

***HEALTH FACILITIES IN JALNA: A STUDY OF DISTRIBUTION,  
CAPACITIES AND SERVICES OFFERED IN A DISTRICT IN  
MAHARASHTRA***

(A study for the National Commission on Macroeconomics and Health,  
Ministry of Health and Family Welfare, Government of India)

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## I. INTRODUCTION

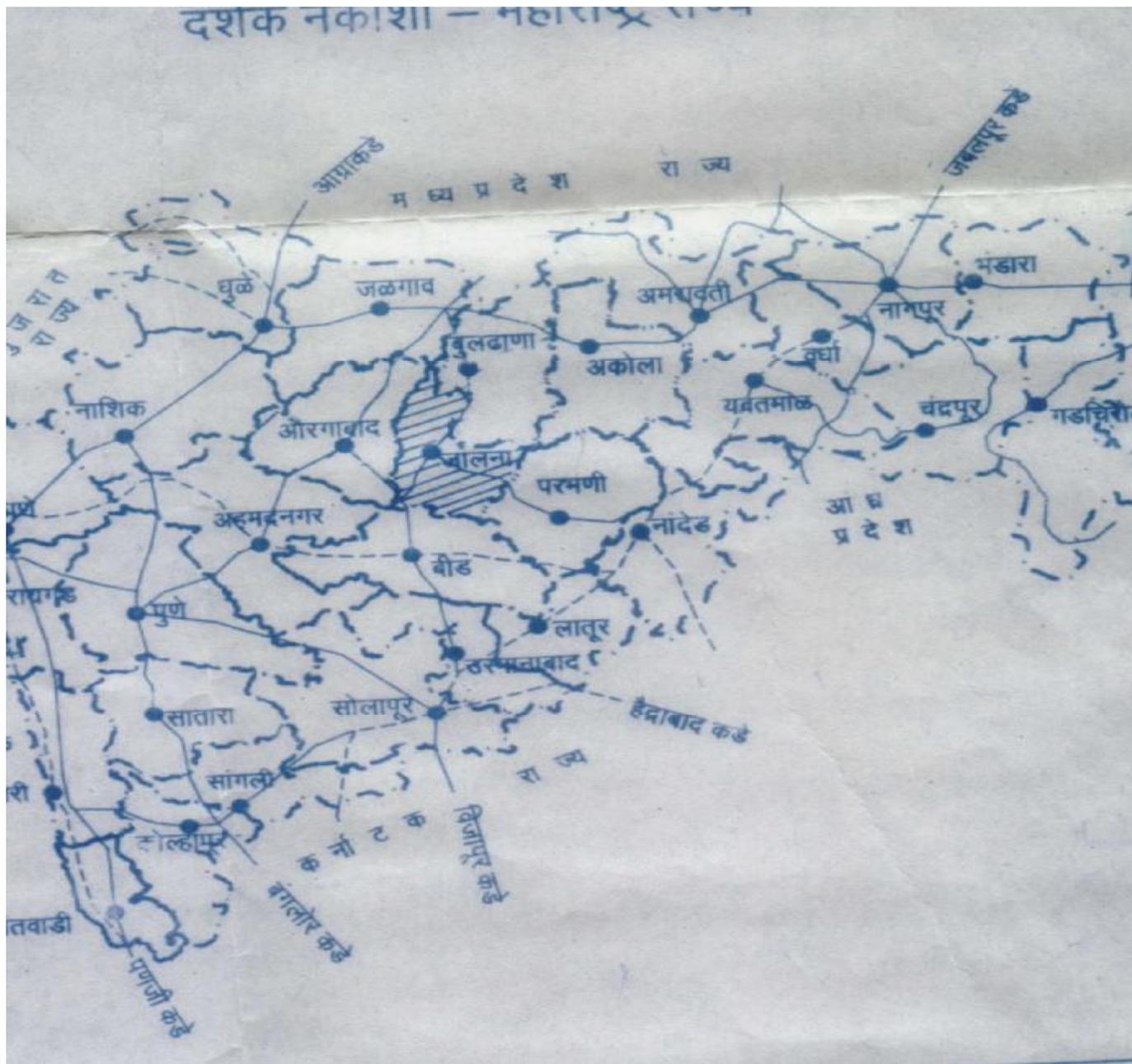
Healthcare in India is provided by the state established and managed public sector and the private sector. The state run public sector is marked by health facilities of different levels, ranging from subcentres basically geared to outreach activities to multispeciality, multi bedded hospitals in urban areas. State run facilities are variously run by the state governments and the urban and rural local bodies. The private sector is the dominant player with regards to healthcare in India today. The NSS 52<sup>nd</sup> round estimates that more than 80% of outpatient care in the country today is provided by its private sector (NSSO,1998). However, facilities in the private sector are marked by great variations in their infrastructural capacities and systems of medicine practiced. The sector functions in a largely unregulated manner with allegations of irrational practices and malpractices not being uncommon against it.

This report is based on a study of health facilities in Jalna district of Maharashtra. The study was carried out for the National Commission on Macroeconomics and Health (NCMH), Government of India, by Centre for Enquiry into Health and Allied Themes (CEHAT), a Mumbai based health research and advocacy organization. The objective of the study was to collect information on all health facilities run by qualified health professionals in Jalna district with respect to their infrastructural capacities, services offered, referral patterns, human resources and the fee charges for select services. The study is one among eight such studies being conducted in an economically average district each of eight states in India. In Maharashtra, the district of Jalna was chosen for such an exercise.

### **Jalna district**

The state of Maharashtra has a total of 34 districts. Jalna district lies in the Marathwada region in Maharashtra. The district has a total of eight talukas (blocks). The district has a score of 93.24 on the CMIE Infrastructure Development Index, in a state where the scores on the index range from 73.86 (Aurangabad) to 216.49 (Sholapur). The 2001 census puts the total population of the district at 16,12,980 with the share of scheduled castes and the scheduled tribes being 11.2% and 2.0% respectively (Registrar General of India, 2004). About one fifth (19.1%) of the population of the district resides in urban areas. The literacy rate of the district is 64.4% and is among the lowest in the state of Maharashtra. On the Human Development Index for the districts of the state, Jalna has a ranking of 'low' and is listed as a 'backward' district of the state (Government of Maharashtra, 2002). A recent study on Jalna district shows that patient population in district level hospitals and the PHCs in Jalna has declined in the past 15 years though the Rural Hospitals of the district have registered a growth in patient population during the same time. In the PHCs of the district, the patients treated per thousand population has halved during the period. Further, the population to PHC ratio has increased in most talukas of the district, with PHCs in some talukas servicing about a quarter more than their normative population size (Mishra, Duggal and Raymus,2004).

MAP OF MAHARASHTRA (Jalna district highlighted)



Source: Public Works Department, Jalna district, Maharashtra

## **Methodology**

The study attempted to cover the universe of health facilities run by qualified and registered personnel in Jalna district of Maharashtra. The study design was prepared by the National Commission on Macroeconomics and Health in consultation with the various research agencies. The **tool of data collection** was a structured interview schedule. The major domains of information in the interview schedule were: infrastructural details of the facility (e.g. the type of facility, the floor space, type of ownership of premises, availability of water, electricity; equipments, etc); the various services offered by the facility (including national health programmes, non communicable and specialist services and laboratory services); the referral patterns therein; the human resources in the facility (general, specialist, paramedical and other supporting staff in the facility); and information on charges for select services (OPD visit, bed charges, select diagnostic services, etc). The data gathered was entered in a specially designed **data entry** package provided by the National Commission on Macro economics and Health. An output format was also provided by the Commission to help **data analysis**. The output format was a specially designed computer software package that read the data as entered in the data entry package and generated analytical tables. We would like to state here that this report goes beyond the tables generated by the output format and draws upon available secondary data to analyse/contextualise the study findings. Further, at some places, the output format generated incongruous results and these have been mentioned in the course of the report (e.g. it generated results that showed all facilities in the district as providing ANC services; the referral distances for laboratory services were out of sync; the average charges for different services were way below the pattern in the field, etc).

## **Organisation and conduct of fieldwork**

### ***Selection and training of Research Investigators***

For the study, the project team in CEHAT comprised of five persons: the principal investigator, the co-investigator and three researchers. Apart from it a team of eight research investigators was appointed for carrying out fieldwork in Jalna district. Advertisements for the posts of research investigators were issued in July 2004 following which interviews were conducted. Eight candidates were selected for the purpose. All the candidates were graduates with either prior field experience in quantitative data collection or a postgraduate degree. After the appointment of the research investigators, a two day training was imparted. The training included lectures on the background of the study, health care in India, the process of data collection (including the ethical norms that should be followed), the administration of the interview schedule, elaboration on the technical terms in the interview schedule; mock interviews; and visit to a multibedded municipal hospital in Mumbai. Information on administrative procedures in CEHAT and first aid were also imparted during the training session.

### ***Gaining entry into the field***

Prior to the departure of the study team to Jalna, a member of the project team in CEHAT went to Jalna for strategic as well as logistic reasons. The collector of the district was briefed about the study (and furnished with the letters from the National Commission on Macroeconomics and Health). The local Public Works Department(PWD) was approached and the maps of Jalna district and its talukas were procured from it. Further, the PWD was briefed about the impending visit of the study team and requested to provide for its accommodation in the various taluka resthouses in the district. The presidents of the different medical associations in the district were

approached and briefed about the study. These included the local chapters of the Indian Medical Association (IMA), Homoeopathic Medical Practitioners' Association (HIMPAM) and National Integrated Medical Association (NIMA). The presidents of the associations were also requested to issue general letter of introduction to their colleagues informing them about the study. (The study team carried copies of these letters in the field and these helped in overcoming initial distrust that providers might have had towards the study). During this visit, the District Health Officer (DHO), the Civil Surgeon (CS), Residential Medical Officer (RMO) of the district were met and appraised of the study and also requested to inform the different public facilities about the same.

### ***Fieldwork***

The fieldwork for the study was carried out in two phases in the period July and August 2004. Health facilities in the different talukas of the district were covered first and finally Jalna town was covered. Typically, a research team would cover the facilities in the taluka headquarters first and then proceed to the other parts of the taluka. Within a town/ village, the *modus operandi* was to cover the facilities on the main roads and then move on to those on the arterial roads. In the field, the study team comprised of the eight research investigators and at least one (though usually two) CEHAT staff member. The research investigators were grouped into a total of four teams, each team comprising of two investigators. It was instructed that during the process of interviewing, one of them should ask the questions while the other writes down the responses. Each team maintained a list of the facilities it visited. The CEHAT staff member(s) was responsible for the overall coordination of the job on the field, working out logistic arrangements (including geographical delineation of the work areas of the teams), intervening whenever research investigators faced problems in the field (e.g. when providers had to be convinced about the aims of the study or refused to participate in it) and checking the filled up interview schedules for consistency and accuracy of the data. The district and the taluka maps were of immense help in working out movements in the field during the period. CEHAT staff also carried out random cross checking of the interview schedules in order to ascertain validity of the data as well as give constructive feedback to the investigators as and when problems were detected in data collection. About 20% of the schedules were so validated for their accuracy. Such independent validation of the interview schedules also provided opportunities to interact with the providers and gain field insights with regards to the structure and pattern of the healthcare services in Jalna. In some cases, when despite the best efforts by the research investigators, some providers were unwilling and/or unable to give interviews, the CEHAT staff members carried out the interviews. Validation of the data was also carried out by the NCMH in September 2004.

### ***Problems during fieldwork***

#### ***Nonresponse***

For the purpose of this study, non response is defined as such a case where despite paying at least three visits to the facility (by the research investigators and/or CEHAT staff) and giving information on the study, the incharge refused to participate in the same. The stated reasons for not participating in the study were varied. Most of the non respondents viewed the study as an information gathering exercise for the Income Tax department being carried out under the guise of research; others were unconvinced about the credentials of the NCMH. The absence of the national emblem on the letter from the Commission to the research participants was viewed with suspicion by some providers. The total number of non responses in the entire district is 13. The response rate for this study is thus 97.56%. In addition to non responses, there were also a

number of instances where facilities were found locked upon repeated (at least three) visits to the same. It was usually learnt (from neighbours, cleaning staff at the facility, etc) that the doctor has shifted base, visits the facility periodically, or is on long leave. It may be speculated that at least some of these locked facilities might be run by qualified medical personnel. The universe of health facilities in Jalna district of Maharashtra being run by qualified and registered personnel might thus be put at a little over 550.

#### *Heavy rains and Imposition of curfew*

Due to exceptionally heavy rains in early August, the second phase of fieldwork had to be rescheduled. Fieldwork thus recommenced a few days later than envisaged. In end August 2004, when fieldwork in Jalna was coming to a close, communal tensions erupted in the district. Consequently, curfew was imposed in Jalna bringing fieldwork to a halt. The study team returned to Mumbai subsequently. The pending work was completed by CEHAT staff member in September, when the situation had become normal.

#### *Observation of ethical norms*

The study abides by certain ethical norms. A **letter of introduction** informing the research participants about the background of the study, the aegis under which it is being conducted, the expected outcomes of the study and the contact details of CEHAT was attached to all interview schedules. Potential respondents were also told of their **rights** as research participants, viz., voluntary participation in the study and their right to terminate the interview at any point. Research investigators were trained to speak about the contents in the letter of introduction while seeking the participation of a potential respondent. **Informed consent** was taken in writing from all participants who agreed to participate in the study.

The study was reviewed by the Institutional Ethics Committee (IEC) of CEHAT.

#### **Organisation of the report**

This report comprises of three chapters. **Chapter I** is an introductory chapter that gives information on the study, the socio-demographic features of Jalna district and the methodology adopted for the study. **Chapter II** elaborates on the study findings with respect to the distribution of health facilities in Jalna, the types of facilities and their infrastructural capacities. **Chapter III** is an exposition on the services offered and the referral patterns in health facilities in Jalna. The current analysis is based on the responses of registered and qualified practitioners on their respective facilities, and it totals 520 (five hundred and twenty only) for Jalna district. We would like to state here that owing to various reasons (chiefly the suspicion that the Income Tax department might have access to the data anytime), certain types of information elicited cautious replies. These may constitute **sources of bias** in the data. These include primarily information on equipments, investment and charges for the different services. Sometimes, questions on referral patterns were viewed with suspicion as providers were wary of being seen to be in nexus with fellow colleagues in matters of patient referrals.

## II. Distribution, types and infrastructural capacities of health facilities in Jalna

The present chapter examines information on health facilities in Jalna along several dimensions: geographical distribution, types of facilities and their infrastructural capacities (including equipments, human resources, bedstrength, etc.). The analysis of information on health facilities in Jalna is based on a total of 520 records of facilities run by qualified and registered practitioners. Keeping in account the non responses and the facilities which were found locked on the visits made to them, the universe of health facilities in the district run by qualified personnel would slightly exceed this number. Subcentres were not studied in the current study. The list of subcentres given to us by the Office of the District Health Officer puts the total number of subcentres in the district at 171 (one hundred and seventy one). The taluka wise distribution of subcentres in the district is given in Annexure I.

### Distribution of health facilities in Jalna

The present section looks into distribution of health facilities in Jalna along the dimensions of rural-urban and taluka wise differences. Out of the 520 health facilities on which information has been collected for this study, 54 are government facilities and 466 are private ones. For a district where 19.09% of the population resides in urban areas, 52.12% of the total health facilities are present in urban areas. 24.07% of the government facilities and a high 55.36% of the private facilities are in urban areas. The 2001 census figures for the district show that of the eight talukas in the district, four (Jaffrabad, Badnapur, Ghansawangi and Mantha) are completely rural. Jalna taluka is the most urbanized one in the district with 54.57% of its population in urban areas. The percentage of urban population in the remaining talukas varies between 6.62% (Bhokardan) to 19.94%(Partur). **Public** health facilities in the talukas of the district are majorly located in rural areas, excepting in Jalna taluka where 10 of the 17 facilities are in the urban areas. However, the distribution of **private** health facilities in the talukas is disproportionate to the percentage of urban population in them. In Jalna taluka, a whopping 87.67% of the private health facilities are in urban areas. The proportion of private health facilities in urban areas for the remaining talukas with urban centers ranges from 38.46% in Bhokardan to 66.67% in Ambad.

The **taluka wise** distribution of facilities shows that Jalna taluka alone accounts for 42.12% of the total health facilities in the district and is way ahead of the other talukas in this regard. Significantly, the taluka records the highest proportion for both public and private facilities in the district (31.48% and 43.35% respectively). If the 2001 census figures are extrapolated to the current year, there is a health facility (government or private) per about 8000 people in Jalna taluka. The other talukas in the district account between 5.19% (Badnapur) to 11.35% (Partur) of the total health facilities in Jalna district.

Table 1 contains details about the distribution of health facilities in different talukas of the district.

**Table 1 : Distribution of health facilities in Jalna**

Sr. no	Talukas	% Urban Population (Census 2001)	Number of facilities			% of health facilities in the talukas w.r.t the Dist.	% of Public facilities in the Urban areas	% of private facilities in the Urban areas
			Public	Private	Total			
1	AMBAD	12.60	4	44	48	9.23	25.00	70.45
2	BADNAPUR	0.00	6	21	27	5.19	*	*
3	BHOKARDAN	6.62	8	44	52	10.00	12.50	43.18
4	GHANSAWANGI	0.00	4	37	41	7.88	*	*
5	JAFFERABAD	0.00	6	28	34	6.54	*	*
6	JALNA	54.57	17	202	219	42.12	58.82	90.10
7	MANThA	0.00	4	36	40	7.69	*	*
8	PARTUR	19.94	5	54	59	11.35	20.00	48.15
<b>JALNA DIST.</b>		<b>19.09</b>	<b>54</b>	<b>466</b>	<b>520</b>	<b>100</b>	<b>24.07</b>	<b>55.36</b>

Note: \* no urban areas in the taluka

### Types of health facilities in Jalna

The number of public and private facilities, the types therein and the systems of medicine practised form the theme for the present section. There are a total of 54 public facilities in the district on which information is available. Of these four are district level facilities (the Civil Hospital; the District Women's Hospital; the District Tuberculosis Centre and the District Public Health Laboratory), eight are government dispensaries (six of which are in Jalna town alone); 34 are PHCs and eight are Community Health Centres/ subdistrict hospitals (known as Rural Hospitals in Maharashtra). In the private health sector, sole proprietorship accounts for an overwhelming majority of the private facilities in the district on the whole (92.92%) as well as the different talukas. Partnerships, trust or corporate setups account for about 7.08% of the private facilities in the district. The overwhelming presence of sole proprietorship, followed by partnerships distantly, is replicated in the different talukas of the district as well.

For the district as a whole, there are about nine (8.63) private facilities for every public facility. The taluka with the lowest private to public facility ratio is Badnapur (3.50). Jalna taluka (11.88), Ambad (11.00) and Partur (10.80) have the highest private to public facility ratio in the district. Interestingly, the talukas lying to the north western parts of Jalna have lower ratios than those in the south of the district.

For the district as a whole, there are 3.17 public facilities per lakh population. Badnapur (4.33) and Jaffrabad (4.14) have the highest number of public facilities per lakh population. In contrast to the low number of public facilities per lakh population, there are 27.39 private facilities per lakh population for the district as a whole. The ratio is the highest for Jalna taluka (where there are 44.32 private facilities per lakh population) and Partur taluka, where the figure is 39.32.

**Table 2: Types of health facilities in Jalna**

Sr. no	Taluka	Public facilities				Private facilities					Private: Public ratio	No. of Public Facilities per lakh population *	No. of Private facilities per lakh population *
		PHC	CHC	Disp/Other	Total	Sole Proprietorship	Partnership	Trust	Corporate	Total			
1	AMBAD	3	1	0	4	40	3	1	0	44	11.00	1.83	20.14
2	BADNAPUR	4	1	1	6	19	2	0	0	21	3.50	4.33	15.16
3	BHOKARDAN	7	1	0	8	41	2	1	0	44	5.50	2.96	16.28
4	GHANSAWAN GI	4	0	0	4	35	1	1	0	37	9.25	2.19	20.27
5	JAFFERABAD	4	2	0	6	28	0	0	0	28	4.67	4.14	19.33
6	JALNA	5	1	11	17	182	10	9	1	202	11.88	3.73	44.32
7	MANTHA	3	1	0	4	34	2	0	0	36	9.00	2.61	23.46
8	PARTUR	4	1	0	5	54	0	0	0	54	10.80	3.64	39.32
	<b>JALNA DIST.</b>	<b>34</b>	<b>8</b>	<b>12</b>	<b>54</b>	<b>433</b>	<b>20</b>	<b>12</b>	<b>1</b>	<b>466</b>	<b>8.63</b>	<b>3.17</b>	<b>27.39</b>

Note: \* Population figures projected for the current year from census 2001 figures

**Allopathy is majorly practised in the health facilities in the district.** 96.30% of the public facilities and 84.98% of the private facilities practise allopathy. It is to be noted here that allopathy is widely practiced by providers who may not be formally trained in that system of medicine, thereby indicating the widespread prevalence of 'cross practice'. It is also pertinent to note here that the near exclusive emphasis on allopathy in public facilities betrays the socio-political context which has favoured the emergence of allopathy as a privileged system of medicine in India today (Abraham, 2004). It was not uncommon during fieldwork in Jalna for doctors trained and practicing other systems of medicine to rue the limited/negligible opportunities that are open to them in government facilities, thereby leaving them with little choice but to depend on their own wherewithal to establish themselves professionally. **Among the other systems of medicine practiced in the district, Ayurveda was a distant second to Allopathy in public facilities, while in the private facilities, it was Homoeopathy, followed by Ayurveda which were most widely practiced after Allopathy. Siddha is not practiced in any of the health facilities in Jalna.** Private facilities also practiced other systems of medicine like electropathy, acupressure, etc. The talukawise disaggregated figures (Annexure II) also show the overwhelming practice of Allopathy in both public and private facilities of the district followed by the other systems of medicine. In some talukas like Badnapur, Ghansawangi and Partur, the percentage of public facilities practicing Ayurveda were considerable. Practicing of Homoeopathy in the private sector is very widespread in the talukas of the district. Table 3 gives percentage of facilities in Jalna district practicing different systems of medicine.

**Table 3: Percentage of facilities practicing different systems of medicine**

System of medicine	% of public facilities practising	% of Private facilities practising	% of total facilities practising
Allopathy	96.30	84.98	86.15
Ayurveda	20.37	32.62	31.35
Homoeopathy	1.85	43.35	39.04
Unani	1.85	1.72	1.73
Siddha	0.00	0.00	0.00
Other systems of medicine	0.00	3.86	3.46

*Note:* Being multiple responses, the percentages do not add upto 100.

### **Infrastructural capacities of facilities**

The infrastructural adequacy of facilities is the *sine qua non* for effective delivery of services. However, as we shall see in the present section, wide disparities exist with regards to infrastructure in health facilities. Among other things, facilities differ greatly with regards to their bed strengths, the human resources present, the equipments they have and facilities like telephone connection and vehicle for transportation of patients.

**Across the talukas of the district as well as for the district as a whole, the majority of the health facilities (both public and private) were established in the period 1980-2004** (Annexure III). This is in keeping with the history of healthcare development in the country. The private health sector in the country grew substantially in the 1980s. Post the Alma Ata declaration, there was a spurt in the public facilities with the establishment of rural health infrastructure (PHCs and CHCs) in the country in the 1980s. However, this began to decline in the 1990s on the face of shrinking public investment in the social sector. It has been observed that the PHC and the CHC infrastructure in the state of Maharashtra is adverse according to the existing population norms. In Jalna, the PHC and CHC infrastructure is worse than the already deficient state averages (Mishra, Duggal and Raymus, 2004). The establishment of Rural Hospitals (CHCs) in the district has, in fact, slowed down in the 1990s (*ibid*). **The 1990s being a watershed in the political economy of India, it would have been a worthwhile exercise if the output format could have disaggregated information on year of establishment of facilities into a post 1990s category.**

**There is a clear public private divide in terms of the size of facilities and ownership of premises in the district.** Only about a quarter (24.03%) of the private health facilities have floor space exceeding 1000 square feet. In contrast, more than half (53.70%) the public facilities have floor space of more than 1000 square feet. The figure is likely to be considerably higher since, in many instances (37.04%), respondents in government facilities did not have information about the floorspace of their facilities. Such a public-private divide is evident across the talukas as well (Annexure IV). Most government facilities operate either from owned premises or premises of other government buildings (like the Zilla Parishad buildings). Private facilities however majorly operate either from owned or rented premises. The pattern replicates across talukas of the district (Annexure V) with some exceptions. In Jalna taluka, a considerably higher percentage of the premises of private facilities are owned, while in Partur, a far higher percentage of the private facilities operate from rented premises.

**There are considerable commonalities and variations between the public and the private facilities of the district with respect to infrastructural indices like water, electricity and telephone connection, vehicle in working condition, etc.** Table 4 contains details of

infrastructural capacities in public and private facilities of the district. More than half of both public and private facilities have piped **water** supply. Water is also sourced from borewells/handpumps by a third of the public facilities and 44.42% of the private facilities. Water requirements are also met to some extent by drawing from open wells, purchase of water or from other sources like carrying water from neighbours, etc. **Electricity connection** is present in a very high percentage of both public and private facilities (88.89% and 98.71% respectively), though private facilities are better off in this regard. Interestingly, **generators** are available in 72.22% of the public facilities compared to only 24.46% of the private facilities. The situation is reversed in the case of **phone connection** with only 42.59% of the public facilities having such connection compared to 82.83% in the private sector. A majority of the facilities have **access to motorable roads**, with the private facilities being slightly better placed in this regard. An interesting point of observation is the availability of **vehicles in working condition** for patient transport/ emergency purposes. A little more than half (51.85%) of the public facilities have such a facility in contrast to only 9.23% of the private facilities. The fact that such a facility is so poorly present in *public* facilities is a matter of concern with implications for effective service delivery, patient transportation and referrals. In the *private* facilities, it was observed that transportation of patients was left to them (patients) with providers often not undertaking any responsibility for them. In the larger urban centers of the district like Jalna town, private ambulance services exist and are hired by patients if need be. Annexure VI gives details on the infrastructure in the health facilities in different talukas of Jalna.

**Table 4 : Infrastructural capacities of public and private facilities in Jalna district**

Infrastructure	% public facility	% private facility	Total %
<b>Water</b>			
Piped water	55.56	57.3	57.12
Bore well/Handpump	33.33	44.42	43.27
Open well	5.56	7.08	6.92
Other source	14.81	9.44	10
Purchase (part purchase)	11.11	10.94	10.96
Purchase (full purchase)	12.96	33.48	31.35
<b>Electricity</b>			
Electricity connection	88.89	98.71	97.69
Generator	72.22	24.46	29.42
<b>Phone facility</b>	42.59	82.83	78.65
<b>Access to motorable road</b>	87.04	93.56	92.88
<b>Vehicle in working condition</b>	51.85	9.23	13.65

### Equipments

The data on equipments available in facilities of the district presents an interesting picture. **Only the refrigerator for general purpose is available in about a quarter (25.77%) of the facilities (both public and private) in the district. No other equipment crosses the lower quintile mark. For the district as a whole, private facilities are poorly equipped compared to public facilities, with some exceptions.** Public facilities are *especially* better equipped than the private facilities with respect to new born resuscitator, autoclave for sterilization, refrigerator for vaccine, refrigerator for general purpose, labour table, operation table and ambubag, the

difference being more than ten percentage points in each case. It is in the case of equipments like ultra sound machine, dental chair, endoscopes, MRI machine and Doppler's machine that the private sector is proportionally better equipped than the public facilities. It should be emphasized here that in Jalna district, equipments like ultra sound machine, dental chair, etc, are very rare, often being present in miniscule percentage of the facilities in the district and never exceeding the 5% mark.

The taluka wise data replicate the district pattern of relatively higher adequacy in public facilities (with exceptions for certain equipments). However, Jalna taluka defies the district patterns in some respects. The taluka has higher proportions of facilities (public or private) having the listed equipments and exceeds the district averages for all listed equipments excepting labour table and MRI machine. Also, higher proportions of the private facilities in that taluka have the listed equipments in comparison to the proportion of the private facilities in the other talukas of the district. Annexure VII gives details of the availability of equipments in public and private facilities of the district as well as its constituent talukas.

### Human Resources

Table 5 and 6 give details of the human resources position in the district. For the district as a whole, there are 124 doctors with general MBBS qualifications. Of these, 55 are employed in the public sector and the rest are in the private sector. There are 46 medical specialists (of various specializations) in the public sector and 414 are in the private sector. Deducting the number of part time doctors from the above totals, the number of full time doctors in the different sectors are as follows:

Full time General MBBS doctors in the public sector =  $55 - 2 = 53$   
 Full time General MBBS doctors in the private sector =  $69 - 5 = 64$   
 Full time Medical specialists in the public sector =  $46 - 6 = 40$   
 Full time Medical specialists in the private sector =  $414 - 193 = 221$ .

Thus the total number of **full time** doctors in the district (both general MBBS and specialists) =  $53 + 64 + 40 + 221 = 378$ .------(a)

Number of part time doctors in the various facilities in the district is  $2 + 5 + 6 + 193 = 206$ .

*Assuming* that each part time doctor visits four facilities, then the **number of doctors rendering part time services** in the district is  $206/4 = 51.50 = 52$ .------(b)

Adding (a) and (b), the total number of doctors in the district is  $378 + 52 = 430$ .

We thus have 430 doctors with MBBS and higher allopathic specialisations in Jalna district. Since the projected population for Jalna district is 17,01,130, the total number of (MBBS and specialist) doctors per thousand population in the district is:

$$(430 * 1000) / 17,01,130 = 0.25$$

or, **1 (MBBS and specialist) doctor per 4,000 population.**

**General MBBS doctors:** Jalna district has 55 doctors with MBBS qualifications in the public sector and 69 doctors with similar qualifications in the private sector. Of these doctors, the number of part timers in the public and the private sectors are 2 and 5 respectively. 20% of the MBBS doctors in the public sector are women and the corresponding percentage for the private sector is 27.54%. Barring two doctors, the rest are government servants in the public sector. 4.35% of the general MBBS doctors in the private sector are government servants. 74.55% of the doctors in the public sector are local residents and the corresponding percentage for the private sector is 88.41%.

**Specialist doctors:** The district has a total of 460 specialist doctors in its various facilities. Of these, 90% are in the private sector. Gynaecologists, paediatricians, anaesthetists, physicians, surgeons and ophthalmologists together constitute the bulk of the specialists in the public as well as private sector in the district. The district does not have an endocrinologist in either the public or the private sector. In addition, the public sector does not have the services of cardiologist, gastroenterologist, psychiatrist or urologist.

13.04% of the specialists in the public sector provide part time services and these are in the fields of ENT, dentistry, orthopaedics, ophthalmologist and paediatrics. A little less than half (46.62%) of the specialists in the private sector provide part time services. A recurrent field observation was that most private facilities that provided specialist services had all or most of the doctors 'on call'. This is validated by the data that show that for most specialisations in the private sector, more than a third of the specialists are part timers.

10.87% of the specialist doctors in the public sector are women and they are in gynaecology, anaesthesia and dentistry. 18.84% of the specialist doctors in the private sector are women and they are *majorly* in gynaecology, anaesthesia and ophthalmology.

82.61% of the specialist doctors in the public sector are government servants and the corresponding percentage is 2.66% for the private sector. Almost three quarters or more of the specialists in both the public as well as the private sector in the district are local residents (84.78% and 73.91% respectively).

**Table 5: General and Specialist doctors in Jalna district**

	No. of doctors			% part time employees		% female employees		% Government Servants		% Local Residents	
	Pub.	Pvt.	Total	Pub.	Pvt.	Pub.	Pvt.	Pub.	Pvt.	Pub.	Pvt.
<b>Medical-General</b>											
General MBBS	55	69	124	3.64	7.25	20.00	27.54	96.36	4.35	74.55	88.41
<b>Medical-Specialist</b>											
Gynaecologist	7	55	62	0.00	32.73	28.57	56.36	100.00	5.45	85.71	83.64
Paediatrician	6	48	54	16.67	41.67	0.00	18.75	100.00	2.08	83.33	72.92
Anesthetist	6	44	50	0.00	61.36	33.33	31.82	83.33	0.00	66.67	84.09
Physician	6	51	57	0.00	52.94	0.00	7.84	50.00	3.92	66.67	80.39
Surgeon	8	38	46	0.00	52.63	0.00	2.63	87.50	7.89	100.00	76.32
Ophthalmologist	3	35	38	33.33	28.57	0.00	22.86	100.00	2.86	100.00	40.00
Skin and VD Specialist	1	13	14	0.00	69.23	0.00	0.00	100.00	0.00	100.00	38.46
Orthopaedician	2	21	23	50.00	52.38	0.00	0.00	50.00	0.00	100.00	71.43
Cardiologist	0	11	11	0.00	72.73	0.00	9.09	0.00	0.00	0.00	81.82
Gastroenterologist	0	5	5	0.00	80.00	0.00	0.00	0.00	0.00	0.00	80.00
Dentist	2	25	27	50.00	24.00	50.00	16.00	50.00	0.00	100.00	88.00
Psychiatrist	0	8	8	0.00	62.50	0.00	0.00	0.00	0.00	0.00	62.50
ENT Specialist	1	20	21	100.00	65.00	0.00	0.00	100.00	5.00	0.00	60.00
Urologist	0	14	14	0.00	92.86	0.00	0.00	0.00	0.00	0.00	42.86
Endocrinologist	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Any Other	4	26	30	25.00	7.69	0.00	23.08	75.00	0.00	100.00	100.00
<b>Total specialists</b>	<b>46</b>	<b>414</b>	<b>460</b>	<b>13.04</b>	<b>46.62</b>	<b>10.87</b>	<b>18.84</b>	<b>82.61</b>	<b>2.66</b>	<b>84.78</b>	<b>73.91</b>

**Para medical staff:** There are 605 paramedical staff in the 54 public facilities in the district, making it an average of around 11 (11.20) paramedical staff per public facility. The 466 private facilities in the district have a total of 871 paramedical staff, recording an average of approximately 2 (1.87) paramedical staff per private facility in the district. The high averages for paramedical staff in the public facilities in the district highlights the varied functional responsibilities that public facilities discharge as well as the clear delineation of jobs and their attendant responsibilities. PHCs in Maharashtra carry out a host of promotive and preventive activities for which a cadre of outreach workers (the ANMs and the MPWs) are deployed. In addition, public facilities have clearly delineated jobs for which staff are recruited. *Unlike the private sector where multi tasking is common, the public sector has set categories of staff carrying out designated responsibilities.* Hence, we see higher proportions of staff against the various categories in the public sector, especially in the categories of nurses and health workers. The case of nurses is similar and exemplifies another axis of distinction between the two sectors. The number of nurses working in the 54 public facilities in the district is 260 (average being approximately 5 nurses per public facility). In contrast, in the private sector, there are 271 nurses working in the 466 facilities (average being less than one (0.58)). Further, all the nurses in the public sector are full time employees whereas, in the private sector, 8.12% are parttimers. It is

understood from the field that the private facilities often employ women who could multitask as nurses, attendants, or, even occasionally as the cleaning staff, thereby lowering the total number of support staff that they employ. Importantly also, it was widely reported from the field that most nurses in the private sector are not formally trained in nursing. Private providers recounted how difficult it is to get qualified nurses and pay them at par with those in the public sector. The nurses in the private facilities are usually matriculates who get on the job training at the facilities. The public sector, in contrast, employs nurses who are formally trained in the profession.

4.79% of the paramedical staff in the public sector are part timers, with ophthalmic assistants being the single largest category of part timers at 21.05%. In the private sector, almost 10% (9.99%) of the paramedical staff are part timers, microbiologists and ophthalmic assistants being the two categories where the proportion of part timers is the highest. Close to 50% (47.27%) of the total paramedical staff in the public sector are women with nursing being majorly feminine (82.31% of its nurses are women). In the private sector in the district, 36.97% of the total paramedical employees are women, with most of the nurses being female (91.51% of the nurses in the sector are women). Expectedly, an overwhelming majority (94.38%) of the paramedical employees in the public sector in the district are government employees. It is the category of ophthalmic assistants that has a considerable percentage of non government employees in the public sector. In the private sector of the district, a miniscule percentage (0.11%) of the paramedical employees are government employees. 78.31% of the paramedical employees in the public sector are local residents and the corresponding percentage for the private sector is 95.49%. In the public as well as the private sector, more than three quarters of the paramedical employees in almost all categories of staff are local residents.

**Other supporting staff:** The total number of supporting staff (clerical staff, drivers, cleaning staff, etc) in the public sector is 275. The average number of supporting staff in a public facility is thus 5. The total number of supporting staff in the private sector is 424 and the average number of supporting staff is less than one (0.91) per private facility in the district. In the field, it was not rare to come across clinics in the private sector where there would be a part time cleaning staff apart from the doctor. This could explain why the totals as well as the averages are so low for the supporting staff in the private sector in the district. Expectedly, almost a fifth (22.17%) of the supporting staff in the private sector are part timers, bulk of which are from the cleaning staff category. This is in contrast to 3.27% of the staff being part timers in the public sector. 21.45% of the other supporting staff category in the public sector are women compared to more than half (52.59%) of the category in the private sector. The higher proportion of women in the private sector in that category may be on account of the fact that usually cleaning staff, receptionists or attendants form the bulk of this category in the private sector and these are female mostly. In the public sector, 93.82% of the staff in the category are government employees compared to 1.65% in the private sector. More than 80% of the staff in both the sectors are local residents, the percentages being 86.91% for the public sector and 91.04% for the private sector.

**Table 6: Paramedical and other supporting staff in Jalna district**

	No. of staff			% part time employees		% female employees		% Government Servants		% Local Residents	
	Pub.	Pvt.	Total	Pub.	Pvt.	Pub.	Pvt.	Pub.	Pvt.	Pub.	Pvt.
<b>Para-Medical</b>											
Microbiologist	1	6	7	0.00	16.67	0.00	16.67	100.00	0.00	100.00	83.33
Nurses	260	271	531	0.00	8.12	82.31	91.51	99.23	0.37	85.38	97.05
Pharmacists	46	18	64	2.17	0.00	2.17	11.11	97.83	0.00	91.30	88.89
Compounders	10	340	350	10.00	14.12	0.00	4.71	100.00	0.00	100.00	96.76
Lab Technicians	15	73	88	6.67	12.33	0.00	19.18	93.33	0.00	86.67	98.63
Ophthalmic Assistant	38	27	65	21.05	14.81	2.63	7.41	65.79	0.00	73.68	100.00
X-Ray Technician	12	21	33	0.00	0.00	0.00	0.00	100.00	0.00	83.33	95.24
Radiographers	0	4	4		0.00		25.00	0.00	0.00	0.00	100.00
Health Workers	182	24	206	6.59	4.17	29.12	29.17	91.21	0.00	64.29	75.00
Others	41	87	128	14.63	2.30	41.46	35.63	97.56	0.00	75.61	88.51
<b>Total</b>	<b>605</b>	<b>871</b>	<b>1476</b>	<b>4.79</b>	<b>9.99</b>	<b>47.27</b>	<b>36.97</b>	<b>94.38</b>	<b>0.11</b>	<b>78.31</b>	<b>95.49</b>
<b>Clerical Staff</b>											
Driver	33	27	60	6.06	0.00	0.00	18.52	93.94	0.00	87.88	96.30
Cleaning Staff	151	273	424	2.65	27.11	31.13	61.54	93.38	2.20	88.08	88.28
Others	91	124	215	3.30	16.13	13.19	40.32	94.51	0.81	84.62	95.97
<b>Total clerical staff</b>	<b>275</b>	<b>424</b>	<b>699</b>	<b>3.27</b>	<b>22.17</b>	<b>21.45</b>	<b>52.59</b>	<b>93.82</b>	<b>1.65</b>	<b>86.91</b>	<b>91.04</b>

**Bed strength**

For the district as a whole, the number of beds totals 2191. Out of these, about a quarter (27.70%) are in the public sector and the remaining in the private sector. However, the taluka wise disaggregation of data presents striking evidence of gross disparities in the distribution of beds across the public and the private sector as well as across talukas of the district. Jalna taluka alone accounts for 72.07% of the total beds in the district. Further, apart from Jalna and Ghansawangi talukas, in the remaining six talukas, the number of beds in the public facilities exceeds those in the private facilities. The high number of beds in the private sector in Jalna taluka has thus skewed the district pattern. The inequitable distribution of beds in the district is also evident from the **wide variations in the bed to population ratios** across the talukas of the district. For the district as a whole, there are 1.29 beds per 1000 population. However, Jalna taluka records 3.46 beds per thousand population whereas the other talukas have less than 1 bed per thousand population (Table 7).

**Table 7: Bed capacities in Jalna district**

Sr. no	Taluka	Total beds	% of beds in public facilities	% of beds in private facilities	Beds per 1000 population*	Average no. of beds in public bedded facility	Average no. of beds in private bedded facility
1	AMBAD	126	55.56	44.44	0.58	17.50	5.60
2	BADNAPUR	43	51.16	48.84	0.31	5.50	5.30
3	BHOKARDAN	105	73.33	26.67	0.39	11.00	4.00
4	GHANSAWANGI	91	34.07	65.93	0.50	7.80	8.60
5	JAFFERABAD	89	80.90	19.10	0.61	18.00	3.40
6	JALNA	1579	15.07	84.93	3.46	26.40	17.40
7	MANTHA	66	59.09	40.91	0.43	13.00	3.90
8	PARTUR	92	63.04	36.96	0.67	11.60	4.30
	<b>JALNA DIST.</b>	<b>2191</b>	<b>27.70</b>	<b>72.30</b>	<b>1.29</b>	<b>15.20</b>	<b>12.70</b>

Note: \* Population figures as projected for the current year from the 2001 Census figures.

The **greater capacity of the public facilities for inpatient care** is also reflected in the fact that for all talukas of the district (excepting Ghansawangi, which defies the pattern slightly), the average number of beds per bedded facility is always (often considerably) higher for public facilities than it is for the private facilities. Further, for the district as a whole, as well as for most talukas (Ghansawangi and Partur being the exceptions), the **bed occupancy rate in public facilities is higher** than that for private facilities. In fact, on the date of survey, more than half of all beds (52.06%) in public facilities were occupied compared to less than a third (31.57%) in the private facilities in the district.

Jalna taluka registered the highest bed occupancy rate among all talukas of the district which might be suggestive of the fact that for inpatient care, it may be the favoured destination for service seekers as well as referring providers. Being the district headquarters with the most technically superior facilities and humanpower being present, Jalna taluka registers the highest bed occupancy rates for public facilities and second highest bed occupancy rate (after Partur) among private facilities in the district. Interestingly, the taluka, despite having higher number of beds in the private sector in comparison to that in the public facilities, registered a lower bed occupancy rate for the private sector. The bed occupancy rate in the public facilities in Jalna taluka was a high 78.57% compared to 33.71% for the private facilities.

For the district as a whole, the **average number of inpatient nights admitted in the last 30 days was also higher for government facilities (57.2) compared to that of private facilities (34.4)**. The taluka wise disaggregation of data presents similar pattern excepting Badnapur, Bhokardan and Partur talukas. In fact, for Ambad (107.0) and Jalna (147.0) talukas, for the month prior to the study, the average numbers of inpatient nights per bedded *government* facility were more than 100.0 and significantly higher than that for private facilities (Table 8).

**Table 8: Bed occupancy rates and inpatient nights in facilities in Jalna district**

Sr. no	Taluka	No. of beds		Bed occupancy rate (%) in public facility	Bed occupancy rate (%) in private facility	Average inpatient nights admitted in last 30 days per Pub. Bedded facility	Average inpatient nights admitted in last 30 days per private bedded facility
		Pub.	Private				
1	AMBAD	70	56	37.14	17.86	107.00	6.80
2	BADNAPUR	22	21	36.36	19.05	5.30	25.50
3	BHOKARDAN	77	28	48.05	14.29	10.00	14.30
4	GHANSAWANGI	31	60	6.45	16.67	25.30	18.00
5	JAFFERABAD	72	17	29.17	11.76	39.80	5.40
6	JALNA	238	1341	78.57	33.71	147.00	47.50
7	MANTHA	39	27	41.03	18.52	30.70	7.90
8	PARTUR	58	34	32.76	38.24	18.60	20.90
	<b>JALNA DIST.</b>	<b>607</b>	<b>1584</b>	<b>52.06</b>	<b>31.57</b>	<b>57.20</b>	<b>34.40</b>

**N.B.** OWING TO ERRORS IN THE OUTPUT FORMAT, THE SECTION ON **INVESTMENT PATTERNS** IN THE HEALTH FACILITIES OF THE DISTRICT COULD NOT BE WRITTEN.

### III. Services Offered and Referral Patterns

The present chapter details the types of services offered by health facilities in Jalna. The exposition would include the provision of services under the various National Health Programmes like Family Welfare, Tuberculosis, etc.; Surgeries (minor as well as major); services requiring specialist intervention (dental care, cancer, psychiatric illnesses, etc.) and; Emergency care. The provision of laboratory services will also be studied in this chapter. Within the context of each of the above mentioned service, referral patterns will be studied. The chapter will conclude with the charges levied by different types of facilities for select services.

#### Outpatient caseload on health facilities

In the week preceding the survey, a total of 86,736 outpatients accessed the different public and private health facilities in the district. Of these, less than a quarter (19.86%) accessed the 54 government facilities, with the remaining accessing the 466 private facilities in the district. **Though, in terms of absolute numbers, the public facilities register lesser OPD caseloads, however, in terms of average number of outpatients per facility per day, the figures are always higher for the public facilities in the district as a whole as well as the individual talukas (with the sole exception of Badnapur taluka which does not have a functional Rural Hospital).** This may be a strong case for expanding the public healthcare services in the district in particular (and the country, in general) so that they are accessible to the people. The unmet need for public health facilities in India has been felt in other locales also. For instance a study by Dilip and Duggal in Mumbai showed the unmet need for public health facilities for both outpatient and inpatient related services. In the absence of public facilities in an area, the residents of a lower middle class and lower class dominated locality in Mumbai had to access the private sector in the area or public facilities in the neighbouring areas for their healthcare needs (Dilip, T.R. and Duggal, R., 2003). Table 9 has details of the OPD caseloads for public and private facilities in Jalna district.

**Table 9: OPD caseloads for public and private facilities in Jalna district**

Sr. no	Taluka	Outpatients consulted in the last 7 days		Avg. outpatients per facility per day	
		Public	Private	Public	Private
1	AMBAD	1638	5608	58.50	18.21
2	BADNAPUR	557	3150	13.26	21.43
3	BHOKARDAN	2556	5550	45.64	18.02
4	GHANSAWANGI	1582	6022	56.50	23.25
5	JAFFERABAD	1970	4286	46.90	21.87
6	JALNA	7342	33617	61.70	23.77
7	MANTHA	534	3140	19.07	12.46
8	PARTUR	1049	8135	29.97	21.52
	<b>JALNA DIST.</b>	<b>17228</b>	<b>69508</b>	<b>45.58</b>	<b>21.31</b>

### National Health Programmes

Table 10 gives details about the provision of services, average referral distance and caseloads under the various National Health Programmes in Jalna district. Information on the same for the different talukas of the district is appended in Annexure VIII.

#### Reproductive Health

**The reports generated by the output format for the section on ANC is highly implausible.** It says that ALL the public and private health facilities in Jalna district provide services for ANC, whereas the source data speaks otherwise. A cursory observation of the data shows that, both in the public as well as the private sector, there are many facilities that do not offer ANC services. **Hence, this write up does not include ANC in its analysis.**

For the district as a whole, for all Reproductive Health programmes (excluding caesarean section and hysterectomy), the proportion of public health facilities providing the services is higher than that of private facilities. 68.52% of the public facilities provide services related to delivery compared to 21.46% in the private sector; and 14.81% of the public facilities provide MTP services in comparison to 6.01% in the private sector. More than half the public facilities (55.56%) carry out female sterilizations and about a quarter (24.07%) provide services for male sterilization. In contrast, in the private sector in the district, less than 10% of the facilities provide sterilization related services (whether male or female). However, when it comes to caesarean section or hysterectomy, it is the lone case of the District Women's Hospital in Jalna town that provides the necessary services among public facilities in the district. In the private sector in the district, 25 facilities provide similar services.

The taluka wise disaggregation of data on the reproductive health programmes shows uneven availability of services in both the public and the private sector across the district. Expectedly, Jalna taluka provides all the reproductive health services, but other talukas may be deficient in one or more of the services. Often the services not being available in either the public or the private sector of the talukas include those for MTP, caesarean section, hysterectomy and male sterilization.

A recurrent field observation has been that public facilities *mostly* refer patients to higher level *public* facilities. The Medical Officer of a PHC would, for instance, refer patients to the nearest Rural Hospital, or where appropriate, the Civil Hospital. It was widely reported from private practitioners that they routinely referred poor patients to public healthcare facilities and those belonging to the middle and higher economic classes to private facilities. However, private practitioners often recounted that the inattention paid to patients at public facilities and the perceived infrastructural inadequacies (of the public sector) often led patients to seek treatment elsewhere. Further, in many cases, in both public and private facilities, facilities often get patients suffering from select (perceived) diseases and/or do not refer patients.

The data on average distances to the referred facilities show that, with the exception of deliveries, the figures are higher for public facilities in comparison to the private facilities. As stated earlier, the *predominant* choice of public facilities as the referral destination for public facilities could be the reason for the same. Being geographically dispersed, the referral distances to public facilities are higher. Across providers, for the district as a whole, the average distance to referral destination was highest for caesarean section (17.00 kms), followed by that for MTP services (14.79kms). Curiously, male sterilization recorded the lowest average distance, being 3.65 kms. It was reported from the field that very few facilities (especially in the private sector) entertain men with queries on male sterilization or refer them. The taluka wise average distances

to referred facilities broadly replicate the district patterns with some exceptions. Jalna taluka records the lowest average distances to referred facilities in the district, a fact that highlights the concentration of facilities in the taluka.

The interview schedule sought information on the number of patients in the preceding month. With the exception of sterilizations (both male as well as female), for the district as a whole, it was *always* the private sector that witnessed larger numbers of patients for the different types of reproductive health conditions like MTPs, deliveries, caesarean sections and hysterectomy. However, as we have seen earlier, in reproductive health too, the average caseload per public facility is *always* higher, thereby reiterating the need for numerical expansion of the public facilities offering such services. Taluka wise disaggregation of data suggests that public facilities in talukas may sometimes be handling higher absolute numbers of patients of different reproductive health conditions as well.

### **Childcare**

The section on childcare sought information on diarrhoea, ARI and immunization. The data show that greater proportions of public facilities offered services for all the three categories of childcare than private facilities. 88.89% of the public facilities offer services for diarrhoea compared to 69.53% of private facilities. 74.07% of the public facilities offer ARI related services and a similar percentage provide immunization services. Barring aberrations, the taluka wise data also follow the district patterns of higher percentages of public facilities offering child care related services. This is true for Jalna taluka as well.

The average distances to referred facilities were higher in the case of public facilities than for private facilities for diarrhoea and ARI, but considerably lower for immunization. For the district as a whole as well as for both public as well as private facilities, the average distances for immunization were the lowest, indicating the widespread presence of such services, especially in the public sector. The taluka wise data on referral distances show that often, in both public and private facilities in talukas of the district, referrals with regards to childcare do not take place. Further, mostly it is immunization that records the lowest average distance to referred facilities.

As seen in earlier sections, the private sector registers higher volumes of patients for diarrhoea and ARI, though the average case load per facility is higher for public facilities in both the cases. In the case of child immunization, however, the public sector is the dominant player in terms of absolute numbers as well. This is in keeping with the findings of household surveys that indicate the predominant role of the public sector in child immunization in the country. The Rapid Household Survey of the Reproductive and Child Health Project for Jalna district shows that in both rural and urban areas of the district, public facilities (government hospital, PHC, CHC, sub center and the ANM) were the dominant source of immunization, accounting for about three quarters of the last immunization for which information was taken (CORT, 2000).

### **Other National Health Programmes**

**Tuberculosis:** For the district as a whole, more than 80% of the public facilities take in new TB cases as well as have TB patients on their rolls. In contrast, less than 20% of the private facilities provide services for tuberculosis. Such a public sector edge is repeated across all talukas of the district with some talukas recording *all* their public facilities providing such services. The average referral distances for TB services are lower for public facilities than for private facilities for the district as a whole as well as the individual talukas (excepting Badnapur). For the district

as a whole, the private sector sees higher TB caseloads than the public sector, though the averages of TB caseloads (both new ones as well as those on the rolls) per facility are higher for the public sector. Interestingly, however, many of the talukas register higher TB caseloads in their public facilities in comparison to private facilities.

**Malaria:** Services for malaria are available in 81.48% of the public facilities and 66.74% of the private facilities in the district. With the exception of Mantha and Partur talukas, greater proportions of public facilities provide such services in comparison to private facilities in the other talukas. The average referral distance for malaria cases is considerably low for Jalna district as a whole, being 1.41 kms. For individual talukas also, the average referral distances are very low for malaria (*often* being within 1 km), with the exception of Ghansawangi which records an aberrant 13.67 km. Unlike the services seen earlier, in the case of malaria, the private sector in *some* talukas of the district may be registering higher case loads and higher averages per facility as well. For the district as a whole, though, the earlier pattern of lower caseloads in the public sector but higher averages per public facility continues.

**Leprosy:** For the district as a whole, about three quarters (75.93%) of the public facilities provide services for leprosy compared to less than 10% (7.73%) of the facilities in the private sector. Such sharp differentials between the two sectors in the provision of leprosy services is replicated in all the talukas of the district. There are considerably fewer referrals for leprosy from public facilities in the district as well as the talukas. For the district as a whole as well as *most* talukas, the public sector sees higher caseloads for leprosy and higher averages per facility in comparison to the private sector.

**HIV/AIDS:** The percentage of total facilities in Jalna providing services for HIV/AIDS is very low (9.42%). 11.11% of the public facilities and 9.23% of the private facilities provide services for HIV/AIDS in the district. Services for HIV/AIDS may not be available in either or both the sectors in some talukas of the district (Badnapur and Jaffrabad). The average distance to referral destinations for HIV/AIDS is higher for public facilities (13.27kms) than private facilities (9.52 kms) for the district. *Most* talukas also register higher average referral distances for public facilities in comparison to the private facilities. For the district as a whole, the average caseload per public facility for HIV/AIDS is 0.48 and that for the private facility is 0.23. There have been no diagnosed cases of HIV/AIDS for *some* talukas of the district in the month prior to the study.

**Eyecare/ Cataract Surgery:** Less than 10% (9.62%) of the total facilities in Jalna provide eyecare. 25.93% of the public facilities and 7.73% of the private facilities in the district provide such services. Excepting Jaffrabad taluka, in all the other talukas of the district, greater proportions of the public sector provide eyecare services than the private sector. For the district as a whole, the average referral distances are higher for public facilities (24.30kms) than the private sector (15.30kms). Referral distances from public facilities are generally higher across the talukas, with some exceptions. Of the National Health Programmes in the district, the referral distances for eyecare are among the *highest*. The private sector records higher caseloads in eyecare in the district, though the average caseload per facility is higher for the public sector in the district as a whole. In individual talukas of the district, the public sector might be registering higher caseloads as well as higher averages for eyecare services.

**Table 10: National Health programmes in Jalna district**

Services	Medical care provided			Average referral distance (in kms)			Average no. of Cases per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	14.81	6.01	6.92	16.92	14.56	14.79	1.50 (81)	1.01 (472)	1.06 (553)
Deliveries	68.52	21.46	26.35	7.62	11.61	11.44	18.69 (1009)	2.42 (1129)	4.11 (2138)
Caesarean sections	1.85	5.36	5.00	24.50	16.10	17.00	0.15 (8)	0.21 (96)	0.20 (104)
Hysterectomy	1.85	5.36	5.00	19.35	12.30	13.06	0.35 (19)	0.11 (52)	0.14 (71)
Male sterilization	24.07	3.43	5.58	5.83	3.45	3.65	0.41 (22)	0.02 (7)	0.06 (29)
Female sterilization	55.56	6.44	11.54	8.49	4.47	4.68	9.15 (494)	0.27 (124)	1.19 (618)
<b>Child Care</b>									
Diarrhoea	88.89	69.53	71.54	10.00	5.91	6.08	45.09 (2435)	29.18 (13600)	30.84 (16035)
ARI	74.07	36.91	40.77	11.50	8.80	8.92	37.74 (2038)	20.94 (9756)	22.68 (11794)
Immunization	74.07	11.37	17.88	0.15	5.88	5.69	239.43 (12929)	10.17 (4739)	33.98 (17668)
<b>Other National Programmes</b>									
New TB Cases	83.33	18.88	25.58	3.33	9.47	9.33	4.33 (234)	0.79 (368)	1.16 (602)
Total TB cases on rolls	81.48	15.24	22.12	2.90	8.86	8.71	20.33 (1098)	2.41 (1122)	4.27 (2220)
Malaria	81.48	66.74	68.27	0.00	1.50	1.41	83.39 (4503)	14.33 (6677)	21.50 (11180)
Leprosy	75.93	7.73	14.81	1.23	4.37	4.28	7.31 (395)	0.24 (112)	0.98 (507)
HIV/AIDS	11.11	9.23	9.42	13.27	9.52	9.91	0.48 (26)	0.23 (107)	0.26 (133)
Eye Care/ Cataract Surgery	25.93	7.73	9.62	24.30	15.30	16.07	9.98 (539)	9.30 (4332)	9.37 (4871)

*Note:* Figures in parentheses denote total caseload in the facility in the month prior to the study.

### Non-communicable Diseases and Specialist Services

Table 11 gives details about the provision of facilities, average referral distance and caseloads for the various non communicable and specialist services in Jalna district. It also contains information on surgery and emergency services in the district. Taluka wise information on the same is appended in Annexure IX.

**Cardiology:** For the district as a whole, 5% of the facilities (both public and private) provide services for *acute myocardial infarction*. A total of two public facilities and 24 private facilities provide such services in the entire district. Interestingly, the public sector in Jalna taluka does not provide services for acute myocardial infarction. For *coronary angiography*, a total of ten facilities (one public facility and nine private facilities) provide such services in the district. As many as four talukas of the district do not have services for coronary angiography.

The average referral distance for both acute myocardial infarction as well as coronary angiography is approximately 22 kilometres for the district as a whole. Expectedly, Jalna taluka has the lowest average referral distances with below 10 kilometres for both the services. But the average referral distances from other talukas often go beyond 30 kilometres for both types of cardiac conditions.

All the cases of acute myocardial infarction and coronary angiography in the month preceding the study were handled by the private sector in the district, and majorly by the private facilities in Jalna taluka.

**Hypertension:** Services for hypertension are available in 40.74% of the public facilities and 31.33% of the private facilities in the entire district. Across the talukas between a quarter to one third of all facilities (both public and private) provide such services. Consistently (excepting in Partur taluka), higher proportion of the public facilities provide services for hypertension than private facilities in the different talukas of the district.

For the district as a whole, the average referral distances for hypertension was 26.94 kilometres for public facilities and 17.93 kilometres for private facilities. For individual talukas excepting Jalna taluka, many a time the figures go beyond 30 kilometres.

Compared to the public sector, the private sector in the district records higher caseload as well as higher averages per facility for hypertension. The private sector continues to record higher caseloads for hypertension for all talukas of the district, though the average caseload per facility may be higher for the public facilities in some talukas (e.g., Ambad, Bhokardan, Jaffrabad)

**Asthma and COPD:** Services for asthma and COPD are available in more than half of all the facilities in the district. 62.96% of the public facilities and 51.07% of the private facilities offer such services. Across the individual talukas, more than 40% of all facilities provide such services. In fact, in talukas like Bhokardan and Mantha, more than 70% of the total facilities offer services for asthma and COPD.

For the district, average referral distances for asthma and COPD are 19.85 kilometres for public facilities and 13.14 kilometres for private facilities. For most talukas (excepting Bhokardan, Ghansawangi and Jaffrabad), the corresponding figures are within 20 kilometres.

In the month preceding the study, the private sector in the district handled more than ten times the caseload recorded by the public sector for asthma and COPD, the figures being 3509 and 300 for the two sectors respectively. The private sector continues to record higher caseloads for asthma and COPD across the talukas of the district as well. Often the average caseload per facility is also higher for the private sector in the different talukas in comparison to that of the public sector.

**Cancer:** *New cases of cancer* are diagnosed in only 6.54% of the total facilities in the district. Three public facilities and 34 private facilities offer such services in the entire district, with the concentration being in Jalna taluka. Services for diagnosis of new cancer cases are very sporadic across the talukas of the district and are often absent (e.g. Badnapur, Bhokardan, Jaffrabad and Mantha). *Services for radiotherapy* are available in only seven facilities in the entire district. *Services for chemotherapy* are available in two facilities (both are private facilities in Jalna taluka) in the whole district.

It was learnt from the field that cases of cancer are usually referred to Jalna town from other parts of the district. In Jalna town, if providers come across such cases, they usually refer these to neighbouring Aurangabad city. For the district as a whole, the average referral distances for new cases of cancer is 36.05 kilometres. For radiotherapy, the average referral distance is 31.74 kilometres and for chemotherapy, it is 29.38 kilometres. The average referral distances for all the three cases is higher for the public facilities in comparison to the private facilities in the district. For the different talukas of the district, (*including Jalna taluka*), the average referral distances for the three conditions is, at most times, more than 20 kilometres.

For all the three conditions, it was the private sector in Jalna taluka that bore the highest caseloads. In fact, for the month preceding the study, no case for any of the three conditions was recorded from either public or private facilities in Badnapur, Bhokardan, Jaffrabad and Mantha talukas.

**Psychiatry:** Psychiatry services are offered in 10.38% of the facilities in the entire district (14.81% of the public facilities and 9.87% of the private facilities). No facilities provide such services in Jaffrabad taluka and the percentage of total facilities providing such services is below 10% in Bhokardan, Ghansawangi and Mantha taluka. It may be mentioned here that providers who offered services for neuroses (minor psychiatric illnesses) often responded as providing psychiatry services and this may distort the figures for psychiatry services in the district. The actual percentages of facilities providing psychiatric services (for neuroses as well as psychoses) may be lesser than what is indicated in the current writeup.

The average referral distance for psychiatry services for the district as a whole is 30.95 kilometres. Taluka wise, excepting in Jalna taluka, the average referral distances exceed 20 kilometres and sometimes go beyond 60 kilometres.

For the district as a whole, as well as the individual talukas (excepting Bhokardan), the private sector handles an overwhelming majority of the psychiatric cases.

**Dental care:** *Services for dental extractions* is provided by 11.73% of the facilities in the district (9.26% of the public facilities and 12.02% of the private facilities provide such services). *Root canal treatment* is offered by a single public facility (the Civil Hospital) and 18 private facilities in the entire district. Dental services are absent in Jaffrabad. Ambad has by far the highest percentage of facilities offering services for *dental extractions* (29.17%). The other talukas have within 14% of their facilities offering services for dental extraction. Services for *root canal treatment* are comparatively rare, with some talukas (Badnapur, Jaffrabad, Mantha) not having a single facility offering such services.

For the district as a whole, the average referral distance was 16.57 kilometres for dental extractions and 14.65 kilometres for root canal treatment. The average referral distance from public facilities was considerably higher than that for private facilities in both the cases. The average referral distances for dental care (dental extractions as well as root canal treatments) was

beyond 25 kilometres for most talukas of the district, excepting Jalna taluka and the proximally situated Badnapur and Ambad talukas.

The private sector in the district handled an overwhelming majority of the cases of dental extractions and *all cases* of root canal treatment in the month prior to the study. It is notable that in most talukas (excepting Ambad and Jalna talukas), it was only the private sector that carried out dental extractions in the preceding month.

**ENT Diseases:** Services for the specified ENT diseases of ear surgery, tonsillectomy and nasal surgery are available in a minority percentage of the facilities in the district. 4.81% of the total facilities in the district provide services for ear surgery; 3.65% provide for tonsillectomy and 1.73% of the facilities offer nasal surgery. Across the talukas of the district, such services are rarely offered by either sector and many talukas report absence of one or more of the specified services.

For the district as a whole, the average referral distance was 22.79 kilometres for ear surgery, 20.30 kilometres for tonsillectomy and 16.54 kilometres for nasal surgery. As in most cases seen earlier, the average referral distances are higher for public facilities than for private facilities. Excepting Jalna taluka where the referral distances for the three types of ENT conditions are within 5 kilometres, for most of the other talukas, they are beyond 30 kilometres.

The private sector registered considerably higher caseloads than the public sector for all the three ENT conditions. Excepting Jalna and Mantha talukas where the public sector carried out a minority of the cases, in all the other six talukas of the district, it was the private sector that recorded cases for the three ENT conditions in the preceding month.

**General Medicine:** About three quarters (74.07%) of the public facilities and 62.66% of the private facilities in the district offer services for general medicine. The taluka wise disaggregation of the data shows that *usually*, across the talukas, higher proportions of public facilities offer such services than the private facilities. For the district as a whole, the average referral distance from public facilities was 10.43 kilometres and it was 3.26 kilometres for private facilities. The average referral distances for individual talukas was mostly within seven kilometers except for Ghansawangi taluka which showed an aberrant 20 kilometres.

In the month prior to the study, a total of 18,234 cases of general medicine were recorded by the public facilities compared to 68,073 cases in the various private facilities of the district. The private sector thus saw almost four times the number of cases than the public sector in the period. However, the average caseload per public facility is considerably higher (337.67) than that of the private sector (146.08) for the district as a whole. The average caseloads per facility is higher for public facilities across the talukas of the district as well, excepting for Jaffrabad and Partur, where they are slightly lower than that for private facilities.

**Orthopaedics:** The four orthopaedic conditions for which information was sought in the interview schedule were: management of open fracture cases; management of closed fracture cases; management of dislocations; and orthopaedic surgery under general anaesthesia. Less than four percent of the total facilities in the district offered services for these four conditions. Across the talukas orthopaedic services are absent in Badnapur, Bhokardan and Mantha talukas and one or more of the services are not offered in most of the other talukas. The average referral distance for all the four types of orthopaedic services was more than 20 kilometres for the district as a whole with the public sector recording higher distances. The average referral distances were beyond 35 kilometres for most talukas of the district. Jalna taluka recorded the lowest averages (within five kilometers) and for Ambad and Badnapur talukas it was within 20 kilometres.

Closed fracture cases accounted for the single largest category among orthopaedic cases. Like most other specialist services we have seen earlier, the orthopaedic caseload was considerably higher in the private facilities of the district in comparison to the public facilities. The average caseload per facility was also higher for the private sector in comparison to that of the public sector. Excepting Jalna and Partur talukas, the public sector in the other six talukas did not have a single case of the above mentioned orthopaedic conditions in July 2004.

**Neurology:** Management of cerebo-vascular accident (CVA) cases is carried out in 19 facilities (3.65%) in all in the district. Coma cases are managed in only six facilities (1.15%) in the district. Expectedly, such services are absent in most talukas of the district and facilities rendering them are majorly located in Jalna taluka. The average referral distance for both the conditions is more than 20 kilometres for the district as a whole and more than 25 kilometres for most talukas of the district. The private sector managed an overwhelming majority of the cases of CVA and all cases of coma in the month preceding the study.

**Dermatology:** Services for sexually transmitted diseases (STD) are offered by 46.30% of the public facilities and 12.66% of the private facilities in the district. Services for STD are available in all talukas of the district and in greater proportions in the public sector. The average referral distance for STD is 13.74 kilometres for the district as a whole (it being 31.69 kilometres for the public facilities and 12.46 kilometres for the private sector). The pattern of comparatively very high referral distances for the public sector is replicated in all the talukas excepting Partur. As seen earlier, the referral distances for Jalna taluka are the lowest among all the talukas in the district being within eight kilometers (for both the sectors). Unlike many other specialities, the public sector in the district does handle considerable amount of the caseload for STD. For the district as a whole, in July 2004, it handled a third of the cases of STD. The public sector in *many* talukas of the district handled approximately the same (or even more) number of STD cases in July 2004.

**Gastroenterology:** No public facility in the district provides services for endoscopy (upper GI and lower GI). 13 private facilities offer services for endoscopy upper GI in the entire district, and 11 of these are located in Jalna taluka alone. Seven private facilities (all located in Jalna taluka) provide services for endoscopy lower GI. The average referral distances for both the conditions is more than 20 kilometres. Most talukas record more than 30 kilometres as the average referral distances for endoscopy (upper GI and lower GI). There were 160 cases of upper GI and ten cases of lower GI in July 2004. Of these, 140 cases of endoscopy upper GI were handled by the private facilities in Jalna and the remaining by those offering such services in Partur taluka. All the ten cases of endoscopy lower GI were handled by the private facilities in Jalna taluka.

**Endocrinology:** Services for adult diabetes are offered by 11.35% of the total facilities in the district and are available (usually by the private sector) in all talukas excepting Jaffrabad. Services for child diabetes are offered by 3.65% of the total facilities in the district and are not available in Bhokardan, Ghansawangi and Jaffrabad talukas. Barring two public facilities in Jalna taluka, no other public facility in the district offers services for child diabetes. The average referral distance for adult diabetes is 19.89 kilometres and it is 15.76 kilometres for child diabetes. (Many providers do not refer child diabetes and this could have depressed the average referral distances for child diabetes). The referral distances are more than 20 kilometres for most

talukas of the district. In July 2004, the majority of the cases of adult as well as child diabetes were handled by the private facilities in the district (especially the private sector in Jalna taluka).

**Urology:** The District Civil Hospital is the only public facility in the district that provides services for prostate surgery, kidney/ureter surgery and scopies (but not lithotripsy). Among the private facilities in the district, about 4% (or less) of the facilities provide such services and these are majorly located in Jalna taluka. One or more of these services are usually absent in most talukas of the district. The average referral distance for each of the four services goes beyond 20 kilometres for the district as a whole, and it is higher for the public facilities. In some talukas, the average referral distance may go beyond 40 kilometres. In July 2004, there were 100 cases in all the four urological conditions and these were majorly handled by the private sector in Jalna taluka.

### **Surgery**

For services related to surgery, for both minor as well as major surgeries, for the district as a whole, higher proportion of the facilities in the public sector provide such services than the private sector. About 20% (19.23%) of the total (both public and private) facilities in the district provide services for *minor* surgery (31.48% of the public facilities and 17.81% of the private facilities). Excepting Badnapur taluka where the public sector does not offer services for minor surgery, in all the other talukas of the district, higher proportions of the public facilities provide such services in comparison to those in the private sector.

Services for *major* surgeries are offered by 5.19% of the facilities in the district with 9.26% of the public facilities and 4.72% of the private facilities offering such services. Excepting Jalna taluka, where both the public as well private sector provide services for major surgery, in no other taluka of the district is it available in both the sectors. In fact, in Badnapur and Bhokardan, services for major surgery are not available at all.

For the district as a whole, the average distance to referral destinations are expectedly lower (17.11kms) for minor surgeries than it is for major surgeries (21.32 kms). The referral distances of public facilities are slightly higher than those for private facilities for both minor as well as major surgeries in the district as a whole. However, individual talukas present disparate pictures. For Jalna taluka, the referral distances are the lowest in the district for both minor as well as major surgeries, being within five kilometers in both cases. But for *most* of the other talukas, the referral distances for both minor and major surgeries are more than 20 kilometres.

For the district as a whole, the private sector registers higher caseloads as well as (slightly) higher averages for both minor and major surgeries. Across the talukas of the district also, the private sector registers higher caseloads than the public sector for minor surgeries. The private sector in Jalna taluka handled three quarters of the total minor surgeries carried out in the district in the month prior to the study. Cases of major surgery were infrequently reported from talukas in the district excepting in Jalna taluka where the private sector was the dominant sector.

### **Emergency**

It was widely reported from the field that emergency care is not given in many facilities. Providers, especially in the private sector, often said that they “*neither entertained emergency cases nor treated them*”. Lower level public health facilities also (especially the PHCs) often did not take emergency cases. The stated reluctance in taking emergency cases was on various

accounts of being implicated in legal hassles (especially where the cases are of medico legal nature); the seriousness of the patient that needs higher level care than what could be provided for in the facility and; also the fear of taking in critically ill patients that would increase the fatality rates for the facility.

In most cases, the referral destinations for emergency cases are usually higher level public health facilities like the Rural Hospitals or the District Civil Hospital.

A third (33.33%) of the public health facilities in the district and 13.73% of its private facilities provide emergency care. The total (both public and private) number of facilities providing emergency care for most talukas in the district is often less than ten. For the district as a whole, the average referral distance is 21.11 kms for public facilities and 11.07 kms for private facilities. Excepting Jalna taluka (average referral distance being the lowest in the district at 1.75 kilometres), in five of the seven remaining talukas, the average referral distance for emergency cases is more than 15 kilometres.

More than 70% of the emergency cases in the district were handled by the public sector in the month prior to the study. The average caseload per public facility thus was considerably higher at 21.94 compared to one per private facility in the district as a whole. The taluka wise disaggregation of data shows that public facilities in Jalna taluka handled a majority of the cases. In fact, barring the public sector in Jalna taluka, the average caseload per facility in both the public and the private sector in the remaining talukas of the district was less than six, thereby indicating the unpreparedness/ unwillingness of most facilities in handling emergency cases.

**Table 11: Non communicable diseases and Specialist services in Jalna district**

Services	Medical care provided			Average referral distance			Average no. of Cases per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	3.70	5.15	5.00	31.32	21.43	22.47	0.00 (0)	0.57 (264)	0.51 (264)
Coronary angiography	1.85	1.93	1.92	28.24	21.01	21.76	0.00 (0)	0.08 (38)	0.07 (38)
Hypertension	40.74	31.33	32.31	26.94	17.93	18.75	3.44 (186)	6.47 (3015)	6.16 (3201)
Asthma and COPD	62.96	51.07	52.31	19.85	13.14	13.68	5.56 (300)	7.53 (3509)	7.33 (3809)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	5.56	6.65	6.54	44.76	35.02	36.05	0.06 (3)	0.23 (108)	0.21 (111)
Patients for radiotherapy	3.70	1.07	1.35	34.81	31.39	31.74	0.07 (4)	0.01 (5)	0.02 (9)
Patients for chemotherapy		0.43	0.38	32.69	29.00	29.38	0.00 (0)	0.01 (5)	0.01 (5)
<b>Psychiatric Illness</b>	14.81	9.87	10.38	26.41	31.44	30.95	0.54 (29)	2.88 (1343)	2.64 (1372)
<b>Dental Care</b>									
Dental Extractions	9.26	12.02	11.73	31.50	14.78	16.57	1.11 (60)	4.67 (2176)	4.30 (2236)

Services	Medical care provided			Average referral distance			Average no. of Cases per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
Root canal treatments (patients)	1.85	3.86	3.65	23.12	13.65	14.65	0.00 (0)	1.03 (480)	0.92 (480)
<b>ENT Diseases</b>									
Ear surgery	1.85	5.15	4.81	29.62	21.97	22.79	0.19 (10)	0.50 (233)	0.47 (243)
Tonsillectomy	5.56	3.43	3.65	27.61	19.47	20.30	0.04 (2)	0.42 (194)	0.38 196
Nasal surgery	1.85	1.72	1.73	25.83	15.46	16.54	0.04 (2)	0.03 (12)	0.03 (14)
<b>General Medicine</b>	74.07	62.66	63.85	10.43	3.26	3.79	337.67 (18234)	146.08 (68073)	165.98 (86307)
<b>Orthopaedics</b>									
Open fracture cases managed	1.85	3.43	3.27	29.56	23.54	24.17	0.07 (4)	0.10 (48)	0.10 (52)
Closed fracture cases managed	1.85	3.43	3.27	26.41	22.73	23.12	0.13 (7)	0.82 (380)	0.74 (387)
Dislocations managed	5.56	3.22	3.46	23.99	20.75	21.08	0.06 (3)	0.12 (54)	0.11 (57)
Orthopaedic surgery under GA	1.85	2.58	2.50	26.10	18.80	19.57	0.15 (8)	0.19 (88)	0.18 (96)
<b>Neurology</b>									
New cerebro-vascular accidents (CVA) cases treated	1.85	3.86	3.65	22.38	22.91	22.86	0.04 (2)	0.46 (216)	0.42 (218)
Coma cases managed	0.00	0.00	0.00	20.21	20.36	20.34	0.00 (0)	0.04 (17)	0.03 (17)
<b>Dermatology</b>									
Total STD cases managed	46.30	12.66	16.15	31.69	12.46	13.74	4.37 (236)	0.98 (459)	1.34 (695)
<b>Gastroenterology</b>									
Endoscopy-Upper GI	0.00	2.79	2.50	29.67	23.72	24.35	0.00 (0)	0.34 (160)	0.31 (160)
Endoscopy-Lower GI	0.00	1.50	1.35	25.22	22.51	22.79	0.00 (0)	0.02 (10)	0.02 (10)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	12.96	11.16	11.35	23.45	19.49	19.89	0.35 (19)	1.75 (817)	1.61 (836)
Child diabetics on insulin managed	3.70	3.65	3.65	16.15	15.71	15.76	0.02 (1)	0.05 (23)	0.05 (24)
<b>Urology</b>									
Prostrate surgery	1.85	3.43	3.27	35.07	27.21	28.04	0.00 (0)	0.06 (26)	0.05 26
Kidney/Ureter surgery	1.85	4.29	4.04	33.88	24.94	25.89	0.00 (0)	0.08 (36)	0.07 (36)
Scopies	1.85	2.15	2.12	29.67	22.62	23.36	0.00 (0)	0.08 (35)	0.07 (35)

Services	Medical care provided			Average referral distance			Average no. of Cases per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
Lithotripsy	0.00	1.29	1.15	30.05	20.52	21.52	0.00 (0)	0.01 (3)	0.01 (3)
<b>Surgery</b>									
Minor Surgery	31.48	17.81	19.23	17.62	17.06	17.11	2.17 (117)	3.87 (1804)	3.69 (1921)
Major Surgery	9.26	4.72	5.19	23.86	21.04	21.32	0.57 (31)	0.66 (308)	0.65 (339)
<b>Emergency</b>									
Accidents/Injuries	33.33	13.73	15.77	21.11	11.07	11.90	21.94 (1185)	1.00 (467)	3.18 (1652)

*Note:* Figures in parentheses denote total cases in the facility in the month prior to the study

### Provision of Laboratory Services

The current section looks into the provision of various laboratory services in the district. **Due to incongruities in the total referral distances for laboratory services as given in the output format, the analysis of referral distances is not done in this writeup.** Among all the laboratory services for which information was collected in the interview schedule, **haematology and urine tests are the most widely available in the district.** 14.42% of the total facilities (both public and private) in the district provide services for *haematology*. More than half (55.56%) of the public facilities and about a tenth (9.66%) of the private facilities provide such tests. Tests for haematology are available in the public as well as private facilities in all talukas of the district, though the percentage of the facilities providing such services varies widely across the talukas. In Ambad taluka, all the public facilities provide such services, whereas in talukas like Mantha and Partur less than 40% of the public facilities provide such services. The percentage of private facilities offering haematology tests is usually below 10% of the total number of private facilities in the respective talukas and sometimes goes down to less than 5% in talukas like Ambad, Ghansawangi and Jaffrabad. *Urine tests* are available in 15.19% of the total facilities in the district (55.56% of the public facilities and 10.52% of the private facilities offer such services in the district). Majority of the public facilities across *most* talukas of the district provide services for urine tests. At least five percent of the private facilities in *most* talukas of the district provide services for urine tests.

Services for other types of laboratory services are rarer in the district. Stool tests and biochemistry are offered by about 9% of the total facilities in the district, and are offered in all talukas of the district by either or both the sectors. Services for the other pathological tests of histopathology, microbiology and culture of specimens are offered by less than 5% of the facilities for the district as a whole and one or more of these are most likely to be absent across the different talukas.

Among the imaging diagnostic tests, X-rays are the most widely offered with 7.50% of the total district facilities offering such services. (12.96% of the public facilities and 6.87% of the private

facilities in the district have X-ray facilities). Barring Jalna taluka, it is usually a single public and/or a single private facility that offers X-ray facilities in each of other talukas. ECG is available in 5.38% of the total facilities in the district and, like X-ray, solitary facilities in the different talukas may be offering such services (excepting Jalna taluka). Ultra sonography (static) is offered by a single public facility (District Civil Hospital) and 19 private facilities in the district. The district also has services for ultra sonography (mobile), CT scan, Doppler's, endoscopy and angiography being offered only by a small number of private facilities in Jalna taluka mainly. Services for mammography and MRI are not available in the district at all. Table 12 contains details of the availability of laboratory services and referral distances from public and private facilities in the district. Annexure X gives details about the availability of laboratory services in different talukas of the district.

**Table 12: Laboratory services in Jalna district**

Services	Availability of Lab. Services			Average Distance of referred Lab Facilities		
	% Public	% Private	Total %	Public	Private	Total*
Haematology	55.56	9.66	14.42	12.13	11.16	4989.1
Urine	55.56	10.52	15.19	14.08	10.27	4619
Stool	16.67	8.58	9.42	20.73	9.06	4790.8
Biochemistry	7.41	8.58	8.46	24.08	8.46	4809.7
Histopathology	1.85	3.22	3.08	26.23	9.51	5678.5
Microbiology	5.56	4.51	4.62	26.27	9.15	5411.1
Culture of specimens	1.85	2.79	2.69	20.87	8.55	4978.1
X Rays	12.96	6.87	7.5	22.34	11.42	6006.8
ECGs	9.26	4.94	5.38	25.33	10.76	6008.2
Ultra Sonography Static	1.85	4.08	3.85	26.15	11.83	6674.2
Ultra Sonography Mobile	0.00	1.29	1.15	20.72	7.9	4754.3
CT Scan	0.00	0.21	0.19	34	18.06	10231.7
MRI	0.00	0.00	0.00	29.26	16.16	9111.2
Mammography	0.00	0.00	0.00	25.56	11.63	6801.7
Doppler's	0.00	1.29	1.15	25.76	10.5	6221.7
Endoscopy	0.00	0.64	0.58	27.13	10.6	6371.2
Angiography	0.00	0.21	0.19	23.89	11.95	6846.2

Note: \* figures as given in the output format.

### Cost of services

In the interview schedule, the section on costs included questions on the charges levied for various services by the health facilities. These include outpatient charges for the first, second and third visits; the highest and the lowest bed charges; charges for normal delivery, caesarean section and abdominal surgery; and charges for investigative tests like X-ray, ECG, routine blood test and routine urine test. **The results generated by the output format are spurious since the average charges shown are very low and in sharp contrast to the patterns in the field. Hence, the results in the output format have not been used in the present section.** Instead we have tried to circumvent the problem in the following manner. The rates for different services as mentioned by the providers in the **public facilities** are mentioned hereunder. Such rates are uniform across categories of public facilities in the district. For the **private facilities**, we have computed the average costs (where possible) by totaling the sum of charges for a given service (as given in the output format) and dividing it by the number of facilities from which such a response was forthcoming (also given in the output format). *It may be reiterated here that the information on costs of services in the private sector was a sensitive issue in the field and may not have been reported truthfully. The costs cited are most likely to be conservative and therefore should be interpreted with care.*

In all **public** facilities in the district, patients possessing BPL (below poverty line) cards are given free treatment. In the PHCs of the district, the case paper charges for a visit is Rupees Two only. This is valid for a period of seven days. In Rural and district level facilities, the case paper charges for an OPD is Rupees Five only (valid upto seven days). The bed charges for public facilities in the district is Rupees Ten only per day (excepting in PHCs where it is free). For normal delivery, apart from BPL patients who are given free services, the first delivery is carried out free of charge; Rupees Fifty is charged for the second delivery and Rupees 250 is charged from the third delivery onwards. Operations like Caesarean section cost Rupees 160. Clinical investigations carried out for the various National Health Programmes are free of cost. Otherwise, an X-ray screening costs Rupees Thirty and a sonography scan comes for Rupees Hundred in public facilities. Routine blood tests and routine urine tests cost Rupees Thirty each. For information on prices in the **private** facilities of the district, *the costs of only those services are given for which data was amenable for analysis.* The district average for normal delivery is Rs. 484. There are some variations across the talukas with Ghansawangi registering Rs. 250 whereas Jalna taluka averages at Rs. 535. For caesarean sections, the district average is Rs.4846. The average costs for abdominal surgery for the district is Rs. 6300. For the two talukas for which information is available, the average cost of abdominal surgery is Rs.5000 in Ambad taluka and Rs.6700 for Jalna taluka. The average cost of ECG in the district is Rs.107 and like most other services, it costs the highest in Jalna taluka (Rs.136). The cost for X-ray is Rs.108 for the district, though talukas like Mantha and Partur record average costs of Rs.140 while in Ambad it is Rs.99. Routine urine test costs Rs.26 in the district and it ranges from Rs 12 in Bhokardan to Rs. 40 in Partur. The district average for routine blood tests is Rs.69. There are marked variations across the talukas with respect to the costing of routine blood tests. While in Ambad it costs Rs. 130, in Bhokardan it costs about Rs. 17. In Jalna taluka, a routine blood test costs about Rs.87 on an average. Table 13 gives information on cost of select services in the district as a whole. Annexure XI gives costs of select services in different talukas of the district.

**Table 13 : Cost of select services in Jalna district**

<b>Services</b>	<b>Range (in Rs.)</b>	<b>No. of Facilities for which information present</b>	<b>Average charge (Rs)</b>
<b>Normal Delivery charges</b>	500-3000	43	
	>3000	1	
	<500	34	
	0 / Not Available	388	484
<b>C- Section charges</b>	1000-5000	16	
	>5000	9	
	0 / Not Available	441	4846
<b>Abdominal Surgery charges</b>	1000-5000	12	
	>5000	9	
	0 / Not Available	445	6300
<b>ECG charges</b>	10-30		
	>30	26	107
<b>X- Ray charges</b>	30-100	18	
	>100	17	108
<b>Routine Urine test charges</b>	<10	1	
	10-30	26	
	>30	7	26
<b>Routine Blood charges</b>	<10	2	
	10-30	12	
	>30	21	69

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## ANNEXURES

## Annexure I : List of subcentres in Jalna district

Taluka	PHC	No. of sub centres	Names of Sub Centres							
Jalna	Pirpimpalgaon	4	Pirpimpalgaon	Kadvanchi	Gondegaon	Waghrul				
	Sevli	5	Pimpalgaon	Boargaon	Ner	Viregaon	Sondev			
	Dudhana Kalegaon	5	Daregaon	Revgaon	Pachan Wadgaon	Golapangri	Hiswan			
	Manegaon	6	Manegaon	Pirkalayan	Utvad	Baji Umrad	Pathruad	Dukari Pimpri		
	Karla	3	Karla	Bhatepuri	Savargaon Hadap					
Badnapur	Badnapur	5	Bhadnapur	Dhasla	Gaverai	Akola	Dhopteshwar			
	Salegaon	4	Bharadkheda	Najik Pangri	Rajewadi	Hivra Rala				
	Vakulni	4	Roshangaon	Butegaon	Bazar Wahegaon	Dhoksal				
	Dhabhadi	5	Chikhali	Khamgaon	Nandkheda	Kandari B.	Bawane Pangri			
Ambad	Shahagad	5	Shahagad	Patharwala	Sashta Pimpalgaon	Churmapuri	Nalewadi			
	Gondi	5	Gondi	Ghungharde Hadgaon	Pi. Sirsgaon	Ruee	Sukhapuri			
	Wadigondri	4	Doangaon	Shahapur	Tad Hadgaon	Zirpi				
	Jamkhed	6	Jamkhed	Bakshiwadi	Chinchkhed	Kingaon	Rohilagad	Lonar Bhaygaon		
	Dhangar Pimpri	7	Dhangar Pimpri	Matha Pimpalgaon	Dahipuri	Parada	Hastapokhari	Parner	Karjat	
Ghansawangi	Ghansawangi	3	Bodkha	Bolegaon	Dhakephal					
	Kumbhar Pimpalgaon	5	Gunj	Rajatakali	Jamsamartha	Devi Dahegaon	Pimparkhed			
	Thirthapur	4	Banegaon	Ramsgaon	Khadka	Kandari				
	Rani Unchegaon	4	Rani Unchegaon	Talegaon	Guru Pimpri	Panewadi				
	Rajani	5	Rajani	Kandari	Masegaon	Paradgaon	Karadgaon			
Mantha	Dhoksal	6	Naigaon	Khoradsawangi	Dhoksal	Aakni	Pangrigosawi	Pangri B.		
	DahifalKhandare	8	DahifalKhandare	Wazar Sarkate	Talni	Belore	Shivangiri	Uswad	Devthana	Jaipur
	Patoda	6	Tokewadi	Kedhali	Wajola	Widoli	Helas	Mantha		

Taluka	PHC	No. of sub centres	Names of Sub Centres							
Partur	<b>Watur</b>	3	Watur	Edlapur	Rohina					
	<b>Shrishti</b>	5	Shrishti	Singona	Hatadi	Amba	Patoda Mav			
	<b>Aashti</b>	5	Aashti-1	Aashti-2	Loni	Aakoli	Dhamangaon			
	<b>Satona</b>	5	Khandavi	Devla	Usmanpur	Lingsa	Mapegaon			
Bhokar-dan	<b>Jalgaon Sapkal</b>	3	Jalgaon Sapkal	Wadi	Surangali					
	<b>Kedarkhed a</b>	2	Baranjala Sabale	Kumbhari						
	<b>Dhavada</b>	2	Shelud	Aadgaon						
	<b>Hasnabad</b>	5	Hasnabad	Javkheda B.	Pimpalgaon Kolte	Sirasgaon	Talegaon			
	<b>Aanwa</b>	3	Aanwa	Aawhana	Wakadi					
	<b>Rajur</b>	5	Nalni B.	Chandee Dho.	Chincholi	Longaon	Thigalkheda			
	<b>Walsawangi</b>	3	Walsawangi	Paradh	Sawangi A.					
	<b>R. Pimpalgao n</b>	4	R. Pimpalgaon	Danapur	Walsa Wadala	Sipora				
Jaffrabad	<b>Doangaon</b>	5	Doangaon	Nandkheda	Akola	Ambegaon	Kumbharzari			
	<b>Khasgaon</b>	3	Khasgaon	Jafrabad	Hivra Kabali					
	<b>Warud</b>	4	Warud	Sipora	Aada	Bharaj B.				
	<b>Mahora</b>	4	Aasae	Javkheda	Janephal	Boregaon				
<b>Total</b>	<b>38</b>	<b>171</b>								

**Annexure II: System of medicine practiced in talukas of Jalna**

Sr. no	Taluka	% of Public Facilities practising						% of Private Facilities practising					
		Allopathy	Ayurveda	Homoeopathy	Unani	Siddha	Other systems	Allopathy	Ayurveda	Homoeopathy	Unani	Siddha	Other systems
1	AMBAD	100.00	0.00	0.00	0.00	0.00	0.00	86.36	27.27	47.73	4.55	0.00	0.00
2	BADNAPUR	100.00	50.00	0.00	0.00	0.00	0.00	90.48	28.57	61.90	0.00	0.00	4.76
3	BHOKARDAN	100.00	25.00	12.50	0.00	0.00	0.00	86.36	25.00	56.82	2.27	0.00	6.82
4	GHANSAWANGI	100.00	50.00	0.00	0.00	0.00	0.00	91.89	59.46	67.57	2.70	0.00	2.7
5	JAFFERABAD	100.00	0.00	0.00	0.00	0.00	0.00	82.14	50.00	50.00	3.57	0.00	7.14
6	JALNA	88.24	0.00	0.00	5.88	0.00	0.00	82.67	22.77	26.24	1.49	0.00	3.47
7	MANTHA	100.00	25.00	0.00	0.00	0.00	0.00	75.00	38.89	61.11	0.00	0.00	2.78
8	PARTUR	100.00	60.00	0.00	0.00	0.00	0.00	92.59	50.00	53.70	0.00	0.00	5.56
	<b>JALNA DIST.</b>	<b>96.30</b>	<b>20.37</b>	<b>1.85</b>	<b>1.85</b>	<b>0.00</b>	<b>0.00</b>	<b>84.98</b>	<b>32.62</b>	<b>43.35</b>	<b>1.72</b>	<b>0.00</b>	<b>3.86</b>

**Annexure III: Year of establishment of health facilities in talukas of Jalna**

Talukas	Period of establishment	No. of Public facilities established	No. of Private facilities established	Total facilities established
AMBAD	Pre 1960		1	1
	1960 to 1979		2	2
	1980 to 2004	4	41	45
BADNAPUR	0/ Not Available	1		1
	1960 to 1979	1	1	2
	1980 to 2004	4	20	24
BHOKARDAN	0/ Not Available	1		1
	1960 to 1979	1	3	4
	1980 to 2004	6	41	47
GHANSAWANGI	1960 to 1979	1	5	6
	1980 to 2004	3	32	35
JAFFERABAD	1960 to 1979		4	4
	1980 to 2004	6	24	30
JALNA	0/ Not Available	1		1
	Pre 1960	1	4	5
	1960 to 1979	3	24	27
	1980 to 2004	12	174	186
MANTHA	0/ Not Available	1		1
	1960 to 1979		7	7
	1980 to 2004	3	29	32
PARTUR	0/ Not Available		1	1
	1960 to 1979		5	5
	1980 to 2004	5	48	53

**Annexure IV: Size of health facilities in Jalna district**

Sr. no	Taluka	Not available		% less than 1000 sq.ft		% between 1000-10000 sq.ft		% more than 10000 sq.ft	
		Public	Private	Public	Private	Public	Private	Public	Private
1	AMBAD	25.00	0.00	25.00	65.91	25.00	31.82	25.00	2.27
2	BADNAPUR	66.67	0.00	16.67	90.48	0.00	9.52	16.67	0.00
3	BHOKARDAN	0.00	2.27	12.50	90.91	62.50	6.82	25.00	0.00
4	GHANSAWANGI	50.00	2.70	0.00	83.78	50.00	10.81	0.00	2.70
5	JAFFERABAD	66.67	0.00	0.00	89.29	16.67	10.71	16.67	0.00
6	JALNA	29.41	1.98	11.76	60.89	47.06	34.65	11.76	2.48
7	MANTHA	50.00	0.00	0.00	83.33	25.00	16.67	25.00	0.00
8	PARTUR	40.00	1.85	0.00	92.59	60.00	5.56	0.00	0.00
	<b>JALNA DIST.</b>	<b>37.04</b>	<b>1.50</b>	<b>9.26</b>	<b>74.46</b>	<b>38.89</b>	<b>22.53</b>	<b>14.81</b>	<b>1.50</b>

**Annexure V: Ownership of Premises of health facilities in Jalna district**

Sr. no	Taluka	% Owned		% Rented		% Leased		% Others	
		Public	Private	Public	Private	Public	Private	Public	Private
1	AMBAD	75.00	43.18	0.00	54.55	0.00	2.27	25.00	0.00
2	BADNAPUR	66.67	42.86	0.00	57.14	0.00	0.00	33.33	0.00
3	BHOKARDAN	100.00	45.45	0.00	52.27	0.00	0.00	0.00	2.27
4	GHANSAWANGI	100.00	51.35	0.00	43.24	0.00	0.00	0.00	5.41
5	JAFFERABAD	66.67	50.00	0.00	50.00	0.00	0.00	33.33	0.00
6	JALNA	58.82	65.84	5.88	32.67	0.00	0.99	35.29	0.50
7	MANTHA	75.00	44.44	0.00	52.78	0.00	0.00	25.00	2.78
8	PARTUR	100.00	31.48	0.00	68.52	0.00	0.00	0.00	0.00
	<b>JALNA DIST.</b>	<b>75.93</b>	<b>53.00</b>	<b>1.85</b>	<b>45.28</b>	<b>0.00</b>	<b>0.64</b>	<b>22.22</b>	<b>1.07</b>

**Annexure VI: Infrastructure of health facilities in talukas of Jalna**

Talukas	% of Facilities having Piped water		% of Facilities having water supplied from Bore wells/Hand Pumps		% of Facilities having water supplied from Open Wells		% of Facilities having water supplied from Other Sources	
	Public	Private	Public	Private	Public	Private	Public	Private
AMBAD	0.00	59.09	100	29.55	0.00	9.09	0.00	9.09
BADNAPUR	33.33	47.62	33.33	47.62	0.00	4.76	66.67	19.05
BHOKARDAN	75.00	77.27	0.00	9.09	12.5	6.82	0.00	11.36
GHANSAWANGI	75.00	32.43	25.00	54.05	25.00	18.92	0.00	5.41
JAFFERABAD	83.33	64.29	16.67	17.86	0.00	10.71	0.00	7.14
JALNA	64.71	56.44	29.41	55.94	5.88	4.95	17.65	10.89
MANTHA	25.00	61.11	50.00	33.33	0.00	11.11	0.00	8.33
PARTUR	40.00	57.41	60.00	55.56	0.00	1.85	20.00	3.70

**(contd...) Infrastructure of health facilities in talukas of Jalna**

Talukas	% Water Purchased by Facilities				% with Electricity Connections		% with Generators		% with Telephone		% with access to Motorable Roads		% with working vehicles	
	Part Requirement		Full Requirement		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
	Public	Private	Public	Private										
AMBAD	25.00	13.64	25.00	22.73	75.00	100.00	100.00	9.09	75.00	84.09	100.00	88.64	75.00	15.91
BADNAPUR	50.00	9.52	0.00	14.29	66.67	95.24	66.67	19.05	33.33	80.95	50.00	100.00	33.33	4.76
BHOKARDAN	12.50	4.55	0.00	75.00	100.00	97.73	100.00	22.73	37.5	81.82	100.00	90.91	75.00	11.36
GHANSAWANGI	0.00	5.41	0.00	32.43	100.00	97.30	100.00	13.51	25.00	81.08	100.00	83.78	75.00	16.22
JAFFERABAD	50.00	53.57	0.00	0.00	83.33	100.00	50.00	3.57	50.00	78.57	100.00	96.43	16.67	0.00
JALNA	0.00	15.84	5.88	28.22	94.12	99.5	41.18	38.61	41.18	90.10	82.35	98.51	47.06	10.4
MANTHA	0.00	19.44	25.00	11.11	75.00	100	100.00	13.89	50.00	75.00	100.00	83.33	100.00	0.00
PARTUR	20.00	0.00	20.00	40.74	100.00	96.3	100.00	12.96	40.00	64.81	80.00	90.74	20.00	5.56

**Annexure VII: Availability of equipments in health facilities in talukas of Jalna**

Equipment	AMBAD			BADNAPUR			BHOKARDAN			GHANSAWANGI			JAFFERABAD		
	Pub.	Pvt.	Total	Pub.	Pvt.	Total	Pub.	Pvt.	Total	Pub.	Pvt.	Total	Pub.	Pvt.	Total
ECG Machine	25.00	9.09	10.42	0.00	0.00	0.00	0.00	2.27	1.92	0.00	0.00	0.00	16.67	0.00	2.94
X Ray Machine	25.00	13.64	14.58	0.00	0.00	0.00	12.50	0.00	1.92	0.00	0.00	0.00	16.67	0.00	2.94
Ultrasound Machine	0.00	6.82	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Instruments for laparoscopy	25.00	0.00	2.08	0.00	0.00	0.00	0.00	0.00	0.00	25.00	0.00	2.44	0.00	0.00	0.00
Dental Chair	0.00	6.82	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Born Resuscitator	50.00	4.55	8.33	0.00	0.00	0.00	0.00	0.00	0.00	25.00	0.00	2.44	16.67	0.00	2.94
Ventilator	0.00	2.27	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	2.44	0.00	0.00	0.00
Autoclave for Sterilization	100.00	11.36	18.75	50.00	4.76	14.81	100.00	2.27	17.31	100.00	5.41	14.63	50.00	3.57	11.76
Refrigerator for vaccine	75.00	11.36	16.67	66.67	4.76	18.52	100.00	6.82	21.15	100.00	5.41	14.63	83.33	0.00	14.71
Refrigerator for general purpose	25.00	18.18	18.75	33.33	9.52	14.81	75.00	22.73	30.77	25.00	13.51	14.63	33.33	3.57	8.82
Boyles apparatus	25.00	6.82	8.33	0.00	4.76	3.70	12.50	0.00	1.92	25.00	5.41	7.32	16.67	0.00	2.94
Endoscopes	0.00	2.27	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foetal Monitor	25.00	4.55	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	2.44	0.00	3.57	2.94
Testing of Visual Acuity	0.00	0.00	0.00	0.00	0.00	0.00	12.50	0.00	1.92	0.00	0.00	0.00	0.00	0.00	0.00
Incubator for newborn	0.00	2.27	2.08	0.00	0.00	0.00	12.50	4.55	5.77	0.00	0.00	0.00	0.00	0.00	0.00
Labour Table	100.00	13.64	20.83	83.33	19.05	33.33	87.50	9.09	21.15	100.00	5.41	14.63	66.67	10.71	20.59
Operation Table	50.00	4.55	8.33	33.33	4.76	11.11	75.00	0.00	11.54	100.00	0.00	9.76	50.00	0.00	8.82
Ambubag	75.00	6.82	12.50	16.67	9.52	11.11	50.00	0.00	7.69	50.00	0.00	4.88	16.67	0.00	2.94
MRI Machine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	2.44	0.00	0.00	0.00
Doppler's Machine	0.00	2.27	2.08	0.00	4.76	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**(Contd...) Availability of equipments in health facilities in talukas of Jalna**

Equipment	JALNA			MANTHA			PARTUR			DISTRICT		
	Pub.	Pvt.	Total	Pub.	Pvt.	Total	Pub.	Pvt.	Total	Pub.	Pvt.	Total
ECG Machine	11.76	11.39	11.42	25.00	0.00	2.50	0.00	5.56	5.08	<b>9.26</b>	<b>6.65</b>	<b>6.92</b>
X Ray Machine	17.65	17.33	17.35	25.00	2.78	5.00	20.00	7.41	8.47	<b>14.81</b>	<b>9.87</b>	<b>10.38</b>
Ultrasound Machine	5.88	10.89	10.50	0.00	0.00	0.00	0.00	0.00	0.00	<b>1.85</b>	<b>5.36</b>	<b>5.00</b>
Instruments for laparoscopy	11.76	5.45	5.94	0.00	0.00	0.00	0.00	0.00	0.00	<b>7.41</b>	<b>2.36</b>	<b>2.88</b>
Dental Chair	5.88	4.95	5.02	0.00	2.78	2.50	0.00	1.85	1.69	<b>1.85</b>	<b>3.22</b>	<b>3.08</b>
New Born Resuscitator	11.76	9.41	9.59	25.00	0.00	2.50	40.00	5.56	8.47	<b>16.67</b>	<b>5.15</b>	<b>6.35</b>
Ventilator	17.65	6.44	7.31	0.00	0.00	0.00	20.00	3.70	5.08	<b>7.41</b>	<b>3.65</b>	<b>4.04</b>
Autoclave for Sterilization	70.59	33.17	36.07	50.00	5.56	10.00	80.00	9.26	15.25	<b>74.07</b>	<b>18.03</b>	<b>23.85</b>
Refrigerator for vaccine	47.06	25.74	27.40	75.00	11.11	17.50	100.00	14.81	22.03	<b>74.07</b>	<b>16.09</b>	<b>22.12</b>
Refrigerator for general purpose	58.82	34.16	36.07	25.00	13.89	15.00	60.00	14.81	18.64	<b>48.15</b>	<b>23.18</b>	<b>25.77</b>
Boyles apparatus	11.76	15.84	15.53	25.00	0.00	2.50	40.00	3.70	6.78	<b>16.67</b>	<b>8.58</b>	<b>9.42</b>
Endoscopes	0.00	5.45	5.02	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	<b>2.58</b>	<b>2.31</b>
Foetal Monitor	5.88	8.42	8.22	25.00	0.00	2.50	0.00	5.56	5.08	<b>5.56</b>	<b>5.15</b>	<b>5.19</b>
Testing of Visual Acuity	0.00	1.98	1.83	0.00	2.78	2.50	20.00	0.00	1.69	<b>3.7</b>	<b>1.07</b>	<b>1.35</b>
Incubator for newborn	5.88	6.93	6.85	0.00	0.00	0.00	20.00	3.70	5.08	<b>5.56</b>	<b>4.08</b>	<b>4.23</b>
Labour Table	47.06	18.32	20.55	75.00	16.67	22.50	80.00	12.96	18.64	<b>72.22</b>	<b>14.81</b>	<b>20.77</b>
Operation Table	41.18	27.23	28.31	50.00	0.00	5.00	80.00	3.70	10.17	<b>55.56</b>	<b>12.88</b>	<b>17.31</b>
Ambubag	17.65	26.73	26.03	50.00	0.00	5.00	80.00	5.56	11.86	<b>37.04</b>	<b>13.3</b>	<b>15.77</b>
MRI Machine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.21</b>	<b>0.19</b>
Doppler's Machine	0.00	2.48	2.28	0.00	0.00	0.00	0.00	1.85	1.69	0.00	<b>1.72</b>	<b>1.54</b>

### Annexure VIII: National Health Programmes in talukas of Jalna

#### AMBAD

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Case loads per facility		
	% Public facility	% pvt. facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	25.00	4.55	6.25	35.00	13.56	14.99	0.75 (3)	0.05 (2)	0.10 (5)
Deliveries	100.00	18.18	25	0.00	13.03	13.03	32.5 (130)	1.23 (54)	3.83 (184)
Caesarean sections	0.00	2.27	2.08	28.75	12.63	14.00	0.00 (0)	0.02 (1)	0.02 (1)
Hysterectomy	0.00	2.27	2.08	23.75	7.02	8.45	0.00 (0)	0.02 (1)	0.02 (1)
Male Sterlizations	25.00	2.27	4.17	28.33	1.16	2.93	0.00 (0)	0.00 (0)	0.00 (0)
Female Sterlizations	75.00	4.55	10.42	35.00	2.67	3.42	18.00 (72)	0.55 (24)	2.00 (96)
<b>Child Care</b>									
Diarrhoea	100.00	68.18	70.83	0.00	7.00	7.00	38.5 (154)	18.43 (811)	20.10 (965)
ARI	100.00	27.27	33.33	0.00	10.84	10.84	9.5 (38)	4.68 (206)	5.08 (244)
Immunization	100.00	6.82	14.58	0.00	5.93	5.93	103.75 (415)	0.27 (12)	8.90 (427)
<b>Other National Programmes</b>									
New TB Cases	100.00	20.45	27.08	0.00	8.22	8.22	3.75 (15)	0.48 (21)	0.75 (36)
Total TB cases on rolls	100.00	13.64	20.83	0.00	3.57	3.57	10.5 (42)	0.59 (26)	1.42 (68)
Malaria	100.00	70.45	72.92	0.00	0.85	0.85	1.5 (6)	11.82 (520)	10.96 (526)
Leprosy	100.00	15.91	22.92	0.00	1.75	1.75	3.75 (15)	0.43 (19)	0.71 (34)
HIV/AIDS	25.00	11.36	12.5	6.67	6.69	6.69	0 (0)	0.32 (14)	0.29 (14)
Eye Care/ Cataract Surgery	25.00	2.27	4.17	35.67	19.48	20.53	11.25 (45)	0.11 (5)	1.04 (50)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

**BADNAPUR**

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Cases per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	0.00	4.76	3.70	15.33	9.60	10.92	0.75 (3)	0.05 (2)	0.10 (5)
Deliveries	66.67	19.05	29.63	0.03	9.79	8.77	32.50 130	1.23 (54)	3.83 (184)
Caesarean sections	0.00	0.00	0.00	26.50	10.07	13.72	0.00 (0)	0.02 (1)	0.02 (1)
Hysterectomy	0.00	4.76	3.70	13.17	9.58	10.40	0.00 (0)	0.02 (1)	0.02 (1)
Male Sterlizations	33.33	0.00	7.41	13.25	2.05	3.84	0.00 (0)	0.00 (0)	0.00 (0)
Female Sterlizations	50.00	0.00	11.11	15.02	5.17	6.40	18.00 (72)	0.55 (24)	2.00 (96)
<b>Child care</b>									
Diarrhoea	83.33	85.71	85.19	0.00	0.17	0.13	38.50 (154)	18.43 (811)	20.10 (965)
ARI	83.33	66.67	70.37	0.00	2.14	1.88	9.50 (38)	4.68 (206)	5.08 (244)
Immunization	66.67	4.76	18.52	0.03	2.33	2.12	103.75 (415)	0.27 (12)	8.90 (427)
<b>Other National Programmes</b>									
New TB Cases	66.67	4.76	18.52	14.00	6.95	7.59	3.75 (15)	0.48 (21)	0.75 (36)
Total TB cases on rolls	66.67	4.76	18.52	14.00	6.95	7.59	10.50 (42)	0.59 (26)	1.42 (68)
Malaria	83.33	76.19	77.78	0.00	0.01	0.01	1.50 (6)	11.82 (520)	10.96 (526)
Leprosy	83.33	0.00	18.52	0.00	4.48	4.27	3.75 (15)	0.43 (19)	0.71 (34)
HIV/AIDS	0.00	0.00	0.00	17.00	4.60	7.35	0.00 (0)	0.32 (14)	0.29 (14)
Eye Care/ Cataract Surgery	16.67	14.29	14.81	22.80	15.14	16.80	11.25 (45)	0.11 (5)	1.04 (50)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

**BHOKARDAN**

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Cases per facility		
	% public facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	12.50	0.00	1.92	17.86	29.01	27.48	0.00 (0)	0.00 (0)	0.00 (0)
Deliveries	75.00	36.36	42.31	22.50	24.07	23.97	10.25 (82)	1.18 (52)	2.58 (134)
Caesarean sections	0.00	0.00	0.00	33.75	35.72	35.41	0.00 (0)	0.00 (0)	0.00 (0)
Hysterectomy	0.00	0.00	0.00	26.88	27.03	27.01	0.00 (0)	0.00 (0)	0.00 (0)
Male Sterilizations	37.50	0.00	5.77	3.00	1.83	1.95	0.13 (1)	0.00 (0)	0.02 (1)
Female Sterilizations	75.00	0.00	11.54	7.50	2.01	2.25	7.00 (56)	0.00 (0)	1.08 (56)
<b>Child care</b>									
Diarrhoea	100.00	70.45	75.00	0.00	16.50	16.50	56.38 (451)	19.14 (842)	24.87 (1293)
ARI	87.50	34.09	42.31	0.00	21.21	20.50	6.88 (55)	15.32 (674)	14.02 (729)
Immunization	100.00	6.82	21.15	0.00	12.71	12.71	247.25 (1978)	2.36 (104)	40.04 (2082)
<b>Other National Programmes</b>									
New TB Cases	100.00	13.64	26.92	0.00	15.61	15.61	4.38 (35)	0.25 (11)	0.88 (46)
Total TB cases on rolls	100.00	13.64	26.92	0.00	16.34	16.34	20.75 (166)	0.30 (13)	3.44 (179)
Malaria	75.00	72.73	73.08	0.00	1.71	1.46	219.13 (1753)	22.25 (979)	52.54 (2732)
Leprosy	87.50	4.55	17.31	0.00	5.30	5.17	3.75 (30)	0.02 (1)	0.60 (31)
HIV/AIDS	12.50	6.82	7.69	37.29	6.11	10.66	0.00 (0)	0.07 (3)	0.06 (3)
Eye Care/ Cataract Surgery	25.00	6.82	9.62	28.50	20.94	21.90	10.00 (80)	0.55 (24)	2.00 (104)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

## GHANSAWANGI

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Case loads per facility		
	% Public facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	50.00	0.00	4.88	27.50	36.49	36.03	11.25 (45)	0.00 (0)	1.10 (45)
Deliveries	75.00	18.92	24.39	30.00	26.73	26.84	6.25 (25)	0.65 (24)	1.20 (49)
Caesarean sections	0.00	0.00	0.00	28.75	35.95	35.24	0.00 (0)	0.00 (0)	0.00 (0)
Hysterectomy	0.00	0.00	0.00	35.00	29.89	30.39	0.00 (0)	0.00 (0)	0.00 (0)
Male Sterlizations	25.00	0.00	2.44	0.00	9.62	8.90	0.00 (0)	0.00 (0)	0.00 (0)
Female Sterlizations	75.00	0.00	7.32	20.00	9.77	10.04	13.25 (53)	0.00 (0)	1.29 (53)
<b>Child care</b>									
Diarrhoea	100.00	72.97	75.61	0.00	27.30	27.30	39.50 (158)	39.05 (1445)	39.10 (1603)
ARI	50.00	27.03	29.27	15.00	24.56	23.90	8.25 (33)	18.24 (675)	17.27 (708)
Immunization	100.00	5.41	14.63	0.00	15.10	15.10	442.25 (1769)	0.30 (11)	43.41 (1780)
<b>Other National Programmes</b>									
New TB Cases	100.00	18.92	26.83	0.00	29.92	29.92	2.25 (9)	0.43 (16)	0.61 (25)
Total TB cases on rolls	100.00	2.70	12.20	0.00	26.74	26.74	32.00 (128)	0.16 (6)	3.27 (134)
Malaria	100.00	75.68	78.05	0.00	13.67	13.67	10.75 (43)	9.08 (336)	9.24 (379)
Leprosy	100.00	5.41	14.63	0.00	14.93	14.93	5.75 (23)	0.05 (2)	0.61 (25)
HIV/AIDS	25.00	2.70	4.88	20.00	12.33	12.92	0.00 (0)	0.00 (0)	0.00 (0)
Eye Care/ Cataract Surgery	50.00	5.41	9.76	12.50	33.90	32.74	0.00 (0)	0.54 (20)	0.49 (20)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

**JAFFRABAD**

Services	Medical care provided			Average referral distance (in Kms)			Average no. of Cases per facility		
	% public facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	0.00	0.00	0.00	9.17	23.02	20.58	0.00 (0)	0.71 (20)	0.59 (20)
Deliveries	100.00	10.71	26.47	0.00	24.60	24.60	20.50 (123)	0.71 (20)	4.21 (143)
Caesarean sections	0.00	0.00	0.00	23.33	20.85	21.29	0.00 (0)	0.00 (0)	0.00 (0)
Hysterectomy	0.00	0.00	0.00	23.33	16.57	17.76	0.00 (0)	0.00 (0)	0.00 (0)
Male Sterilizations	33.33	3.57	8.82	5.03	4.17	4.28	1.00 (6)	0.18 (5)	0.32 (11)
Female Sterilizations	66.67	7.14	17.65	10.05	8.60	8.70	6.00 (36)	0.14 (4)	1.18 (40)
<b>Child care</b>									
Diarrhoea	83.33	82.14	82.35	0.00	11.00	9.17	86.17 (517)	32.71 (916)	42.15 (1433)
ARI	50.00	46.43	47.06	18.33	12.37	13.36	51.83 (311)	18.57 (520)	24.44 (831)
Immunization	66.67	10.71	20.59	0.00	8.62	7.98	153.50 (921)	18.57 (520)	42.38 (1441)
<b>Other National Programs</b>									
New TB Cases	83.33	3.57	17.65	0.00	10.20	9.84	2.17 (13)	0.11 (3)	0.47 (16)
Total TB cases on rolls	66.67	3.57	14.71	0.00	3.68	3.43	12.33 (74)	0.36 (10)	2.47 (84)
Malaria	83.33	46.43	52.94	0.00	0.59	0.56	66.67 (400)	12.89 (361)	22.38 (761)
Leprosy	83.33	0.00	14.71	0.00	6.19	5.98	4.50 (27)	0.00 (0)	0.79 (27)
HIV/AIDS	16.67	0.00	2.94	0.00	14.36	12.18	0.00 (0)	0.00 (0)	0.00 (0)
Eye Care/ Cataract Surgery	0.00	7.14	5.88	37.00	12.87	17.39	0.00 (0)	1.00 (28)	0.82 (28)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

**JALNA**

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Cases per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	5.88	11.39	10.96	10.22	3.04	3.62	1.29 (22)	1.99 (402)	1.94 (424)
Deliveries	35.29	17.82	19.18	4.95	2.17	2.34	19.82 (337)	3.47 (700)	4.74 (1037)
Caesarean sections	5.88	11.88	11.42	10.66	3.46	4.05	0.47 (8)	0.47 (95)	0.47 (103)
Hysterectomy	5.88	11.39	10.96	10.03	3.29	3.84	1.12 (19)	0.25 (50)	0.32 (69)
Male Sterlizations	23.53	6.93	8.22	2.85	1.43	1.52	0.82 (14)	0.01 (2)	0.07 (16)
Female Sterlizations	29.41	12.87	14.16	3.29	1.65	1.76	6.06 (103)	0.48 (96)	0.91 (199)
<b>Child care</b>									
Diarrhoea	88.24	58.42	60.73	0.00	1.51	1.47	40.88 (695)	30.23 (6107)	31.06 (6802)
ARI	82.35	37.62	41.10		0.04	0.03	80.94 (1376)	27.56 (5567)	31.70 (6943)
Immunization	47.06	14.85	17.35	0.22	1.11	1.07	127.29 (2164)	18.01 (3638)	26.49 (5802)
<b>Other National Programmes</b>									
New TB Cases	64.71	27.23	30.14	0.33	2.93	2.83	7.65 (130)	1.35 (272)	1.84 (402)
Total TB cases on rolls	70.59	23.27	26.94	0.20	2.76	2.68	29.41 (500)	5.11 (1032)	7.00 (1532)
Malaria	82.35	62.38	63.93		0.12	0.11	110.47 (1878)	16.59 (3351)	23.88 (5229)
Leprosy	41.18	11.39	13.70	1.60	2.15	2.12	14.94 (254)	0.23 (47)	1.37 (301)
HIV/AIDS	5.88	13.86	13.24	7.13	4.96	5.14	1.41 (24)	0.28 (57)	0.37 (81)
Eye Care/ Cataract Surgery	23.53	10.89	11.87	10.77	4.35	4.78	18.24 (310)	21.00 (4243)	20.79 (4553)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

## MANTHA

Services	Medical care provided			Average referral distance (in Kms)			Average no. of Case loads per facility		
	% public facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	25.00	0.00	2.50	11.00	14.03	13.80	2.50 (10)	0.00 (0)	0.25 (10)
Deliveries	75.00	30.56	35.00	0.00	16.70	16.06	18.25 (73)	2.44 (88)	4.03 (161)
Caesarean sections	0.00	0.00	0.00	38.25	28.57	29.54	0.00 (0)	0.00 (0)	0.00 (0)
Hysterectomy	0.00	0.00	0.00	20.00	19.98	19.98	0.00 (0)	0.00 (0)	0.00 (0)
Male Sterilizations	0.00	0.00	0.00	3.25	11.86	11.00	0.00 (0)	0.00 (0)	0.00 (0)
Female Sterilizations	50.00	0.00	5.00	6.50	13.53	13.16	23.75 (95)	0.00 (0)	2.38 (95)
<b>Child care</b>									
Diarrhoea	50.00	94.44	90.00	30.00	0.00	15.00	8.00 (32)	33.11 (1192)	30.60 (1224)
ARI	50.00	38.89	40.00	30.00	23.09	23.67	12.50 (50)	21.64 (779)	20.73 (829)
Immunization	75.00	13.89	20.00	0.00	16.21	15.71	67.25 (269)	3.64 (131)	10.00 (400)
<b>Other National Programmes</b>									
New TB Cases	100.00	13.89	22.50	0.00	17.89	17.89	2.00 (8)	0.19 (7)	0.38 (15)
Total TB cases on rolls	100.00	13.89	22.50	0.00	17.71	17.71	14.00 (56)	0.25 (9)	1.63 (65)
Malaria	75.00	83.33	82.50	0.00	1.04	0.89	41.75 (167)	10.42 (375)	13.55 (542)
Leprosy	100.00	0.00	10.00	0.00	3.28	3.28	2.75 (11)	0.00 (0)	0.28 (11)
HIV/AIDS	0.00	0.00	0.00	20.00	15.60	16.04	0.00 (0)	0.00 (0)	0.00 (0)
Eye Care/ Cataract Surgery	25.00	0.00	2.50	31.00	34.94	34.63	7.50 (30)	0.00 (0)	0.75 (30)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

## (contd...) National Health Programmes in the talukas of the district

**PARTUR**

Services	Medical care provided			Average referral distance ( in Kms)			Average no. of Cases per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Reproductive health</b>									
MTPs	40.00	3.70	6.78	50.00	24.95	26.31	0.20 (1)	0.50 (27)	0.47 (28)
Deliveries	100.00	27.78	33.90	0.00	19.14	19.14	24.60 (123)	2.31 (125)	4.20 (248)
Caesarean sections	0.00	0.00	0.00	35.20	22.50	23.58	0.00 (0)	0.00 (0)	0.00 (0)
Hysterectomy	0.00	0.00	0.00	23.20	16.00	16.61	0.00 (0)	0.00 (0)	0.00 (0)
Male Sterilizations	0.00	0.00	0.00	3.20	3.96	3.89	0.00 (0)	0.00 (0)	0.00 (0)
Female Sterilizations	80.00	0.00	6.78	16.00	5.14	5.34	7.20 (36)	0.00 (0)	0.61 (36)
<b>Child care</b>									
Diarrhoea	100.00	79.63	81.36	0.00	6.55	6.55	44.60 (223)	32.54 (1757)	33.56 (1980)
ARI	60.00	33.33	35.59	8.00	6.89	6.95	2.20 (11)	14.63 (790)	13.58 (801)
Immunization	100.00	11.11	18.64	0.00	3.75	3.75	414.40 (2072)	5.94 (321)	40.56 (2393)
<b>Other National Programmes</b>									
New TB Cases	100.00	7.41	15.25	0.00	8.03	8.03	2.60 (13)	0.70 (38)	0.86 (51)
Total TB cases on rolls	80.00	7.41	13.56	0.00	11.29	11.06	10.00 (50)	0.37 (20)	1.19 (70)
Malaria	60.00	64.81	64.41	0.00	2.84	2.57	48.40 (242)	12.06 (651)	15.14 (893)
Leprosy	100.00	3.70	11.86	0.00	5.75	5.75	3.60 (18)	0.80 (43)	1.03 (61)
HIV/AIDS	20.00	11.11	11.86	0.00	23.97	22.13	0.40 (2)	0.61 (33)	0.59 (35)
Eye Care/ Cataract Surgery	60.00	5.56	10.17	50.00	20.60	21.71	12.40 (62)	0.17 (9)	1.20 (71)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

**Annexure IX: Non-Communicable Diseases and Specialist Services in talukas of Jalna  
AMBAD**

Services	Medical care provided			Average referral distance			Average no. of Cases per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	25.00	9.09	10.42	35	17.61	18.83	0.00 (0)	0.64 (28)	0.58 (28)
Coronary angiography	0.00	4.55	4.17	41.25	15.4	17.65	0.00 (0)	0.05 (2)	0.04 (2)
Hypertension	50.00	31.82	33.33	32.50	10.17	11.56	3.50 (14)	1.80 (79)	1.94 (93)
Asthma and COPD	100.00	50.00	54.17	0.00	9.05	9.05	2.50 (10)	5.39 (237)	5.15 (247)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	4.55	4.17	36.25	21.06	22.38	0.00 (0)	0.05 (2)	0.04 (2)
Patients for radiotherapy	0.00	2.27	2.08	36.25	8.77	11.11	0.00 (0)	0.02 (1)	0.02 (1)
Patients for chemotherapy	0.00	0.00	0.00	36.25	10.89	13.00	0.00 (0)	0.00 (0)	0.00 (0)
Psychiatric Illness	50.00	9.09	12.50	57.5	25.51	27.04	2.00 (8)	6.91 (304)	6.50 (312)
<b>Dental Care</b>									
Dental Extractions	25.00	29.55	29.17	31.67	6.03	8.29	2.50 (10)	8.18 (360)	7.71 (370)
Root canal treatments (patients)	0.00	6.82	6.25	36.25	6.44	9.09	0.00 (0)	1.70 (75)	1.56 (75)
<b>ENT Diseases</b>									
Ear surgery	0.00	6.82	6.25	43.75	20.68	22.73	0.00 (0)	0.11 (5)	0.10 (5)
Tonsillectomy	0.00	2.27	2.08	43.75	13.63	16.19	0.00 (0)	0.11 (5)	0.10 (5)
Nasal surgery	0.00	0.00	0.00	43.75	14.66	17.08	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	50.00	59.09	58.33	15.00	0.00	1.50	597 (2388)	101.48 (4465)	142.77 (6853)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	4.55	4.17	42.5	21.07	22.93	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	4.55	4.17	42.5	17.43	19.61	0.00 (0)	0.25 (11)	0.23 (11)
Dislocations managed	0.00	2.27	2.08	42.5	11.21	13.87	0.00 (0)	0.18 (8)	0.17 (8)
Orthopaedic	0.00	2.27	2.08	42.5	8.3	11.21	0.00	0.00	0.00

Services	Medical care provided			Average referral distance			Average no. of Cases per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
surgery under GA							(0)	(0)	(0)
<b>Neurology</b>									
New cerebro-vascular accidents (CVA) cases treated	0.00	9.09	8.33	47.5	16.55	19.36	0.00 (0)	0.09 (4)	0.08 (4)
Coma cases managed	0.00	0.00	0.00	47.5	7.5	10.83	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dermatology</b>									
Total STD cases managed	75.00	15.91	20.83	30	2.36	3.09	6.00 (24)	0.57 (25)	1.02 (49)
<b>Gastroenterology</b>									
Endoscopy-Upper GI	0.00	0.00	0.00	43.75	21.76	23.59	0.00 (0)	0.00 (0)	0.00 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	43.75	21.11	23.00	0 (0)	0 (0)	0 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	25.00	18.18	18.75	48.33	14.6	17.19	0.25 (1)	0.86 (38)	0.81 (39)
Child diabetics on insulin managed	0.00	6.82	6.25	43.75	6.54	9.84	0.00 (0)	0.09 (4)	0.08 (4)
<b>Urology</b>									
Prostrate surgery	0.00	2.27	2.08	36.25	21.84	23.06	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	2.27	2.08	50	13.88	16.96	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	2.27	2.08	36.25	9.00	11.32	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	2.27	2.08	51.25	5.09	9.02	0.00 (0)	0.00 (0)	0.00 (0)
<b>Surgery</b>									
Minor Surgery	75.00	11.36	16.67	35	8.62	9.28	5.00 (20)	0.45 (20)	0.83 (40)
Major Surgery	0.00	2.27	2.08	41.25	16.92	18.99	0.00 (0)	0.05 (2)	0.04 (2)
<b>Emergency</b>									
<b>Accidents/Injuries</b>	75.00	18.18	22.92	0.00	6.89	6.7	2.00 (8)	0.80 (35)	0.90 (43)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
BADNAPUR**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% pub. facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	0.00	0.00	26.50	12.36	15.50	0.00 (0)	0.00 (0)	0.00 (0)
Coronary angiography	0.00	0.00	0.00	26.50	12.36	15.50	0.00 (0)	0.00 (0)	0.00 (0)
Hypertension	50.00	33.33	37.04	4.67	11.82	10.56	1.17 (7)	1.90 (40)	1.74 (47)
Asthma and COPD	50.00	42.86	44.44	4.67	13.29	11.57	1.67 (10)	3.19 (67)	2.85 (77)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	0.00	0.00	35.67	16.12	20.46	0.00 (0)	0.00 (0)	0.00 (0)
Patients for radiotherapy	0.00	4.76	3.70	35.67	14.68	19.52	0.00 (0)	0.00 (0)	0.00 (0)
Patients for chemotherapy	0.00	0.00	0.00	28.17	13.98	17.13	0.00 (0)	0.00 (0)	0.00 (0)
Psychiatric Illness	0.00	19.05	14.81	18.33	24.85	23.15	0.00 (0)	0.29 (6)	0.22 (6)
<b>Dental Care</b>									
Dental Extractions	16.67	4.76	7.41	18.60	12.25	13.52	0.00 (0)	0.14 (3)	0.11 (3)
Root canal treatments (patients)	0.00	0.00	0.00	17.83	13.81	14.70	0.00 (0)	0.00 (0)	0.00 (0)
<b>ENT Diseases</b>									
Ear surgery	0.00	4.76	3.70	26.50	9.02	13.05	0.00 (0)	0.29 (6)	0.22 (6)
Tonsillectomy	16.67	4.76	7.41	21.40	9.02	11.50	0.00 (0)	0.29 (6)	0.22 (6)
Nasal surgery	0.00	4.76	3.70	26.50	6.07	10.78	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	83.33	71.43	74.07	0.00	2.42	2.07	308.33 (1850)	129.76 (2725)	169.44 (4575)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	0.00	0.00	21.83	14.19	15.89	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	0.00	0.00	21.83	14.86	16.41	0.00 (0)	0.00 (0)	0.00 (0)
Dislocations managed	0.00	0.00	0.00	14.33	14.86	14.74	0.00 (0)	0.00 (0)	0.00 (0)
Orthopaedic surgery under GA	0.00	0.00	0.00	14.33	14.19	14.22	0.00 (0)	0.00 (0)	0.00 (0)

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% pub. facility	% private facility	% total	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Neurology</b>									
New cerebo-vascular accidents (CVA) cases treated	0.00	0.00	0.00	5.00	18.10	15.19	0.00 (0)	0.00 0	0.00 (0)
Coma cases managed	0.00	0.00	0.00	5.00	18.10	15.19	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dermatology</b>									
Total STD cases managed	33.33	19.05	22.22	19.75	6.47	9.00	1.67 (10)	0.57 (12)	0.81 (22)
<b>Gastroentrology</b>									
Endoscopy-Upper GI	0.00	4.76	3.70	17.83	12.65	13.85	0.00 (0)	0.00 (0)	0.00 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	17.83	14.19	15.00	0.00 (0)	0.00 (0)	0.00 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	0.00	14.29	11.11	10.33	8.83	9.21	0.00 (0)	0.62 (13)	0.48 (13)
Child diabetics on insulin managed	0.00	4.76	3.70	10.33	5.00	6.23	0.00 (0)	0.00 (0)	0.00 (0)
<b>Urology</b>									
Prostrate surgery	0.00	4.76	3.70	22.83	20.20	20.81	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	0.00	0.00	22.83	19.90	20.56	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	0.00	0.00	22.83	16.14	17.63	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	0.00	0.00	22.83	15.19	16.89	0.00 (0)	0.00 0	0.00 (0)
<b>Surgery</b>									
Minor Surgery	0.00	4.76	3.70	23.17	13.90	16.03	0.00 (0)	0.05 (1)	0.04 (1)
Major Surgery	0.00	0.00	0.00	21.83	14.14	15.85	0.00 (0)	0.00 (0)	0.00 (0)
<b>Emergency</b>									
Accidents/Injuries	16.67	9.52	11.11	16.00	9.89	11.17	0.00 (0)	0.10 (2)	0.07 (2)

*Note:* Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
BHOKARDAN**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	2.27	1.92	48.88	43.74	44.55	0.00 (0)	0.02 (1)	0.02 (1)
Coronary angiography	0.00	0.00	0.00	51.38	39.34	41.19	0.00 (0)	0 (0)	0 (0)
Hypertension	37.5	22.73	25	54	36.51	38.76	1.63 (13)	1.59 (70)	1.6 (83)
Asthma and COPD	87.5	68.18	71.15	30	32.18	32.03	5.25 (42)	6.8 (299)	6.56 (341)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	0.00	0.00	59.5	33.07	37.13	0.00 (0)	0.00 (0)	0.00 (0)
Patients for radiotherapy	0.00	0.00	0.00	36.88	32.95	33.56	0.00 (0)	0.00 (0)	0.00 (0)
Patients for chemotherapy	0.00	0.00	0.00	36.88	31.48	32.31	0.00 (0)	0.00 (0)	0.00 (0)
<b>Psychiatric Illness</b>	12.5	2.27	3.85	59.43	37.02	40.16	1.63 (13)	0.23 (10)	0.44 (23)
<b>Dental Care</b>									
Dental Extractions	0.00	15.91	13.46	32.63	29.01	29.66	0.00 (0)	1.3 (57)	1.1 (57)
Root canal treatments (patients)	0.00	2.27	1.92	25.13	31.02	30.10	0.00 (0)	0.00 (0)	0.00 (0)
<b>ENT Diseases</b>									
Ear surgery	0.00	9.09	7.69	36.38	37.95	37.69	0.00 (0)	0.45 (20)	0.38 (20)
Tonsillectomy	0.00	0.00	0.00	44.5	29.11	31.48	0.00 (0)	0.00 (0)	0.00 (0)
Nasal surgery	0.00	0.00	0.00	17.00	20.7	20.13	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	87.5	65.91	69.23	0.00	5.33	5.00	314 (2512)	136.7 (6015)	163.98 (8527)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	0.00	0.00	38.63	44.72	43.78	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	0.00	0.00	35.75	41.72	40.8	0.00 (0)	0.00 (0)	0.00 (0)
Dislocations managed	0.00	0.00	0.00	35.75	41.26	40.41	0.00 (0)	0.00 (0)	0.00 (0)
Orthopaedic surgery under GA	0.00	0.00	0.00	39.5	39.1	39.16	0.00 (0)	0.00 (0)	0.00 (0)
<b>Neurology</b>									
New cerebo-	0.00	0.00	0.00	32.63	26.8	27.69	0	0	0

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
vascular accidents (CVA) cases treated							(0)	(0)	(0)
Coma cases managed	0.00	0.00	0.00	36.38	24.43	26.27	0 (0)	0 (0)	0 (0)
<b>Dermatology</b>									
Total STD cases managed	50	13.64	19.23	57.5	16.59	20.49	11.13 (89)	0.89 (39)	2.46 (128)
<b>Gastroentrology</b>									
Endoscopy-Upper GI	0.00	0.00	0.00	37.63	32.7	33.46	0 (0)	0 (0)	0 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	33.25	32.7	32.79	0 (0)	0 (0)	0 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	0.00	2.27	1.92	28.88	31.72	31.27	0 (0)	0.07 (3)	0.06 (3)
Child diabetics on insulin managed	0.00	0.00	0.00	21.88	26.68	25.94	0 (0)	0 (0)	0 (0)
<b>Urology</b>									
Prostrate surgery	0.00	0.00	0.00	24.5	38.52	36.37	0 (0)	0 (0)	0 (0)
Kidney/Ureter surgery	0.00	2.27	1.92	36.38	37.09	36.98	0 (0)	0.05 (2)	0.04 (2)
Scopies	0.00	0.00	0.00	21.25	35.91	33.65	0 (0)	0 (0)	0 (0)
Lithotripsy	0.00	0.00	0.00	21.25	34.89	32.79	0 (0)	0 (0)	0 (0)
<b>Surgery</b>									
Minor Surgery	12.5	4.55	5.77	25	26.79	26.53	1.25 (10)	1.41 (62)	1.38 (72)
Major Surgery	0.00	0.00	0.00	34.5	43.38	42.01	0 (0)	0 (0)	0 (0)
<b>Emergency</b>									
Accidents/Injuries	25	0.00	3.85	35	14.48	16.94	2.13 (17)	0 (0)	0.33 (17)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
GHANSAWANGI**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Govt. facility	% private facility	Total %	Govt. facility	Private facility	Total	Govt. facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	25.00	25.00	2.44	28.33	38.92	38.13	0.00 (0)	0.00 (0)	0.00 (0)
Coronary angiography	25.00	25.00	2.44	20.00	34.32	33.25	0.00 (0)	0.00 (0)	0.00 (0)
Hypertension	25.00	24.32	24.39	20.00	37.5	35.81	1.00 (4)	3.86 (143)	3.59 (147)
Asthma and COPD	50.00	43.24	43.9	15.00	32.62	31.09	3.25 (13)	12.24 (453)	11.37 (466)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	2.70	2.44	40.00	58.06	56.25	0.00 (0)	0.03 (1)	0.02 (1)
Patients for radiotherapy	0.00	0.00	0.00	40.00	53.65	52.32	0.00 (0)	0.00 (0)	0.00 (0)
Patients for chemotherapy	0.00	0.00	0.00	40.00	53.38	52.07	0.00 (0)	0.00 (0)	0.00 (0)
<b>Psychiatric Illness</b>	25.00	8.11	9.76	20.00	59.26	56.08	0.50 (2)	0.24 (9)	0.27 (11)
<b>Dental Care</b>									
Dental Extractions	25.00	10.81	12.2	26.67	35.45	34.72	0.00 (0)	1.54 (57)	1.39 (57)
Root canal treatments (patients)	0.00	2.70	2.44	27.50	37.25	36.28	0.00 (0)	0.00 (0)	0.00 (0)
<b>ENT Diseases</b>									
Ear surgery	0.00	0.00	0.00	22.50	40.00	38.29	0.00 (0)	0.00 (0)	0.00 (0)
Tonsillectomy	25.00	0.00	2.44	20.00	35.14	34.00	0.00 (0)	0.00 (0)	0.00 (0)
Nasal surgery	0.00	0.00	0.00	22.50	23.11	23.05	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	100.00	72.97	75.61	0.00	20.50	20.50	815.5 (3262)	112.59 (4166)	181.17 (7428)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	0.00	0.00	22.50	45.95	43.66	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	0.00	0.00	22.5	41.62	39.76	0.00 (0)	0.00 (0)	0.00 (0)
Dislocations managed	0.00	2.70	2.44	15.00	41.25	38.63	0.00 (0)	0.27 (10)	0.24 (10)
Orthopaedic surgery under GA	0.00	0.00	0.00	22.50	33.38	32.32	0.00 (0)	0.00 (0)	0.00 (0)

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Govt. facility	% private facility	Total %	Govt. facility	Private facility	Total	Govt. facility	Private facility	Total
<b>Neurology</b>									
New cerebro-vascular accidents (CVA) cases treated	25.00	0.00	2.44	30.00	50.54	49.00	0.50 (2)	0.00 (0)	0.00 (2)
Coma cases managed	25.00	0.00	2.44	30.00	50.14	48.63	0.00 (0)	0.00 (0)	0.00 0
<b>Dermatology</b>									
Total STD cases managed	50.00	2.70	7.32	45.00	36.39	36.84	6.50 (26)	0.16 (6)	0.78 (32)
<b>Gastroenterology</b>									
Endoscopy-Upper GI	0.00	0.00	0.00	30.00	46.62	45.00	0.00 (0)	0.00 (0)	0.00 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	15.00	45.27	42.32	0.00 (0)	0.00 (0)	0.00 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	25.00	5.41	7.32	30.00	44.00	42.89	1.25 (5)	0.11 (4)	0.22 9()
Child diabetics on insulin managed	0.00	0.00	0.00	15.00	38.65	36.34	0.00 (0)	0.00 (0)	0.00 (0)
<b>Urology</b>									
Prostrate surgery	0.00	0.00	0.00	52.50	42.3	43.29	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	0.00	0.00	55.00	47.03	47.8	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	0.00	0.00	55.00	39.32	40.85	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	0.00	0.00	52.5	38.51	39.88	0.00 (0)	0.00 (0)	0.00 (0)
<b>Surgery</b>									
Minor Surgery	50.00	18.92	21.95	22.50	41.95	40.73	0.00 (0)	0.46 (17)	0.41 (17)
Major Surgery	50.00	0.00	4.88	12.50	40.61	39.17	0.25 (1)	0.00 (0)	0.02 (1)
<b>Emergence</b>									
Accidents/Injuries	50.00	5.41	9.76	30.00	31.49	31.41	6.00 (24)	0.08 (3)	0.66 (27)

*Note:* Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
JAFFRABAD**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	0.00	0.00	50.33	33.18	36.21	0.00 (0)	3.57 (100)	2.94 (100)
Coronary angiography	0.00	0.00	0.00	40.33	36.39	37.09	0.00 (0)	0.00 (0)	0.00 (0)
Hypertension	50.00	28.57	32.35	66.67	33.75	38.04	6.17 (37)	2.43 (68)	3.09 (105)
Asthma and COPD	50.00	42.86	44.12	48.33	30.75	33.53	6.00 (36)	4.68 (131)	4.91 (167)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	0.00	0.00	76.67	34.46	41.91	0.00 (0)	0.00 (0)	0.00 (0)
Patients for radiotherapy	0.00	0.00	0.00	76.67	34.46	41.91	0.00 (0)	0.00 (0)	0.00 (0)
Patients for chemotherapy	0.00	0.00	0.00	76.67	34.46	41.91	0.00 (0)	0.00 (0)	0.00 (0)
<b>Psychiatric Illness</b>	0.00	0.00	0.00	32.00	37.36	36.41	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dental Care</b>									
Dental Extractions	0.00	0.00	0.00	46.67	24.79	28.65	0.00 (0)	0.00 (0)	0.00 (0)
Root canal treatments (patients)	0.00	0.00	0.00	46.67	22.29	26.59	0.00 (0)	0.00 (0)	0.00 (0)
<b>ENT Diseases</b>									
Ear surgery	0.00	3.57	2.94	49.50	36.74	39.06	0.00 (0)	1.07 (30)	0.88 (30)
Tonsillectomy	0.00	0.00	0.00	49.50	36.86	39.09	0.00 (0)	0.00 (0)	0.00 (0)
Nasal surgery	0.00	0.00	0.00	49.50	35.43	37.91	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	83.33	64.29	67.65	0.00	6.00	5.45	186.00 (1116)	197.82 (5539)	195.74 (6655)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	7.14	5.88	57.83	38.92	42.47	0.00 (0)	0.18 (5)	0.15 (5)
Closed fracture cases managed	0.00	3.57	2.94	57.83	39.52	42.85	0.00 (0)	0.07 (2)	0.06 (2)
Dislocations managed	0.00	0.00	0.00	57.83	36.14	39.97	0.00 (0)	0.00 (0)	0.00 (0)
Orthopaedic surgery under GA	0.00	0.00	0.00	57.83	33.18	37.53	0.00 (0)	0.00 (0)	0.00 (0)
<b>Neurology</b>									
New cerebo-	0.00	0.00	0.00	24.50	36.50	34.38	0.00	0.00	0.00

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
vascular accidents (CVA) cases treated							(0)	(0)	(0)
Coma cases managed	0.00	0.00	0.00	24.50	38.29	35.85	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dermatology</b>									
Total STD cases managed	16.67	3.57	5.88	57.40	13.37	20.25	0.00 (0)	1.79 (50)	1.47 (50)
<b>Gastroentrology</b>									
Endoscopy-Upper GI	0.00	0.00	0.00	41.17	31.23	32.98	0.00 (0)	0.00 (0)	0.00 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	41.17	31.23	32.98	0.00 (0)	0.00 (0)	0.00 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	0.00	0.00	0.00	14.50	24.68	22.88	0.00 (0)	0.00 (0)	0.00 (0)
Child diabetics on insulin managed	0.00	0.00	0.00	14.50	24.68	22.88	0.00 (0)	0.00 (0)	0.00 (0)
<b>Urology</b>									
Prostrate surgery	0.00	0.00	0.00	82.83	39.71	47.32	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	0.00	0.00	82.83	42.04	49.24	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	0.00	0.00	82.83	39.71	47.32	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	0.00	0.00	82.83	39.71	47.32	0.00 (0)	0.00 (0)	0.00 (0)
<b>Surgery</b>									
Minor Surgery	33.33	17.86	20.59	26.25	26.54	26.50	4.17 (25)	1.14 (32)	1.68 (57)
Major Surgery	16.67	0.00	2.94	33.00	32.37	32.47	0.17 (1)	0.00 (0)	0.03 (1)
<b>Emergency</b>									
Accidents/Injuries	16.67	17.86	17.65	35.00	16.76	20.01	5.00 (30)	2.25 (63)	2.74 (93)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
JALNA**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	8.91	8.22	13.09	4.09	4.85	0.00 (0)	0.64 (130)	0.59 (130)
Coronary angiography	0.00	2.97	2.74	12.97	6.4	6.92	0.00 (0)	0.03 (6)	0.03 (6)
Hypertension	41.18	35.15	35.62	14.7	3.81	4.58	6.18 (105)	11.01 (2224)	10.63 (2329)
Asthma and COPD	58.82	46.53	47.49	21.29	4.46	5.49	8.47 (144)	8.73 (1763)	8.71 (1907)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	11.76	13.37	13.24	22.27	21.59	21.64	0.18 (3)	0.5 (100)	0.47 (103)
Patients for radiotherapy	5.88	1.49	1.83	16.69	22.38	21.96	0.18 (3)	0.02 (4)	0.03 (7)
Patients for chemotherapy	0.00	0.99	0.91	15.71	20.99	20.58	0.00 (0)	0.02 (5)	0.02 (5)
<b>Psychiatric Illness</b>	11.76	12.38	12.33	6.4	9.99	9.71	0.29 (5)	4.73 (956)	4.39 (961)
<b>Dental Care</b>									
Dental Extractions	11.76	10.4	10.5	9.23	3.35	3.8	2.94 (50)	7.46 (1506)	7.11 (1556)
Root canal treatments (patients)	5.88	5.94	5.94	9.16	3.22	3.69	0.00 (0)	1.76 (355)	1.62 (355)
<b>ENT Diseases</b>									
Ear surgery	0.00	5.45	5.02	5.82	4.35	4.47	0.00 (0)	0.33 (66)	0.3 (66)
Tonsillectomy	5.88	6.44	6.39	6.19	4.05	4.22	0.12 (2)	0.87 (175)	0.81 (177)
Nasal surgery	5.88	3.47	3.65	6.13	4.06	4.22	0.12 (2)	0.06 (12)	0.06 (14)
<b>General Medicine</b>	76.47	51.98	53.88	0	2.14	2.05	261.82 (4451)	155.34 (31378)	163.6 (35829)
<b>Orthopaedics</b>									
Open fracture cases managed	5.88	5.94	5.94	7.53	3.94	4.22	0.24 (4)	0.21 (43)	0.21 (47)
Closed fracture cases managed	5.88	6.44	6.39	7.59	3.61	3.92	0.41 (7)	1.82 (367)	1.71 (4)
Dislocations managed	5.88	5.94	5.94	7.53	3.48	3.79	0.00 (0)	0.16 (33)	0.15 (33)
Orthopaedic surgery under GA	5.88	5.45	5.48	7.53	3.44	3.76	0.47 (8)	0.44 (88)	0.44 (96)
<b>Neurology</b>									
New cerebo-vascular	0.00	5.45	5.02	5.71	8.09	7.89	0.00	1.01	0.94

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
accidents (CVA) cases treated							(0)	(205)	(205)
Coma cases managed	0.00	2.48	2.28	5.71	8.16	7.97	0.00 (0)	0.08 (17)	0.08 (17)
<b>Dermatology</b>									
Total STD cases managed	52.94	13.37	16.44	7.75	3.16	3.36	3.88 (66)	1.38 (278)	1.57 (344)
<b>Gastroentrology</b>									
Endoscopy-Upper GI	0.00	5.45	5.02	12.12	8.78	9.05	0.00 (0)	0.69 (140)	0.64 (140)
Endoscopy-Lower GI	0.00	3.47	3.2	12.12	7	7.41	0.00 (0)	0.05 (10)	0.05 (10)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	29.41	15.84	16.89	7.17	5.36	5.48	0.76 (13)	3.63 (734)	3.41 (747)
Child diabetics on insulin managed	11.76	4.95	5.48	5.67	4.92	4.97	0.06 (1)	0.09 (19)	0.09 (20)
<b>Urology</b>									
Prostrate surgery	5.88	6.93	6.85	5.28	7.76	7.57	0.00 (0)	0.13 (26)	0.12 (26)
Kidney/Ureter surgery	5.88	7.92	7.76	5.41	8.01	7.8	0.00 (0)	0.17 (34)	0.16 (34)
Scopies	5.88	4.46	4.57	5.28	7.22	7.07	0.00 (0)	0.17 (35)	0.16 (35)
Lithotripsy	0.00	1.98	1.83	4.97	8.02	7.78	0.00 (0)	0.01 (2)	0.01 (2)
<b>Surgery</b>									
Minor Surgery	35.29	22.28	23.29	7.18	3.68	3.91	1.24 (21)	7.54 (1524)	7.05 (1545)
Major Surgery	5.88	9.9	9.59	10.81	4.49	5.00	1.47 (25)	1.5 (302)	1.49 (327)
<b>Emergency</b>									
Accidents/Injuries	35.29	20.79	21.92	3.09	1.66	1.75	63.41 (1078)	1.75 (354)	6.54 (1432)

*Note:* Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
MANTHA**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	0.00	0.00	23.25	44.64	42.50	0.00 (0)	0.00 (0)	0.00 (0)
Coronary angiography	0.00	0.00	0.00	23.25	47.00	44.63	0.00 (0)	0.00 (0)	0.00 (0)
Hypertension	50.00	30.56	32.50	30.00	35.08	34.70	1.50 (6)	2.06 (74)	2.00 (80)
Asthma and COPD	50.00	86.11	82.50	6.50	19.40	15.71	9.25 (37)	8.75 (315)	8.80 (352)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	0.00	0.00	0.00	55.75	68.76	67.46	0.00 (0)	0.00 (0)	0.00 (0)
Patients for radiotherapy	0.00	0.00	0.00	55.75	59.31	58.95	0.00 (0)	0.00 (0)	0.00 (0)
Patients for chemotherapy	0.00	0.00	0.00	55.75	54.31	54.45	0.00 (0)	0.00 (0)	0.00 (0)
<b>Psychiatric Illness</b>	25.00	5.56	7.50	20.00	69.12	65.14	0.25 (1)	0.17 (6)	0.18 (7)
<b>Dental Care</b>									
Dental Extractions	0.00	8.33	7.50	52.50	25.73	28.62	0.00 (0)	0.39 (14)	0.35 (14)
Root canal treatments (patients)	0.00	0.00	0.00	18.75	28.65	27.66	0.00 (0)	0.00 (0)	0.00 (0)
<b>ENT Diseases</b>									
Ear surgery	25.00	5.56	7.50	24.33	42.90	41.39	2.50 (10)	0.94 (34)	1.10 (44)
Tonsillectomy	0.00	2.78	2.50	38.25	41.69	41.33	0.00 (0)	0.22 (8)	0.20 (8)
Nasal surgery	0.00	0.00	0.00	38.25	34.39	34.78	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	50.00	83.33	80.00	0.00	0.00	0.00	472.50 (1890)	153.06 (5510)	185.00 (7400)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	0.00	0.00	23.25	47.58	45.15	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	0.00	0.00	23.25	44.28	42.18	0.00 (0)	0.00 (0)	0.00 (0)
Dislocations managed	0.00	0.00	0.00	23.25	43.86	41.80	0.00 (0)	0.00 (0)	0.00 (0)
Orthopaedic surgery under GA	0.00	0.00	0.00	23.25	38.92	37.35	0.00 (0)	0.00 (0)	0.00 (0)
<b>Neurology</b>									
New cerebo-vascular accidents (CVA)	0.00	0.00	0.00	15.00	45.56	42.50	0.00 (0)	0.00 (0)	0.00 (0)

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
cases treated									
Coma cases managed	0.00	0.00	0.00	15.00	48.06	44.75	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dermatology</b>									
Total STD cases managed	50.00	16.67	20.00	40.00	25.68	26.58	1.50 (6)	0.89 (32)	0.95 (38)
<b>Gastroentology</b>									
Endoscopy-Upper GI	0.00	0.00	0.00	35.00	45.92	44.83	0.00 (0)	0.00 (0)	0.00 (0)
Endoscopy-Lower GI	0.00	0.00	0.00	35.00	45.92	44.83	0.00 (0)	0.00 (0)	0.00 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	0.00	5.56	5.00	35.00	37.94	37.63	0.00 (0)	0.14 (5)	0.13 (5)
Child diabetics on insulin managed	0.00	2.78	2.50	20.00	36.86	35.13	0.00 (0)	0.00 (0)	0.00 (0)
<b>Urology</b>									
Prostrate surgery	0.00	0.00	0.00	38.25	53.35	51.84	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	0.00	0.00	38.25	55.01	53.34	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	0.00	0.00	38.25	53.33	51.83	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	0.00	0.00	38.25	48.33	47.33	0.00 (0)	0.00 (0)	0.00 (0)
<b>Surgery</b>									
Minor Surgery	25.00	13.89	15.00	4.33	36.98	34.10	9.00 (36)	1.14 (41)	1.93 (77)
Major Surgery	25.00	0.00	2.50	4.33	42.31	39.38	1.00 (4)	0.00 (0)	0.10 (4)
<b>Emergency</b>									
Accidents/Injuries	0.00	2.78	2.50	35.00	18.21	19.94	0.00 (0)	0.03 (1)	0.03 (1)

*Note:* Figures in parentheses denote total caseload in the facility in the month prior to the study.

**(Contd...) Non-Communicable Diseases and Specialist Services in talukas of the district  
PARTUR**

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
<b>Non-Communicable Diseases and Specialist Services</b>									
Acute myocardial infarction managed	0.00	1.85	1.69	54.20	35.78	37.37	0.00 (0)	0.09 (5)	0.08 (5)
Coronary angiography	0.00	1.85	1.69	29.20	32.61	32.31	0.00 (0)	0.56 (30)	0.51 (30)
Hypertension	20.00	29.63	28.81	11.50	24.37	23.15	0.00 (0)	5.87 (317)	5.37 (317)
Asthma and COPD	60.00	44.44	45.76	8.00	14.36	13.96	1.60 (8)	4.52 (244)	4.27 (252)
<b>Cancer Screening and Treatment</b>									
New cases diagnosed	20.00	1.85	3.39	67.75	61.30	61.76	0.00 (0)	0.09 (5)	0.08 (5)
Patients for radiotherapy	20.00	0.00	1.69	11.50	52.11	49.31	0.20 (1)	0.00 (0)	0.02 (1)
Patients for chemotherapy	0.00	0.00	0.00	9.20	40.81	38.14	0.00 (0)	0.00 (0)	0.00 (0)
<b>Psychiatric Illness</b>	20.00	12.96	13.56	41.50	63.65	61.91	0.00 (0)	0.96 (52)	0.88 (52)
<b>Dental Care</b>									
Dental Extractions	0.00	12.96	11.86	77.20	26.31	31.21	0.00 (0)	3.31 (179)	3.03 (179)
Root canal treatments (patients)	0.00	1.85	1.69	32.20	11.63	13.41	0.00 (0)	0.93 (50)	0.85 (50)
<b>ENT Diseases</b>									
Ear surgery	0.00	3.70	3.39	77.20	46.21	48.93	0.00 (0)	1.33 (72)	1.22 (72)
Tonsillectomy	0.00	0.00	0.00	32.20	39.96	39.31	0.00 (0)	0.00 (0)	0.00 (0)
Nasal surgery	0.00	0.00	0.00	52.20	28.30	30.32	0.00 (0)	0.00 (0)	0.00 (0)
<b>General Medicine</b>	40.00	77.78	74.58	38.67	0.00	7.73	153.00 (765)	153.24 (8275)	153.22 (9040)
<b>Orthopaedics</b>									
Open fracture cases managed	0.00	0.00	0.00	61.20	42.04	43.66	0.00 (0)	0.00 (0)	0.00 (0)
Closed fracture cases managed	0.00	0.00	0.00	32.20	45.69	44.54	0.00 (0)	0.00 (0)	0.00 (0)
Dislocations managed	40.00	1.85	5.08	20.33	37.98	37.04	0.60 (3)	0.06 (3)	0.10 (6)
Orthopaedic surgery under GA	0.00	0.00	0.00	32.20	35.89	35.58	0.00 (0)	0.00 (0)	0.00 (0)
<b>Neurology</b>									
New cerebro-	0.00	5.56	5.08	62.20	38.59	40.70	0.00	0.13	0.12

Services	Medical care provided			Average referral distance			Average no. of Case loads per facility		
	% Public facility	% private facility	Total %	Public facility	Private facility	Total	Public facility	Private facility	Total
vascular accidents (CVA) cases treated							(0)	(7)	(7)
Coma cases managed	0.00	0.00	0.00	33.20	24.72	25.44	0.00 (0)	0.00 (0)	0.00 (0)
<b>Dermatology</b>									
Total STD cases managed	40.00	12.96	15.25	20.33	26.56	26.19	3.00 (15)	0.31 (17)	0.54 (32)
<b>Gastroentology</b>									
Endoscopy-Upper GI	0.00	1.85	1.69	61.20	40.85	42.61	0.00 (0)	0.37 (20)	0.34 (20)
Endoscopy-Lower GI	0.00	0.00	0.00	32.20	38.84	38.27	0.00 (0)	0.00 (0)	0.00 (0)
<b>Endocrinology</b>									
Adult diabetics on insulin managed	0.00	7.41	6.78	52.20	31.73	33.59	0.00 (0)	0.37 (20)	0.34 (20)
Child diabetics on insulin managed	0.00	3.70	3.39	23.20	22.24	22.33	0.00 (0)	0.00 (0)	0.00 (0)
<b>Urology</b>									
Prostrate surgery	0.00	0.00	0.00	87.20	58.34	60.78	0.00 (0)	0.00 (0)	0.00 (0)
Kidney/Ureter surgery	0.00	3.70	3.39	42.20	40.90	41.02	0.00 (0)	0.00 (0)	0.00 (0)
Scopies	0.00	0.00	0.00	33.20	39.44	38.92	0.00 (0)	0.00 (0)	0.00 (0)
Lithotripsy	0.00	1.85	1.69	33.20	28.30	28.73	0.00 (0)	0.02 (1)	0.02 (1)
<b>Surgery</b>									
Minor Surgery	40.00	24.07	25.42	20.33	29.30	28.68	1.00 (5)	1.98 (107)	1.90 (112)
Major Surgery	0.00	1.85	1.69	44.20	31.33	32.44	0.00 (0)	0.07 (4)	0.07 (4)
<b>Emergency</b>									
Accidents/Injuries	60.00	7.41	11.86	30.50	19.76	20.17	5.60 (28)	0.17 (9)	0.63 (37)

Note: Figures in parentheses denote total caseload in the facility in the month prior to the study.

### Annexure X: Laboratory Services in talukas of Jalna

	Services	Availability of Lab Services			Average referral distance of Lab Facilities		
		% Public	% Private	Total %	Public	Private	Total
<b>AMBAD</b>	Haemotology	100.00	4.55	12.5	0.00	14.31	14.31
	Urine	75.00	4.55	10.42	35.00	11.94	12.48
	Stool	25.00	4.55	6.25	35.00	9.32	11.04
	Biochemistry	0.00	4.55	4.17	33.75	5.36	7.83
	Histopathology	0.00	0.00	0.00	36.25	6.39	8.88
	Microbiology	0.00	0.00	0.00	36.25	6.41	8.90
	Culture of specimens	0.00	0.00	0.00	57.50	4.64	9.04
	X Rays	25.00	13.64	14.58	35.00	10.18	12.00
	ECGs	25.00	9.09	10.42	48.33	14.19	16.57
	Ultra Sonography Static	0.00	4.55	4.17	36.25	9.36	11.70
	Ultra Sonography Moblie	0.00	2.27	2.08	36.25	6.05	8.62
	CT Scan	0.00	0.00	0.00	65.00	26.69	29.89
	MRI	0.00	0.00	0.00	65.00	16.27	20.33
	Mammography	0.00	0.00	0.00	65.00	12.64	17.00
	Doppler's	0.00	0.00	0.00	50.00	8.77	12.21
	Endoscopy	0.00	0.00	0.00	50.00	10.36	13.67
Angiography	0.00	0.00	0.00	50.00	12.41	15.54	

### (Contd...) Laboratory Services in the talukas of the district

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	% Total	Public	Private	Total
<b>BADNAPUR</b>	Haemotology	66.67	9.52	22.22	4.00	6.06	5.87
	Urine	66.67	9.52	22.22	4.00	6.59	6.34
	Stool	0.00	9.52	7.41	14.00	4.86	7.06
	Biochemistry	0.00	4.76	3.70	14.00	6.53	8.25
	Histopathology	0.00	4.76	3.70	14.00	6.21	7.94
	Microbiology	0.00	0.00	0.00	14.00	6.50	8.23
	Culture of specimens	0.00	0.00	0.00	14.00	7.14	8.67
	X Rays	0.00	0.00	0.00	22.00	7.57	10.78
	ECGs	0.00	0.00	0.00	25.33	4.00	8.74
	Ultra Sonography Static	0.00	0.00	0.00	25.33	3.76	8.56
	Ultra Sonography Moblie	0.00	4.76	3.70	31.33	3.25	9.73
	CT Scan	0.00	0.00	0.00	26.67	7.38	11.67

	MRI	0.00	0.00	0.00	19.17	6.43	9.26
	Mammography	0.00	0.00	0.00	19.17	6.43	9.26
	Doppler's	0.00	0.00	0.00	19.17	8.57	10.93
	Endoscopy	0.00	0.00	0.00	19.17	8.57	10.93
	Angiography	0.00	0.00	0.00	19.17	4.29	7.59

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	% Total	Public	Private	Total
<b>BHOKARDAN</b>	Haematology	75	11.36	21.15	17.50	10.76	11.09
	Urine	87.5	11.36	23.08		10.76	10.49
	Stool	12.5	6.82	7.69	25.86	11.29	13.42
	Biochemistry	0.00	9.09	7.69	29.50	13.53	16.19
	Histopathology	0.00	0.00	0.00	29.50	17.35	19.22
	Microbiology	0.00	2.27	1.92	29.50	18.05	19.84
	Culture of specimens	0.00	0.00	0.00	22.50	19.00	19.54
	X Rays	12.5		1.92	25.29	13.80	15.37
	ECGs	0.00	2.27	1.92	30.63	15.44	17.82
	Ultra Sonography Static	0.00	0.00	0.00	37.63	16.59	19.83
	Ultra Sonography Mobile	0.00	0.00	0.00	22.50	13.30	14.71
	CT Scan	0.00	0.00	0.00	36.88	18.39	21.23
	MRI	0.00	0.00	0.00	28.75	14.18	16.42
	Mammography	0.00	0.00	0.00	28.75	12.36	14.88
	Doppler's	0.00	0.00	0.00	28.75	14.18	16.42
	Endoscopy	0.00	0.00	0.00	28.75	12.36	14.88
	Angiography	0.00	0.00	0.00	28.75	12.36	14.88

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	% Total	Public	Private	Total
<b>GHANSAWANGI</b>	Haematology	50.00	2.70	7.32	30.00	28.53	28.61
	Urine	50.00	2.70	7.32	30.00	21.67	22.11
	Stool	0.00	2.70	2.44	35.00	19.58	21.13
	Biochemistry	0.00	2.70	2.44	35.00	21.72	23.05
	Histopathology	0.00	0.00	0.00	35.00	21.11	22.46
	Microbiology	0.00	0.00	0.00	22.50	21.11	21.24

	Culture of specimens	0.00	0.00	0.00	22.50	21.11	21.24
	X Rays	0.00	0.00	0.00	22.50	25.42	25.13
	ECGs	0.00	0.00	0.00	22.50	30.55	29.77
	Ultra Sonography Static	0.00	0.00	0.00	22.50	28.38	27.80
	Ultra Sonography Mobile	0.00	0.00	0.00	15.00	17.16	16.95
	CT Scan	0.00	0.00	0.00	22.50	26.09	25.74
	MRI	0.00	0.00	0.00	15.00	17.97	17.68
	Mammography	0.00	0.00	0.00	15.00	15.00	15.00
	Doppler's	0.00	0.00	0.00	15.00	15.00	15.00
	Endoscopy	0.00	0.00	0.00	15.00	16.22	16.10
	Angiography	0.00	0.00	0.00	15.00	13.38	13.54

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	% Total	Public	Private	Total
<b>JAFFRABAD</b>	Haematology	83.33	3.57	17.65	0.10	16.95	16.35
	Urine	83.33	3.57	17.65	0.00	15.08	14.54
	Stool	33.33	3.57	8.82	15.50	17.06	16.86
	Biochemistry	33.33	3.57	8.82	13.75	12.74	12.87
	Histopathology	0.00	0.00	0.00	17.33	7.43	9.18
	Microbiology	0.00	3.57	2.94	17.33	7.70	9.45
	Culture of specimens	0.00	0.00	0.00	18.33	11.25	12.50
	X Rays	16.67	0.00	2.94	39.60	10.71	15.09
	ECGs	16.67	0.00	2.94	41.00	12.93	17.18
	Ultra Sonography Static	0.00	0.00	0.00	41.17	12.96	17.94
	Ultra Sonography Mobile	0.00	0.00	0.00	25.00	6.25	9.56
	CT Scan	0.00	0.00		43.33	14.46	19.56
	MRI	0.00	0.00	0.00	43.33	8.39	14.56
	Mammography	0.00	0.00	0.00	43.33	8.39	14.56
	Doppler's	0.00	0.00	0.00	43.33	8.39	14.56
	Endoscopy	0.00	0.00	0.00	43.33	8.39	14.56
	Angiography	0.00	0.00	0.00	43.33	8.39	14.56

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	Total %	Public	Private	Total
<b>JALNA</b>	Haematology	35.29	13.86	15.53	11.45	2.76	3.28
	Urine	29.41	15.84	16.89	10.50	2.70	3.21
	Stool	23.53	12.38	13.24	9.54	2.71	3.17
	Biochemistry	11.76	12.87	12.79	8.20	2.45	2.90
	Histopathology	5.88	5.94	5.94	11.69	5.10	5.61
	Microbiology	17.65	7.43	8.22	13.36	4.14	4.78
	Culture of specimens	5.88	5.45	5.48	11.63	2.46	3.17
	X Rays	17.65	11.88	12.33	8.86	3.33	3.74
	ECGs	11.76	8.42	8.68	8.00	2.67	3.07
	Ultra SonographyStatic	5.88	8.42	8.22	7.69	3.57	3.90
	Ultra Sonography Moblie	0.00	1.98	1.83	5.06	2.50	2.70
	CT Scan	0.00	0.5	0.46	12.71	7.30	7.72
	MRI	0.00	0.00	0.00	16.47	13.52	13.75
	Mammography	0.00	0.00	0.00	12.65	8.41	8.74
	Doppler's	0.00	2.97	2.74	8.88	5.45	5.72
	Endoscopy	0.00	1.49	1.37	8.82	6.32	6.52
	Angiography	0.00	0.5	0.46	8.82	8.42	8.46

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	Total %	Public	Private	Total
<b>MANTHA</b>	Haematology	25	5.56	7.5	11.00	19.88	19.16
	Urine	25	5.56	7.5	31.00	19.18	20.14
	Stool	25	5.56	7.5	31.00	19.15	20.11
	Biochemistry	0.00	5.56	5	38.25	16.94	19.18
	Histopathology	0.00	2.78	2.5	38.25	16.59	18.81
	Microbiology	0.00	2.78	2.5	38.25	14.74	17.15
	Culture of specimens	0.00	2.78	2.5	20.00	14.87	15.40
	X Rays	25	2.78	5	11.00	25.56	24.41
	ECGs	25		2.5	31.00	22.40	23.06
	Ultra SonographyStatic	0.00	0.00	0.00	38.25	19.13	21.04
	Ultra Sonography Moblie	0.00	0.00	0.00	35.00	10.19	12.68
	CT Scan	0.00	0.00	0.00	35.00	33.61	33.75
	MRI	0.00	0.00	0.00	35.00	23.61	24.75
	Mammography	0.00	0.00	0.00	35.00	10.00	12.50
	Doppler's	0.00	0.00	0.00	35.00	10.00	12.50

	Endoscopy	0.00	0.00	0.00	53.75	10.56	14.88
	Angiography	0.00	0.00	0.00	35.00	22.78	24.00

**(Contd...) Laboratory Services in the talukas of the district**

	Services	Lab Services availability			Average referral distance of Lab Facilities		
		% Public	% Private	% Total	Public	Private	Total
PARTUR	Haematology	40.00	7.41	10.17	9.67	18.43	17.94
	Urine	60.00	7.41	11.86	8.00	18.75	18.33
	Stool	0.00	7.41	6.78	28.80	12.30	13.80
	Biochemistry	0.00	5.56	5.08	55.60	11.29	15.24
	Histopathology	0.00	3.7	3.39	68.20	11.07	16.08
	Microbiology	0.00	3.7	3.39	68.20	11.63	16.59
	Culture of specimens	0.00	1.85	1.69	29.20	11.22	12.77
	X Rays	0.00	1.85	1.69	38.20	20.29	21.83
	ECGs	0.00	1.85	1.69	38.20	12.42	14.64
	Ultra Sonography Static	0.00	0.00	0.00	35.00	24.52	25.41
	Ultra Sonography Mobile	0.00	0.00	0.00	34.00	19.50	20.73
	CT Scan	0.00	0.00	0.00	83.00	40.93	44.49
	MRI	0.00	0.00	0.00	47.00	29.17	30.68
	Mammography	0.00	0.00	0.00	20.00	24.78	24.37
	Doppler's	0.00	0.00	0.00	47.00	26.35	28.10
	Endoscopy	0.00	0.00	0.00	47.00	23.20	25.22
	Angiography	0.00	0.00	0.00	27.00	20.98	21.49

## Annexure XI: Cost of select services in talukas of Jalna

Services	Range & Average (Rs)	AMBAD	BADNAPUR	BHOKARDAN	GHANSAWAN GI	JAFFERABAD	JALNA	MANTHA	PARTUR
Normal delivery	<500	3	1	3	2	2	15	5	3
	500-3000	4	3	6	0	2	20	1	7
	>3000	0	0	0	0		1		
	0 / Not Available	37	17	36	35	24	166	29	44
	Average charge	464.29	475.00	466.67	250.00	425.00	534.72	375.00	470.00
C- Section	1000-5000	1	0	0	0	0	15	0	0
	>5000	0	0	0	0	0	9	0	0
	0 / Not Available	43	21	45	37	28	178	35	54
	Average Charges	3250.00	*	*	*	*	802.08	*	*
Abdominal Surgery	1000-5000	1	0	0	0	0	11	0	0
	>5000	0	1	0	0	0	8	0	0
	0 / Not Available	43	20	45	37	28	183	35	54
	Average Charges	5000.00	*	*	*	*	6700.00	*	*
ECG	10-30	0	0	0	0	0	0	0	0
	>30	4	0	1	0	0	20	0	0
	Average Charges	100.00	0.00	70.00	0.00	0.00	135.88	0.00	0.00
X ray	30-100	4	0	0	0	0	14		1
	>100	2	0	0	0	0	13	1	1
	Average Charges	98.33	0.00	*	0.00	*	121.25	140.00	140.00
Routine Urine test	<10	0	0	1	0	0	0	0	0
	10-30	1	2	2	1	2	17	0	1
	>30	1	0	0	0	0	3	2	1
	Average Charges	35.00	30.00	11.67	15	30	28.5	*	40
Routine Blood charges	<10	0	0	2	0	0	0	0	0
	10-30	0	1	0	1	2	8	0	0
	>30	2	1	1	0	0	13	2	2
	Average Charges	130	50	16.67	25	25	86.81	*	50

Note: \* refer to instances where the total costs was not given in the output format, hence the average charges could not be calculated.