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HOSMAC India Pvt. Ltd.
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**MARKET FEASIBILITY STUDY AND COMPETITORS
ANALYSIS AND FOR ALEXIS HOSPITAL NAGPUR**

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**Under the guidance of
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**Post Graduate Diploma in Hospital and Health Management
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**Institute of Health Management Research,
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Certificate

This to certify that Dr. Mangesh Dani, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from Institute of Health Management Research, Jaipur, Batch 17 , has successfully undergone his summer training at HOSMAC India Pvt. Ltd, and has done projects on "Market Feasibility Study and Competitors' Analysis and for Alexis Hospital Nagpur".

The candidate has successfully carried out the mentioned studies assigned during his summer training from 06 April 2013 – 06 June 2013 and his approach towards the study was sincere, scientific and analytical.

We wish his success in all his future endeavors.



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Contents

Tables	Error! Bookmark not defined.
INTRODUCTION.....	9
A. Promoter:.....	9
B. Project Overview:	9
C. Project Consultant:.....	10
D. Data Survey:.....	11
□ Primary Data Collection	11
□ Secondary Data Collection	11
HEALTH CARE INFRASTRUCTURE.....	12
A. Indian Healthcare Industry.....	12
B. Indian Hospital Industry	13
C. Porter’s Five Forces Analysis: Hospital Industry in India.....	14
D. Key Trends in the Industry:	15
NAGPUR DISTRICT OVERVIEW	17
A. An Overview:.....	17
B. Demographic Overview: Nagpur District.....	18
C. Healthcare Overview	19
D. Health Care Education Overview	20
NAGPUR CITY OVERVIEW.....	22
A. Civic administration.....	22
B. EcoNomy:	22
C. Demographic Overview:.....	23
D. Nagpur City Population Projection:.....	24
E. Decadal Growth Rate:.....	24
F. Current Health Care Facilities in Nagpur:	25
G. Location wise Distribution of Hospitals:	26
H. CGHS (Central Government Health Scheme) Empanelled Hospitals	28
I. ECHS (Ex-servicemen Contributory Health Scheme) Empanelled Hospitals:	28
NEED GAP ANALYSIS:	29
COMPETITORS ANALYSIS	31
A. Key Competitors Profile:	33
B. Facility Mix:.....	34
C. Tariff Structure:	35

D. Specialization Mix:	36
E. Performance Indicators: (2012-2013 data):	37
HEALTH CARE INFRASTRUCTURE OF MANKAPUR.....	37
SWOT ANALYSIS OF MANKAPUR AREA:.....	40
DOCTOR ENGAGEMENT MODEL PREVALENT IN NAGPUR:	40
DISEASE BURDEN ESTIMATIONS:	41
Cancer: Current scenario, intervention strategies and projections for 2015	41
Cancer Infrastructure in Nagpur.....	44
Specialty Hospitals in Cancer Care in Nagpur.....	44
Market for Cardiac Care and Radiotherapy in India:	45
Forecasting the total number of coronary heart disease (CHD) cases in India 2015:	47
PROJECT CONCEPTUALIZATION	48
A. Project Overview	48
B. Proposed Facility Mix.....	49
C. Bed Mix:	52
D. Reasons for this Suggested Specialty mix:	53
E. Reasons for setting up a Multi Super Specialty Hospital in Nagpur:	53
CONCLUSION	54

Tables

Table Number	Table	Page No.
1	Demographic Overview of Nagpur District	8
2	Healthcare Overview of Nagpur District	9
3	Healthcare Education Overview of Nagpur District	10
4	MBBS Colleges in Nagpur with annual student intake	10
5	Demographic Overview of Nagpur UA	12
6	Population Projections of Nagpur UA	13
7	Decadal Growth Rate of Nagpur UA	13
8	Healthcare components(Nagpur UA)	14
9	Total Hospital Beds under NMC, Government Beds and Private Beds.	14
10	Government to Private Bed Ratio and population per Government bed	14
11	Major Hospitals in City as per number of beds	15
12	Government to Private Bed Ratio and population per Government bed	16
13	Hospital Bed deficit	18
14	Competitors and there bed strength	20
15	Competitors profile.	21
16	Competitors facility mix	22
17	Competitors tariff structure	23
18	Competitors Specialization Mix	24
19	Competitors performance indicators	24
20	Hospitals in Mankapur area	25
21	Major hospitals in range of 10km from Alexis Hospital.	25
22	Cath labs & LINAC units in Nagpur	33
23	Projected cases of cardiac, oncology & diabetes	34

24	Projected In-Patient market size	34
25	Compounded annual growth rate of cardiac, oncology & diabetes	34
26	Disease burden estimation of communicable and Non-communicable disease	35
27	Forecasting the total number of coronary heart disease (CHD) cases in India 2015.	38
28	Proposed Facility Mix	39
29	Proposed Facility Mix	39
30	Proposed Bed Mix	41
31	Proposed IPD Bed Mix	41
32	Proposed critical care bed Mix	41
33	Proposed Service Bed Mix	41

ACRONMYS/ABBREVIATIONS

AKD	Artificial Kidney Dialysis
BAMS	Bachelor of Ayurvedic Medicine & Surgery
BDS	Bachelor of Dental Surgery
BHMS	Bachelor of Homeopathic Medicine & Surgery
CAGR	Compounded Annual growth Rate
CGHS	Central Government Health Scheme
CICU	Cardiac Intensive Care Unit
CIIMS	Central India Institute of Medical Sciences
ECG	Electro Cardio Gram
ECHS	Ex-Servicemen Contributory Health Scheme
EEG	Electro Encephalogram
HDR	High-Dose Rate
ICCU	Intensive Critical Care Unit
IGRT	Image Guided Radiation Therapy
IMRT	Intensity Modulated Radiation Therapy
MBBS	Bachelor of Medicine & Surgery
MICU	Maternal Internal Care Unit
MRI	Magnetic Resonance Images
NABH	National Accreditation Board of Hospital & Health Services
NEERI	National Environmental Engineering Research Institute
NICU	Neo-Natal Intensive Care Unit
NIT	Nagpur Improvement Trust
NMC	Nagpur Municipal Corporation
PICU	Pediatric Intensive Care Unit
PT	Physiotherapy
RNCOS	
SICU	Special Intensive Care Unit
TMT	
UA	Urban Agglomeration
USG	Ultra Sonography

INTRODUCTION

A. Promoter:

The Zulekha Healthcare Group found its roots in the year 1992 with establishment of Zulekha hospital in Sharjah by Dr. Zulekha Daud. It started off as a 30 bed set up with basic facilities for gynecology, obstetrics, surgery, medicine and pediatrics. Today the Zulekha Healthcare Group has expanded and includes a new hospital in Dubai; four medical centers and three pharmacies are is provide specialized treatment in over 20 disciplines ranging from gynecology to cosmetology. From a humble beginning to what we are today, it has been a journey of commitment and dedication. As we look ahead, we carry on with the same values of Zulekha Spirit.

The Zulekha Healthcare group, UAE is coming with Alexis Hospital Nagpur, an offering and initiative of to help serve the entire Central India community. The hospital will be open for patients in the 1st quarter of 2014. Alexis Hospital is designed to provide quality and affordable experience for patients with an aesthetic and warm atmosphere. The Hospital will have a team of renowned specialists and medical personnel supported by latest cutting-edge technology offering all-round care and comfort.

B. Project Overview:

Zulekha Healthcare group has identified has identified a plot admeasuring around 2,23,000 sq ft in Mankapur Nagpur to set up a multispecialty hospital, to improve the Healthcare delivery system of the entire Central India community.

The hospital is stipulated to be a multispecialty hospital offering high end medical treatment like Cardiology, Oncology, Kidney treatment, Medical Oncology, Orthopedics, Trauma, etc.

C. Project Consultant:

Hosmac India Pvt. Ltd. established in 1996 a leading name in Hospital planning. Hosmac is having a hand full experience of designing 8,000,000 square feet of Hospital Space.



Hosmac India Pvt. Ltd. is a leading hospital planning, design and management consulting firm in India. In the last 17 years since its inception in 1996, Hosmac has Notched up an impressive string of more than 350 projects in India and abroad.

Hosmac provides a gamut of services in the field of healthcare consultancy and have been advisors for some of India's most high profile healthcare projects. Hosmac is uniquely positioned to provide our clients with a comprehensive range of services, right from Project Conceptualization, Feasibility Analysis, Detailed Project Reports, JV Assistance Design, Build Services, Project and Construction Management, Equipment Planning and Procurement, Commissioning Assistance, NABH Accreditation Assistance, Operations Management and Recruitments.

Hosmac has rich experience in executing similar kind of assignments across India and abroad.

Some of the key clients being:

- Asian Heart Institute, Mumbai
- Dr. L.H. Hiranandani Hospital, Mumbai
- Lilavati Hospital, Mumbai
- P G Hinduja Hospital
- Manipal Group of Hospitals
- International Finance Corporation
- ILS hospital, Agartala
- Westbank Hospital, Kolkata
- Camellia Group, Kolkata
- CMC Vellore
- Fortis Healthcare
- Orissa Mining Corporation
- Vedanta Ltd.

- Aga Khan Trust, Kenya
- Zulekha Hospital, Dubai
- Lifeline Hospital, Dubai
- Majid Al Futtaim Group, Dubai
- Parkway Group, Singapore
- KPMG Bahrain to name a few.

D. Data Survey:

- **Primary Data Collection**
- Telephonic interviews with Hospital Managers

- **Secondary Data Collection**
- Directorate of Census - Census of India 2011
- Data obtained from or published by Nagpur Municipal Corporation (NMC).
- Internet sources like
 - Reports published by Government of Maharashtra.
 - Website of respective Hospitals.
 - Website of Nagpur Municipal Corporation.

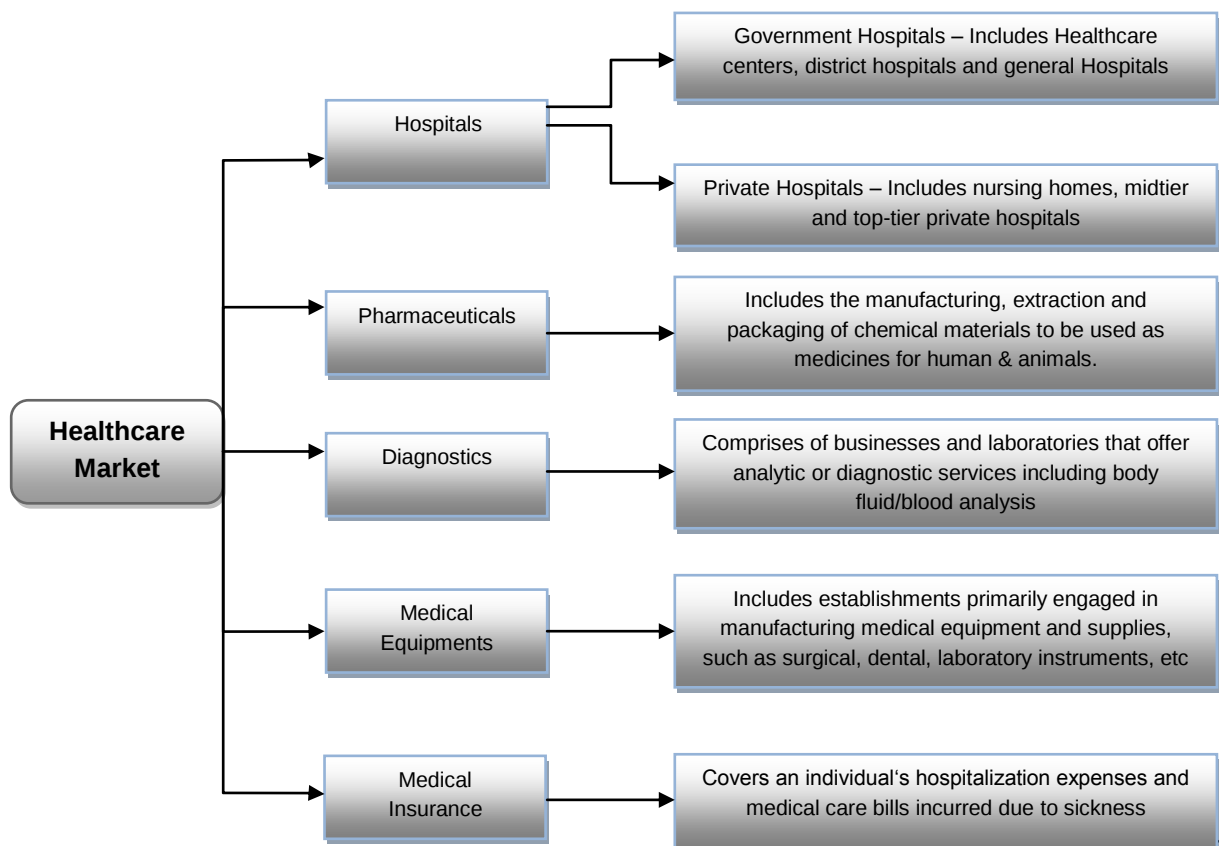
HEALTH CARE INFRASTRUCTURE

A. Indian Healthcare Industry

The Indian healthcare industry has witnessed a massive spurt in healthcare spend and is expected to reach US\$100billion¹ by 2015 from the current ~US\$65 billion in 2012, growing at a CAGR of 20% a year India currently faces a chronic shortage of healthcare infrastructure, especially in rural areas and Tier II and Tier III cities, and it is expected that India will have potential requirement of 1.75 million new beds by the end of 2025.

The industry is adopting innovative business models to work in the sector but still needs high upfront investments, has long gestation periods and faces ever-rising real estate costs In the present scenario, high entry barriers such as huge capital requirements and a cash crunch amongst most big business houses will favor existing players to pursue accelerated growth in the segment.

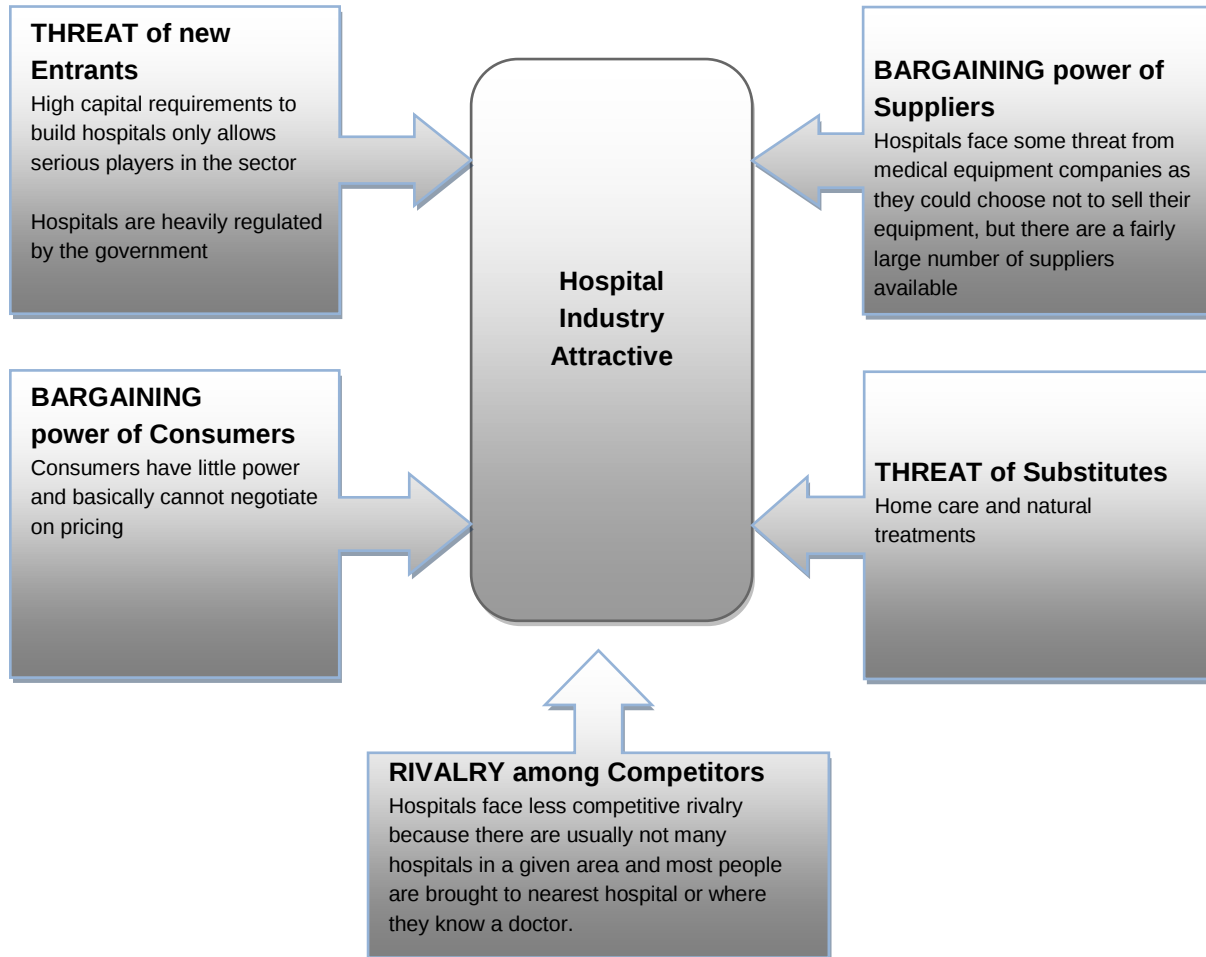
The healthcare industry in India is attracting a significant amount of capital from investors and de-centralized healthcare delivery models are the flavor of the season among private equity investors.



B. Indian Hospital Industry

- The hospital segment holds a major share of the healthcare industry and is outpacing the overall industry growth. The size of the private hospital industry in India is estimated to be around US\$25billion as per Assocham and growing at a CAGR of 20%.
- The demand for hospital services has been consistently soaring in the country, with every class of the society demanding better quality and standards of healthcare. Realizing the continuous growing demand, many investors worldwide have expressed their keenness towards investing in the Indian hospital service market.
- The country is making strides in the right direction as evident from the 100% allowance of FDI in the hospital segment under the automatic route, since January 2000.
- According to “Indian Hospital Services Market Outlook” by RNCOS Industry Research Solutions, the country needs to cover the cumulative deficit of around 3 million hospital beds to match up with the global average of 3 beds per 1000 population.
- An additional 700,000 doctors will be required by 2025 to reach a ratio of one medical doctor per 1,000 individuals.
- A hospital which has established its brand name in market can earn at a handsome gross profit percentage, which may be up to 80% of total income.

C. Porter's Five Forces Analysis: Hospital Industry in India



D. Key Trends in the Industry:

- Shift from communicable to lifestyle diseases: 50% of the spending on in-patient beds will be from lifestyle – related diseases, which will result in increased demand for specialized care.
- Management contracts: Many healthcare players are signing management contracts to provide additional revenue stream to hospitals.
- Evolution of telemedicine: Telemedicine is evolving fast in India, supported by the ICT sector. Currently, about 650 telemedicine centers exist throughout India.
- Expat doctors / foreign doctors: This trend is being supported by improved healthcare infrastructure in India, increase in medical tourism, improved compensation structures and growing restrictions on licensing and practicing in UK and Europe, making Indian origin doctors settled overseas to return to India.
- Holistic well-being: various hospitals have tied-up with holistic health centers to combine traditional healthcare knowledge and practices with conventional systems.

OBJECTIVES OF STUDY

To scan market for feasibility to open a Multi Super Specialty Hospital in Nagpur, Maharashtra.

TYPE OF STUDY

Descriptive study

DATA

- **Primary Data Collection**

- Telephonic interviews with Hospital Managers

- **Secondary Data Collection**

- Directorate of Census - Census of India 2011
- Data obtained from or published by Nagpur Municipal Corporation (NMC).
- Internet sources like
 - Reports published by Government of Maharashtra.
 - Website of respective Hospitals.
 - Website of Nagpur Municipal Corporation.

SAMPLE SIZE

5 Hospitals: - Big names in local market as health providers / selected as competitors.

10 Hospital Managers working in various hospitals at Nagpur.

LOCATION OF THE STUDY

Nagpur Urban Agglomeration, Maharashtra State of India.

DURATION OF THE STUDY

Two weeks

NAGPUR DISTRICT OVERVIEW

A. An Overview:

Nagpur District is in the eastern region of Maharashtra.

It is bounded by

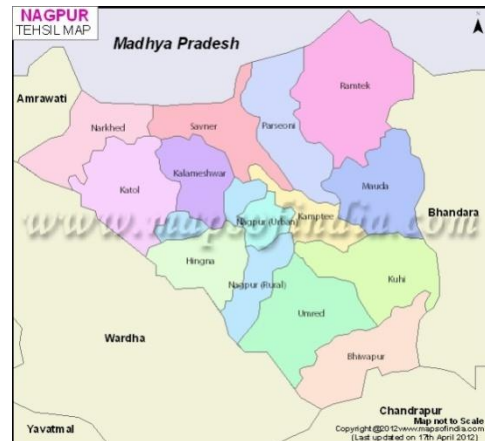
North: Chinwada District, Madhya Pradesh

North West: Amravati District, Maharashtra

South East: Chandrapur District, Maharashtra

South West: Wardha District, Maharashtra

East: Bhandara District, Maharashtra.



It lies in the Center of India. The Geographical center point of India, The Zero Mile is placed in Nagpur city. With a population of 4,653,171 (2011) Nagpur Metropolitan Area is the 13th largest urban agglomeration in India¹.

Nagpur lies on the Deccan plateau of the Indian Peninsula and has a mean altitude of 310.5 meters above sea level. Nagpur city is dotted with natural and artificial lakes. The largest lake is Ambazari. Other natural lakes include Gorewada Lake and Telangkhedi Lake. Sonegaon and Gandhisagar lakes are artificial, created by the city's historical rulers.

Nagpur is known for its greenery and was adjudged the cleanest and second greenest in India after Chandigarh in 2010. Recently, the government of India selected Nagpur as a model city for the National Clean Air Mission by allocating 250 million for the plan. This project will be handled by Nagpur's own National Environmental Engineering Research Institute (NEERI).

¹ Wikipedia: Data Source. Available from: http://en.wikipedia.org/wiki/Nagpur_district

B. Demographic Overview: Nagpur District

P Table: Demographic Overview of Nagpur District².ict1 2001 2011

Description	2001	2011
Actual Population	4,067,637	4,653,171
Male	2,105,314	2,388,558
Female	1,962,323	2,264,613
Population Growth (Decadal)	23.74	14.39
Area Sq. Km	9,892	9,892
Density/sq.km	411	470
Proportion to Maharashtra Population	4.20%	4.14%
Sex Ratio (Per 1000)	932	948
Child Sex Ratio (0-6 Age)	942	926
Average Literacy	84.03	89.52
Male Literacy	90.18	93.76
Female Literacy	77.42	85.07
Total Child Population (0-6 Age)	525,850	481,814
Male Population (0-6 Age)	270,823	250,223
Female Population (0-6 Age)	255,027	231,591
Literates	2,976,205	3,734,192
Male Literates	1,654,342	2,004,798
Female Literates	1,321,863	1,729,394
Child Proportion (0-6 Age)	10.35%	12.93%
Boys Proportion (0-6 Age)	10.48%	12.86%
Girls Proportion (0-6 Age)	10.23%	13.00%

- Nagpur is the Third most highly populated District in Maharashtra next to Mumbai and Pune and the thirteenth most populated city in India as stated in Census 2011.

² Government of India Census 2011: Data Source Available from : <http://www.census2011.co.in/census/district/343-nagpur.html>

Wikipedia: Data Source. Available from http://en.wikipedia.org/wiki/Nagpur_district

- The decadal growth rate has reduced by a good margin during the last decade and even the proportion of Nagpur district population to Maharashtra state population has decreased.
- Population has grown approximate 24 % from 1991 to 2001 and approximate 14% from 2001 to 2011 showing that there is population influx in the region, probably from surrounding rural and urban area.
- The increased proportion of girls in 0-6 age group and increased literacy are, particularly female literacy rate is indicative of growing social standards and equality of the region.
- The average per capita income of Nagpur has increased from 68,944 in 2005-2006 to 96.458³ in 2010-2011 showing that there is increase in purchasing power and paying capacity of masses.

C. Healthcare Overview

Public and private sector healthcare infrastructure available in Nagpur.

Table: Healthcare Overview of Nagpur District⁴.

Description	No. of centers /hospitals
Sub Center level	3000
Primary Health Center level	0049
Rural Hospitals	0009
Hospitals	0437
Govt. Medical College & Hospitals	0002
Sub District Hospital	0002

In India Private sector dominates in health care service delivery with contribution of 69.7% and Nagpur is No exception.

³ Government of India Planning Commission 2012: Data Source, Available from:

http://planningcommission.gov.in/plans/stateplan/Presentations12_13/maharashtra1213.pdf and NHFS III

⁴Government of Maharashtra, Ministry of Health: Data Source, Available from: <http://www.maha-arogya.gov.in/services/primary/primary/default.htm>

Nagpur Municipal Corporation Data source, Available from: <http://cityhealthline.org/Hospital.aspx>

D. Health Care Education Overview.

MEDICAL COLLEGES

N Table: Healthcare Education Overview of Nagpur District BER

Streams	Number of Colleges	Student Intake
MBBS	3	400
BDS	3	240
BAMS	4	320
BHMS	2	100
PT	2	60
Nursing	6	270

At present, there are 5,195 MBBS seats in the 43 medical colleges across Maharashtra and 400 of them come from three colleges situated in Nagpur. Further Maharashtra will soon have four new medical colleges with a total intake of 400 students, Chief Minister Prithviraj Chavan said on Monday, Jan 03, 2012⁵.

⁵India Today 2012 News Publication, Available From: <http://indiatoday.intoday.in/story/four-new-medical-colleges-for-maharashtra/1/166949.html>

The below table gives a list of MBBS Colleges in Nagpur, ensuring availability of Trained manpower for Nagpur Hospitals:

E. Medical colleges in Nagpur with student seats⁶.

Table: MBBS Colleges in Nagpur with annual student intake.

Sr. No.	College Name	Student Capacity
1	Government Medical College, Nagpur.	200
2	Indira Gandhi Medical College, Nagpur.	100
3	Lata Mangeshkar College, Digdoh, Nagpur.	100
	Total	400

Total of 14 Medical colleges and 6 Nursing colleges in city will assure continuous supply of required manpower.

⁶ Medical Council of India 2012, Available from:
<http://www.mciindia.org/InformationDesk/MedicalCollegeHospitals/ListofCollegesTeachingMBBS.aspx>

NAGPUR CITY OVERVIEW

Nagpur is the winter capital of the state of Maharashtra. It is a fast-growing metropolis and the third largest city in Maharashtra after Mumbai and Pune and third most industrialized city after Mumbai and Pune. With a population of 2,405,421 (2011 census figures)⁷ Nagpur Metropolitan Area is the 13th largest urban agglomeration in India. According to a survey by ABP News, Nagpur has been identified as the best city in India by topping the live ability, greenery, public transport, and health care indices.

Nagpur is the seat of the annual winter session of the Maharashtra state assembly, "Vidhan Sabha". Nagpur is a major commercial and political center of the Vidarbha region of Maharashtra⁵.

It is famous for the Nagpur Orange and is known as the "Orange City" for being a major trade center of oranges cultivated in the region. It is among the important cities for the Information Technology sector in Maharashtra. Nagpur lies at the dead center of the country with the Zero Mile marker indicating the geographical center of India.

Nagpur is the largest city in central India in terms of population as per the 2011 census.

A. Civic administration

Nagpur is administered by the Nagpur Municipal Corporation (NMC), which is a democratically elected civic governing body. Nagpur Improvement Trust (NIT) works with NMC and carries out works such as development of the civic infrastructure and new urban areas on behalf of NMC. The city is divided into 10 zones, which are, in turn, divided into 145 wards⁸.

B. Economy:

It was ranked the 11th most competitive city in the country by the Institute for Competitiveness in its 2012 report. The city is important for the banking sector as it hosts the regional office of Reserve Bank of India; The Reserve Bank of India has two branches in Nagpur in which one of it houses India's entire gold assets.

⁷Wikipedia: Data Source. Available from: http://en.wikipedia.org/wiki/Nagpur_district
⁸

C. Demographic Overview:

Table:- Demographic Overview of Nagpur UA⁹.ICULARS8

Description	2001	2011
City Population	2,052,066	2,497,777
Males	1,059,765	1,275,750
Females	992,301	1,222,027
Urban agglomeration population	2,129,500	2,405,421
Child (0-6 Yr)	2,41,253	2,37,020
Literacy Rate	84.06	93.17
Male Literacy Rate	90.18	96.20
Female Literacy Rate	77.42	90.02
Population Density*	9695	11800
Population Growth Rate**		17.92

Nagpur City is registering rapid growth since last few decades and is giving its contribution to India's highly urbanized state, Maharashtra. Increasing urban population will put pressure on city to provide people with basic infrastructure and excess population will be further pushing the boundaries. Failure of providing basic needs like food, water & shelter of increasing population in an already densely populated area will lead to poor standard of living, increase slum area, increase pollution and this will replicate on health burden of city.

The literacy rate has increased from 84.06% to 93.17% implies higher awareness of people to healthcare and hygiene.

In 2004, it was ranked the fastest growing city in India in terms of the number of households. Multi-modal International Cargo Hub and Airport at Nagpur (MIHAN)¹⁰ is an airport project

⁹ Wikipedia: Data Source. Available from: http://en.wikipedia.org/wiki/List_of_urban_areas_by_population
<http://en.wikipedia.org/wiki/Nagpur> http://articles.timesofindia.indiatimes.com/2011-04-14/nagpur/29417289_1_literacy-rate-population-number
http://www.unhabitat.org/jo/en/inp/Upload/1052216_Data%20tables.pdf

Times of India 2013 News Article . Available from: http://articles.timesofindia.indiatimes.com/2012-07-01/nagpur/32494161_1_cath-lab-angiography-angioplasty
http://articles.timesofindia.indiatimes.com/2013-04-09/nagpur/38403274_1_cargo-hub-madc-rc-sinha-mihan

for Dr. Babasaheb Ambedkar International Airport, Nagpur. It is the biggest economical development project currently underway in India in terms of investments.

The is expect to grow and have population of 3.2 million plus by 2020 and about 3.6 million till 2025 from current population of 2.5 million.

D. Nagpur City Population Projection:

Table: Population Projections of Nagpur UA

City population projection	Population in thousands
Actual population in 2011	2498
Projected population in 2020	3219
Projected population in 2025	3583

Presently Nagpur is serving healthcare needs of around 30 million people of Nagpur and neighboring region. The population is projected to add another one million people in Nagpur UA only. This increasing population will put pressure on present healthcare services and this will in turn create demand for healthcare infrastructure.

E. Decadal Growth Rate:

Table: Decadal Growth Rate of Nagpur UA

City population	Population	Decadal Growth %
Population in 1991	1,624,752	
Population in 2001	20,11,662	23.81%
Population in 2011	2,497,777	24.61%

F. Current Health Care Facilities in Nagpur

ABP News has awarded Nagpur as Best City in Healthcare¹¹ Services for year 2013.

Table: Healthcare components (Nagpur UA)

Health Care Facilities in Nagpur	Values
Blood Banks	12
Total Beds in Nagpur	8935
Hospitals	437
Population of Nagpur	2,497,777

Table: Total Hospital Beds under NMC, Government Beds and Private Beds.¹²

Type of Hospital	Number of beds
Government Hospitals	3213
Private Hospitals	6662
Total Beds	8935

Nagpur City has 8935 beds of which 2273 are government beds and 6662 private beds.

Table: Government to Private Bed Ratio and population per Government bed.

Description	Value
Govt. Bed/Private Bed	1/2
Population Per Government Bed	778

The ratio of Government beds to Private beds for Nagpur Urban Agglomeration is 1/3 and population per government bed for Nagpur UA is 778.

¹¹Times of India 2013 News Article . Available from: <http://www.newsbullet.in/india/34-more/40067-nagpur-tops-in-4-categories-bags-abp-news-best-city-award>

¹² Nagpur Municipal Corporation Data source, Available from: <http://cityhealthline.org/Hospital.aspx>

G. Major hospitals with more than 100 plus beds

Table: Major Hospitals in City as per number of beds.

Name	Organization Type	Number of Beds
Government Medical College & Hospital	Government	1401
Indira Gandhi Medical College & Hospital	Government	872
Lata Mangeskar Hospital	Private	910
Daga Hospital	Government	335
Wockhardt Super Specialty Hospital	Private	115
SureTechnology Hospital and Research Centre Limited	Private	115
Central India Institute Of Medical Sciences CIIMS	Private	115
Care Hospital	Private	105
Hope Hospital - The Multispecialty Hospital	Private	100
Avanti Institute of Cardiology Private Limited	Private	100

Only two of these hospitals, Wockhardt Super Specialty Hospital and Care Hospital are NABH¹³ accredited and it can be easily noted all private hospitals are 100-115 bedded.

H. Location wise Distribution of Hospitals:

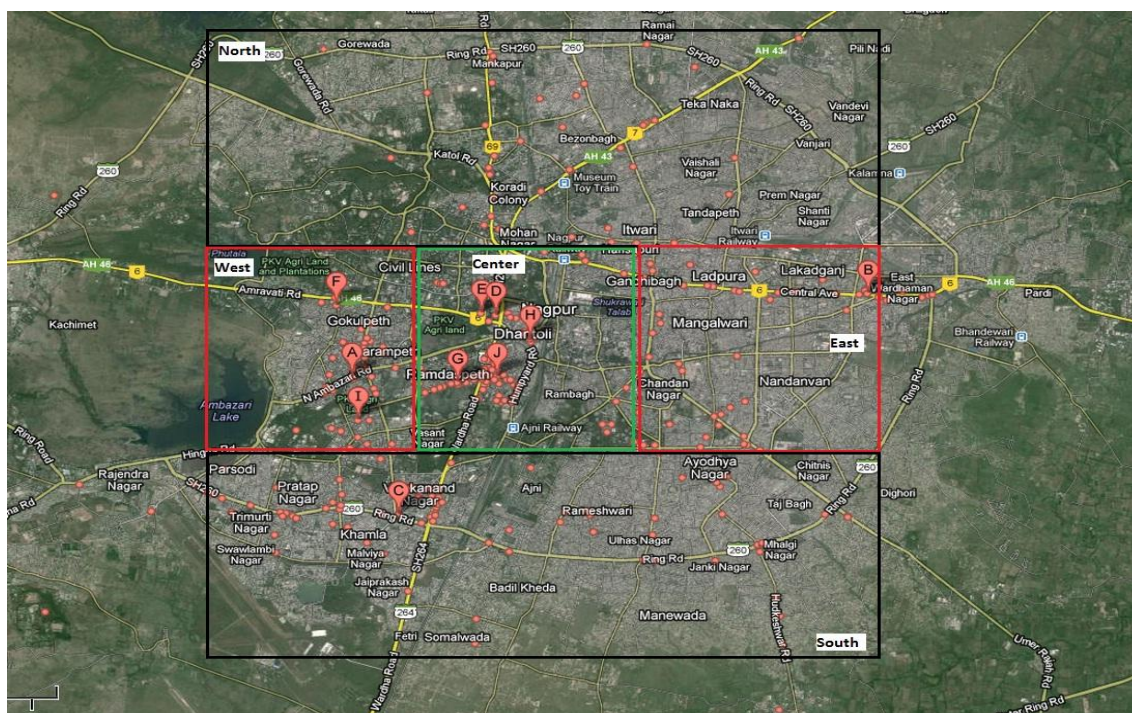
Central and southern Nagpur has the major concentration of Hospitals.

¹³ National Accreditation Board for Hospital & Health Care Provider, 2013 Available From:
<http://nabh.co/main/hospitals/accredited.asp>

Table:- Government to Private Bed Ratio and population per Government bed.

Location	Approx No. of Hospital	Location-wise % Distribution Hospitals
Central Nagpur	86	32.70%
Eastern Nagpur	48	18.25%
Western Nagpur	34	12.93%
Northern Nagpur	37	14.07%
Southern Nagpur	58	22.05%
Total	263	

Most number of hospitals is situated in center of city in areas like Dhantoli and Ramdaspath. Northern Nagpur is having only 14% of total hospital. The following map is showing the approximate areas taken for calculations¹⁴. The counting is and approximate percentage distribution is done based on Google maps.



¹⁴ Google Maps Available From: <http://maps.google.co.in/>

I. CGHS (Central Government Health Scheme) Empanelled Hospitals in Nagpur:

The “Central Government Health Scheme” (CGHS) provides comprehensive health care facilities for the Central Govt. employees and pensioners and their dependents residing in CGHS covered cities. Nagpur is one of those cities¹⁵.

There are total 33 hospitals, eye care, diagnostics centers, dental clinics & specialty clinics empanelled under CGHS (Central Government Health Scheme). Big hospitals like ockhardt, Lata Mangeshkar Hospital & Avanti Hospital are empanelled under this CGHS¹⁶.

J. ECHS (Ex-servicemen Health Contributory Scheme) Empanelled Hospitals in Nagpur:

With an aim to provide comprehensive health services to Ex-Servicemen a Contributory Health Scheme is launched which provides a health cover provided to 4.25 million Ex-Servicemen from the Armed Forces as on 31 Jan 2013 all over India¹⁷.

There are total 33 hospitals, eye care, diagnostics centers, dental clinics & specialty clinics empanelled under ECHS in Nagpur. Big hospitals like Wockhardt, Care Hospital & Avanti Hospital are empanelled under this CGHS¹⁸.

¹⁵ Central Government of India Scheme Available From: <http://msotransparent.nic.in/cghsnew/index.asp>

¹⁶ <http://msotransparent.nic.in/writereaddata/cghsdata/mainlinkfile/File500.pdf>

¹⁷ Ministry of Defense, Data Source Available From: <http://echhs.gov.in/>

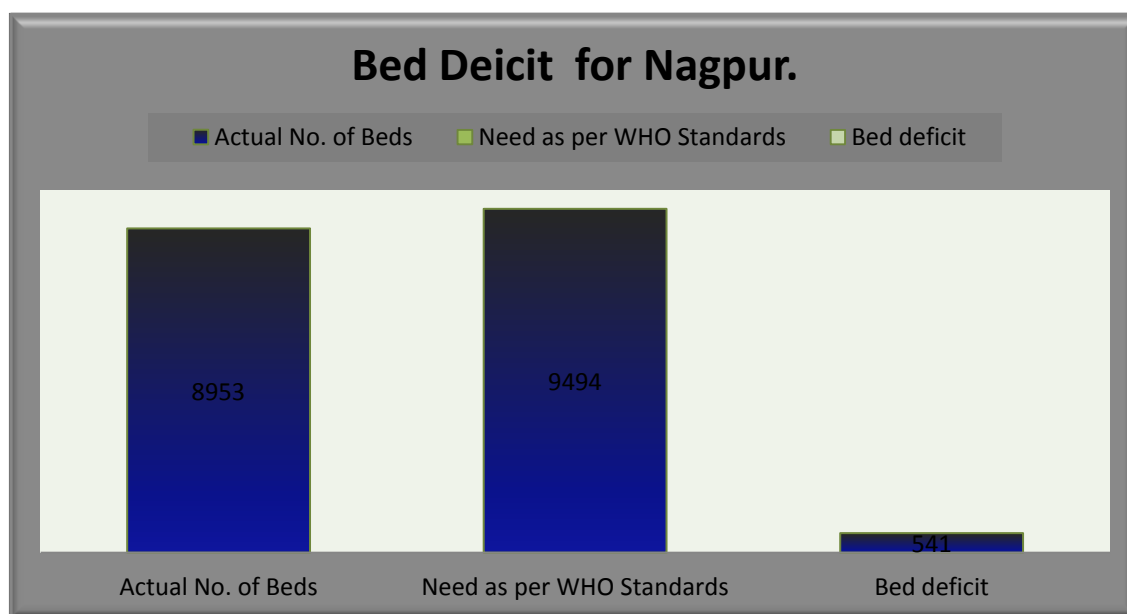
¹⁸ http://echhs.gov.in/images/pdf/hosp_valid_moa.pdf

NEED GAP ANALYSIS:

There are 437 small and big hospitals which count for 8953 beds under Nagpur Agglomeration which is having population of 24,97,777 as per latest census. Number of bed per 1000 population for Nagpur is 3.58 which is less than WHO standard of 4 beds per 1000 people.

Table: Hospital Bed deficit.

Bed per 1000 people	3.58
Bed per 1000 people WHO	3.8
Actual Number of Beds	8953
Need as per WHO	9494
Bed deficit for Nagpur	541



Bar graph showing bed deficit

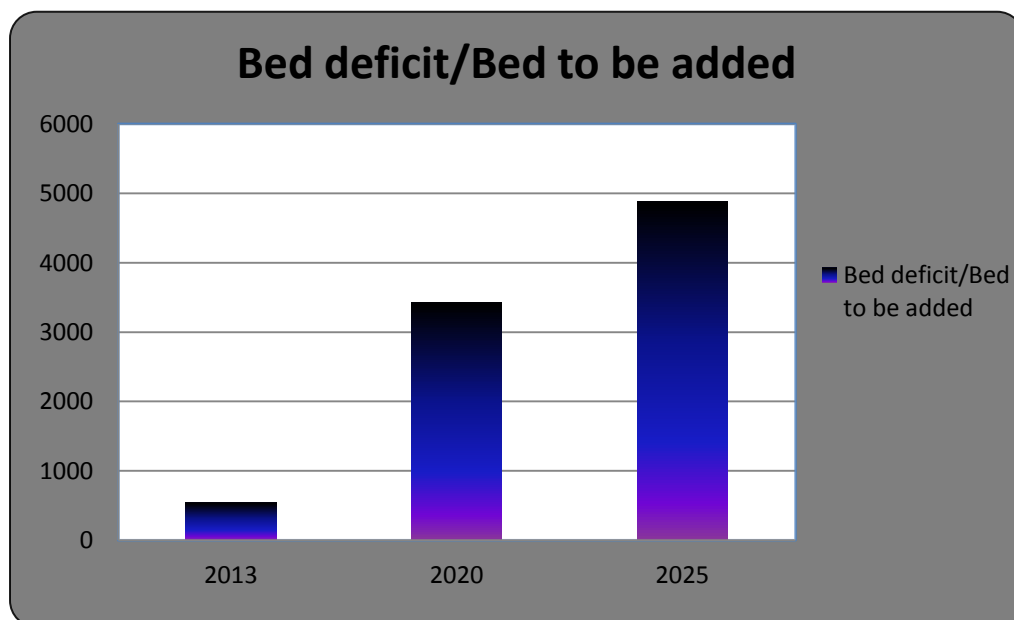
This bed deficit is possibly an underestimate as Nagpur city also drains population from the rest of Nagpur district. Nagpur city's health care facilities presently cater to the needs of the

three-crore strong population of Vidarbha and adjoining districts of MP and Chhattisgarh. Since there is No other city in a 300 km radius with good medical facilities, the city offers an excellent opportunity for health care establishment4s/corporate hospitals.

Nagpur needs 541 more beds to satisfy healthcare need of Nagpur. But the estimated bed deficit is less than actual bed deficit, because of following reasons:

- Bed deficit has been calculated using 2011 population, which is for sure less than 2013 population.
- Since many districts around Nagpur like Amravati, Bhandara, Chinwada, and Wardha, an estimated population of 30 million are dependent on Nagpur for Healthcare.
- Biggest city in central India, which is very well connected to all part of country by Roads, Railways and Airport.

Considering the projected population growth for 2020, Nagpur needs to add 2844 plus current deficit of 541 beds i.e. a total of 3381 beds by 2020 and further 1456 beds by 2025 to answer healthcare needs of its own population. Furthermore the same is probably an underestimate.



COMPETITORS ANALYSIS

Nagpur has a mix of small nursing home, mid-sized multispecialty hospitals and a few large super specialty hospitals.

Table: Competitors and there bed strength.

Sr. No	Name of Hospital	Total Beds	Sr. No	Name of Hospital	Total Beds	Sr. No	Name of Hospital	Total Beds
1	Government Medical College & Hospital	1401	1	Avanti Institute of Cardiology Private Limited	100	1	Arneja Institute of Cardiology Private Limited	50
2	Indira Gandhi Medical College & Hospital	872	2	Care Hospitals - Nagpur	105	2	Center Point Hospital	60
3	Regional Mental Hospital	940	3	Central India Institute Of Medical Sciences	115	3	Get-well Hospital and Research Institute	60
4	Lata Mangeshkar Hospital	910	4	Daga Memorial	335	4	Matru Sewa Sangh Hospital1	50
			5	Ganga Hospital	105	5	Matru Sewa Sangh Hospital2	60
			6	Hope Hospital - The Multispecialty Hospital	100	6	Platina Heart Institute	50
			7	Kunal Hospital & Critical Care Centre	102	7	Tukdoji Cancer Hospital	70
			8	Meditrina Hospital	100	8	Wockhardt Heart Hospital	50
			9	Mure	165			

				Memorial Hospital				
			10	Orange City Hospital and Research Institute	150			
			12	SureTechn ology Hospital and Research Centre Limited	115			
			13	Wockhardt Super Speciality Hospital	115			
	Total	4123			1607			450

A. Key Competitors Profile¹⁹:

Table: Competitors profile.

	Care Hospitals	CIIMS	Hope Hospital	Meditrinsa	SureTech	Wockhardt
Distance From Alexis Hospital	7.2 Km	7.2 Km	4.5 Km	7.0 Km	6.0 Km	7.1 Km
Total No. of Beds	105	115	100	100	115	165
Type of Institution	Private	Private	Private	Private	Private	Private
Level of Care	Tertiary level	Tertiary level	Tertiary level	Tertiary level	Tertiary level	Tertiary level
Special Trust Areas	Neuro-Surgery	Cancer Care	Spine Care		Burn Injury	Heart care
	Otorhinolaryngology	Interventional Radiology	Orthopedics		Kidney Transplant	Brain & Spine
	Robotic Surgery		Musculoskeletal Care		Chest Medicine	Bone & Joint
	Vascular Surgery					
	Pediatric Cardiology					
	Interventional Radiology					
	Nuclear Medicine					

¹⁹ Respective hospital websites.

B. Facility Mix²⁰:**Table: Competitors facility mix.**

	Care	CIIMS	Meditrina	SureTech	Wockhardt
Anesthesia	Yes	Yes	Yes	Yes	Yes
Cardiology	Yes	Yes	Yes	Yes	Yes
Cardiac Surgery	Yes	Yes	Yes	Yes	Yes
Critical care	Yes	Yes	Yes	Yes	No
Dental	Yes	No	Yes	Yes	No
Dermatology	Yes	No	Yes	No	No
Diabetes and Endocrinology	Yes	Yes	Yes	No	No
Dialysis	No	No	Yes	Yes	No
Emergency Medicine	Yes	No	Yes	No	No
ENT Medicine	Yes	No	Yes	No	No
Gastroenterology	Yes	No	Yes	Yes	Yes
General Medicine	Yes	Yes	Yes	Yes	Yes
General Surgery	Yes	Yes	Yes	Yes	Yes
Gastro-intestinal Surgery	Yes	No	Yes	Yes	Yes
Neonatology	No	No	No	Yes	No
Nephrology	Yes	No	Yes	No	Yes
Neurology	Yes	Yes	Yes	Yes	Yes
Obstetrics & Gynecology	Yes	No	Yes	Yes	No
Oncology	Yes	No	Yes	No	No
Ophthalmology	Yes	No	Yes	Yes	No
Orthopedics	Yes	Yes	Yes	Yes	Yes
Pediatrics	Yes	No	Yes	Yes	No
Pediatric Surgery	Yes	No	Yes	Yes	No
Pathology	Yes	Yes	Yes	Yes	No
Physiotherapy	Yes	Yes	Yes	No	No
Plastic Surgery	Yes	No	Yes	Yes	No
Psychiatry	Yes	Yes	Yes	No	No
Radiology	Yes	Yes	Yes	No	Yes

²⁰ Respective hospital websites.

C. Tariff Structure²¹:

Table: Competitors tariff structure.

	Care	CIIMS	Hope	Meditrina	SureTech	Wockhardt
Day Care	900	DNA	800	DNA	DNA	900
General Ward	900	800	850	750	800	600
Twin Sharing	1500	1400	1200-1400	1200	1100	1300
Single	2,300	DNA	DNA	DNA	DNA	1500
Deluxe	3000	DNA	DNA	DNA	DNA	DNA
Super Deluxe	3500	5000	4500	6000	4000	5000
ICCU	3500	DNA	DNA	DNA	DNA	3700
PICU	3500	DNA	DNA	DNA	DNA	3700
NICU	3000	DNA	DNA	DNA	DNA	3700
SICU	3500	DNA	DNA	DNA	DNA	3700
OPD	250	250	300	250	200	250
OPD Follow Up	150	150	200	150	150	200
X- Ray	200	250	250	300	200	250

²¹ Respective hospitals website and telephonic interviews with respective hospital managers.

D. Specialization Mix²²:

Table: Competitors Specialization Mix

	Care	CIIMS	Hope	Meditrina	SureTech	Wockhardt
CT Scan	Yes	Yes	Yes	Yes	Yes	Yes
MRI	Yes	Yes	Yes	Yes	Yes	Yes
X ray	Yes	Yes	Yes	Yes	Yes	Yes
USG	Yes	Yes	Yes	Yes	Yes	Yes
Dialysis	Yes	Yes	Yes	Yes	Yes	Yes
Lab tests	Yes	Yes	Yes	Yes	Yes	Yes
EEG	Yes	Yes	Yes	Yes	Yes	Yes
ECG	Yes	Yes	Yes	Yes	Yes	Yes
TMT	Yes	Yes	Yes	Yes	Yes	Yes
Endoscopy	Yes	Yes	Yes	Yes	Yes	Yes
Mammography	Yes	Yes	Yes	Yes	Yes	Yes
Angioplasty	Yes	Yes	Yes	Yes	Yes	Yes
Angiography	Yes	Yes	Yes	Yes	Yes	Yes
CABG	Yes	Yes	Yes	Yes	Yes	Yes
Cath lab procedure	Yes	Yes	Yes	Yes	Yes	Yes
Linear Accelerator	Yes	No	Yes	Yes	No	Yes
Radiotherapy	No	No	Yes	Yes	No	Yes
Kidney Transplant ²³	Yes	No	No	No	No	Yes

²² Respective hospital websites.

²³ Times Of India News Article Available From: http://articles.timesofindia.indiatimes.com/2011-06-28/nagpur/29712060_1_kidney-transplant-organ-transplant-brain-dead-patients

E. Performance Indicators: (2012-2013 data):

The below Table indicates the Key Performance Indicators of few of the main competitors²⁴.

Table: Competitors performance indicators.

	Care	CIIMS	Hope	Meditrina	SureTech	Wockhardt
Total No. of Operational Beds	105	115	100	100	115	115
Avg. Occupancy	90-95%	90%	100%	95%	85-90%	95%
ALOS	4-5	4-5	7-10	5-8	5-6	4-6
Avg. No of OPD/Month	220-250/day	75-85/day	150/day	DNA	DNA	250-300/day

HEALTH CARE INFRASTRUCTURE OF MANKAPUR

Current Health Care Facilities in Mankapur and its surrounding Area:

Mankapur proper is not having any big multi specialty hospital but there are some small sized hospitals.

Table: Hospitals in Mankapur area.

Hospitals in Mankapur
Avad Hospital
Kunal Hospital
Usha Memorial Hospital
Punshi Hospital
Janta Hospital
Rajkumar Ruhuwanshi Hospital

But majority of big hospitals in Nagpur are within range of 10km from Alexis Hospitals.

²⁴ Telephonic interviews.

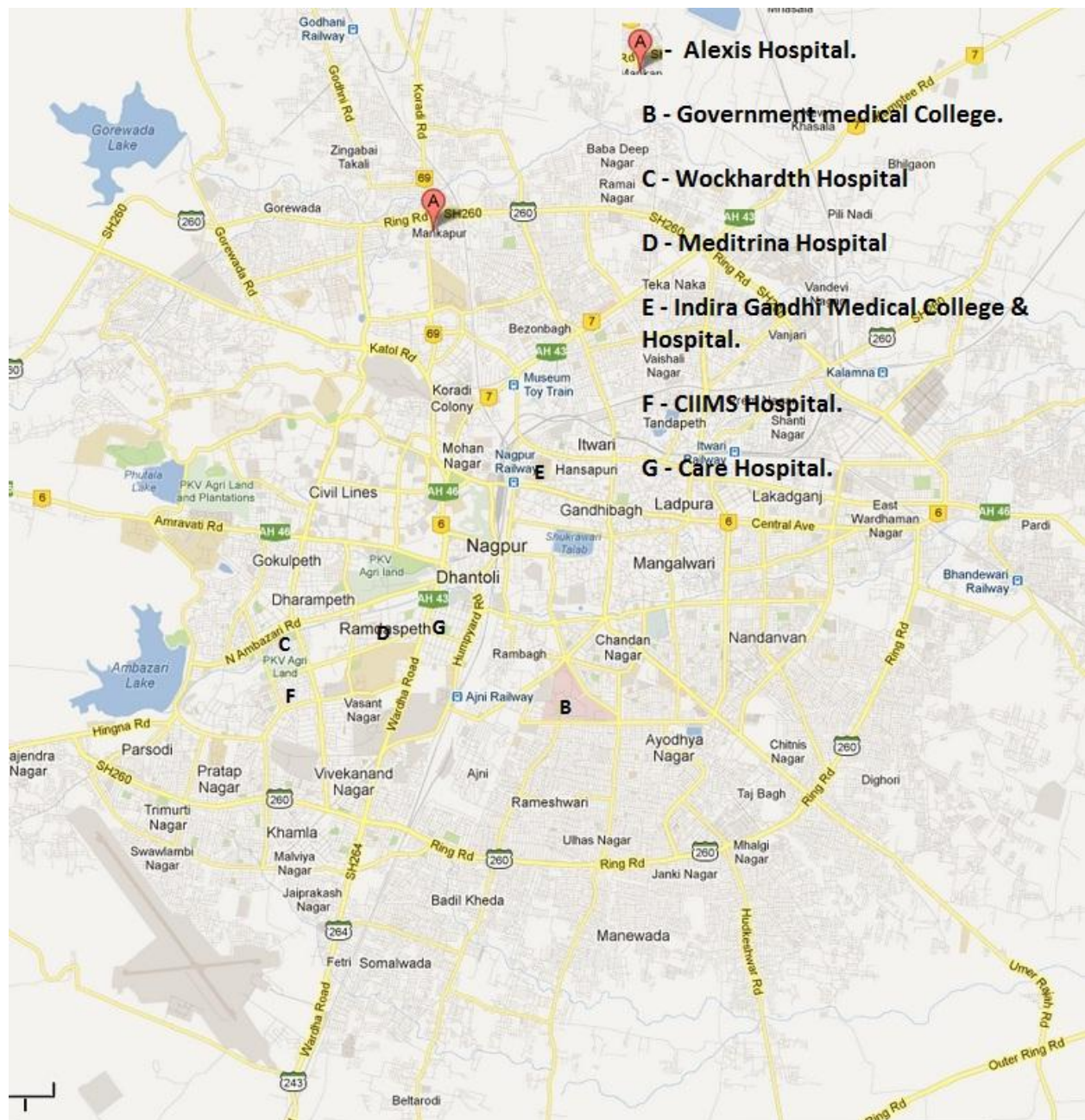
Table: Major hospitals in range of 10km from Alexis Hospital.

List of hospitals within 10km range from Alexis.	Beds
Government Medical College Nagpur.	1401
Indra Gandhi Medical College Nagpur.	872
Care Hospital	105
CIIMS Hospital	115
SureTech Hospital	115
Wockhardt Hospital	115

Almost about 95% of Nagpur agglomeration is settled in area of diameter 20 kms. Distance of major hospitals from Alexis Hospital is shown with help of Google maps.

Table showing Distance of Major Hospitals from Alexis Hospital.

Name Of Hospital	Distance From Alexis Hospital
Government Medical College & Hospital, Nagpur.	9.4 km
Indira Gandhi Medical College & Hospital, Nagpur.	5.2 km
Care Hospital, Nagpur.	7.2 km
Wockhardt Hospital, Nagpur.	7.1 km
CIIMS Hospital, Nagpur.	7.2 km
Meditrina Hospital, Nagpur.	7.8 km



SWOT ANALYSIS OF MANKAPUR AREA:

Strength

- Its strength lies in its location, as majority of big hospitals are situated in Center of Nagpur and there is No big hospital in North Nagpur.
- The development taking around Katol Road, Ring Road & Koradi Road.
- High rate of literacy and higher per capita income in the Nagpur UA region has increased health awareness.

Weakness

- Increasing land rate is a deterrent factor for new healthcare projects, predominately being low margin industry; it further leads to prolonged break even & payback period.

Opportunities

- Nagpur city's health care facilities presently cater to the needs of the three-crore strong population of Vidarbha and adjoining districts of MP and Chhattisgarh. Since there is No other city in a 300 km radius with good medical facilities, the city offers an excellent opportunity for health care establishments/corporate hospitals.
- North Nagpur area is inhabited by the Upper Class educated client; there is scope for a 200 bedded hospital to obtain a steady clientele.

Threats

- Old established hospitals are expanding at a good pace in North Nagpur region and this shall increase competition for patients.
- The healthcare industry already has a substantial presence in the city; the numerous medical colleges would ensure an easy supply of trained manpower to the industry.

DOCTOR ENGAGEMENT MODEL PREVALENT IN NAGPUR:

Fee by patients treated base model mainly works in India and Nagpur is No exception, wherein doctors are attached to multiple hospitals at the same time, and the monetary benefits are shared between the hospital and the doctor at a predefined percentage of sharing.

But a full time consultants for hospitals on salary basis are always preferred, executive president of healthcare at Apollo Hospitals says "Great institutions in the world over predominantly have a full-time, salaried staff with a variable component model to drive volumes". Kokilaben Dhirubhai Ambani Hospital made it very clear they wanted to be the first in Mumbai to employ only salaried, full-timers.

DISEASE BURDEN ESTIMATIONS:

Cancer: Current scenario, intervention strategies and projections for 2015

Table 26:- Disease burden estimation of communicable and Non-communicable disease²⁵.

Disease/health condition	Estimates in	Projected estimate	Cases reported
	2005 (lakh)	for 2015 (lakh)	in 2010 (lakh)
Communicable Diseases			
Pulmonary Tuberculosis	85	NA	11.74
HIV/AIDS	51	190	DNA
Acute Respiratory Infection	257.37	NA	247.2
Diarrheal diseases (episodes/year)	760	880	101.13
Malaria and other vector borne conditions	20.37	NA	13.73
Enteric Fever	6.95	NA	10.35
Pneumonia	7.74	NA	7.32
Leprosy	3.67	Expected to be eliminated	DNA
Otitis Media	3.57	4.18	DNA
Non-communicable conditions			
Cancer	8.07	9.99	9.8
Diabetes	310	460	376.7

²⁵ Report of the National Commission on Macroeconomics and Health, National Health Profile 2010 - Central Bureau of Health Intelligence.

Mental health	650	800	DNA
Blindness	141.07	129.96	DNA
Cardiovascular diseases	290	640	469.7
COPD and Asthma	405.2	596.36	DNA
Other Non-communicable conditions			
Injuries-deaths	9.8	10.96	3.35
No. of hospitalizations	170	220	

Table: Projected cases of cardiac, oncology & diabetes.

Number of cases in millions	2008	2013(p)	2018(p)
Cardiac	2.9	5.2	8.3
Oncology	2.0	3.1	4.2
Diabetes	1.2	2.3	3.4

The projected load of Cardiac and Cancer by 2013 and 2018 is 5.2 Million and 8.3 Million respectively i.e. the cardiac case is projected to grow approx three time volume of 2008.

Likewise Oncology and Diabetes cases are also projected to grow to approximate two folds and three folds respectively within a span of ten years i.e. 2008 to 2018. This huge disease burden will demand for increase in Healthcare infrastructure spending by both public and private sector.

Table: Projected In-Patient market size.

In- Patients market Size			
	2008	2013(p)	2018(p)
Cardiac	201	509	1030
Oncology	118	274	519
Diabetes	29	79	163

The In-Patient market size will increase as numbers of cases are expected to grow.

Table: CAGR of cardiac, oncology & diabetes market.

Market size CAGR	2008-19
Cardiac	18%
Oncology	16%
Diabetes	19%

The market size for Cardiac, Oncology & Diabetes are expected to grow at rate of 18%, 16% & 19% respectively.

Cancer Infrastructure in Nagpur.

The following are the advance technological advances used in treatment of cancer.

- Linear Accelerators
- IMRT Intensity Modulated Radiation Therapy
- IGRT Image Guided Radiation Therapy
- Three-Dimensional conformal Radiation Therapy
- High-Dose Rate (HDR) Brachytherapy

Rastra Sant Tukdoji Cancer Hospital is only hospital in Nagpur having all this advance treatment modalities.

A three-month long waiting list exists in the Nagpur and other parts of Vidarbha; it has now emerged for cancer treatment. In the upper house, medical education minister Dr Vijaykumar Gavit admitted to it.

"The state government has forwarded Rs 378.47 crore proposal to the centre for funding aid to establish a comprehensive cancer unit in the Government Medical College," Gavit said, adding that the government was hoping for the funding support this year.

Cyber Knife, the world's first Non-invasive whole body robotic radio surgery system is Now available in Care Hospital Nagpur and Getwell Hospital Nagpur²⁶.

Specialty Hospitals in Cancer Care in Nagpur

- Cancer Care Clinic & Hospital, Dhantoli, Nagpur.
- Rastra Sant Tukdoji Cancer Hospital, Tukdoji Square Manewada Nagpur.
- Care Hospitals, Dhantoli, Nagpur.
- Mrs. Gupte Cancer Hospital, Dhantoli, Nagpur.
- Mandhandiya Cancer Hospital Nagpur, Ramdaspeth, Nagpur.

²⁶<http://www.ask4healthcare.com/healthcaresolutions/OFFERS/Proc/tabid/168/ctl/ProcHospList/mid/2069/Default.aspx?strProc=CYBERKNIFE%20SURGERY&strCity=NAGPUR>

CRISIL Research estimates the potential market size of oncology healthcare (excluding drugs sold through retail outlets) to be Rs 110 billion in 2010; the market is poised to grow at 14 percent CAGR to reach Rs 215 billion in 2015.

Market for Cardiac Care and Radiotherapy in India²⁷:

Overall prevalence of overweight/obesity Central Indian populations in Nagpur and Pune in Maharashtra had prevalence of 20% and 36% each.

Table: Prevalence of Stroke per 1000 in Indian Population

Sr. No	Place	Type	Male	Female	Sample Size	Criteria
1	Nagpur	Semi U	0.1	0.3	4802	History
2	Pune	Semi U	0.7	0.5	3620	History
3	Lucknow	U	0.5	0.1	4890	History

The world cancer report documents that cancer rate are set to increase at an alarming rate globally. Cancer rate could increase by 50% new cases for the year 2020.²⁸

Approximately 8 million people are suffering from cancer at a given time and every year 2-3 million people are affected with the disease. About 2/3rd of these patients die every year because of advanced stages of the disease.

The total cancer cases are likely to go up from 979,786 cases in the year 2010 to 1,148,757 cases in the year 2020. The tobacco-related cancers for males are estimated to go up from 190,244 in the year 2010 to 225,241 in the year 2020. Similarly, the female cases will go up from 75,289 in year 2010 to 93,563 in the year 2020. For the year 2010, the number of cancer cases related to digestive system, for both males and females, are estimated to be 107,030 and 86,606 respectively. For, head and neck cancers, the estimates are 122,643 and 53,148 cases, respectively. And for the lymphoid and hematopoietic system (LHS), for the year 2010, are 62,648 for males and 41,591 for females. Gynecological-related cancers are

²⁷ http://www.ccdindia.org/pdfs/CVD_profile_corrected.pdf

²³http://www.indiancancer.com/temp/IndianJournalofCancer4514-2795306_074553.pdf

http://www.apocpcontrol.com/paper_file/issue_abs/Volume11_No4/c1045-49%20Takiar.pdf

estimated to go up from 153,850 in 2010 to 182,602 in 2020. Among males and females, cancer of breast alone is expected to cross the figure of 100,000 by the year 2020.

Table: - Projected Annual Number of new Cancer Cases by Sex form 2011 to 2016

	Male	Male	Female	Female	Both	Both
	2011	2016	2011	2016	2011	2016
India	512,529	587,750	546,454	631,899	1,058,984	1,219,649
Maharashtra	45,344	51,565	52,203	59,928	97,547	111,494

Table: - Gaps in the Availability of Radiotherapy Treatment Facilities

	Projected Population in	Requirement of RT installations	Availability	Female
	2016	2016	2006	2016
India	1,142,066	1,142	430	712
Maharashtra	100,222	100	51	49

The data shown in above table about gaps in availability of Radiotherapy Treatment Facilities is probably an under estimate as the projected population for both India & Maharashtra is largely underestimate.

There was short fall of 49 radiotherapy units in Maharashtra in year 2006 only and since then Maharashtra need to install minimum 5 radiotherapy per year till 2016 to complete needed requirement.

To compensate this huge gap between need and availability of infrastructure both public spending and private investment is necessary. Government is continuously increasing its spending on health in 2012 and 2013, health spending is projected to continue to grow modestly at 4.2 percent and 3.8 percent, respectively in 2014 national health spending is to

grow at an average rate of 6.2 percent annually, reflecting the net result of the aging of the population, several provisions of the Affordable Care Act, and generally improving economic conditions.²⁹

Nagpur city in particular is having Rashtra sant Tukdoji Regional Cancer Hospital & Research Centre, Nagpur as two regional cancer centers. And understanding this demand and good growth projections of health care economy private players had started investing. There are total 13 hospitals having cath labs and 5 hospitals having linear accelerators.

Forecasting the total number of coronary heart disease (CHD) cases in India 2015:

Table: Forecasting the total number of coronary heart disease (CHD) cases in India 2015.

Year and area	20–29	30–39	40–49	50–59	60–69	Total
Urban	8,167,924	8,858,137	8,736,819	5,468,994	4,095,480	35,327,354
Rural	2,324,087	4,275,884	3,891,825	12,761,368	7,788,760	31,041,925
Total	10,492,011	13,134,021	12,628,645	18,230,363	11,884,240	66,369,279

Table: Cath labs & LINAC units in Nagpur

	Unit	Name of Hospital
Cath Labs	13	- Arneja Institute of Cardiology Private Limited - Avanti Institute of Cardiology Private Limited - Bisne Heart Hospital

²⁹ http://apocpcontrol.com/paper_file/issue_abs/Volume9_No4/671%20c%20Murthy.pdf <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2011PDF.pdf> http://www.apollohospitals.com/apollo_pdf/Investor_Presentation_June_2011_INR.pdf

		• Care Hospitals - Nagpur • Crescent Nursing Home and ICCU • Center Point Hospital • Life Care Hospital • Meditrina Hospital • Platina Heart Institute • Shri RadhaKrishna Hospital and Centre • Spandan Heart Institute and Research Institute • Super Specialty Hospital • Wockhardt Heart Hospital
LINAC	4	• RST Cancer Hospital • Govt. Medical College, Nagpur • Super Specialty Hospital • Hope Hospital - The Multispecialty Hospital

Even if the present infrastructure is considered to be adequate to meet need of population, which is not true, there is a huge scope Healthcare infrastructure investment.

Considering the disease profile of India and Nagpur City in proper following area Project Conceptualization is made.

PROJECT CONCEPTUALIZATION

A. Project Overview

Considering the current healthcare scenario in and around Mankapur, set up of a 250-bed multi-specialty hospital focusing on tertiary care facilities is a good investment. The thrust areas should be Cancer Care, Cardiac Surgery, Interventional Cardiology and Radiation Oncology. Considering the affluent socio-economic condition, increasing population of Nagpur a 250 bedded multi specialty hospital will be techno-commercially viable, to cater the healthcare demands in and around Nagpur.

B. Proposed Facility Mix

Hospital Type: - Tertiary care Multispecialty

Considering the increased disease burden of cancer and life style diseases and focusing on main view of providing good healthcare facility to people of central India following facility mix is proposed.

Table: Proposed Trust Area.

Proposed Thrust Area
Cardiology
Oncology
Diabetes & Obesity Clinic
Emergency & Critical Care
Gastroenterology Urology
General Medicine
General Surgery
Internal Medicine & Diabetes
Nephrology
Neurology
Neuro-Surgery
Dental & maxillofacial surgery
Orthopedics
Otorhinolaryngology
Pathology , Biochemistry & Microbiology
Pediatric Cardiology
Pediatrics
Physiotherapy
Radiology , Vascular & Interventional Radiology
Robotic Surgery
Vascular Surgery

Considering the growing medical diagnostics market in India, proposed facility mix and diagnostic facility need of central India following facility mix is proposed.

Table: Proposed Facility Mix

Facility Mix:	
2D-Echo	Yes
3-Dimensional conformal Radiation Therapy	Yes
Biochemistry	Yes
Bone Densitometer	Yes
Brachy Therapy	Yes
C Arm	Yes
C. R. System	Yes
Cardiology	Yes
Cath Lab	Yes
Clinical Pathology	Yes
CT Scan 16 Slice	Yes
Cyber knife	Yes
Diagnostic Services	Yes
Dosimetry, Simulation	Yes
ECG	Yes
EEG	Yes
Electro Physiology Lab	Yes
EMG	Yes
Hematology	Yes
High-Dose Rate (HDR) Brachytherapy	Yes
Histopathology	Yes

Facility Mix:	
IGRT Image Guided Radiation Therapy	Yes
IMRT Intensity Modulated Radiation Therapy	Yes
Laboratory Medicine	Yes
Linear Accelerators	Yes
Mammography (Digital)	Yes
Microbiology	Yes
MRI (1.5T)	Yes
Neurology	Yes
Nuclear medicine	Yes
PFT/Spirometry	Yes
Radiation Oncology scan	Yes
Radio Immuno Assay	Yes
Radiology & Imaging	Yes
Recovery	Yes
Serology	Yes
Treatment Planning System,	Yes
Ultra Sound (Colour)	Yes
X-Ray 500 mA	Yes

C. Bed Mix:

Table: Proposed Bed Mix. SCAN

Bed Mix	Number of beds	IPD	Number of beds	Critical care	Number of beds
General Wards	100	Super Deluxe	4	CICU	15
IPD	50	Deluxe	8	ICCU	5
Critical care	50	Single	15	MICU	5
		Twin Sharing	23	NICU	5
		General Wards	100	PICU	5
				SICU	5
TOTAL	200	TOTAL	150	TOTAL	50

Table: Proposed Service Bed Mix.

Service Beds	Number of beds
Casualty	5
Pre op	6
Post op	10
Artificial Kidney Dialysis (AKD)	6
Day Care	8
Total	35

D. Reasons for this Suggested Specialty mix:

This Specialty mix is suggested after considering various factors like increasing cancer and cardiac load in India, unavailability of required infrastructure and good future market. The data about the same is produce in earlier part of this report. A recent study conducted on “Prevalence of risk factors for Non-communicable disease in a rural area of Nagpur district” by Department of Community Medicine, Govt. Medical College, Nagpur, had showed a high burden of Non-communicable disease risk factors in Nagpur.

There is much scope of a world class hospital to answer cities increasing disease load of cancer, hypertension, diabetes, obesity and heart problems.

E. Reasons for setting up a Multi Super Specialty Hospital in Nagpur:

- Nagpur is the city with bed deficit of 541 beds considering its own population only but the fact it is that Nagpur is catering health care to around 30 million population which itself demand for more investment in healthcare infrastructure.
- Expected population growth of about 44% in next 14 years will add more population in city and increased population need to be compensated with increased healthcare infrastructure investment.
- Lacking technology infrastructure in central India itself create a demand for investment.
- The central location in India had made Nagpur to act like a travel corridor between North and South India and East and West India, so it is very well connected to all big cities in the country.
- Some of the world’s big name in healthcare like John Hopkins, USA had shown interest in investing Nagpur shows that Nagpur has huge potential to grow.

CONCLUSION

In this world of interdependent economics, the global economic slowdown has also affected India but still India is one of the world's fastest growing economies. But this fastest growing economy is also unable to provide minimum health care facilities to its population. India is still having less than one hospital bed per thousand people for its population³⁰. Government of India has realized the poor health of its people and has decided to increase its health care spending to 2.5% of GDP.

Healthcare Industry in India is third fastest growing industry after IT and telecom in India¹⁰. Policies for FDI in healthcare have been liberalized to attract more investments¹¹.

Blooming economy and bright growth prospects are promising signs for establishment of modern hospitals.

Nagpur UA is area with very minimal bed deficit of only 541 beds with a ratio of 3.58 beds per 1000 people and this data can be the best healthcare stats for any city in country. But its location with No big city within 300km of range and its very good road, rail and air connectivity to nearby by area and other part of country had increased load of Nagpur to cater for healthcare need of nearby location along with its own population of about 2.5 million. So despite of this good healthcare statistics there is a need of healthcare investment.

³⁰ Indian credit ratings agency 2013: Available From : <http://www.icra.in/Files/ticker/SH-2013-Q1-ICRA-Healthcare.pdf>