudnine Hospital, Bengaluru.



Dr Arjun Kalyanpur, CEO, Teleradiology Solutions

The Indian imaging market has made rapid strides over the last one decade. There has been proliferation of diagnostic imaging centres in private hospitals, growth in tele-radiology utilisation, growth of refurbished equipment sellers and focus of major imaging vendors on value segment imaging with a focus on emerging markets. Says Dr Arjun Kalyanpur, CEO, Teleradiology Solutions, "The growth in the sector is related to the overall growth in the Indian healthcare industry which is spurred by an increase in availability of capital for investment in the sector, rising consumer expectations, and an increase in healthcare imaging needs arising from increasing prevalence of the big three diseases, namely cancer, heart disease and stroke, all

of which require repeated imaging as part of the initial diagnosis and subsequent follow up."

High-end imaging continues to find inroads into the hospitals where there are captive customers and where a minimum number of patients is assured. "Imaging is auguring well for the hospitals as the capex gets justified through the assured patient base," says a market pundit.

Below are a slew noticeable trends in diagnostic imaging market:

Boom in tier II and III towns

The proliferation of imaging centres is mostly being witnessed in tier II and tier III towns, as most of the metro cities are over saturated markets. "While more centres would come up in tier II and III cities, the leading brands in tier I cities need to focus on specialised imaging like cardiac or neuro imaging to be key differentiators," says Rahul Shah, CEO, NM Medical.

A good example of a group capturing the tier III market is HealthMap Diagnostics Private Limited, which is a SPV that Manipal Health Enterprises Private Limited has started with Philips India Limited. The group is providing radiology services in Haryana and Jharkhand under the PPP model. All the centres managed by HealthMap are in tier III towns, except for Panchukla, Gurgaon. Ranchi and



Rahul Shah, CEO, NM Medical

2. NM Medical has a chain of 15 diagnostic imaging centres.



Jamshedpur. (Read more about the PPP in the box on page 22)

According to experts, large healthcare chains find these markets attractive given the latent demand-supply gap, relatively low cost of land and lower competitive intensity for quality and high-end services.

Pathology chains in diagnostic imaging

Many leading pathology chains have entered diagnostic imaging, but these chains notably offer basic diagnostic imaging like X-Ray, ultrasound and ECG. "These pathology chains are keen on offering comprehensive diagnostics, mainly for the purpose of corporate health check-ups," says Dr Mahajan.

However, corporates keen on grabbing a pie of the diagnostics market is clearly focusing on pathology. Examples are Sterling Accuris, Apollo Diagnostics or the newly formed Pathkind Diagnostics, the diagnostic foray of Mankind Pharma.

Mankind would primarily be restricting itself to pathology. It would not venture into the high-end imaging. The group would be having only basic imaging like ultrasound and X-Rays in these centres. Says Sanjeev Vashishta, CEO, Pathkind Diagnostics, "We are looking at purely pathology model, barring some of those centres where we will be offering complete health check."

Lack of interest of corporate

While there has been a proliferation of imaging centres, predominantly run by the radiologists, a closer look indicates that not too many corporate are in this space. Rather, several corporates in this space are witnessing a plunge in business. An established diagnostic player like SRL Limited has been de-focusing on imaging. Over the last few years, it has exited its imaging vertical in around seven centres as the segment was not growing it a steady pace and eroding the EBITDA margin of the company.

So what has led to the slowing down of the growth of imaging chains? Is diagnostic imaging a difficult model to replicate,



in comparison with pathology? Yes, says experts. First, diagnostic imaging requires a high capital investment. While a diagnostic centre with only ultrasound, ECG and X-Ray as well as pathology services would require Rs 25 lakh to Rs 30 lakh, a centre with high-end CT and MR would require an investment of Rs 15 to 20 crore. If one adds nuclear medicine with PET CT, then the investment is another Rs 10 crore. Mahajan Imaging pumped in Rs 13 crore to start the nuclear medicine department with PET CT in Sir Ganga Ram Hospital.

Also, the breakeven period for imaging centres is around five to seven years. "To set up a pathology lab, the equipment can be taken on lease, reagents are mostly on pay per use basis and there are various easy funding options. Also, one can scale up the pathology business faster," says Rahil of NM Medical.

Second, diagnostic imaging centres are highly dependant on radiologists and technicians for interpretation of reports and quality manpower is difficult to acquire. Around 90% of pathology reports for biochemistry, microbiology and pathology are automated, with very less dependence on manpower. But cent per cent of all radiology report interpretation are dependent on radiologists. For a high-end imaging lab, one needs to hire well-trained radiologists, sononologist, cardiologist and technicians. "A pathologist in the



Dr MK Khanduja,
Founder, BSR
Diagnostics

3. BSR Diagnostics focuses mainly on high-end imaging.

A PPP IN HARYANA AND JHARKHAND



HealthMap Diagnostics Private Limited, the SPV between Manipal Health Enterprises Private Limited and Philips India Limited, is running two successful PPP projects in

diagnostic imaging. It inked its first PPP in mid of 2015 with the government of Haryana for providing radiology services (CT and MR) or eight centres- four district hospitals and four medical college hospitals. Says Niraj Arora, CEO, HealthMap Diagnostics, "Four more centres are in the pipeline in Panipat, Kaithal, Jind and Kurukshetra." The technology provided in the centres range from 16 slice to 128 slice CT and 1.5 T MR with dedicated coils and software for complete body coverage. The Rohtak centre in Haryana is one of the busiest centres under this PPP, doing more than 100 scans per day. HealthMap picked up its second PPP project in Jharkhand for all 24 districts. As of now, it is operational in six locations. The technology spans from basic radiology like ECG, X-ray, ultrasound to high-end CT and MR, depending on presence of specialties like ortho, neuro, cardio and trauma. The group spends around Rs 40 lakh per centre if its installing only X-ray, ultrasound and ECG. And when CT and MR are included, it spends around Rs 10 crore. In another four to six months, it would start imaging for another 8 to 10 centres in Jharkhand.

central lab can validate hundreds of reports in one day. However, a sonologist can only do 15-20 scans per day," says Rahil.

Experts say that the investment required for one imaging centre can be utilised for starting one main lab and 20 collection centres, covering a wider geography. "In pathology, the patient need not travel. Rather, the sample travels. But in imaging, as the patient needs to travel for scan, the imaging centre has to be closer to the patient," says Dr MK Khanduja, founder of BSR Diagnostics.

Exit of a few groups

Diagnostic imaging is plagued with challenges like high manpower costs and lack of availability of skilled manpower, high capex and high rate of obsolescence of technology. The challenges have compelled some old and new players to exit the sector. For instance, north India's leading healthcare imaging brand, Diwan Chand Satyapal Aggarwal Imaging, had to wind up a few year after the founder promoters exited the group. It was in 2010 that ASIAN Healthcare Fund, a pri-

vate equity firm launched by Dabur Group chairman Anand Burman and former CEO of Dabur Pharma Ajai Vij, had taken controlling stake in the group for about Rs 180 crore.

According to analysts, the group eventually lost its market position and local connect post the exit of the founders. Others point out that the group did not invest sufficiently in high-end technology and were plagued with several other operational issues.

And last December, the Vatika Group, a leading player in the real estate and hospital-ity business, decided to exit its healthcare business- Vatika Medicare. It was only in January 2015 that the group began its operations in Delhi-NCR by acquiring two diagnostic labs 'Health Square' from Spry Hospitality. Vatika Medicare, which is one of the verticals of Vatika Hotels, had plans of investing Rs 200 crore to open 15 diagnostic centres in tier II cities, beginning with Delhi-NCR. The group has exited both the diagnostic centres in Gurgaon and Hauz Khas. During the exit, Deepak Uppal, director, Vatika Medicare, explained, "We have decided to focus on our



Niraj Arora,
CEO, HealthMap
Diagnostics Pvt Ltd



core business, which is real estate and hotels."

What could have gone wrong in both the cases? "Knowledge about the local market along with continuous investment in high-end technology are mandatory to be a differentiator in this business," says Rana Mehta, executive director, Leader Healthcare, PWC. He added that one needs to have good local connect with doctors to successfully run radiology business. That is why several successful radiology chains are not present pan India.

Imaging centres offering pathology

Several leading diagnostic imaging chains have also started offering basic pathology services, without digressing from its core domain. However, Mahajan Imaging offers diagnostics only in its Defence Colony centre. It plans to provide it in the recently launched Gurgaon centre.

There are also instances where diagnostic chains attempted to roll out its path lab business but attained limited success. Bhilai-based BSR Diagnostics is a case in point. The group which has 27 imaging centres in the states of Chhattisgarh, Odisha, West Bengal, Madhya Pradesh and Maharashtra, had tried to stake a claim in the pathology business in a meaga mode a few years back. But soon the group realised that the dynamics of running the pathology business is different from

radiology. "Though we continue to have pathology in all our centres, our current focus is high-end radiology, as it was before," says Dr Khanduja.

Spate of PPPs

Several successful PPP projects are being run across the country in diagnostic imaging for over 15 years in several parts of India. Several of the PPPs have Philips as a technology partner. According to Chhitiz Kumar, CEO - Philips Capital, head - government business & PPP, "The diagnostic services are independent services and hence amenable to doing a complete PPP around them. These services can function independent of other services in the hospital unlike services such as cardiology, oncology and others. Also, imaging PPP ensures that diagnostic services are accessible and available to the masses. This has a direct co-relation with down-staging of various diseases by early detection."

PPP is a win-win solution for the government, patient and private player as the latter gets a steady patient flow in an existing government hospital. This implies lower gestation period and lower marketing expenses. And the government gets high-end services which ultimately benefit the patients. Also, patients get the high-end services at lower prices in the existing government hospital, closer to their community.



Chhitiz Kumar, CEO - Philips Capital, Head-Govt. Business & PPP

4. A pathologist at the central lab can validate hundreds of reports in one day, but a sonologist can only do 15-20 scans per day.

COVER STORY

A PPP IN JAIPUR



The radiology PPP project at SMS Hospital, Jaipur, is considered one of the successful PPPs in the diagnostic imaging. For the project, Soni Hospitals is the clinical partner and Philips the technology partner. The PPP programme provides high-end radiology services for the hospital. The

goal of this PPP programme is to meet high patient load while reducing waiting periods. Currently there are two sets of CT and two sets of MRI. High clinical quality as the CT scan is 128 slice (low dose) and 3T MRI is a Digital MRI – both equipment are supplied by Philips. The facility is being used by outside patients as well. This is on account of high-end clinical output using latest equipment at relatively low rates.

For the project, the work relationship has gone beyond the role of equipment supplier-buyer relationship. Says Chhitz Kumar, CEO - Philips Capital, head-govt business & PPP, "For instance, site layout and clinical workflows have been jointly created to ensure efficient and high throughput with maximum patient comfort and safety. Both by jointly managing equipment downtime to the minimum by ensuring adequate training, efficient parts availability, has led to achieving over 99% availability of services." This has optimised the total cost of ownership for the equipment by providing efficient financing solutions, considering the high throughput from these equipment.

To have a profitable PPP, Kumar insists that the government needs to increase the differential of CGHS pricing NABH/NABL vs. non-NABH/NABL to ensure that quality players are attracted to deliver healthcare. "Also, the tenders should be re-designed to go beyond lowest price bidder and move to quality and cost based selection in PPP bid selection in healthcare, as it has done in other sectors," he adds.

Demand for teleradiology

With shortage of radiologists, teleradiology services for diagnostic imaging is expected to pick up. As of now, only a few imaging chains are using teleradiology.

Teleradiology Solutions Private Limited, founded in the year 2002 with the initial goal of providing emergency/after-hours reporting services to hospitals in the US, has been on the forefront in this domain. The group has teleradiology reporting centres in Bengaluru, New Delhi and Hyderabad, as well as a team of radiologists reporting from other locations in India, Israel and the US.

"Currently we report approximately

2,000 examinations per day via teleradiology, which includes all modalities, namely X-ray, mammography, CT, PET-CT and MRI. In addition, we have three diagnostic centres linked with our outpatient multispecialty clinics under the RXDX banner. The average volume per day at these centers is approximately 50 X-rays, 40 ultrasounds, 10-15 CTs and 5-10 mammograms," says Dr Kalyanpur.

Private equity infusion

According to market pundits, as increasingly larger amounts of capital will continue to be deployed behind established ideas like national and regional chains, funding will be towards new firms as well as further funding of market leaders. Also, acceleration in consolidation and M&A are expected. The key ingredients seem to be in place for roll-ups across different segments and it is likely that in the next five years the market will witness a clear set of consolidators and potential sub-scale targets. Others predict that more centres might introduce nuclear medicine or do O&Ms of nuclear medicine centres within hospitals. 