

**Evaluation of Transport and Diet Services under JSSSK in Pune, Maharashtra
(2015-16)**

Report prepared by

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Chapter I: Introduction

Background

In order to reduce the maternal and infant mortality, Reproductive and Child Health Programme under the National Rural Health Mission (NRHM) is being implemented by Government of India to promote institutional deliveries so that skilled attendance at birth is available and women and new born can be saved from pregnancy related deaths. Several initiatives have been launched by the Ministry of Health and Family Welfare (MoHFW), including Janani Suraksha Yojana (JSY), a key intervention that has resulted in phenomenal growth in institutional deliveries. More than one crore women are benefitting from the scheme annually and the outlay for JSY has exceeded 1600 crores per year (MoHFW 2013).

However, the phenomenal increase in institutional delivery has not resulted in desired decline in maternal and infant mortality. Further, still about 56,000 women in India die every year due to pregnancy related complications. Similarly, every year more than 13 lacs infants die within 1 year of the birth and out of these approximately 9 lacs i.e. 2/3rd of the infant deaths take place within the first four weeks of life. Out of these, approximately 7 lacs i.e. 75% of the deaths take place within a week of the birth and a majority of these occur in the first two days after birth" (MoHFW, 2011).

It is realized that, even though the institutional delivery has increased significantly, the out of pocket expenses being incurred by pregnant women and their families are significantly high. This often acts as a barrier for the pregnant women who still deliver at home as well as for sick neonates on account of poor access to health facilities (MoHFW, 2011). Important factors affecting access to health facilities include: (a) user charges for OPD, admissions, diagnostic tests, blood etc.; (b) purchasing medicines and other consumables from the market; (c) in the case of a caesarean operation, expenses can be very high; non-availability of diet in most institutions; and (e) transport to health facility and back home. Out-of-pocket expense for health has an important barrier for poor households to access the institutional health care and also it has an impoverishing effect on households.

In view of the difficulty being faced by the pregnant women and parents of sick newborn along-with high out of pocket expenses incurred by them on delivery and treatment of sick- new-born, Ministry of Health and Family Welfare (MoHFW) has taken a major policy initiative to provide completely free and cashless services to pregnant women including normal deliveries and caesarean operations and to sick new born (up to 30 days after birth) in Government health institutions in both rural & urban areas. Government of India has launched the new scheme Janani Shishu Suraksha Karyakaram (JSSK) on 1st June, 2011 and all the states have rolled out the scheme immediately. The Janani Shishu Suraksha Karyakram, launched from Mewat district in Haryana on 1st of June, unmistakably signs a huge leap forward. It invokes a new approach to health care, placing, for the first time, utmost emphasis on entitlements and elimination of out-of-pocket-expenses, for both pregnant

women and sick neonates. The initiative entitles all pregnant women delivering in public institution to absolute free and no-expense delivery, including caesarean section besides to and fro transport. Similar entitlements have been put in place for all sick newborns accessing public health institutions for health care till 30 days after birth. This has now been expanded to cover infants. They would also be entitled to free treatment besides free transport, both ways and between facilities in case of referral.

Key features of the JSSK

The new initiative entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. The entitlements include free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, and free blood wherever required. This initiative also provides for free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborns accessing public health institutions for treatment till 30 days after birth. The scheme aims to eliminate out of pocket expenses incurred by the pregnant women and sick newborns while accessing services at Government health facilities. As the scheme is being implemented for more than two years by the states, it is time to evaluate and understand the functioning of the scheme.

The present study, attempts to evaluate the functioning of JSSK from in Pune district of Maharashtra in order to improve the service provision under the scheme by identifying the strengths and weaknesses of the scheme.

Objective of the study

The major objective of the study is to evaluate the functioning of the JSSK with respect to all its dimensions through a field-survey in Pune district of Maharashtra. The specific objectives are:

- To evaluate the adequacy of the infrastructure under JSSK like manpower, equipment, drugs, consumables, IEC, etc. at the selected facilities.
- To evaluate the JSSK through the exit interview of the beneficiaries of the scheme.
- To understand the views/opinion of the health personnel about the implementation of JSSK and the issues faced by them in the selected districts.
- To identify the gaps in implementation of JSSK, if any and suggest the measures to improve the same.

In JSSK survey health service providers and women who had given births during the reference period i.e., 1.12.2013 to 30.03.2014 (till the date of survey) were interviewed.

The survey provides data on key indicators and includes information on entitlements under JSSK, such as free transport facilities (pick up, referral and drop back), free diagnostics, free drugs and consumables, free blood if required, free diet and exemption from any kind of user charges for both mothers and infants.

Chapter II Sample design and Sampling

Sample Size: Since the objective of our study is to evaluate the JSSK services with emphasis on entitlement of free transport and diet in Pune, Maharashtra. For the purpose of convenience, we selected 3 blocks based on the comparative performance of JSSK service in terms of average, high and low intake.

Allocation of the sample size & identification of the sample-units: The study was conducted in three blocks in Pune districts viz: Ambegaon, Baramati and Daund blocks with average, high and low utilization of JSSK service

The target group of our study was mainly the service providers such as Specialist, Medical officer, Staff nurse, Sister In charge, ANM, and ASHAs who are directly involved in the health care needs of the beneficiaries. Our target group were also SHG, Cook, and drivers who provides diet and transport service. Taking into account these target-groups of the district, after the selection of blocks three PHCS from each block were selected based on PPS method. They have all the target-groups. As well as nearest first referral unit of RH, SDH, WH and DH whichever nearer were visited for our study. Overall 3 PHCS from 3 blocks; 3 each of SDHs and RHs and one each of WH and DH were visited. Merely focussing on service provider without the impact of JSSK service would not serve our purpose. Hence, exit beneficiaries were conducted in the visited health facilities

Allocation of sample-size within the blocks: Total of 53 health service providers and 21 non health service providers: consisting of 22 MO/Specialist, 12 Staff Incharge/staff Nurse/ Matron, 19 ANM/LHV, 16 Drivers and 15 SHG. For tribal and non-tribal rural areas, the next allocation is into two tribal and two non-tribal PHCs with equal sample-size (100 births in each PHC). From tribal and non-tribal PHCs, generally three or four villages were selected by PPS method with a target of 100 births during the reference period. The number of villages selected by PPS for tribal PHCs was slightly different from non-tribal PHCs. was Wherever the size of tribal villages was small , we selected them till we got 100 births as per the data from ANM.

After selecting the villages, the R15 register maintained by ANM at Sub-Centre was referred to identify the women who delivered the child during the reference period from the selected villages.

Reference period: All the births that have taken place in the selected sampling units during the reference period of one year prior to the survey, i.e., 1.12.2013 to 30.03.2014 (till the date of survey) were covered for the study. Out of these births, information was collected for the beneficiaries under JSSK, i.e., women who delivered in the public institutions and the neonates who were treated at the public facilities for the neonatal illness.

Evaluation of JSSK

The Government of India has provided guidelines for rolling out the scheme in the states. The study collected information on various indicators pertaining to implementation of the scheme for the following items:

- Action taken at the state level.
- Action taken at the district level.
- Dissemination of entitlements in the public domain.
- Ensuring drugs and consumables.
- Strengthening diagnostics.
- Ensuring provision of diet.
- Ensuring availability of blood in case of need.
- Exemption from all kinds of user charges.
- Referral transport.
- Grievance redressal.
- Making the funds available.
- JSSK entitlements in JSY Cards/ANC Cards.

The evaluation of the scheme was carried out through (a) exit interview of beneficiaries using the structured interview schedule, (b) check list for the health facilities to elicit the availability of equipment, drugs and consumables as per the JSSK guidelines, and (c) survey of health personnel involved in the implementation of the scheme at various levels by using a semi-structured interview schedule designed to collect information on background characteristics, awareness and utilisation of JSSK scheme and home deliveries.

A. Exit Beneficiary Interview

Through the beneficiary, the following free entitlements received by the pregnant women and neonates/infants under JSSK were collected and evaluated:

Entitlements for pregnant women:

- Free zero expense delivery.
- Free zero expense in caesarean section.
- Free drugs and consumables.
- Free diagnostics (blood, urine tests and ultra sonography, etc.).
- Free diet during stay in the health institutions (up to three days for normal delivery and seven days in caesarean section).
- Free provision of blood.
- Free transport from home to health institutions.
- Free transport between health institutions in case of referral.
- Drop back from institution to home.
- Exemption from all kinds of user charges including Registration charges.

Entitlements for sick neonates/infants

- Free and zero expense treatment.
- Free drugs and consumables.
- Free diagnostics.
- Free provision of blood.
- Free transport from home to health institutions.
- Free transport between health institutions in case of referral.
- Drop back from institution to home.
- Exemption from all kinds of user charges.

B. Availability of equipment, drugs and consumables in health facilities

In addition to the survey of beneficiaries under the JSSK, the relevant health facilities were visited to examine the adequacy of required equipment, drugs, and consumables. The following facilities were covered for the survey:

- District Hospital.
- Women's Hospital.
- Rural Hospital and Sub-District Hospital in the selected tribal and non-tribal blocks.
- Selected PHCs.
- Selected Sub-centres under the selected PHCs.

C. Health Personnel

Following Health personnel were interviewed to know about their role in implementing the scheme and their views on different aspects of JSSK.

- Medical Superintendents/In-Charge of the Hospitals.
- All the ANMs in the selected PHCs and Sub-Centres.
- ASHA workers under the selected villages.
- All the Medical Officers of the selected PHCs.
- Selected Medical Officers in one Rural Hospital and one Sub-District Hospital in the selected tribal and non-tribal blocks.
- In-Charge doctors of Maternity Ward, INCU, Gynaecology and Paediatrics at the Civil Hospital.

A common semi-structured interview schedule was used to collect the data from the health personnel mentioned above. The following information was elicited from them: (a) their role in implementing the scheme, (b) their views on strengths and weaknesses of the scheme, (c) difficulties faced by them, if any, for implementing the provisions under the scheme, and (d) suggestions for increasing the efficiency of scheme.

The study also looks into the following issues:

- **PPP:** Public-private partnership arrangement for provision of different services under JSSK.
- **Diet:** Issues related to outsourcing of diet for the women during their stay in the hospital.
- **IEC** efforts for JSSK made by the district administration as per the guidelines.
- **Referral Transport:** Relevant information was obtained from the Call Centres records, vehicle log books, contractors and their drivers, concerned staff at the facilities and the beneficiaries.
- **Grants under JSSK:** Grants requested by the District in PIP, timeliness of receipt of the grants and adequacy of the grants received.
- **Utilisation of sanctioned grants** under JSSK by the districts and the grants utilised by the facilities.

To evaluate the above activities, an open ended interview method was used to free-list issues from the concerned staff. This was aimed to help understand the implementation of JSSK at the ground level as per the requirement of the district

Chapter III Background Characteristics and Utilization of JSSK

3.1 Background Characteristics

JSSK service is meant to provide timely and efficient service to respondents thereby reducing maternal and infant death. The question that arises is whether the implementation of JSSK Scheme is reaching to the expectant mother and caretaker of sick infants. If so what is the quality of the service and is there any suggestion to improve the service.

Exit interview was conducted in the visited facilities to understand the mechanism of functioning of JSSK and measures to improve JSSK service from respondents' point of view. The total number of respondents interviewed was 86 out of which 13 were neonates. Interviews of sick infant and sick mother Caretakers was taken.

Table below gives the demographic characteristics of respondents and their experience in utilizing JSSK service. The highest number of respondents are from the age group 20-24 (55.9%), followed by 16 percent of respondents in the age group 15-19 years and 15 percent of the respondents in the age group 25-29 years of age. About 32 percent of the respondents have completed 8-10 years of education followed by 26 percent of respondents with 11-12 years of education. Majority of the respondents (83%) belong to the Hindu religion. About 9 percent of the respondents belong to the Buddhist religion and 4 percent belong to the Muslim religion. Thirty four percent of the respondents belong to open caste, followed by 32 percent of the respondents belonging to caste SC. Near about quarter of the respondents (24%) belong to caste ST. Surprisingly more than half of the respondents (53%) do not belong to BPL which was ascertain by probing question on the color of ration card. Majority of the respondents are in the age group 20-24 years with 8-10 years of education and belong to religion Hindu.

Nearly 79 percent of the respondents are housewife. When probed on husband's occupation 27 percent of respondents spouse are employed as unskilled labor, 22 percent of the respondents spouse are engaged in service sector. Nearly 28 percent of the respondent's spouses in rural areas are engaged as agricultural laborer. All the respondents own a mobile which indicates that the respondents have the means to access call centre. More than half of the respondents (51%) have moped/scooter and 10 percent of the respondents own a car. Overall, it strengthens the respondent's response that more than half of them do not belong to BPL. Also, it reflects that the respondents can at least try to access JSSK service if they are willing to and are aware of JSSK services.

Age at marriage is quite low (17-19 years) for 55 percent of respondents and 31 percent of respondents are in the age group 20-22 years. The present delivery is first delivery for 62 percent of the respondents, which is quite likely considering the number of respondents in the age group 17-19 years at the time of marriage. For those respondents whose delivery was not a first delivery, place of previous delivery was asked. Eleven percent reported place of delivery as private institution and the rest reported the place of delivery as public institution. Number of women who reported the number of ever born children as 2 was 20, about 8 women reported children ever born as 3 and 2 women each reported as 1 and 4 children ever born. The statistics for the number of children surviving seems the same as the number of ever born children. For about 48.4 percent of the population age at first delivery was 20-21 years of age. The percentage of respondents falling in the category of 18-19 as the age at first delivery was 16.1.

Table 3.1: Background Characteristics of the respondents in Pune, 2015-16

	RESPONDENTS
TOTAL RESPONDENTS	86
Age of respondent	
15-19	16.7
20-24	57.1
25-29	15.5
30-34	8.3
35-39	1.2

40 +	1.2
Total	84
Education of respondent	
No schooling	
1 - 4	11
5 – 7	8.2
8 – 10	32.9
11 – 12	26
Graduate & Post Graduate	13.7
Religion	
Hindu	83.7
Muslim	4.7
Christian	1.2
Buddhist/Neo Buddhist	9.3
Jain	1.2
Total	86
Caste	
SC	32.1
ST	24.7
OBC	8.6
Open	34.6
Total	81
Whether belong to BPL Category	
Yes	46.5
No	53.5
Total	86
Occupation of Respondent	
Housewife	79.1
Agricultural self employed	3.5
Agricultural employed	1.2
Household and domestic	2.3
Unskilled manual	3.5
NA (For sick infant)	8.1
Service	1.2
Other	1.2
Total	86
Occupation of Husband	
Non worker	1.2
Prof., Tech., Manager	4.7
Sales	5.8
Agricultural self employed	10.5
Agricultural employed	9.3
Service	22.1
Skilled manual	18.6

Unskilled manual	27.9
Total	86
Household durables owned	
Telephone	2.3
Mobile	100.0
Bicycle	5.8
Moped/Scooter/Motorcycle	51.2
Car	10.5
Bullock cart	5.8
Tractor	1.2
Total	86
Age at marriage	
17-19	55.7
20-22	31.4
23-25	10.0
26-28	2.9
Total	70
First delivery	
Yes	62.8
No	37.2
Total	86
If not a first delivery, place of previous delivery	
Home	1
Govt. Hosp./Women's Hospital	3
Municipal Hospital	6
UHP/UHC	1
SDH	1
PHC	2
Private Hospital	11
Total	25
Children ever born	
1	2
2	20
3	8
4	2
Total	32
Children surviving	
1	2
2	20
3	8
4	2
Total	32
Age at first delivery	
18-19	16.1

20-21	48.4
22-23	12.9
24-25	6.5
26-27	9.7
28-29	6.5
Total	31

3.2 Awareness

Awareness of the scheme impacts the utilization of scheme. Sixty seven percent of the respondents were aware of JSSK. The main sources for awareness are Doctors (43%), Relatives (41%) and ASHAs (43%). Near to quarter percent of the respondents (24%) also reported poster as the main source of information. To ascertain the level of awareness, respondents were asked by awareness of each entitlement. Nearly, three fourth of the respondents (74%) were aware of free diagnostics. Awareness was also high among free transport (67%), free drugs (69%) and free diet during stay (68%). Awareness of free blood if required was only among 20 percent of the respondents. In terms of receiving ANM phone number only 14.1 percent have received it. However, 44.2 percent have received the toll free number. Overall, the first level of contact which is either through toll free or through ANM phone number is dismally low. Interestingly, 35 respondents were aware of the toll free number 108. On the contrary only 2 respondents were aware of the toll free number 102 which is used for JSSK transport service.

Table 3.2: Awareness of JSSK scheme of the respondents in Pune, 2015-16

	RESPONDENTS
TOTAL RESPONDENTS	86
Heard about JSSK	
Yes	67.4
No	32.6
Total	86
Source of Information about JSSK	
ANM	15.5
ASHA	43.1
Doctor	43.1

Relative	41.4
Friend	15.5
News paper	3.4
Poster	24.1
Pamphlets	13.8
JSY Car	5.2
Radio	3.4
TV	8.6
Total responses	58
Level of awareness regarding the following free services provided during pregnancy and delivery (sick infant)	
Free Transport (Home to Facility)	67.1
Free Diagnostics	74.7
Free drugs & consumables	69.8
Free blood provision	20.0
Free diet during stay	68.7
Free Transport (referral case)	30.3
Free drop back	55.9
Exemption (all user charges)	19.0
Received the Phone number of ANM	
Yes	14.1
No	85.9
Total	85
Received the Toll Free number	
Yes	44.2
No	55.8
Total	86
If Yes, then what is the toll free Number.	
Know 102	2
Know 108	32
Know both 102 & 108	3
Total	37

3.3 Admission and Treatment in Present Hospital

This section traces the pathways/background through which respondents was admitted to present hospital, right from seeking admission and awareness about the hospital, to reaching hospital, and number of referrals etc. The table below gives the number of respondents admitted in present hospital, reasons for admission, etc. Respondents were asked the reason for the admission in present facility. Delivery normal (8%), and delivery c section (30%) were the prominent reason for which the

respondents were admitted to the present hospital. Also, respondents were admitted for illness such as Pneumonia or other acute respiratory infection and admission for more than one ailment.

Ideally, for a health issue nearest hospital is preferred as it not only avoids precious loss of time but also reflects community health seeking behavior. However, with the availability of JSSK transport service it is likely that most of the respondents might prefer going to a well reputed hospital where they are assured/advised from various quarters of quality treatment. Hence, respondents were queried about nearest facilities to their home. If nearest facilities is different from the present hospital then respondents were asked the reason for preferring the present hospital over the nearby hospital. Eighteen percent of the respondent said the present hospital was nearest to their home. Interestingly, forty five percent responded private hospital is nearest to their house. Questions were asked to find the reasons for not visiting the nearest hospital if the present hospital was different from the nearest hospital. This was asked to know the respondents preference as well as to get a brief idea of the quality of care available in the nearest and the present hospital. One of the reasons for the same was exorbitant charges (33%) by the private hospital. Another reason for admission to the present hospital was the referral from other hospital (31%). These were the prominent reasons for admission to the present hospital. Very few (1.4%) were admitted to the present hospital due to availability of JSSK service. Thus this shows that the respondents will not seek JSSK transport service for admission to a particular hospital on their own. Lack of facilities (14%), poor quality of service (8%) and recommendation by friends/relatives (7%) were other prominent reasons for admission to present hospital even with availability of nearby facilities.

To understand the pathway before admission to present hospital the respondents were asked if they had visited any other facility for seeking treatment. Nineteen percent of the respondents said that this was the first facility for seeking treatment and they had not visited any other facility before admission to the present hospital. Majority of the patients (42%) reported seeking treatment in private hospital before admission to the present hospital. Notably, near about 45% of the respondents reported private hospital near to their house. This implies, majority of respondents, first seek treatment in private hospital after which they get admitted to the present hospital. About 19 percent had visited PHC, 3 percent had visited SC and around 8 percent had visited the UHP before coming to this facility. The respondents were then queried about the reasons for admission to present hospital. Free of charge (52%) and easy accessibility (50%) were the prominent reason for admission to present hospital. Further a substantial number of respondents (27%) were referred to the present hospital.

Table 3.3: Admission and treatment of the respondents admitted to the present hospital, Pune, 2015-16

	RESPONDENTS
TOTAL RESPONDENTS	86
Reason/Ailment for admission	
Delivery (Normal)	8.1
Delivery (C Section)	30.2
Bleeding	3.5
Feeding problem	1.2
Birth weight < 1800 gms.	5.8
Large baby wt. > 4 kg.	3.5

Pneumonia or other acute respiratory infection	48.8
Severe Jaundice	7.0
Diarrhea/Dysentery	2.3
Birth defects	1.2
Sepsis	1.2
Admitted for more than one ailment	11.6
Total	86
Health facility nearest to your house	
Same hospital	18.6
SC	1.2
PHC	16.3
RH	3.5
WH	1.2
Private Hospital	45.3
UHP	11.6
Other (Municipal Hosp.)	2.3
Total	86
Reason for not going to the nearest hospital	
Referred from other facility	31.9
JSSK service (free transport)	1.4
Poor quality of services	8.7
Charges are exorbitant	33.3
Earlier experience with present hospital is good	4.3
Lack of facilities	14.5
During ANC visited here	2.9
Came to mother's place for delivery	2.9
Recommended by Friends/Relative	7.2
ANM suggested to go to other facility	4.3
Total responses	69
Visited any other place for treatment before coming here	
No	19.0
SC	3.6
PHC	19.0
RH	2.4
Private Hospital	42.9
PHU	1.2
UHP	8.3
SDH	1.2
Other (Govt. Hosp., Bhosari, Municipal Hosp.)	2.4
Total	84
Reason for coming to present hospital	
Easily accessible	50.0

Free of charge	52.3
Good past experience	3.5
On others' advice	4.7
Emergency	5.8
Referred	27.9
Total responses	86

3.4 Transport Service of Beneficiaries

Free transport service is an important component of JSSK. Questions were asked to get information from respondents on the awareness, utilization, medium of transport and satisfaction and suggestion to improve transport service. Out of the total respondents interviewed 57 of the respondents reached directly from home and 29 respondents were directly referred from other facilities. Out of the 57 respondents only 6 tried to avail free transport pick up service which is quite low. This may be attributed due to the owning of vehicles (at least a two wheeler) among majority of the respondents. Moreover, among these six respondents only one was contacted by ASHAs for free pick up whereas in rest of cases family and self contacted toll free number.

Out of the 6 cases, the vehicle was arranged within 30 minutes, for 4 cases. All were satisfied with arrangement of vehicle. Assurance as well as timely arrangement plays an important role in the pick-up service. Near about 21 and 22 respondents reached the facility by private transport and own vehicle respectively. Both of these emphasize the assurance and timely arrangement of vehicle. Most of the respondents (44) reached facility within 30 minutes.

Twenty four respondents paid an amount of Rs 1-100 to reach facility. Among the referred cases (29) 17 were aware of free referral service and the major source of information was ASHAs and Doctors. About 8 cases were referred from PHCs followed by 5 cases from UHP and 4 cases from RH. The mode of transportation between the facilities was as follows: Eighteen respondents reached the facility through facility ambulance; referral transport was arranged by staff of facility for 15 respondents and by ASHAs for 4 respondents. Self-arrangement for referral was reported in 4 cases referred each from PHC, RH & Private hospital and 1 case from KEM Pune to DH Aundh. It needs to be investigated why the referral respondents in government health facilities arranged the referral transport on their own. Three respondents paid for referral transport to approximately an amount of Rs 2000 for referral transport and were referred from RH, YCM and one of these respondents from UHP Sangvi got the amount reimbursed. All the respondents (25) were provided with referral slips. Out of the 25 respondents referred 23 was referred by M.O and 2 were referred by gynecologists and 16 respondents were accompanied by doctors whereas one was accompanied by ASHA. More than half the number of referral respondents (14) did not receive any instruction. Six respondents got general counseling. All were satisfied with referral transport arrangement except for two cases.

**Table 3.4 : Mode of transport of respondents from home to health facility
Pune,2015-16**

	RESPONDENTS
Reached facility	
Directly from Home	57
Referred from facility	29
Total	86
Tried to avail free transport	

Yes	6
No	51
Total	57
Person contacted on toll free number for arrangement of vehicle	
Self	3
Family Member	2
ASHA	1
Total	6
Response when contacted	
Vehicle was arranged immediately	4
Not sure that vehicle will come in time	1
Vehicle not arranged	1
Total	6
Mode of transport to reach the facility	
By facility vehicle	4
By public transport	6
By private transport	21
By own vehicle	22
By walk	3
Total	56
Time taken for vehicle to reach the residence after the telephone call was made (in minutes)	
0-30 minutes	4
Total	4
Time taken for vehicle to reach the facility from home (in minutes)	
0-30 minutes	3
31-60 minutes	1
Total	4
Level of satisfaction with the transport arrangement at the facility	
Completely satisfied	4
Total	4
Any amount paid to any person for availing this transport facility	
No	4
Total	4
Time taken to reach the facility from the residence	
0-30 minutes	44
31-60 minutes	7
61 and above	2
Total	53
Amount paid for transport (in Rs.)	
0	5
1-100	24
101-250	5
251-500	2
501-1000	36

Total	72
Amount reimbursed	
No	31

Note: Some have not responded

Table 3.5: Awareness, utilization and satisfaction of referral patients

	RESPONDENTS
TOTAL RESPONDENTS	86
Referred from facility	29
Awareness of the free transport facility in case of referral	
Yes	19
No	7
Total	26
Who told you about the free transport facility in case of referral	
ASHA	57.9
Doctor	52.6
Relative	5.3
Posters	10.5
TV	5.3
Total	19
Facility from where you were referred	

PHC	8
RH	4
SDH (50/100)	1
WH	1
Private Hospital	2
UHP	5
Municipal Hospital	3
Total	24
Mode of transport between the facilities	
Vehicle in the Facility	18
Private Transport	5
Own Vehicle	1
Couldn't tell (Unconscious)	1
Relative/ arranged the ambulance	1
Total	26
Arrangement of the transport from facility to facility	
Staff of the facility	15
ASHA	4
Self	4
Nobody	1
Total	24
Payment made for the transport from facility to facility	
Yes	3
No	21
Total	24
Amount paid for transport (in Rs.)	
Rs. 2000	2
Rs. 2200	1
Total	3
Amount reimbursed	
Yes	1
No	2
Total	3
Referral slips provided	
Yes	25
Total	25
HSP referred	
Medical Officer	23
Gynecologist	2
Total	25

HSP who accompanied	
Doctor	16
ASHA	1
Nobody	9
Total	26
Received any instructions during referral	
Name and location of facility	1
Who to contact at the referral facility	2
When to go	1
Continue feeding (breastfeeding)	2
Emphasize the urgency of the referral	1
General counseling	6
No	14
Total	24
Transport arrangement satisfaction level	
Completely satisfied	21
Not satisfied	2
Total	23

3.5 Diet Services

Free diet is an important component of JSSK. Under JSSK, free diet is provided to mother and sick infants during their stay in the facility. The table below gives the awareness, source of awareness and utilization and suggestion about free diet. Awareness about various entitlements needs to be provided during ANC care/ at the time of seeking treatment or through community worker. With 72 percent of the respondents aware of free diet available in health facility, the awareness of free diet seems to be good. The main source of information seems to be ASHA (38 percent), doctors (45%) and relatives(41%). Majority of the respondents (84% including 17 cases of neonates) availed free diet and 15.1 percent (including 3 cases of neonates) did not avail free diet.

Although entitled for free diet, practically immediately after admission, women at the time of delivery or in labor are unable to take any food and might start diet after several hours of delivery. The same applies to sick infants. In the first 6 months the baby is only breastfed.

Respondents were asked the time of initiation of free diet. Nearly 41 percent of the respondent availed free diet immediately after admission and 39 percent of the respondent availed free diet after delivery and 19 percent of the respondent mainly from DH and WH availed free diet after two days of delivery. Thus, it is quite evident that the timing of initiation of diet varies from patient to patient.

About 87 percent of the respondents were provided with complete meal of tea, breakfast, lunch, and dinner and 9 percent of the respondents were provided with complete meal excluding tea/ coffee. One respondent from PHC Morgaon received lunch and dinner. Another respondent from PHC Murti received only Lunch. The food was sufficient and was served on time and the quality of food was good

to alright. Thirteen respondents when probed for not availing free diet responded that they prefer home food.

Table3.5 : Awareness and Utilization of free diet service by respondents, Pune,2015-16

	RESPONDENTS
TOTAL RESPONDENTS	86
Awareness of getting free diet during the stay at facility	
Yes	72.1
No	27.9
Total	86
Source of knowledge about the provision of free diet	
ANM	14.5
ASHA	38.7
Doctor	45.2
Relative	41.9
Friend	12.9
Newspaper	4.8
Poster	19.4
JSY Card	1.6
Radio	1.6
TV	3.2
Anganwadi Worker	1.6
Total	62

Availed free diet	
Yes	84.9
No	15.1
Total	86
Initiation of free diet	
The moment after admission	41.1
After delivery	39.7
After 2 days	19.2
Total	73
Items available under diet	
Breakfast, Lunch, Dinner, Tea/coffee/milk	87.7
Breakfast, Lunch & Dinner	9.6
Lunch & Dinner	1.4
Only Lunch	1.4
Total	73
Sufficiency of quantity of food	
Yes, sufficient	100.0
Total	73
Quality of food	
Good	87.7
Alright	12.3
Total	73
Food served on time	
Yes	100.0
Total	72
Reasons for not availing free diet	
Preferred home food	100.0
Total	13

3.6 Staff Behavior

Staff behavior is not directly linked with JSSK service. Although it is not directly linked, it impacts the behavior of those respondents seeking treatment. For near about 98.8 percent of the respondents (except for one case from RH Godegaon) the doctors listened patiently and the privacy of the place (except for one case in DH Aundh) was maintained. For 95.3 percent of the cases the instruction for taking medicines was given properly. Nearly the same number of respondents responded that the nurse attended to their call in need and in cases of emergency the nurse was immediately available (98

percent). The next question was whether or not the technical and non technical staff was good and kind. For about 39 percent of the cases of the technical staff the behavior was good (except for one cases each of Gynecologist and pediatric in DH Aundh). The behavior of the ayahs, counter clerk and ward boys was good in 95 percent of the cases. Thus overall the staff behavior seems to be good and cordial in visited facilities.

Table 3.6: Staff behavior as per respondents, Pune, 2015-16

	RESPONDENTS
TOTAL RESPONDENTS	86
Doctor listen to your complaint patiently	
No	1.2
Yes, always	98.8
Total	86
Privacy at the place of examination	
Yes, inadequate	1.2
Yes, adequate	98.8
Total	86
Proper instruction for taking medicine	
Not necessary as staff gives medicines	2.3
Yes	95.3
Can't say	2.3
Total	86
Availability of nurses in case of need	
Yes, sometimes	3.52
Yes, always	96.5
Total	86

Attending call immediately at the time of emergency	
Yes	98.8
Can't say	1.2
Total	85
Behavior of the technical staff	
Indifferent	2.4
Good	39.3
Very kind	9.5
Did not meet any technician	48.8
Total	84
Behavior of the ayahs, ward boys, counter clerk	
Indifferent	4.8
Good	95.2
Total	84

3.7 Effectiveness of Treatment

Finally the success of any scheme directly or indirectly reflects in the form of how effective the treatment is. Majority (96%) of the respondents seek the treatment for the first time. There were 3 respondents who were seeking JSSK treatment for the second time and previously all the 3 cases went for the treatment for expectant mothers. There was improvement in the service from the previous and it was in the field of arrangement of vehicle immediately as reported by one respondent. More than half of the respondents were fully cured for which they had taken the treatment and a little below half were partially cured. 90 percent of the respondents responded in affirmative that facility is well equipped except in WH Baramati. Regarding cleanliness, 80 percent were satisfied with level of cleaning and 17 percent were partially satisfied. However, very few cases from DH Aundh and WH Baramati were not satisfied. 97 percent of the respondents responded that they will recommend others to the present hospital and the main reasons for referring are timely treatment (81%), free treatment (70%), availability of doctors (38%) and free transport service (18%).

Lastly, some of the suggestions for the improvement of the facility are: the requirement of warm water, cleanliness, and separate ward for SNCU and privacy in DH Aundh and requirement of doctors and staffs in PHC Murti.

Table3.7 : Effectiveness of treatment by respondents, Pune,2015-16

	Respondents
TOTAL RESPONDENTS	86
Ever availed JSSK service before	
Yes	3.5
No	96.5
Total	84
Date of availing the JSSK service	
23.7.2014	33.3
4.9.2015	33.3
1.11.2015	33.3
Total	3
Reason for availing the JSSK service	
Mother	100.0
Total	3
Improvement in JSSK service as compared to last time	
Yes	100.0
Total	3
Improvement source	
Vehicle was arranged immediately	1
Not answered	2
Total	3
Cure for the ailment you got admitted for	
Partially recovered	8
Fully cured	11
Can't say	1

Total	20
Equipment in the hospital with reference to the treatment	
Not at all	1.2
Fairly equipped	4.8
Well equipped	90.5
Can't say	3.6
Total	84
Satisfaction with the Cleanliness	
Not satisfied	2.4
Satisfied	80
Partially satisfied	17.6
Total	85
Yes	97.6
Can't say	2.4
Total	85
Reasons for referring others to this facility	
JSSK transport service	18.5
Free treatment	70.4
timely treatment	81.5
Hospital is well equipped	14.8
Doctors available	38.3
Total	81
SUGGESTIONS (no. of cases)	
Hot water provision in delivery ward	33.3
Cleanliness required	33.3
Separate ward required for SNCU	33.3
There should be privacy in female ward	33.3
Doctors should be appointed	33.3
Staff should be appointed	33.3
Total*	3

Note: * indicates more than one suggestion

Summary:

The age at marriage for nearly 55 percent of the interviewed respondents is quite low (17-19 years). Correspondingly, the present delivery is first delivery for 62 percent of the respondents. Sixty seven percent of the respondents were aware of JSSK. The main sources for awareness are Doctors (43%), ASHAs (43%) and Relatives (41%). Near to quarter percent of the respondents (24%) also reported poster as the main source of information. To ascertain the level of awareness, when respondents were asked about awareness by each entitlement of JSSK, three fourth of the respondents (74%) were aware of free diagnostics followed by free drugs (69%), free diet during stay (68%) and free transport (67%). Only 20 percent of the interviewed respondents were aware of free blood if required. In terms of receiving ANM phone number only 14.1 percent have received it. However, 44.2 percent have received

the toll free number. Overall, the first level of contact which is either through toll free or through ANM phone number is dismally low. Interestingly, more number of respondents (35) was aware of the toll free number 108 whereas only 2 respondents were aware of the toll free number 102 which is exclusively used for JSSK transport service.

Lack of awareness, means of communication, and the decision making ability are the major hindrances in seeking health service. In terms of means of communication there seems to be no major hindrance as all the respondents or caretaker of the respondents own a mobile. Similarly, near about half of the respondents (51%) have moped/scooter and 10 percent of the respondents own a car. This may be the prime reason that out of the 57 respondents only 6 tried to avail free transport for pick up service. Out of the 6 cases, the vehicle was arranged within 30 minutes, for 4 cases. All were satisfied with arrangement of vehicle. Assurance as well as timely arrangement plays an important role in the pick- up service.

Distance to nearest hospital is an important component in health seeking behavior of the patients. Not only it saves precious time but also avoid unnecessary hassles most importantly in a nuclear family set up. However, distance cannot be outweighed by the quality of treatment. For example, a patient would always prefer to seek health services in a distant health facility with specialized doctors rather than nearest facility with not a specialized doctor. Moreover, in urban areas the distance hardly matters with the availability of transport. In contrast, the patients and his or her caretaker can also evaluate health seeking behavior if he or she feels that a delivery can be done in a nearby subcentre rather than seeking the health service in distant places. Regarding the pathways followed, before admission to the present hospital considerable number of respondents (42%) reported seeking treatment in private hospital before admission to the present hospital. Forty five percent of the interviewed respondents reported private hospital as the nearest health facility to their house and the reasons for not visiting the nearest hospital was exorbitant charges (33%) by the private hospital. Substantial number of respondents (31%) admitted to the present hospital were referred from other hospitals. Very few (1.4%) were admitted to the present hospital due to availability of JSSK service. Free of charge (52%) and easy accessibility (50%) were the prominent reason for admission to present hospital.

Among the referred cases (29) 17 were aware of free referral service and the major source of information was ASHAs and Doctors. Self-arrangement for referral was reported in 4 cases referred each from PHC, RH & Private hospital and 1 case from KEM Pune to DH Aundh. It needs to be investigated why the referral respondents in government health facilities arranged the referral transport on their own. Three respondents paid an amount of Rs 2000 for referral transport and were referred from RH, YCM and one of these respondents from UHP Sangvi got the amount reimbursed.

Referral cases (25) were provided with referral slips. Out of the 25 respondents referred 23 was referred by M.O and two respondents were referred by gynecologists. Sixteen respondents were accompanied by doctors whereas one was accompanied by ASHA. More than half the number of referral respondents (14) did not receive any instruction. Six respondents got general counseling.

With 72 percent of the respondents aware of free diet available in health facility, the awareness of free diet seems to be good. The main source of information seems to be ASHA (38 percent), doctors (45%) and relatives (41%). Majority of the respondents (84% including 17 cases of neonates) availed free diet and 15.1 percent (including 3 cases of neonates) did not avail free diet.

Although entitled for free diet, practically immediately after admission, women at the time of delivery or in labor are unable to take any food and might start diet after several hours of delivery. The same applies to sick infants. In the first 6 months the baby is only breastfed. Respondents were asked the time of initiation of free diet. Nearly 41 percent of the respondent availed free diet immediately after admission and 39 percent of the respondent availed free diet after delivery and 19 percent of the respondent mainly from DH and WH availed free diet after two days of delivery. Thus, it is quite evident that the timing of initiation of diet varies from patient to patient.

Some of the suggestions for the improvement of the facility are: the requirement of warm water, cleanliness, and separate ward for SNCU and privacy in DH Aundh and requirement of doctors and staffs in PHC Murti.

Chapter IV: Health Facilities

The delivery of facility-based health services requires service providers, health infrastructure, and a complex system that vary from facilities to facilities. Provision of timely quality free of cost health services is a challenge itself.

Based on the analysis of key factors of health service provision at facilities this chapter focuses on the following factors using the facility sample:

- Facility-based resources (e.g., human resources, infrastructure and equipment, and drugs).
- Patient intake and services provided at facilities (e.g., OPD, IPD).

These two components build upon each other to create a comprehensive understanding of health facilities in Pune, highlighting facilities with high performance and areas for improvement.

4.1 Infrastructure

Facilities with adequate human resource and infrastructure are important to provide timely treatment to patients. The unavailability of either of these, leads to high referrals and at times fatal to patients. Hence, basic information regarding availability of infrastructure, human resource, and shortcoming if any was collected from the visited facilities.

Seventeen facilities were visited out of which 9 were PHCs, 3 each of RHs and SDHs, and one each of WH and DH. Only 2 PHCs are located in tribal areas and one each of SDH, DH and WH are located in town areas and the rest of facilities are located in non tribal areas. Access to nearest facility is important for timely referrals in case of emergency. The nearest facility available to 2 PHCs is RH and to 7 PHCs is SDH at a distance of 5 to 55 kms. For RH the nearest facility was SDH and Medical College (Sassoon) which was located within 5-45 km; For SDH nearest facilities is civil hospital/WH and DH located within a distance 45-65 km. For both DH and WH the nearest referral facility is Sassoon Hospital (medical college) which is approximately 5-15 km from DH and 55-65km from WH. Overall all the facilities are located within a vicinity of 5-65 kms.

As per guideline the number of beds available in PHCs is 6; in RHs 30; Two SDHs has bed strength of 100 and one SDH with 50 beds. The number of beds available in DH was 280 and in WH 100. In terms of treatment to sick infant basic care is provided in NBCC (available in 7 PHCs) and NBSU (available in 2 PHCs). SNCU is available in DH, RHs, and two SDHs and NICU is also available in one SDH and all the RHs. Except for WH all the other facilities have access to neonatal and infant care. NRC is available in all 3 RHs and one each ofSDH. Blood bank is available in one each ofSDH, in RHs and DH. However,

blood bank is not available in WH. Considering the nearest referral point is at a distance of 65 km from WH it is felt BB is required for WH. Labour room is available in each of the visited facilities.

Apart from availability of major units availability of basic amenities such as water and electricity is essential for uninterrupted functioning of facilities. Labour room and 102 vehicle facility is available in all the visited facilities. Accessibility is important for proper functioning of transport service. Health facility is easily accessible from nearest road and building condition is good except in SDH Daund and PHCs Warwand and Murti.

As per guideline male and female ward should be separate. Since, PHCs are 6 bedded hospitals there might be some difficulty in providing separate wards for male, female and children. However, some PHC such as Morgaon PHC on their own has made a separate ward for male and female. Male and female ward are separated in visited RH, DH, SDH, except in WH which does not have a children ward. Availability of staff quarters assures round the clock timely services to patients. However, staff quarters for MOs and SNs/ANM was not available in PHCs: Morgaon, Taleghar, Malunge and Kurkhumb. Staff quarter for MOs was under construction in SDH Manchar. Electricity with power back up and running water is essential for efficient functioning of health facilities. Power back up for electricity is not available in RH Supa and running water is not available in RH Supa, PHCs Morgaon and Murti. Kitchen facilities are available only in DH, WH, RHs Yavat and Supa and in SDH Manchar. Hence, diet service is outsourced in most of the visited facilities. Ambulance JSSK service of 102 is available in all the facilities visited except in RH Supa where it is not available since 2 years.

Health service provider's posts such as Doctors, Staff Nurse, ANM and other supporting health staffs are sanctioned in every facility. However, it needs to be probed that out of the sanctioned post how many of the health posts are in place in the visited health facilities. In WH gynecologist post and in DH pediatrician post only 66 percent of the sanctioned posts are filled. Although, in RH Yavat all the sanctioned posts are filled one Gynecologist is on deputation in another facility. Anesthetist posts are not filled in SDH Manchar and Baramati. Out of the two sanctioned post of MOs only 1 MO is in place in PHCs: Mhalune, Murti and Warwand and out of 15 sanctioned posts in SDH Baramati 10 are filled. In general, at the time of our field visit in almost all the PHCs only one MO was available and most of them were recently appointed MO. Although, two sanctioned post of MO in actual only one is available at the time of our visit when queried they were on duty with training, meeting or in deputation. In PHC Morgaon the MO is given additional charge of THO due to which MO was not available at the time of our visit. There are 3 MOs in RH Supa data was not available for the sanctioned and filled in post of Gynecologist. All the sanctioned post of LHVs is filled in PHCs. Only in 3 PHCs all the sanctioned posts of ANM are filled in rest of the PHCs 50 to 85 percent of the sanctioned posts are filled. All the sanctioned posts of SNs are filled in RHs and DH whereas in WH only 65 percent of the sanctioned posts are filled. All the sanctioned posts of wardboys are filled in DH and two RHs and pharmacist are filled in except in WH and SDH(66 % filled) and in SDH Daund (50%). Of the one sanctioned posts of BB technician zero is filled in PHC Warwand?? And the one sanctioned post in PHC morgaon is filled. None of the sanctioned Technician (diagnostics) posts are filled in one RH and in SDH Manchar and Baramati; whereas only 50 percent of the posts are filled in WH and in SDH Daund. The driver available in WH is on contractual basis and receives a daily salary of Rs 200. Sanctioned posts of drivers are filled in all the facilities except in RH Godegaon wherein the only driver available is under NRHM. Sanctioned post of one physiotherapist is filled in SDH Manchar.

To asses the quantity of service delivery within the available resources data on the number of delivery cases and treatment provided to sick infants during the reference period April 2015 to January 2016

were collected. Across types, all health facilities reported providing antenatal care (ANC) and routine birth services. During the reference period ANC care was provided to above 900 pregnant women in one SDH and in WH Baramati reflecting high demand for ANC care. About 700-900 ANC cases were treated in DH, SDH and PHC. As reflected from ANC the number of delivery was above 900 in WH and SDH Baramati. Even though, ANC treated cases was 700-900 in PHC Kurkumbh , 958 in PHC Warwand and 1198 in PHC Mhalunge this is not reflected in number of delivery which was in the range of 1-300. Normal delivery in the range of 300-500 was reported in DH and in SDHs Daund and Baramati. The highest number of normal delivery was reported in DH (1609 delivery) followed by SDH (manchar (989). C section delivery was highest in SDH Manchar with 500-600 cases, followed by DH with 400-500 cases, 300-400 cases in SDH Daund, 200-300 cases in WH and SDH Baramati. Two cases of c section was reported from RH Yavat and no cases of c section was reported from RH Supa.

Highest number of Live births male and female was above 900 reported in DH and in SDH. One maternal death was reported in SDH Manchar during the reference period. Thirteen Infant deaths were reported in SDH Manchar, followed by 9 in WH Baramati. Six infant deaths were also reported in PHC Kurkumbh. In general, visited health facilities showed a fairly high availability of services for pregnancy, delivery, and the newborn child.

For efficient functioning of JSSK service it is important to have good means of communication. All the facilities have means of communication. However, there is no connectivity in PHCs Murti and Taleghar. Apart from DH which has 4, 102 ambulance and drivers the rest of facilities have one ambulance and driver each. In spite of SDH Manchar having a load of high delivery it has only one 102 ambulance. NGO ambulance is available in PHC Peth and RH Ghodegaon. Except in WH Baramati and PHCs Murti and Mhalunge where JSSK service is provided to only mothers, in other facilities JSSK services are provided to both mothers and sick infants.

Figure 4.1 Average number of ANC Care and Deliveries conducted by types of health facilities

	High	Medium	Low
ANC Care	700+ PHC (3), RH (1), SDH (3), DH, WH	300-500 PHC(1)	1-300 PHC (5), RH (2)
Delivery normal	900+ SDH, WH	100-500 PHC (6), RH (2), SDH (2)	1-100 PHC(3), RH (1)
Delivery C section	300+ SDH(1), DH	100-300 RH (1), SDH(1), WH	0-10 RH (2)

In terms of JSSK service it varies across by type of facilities. Blood bank is not available in most of facilities it is available only in DH, and SDHs Baramati and Manchar. Blood bank of SDH Manchar is functioning in collaboration with a NGO. Even though BB is not available, some mechanism needs to develop to provide this service in case of emergency especially in WH Baramati. When it comes to pick up and drop back of mothers the service is uniformly available except in WH Baramati where there is no pick up service. Pick up and drop back service of infant is negligible in SDH, RH and WH Baramati. Again referral services are available for mothers. Diagnostics and diet for mother is available. In addition

mother and baby kit is available in most of facilities. Telemedicine service is available in SDH Baramati and Physiotherapy unit is available in SDH Manchar.

Doctors (15), ANM (8), and ASHA (5) mainly arrange transport service. Proper record of JSSK service is maintained in all facilities except in one PHC. Records of inrefer patients are not maintained in DH.

Table 4.1: Number of ANC Care and Deliveries conducted by types of health facilities, Pune 2015-16

	PHC	RH	SDH (50)	SDH (100)	DH	WH	To tal
TOTAL RESPONDENTS	9	3	1	2	1	1	17
Nearest facility							
RH	2	0	0	0	0	0	2
SDH	7	2	0	0	0	0	9
Civil Hosp/WH	0	0	0	2	0	0	2
DH	0	0	1	0	0	0	1
Medical college (Sassoon)	0	1	0	0	1	1	3
Total	9	3	1	2	1	1	17
Distance to nearest facility (in kms.)							
5-15	3	1	0	0	1	0	5
15-25	3	0	0	0	0	0	3
25-35	1	1	0	0	0	0	2
35-45	1	1	0	0	0	0	2
45-55	1	0	0	0	0	0	1
55-65	0	0	0	1	0	0	1
85 & above (up to 110 kms)	0	0	1	1	0	1	3
Total	9	3	1	2	1	1	17
Number of Beds							
6	9	0	0	0	0	0	9
30	0	3	0	0	0	0	3
50	0	0	1	0	0	0	1
100	0	0	0	2	0	1	3
280	0	0	0	0	1	0	1
Total	9	3	1	2	1	1	17
Facility located in							
Tribal	1	1	0	0	0	0	2
Non- Tribal	8	2	1	1	0	0	12
Town	0	0	0	1	1	1	3
Total	9	3	1	2	1	1	17
Type of units available	PHC	RH	SDH (50)	SDH (100)	DH	WH	To tal
NBCC	7	1	1	2	-	-	11
NBSU	2	2	1	2	-	-	7
SNCU	-	3	1	1	1	-	5

NICU	-	3	0	1	-	-	4
NRC	-	3	1	1	-	-	5
BB	-	3	1	1	1	-	5
Labour Room	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Infrastructure							
Health facility is accessible from nearest road (Yes)	9	3	1	2	1	1	17
Building condition (Good)	7	3	0	2	1	1	14
Separate Female ward (Yes)	5	3	1	2	1	-	13
Separate Children's ward (Yes)	1	2	0	2	1	0	6
Staff Quarter for Mos (Yes)	5	3	1	1	1	1	12
Staff Quarter for SNs (Yes)	4	3	1	1	1	1	11
Staff Quarter for Other categories (Yes)	2	3	1	0	1	0	8
Electricity with power backup (Yes)	9	2	1	2	1	1	16
Running water supply (24 x 7 (Yes)	7	2	1	2	1	1	13
Labour room (Yes)	9	3	1	2	1	1	17
Kitchen (Yes)	1	2	0	1	1	1	6
Ambulance (102) (Yes)	9	2	1	2	1	1	16
Total	9	3	1	2	1	1	17
Human Resource Percent filled posts							
Gynecologist							
66.7 Percent filled	-	0	0	0	0	1	1
100 Percent filled	-	2	1	2	1	0	6
Data Not available (RH Supa)	-	1	-	-	-	-	1
Total	-	3	1	2	1	1	8
Pediatrician							
66.70	-	-	0	0	1	0	1
100.00	-	-	1	2	0	1	4
Total	-	-	1	2	1	1	5
Anesthetist							
.00	-	0	0	2	0	1	3
100.00	-	2	1	0	1	0	4
Data Not available (RH Supa)	-	1	-	-	-	-	1
Total	-	3	1	2	1	1	8
MO							
50.00	4	0	0	0	0	0	4
66.70	0	0	0	1	0	0	1
100	5	3	1	1	1	1	12
TOTAL RESPONDENTS	9	3	1	2	1	1	17
LHV							

0	2	-	-	-	-	-	2
100	7	-	-	-	-	-	7
Total	9	-	-	-	-	-	9
ANM/GNM							
50.00	3	-	-	-	-	-	1
66.70	1	-	-	-	-	-	2
75.00	1	-	-	-	-	-	1
85.70	1	-	-	-	-	-	1
100.00	3	-	-	-	-	-	4
Total	9	-	-	-	-	-	9
Staff Nurse							
65.00	-	0	0	0	0	1	1
81.00	-	0	0	1	0	0	1
87.50	-	0	1	0	0	0	1
92.85	-	0	0	1	0	0	1
99.1		0	0	0	1	0	1
100.00	-	3	0	0	0	0	3
Total	-	3	1	2	1	1	8
Ward Boy							
50.00	-	1	0	0	0	-	1
58.33	-	0	0	1	0	-	1
75.00	-	0	0	1	0	-	1
80.00	-	0	1	0	0	-	1
92.00	-	0	0	0	1	-	1
100.00	-	2	0	0	0	-	2
Total	-	3	1	2	1	-	7
Pharmacist							
50.00	0	1	0	0	0	0	1
66.67	0	0	0	1	0	1	2
100.00	9	2	1	1	1	0	14
Total	9	3	1	2	1	1	17
Technician (BB)							
.00	1	-	-	2	0	-	3
100.00	1	-	-	0	1	-	2
Total	2	-	-	2	1	-	5
Technician (Diagnostic)							
.00	0	1	0	2	0	0	3
50.00	0	0	1	0	0	1	2
100.00	6	2	0	0	1	0	9
Total	6	3	1	2	1	1	14
Driver							
.00	2	0	0	0	0	0	2
100.00	7	2	1	2	1	1	14
Total	9	2	1	2	1	1	16
Physiotherapist							

100.00	0	0	0	1	0	0	1
Total	0	0	0	1	0	0	1
No. of cases treated during the reference period							
ANC	PHC	RH	SDH (50)	SDH (100)	DH	WH	Total
1 – 100	4	2	-	0	0	0	6
101 – 300	1	0	-	0	0	0	1
501-700	1	0	-	0	0	0	1
701-900	1	0	-	1	1	1	4
above 900	2	1	-	1	0	1	4
Total	9	3	1	2	1	1	17
Delivery (Normal)							
1 – 100	3	1	0	0	0	0	4
101 – 300	6	2	0	0	0	0	8
301-500	0	0	1	1	1	0	3
above 900	0	0	0	1	0	1	2
Total	9	3	1	2	1	1	17
Delivery (C Section)							
No C Section	0	1	0	0	0	0	1
2 C Sections	0	1	0	0	0	0	1
101-200	0	1	0	0	0	0	1
201-300	0	0	0	1	0	1	2
301-400	0	0	1	0	0	0	1
401-500	0	0	0	0	1	0	1
501-600	0	0	0	1	0	0	1
Total	9	3	1	2	1	1	17
Live Births (Male)							
1-100	8	2	-	0	0	0	10
101-200	1	1	-	0	0	0	2
301-400	0	0	-	1	0	1	2
801-900	0	0	-	1	1	0	2
Total	9	3	1	2	1	1	17
Live Births (Female)							
1-100	8	2	-	0	0	0	10
101-200	1	1	-	0	0	0	2
301-400	0	0	-	1	0	1	2
401-500	0	0	-	1	0	0	1
701-800	0	0	-	0	1	0	1
Total	9	3	1	2	1	1	17
Sick Infants Treated							
1-10	3	-	-	0	-	-	3
40-50	1	-	-	0	-	-	1
50-60	0	-	-	1	-	-	1
400-500	0	-	-	1	-	-	1

Total	4	3	1	2	1	1	17
Maternal Death	PHC	RH	SDH (50)	SDH (100)	DH	WH	To tal
1	-	-	-	1	-	-	-
Total	9	3	1	2	1	1	17
Infant Death							
0	1	-	-	0	-	0	1
1	3	-	-	1	-	0	4
6	1	-	-	0	-	0	1
9	0	-	-	0	-	1	1
13	0	-	-	1	-	0	1
Total	9	3	1	2	1	1	17
Access to means of communication							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Type of communication available							
No connectivity	2	0	0	0	0	0	2
Phone/Mobile with connectivity	7	3	1	2	1	1	15
Total	9	3	1	2	1	1	17
Number of Ambulances available (102)							
1	9	3	1	2	0	1	16
4	0	0	0	0	1	0	1
Total	9	3	1	2	1	1	17
Number of drivers available for 102 Ambulance							
1	8	2	1	1	0	1	13
2	0	1	0	0	0	0	1
4	0	0	0	0	1	0	1
Total	9	3	1	2	1	1	17
Number of NGO vehicles available							
1	1	1	0	0	0	0	2
Total	9	3	1	2	1	1	17
Number drivers available for NGO vehicles							
1	0	1	0	0	0	0	1
Total	9	3	1	2	1	1	17
JSSK services provided to							
Mothers	2	0	0	0	0	1	3
Both	7	3	1	2	1	0	14
Total	9	3	1	2	1	1	17
Type of services provided under JSSK	PHC	RH	SDH (50)	SDH (100)	DH	WH	To tal
Pickup for Mothers	7	3	1	2	1	0	14
Pickup for Infants	6	0	1	2	1	-	10
Drop back for Mothers	7	3	1	2	1	1	15

Drop back for Infants	6	1	1	2	1	-	11
Referral for Mothers	7	3	1	2	1	1	15
Referral for Infants	6	1	1	2	1	1	12
Diagnostic for Mothers	6	3	1	2	1	1	14
Diagnostic for Infants	6	1	1	2	1	0	11
Diet for Mothers	7	3	1	2	1	1	15
Diet for Infants	3	1	1	1	1	-	7
Drug for Mothers	6	3	1	2	1	1	14
Drug for Infants	6	1	1	2	1	-	11
Blood for Mothers	-	-	-	2	1	-	3
Blood for Infants	-	-	-	2	1	-	3
Mother Kit	7	2	1	1	1	-	12
Baby Kit	7	3	1	1	1	-	13
Total	9	3	1	2	1	1	17
HSP who normally arranges the transport services							
Doctor	8	3	1	2	1	0	15
ANM	7	0	0	0	0	1	8
ASHA	5	0	0	0	0	0	5
SN	0	0	1	0	0	0	1
Special staff appointed in SDH Baramati	0	0	0	1	0	0	1
Total	9	3	1	2	1	1	17
Proper record of JSSK services maintained							
Yes	8	3	1	2	1	1	16
Partially	1	0	0	0	0	0	1
Total	9	3	1	2	1	1	17

4.2 Transport Service

One of the important component of JSSK is free transport service. The entire process of transport service (pick up, drop back and referral) provided to mothers and sick infants varies substantially not only by supply and demand but also by level of care and awareness among HSP and among caretaker of sick infants and mothers. Awareness is an important component of transport service. Table below gives the detail analysis on JSSK transport service from HSP point of view. HSPs such as ANMs and ASHAs are the main source of information in PHCs and RHs. SNs and Doctors are the main source of information in DH, WH, and SDHs.

Call Centre is the first level of contact in seeking free transport service. All the facilities visited have an access to call Centre. Record maintenance seems to be an uphill task in many of the facilities visited and varies by facilities and by persons handling it. In every facility there is a provision of a log book the maintenance of which need to be upgraded. In 4 PHCs and 2 RHs only log book is maintained and in rest of facilities a proper record of free transport service is maintained.

In general 108 vehicle is provided in RHs, SDHs, WH and DH for referral and drop back service. The number of pick up cases reflects not only the awareness of pick- up service but also the demand in seeking treatment. Only 3 cases of pick- up service was reported from PHC Peth and RH Supa, whereas 310 number of pick- up of mothers were reported from PHC Morgaon. On further probing it was revealed that patients prefer to go PHC Morgaon instead of RH Supa. The number of pick up cases were in the range of 100-170 cases in SDHs and the highest number of pick up cases of 865 during the reference period was reported from DH.. Even though register was maintained data on pick up service was not available. The highest number of drop-back services of 1257 during the reference period was observed in DH which implies the high number of women admitted for delivery and referral cases. The number of drop back service was much higher than number of pick-up service which also implies high number of women admitted for delivery and not accessing pick up service. The number of referral cases of mothers during the reference period was less than 50 cases in 4 PHCs and WH. The highest number of referral cases was observed in DH of 200-250 during the reference period.

The highest number of pick- up service of infants with 340 cases and highest number of drop back service of 550 during the reference period was reported from DH. Drop back service of infants was provided in SDH and RHs too. The number of referral cases was highest in DH with 81-90 cases during the reference period and 31-40 in WH. This reflects that although pick up and drop back service is provided the sick infant treatment needs to be established. Data on free transport service was not available in PHC Taleghar and SDH Manchar.

When probing the details of JSSK transport service records on time taken for vehicle to reach the residence after call was made, return back to facility, and drop back was maintained in DH, WH, SDH Daund, RH and 3 PHCs in the form of logbook. Registers of the same were not maintained in PHC Sangvi and Murti and in SDH Baramati. Data was not recorded in PHCs: Peth, Warwand, mhalunge, Taleghar, RH Godegaon and SDH Manchar.

When probed for the reasons for not providing/ timely pick up and drop back service the reasons were vehicle not available on time (PHC Mhalunge), Time taken for pick up, drop back and referrals are only maintained in log books etc. Vehicle condition was not good in RH Supa; driver was not available in PHC Rahu; and area was inaccessible as reported by PHC Taleghar and Murti.

Some of the difficulties in providing JSSK service were High demand (RH Supa), Limited funds (PHC Murti), Funds not available on time (PHC Murti), drivers not available on time (PHC Warwand) etc.

Facilities PHC Kurkhumbh, Murti, Rahu, Peth, RH Yavat, Ghodegaon, WH Baramati reported that the POL fund is not enough for diesel and the minimum amount required for diesel per year ranges from Rs 100000 in PHC Rahu, RH Yavat and WH Baramati to Rs 40000 in RH Ghodegaon.

In case of shortage of fund alternative arrangement is made in facilities through RKS fund and through Head, General Fund in DH Pune which is providing high number of service.

Facilities PHC Peth, Taleghar, Moregaon, Warwand, RH Supa, SDH Manchar, Baramati, DH Aundh make alternative arrangement of vehicle by reimbursing for private vehicle(PHC Peth and Taleghar), request other facilities and Free of cost vehicle available by Sharad Bank.

Proper guidelines are followed for reimbursement in PHC Peth and Taleghar through RKS fund in facilities.

If vehicle facility is not available alternative arrangement is done in facilities DH Pune, SDH Manchar, Baramati, PHC Peth, Taleghar and Moregaon. Alternative arrangement of vehicle is through RBSK in DH Pune and WH. Ambulance 108 is used in facilities and free of cost vehicle is available under Sharda bank scheme in SDH Manchar. Amount for private vehicle is reimbursed in PHC through RKS funds on producing bill. However, in PHC Peth, no record was maintained.

Requirement of ambulance varies from facilities to facilities. Out of the visited 17 facilities ambulance is adequate in 9 facilities. Facilities PHC Rahu, RH Yavat, Supa, SDH Daund and WH Baramati require an additional ambulance for smooth functioning of JSSK service.

Except for facilities PHC Mhalunge, Taleghar and RH Ghodegaon all the other facilities requires additional drivers to provide pick up and drop back services.

Demand and supply is subject to quality. However, provision of quality treatment is hindered with high demand and limited infrastructure. With the provision of free drop back service and increase in institutional delivery there was a need to understand the constraints faced by the facilities in providing free drop back service. When queried whether there was a necessity for women to stay in facilities for 48 hours after delivery if women were not facing any complications, 6 PHCs reported that it was necessary for women to stay 48 hours after delivery. It is quite likely that the PHC with limited infrastructure find itself at a risk if women are discharged and after delivery. No one to look after children and unavailability of food for accompanying person were the major reasons due to which women were unwilling to stay for 48 hours after delivery as per the view of facilities. It needs to be understood that the opportunity cost is high for women seeking treatment in public health facilities. Also, such issues need to be addressed for women with complications who have no other options.

Table 4.2: Transport Services (Pickup and Drop-back) by type of facilities, Pune 2015-16

	PHC	RH	SDH (50)	SDH (100)	D H	W H	To tal
TOTAL RESPONDENTS	9	3	1	2	1	1	17

HSP who provides information to beneficiaries of free transport facility							
ANM	7	2	1	0	0	0	10
ASHA	7	3	0	0	0	0	10
SN	0	1	1	0	0	0	2
Doctor	7	2	1	2	1	1	14
ANC Card	5	1	0	2	0	0	8
Special staff appointed in SDH Baramati	0	0	0	1	0	0	1
Total	9	3	1	2	1	1	17
Service of call centre available for free transport							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
JSSK records maintained of pick up and drop back service							
Yes only in log book	4	2	0	0	0	0	6
Yes	5	1	1	2	1	1	11
Total	9	3	1	2	1	1	17
JSSK transport service during the reference period (No. of Pickups-Mother)							
3	1	1	0	0	0	-	2
90	1	0	0	0	0	-	1
120	0	0	1	0	0	-	1
142	2	0	0	0	0	-	2
170	0	0	0	1	0	-	1
172	1	0	0	0	0	-	1
310	1	0	0	0	0	-	1
865	0	0	0	0	1	-	1
Data not available	1	0	0	1	0	-	2
Total	7	1	1	2	1	-	12
JSSK transport service during the reference period (No. of Drop back-Mother)							
1 – 100	2	1	0	0	0	0	3
101 – 200	3	0	0	0	0	0	3
201 – 300	1	0	1	0	0	0	2
601 – 700	0	0	0	1	0	1	2
1276	0	0	0	0	1	0	1
Data not available	1	0	0	1	0	0	2
Total	7	1	1	2	1	1	13
JSSK transport service during the reference period (No. of Referrals-Mother)							
1 – 50	4	1	0	0	0	1	6
51 – 100	1	0	1	0	0	0	2
101 – 150	0	0	0	1	0	0	1

201 – 250	0	0	0	0	1	0	1
Data not available	1	0	0	1	0	0	2
Total	6	1	1	2	1	1	12
JSSK transport service during the reference period (No. of Pickups-Infant)							
340	0	-	-	0	1	-	1
Data not available	1	-	-	1	0	-	2
Total	1	-	-	1	1	-	3
JSSK transport service during the reference period (No. of Drop back-Infant)							
11	0	1	-	0	0	-	1
54	0	0	-	1	0	-	1
550	0	0	-	0	1	-	1
Data not available	1	0	-	1	0	-	2
Total	1	1	-	2	1	-	5
JSSK transport service during the reference period (No. of Referrals-Infant)							
1 – 10	3	-	1	1	0	0	5
31 – 40	0	-	0	0	0	1	1
81-90	0	-	0	0	1	0	1
Data not available	1	-	0	1	0	0	2
Total	4	-	1	2	1	1	9
Reason for not or non- timely provision of JSSK Pickup or drop back							
Vehicle not available on time	1	0	0	1	0	0	2
Vehicle not in good condition	0	1	0	0	0	0	1
Driver was not available	1	0	0	0	0	0	1
Weather condition was not good	0	1	0	0	0	0	1
Road condition was not good	1	0	0	0	0	0	1
Inaccessible area	2	0	0	0	0	0	2
Total	4	1	0	1	0	0	6
Record of the time taken for vehicle to reach the residence after the telephone call was made							
Recorded in logbook	3	1	1	0	1	1	7
Register not maintained	2	0	0	1	0	0	3
Not recorded	4	1	0	1	0	0	6
Total	9	2	1	2	1	1	16
Record of the time taken vehicle to reach the facility from the residence							
Recorded in logbook	2	1	1	0	1	0	5
Register not maintained	2	0	0	1	0	1	4
Not recorded	5	1	0	1	0	0	7
Total	9	2	1	2	1	1	16
Record of the time taken to arrange drop back vehicle from facility to the residence							
Recorded in logbook	3	1	1	1	1	0	7

Register not maintained	1	0	0	1	0	1	3
Not recorded	5	1	0	0	0	0	6
Total	9	2	1	2	1	1	16
Difficulties in providing Pick up and drop back services							
High demand	0	1	0	0	0	0	1
Limited funds	1	0	0	0	0	0	1
Funds not available on time	1	0	0	0	0	0	1
Drivers not available on time	1	0	0	0	0	0	1
Heavy workload for drivers	0	0	1	0	0	0	1
Ambulance condition is not good	3	0	1	0	0	0	4
No range to call 102	1	1	0	0	0	0	2
No drivers appointed / drivers retired, MPW or Pharmacist has to driver	1	0	0	0	0	0	1
Vehicle engaged in office duty	0	0	0	1	0	0	1
Total	5	2	1	1	0	0	9
POL fund sufficient for fuel							
Yes	5	1	1	2	1	0	10
No	4	2	0	0	0	1	7
Total	9	3	1	2	1	1	17
Minimum amount of POL fund required per year							
Rs. 40,000	0	1	-	-	-	0	1
Rs. 70,000	1	0	-	-	-	0	1
Rs. 90,000	1	0	-	-	-	0	1
Rs. 1,00,000	1	1	-	-	-	1	3
Not stated	1	-	-	-	-	-	1
Total	4	2	-	-	-	1	7
Alternative arrangement for shortage of funds							
Yes	2	2	-	0	0	1	5
No	7	1	-	2	1	0	11
Total	9	3	-	2	1	1	16
What are those alternative arrangements							
Through RKS fund	2	2	-	-	-	0	4
Other (2210 Head, General fund)	0	0	-	-	-	1	1
Total	2	2	-	-	-	1	5
Approval in RKS meeting							
Through RKS fund	2	2	-	-	-	0	4
Total	2	2	-	-	-	0	4

Alternative arrangement when vehicle unavailable							
Yes	4	1	-	2	1	0	8
No	5	2	-	0	0	1	8
Total	9	3	-	2	1	1	16
Alternatives for vehicle arrangement							
Reimburse for private vehicles	2	0	-	0	0	-	2
Request other facilities	0	1	-	0	0	-	1
Free of cost vehicle available by Sharad Bank	0	0	-	1	0	-	1
108 is called	2	0	-	0	0	-	2
RBSK vehicle is used	0	0	-	1	1	-	2
Total	4	1	-	2	1	-	8
Source of reimbursement							
RKS Fund	2	-	-	-	-	-	2
Total	2	-	-	-	-	-	2
Guidelines/record receiver for reimbursement							
Approved in RKS meeting	2	-	-	-	-	-	1
Total	2	-	-	-	-	-	2
The guidelines							
Reimburse, if pickup/drop back transport service could not be arranged	1	-	-	-	-	-	1
On producing the bill	1	-	-	-	-	-	1
Total	2	-	-	-	-	-	2
Any record maintained for reimbursement							
No	1	-	-	-	-	-	1
This year no one reimbursed, so no question of maintaining record	1	-	-	-	-	-	1
Total	2	-	-	-	-	-	2
Adequacy of ambulance to provide pick up and drop back service							
Yes	7	1	0	2	1	0	11
No	2	2	1	0	0	1	6
Total	9	3	1	2	1	1	17
No. of additional ambulance required for smooth functioning							
1	2	2	1	-	-	1	6
Total	2	2	1	-	-	1	6

Drop back service provided to mothers staying less than 48 hours after delivery (7 days in case of c section) in the facility?							
Yes	6	0	0	0	0	0	6
No	3	2	1	0	0	0	6
Sometimes	0	1	0	2	0	1	4
Not stated	0	0	0	0	1	0	1
Total	9	3	1	2	1	1	17
Reasons for not staying at least 48 hours in the facility							
No one to look after children	3	0	0	1	1	0	5
No food for accompanying person	0	0	0	1	1	0	2
Baby in ICU/NICU in other facility	0	0	0	1	0	0	1
Family problem	1	0	0	0	0	0	1
Total Responses	4	0	0	2	1	0	7
During the reference period cases wherein mothers could not be provided with drop back services even though mothers stayed for more than 48 hours							
No	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Additional drivers required to provide pick up and drop back service							
Yes	4	2	1	2	1	1	11
No	2	1	0	0	0	0	3
Total	6	3	1	2	1	1	14
No. of additional driver required to provide pick up and drop back service							
1	3	2	1	2	1	0	9
2	1	0	0	0	0	1	2
Total	4	2	1	2	1	1	11

4.3 Referral Services

Section 5 gives the detail of referred patients in the visited facilities. This section aims to provide the entire process of patient's referral to the facility. There were no referral patients in PHCs hence RHs, SDHs, DH and WH constitutes our sample of 8 facilities.

When patients are referred to a facility it reflects availability of specialist and infrastructure to treat the patients. It also reflects the non-availability or limited availability of both or either of human resource

and infrastructure in the source facility. Hence, facilities were asked about the type of facility from where patients are referred to the present facility. In RHs patients are referred from PHCs. In SDH Daund patients are mainly inreferred from PHCs. In SDH Manchar and Baramati patients are referred from SCs, PHCs, RHs, and private facilities. Interestingly, in SDH Baramati, the patients are referred from WH and in DH as well. In WH patients inreferred are from SCs, PHCs, RHs, SDHs, and private hospitals. DH gets referred patients from SCs, PHCs, UHPs, RHs, SDHs, and private hospitals. Overall, SDH, WH and DH are the most preferred facility for referral patients reflecting availability of specialist and infrastructure.

Registers of in-referral transport service is maintained everywhere except in DH Aundh. During the reference period the highest number of mothers inreferred to SDH Manchar with 521 cases and in rest of the facilities the numbers were in the range of 60-130 cases. Interestingly, the number of inreferred cases in RH Godegaon was more than SDHs. More or less all the women were provided with referral slips and transport service when referred to the facility.

Comparatively the sick infant referral was quite less with 43 cases of infants inreferred in SDH Manchar and 12 cases in WH during the reference period. The sick infants referred was provided with referrals slips as well. Only 12 cases of sick infants referred in WH were provided with free referral transport service. Communications about patients inreferred were received in DH, WH, and in SDHs. Interestingly RHs which has inreferred cases from PHCs received no communication. RH Ghodegaon and SDH Manchar received referral patients but stabilization treatment was not provided to the referred patients.

The main objective of this study was to access the impact of timely transport service hence questions were asked regarding the lives saved due to the timely arrival of transport service. The highest number of cases wherein patient's lives were saved due to timely availability of transport service was reported from WH with 100 cases. There were 20 cases reported from RH Ghodegaon and 15 cases in SDH Manchar. This emphasizes that the timely management of transport service plays a vital role in reducing maternal and child death.

The main cause of referral if identified can reduce considerable risk to mother's health in terms of providing treatment in the facilities itself. The major causes of referral was Bleeding, delayed labour, twin/ multiple pregnancies, APH, severe anemia; Obstructed labour, Pre eclampsia/eclampsia and Abnormal presentation; other causes such as congenital anomaly. In SDH, WH, DH admitted for hypertension or pre eclampsia/eclampsia in previous pregnancy, and premature birth were some of the major causes. In the case of neonates Sepsis was the major cause of referrals in all the facilities and LBW was also the major cause except in DH. Gestation < 34 weeks and asphyxia were also the major causes as well as Respiratory distress (rate>60/min, or grunt retraction), convulsion and feeding problem. HSP such as ANM, Nurse and MO refer the patients.

Table 4.3: Health Services (In referral transport) by type of health facilities , Pune 2015-16

	RH	SDH (50)	SDH (100)	D H	WH	To tal
TOTAL RESPONDENTS	3	1	2	1	1	8
Patients referred to this facility						
Yes	2	1	2	1	1	7
No	1	0	0	0	0	1

Total	3	1	2	1	1	8
Facilities from where the patients are referred						
SC	0	0	1	1	1	3
PHC	2	1	2	1	1	7
UHP	0	0	0	1	0	1
CHC	0	0	2	1	1	4
SDH	0	0	0	1	1	2
WH	0	0	1	1	0	2
DH	0	0	0	0	0	1
Pvt. Hosp.	0	0	1	1	0	2
Total	2	1	2	1	1	7
Maintenance of registers of in-referral transport service						
Yes	2	1	2	0	1	6
No	0	0	0	1	0	1
Total	2	1	2	1	1	7
No. of mothers referred to this facility						
60	0	1	0	-	0	1
88	0	0	1	-	0	1
96	1	0	0	-	0	1
109	1	0	0	-	0	1
130	0	0	0	-	1	1
521	0	0	1	-	0	1
Total	2	1	2	-	1	6
No. of sick infants referred to this facility						
12	-	-	0	-	1	1
43	-	-	1	-	0	1
Total	-	-	1	-	1	2
No. of mothers provided with referral slips when referred to this facility						
60	0	1	0	-	0	1
88	0	0	1	-	0	1
96	1	0	0	-	0	1
109	1	0	0	-	0	1
130	0	0	0	-	1	1
514	0	0	1	-	0	1
Total	2	1	2	-	1	6
No. of sick infants provided with referral slips when referred to this facility						

12	-	-	0	-	1	1
43	-	-	1	-	0	1
Total	-	-	1	-	1	2
No. of mothers provided with JSSK transport service when referred to this facility						
60	0	1	0	-	0	1
88	0	0	1	-	0	1
96	1	0	0	-	0	1
109	1	0	0	-	0	1
130	0	0	0	-	1	1
519	0	0	1	-	0	1
Total	2	1	2		1	6
No. of sick infants provided with JSSK transport service when referred to this facility						
12	-	-	-	-	1	1
Total	-	-	-	1	1	2
Communication made when referred to this facility						
Yes	0	1	1	1	0	4
No	2	0	1	0	0	3
Total	2	1	2	1	1	7
Treatment for stabilization for mothers						
Yes	1	1	1	1	1	5
No	1	0	1	0	0	2
Total	2	1	2	1	1	7
No. of mothers saved due to timely arrival (in numbers)						
1	1	0	0	-	0	1
3	0	1	0	-	0	1
5	0	0	1	-	0	1
15	0	0	1	-	0	1
20	1	0	0	-	0	1
100	0	0	0	-	1	1
Total	2	1	2	-	1	6
No. of sick infants saved due to timely arrival(in numbers)						
8	-	0	1	-	-	1
Total	-	1	1	-	-	2

Clinical reasons for referring mothers						
Still birth or neonatal loss	0	0	1	0	1	2
Three or more spontaneous consecutive abortions	1	0	1	0	1	3
Delayed labour	2	0	2	1	1	6
Obstructed labour	1	0	2	1	1	5
Premature births	1	0	2	0	1	4
Twins or multiple pregnancies	2	0	2	1	1	6
Bleeding	2	1	2	0	1	6
Weight of previous baby < 2500 gms	0	0	1	0	1	2
Weight of previous baby > 4500 gms	0	0	2	0	0	2
Admitted for hypertension or pre eclampsia/eclampsia in previous pregnancy	1	0	1	1	1	4
Surgery on reproductive tract	0	0	1	0	0	1
Congenital anomaly	0	0	2	1	1	4
Treatment for infertility	0	0	2	0	1	3
Spinal Deformities (scoliosis/kyphosis/polio)	0	0	0	0	1	1
Rh -ve in previous pregnancy	1	1	2	0	1	5
Severe anemia	1	1	2	1	1	6
Pre eclampsia/eclampsia	1	0	2	1	1	5
APH	2	0	2	1	1	6
Abnormal presentation	2	0	1	1	1	5
Height less than 140 cms	1	0	1	0	1	3
Known heart disease	0	0	1	0	0	1
Tuberculosis	0	0	0	1	0	1
PROM	0	0	1	0	0	1
Other	0	0	0	1	0	1
Other	1	0	0	0	0	1
Total Responses	3	1	2	1	1	8
Clinical cause for referral of sick infant						
Birth weight < 1800 gms	2	1	2	0	1	6
Gestation < 34 weeks	1	1	2	0	0	4
Large baby wt. > 4.0 kg	0	0	1	1	0	2
Asphyxia	1	0	2	0	1	4
Pneumonia or other acute respiratory infections	0	0	1	0	0	1
Feeding problem	1	0	1	0	1	3
Respiratory distress (rate>60/min, or grunt retraction)	0	1	2	0	0	3
Severe Jaundice	0	0	1	0	1	2
Hypothermia (< 35.4 d.c.)	0	0	1	1	0	2
Hyperthermia (> 37.5 d.c.)	0	0	1	0	0	1
Fever	0	0	2	0	0	2
Convulsion	0	0	2	1	0	3

Encephalopathy	0	1	0	0	0	1
Abnormal distension	0	0	1	0	0	1
Diarrhea/Dysentery	1	0	1	0	0	2
Bleeding	0	0	1	0	0	1
Birth defects	0	1	1	0	0	2
Sepsis	1	1	1	1	1	5
Other	1	0	0	0	0	1
Total Responses	3	1	2	1	1	8
HSP who referred to this facility						
ANM	1	0	1	0	0	2
Nurse	0	0	1	0	0	1
Medical Officer	2	1	2	1	1	7
Total	2	1	2	1	1	7

Table below gives the process of out referral in depth for the referred mothers and sick infants during the reference period. In all the visited facilities patients were out referred and the register of the same is maintained. The number of patients admitted v/s the number of patients referred reflects not only the need to strengthen the infrastructure and human resources of the referring facility but also throw light on number of unnecessary referrals.

The number of outreferred cases of mothers during the reference period in PHCs, one each of RH and SDH Daund was less than 80. The highest number of referral of 737 mothers was reported from SDH Manchar during the reference period. The number of outreferrals in DH was 210 and 20-40 in WH during the reference period. In case of sick infants the number of outreferrals in WH was 41-60 and in DH 80-100 cases during the reference period. The number of referrals from PHCs was less than 60 cases during the reference period. The first place of referral of PHCs is RHs Godegaon and Yavat, SDHs Daund and Manchar and Sassoon Hospital. Whereas for RHs the first place of referral is Sassoon hospital or SDH Baramati and in rest of facilities medical college Sassoon hospital is the place of first referral. Nearly all the cases of referrals were provided with referral slip and free transport service.

Communication to the referring facility is important as it not only emphasizes the urgency of treatment but also alerts the referring facility in terms of readiness and in providing timely treatment. Communication also helps to track and find any hindrance in timely treatment of patients in referring facility. This again depends on the urgency of treatment to referred patients. Only in few cases communication was made to the next referrals. Except for SDH Daund, and WH rest of the facilities make communication with the referral facilities. Data was not available for PHC Taleghar and RH Yavat. Treatment for stabilization is provided to all the referral mothers in all the facilities and in 12 health facilities for sick infants and to nearly all the cases referred. The major cause of referral for sick mothers was bleeding and obstructed and delayed labour and is surprisingly observed in all the facilities. Premature birth and treatment for fertility were the prominent clinical reason for referral of sick mothers from RH. Birth weight less than 1800 gm and severe jaundice were the prominent reason for referrals of sick infants in PHC, SDH, and RH. Respiratory distress was the major cause of referral of sick infants in RH. Convulsion and respiratory distress were the major causes of referrals of sick infants in

SDHs, RHs and PHCs. Sepsis was the major cause of referrals of sick infants in DH whereas Asphyxia, LBW and severe jaundice were the prominent causes of referrals of sick infants in WH.

Health service provider such as ANM and MOs mainly refer in PHCs, SDH, RH, WH and DH. Gynecologist and pediatrician refer in SDH, DH and WH. Except in RHs in all the facilities communication is made to the referring facility in some cases. Responses after communication were reported only from PHC Taleghar and Kurkhumbh, WH Baramati. In RH Supa and Yavat no attempt was made to communicate to the referring facility. When asked for the reason the response was they did not get any instruction. In PHC Murti, RH Yavat, SDH Baramati and WH Baramati no one accompanies the referred patient as the patients are mainly referred in 108 vehicle. In PHC HSP such as MO, SN, ANM, ASHA, MPW etc. accompanies the patients; SN and MO accompanies the patients in SDH and RH and no one accompanies the referred patients from WH and DH. General counseling, the urgency of referral and name and place of the referring facilities were the instruction given to sick mothers and caretaker of sick infants.

Table 4.4: Health Services (Out referral transport) by type of health facilities, Pune 2015-16

	PH C	RH	S DH (50)	SDH (100)	D H	WH	Tot al
TOTAL RESPONDENTS	9	3	1	2	1	1	17
Patients out referred from this facility							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Maintenance of proper record of out refer transport service							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17

No. of mothers referred from this facility							
1-20	1	1	0	0	0	0	2
21-40	5	0	0	0	0	1	6
41-60	1	0	0	0	0	0	1
61-80	1	1	1	0	0	0	3
101-120	0	0	0	1	0	0	1
210	0	0	0	0	1	0	1
308	0	1	0	0	0	0	1
737	0	0	0	1	0	0	1
Total	9	3	1	2	1	1	17
No. of sick infants referred from this facility							
1-20	6	1	1	1	0	0	9
41-60	1	0	0	0	0	1	2
61-80	0	0	0	1	0	0	1
81-100	0	0	0	0	1	0	1
Data not avail	2	2	0	0	0	0	4
Total	9	3	1	2	1	1	17
Name of the facility usually referred							
RH Ghodegaon	1	0	0	0	0	0	1
RH Yavat	1	0	0	0	0	0	1
Sasoon Hosp.	0	0	0	0	1	1	2
Sasoon Hosp. or SDH Baramati	0	1	0	0	0	0	1
Sasoon Hosp. or YCM Hosp.	0	1	1	1	0	0	3
Sasoon or Civil Hosp. or WH Baramati	0	0	0	1	0	0	1
SDH Baramati	2	0	0	0	0	0	2
SDH Daund, Sasoon	2	0	0	0	0	0	2
SDH Manchar	2	0	0	0	0	0	2
SDH Manchar	0	1	0	0	0	0	1
SDH or WH Baramati	1	0	0	0	0	0	1
Total	9	3	1	2	1	1	17
No. of Mothers provided with referral slips when referred to other facility							
1-20	1	1	0	0	0	0	2
21-40	5	0	0	0	0	1	6
41-60	1	0	0	0	0	0	1
61-80	1	1	1	0	0	0	3
101-120	0	0	0	1	0	0	1
210	0	0	0	0	1	0	1
308	0	1	0	0	0	0	1
737	0	0	0	1	0	0	1
Total	8	3	1	2	1	1	16
No. of Sick Infants provided with referral slips when referred to other facility							
1-20	6	1	1	1	0	0	9
41-60	1	0	0	0	0	1	2

61-80	0	0	0	1	0	0	1
81-100	0	0	0	0	1	0	1
Data not avail	2	2	0	0	0	0	4
Total	9	3	1	2	1	1	17
No. of beneficiaries (mothers) provided with JSSK transport service when referred to other facility							
1-20	1	1	0	0	0	0	2
21-40	5	0	0	0	0	1	6
41-60	1	0	0	0	0	0	1
61-80	1	1	1	0	0	0	3
101-120	0	0	0	1	0	0	1
210	0	0	0	0	1	0	1
308	0	1	0	0	0	0	1
737	0	0	0	1	0	0	1
Data not available	1	0	0	0	0	0	1
Total	9	3	1	2	1	1	17
No. of beneficiaries (sick infants) provided with JSSK transport service when referred to other facility							
1-20	6	1	1	1	0	0	9
41-60	1	0	0	0	0	1	2
61-80	0	0	0	1	0	0	1
81-100	0	0	0	0	1	0	1
Data not available	2	2	0	0	0	0	4
Total	9	3	1	2	1	1	17
No. of beneficiaries (Mothers) for which communication made when referred to other facility							
1-20	2	1	-	0	0	-	3
21-40	2	0	-	0	0	-	2
61-80	1	1	-	0	0	-	2
101-120	0	0	-	1	0	-	1
210	0	0	-	0	1	-	1
737	0	0	-	1	0	-	1
Data not available	1	1	-	0	0	-	2
Total	6	3	-	2	1	-	12
No. of beneficiaries (sick infants) for which communication made when referred to other facility							
1-20	3	0	-	1	0	-	4
61-80	0	0	-	1	0	-	1
81-100	0	0	-	0	1	-	1
Data not avail	2	1	-	0	0	-	3
Total	5	1	-	2	1	-	9
No. of mothers stabilized before referral							
1-20	4	2	0	0	0	0	6

21-40	2	0	0	0	0	1	3
41-60	1	0	0	0	0	0	1
61-80	1	1	1	0	0	0	3
101-120	0	0	0	1	0	0	1
210	0	0	0	0	1	0	1
737	0	0	0	1	0	0	1
Total	8	3	1	2	1	1	16
No. of Infants stabilized before referral							
1-20	6	1	1	1	0	0	9
41-60	0	0	0	0	0	1	1
61-80	0	0	0	1	0	0	1
81-100	0	0	0	0	1	0	1
Total	6	1	1	2	1	1	12
Clinical reason for referring mothers to other facility							
Still birth or neonatal loss	2	1	0	0	0	1	4
Three or more spontaneous consecutive abortions	2	1	0	0	0	0	3
Delayed labour	7	0	1	0	0	0	8
Obstructed labour	9	1	1	0	0	0	11
Premature births	4	2	0	1	0	0	7
Twins or multiple pregnancies	6	1	0	1	0	0	8
Bleeding	9	1	1	1	1	1	14
Weight of previous baby < 2500 gms	2	1	1	1	0	0	5
Weight of previous baby > 4500 gms	3	1	0	0	0	0	4
Admitted for hypertension or pre eclampsia/eclampsia in previous pregnancy	4	2	1	0	0	0	7
Surgery on reproductive tract	2	2	0	0	0	0	4
Congenital anomaly	2	1	0	1	0	0	4
Treatment for infertility	1	2	0	0	0	0	3
Spinal Deformities (scoliosis/kyphosis/polio)	1	1	0	0	0	0	2
Rh -ve in previous pregnancy	0	0	1	0	0	1	2
Severe anemia	4	1	1	2	0	0	8
Pre eclampsia/eclampsia	1	1	0	1	0	0	3
APH	4	1	0	1	0	1	7
Abnormal presentation	1	0	0	0	0	0	1
Height less than 140 cms	1	0	0	0	0	0	1
Known heart disease	0	1	0	1	0	1	3
Total	9	3	1	2	1	1	17
Clinical cause for referral of sick infant to other facility							
Birth weight < 1800 gms	8	2	0	1	0	1	12
Gestation < 34 weeks	3	2	0	0	0	0	5
Large baby wt. > 4.0 kg	3	1	0	0	0	0	4
Asphyxia	5	0	1	1	0	1	8

Pneumonia or other acute respiratory infections	3	0	0	1	0	0	4
Feeding problem	5	1	0	0	0	0	6
Respiratory distress (rate>60/min, or grunt retraction)	5	3	0	2	0	0	10
Severe Jaundice	7	3	0	0	0	1	11
Hyperthermia (> 37.5 d.c.)	1	0	0	0	0	0	1
Fever	4	0	0	0	0	0	4
Shock (cold periphery with CFT >3 sec, and weak & fast pulse)	3	2	0	0	0	0	5
Coma	1	2	0	1	0	0	4
Convulsion	0	1	0	2	0	0	3
Encephalopathy	0	0	0	1	0	0	1
Abnormal distension	1	1	0	0	0	0	2
Birth defects	1	1	1	1	0	0	4
Sepsis	2	2	1	1	1	0	7
Total	9	3	1	2	1	1	17
HSP who referred to present facility							
ANM	3	0	0	0	0	0	3
Medical Officer	8	2	1	2	0	0	13
Pediatrician	0	0	0	1	1	1	3
Gynecologist	0	1	0	1	1	1	4
Total	9	3	1	2	1	1	17
Communication made to the referring facility							
Yes	1	0	0	1	0	0	2
Sometimes	1	0	0	0	0	1	2
No	0	3	0	0	0	0	3
108 Ambulance, no need to communicate	7	0	1	1	1	0	10
Total	9	3	1	2	1	1	17
The responses							
Picks and respond	2	0	0	0	0	1	3
Instruction/treatment communicated	0	0	0	1	0	0	1
Total	2	0	0	1	0	0	4
Reason if no communication made to referral facility to alert the next level of care reasons							
No instruction or guidelines	0	1	0	0	0	0	1
Tried initially but no response	0	1	0	0	0	0	1
108 Ambulance, no need to communicate		1	0	0	0	0	1
Total	0	3	0	0	0	0	3
If a person accompanies the referral patients							
Yes	2	1	0	0	0	0	3
Sometimes	2	1	0	0	0	0	3
No	1	1	0	1	0	1	4
108 Ambulance, no need	4	0	1	1	1	0	7

Total	9	3	1	2	1	1	17
Person who accompanies							
Doctor	1	0	1	1	0	0	3
SN	1	1	1	1	0	0	4
ANM	7	1	0	0	0	0	8
ASHA	6	0	1	0	0	0	7
MPW	1	0	0	0	0	0	1
108 ambulance, no need to accompany	2	0	0	1	0	0	3
Total	8	2	1	2	0	0	13
Instructions given to mother and caretaker of child when referred							
Name and location of facility	6	3	1	2	0	1	13
Tell mother to keep child warm	1	0	0	1	1	0	3
Who to contact at the referral facility	2	2	0	0	0	1	5
When to go	3	0	0	1	1	0	5
Emphasize the urgency of the referral	0	1	0	2	0	1	4
General counseling	7	2	1	2	1	1	14
Total	9	3	1	2	1	1	17

4.5 Diet Service

Free diet is an important component of JSSK Service and a separate budget is allocated for the same. Initially free diet service was provided to only mothers. After the scheme was extended to sick infants the diet service for sick infants needed to be provided mainly to 6 months and above old babies. To understand the process of providing free diet service to mothers and sick infants in terms of budget, intake and outsourcing, the visited health facilities were asked about the diet service. Free diet was provided in all the facilities to mothers and only in facilities DH, PHC Morgaon and SDH Manchar to sick infants.

The highest number of mothers provided with diet service was in SDH Manchar (1534 cases) followed by 809 in SDH Daund. RH Ghodegaon had a number of 413 cases of mothers provided with free diet service. Dietician, Health staffs, Cook, SHG, Private Hotels generally arranged for the diet service with private hospital in the lead. The type of arrangement for providing free diet is outsourcing. In PHCs Morgaon, Murti funds for diet are provided on availability while in the rest of the facilities fund is provided on a monthly basis.

Table 4.5: Health Services (Diet) by type of health facilities, Pune 2015-16

	PHC	RH	SDH (50)	SDH (100)	D H	W H	Total
TOTAL RESPONDENTS	9	3	1	2	1	1	
Free diet							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Availability of diet service for							
Mother	8	3	1	1	0	1	14
Both	1	0	0	1	1	0	3
Total	9	3	1	2	1	1	17
No. of mothers provided with the diet service							
52	0	1	0	0	0	0	1
75	1	0	0	0	0	0	1
84	1	0	0	0	0	0	1
101	1	0	0	0	0	0	1
107	1	0	0	0	0	0	1
111	1	0	0	0	0	0	1
134	0	1	0	0	0	0	1
260	1	0	0	0	0	0	1
272	1	0	0	0	0	0	1
413	0	1	0	0	0	0	1
559	0	0	0	0	0	1	1
691	0	0	0	1	0	0	1
809	0	0	1	0	0	0	1
1534	0	0	0	1	0	0	1
Data not available	2	0	0	0	1	0	1

Total	9	3	1	2	1	1	17
No. of sick infants provided with diet services during the reference period							
Data not available	1	0	0	1	1	0	3
Total	1	0	0	1	1	0	3
Diet service arranged by							
Dietician	0	0	0	1	1	0	2
Health staff	1	0	0	1	0	0	2
Cook	0	1	0	0	0	0	1
SHG	3	2	0	0	0	0	5
Pvt. Hotel	5	0	1	0	0	1	7
Total	9	3	1	2	1	1	17
Type of arrangement for providing diet service							
Outsourced	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17
Cooking Responsibility given to							
Mahila Bachat Gat	1	1	0	1	0	0	3
Needy Person	8	2	1	1	0	0	12
Private Contractors	0	0	0	0	1	0	1
Not Stated		0	0	0	0	1	1
Total	0	3	1	2	1	1	17
Schedule of payment							
Monthly basis	9						
		3	1	2	1	0	14
As per availability of fund		0	0	0	0	0	2
Not stated	7	0	0	0	0	1	1
Total	2	3	1	2	1	1	17
	0						
	9						

4.4 IEC

IEC is an important component of JSSK service. IEC in the form of Poster, Written on walls, and Charts are available in all the facilities except in WH Baramati. Proper cleanliness is maintained in all the facilities.

Table 4.6: Health Services (IEC) by type of health facilities, Pune 2015-16

	PH C	RH	SD H (50)	SD H (100)	D H	W H	To tal
IEC Materials available for JSSK in facility							
Poster	9	3	1	2	1	0	16
Written on walls	9	2	1	2	1	0	15
Charts	8	3	1	2	1	0	15
Newly started, IEC not displayed	0	0	0	0	0	1	1
Total	9	3	1	2	1	1	17
Cleanliness maintained in the facility							
Yes	9	3	1	2	1	1	17
Total	9	3	1	2	1	1	17

Chapter V Diet Services in Health Facilities

Free Diet is one of the important components of JSSK and a separate budget is maintained for provision of free diet under JSSK. Under JSSK free diet is provided to mothers till 48 hours after normal delivery and upto 7 days after c section delivery. In case of sick infants also free diet is available. However, it is advisable that baby is breastfed exclusively till 6 months.

Arrangement of diet varies facilities to facilities. In high referral facilities they have their own kitchen; whereas at PHC level they give to SHG or local hotels. Hence, to understand the functioning of DIET and mechanism of various stakeholders in providing DIET we prepared a separate questionnaire for concerned officials associated with implementation of diet.

Majority of the cooks are in middle age group with 31-40 years (9), and 31-40 years (4). In terms of education most of the SHG were with 8-10 years of education (5), and 5-7 and 10-12 years of education (4 each). Except for one rest of the interviewed SHG belongs to religion Hindu. Caste wise, majority of them belong to caste Open (9), followed by caste OBC (4).

Except for two facilities rest of the facilities have pucca and semi pucca kitchen in their facilities (7 each). Majority of them have atleast 1-5 years (8), and 5-10 years (6) in catering profession. Ten of the respondents from SHG have 1-5 years of experience in JSSK itself. Every kitchen has electricity as the main source of lighting.

It is quite evident that bigger hospitals have a larger space for kitchen considering the dietary need of number of patients. However, this was not the case as observed in SDH Baramati having less than 100 sq feet allotted exclusively for kitchen. Rest 11 facilities have space of 100-200 sq ft for kitchen. Thirteen facilities have access to piped water for cooking. However, PHC Rahu relies on packaged water (35 ltr per day) for its cooking purpose. Majority of the respondents reported LPG as a main source of cooking (7) followed by biogas (2). Depending upon the demand the number of cooks assisting increases as evident from nearly 5 cooks in facilities SDH Manchar and 10 in RH Yavat. The majority of the cooks (14) are paid per day and nearly all the cooking facilities are in the vicinity of 500 mtr from facilities (14)

Although 11 respondents from SHG were aware of JSSK when it comes to entitlements majority were aware of free diets (10), followed by free medicines and transport (8 each), and free diagnostics (6).

Nearly all of them serve the food (15). Diet charts are mainly provided by ANM and ASHAs (6 each).

The total amount per diet is RS 100 (11). Majority felt that diet amount is not sufficient (10) and partially sufficient (3)

The diet menu for rice and dinner is usual consisting of rice, dal and vegetables. In one facility RKSS member decides the menu. Majority of the facility do monthly payment (12). Irregular payment was reported from SDH Baramati and PHC Murti. Majority will recommend others to this job and aware others about JSSK (12 each). In general the suggestion was to increase the amount for diet from Rs 76 to Rs 120, followed by suggestions for payment to be in time, space for cooking in facilities.

Table 5.1 Diet services in Health facilities, Pune 2015-16

	PHC	RH	SDH	W H	Total
TOTAL RESPONDENTS	9	3	1	1	16
Age of Cook					
21-30	0	1	0	1	2
31-40	5	2	2	0	9
41-50	3	0	1	0	4
51-60	1	0	0	0	1
Total	9	3	3	1	16
Education of Cook					
1-4	2	0	0	0	2
5-7	2	1	1	0	4
8-10	3	0	1	1	5
11-12	2	2	0	0	4
Graduate & above	0	0	1	0	1
Total	9	3	3	1	16
Marital Status					
Currently married	3	2	1	14	11
Widowed	0	1	0	2	
Total	9	3	3	1	16
Religion					
Hindu	8	3	2	1	14
Muslim	0	0	1	0	1
Buddhist/Neo Buddhist	1	0	0	0	1
Total	9	3	3	1	16
Caste					
SC	1	1	0	0	2

OBC	4	0	0	0	4
Open	4	2	3	0	9
Other	0	0	0	1	1
Total	9	3	3	1	16
Type of Kitchen					
Kutchha(name of facilities)	1	0	1	0	2
Semi Pucca	6	1	0	0	7
Pucca	2	2	2	1	7
Total	9	3	3	1	16
Duration in catering profession					
1-5	5	2	0	1	8
5-10	3	1	2	0	6
10-15	0	0	1	0	1
Not stated	1	0	0	0	1
Total	9	3	3	1	16
catering for JSSK					
1-5	7	2	0	1	10
Not stated	2	1	1	0	4
Total	9	3	3	1	16
Main source of light					
Electricity	9	3	3	1	16
Total	9	3	3	1	16
Area of kitchen (sq. ft.)					
Less than 100 Sq. ft. (SDH Baramati, PHC Taleghar)	1	0	1	0	2
100-200 sq.ft.	8	2	1	0	11
200-400 sq. ft. (RH Gho. 400, SDH Daund 225)	0	1	1	0	2
Total	9	3	3	1	16
Source of water to cook the food					
Piped water	7	2	3	1	13
Ground water	1	0	0	0	1
Piped and well water	0	1	0	0	1
Package water	1	0	0	0	1
Total	9	3	3	1	16
Type of fuel is used for cooking					
Wood(name of facilities)	0	0	1	0	1

LPG	6	0	1	0	7
Bio-gas	1	1	1	1	4
Wood & LPG	0	2	0	0	2
Wood & Biogas	1	0	0	0	1
Kerosene & Electricity	1	0	0	0	1
Total	9	3	3	1	16
No. of cooks work in the kitchen (Male)					
0	4	2	1	0	7
1	5	1	2	1	9
Total	9	3	3	1	16
No. of cooks work in the kitchen (Female)					
0	0				
1	7	2	0	1	10
2	2	0	2	0	4
5 (SDH Manchar)	0	0	1	0	1
10 (RH Yavat)	0	1	0	0	1
Total	9	3	3	1	16
Payment					
Per person per day	8	2	3	1	14
Per dabba	1	0	0	0	1
Not stated	0	1	0	0	1
Total	9	3	3	1	16
Distance of cooking place from facility (km)					
0-500 mtr.	8	3	3	0	14
500-1 km	0	0	0	1	1
Total	8	3	3	1	15
Aware about JSSK?					
Yes	6	2	2	1	11
No	3	1	1	0	5
Total	9	3	3	1	16
Entitlements					
Free ANC checkup	4	1	1	1	7
Free Medicines	3	2	2	1	8
Free Diagnostic	2	2	1	1	6
Free Transport	4	2	1	1	8
Free Diet	5	2	2	1	10
Total Responses	5	2	2	1	10

				2	2
Diets provided					
2	1	0	0	0	1
11	0	1	0	0	1
312	1	0	0	0	1
545	0	1	0	0	1
600	1	0	0	0	1
2400	0	1	0	0	1
3532	0	0	0	1	1
4040	0	0	1	0	1
6778	0	0	1	0	1
Total	3	3	2	1	9
Type of diet					
Breakfast, Tea, Lunch, Dinner	6	1	3	1	11
Lunch & Dinner	3	2	0	0	5
Total	9	3	3	1	16
Serve the food					
Yes	8	3	3	1	15
No	1	0	0	0	1
Total	9	3	3	1	16
Any wastage of food?					
Yes	2	1	0	0	3
No	6	2	3	1	12
Yes, if case referred further	1	0	0	0	1
Total	9	3	3	1	16
Any shortage					
Yes	0	1	0	0	1
No	9	2	3	1	15
Total	9	3	3	1	16
Diet chart by					
ANM	6	0	0	0	6
SN	1	2	2	1	6
Medical Doctor	2	1	0	0	3
Paediatrician	0	1	0	0	1
Gynecologist	0	1	1	0	2
ASHA	3	0	0	0	3
Total	9	3	3	1	16
Amount					

Rs. 55	0	1	0	0	1
Rs. 76	0	0	1	0	1
Rs. 100	8	1	2	1	12
Rs. 110	0	1	0	0	1
Rs. 130	1	0	0	0	1
Total	9	3	3	1	16
Sufficiency					
Yes	1	1	1	0	3
No	6	2	2	0	10
Partially	2	0	0	1	3
Total	9	3	3	1	16
Amount required to give sufficient diet					
Rs. 110	1	0	0	0	1
Rs. 117	1	0	0	0	1
Rs. 120	0	1	1	0	2
Rs. 125	0	0	0	1	1
Rs. 130	2	0	0	0	2
Rs. 133	1	0	0	0	1
Rs. 140	1	1	0	0	2
Rs. 150	1	0	1	0	2
Rs. 170	1	0	0	0	1
Total	8	2	2	1	13
Menu of lunch-dinner					
Roti, Chapati, Rice, Bhaji, Dal	9	3	3	1	16
Total	9	3	3	1	16
Frequency of payment					
Daily	1	0	0	0	1
Weekly	0	1	0	0	1
Monthly	7	2	2	1	12
Irregular Payment	1	0	1	0	2
Total	9	3	3	1	16
Timely payment					
Yes	7	3	1	1	12
No	2	0	2	0	4
Total	9	3	3	1	16
Any difficulties in getting payment					

Yes	2	0	2	0	4
No	6	3	1	1	11
Total	8	3	3	1	15
Satisfied with payment					
Yes	6	3	1	1	11
No	3	0	2	0	5
Total	9	3	3	1	16
Overall satisfaction					
Yes	9	2	1	1	13
No	0	1	2	0	3
Total	9	3	3	1	16
Reason for Dissatisfaction					
Payment per person is less	0	1	0	0	1
Do not get payment in time	1	0	1	0	2
Both, Payment is less & don't get payment in time	0	0	1	0	1
Total	1	1	2	0	4
Recommend this job to others					
Yes	7	3	2	-	12
No	1	0	0	-	1
Total	8	3	2	-	13
Ever informed others about JSSK					
Yes	7	3	2	-	12
Don't know about JSSK	1	0	0	-	1
Total	8	3	2	-	13
Recommend other to come to this facility					
Yes	8	2	2	-	12
Total	8	2	2	-	12
Any suggestion					
Yes	6	2	2	-	10
No	2	0	0	-	2
Total	8	2	2	-	12
Facility should provide space for cooking					
Facility should provide space for cooking	0	1	1	0	2
Payment should be done in time					
Payment should be done in time	0	0	1	0	1
Amount per day per person should be increased from Rs. 76 to 120					
Amount per day per person should be increased from Rs. 76 to 120	2	1	2	0	5

Need supply of milk & gul-shengadana ladu	0	1	0	0	1
PHC should provide plate-bowl (set of 6)	4	0	0	0	4
Payment should be done in cash, no cross-cheque	0	1	0	0	1
Total Suggestions	6	3	2	0	11

Chapter VI Health Service Provider (Driver)

For efficient functioning of transport service an important component of JSSK is the role of driver which plays an important role. In Maharashtra under NRHM the drivers are appointed through BWG as well as there is permanent post of drivers under state government.

As per terms and condition/agreement the drivers receives monthly salary as well as fixed amount for mobile recharge. There are three types of vehicle which can cater to beneficiaries of JSSK. Usually for JSSK an ambulance fitted with GPS is provided and can be accessed using toll free number 102. Patients/relatives/service provider can also seek the transport service of ambulance of health facilities and emergency ambulance (toll free 108) whichever available.

To understand the overall functioning of JSSK transport service we interviewed drivers from the visited health facilities. Drivers available on the day of our visit were interviewed and presented in the following table to know the overall functioning of the schemes; if any hindrance in providing the transport service; and suggestions to improve the transport service.

From the facilities visited fifteen drivers were interviewed depending upon their availability. Drivers driving by types of vehicle such as 108 (2); 102(9); facility vehicle (2); both facility and 102 (1) were interviewed.

The number of drivers in the age group 21-30 years was five whereas in the age group 51-60 years was three. Majority of the interviewed drivers have completed 8-10 years of education (8) followed by drivers with 10-12 years of education (4). Out of the 15 drivers; six belongs to caste open; 3 each from caste SC and OBC; 2 from caste ST and 1 from NT. Seven each of the drivers have an experience of 1-10 years and more than 10 years of driving respectively; Except for two of the drivers who were newly joined rest of the drivers have an experience of 1-10 years (2) to 11-20(9) years.

Except for drivers from facilities PHC Warwand, RH Yavat, SDH Manchar all the drivers were aware of JSSK. However, when it comes to entitlement the level of awareness varies with all the drivers aware of free pick up, drop back and referrals. The number of drivers who were awareness of free drugs and consumables and free blood if required was 5 and 4 drivers respectively; 3 drivers were aware of free diagnostics and surprisingly only 2 drivers were aware of availability of free diet.

Maintaining log book not only provides abstract of the number of beneficiaries utilizing transport service it also helps to cross relate the work load of drivers to the number of beneficiaries. Vehicle log book is maintained by all the drivers however only 9 drivers responded in affirmative that monthly abstract is done. In terms of data entered during the reference period it was found 8 drivers reported non availability of data; driver from PHC Murti have all the data entered; 3 drivers maintain pick up and

drop back data and one each driver maintain partial data such as only referrals or drop back etc. It was also observed from log book that at times numbers of beneficiaries are more than one if pick up/drop back is from same route. Overall there is no uniformity in terms of entry of data.

When queried about not maintaining the log book the response from each of 3 drivers was since they were newly joined will take time in maintaining, sometimes if more than one driver in a facility log book maybe with other driver and it seems if they get call from call centre log book is not maintained. It is suggested in such cases a separate log book for each of the driver is maintained.

Availability of GPS helps in locating the beneficiaries and thus expanding the outreach service to remote areas. Except for WH Baramati all the vehicle is fitted with GPs however in facilities PHC Taleghar and PHC Murti the GPS was not functioning. Maintenance of vehicle, GPS system cannot be neglected to assure timely and efficient transport service.

Performance of driver may affect if they are subjected to undue stress without a break. Hence, drivers were queried on working hours/pattern and stress etc. The duty hours was 24 hours in all the facilities except in facilities RH Yavat and SDH Manchar where duty hours was 12 hours. Eleven drivers reported there were no fix timings as such.

At a stretch 2 driver from facilities PHC Morgaon and PHC Sangvi reported driving for more than 24 hours, 4 drivers driving at a stretch of 16-18 hours and 3 each of drivers reported driving at a stretch of 10-12 and 2-6 hours respectively. This reflects stress among drivers.

Except for 2 drivers from facilities RH Yavat, and WH Baramati the rest of drivers unanimously agreed that it affects their work if they have to drive non stop and even 3 drivers from facilities PHC Taleghar, PHC Kurkhumbh, SDH Manchar admitted at times they felt they maybe unable to stretch or drive further. This is a matter of serious concern, considering the stress drivers undergo.

None of the drivers reported any untoward incident of any danger/threat/ accident or death while they were on road.

Due to availability of free transport services there are chances of unnecessary referrals. Even tough, drivers are not an health staff but at times with year of experience they can judge although not perfectly the seriousness of the cases. Except for drivers from facilities PHC Rahu, PHC Kurkhumbh, and DH Aundh rest felt there was no such unnecessary referrals.

ASHAs (8), ANMs (6), and call centre (5) are the three places from where they receive call for transport service. Drivers from facilities DH Aundh and WH Baramati reported they receive call only for drop back services.

On an average 9 drivers reported of covering 1-50 km per day; whereas drivers from SDH Manchar and reported of travelling more than 150 km.

When queried about alternative arrangement 5 drivers reported other driver comes on hourly basis, Four drivers reported that patients/facilities make their own arrangement and 4 drivers from facilities PHC Rahu, Warwand, Kurkhumbh, Morgaon reported no arrangement at all.

Except for drivers in facilities PHC Taleghar, Murti & SDH Manchar rest felt fuel for vehicle is adequate.

Timely payment of salary is essential otherwise it might demotivate the driver. Five of the drivers from facilities PHCs Sangvi, Mhalunge, Kurkhumbh, Taleghar, Morgaon reported they do not receive salary on timely basis leading to strain in steady income. Regarding salary of driver it ranged from Rs 50001-10000 (10) to Rs 30,000-35000 (1) **depending upon years of experience and affiliation.**

Communication is an important aspect for smooth functioning of transport service. Hence, mobile needs to be charged on regular basis and an addition amount to salary is paid for mobile recharge. All the drivers reported receiving amount for mobile recharge except for driver in WH Baramati. The

amount varies from Rs 200 (9) to Rs 100(2) which was insufficient as reported by 9 drivers in facilities PHC Warwand, Sangvi, Kurkhumbh, Morgaon, Taleghar, Rahu, & RH Yavat, SDH Manchar.

Thirteen drivers were satisfied with their work and will recommend others about this work and all have informed others about JSSK services. However, 7 drivers reported that they will leave this job if they get another job indicating probability of high attrition rate.

Regarding difficulties the most prominent reason was non timely payment of salary (5), regular servicing of the vehicle (3), regular maintenance and continuous duty (2 drivers each).

When asked about suggestions to improve the JSSK transport service drivers suggested of more salary and appointing more number of drivers (4 each), and to have permanent post (3).

Overall, it seems drivers are under strain in addition to not timely payment of salary which could be a demotivating factor for drivers.

Table 6.1: Background Characteristics and provision of JSSK Services by drivers in health facilities, Pune 2015-16

	Facility Type					Total
	PHC	RH	SDH	D H	W H	
TOTAL RESPONDENTS	8	3	2	1	1	15
Type of vehicle						
108 Ambulance	0	1	1	0	0	2
102 Ambulance	6	2	0	0	1	9
Facility Ambulance	1	0	1	0	0	2
Both 102 & facility Ambulance	0	0	0	1	0	1
Not stated (PHC Mhalunge)	1	0	0	0	0	1
Total	8	3	2	1	1	15
Age of Driver						
21-30	2	2	0	0	1	5
31-40	1	1	1	0	0	3
41-50	3	0	1	0	0	4
51-60	2	0	0	1	0	3
Total	8	3	2	1	1	15
Education (completed yrs of education)						
1-4	1	0	0	0	0	1
5-7	1	0	0	0	0	1
8-10	3	2	2	1	0	8
11-12	2	1	0	0	1	4
Graduate & above	1	0	0	0	0	1
Total	8	3	2	1	1	15
Caste						
SC	2	0	0	1	0	3
ST	1	0	1	0	0	2
NT	0	1	0	0	0	1
OBC	2	1	0	0	0	3
Open	3	1	1	0	1	6
Total	8	3	2	1	1	15

Driving experience (years)						
1-10 (<1; 1-10; and 10+) (All cases are in gr. 1-10)	3	2	1	0	1	7
11-20	2	1	0	0	0	3
21-30	2	0	1	1	0	4
Total	7	3	2	1	1	
No. of years doing this job						
Newly joined (few months)	1	0	0	0	1	2
1-10	5	3	1	0	0	9
10 +	1	0	1	1	0	3
Total	7	3	2	1	1	14
Aware of JSSK entitlements						
Yes	7	2	1	1	1	12
No (PHC Warwand, RH Yavat, SDH Manchar)	1	1	1	0	0	3
Total	8	3	2	1	1	15
Awareness by entitlements						
Free drugs and consumables	3	1	1	0	0	5
Free essential diagnostics	2	0	1	0	0	3
Free provision of blood	3	0	1	0	0	4
Free diet	1	1	0	0	0	2
Total	7	2	1	1	1	12
No. of vehicles drive In this facility						
1	8	1	1	0	1	11
2	0	2	0	0	0	2
3	0	0	1	1	0	2
Total	8	3	2	1	1	15
vehicle logbooks maintained						
Yes	8	3	2	1	1	15
Total	8	3	2	1	1	15
If yes, monthly abstract done						
Yes	4	3	1	1	0	9
No	3	0	1	0	1	5
Total	7	3	2	1	1	14
Type of facilities						
Only drop-back data for mother available (entered)	0	0	1	0	0	1
Pickup & Drop-back data for mother available	2	1	0	0	0	3
Referral & drop-back for mother available	0	1	0	0	0	1
Pickup & drop-back and referral for mother available	1	0	0	0	0	1
Referral & Dropback for mother and infant available (DH Aundh)	0	0	0	1	0	1
Data not available	5	1	1	0	1	8
Total	8	3	2	1	1	15
Reason for not maintaining logbook						
New appointment	1	0	0	-	-	1
Logbook not available/in the vehicle with other driver	0	0	1	-	-	1

Other (There was a call from call centre, driver had to leave the interview)	0	1	0	-	-	1
Total	1	1	1	-	-	3
GPS fitted in the vehicle						
Yes	7	3	2	1	0	13
No	0	0	0	0	1	1
Total	7	3	2	1	1	14
GPS functioning						
Yes	5	3	1	1	0	10
No	2	0	0	0	0	2
Total	7	3	1	1	0	12
duty hours						
12 hrs (RH Yavat, SDH Manchar)	0	1	1	0	0	2
24 hrs	7	2	1	1	1	12
Total	7	3	2	1	1	14
Is the time fixed?						
Yes	0	1	1	1	0	3
No	7	2	1	0	1	11
Total	7	3	2	1	1	14
At a stretch average hrs of work						
2-6	3	0	0	0	0	3
7-9	0	1	0	0	0	1
10-12	1	0	2	0	0	3
13-15	0	0	0	1	0	1
16-18	1	2	0	0	1	4
24 hrs &	2	0	0	0	0	2
Total	7	3	2	1	1	14
Non stop duty affecting the work						
Yes	5	0	2	0	0	7
No	0	1	0	0	1	2
Sometimes	2	2	0	1	0	5
Total	7	3	2	1	1	14
Ever felt unable to stretch further						
Yes	2	0	1	0	0	3
No	4	3	1	1	1	10
Total	6	3	2	1	1	13
Ever face any threat/danger in your service						
No	7	3	2	1	1	14
Sometimes	1	0	0	0	0	1
Total	8	3	2	1	1	15
Any accident						
No	8	3	2	1	1	15
Total	8	3	2	1	1	15
Any death of patient						
No	8	3	2	1	1	15
Total	8	3	2	1	1	15

unnecessarily referred even before admission						
Yes	2	0	0	1	0	3
No	6	2	1	0	1	10
Don't know	0	1	1	0	0	2
Total	8	3	2	1	1	15
Normally, who calls for vehicle						
Call centre	1	3	1	0	0	5
ASHA	8	0	0	0	0	8
ANM	6	0	0	0	0	6
Patient	1	0	0	0	0	1
Relative of patient	2	0	0	0	0	2
MO	0	0	1	0	0	1
Vehicle is for drop back only (0	0	0	1	1	2
Total	8	3	2	1	1	15
Daily how many kms						
1-50	7	1	0	0	1	9
51-100	1	2	0	0	0	3
151-200	0	0	0	1	0	1
Above 200 kms.	0	0	2	0	0	2
Total	8	3	2	1	1	15
Alternative arrangement						
Own Arrangement	1	2	1	0	0	4
Other driver come on hourly basis	2	1	1	1	0	5
Available at any time	1	0	0	0	1	2
No alternative	4	0	0	0	0	4
Total	8	3	2	1	1	15
Adequate Fund for fuel						
Yes	6	3	1	1	1	12
No	2	0	1	0	0	3
Total	8	3	2	1	1	15
Timely Payment						
Yes	3	3	2	1	1	10
No	5	0	0	0	0	5
Total	8	3	2	1	1	15
Monthly salary						
Per day basis	0	0	0	0	1	1
5001-10000	6	3	1	0	0	10
15001-20000	1	0	0	0	0	1
20001-25000	1	0	0	0	0	1
25001-30000	0	0	0	1	0	1
30001-35000	0	0	1	0	0	1
Total	8	3	2	1	1	15
Receives amount for mobile charges in addition to salary						
Yes	8	2	2	1	0	13
No	0	0	0	0	1	1

Separate mobiles are given to drivers	0	1	0	0	0	1
Total	8	3	2	1	1	15
Amount for mobile charges						
Rs. 100	1	1	0	0	-	2
Rs. 150	2	0	0	0	-	2
Rs. 200	5	1	2	1	-	9
Total	8	2	2	1	-	13
Amount sufficient						
Yes	2	1	0	1	-	4
No	6	1	2	0	-	9
Total	8	2	2	1	-	13
Satisfied with work						
Yes	6	3	2	1	1	13
No	1	0	0	0	0	1
Sometimes	1	0	0	0	0	1
Total	8	3	2	1	1	15
Recommend this work to others						
Yes	6	3	2	1	1	13
No	2	0	0	0	0	2
Total	8	3	2	1	1	15
Inform others about JSSK						
Yes	8	3	2	1	1	15
Total	8	3	2	1	1	15
Leave if got another job						
Yes	4	1	1	1	-	7
No	4	2	0	0	-	6
Not answered	0	0	1	0	-	1
Total	8	3	2	1	-	14
Difficulties						
Continuous duty, no rest	1	0	1	0	-	2
Additional driver needed	0	1	0	0	-	1
Vehicle Maintenance charges should be increased	1	1	0	0	-	2
Do not get salary regularly	5	0	0	0	-	5
Servicing of Vehicle should be regular	2	0	0	1	-	3
Salary is less	1	0	0	0	-	1
It should be 8 hrs duty, not more than that	1	0	0	0	-	1
Vehicle should be washed regularly	0	0	0	1	-	1
Mobile allowance should be increased	1	0	0	0	-	1
Total responses	6	1	1	1	0	9
Suggestions						
12 hrs working is strenuous/more	0	0	2	-	0	2
Appoint more driver distribute work	1	1	1	-	1	4
Driver's post should be permanent	1	2	0	-	0	3
Salary should be increased	1	2	0	-	1	4
Vehicle should be maintained time to time	2	0	0	-	0	2
Should get uniform	1	0	0	-	0	1
Should get Identity Card	1	0	0	-	0	1

LIC Policy should be given to drivers by govt.	1	0	0	-	0	1
Should get weekly off	1	0	0	-	0	1
Total responses	5	2	2	0	1	10

Chapter VII Role of ASHA

ASHAs play an important role as an outreach work reaching to local level and bridging the gap between HSP and beneficiaries. ASHAs are provided training (based on level of training) to provide basic health care at local level for which they receive incentives for ANC care and Deliveries. Hence, ASHAs plays an important role in creating awareness of JSSK scheme and in providing necessary feedback for the implementation of the scheme.

From three blocks and three facilities one each ASHAs were interviewed to know the awareness and implementation of JSSK scheme.

The finding and analysis are provided in the following table. All the interviewed ASHAs (9) are currently married women. About six ASHAs were in the age group 25-35 years of age. Four of ASHAs have completed 8-10 years of education whereas 3 ASHAS have completed 10-12 years of education and two ASHAs have completed 12+ years of education. Among the interviewed one ASHA belongs to caste SC 3 each of ASHAs belongs to caste ST and OBC and 2 belongs to caste open. Two ASHAs were self employed in agriculture; 3 employed in agriculture and one each was employed as skilled and unskilled manual labour, self-employed and in service sector.

The overall household monthly income of ASHAs varies considerably with two each of ASHAs having monthly salary of Rs 3000 and Rs 10,000 respectively. One each of ASHA's monthly income ranges from Rs 5800 to Rs 25,000. The number of household member in the family varies from 3 to 10 members per household. When asked about their husband's employment four of ASHAs husband are working as self employed in agriculture; 3 of ASHAs husband are in service sector whereas one each of ASHAs husband are working as agriculture employed and skilled manual labour. Overall the major source of income is from agriculture sector.

Six of ASHAs name was suggested by gram panchayat and 3 of ASHAs name were suggested by ANMs. Five of ASHAs have completed training in module 7 and one each in module 1, 2 and 3. This implies majority of ASHAs interviewed have received advance training depending upon the length of service as ASHAs. Except for one all the ASHAS work in the same village where they reside. Six of ASHAs belonging to (3 each of tribal and non tribal areas) serve an average population of 1000 and rest of ASHAs serve an average population of 1100 to 1600 in non tribal areas. Household visits by ASHAs not only help in providing basic care and needs to the community but it also helps in bringing the gap between community and health facilities. The number of household visits by ASHAs shows ASHAs from PHCs

Morgaon, Murti, Rahu, Warwand, Kurkhumbh visits 2-3 households whereas ASHAs from PHCs Sangvi and Mhalunge Padval visits 16 and 25 households respectively. One ASHA from PHC Taleghar and PHC Peth visits 70 and 75 households respectively per week which is quite high.

All the interviewed ASHAs were aware of JSSK scheme. Although, all of them reported yes to entitlements eight ASHAs were aware of free pick up, free diagnostics and free drugs and consumables. Five each of ASHAs were aware of only free blood if required and free user charge. This reflects partial awareness of JSSK in terms of entitlement. ASHAs from PHC Rahu, Warwand, & Morgaon were not aware of availability of free blood if required and free user charge. Whereas, ASHAs from PHCs Rahu, Kurkhumbh, & Morgaon were not aware of free user charge.

Early ANC registration not only helps in timely detection of any future complications but also helps in providing adequate care and growth to both mother and babies. During the reference period the number of women who were registered by ASHA ranged from 4 (PHC Sangvi) to 45 (PHC Peth). ASHAs from PHC Warwad and PHC Peth registered 38 and 46 women for ANC and number of births respectively. Consequently, the number of births registered by ASHA ranged from 3 (PHC Sangvi) to 45 (PHC Peth births respectively).

When queried about number of women referred for free pick up transport and accompanied the response ranged from 2 in PHC Peth to 20 in PHC Warwad during the reference period.

Only one ASHA said that distance of expectant mother to facility PHC Peth was 0.5 km in rest of the case the distance from facility to beneficiaries ranged from 1.5 km to 10 km (PHC Rahu) 12km (PHC Kharkhamb). Coincidentally ASHAs from PHC Kharkhamb responded the mode of travel between facility and home was by walk which needs to be addressed. ASHA from PHC Rahu reported public ST and 4 ASHAS reported facilities vehicle as mode of travel between home and facilities. This reflects, beneficiaries are located nearby as well as far off. Ideally the role of ASHAS plays an important role in not only identifying the number of mothers and sick infants located far off but also in identifying the mode of travel. Identifying and taking up some early measures in providing quick access to health facilities will ease out unnecessary difficulties at the time of emergency.

ASHAs from eight health facilities provided mobile no. to expectant mother in ANC card. The number of women who got pick up and drop back during the reference period ranged from 2 in PHC Peth to 20 and 2 to 18 women respectively and 4 of ASHAS did not stated.

Only one ASHA reported to provide pick up to 1 infant from PHC Peth facility.

ASHAs from PHCs Rahu (Rs 200), PHC (Taleghar (Rs 300) reported of providing reimbursement to mother in case of inability to provide transport service. Uniformly all the ASHAs reported that diet is provided free of cost and the quality of the food is good.

Incentive amount received by ASHA ranged from an amount of Rs 3000 in PHC Morgaon to Rs 35000 in PHC Warwand. **Contrastingly, even tough PHC Peth in terms of utilization of health services is low the incentive amount received by ASHA from the same PHC is 22200. Since, overall incentive is asked it is quite likely that these incentives are provided for other type of services.**

Timely receipt of incentive is important otherwise it leads to strain affecting the overall health services. When queried about the remaining amount of incentive to be received it ranged from Rs 0 (PHC Morgan) to **Rs 25000 (PHC Peth)**.

When asked if they face any difficulties two ASHAs from (PHC Mhalunge facility reported vehicle do not come when called. **This may also be one of the reason for low utilization of service in PHC Peth.** Responses from ASHAs were also to get additional incentive if the cases are further referred and patients come on their own due to which they don't get incentive.

When asked about suggestion to improve JSSK service ASHAs from (PHC Mhalunge Padval & Morgaon)reported ambulance and driver should be available. ASHAs from PHC Kurhumb reported specialist such as Pediatrician and gynecologist should be available.

Table 6.1: Background Characteristics and provision of JSSK Services of ASHAS, Pune 2015-16

ASHA	Numbers
Total Respondents	9
Age of the respondent	
25-30	4
30-35	2
35 & above	3
Total	9
Education of the respondent	
8-10	4
11-12	3
Above 12th	2
Total	9
Marital Status (CURRENTLY MARRIED)	9
4 Caste	
SC	1
ST	3
OBC	3
Open	2
Total	9
Occupation of Respondent	
Agric-self employed	2
Agric-employed	3
Skilled manual	1
Unskilled manual	1
Self employed	1
Service	1
Total	9
Household Income (monthly)	
3000	2
5800	1
6000	1

10000	2
18000	1
25000	1
Not stated	1
Total	9
No. of members in the family	
3	1
4	4
5	2
7	1
10	1
Total	9
Occupation of Husband	
Agric-self employed	4
Agric-employed	1
Skilled manual	1
Service	3
Total	9
Who suggested your name for work of ASHA	
Gram Panchayat	6
ANM	3
Total	9
No of training completed (Module)	
1	1
2	1
3	1
7	5
Not stated	1
Total	9
Work for same village	
Same village	8
Other village	1
Total	9
Year of joining ASHA Programme	
2002	1
2007	2
2009	3
2011	1
2012	1
2014	1
Total	9
Average population do you serve	
1000	6
1100	1
1500	1
1600	1

Total	9
14 No. of HH visits per week	
10	2
12	3
16	1
25	1
70	1
75 (PHC Peth)	1
Total	9
Aware of JSSK entitlements	
Free Transport (Home to Facility)	8
Free Diagnostics for Pregnant woman	8
Free Drugs & Consumables for Pregnant woman	8
Free provision of blood for Pregnant	5
Free Diet during stay in the facility after delivery	9
Free Transport between facilities in case of referral	9
Free Drop back from Facility to Home	9
Exemption from all kinds of user charges	5
No. of pregnant women	
4	1
11	1
12	1
15	2
17	1
36	1
45	1
Not stated	1
Total	8
No. of births registered	
3	1
6	1
10	1
15	1
38	1
46	1
Not stated	3
Total	9
No. of home deliveries in the reference period	
0	3
Not stated	6
Total	9
No. of women refer for free transport (pickup) to govt. facility for delivery	
2	1
6	1
12	1
15	2
20	1
Not stated	3
Total	9
No. accompanied	

2	1
6	1
12	1
15	2
20	1
Not stated	3
Total	9
Distance from home where you generally refer the patient (km.)	
.500	1
1.500	1
3.000	1
4.000	2
10.000	1
12.000	1
Not stated	2
Total	9
Mode of transport	
By walk	2
Public Bus (ST)	1
Govt. vehicle	4
Not stated	2
Total	9
Money received from JSY scheme per delivery	
600	5
700	1
2400	1
5000	1
Not stated	1
Total	9
Whether mobile no. of institute /driver given in MCP card	
Yes	8
No	1
Total	9
No. of women got pickup in reference period	
2	1
6	1
16	1
17	1
20	1
Not stated	4
Total	9
No. of women got dropback in reference period	
2	1
6	1
8	1

16	1
18	1
Not stated	4
Total	9
No. of infants got pickup in reference period	
1	1
Total	9
No. of infants got dropback in reference period	
Not stated	9
Total	9
Any reimbursement given to mothers for not providing vehicle	
No reimbursement	6
Rs. 200	1
Rs. 300	1
Not stated	1
Total	9
Diet provided to mothers/infants in the facility	
Yes	9
Total	9
Quality of diet	
Good	9
Total	9
Incentive amt. received during the reference period	
3000	1
4000	1
5000	1
9000	1
12500	1
15000	1
18000	1
22200	1
35000	1
Total	9
Remaining amount of incentive	
0	1
1000	1
1500	1
2000	1
9000	1
25000	1
Not stated	3
Total	9
Difficulties	
Don't get salary in time	2
Don't get vehicle after a call by ASHA	1

Additional incentive should be given if case is referred further	1
Patient come on their own, we don't get benefit of	1
Total responses	4
Suggestions	
Ambulance needed	2
Driver should be appointed	2
Should get travelling expenses while coming back with patients	1
Paediatrician should be appointed	1
Gynecologist should be appointed	1
Total responses	4

Chapter VIII Summary

The age at marriage for nearly 55 percent of the interviewed respondents is quite low (17-19 years). Correspondingly, the present delivery is first delivery for 62 percent of the respondents. Sixty seven percent of the respondents were aware of JSSK. The main sources for awareness are Doctors (43%), ASHAs (43%) and Relatives (41%). Near to quarter percent of the respondents (24%) also reported poster as the main source of information. To ascertain the level of awareness, when respondents were asked about awareness by each entitlement of JSSK, three fourth of the respondents (74%) were aware of free diagnostics followed by free drugs (69%), free diet during stay (68%) and free transport (67%). Only 20 percent of the interviewed respondents were aware of free blood if required. In terms of receiving ANM phone number only 14.1 percent have received it. However, 44.2 percent have received the toll free number. Overall, the first level of contact which is either through toll free or through ANM phone number is dismally low. Interestingly, more number of respondents (35) was aware of the toll free number 108 whereas only 2 respondents were aware of the toll free number 102 which is exclusively used for JSSK transport service.

Lack of awareness, means of communication, and the decision making ability are the major hindrances in seeking health service. In terms of means of communication there seems to be no major hindrance as all the respondents or caretaker of the respondents own a mobile. Similarly, near about half of the respondents (51%) have moped/scooter and 10 percent of the respondents own a car. This may be the prime reason that out of the 57 respondents only 6 tried to avail free transport for pick up service.

Distance to nearest hospital is an important component in health seeking behavior of the patients. Not only it saves precious time but also avoid unnecessary hassles most importantly in a nuclear family set up. However, distance cannot be outweighed by the quality of treatment. For example, a patient would always prefer to seek health services in a distant health facility with specialized doctors rather than nearest facility with not a specialized doctor. Moreover, in urban areas the distance hardly matters with the availability of transport. In contrast, the patients and his or her caretaker can also evaluate health seeking behavior if he or she feels that a delivery can be done in a nearby subcentre rather than seeking the health service in distant places.

Forty five percent of the interviewed respondents reported private hospital as the nearest health facility to their house and the reasons for not visiting the nearest hospital was exorbitant charges (33%) by the private hospital. Regarding the pathways followed, considerable number of respondents (42%) reported seeking treatment in private hospital before admission to the present hospital. Substantial number of respondents (31%) admitted to the present hospital were referred from other hospitals.

Very few (1.4%) were admitted to the present hospital due to availability of JSSK service. Free of charge (52%) and easy accessibility (50%) were the prominent reason for admission to present hospital.

Among the 29 referred cases 17 were aware of free referral service and the major source of information was ASHAs and Doctors. Self-arrangement for referral was reported in 4 cases referred each from PHC, RH & Private hospital and 1 case from KEM Pune to DH Aundh. It needs to be investigated why the referral respondents in government health facilities arranged the referral transport on their own.

Referral cases (25) were provided with referral slips. Out of the 25 respondents referred sixteen respondents were accompanied by doctors whereas one was accompanied by ASHA. More than half the number of referral respondents (14) did not receive any instruction. Six respondents got general counseling.

With 72 percent of the respondents aware of free diet available in health facility, the awareness of free diet seems to be good. The main source of information seems to be ASHA (38 percent), doctors (45%) and relatives (41%). Majority of the respondents (84% including 17 cases of neonates) availed free diet and 15.1 percent (including 3 cases of neonates) did not avail free diet.

Although entitled for free diet, practically immediately after admission, women at the time of delivery or in labor are unable to take any food and might start diet after several hours of delivery. The same applies to sick infants. In the first 6 months the baby is only breastfed. Respondents were asked the time of initiation of free diet. Nearly 41 percent of the respondent availed free diet immediately after admission and 39 percent of the respondent availed free diet after delivery and 19 percent of the respondent mainly from DH and WH availed free diet after two days of delivery. Thus, it is quite evident that the timing of initiation of diet varies from patient to patient.

Some of the suggestions for the improvement of the facility are: the requirement of warm water, cleanliness, and separate ward for SNCU and privacy in DH Aundh and requirement of doctors and staffs in PHC Murti.

Except for WH all the other facilities have access to neonatal and infant care. However, blood bank is not available in WH. Considering the nearest referral point is at a distance of 65 km from WH it is felt BB is required for WH. Health facility is easily accessible from nearest road and building condition is good except in SDH Daund and PHCs Warwand and Murti. Availability of staff quarters assures round the clock timely services to patients. Staff quarters for MOs and SNs/ANM was not available in PHCs: Morgaon, Taleghar, Malunge and Kurkhumb. Electricity with power back up and running water is essential for efficient functioning of health facilities. Power back up for electricity is not available in RH Supa and running water is not available in RH Supa, PHCs Morgaon and Murti.

Health service provider's posts are sanctioned in every facility however, it needs to be probed that out of the sanctioned post how many of the health posts are in place in the visited health facilities. In WH gynecologist post and in DH pediatrician post only 66 percent of the sanctioned posts are filled. Although, in RH Yavat all the sanctioned posts are filled one Gynecologist is on deputation in another facility. Anesthetist posts are not filled in SDH Manchar and Baramati. Out of the two sanctioned post of MOs only 1 MO is in place in PHCs: Mhalune, Murti and Warwand. In PHC Morgaon the MO is given additional charge of THO. In general, at the time of our field visit in almost all the PHCs only one MO was available and most of them were recently appointed MO. Only in 3 PHCs (.....) all the sanctioned posts of ANM are filled in rest of the PHCs 50 to 85 percent of the sanctioned posts are filled. All the sanctioned posts of SNs are filled in RHs and DH whereas in WH only 65 percent of the sanctioned posts are filled. All the sanctioned posts of wardboys are filled in DH and two RHs and pharmacist are filled in

except in WH and SDH(66 % filled) and in SDH Daund (50%). None of the sanctioned Technician (diagnostics) posts are filled in one RH and in SDH Manchar and Baramati; whereas only 50 percent of the posts are filled in WH and in SDH Daund. The driver available in WH is on contractual basis and receives a daily salary of Rs 200. Sanctioned posts of drivers are filled in all the facilities except in RH Godegaon wherein the only driver available is under NRHM.

ANC care provided and delivery was high in SDH Baramati and in WH Baramati. Even though, ANC treated cases was high in PHC Kurkumbh, Warwand and Mhalunge this is not reflected in number of delivery which was only one third to the number of ANC care. The highest number of normal and c section delivery was reported in DH followed by SDH Manchar.

Blood bank is not available in most of facilities it is available only in DH, and SDHs Baramati and Manchar. Blood bank of SDH Manchar is functioning in collaboration with a NGO. Even though BB is not available, some mechanism needs to develop to provide this service in case of emergency especially in WH Baramati. When it comes to pick up and drop back of mothers the service is uniformly available except in WH Baramati where there is no pick up service. Pick up and drop back service of infant is negligible in SDH, RH and WH Baramati. Again referral services are available for mothers. Diagnostics and diet for mother is available. In addition mother and baby kit is available in most of facilities. Telemedicine service is available in SDH Baramati and Physiotherapy unit is available in SDH Manchar.

All the facilities visited have an access to call Centre. Record maintenance seems to be an uphill task in many of the facilities visited and varies by facilities and by persons handling it. In every facility there is a provision of a log book the maintenance of which need to be upgraded. In 4 PHCs and 2 RHs only log book is maintained and in rest of facilities a proper record of free transport service is maintained.

In general 108 vehicle is provided in RHs, SDHs, WH and DH for referral and drop back service. The number of pick up cases reflects not only the awareness of pick- up service but also the demand in seeking treatment. Only 3 cases of pick- up service was reported from PHC Peth and RH Supa, whereas 310 number of pick- up of mothers were reported from PHC Morgaon. The number of pick up cases were in the range of 100-170 cases in SDHs and the highest number of pick up cases of 865 during the reference period was reported from DH. Even though register was maintained data on pick up service was not available. The highest number of drop-back services of 1257 during the reference period was observed in DH which implies the high number of women admitted for delivery and referral cases. The number of drop back service was much higher than number of pick-up service which also implies high number of women admitted for delivery and not accessing pick up service. The number of referral cases of mothers during the reference period was less than 50 cases in 4 PHCs and WH. The highest number of referral cases was observed in DH of 200-250 during the reference period.

The highest number of pick- up service of infants with 340 cases and highest number of drop back service of 550 during the reference period was reported from DH. The number of referral cases was highest in DH with 81-90 cases during the reference period and 31-40 in WH. Data on free transport service was not available in PHC Taleghar and SDH Manchar.

When probing the details of JSSK transport service records on time taken for vehicle to reach the residence after call was made, return back to facility, and drop back was maintained in DH, WH, SDH Daund, RH and 3 PHCs in the form of logbook. Registers of the same were not maintained in PHC Sangvi and Murti and in SDH Baramati. Data was not recorded in PHCs: Peth, Warwand, mhalunge, Taleghar, RH Godegaon and SDH Manchar.

When probed for the reasons for not providing/ timely pick up and drop back service the reasons were vehicle not available on time (PHC Mhalunge. Vehicle condition was not good in RH Supa; driver was not available in PHC Rahu; and area was inaccessible as reported by PHC Taleghar and Murti.

Some of the difficulties in providing JSSK service were High demand (RH Supa), Limited funds (PHC Murti), Funds not available on time (PHC Murti), drivers not available on time (PHC Warwand) etc.

Facilities PHC Kurkhumbh, Murti, Rahu, Peth, RH Yavat, Ghodegaon, WH Baramati reported that the POL fund is not enough for diesel and the minimum amount required for diesel per year ranges from Rs 100000 in PHC Rahu, RH Yavat and WH Baramati to Rs 40000 in RH Ghodegaon.

In case of shortage of fund alternative arrangement is made in facilities through RKS fund and through Head, General Fund in DH Pune which is providing high number of service.

Facilities PHC Peth, Taleghar, Moregaon, Warwand, RH Supa, SDH Manchar, Baramati, DH Aundh make alternative arrangement of vehicle by reimbursing for private vehicle(PHC Peth and Taleghar), request other facilities and Free of cost vehicle available by Sharad Bank.

Proper guidelines are followed for reimbursement in PHC Peth and Taleghar through RKS fund in facilities.

If vehicle facility is not available alternative arrangement is done in facilities DH Pune, SDH Manchar, Baramati, PHC Peth, Taleghar and Moregaon. Alternative arrangement of vehicle is through RBSK in DH Pune and WH. Ambulance 108 is used in facilities and free of cost vehicle is available under Sharda bank scheme in SDH Manchar.

Out of the visited 17 facilities ambulance is adequate in 9 facilities. Facilities PHC Rahu, RH Yavat, Supa, SDH Daund and WH Baramati require an additional ambulance for smooth functioning of JSSK service.

Except for facilities PHC Mhalunge, Taleghar and RH Ghodegaon all the other facilities requires additional drivers to provide pick up and drop back services.

The number of cases outreferred indicates the availability of health specialist and infrastructure. Equal number of cases were inreferred and outreferred in DH, SDH (50 bedded) and in one each of SDH (100 bedded) and RH. In one RH the outreferred cases were 300-500 during the reference period and in WH app 1-300 cases were inreferred whereas 1-100 cases were outreferred during the reference period.

Further, analysis was carried out to find major causes of inrefer and outrefer from or to a particular health institutes. Twin/Multiple pregnancies, APH, and Abnormal presentation are the common causes of inrefer whereas the main causes of outrefer in RH, SDH, and DH is Premature births, hypertension, Surgery for RTI, Treatment for infertility and Others. The main causes of inrefer of mothers and pregnant women in RH is Delayed labour, Bleeding; in SDH are Delayed and obstructed labour, Premature births, weight of previous baby > 4.5kg, RH negative in previous pregnancy, Preeclampsia/eclampsia, and APH whereas the main causes of outrefer in SDH is, Weight of previous baby less than 2.5 kg, and PROM. Surprisingly, bleeding and severe anemia were the common causes for both inrefer and outrefer in SDH. The main causes of inrefer in DH is hypertension, delayed and obstructed labour, severe anemia, Congenital anomaly, Preeclampsia/eclampsia, whereas the main causes of outrefer in DH is bleeding and tuberculosis. The main causes of inrefer in WH is Still births or neonatal loss, Three or more spontaneous abortions, Height <140cm, hypertension, Delayed and obstructed labour, severe anemia, Congenital anomaly, Preeclampsia/eclampsia, weight of previous baby <2.5kg, Spinal deformities, Treatment for infertility, and whereas the main causes of outrefer in WH is Known heart diseases. RH negative in previous pregnancy, Bleeding, and known heart disease are

the common cause of inrefer and outrefer. Overall WH and DH was found to be adequate in terms of provison of treatment except in cases of Known heart disease, bleeding and complications due to tuberculosis.

Free diet was provided in all the facilities to mothers and only in facilities DH, PHC Morgaon and SDH Manchar to sick infants.