

# Chapter 1

## Introduction

1.1 National Urban Health Mission (NUHM) was launched as a separate mission in years 2013 with objective of improving health status of the urban poor particularly slum dwellers and other marginalised sections. Urban Primary Health Centres (UPHCs) are different from conventional rural PHCs in term of size, functions, focus on ambulatory care, limited staff and infrastructure.

1.2 National Quality Assurance Standards for Urban Primary Health Centres have been developed separately to measure the quality of services at Urban PHCs. These standards offer a standardized process for monitoring and evaluation of quality of services by various stakeholders like Facility staff, district health administration, and certification bodies. National Quality Assurance Standards for UPHCs have 35 Standards under 8 Areas of Concerns with 198 Measurable Elements (ME). The checkpoints of each ME have been arranged into Twelve Checklists.

1.3 The most accepted framework for assessing the quality of care is the ‘Donabedian model’, which classifies Quality of Care in terms of three components – Structure, Process & Outcome. The assessment process generates scores for the UPHC, departments, and against each Area of Concern. These scores can be used as an objective parameter for assessing status and progress of Quality Assurance at the UPHC, as well as comparing two similar health facilities and inter-Block/Inter-District/Inter-State comparison and Benchmarking. For the purpose of this study the UPHCs score cards were provided by NHSRC as a secondary data.

1.4 The choice of provider whether public or private and health seeking behaviour is influenced by out of pocket expenditure. Out-of-pocket Expenditure (OOPE) at out-patient departments (OPD) by households is relatively less analyzed compared to hospitalization expenses India. Protecting households from risk of impoverishment due to out-of-pocket costs in health care is a major challenge for health systems. NSSO in 71<sup>st</sup> Round Report compiled data on OOPE at OPD. The same is utilised as secondary data for the purpose of the study.

1.5 **Aim:** To analyse the correlation between Quality of Care and OOPE at OPD of four states of Punjab, Haryana, Gujarat and Karnataka.

1.6 **Objective:** The objective of the study is to analyse whether there is any correlation between quality of care and OOPE at OPD of selected states.

1.7 **Specific Objective:** The specific objectives are to analyse the correlation between each area of concern and OOPE at OPD of selected states.

1.8 **Scope:** The scope of study is limited to analyse if any correlation exists between Quality of Care and OOPE at OPD and not to quantify the correlation. The results obtained are applicable only for group of four selected states.

## **Organisation**

### **National Health Systems Resource Centre , Ministry of Health & Family Welfare, Govt. of India**

1.9 National Health Systems Resource Centre (NHSRC) has been set up under the National Rural Health Mission (NRHM) of Government of India to serve as an apex body for technical assistance. Established in 2007, the National Health Systems Resource Centre's mandate is to assist in policy and strategy development in the

provision and mobilization of technical assistance to the states and in capacity building for the Ministry of Health and Family Welfare (MoHFW) at the centre and in the states. The goal of this institution is to improve health outcomes by facilitating governance reform, health systems innovations and improved information sharing among all stakeholders at the national, state, district and sub-district levels through specific capacity development and convergence models.

1.10 It has a 21 member Governing Board, chaired by the Secretary, MoHFW, Government of India with the Mission Director, NRHM as the Vice Chairperson of the board and the Chairperson of its Executive Committee. Of the 21 members, 11 are ex-officio senior health administrators, four from the states. Ten are public health experts from academics and civil society. The Executive Director, NHSRC is the Member Secretary of both the board and the Executive Committee. NHSRC's annual governing board meet sanctions its work agenda and its budget.

1.11 NHSRC is also a World Health Organization Collaborating Centre for Priority Medical Devices & Health Technology Policy. The NHSRC currently consists of eight divisions – Community Processes, Public Health Planning, Human Resources for Health, Quality Improvement in Healthcare, Healthcare Financing, Healthcare Technology, Health Informatics and Public Health Administration.

### **NHSRC's Role in Developing National Health Policy-2017**

1.12 The National Health Systems Resource Centre (NHSRC), being the technical support institution of the Ministry of Health and Family Welfare (MoHFW) was tasked with the drafting, review and revision of New National Health Policy.

This office played an important part in development of multiple background papers, the approach paper to the National Health Policy as well as the first draft. A particularly intense role was played by the Public Health Planning division of this office led by Dr

Satish Kumar and his team in developing the revised draft of the National Health Policy incorporating suggestions from close to 5000 comments on the first draft of NHP placed in public domain for comments and suggestion in January 2015. In addition, the whole process of revision was made very participative through involvement of States, civil society and various professional bodies. 5 regional workshops were held in different parts of the country to elicit the policy expectations from these stakeholders. All these workshops held specific discussions on following areas:

- Addressing the commitment and unfinished agenda of the previous National Health Policy (NHP 2002).
- Aligning to the commitments made by the government to improve the health of vulnerable and marginalised groups as reflected in related national and international commitments.
- Review of the evidence base of the draft policy to improve health care delivery in the private and public sector and identifying time bound quantifiable and monitorable Goals that the new National Health Policy should aspire for
- Relevant dimensions, if any, which require additional emphasis or inclusion in the current draft policy document.

1.13 The civil society consultations at both state and national level largely expressed satisfaction with the existing draft. However, concerns were raised with regards to the special needs of the adolescents, urban poor and migrants. Various mechanisms for easing civil society participation and regulation of private sector in health sector (planning, provision of services, monitoring of services) were proposed too.

1.14 The Draft National Health Policy was reviewed by the health ministers of various States through the platform of CCHFW. Close coordination and support was also provided to the Ministry in this exercise. India's National Health Policy 2017 was

approved by the Cabinet on 15th March and presented in the House of People (Lok Sabha) on 16th March 2017. The Minister for Health while making a statement on the health policy informed the house on the ‘highly participative and consultative approach in policy formulation process.

### **Vision**

1.15 We are committed to facilitate the attainment of universal access to equitable, affordable and quality healthcare, which is accountable and responsive to the needs of the people of India.

### **Mission**

1.16 Technical support and capacity building for strengthening public health systems in India.

### **Policy Statement**

1.17 NHSRC is committed to lead as professionally managed technical support organization to strengthen public health system and facilitate creative and innovative solutions to address the challenges that this task faces.

1.18 In the process, NHSRC shall build extensive partnerships and network with all those organizations and individuals who share the common values of health equity, decentralization and quality of care to achieve its goals. NHSRC is set to provide the knowledge-centred technical support by continually improving its processes, people and management practices.

### **Healthcare Financing**

1.19 **Increasing Public Health Expenditure:** One of our national priorities in the health sector is to increase public health expenditure. This requires in the least a good tracking of current public health expenditure by both central and state governments, and

to the extent possible by other government departments and local bodies. There is also the need for advocacy to support increases in public health expenditure.

**1.20 More value for money:** Given the reality that the requirements of "fiscal consolidation" policies have a disproportionate impact on health budgets, there is the need to enhance effectiveness in utilization of existing budgets, and develop better costing and cost effectiveness to guide resource allocations for both provisioning and purchase of services. Flexible resource allocation, financing mechanisms and financial monitoring also need to be developed as tools of programme improvement.

**1.21 Financial Protection:** Another national health policy objective is financial protection from health care costs. The main strategy for achieving this is the availability of free or subsidised services provided by the public sector. A sub-component of this agenda is to ensure access to free drugs and diagnostics through the public health system. Supplementary strategies to achieve this are insurance schemes, different forms of public purchasing of services and demand side subsidies like the Janani Suraksha Yojana. Monitoring progress in financial protection through measurement of out-of-pocket expenditure and costs of care has gained importance and immediacy, thanks to the Universal Health Coverage discourse.

**1.22 Engaging the Private Sector:** Given the size of the private sector, and its contribution to both service delivery and health care costs, there has been a constant effort over the last two decades to work out partnership mechanisms. The challenge has been to design schemes that are cost effective, pro-poor, supplement rather than substitute public investment and provisioning and are sustainable. Good documentation and evaluation of existing and past efforts help, and so does technical assistance to design better contracts. One major area of success in this domain is the development of

emergency ambulance and patient transport systems using public private partnerships. There is much to learn from the success and failures of other efforts in this direction.

### **Quality Improvement**

1.23 Universal access to services implies universal access to good quality service - services that are effective, that are safe and satisfying to the patient, services that are patient and community centered and services that make efficient use of the limited resources available. The approach for achieving these objectives, as envisaged in the 12th five year, requires ensuring that every single health facility is scored against pre-defined standards with periodic supportive supervision for ensuring continual improvement.

1.24 The 11th five year plan period saw a number of pilots in this practice area. The most important amongst these were organized by NHSRC, using the ISO platform. The ISO platform has been built upon and its standards were strengthened with mandatory inclusion of 24 procedures, which are specific to the Public Health. Over 140 facilities, ranging from Primary Healthcare Centers to District Hospitals were assessed against these ISO 9001:2008 plus NHSRC defined Standards. Another 388 made the effort and are struggling in this direction.

The main activity areas in this domain are :-

1. Developing Standards and Guidelines
2. Training and capacity building
3. Institutional Frameworks for building, monitoring and certifying for quality
4. Infrastructure Planning
5. Developing Resources and Publications for Quality Assurance
6. Advocacy and Policy

**Community Processes**

1.25 To achieve this goal, the program components in NRHM are the ASHA, the Village Health Sanitation and Nutrition Committee (VHSNC), community programmes, involvement of NGOs and public participation in facility based committees. While the ASHA is intended to facilitate access to health services, mobilise communities to realise health rights and access entitlements and provide basic community level care, the other elements focus on promoting action by village level organisations and enhance people's participation in service delivery. The task of developing policy frameworks and successful operationalization of this set of interventions at scale across the entire nation is complex and challenging.



## Chapter 2

### Review of Literature

2.1 In order to get a detailed insight into the subject of study and to seek more clarity on various aspects of quality of care and out of pocket expenditure, literature review of various NSSO reports, National Quality Assurance Standards (NQAS), Quality Standards for UPHC, Operational guidelines of National Health Mission and study reports published on websites were carried out.

2.2 **Dimensions of Quality of Care:** The most accepted framework for assessing the quality of care is the 'Donabedian model', which classifies Quality of Care in terms of three components – Structure, Process & Outcome. The three aspects of the Quality of Care may have different connotation to different stakeholder's viz. Patients, Service providers and Health System. (1)

2.3 **Measurement System for Urban Health care facilities:** Measurement System for Urban healthcare facilities has been developed within the framework of existing Quality Assurance Programme under the National Health Mission. 'Operational Guidelines for Quality Assurance in Public Health Facilities' provides the 'Road-map' for the implementation. Under the existing Quality Assurance Programme, attributes of Quality of Care (QoC) has been covered under 'Area of Concern', then Quality Standards, Measurable Elements and lastly check-points, which could be collated as departmental or thematic check list.(1)

2.4 **Out of Pocket Expense** are expenses for medical care that aren't reimbursed by insurance. Out of pocket expenses include deductibles, coinsurance, and copayments for

covered services plus all costs for services that aren't covered. For the purpose of the study we are only taking OOPE at OPD (Non Hospitalised) expenditure of four states.

2.5 Out-of-pocket spending at out-patient departments (OPD) by households is relatively less analyzed compared to hospitalization expenses in India.[1] Various studies have already established the correlation of OOPE with choice of service provider and health seeking behaviour.

2.6 The major findings/conclusions from various study reports relevant to present study are discussed and summarised in succeeding paragraphs.

“Economically vulnerable individuals spend more on OPD as a proportion of per capita consumption expenditure. The out-patient care remains overwhelmingly private, with concomitant impact on households, especially the more vulnerable ones. Generally individuals do not switch providers, but when they do, the tilt remains towards private providers, though there seems to be a reverse preference for public providers as well, if treatment by the private provider has been unsatisfactory. Finally, treatment at government facilities or providers does tend to lower OPD significantly indicating that government care is still relatively more affordable compared to private care”.[1]

“Most of the discussion in India in the recent past has centred around the possibility of expanding health protection schemes for hospitalization. It is clear that schemes that do not take into account the fact that OPD is a significant part of an individual’s treatment profile—especially with increasing NCDs that result in chronic conditions requiring frequent visits—would remain ineffective as a tool for alleviating the economic impact of OOPS, especially for the poor”.[1]

“ Other important implication is about public providers: while relatively less preferred vis-à-vis the private, it lowers OOPS holding other parameters constant, as indicated by

the regression results. Individuals also do switch from private to public providers indicating the possibility of using this as a viable argument for offering affordable and quality care through public institutions”.[1]

2.7 “As a measure to reduce the out of pocket health spending in our country, the high level expert group on Universal Health Coverage recommends a National Health Package free of cost to all. Whether availability of services free of cost, will reduce out of pocket expenditure?”[2]

“Public health care facilities were preferred (75.5%) for seeking care. Availability of services free of cost reduces out of pocket expenditure among non-hospitalized cases.[2] Study shows that the out of pocket expenditure for non-hospitalized cases are much lower in a region where abundant free health services are available.”[2]

2.8 Lack of money is the most important cause of un-seeking care. Hospitalizations due to inpatient care needs, household members aged 40-59 years old, especially with chronic diseases and non rich status of the household were the highest predictors of facing catastrophic costs. Reducing out-of-pocket costs can increase health care utilization.[3]

2.9 In general we can observe a relationship between the dominance of public facilities in outpatient and inpatient services. Countries with high utilization of public facilities for outpatient services show similar patterns for inpatient services.[4]

2.10 A study was conducted to estimate the out-of-pocket expenditures for outpatient imaging services in Imam-Khomeini Hospital in Tehran.

“Average payment for males was greater than the average payment for females. It was suggested that expensive diagnostic tests, such as CT-scans, be prescribed according to

the actual needs of patients to make the financial burden of diagnostic services reasonable for all patients.”[5]

“Public providers were the single most important providers of care. The total expenditure was higher for those receiving care in private facilities compared to public ones and the insured patients’ bill almost tripled uninsured ( $p < 0.001$ ). Finally, medication was the most expensive component of expenditure in both public and private facilities.” [6]

### **Key Research Question**

2.11 Is there any correlation between quality of care and out of pocket expenditure?

### **Objective**

2.12 To analyse whether there is any correlation between quality of care and out of pocket expenditure in OPD of selected states of Punjab, Haryana, Gujarat and Karnataka .

### **Specific Objectives**

2.13 To analyse whether there is any correlation between each areas of concern and out of pocket expenditure in OPD of selected states.

### **Scope**

2.14 The scope of study is to analyse if any correlation exists between quality of care and OOPE but not to quantify it .Results are applicable for four selected states only.

## Chapter 3

### Methodology

**3.1 Materials and Methods:** An analysis was done on secondary data of four states of Punjab, Haryana, Gujarat and Karnataka during the months of Feb-Apr 2017. The three UPHCs from each state were selected randomly. The quality score for the state was obtained by taking the average of three UPHCs. The OOPE on OPD was extracted from NSSO 71<sup>st</sup> Round Report. MS Excel was used to depict the data in table and graphically to discern and interpret the correlation between quality of care and OOPE. The Pearson correlation was used to find the strength of correlation utilising IBM SPSS Statistics 22 Package.

**3.2 Study Settings:** Study was conducted on secondary data provided by NHSCR, New Delhi of four states of Punjab, Haryana, Gujarat and Karnataka

**3.3 Study Design:** Analytical study.

**3.4 Study Area:** Punjab, Haryana, Gujarat and Karnataka.

**3.5 Study Period:** 01 Feb 2017 to 30 Apr 2017.

**3.6 Data Collection:** Data was collected from NHSCR, New Delhi from 25 Apr 2017 to 26 Apr 2017.

**3.7 Data Analysis:** The data was analyzed using the Microsoft Excel 2007 and IBM SPSS Statistics 22 Package.

**3.8 Comprehensiveness and Accuracy of Data:** The study was done on secondary data. Limited data was made available for the purpose of study and learning the research methodology. The accuracy and comprehensiveness of data cannot be questioned. The

UPHCs score cards were taken from the Assessment Report of UPHCs and out of pocket expenditure was extracted from report of NSSO 71<sup>st</sup> Round. Due to limited availability of secondary data certain tools of SPSS could not be applied effectively.

3.9 **Tools of data collection:** UPHC Score cards and OOPE from NSSO Report.

## Chapter 4

### Data Compilation and Sorting

4.1 The state wise OOPE for both Urban and Rural are tabulated in Table 4.1. In this case we have considered the Urban OOPE as the score cards were available only for UPHCs

Table 4.1-Statewise OOPE			
Ser NO	State	Rural	Urban
1	Punjab	12169	20077
2	Haryana	11698	12701
3	Gujarat	1753	6416
4	Karnatka	7293	10659

**Source of data: NSSO Report 71<sup>st</sup> Round**

4.2 Three UPHCs were randomly considered from each state. The list of selected UPHCs is tabulated below:-

Table 4.2-State Wise UPHC Selected				
Ser No	State	UPHC-1	UPHC-2	UPHC-3
1	Punjab	Preet Colony	Baltana	Mohali Ph-1
2	Haryana	Yamuna Naga	Laxman Vihar	Rajender Park
3	Gujarat	Junction Plot	New Raghuvir	Shyam Nagar
4	Karnatka	NS Palya	Shanthi Nagar	Vidyapeeta

4.3 To study the correlation between quality of service and OOPE, the state wise average quality score was calculated from score cards of three UPHCs from each state.

Table 4.3--Statewise Average Quality Score					
Ser No	State	UPHC-1	UPHC-2	UPHC-3	Avg Score
1	Punjab	70.9	69.3	69	<b>69.73</b>
2	Haryana	39	67.7	68.5	<b>58.40</b>
3	Gujarat	88.2	89.9	81	<b>86.37</b>
4	Karnatka	58.8	63	58.9	<b>60.23</b>

4.4 To study the correlation between various areas of concern (8) and OOPE, the state wise average score for each area of concern was calculated as under :-

Table 4.4- Statewise Areas of Concern Score								
State	Ser Pvn	Pt Rt	Input	Sp Ser	Clinical	Inf cont	Qlty Mgt	Outcome
<b>Punjab</b>								
UPHC1	80.4	80.8	76	73.6	81.3	95.8	7.7	25.6
UPHC2	80.1	76.9	68.8	74.7	81.6	96.2	7.7	21.1
UPHC3	80.4	84.6	67.7	73.6	79.4	90.7	11.4	21.7
<b>Avg</b>	<b>80.30</b>	<b>80.77</b>	<b>70.83</b>	<b>73.97</b>	<b>80.77</b>	<b>94.23</b>	<b>8.93</b>	<b>22.80</b>
<b>Haryana</b>								
UPHC1	55.1	51.5	40.5	40	54.5	18.3	5.3	12.2
UPHC2	78.2	78.8	67.7	77.3	79.4	68.9	19.5	30.6
UPHC3	78.5	71.9	69.8	75.3	79.7	87.8	13	26.7
<b>Avg</b>	<b>70.60</b>	<b>67.40</b>	<b>59.33</b>	<b>64.20</b>	<b>71.20</b>	<b>58.33</b>	<b>12.60</b>	<b>23.17</b>
<b>Gujarat</b>								
UPHC1	83.9	87.3	81	90.6	89.9	100	83.7	90.6
UPHC2	84.6	94	83.3	93.3	90	99	87.4	90.8
UPHC3	85.8	85.6	78.4	90	77.4	87.8	65.9	72.2
<b>Avg</b>	<b>84.77</b>	<b>88.97</b>	<b>80.90</b>	<b>91.30</b>	<b>85.77</b>	<b>95.60</b>	<b>79.00</b>	<b>84.53</b>
<b>Karnatka</b>								
UPHC1	54.2	64.6	66.1	75.8	66.1	85.9	0	3.3
UPHC2	66.1	71.9	66.9	74.5	74.5	85.6	0	11.1
UPHC3	57.4	65.4	65.7	69.4	69.3	85.3	0	3.4
<b>Avg</b>	<b>59.23</b>	<b>67.30</b>	<b>66.23</b>	<b>73.23</b>	<b>69.97</b>	<b>85.60</b>	<b>0.00</b>	<b>5.93</b>



## Chapter 5

### Graphical Representation and Data Analysis

5.1 To study the correlation between Quality Score and OOPE, the state wise OOPE and Quality Score are tabulated and graphically represented for ease of interpretation and analysis.

<b>Table 5.1- Statewise OOPE Vs Quality Score</b>		
<b>State</b>	<b>OOPE</b>	<b>Quality Score</b>
<b>Haryana</b>	<b>12.70</b>	<b>58.40</b>
<b>Karnatka</b>	<b>10.66</b>	<b>60.23</b>
<b>Punjab</b>	<b>20.08</b>	<b>69.73</b>
<b>Gujarat</b>	<b>6.42</b>	<b>86.37</b>

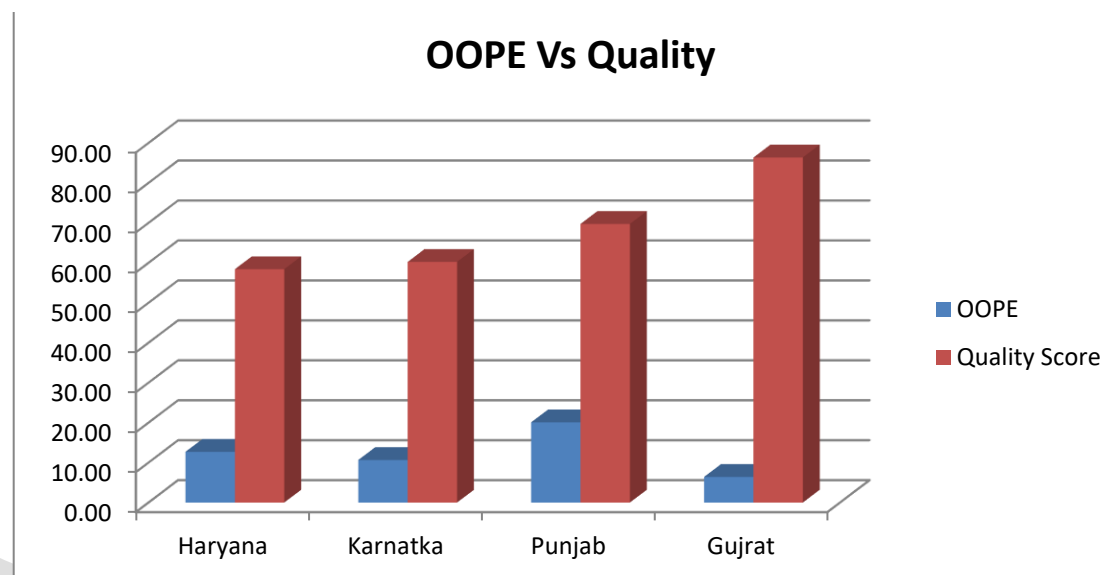


Figure 5.1

**Interpretation** :- As quality of care increases amongst the states, the OOPE decreases

except in case of Punjab where OOPE is the highest.

5.2 The state wise OOPE are tabulated in ascending order for better graphical representation and ease of interpretation

Table 5.2 Statewise OOPE Vs Quality score		
State	OOPE	Patient Right
Gujarat	6.42	88.97
Karnatka	10.66	67.3
Haryana	12.70	67.4
Punjab	20.08	80.76

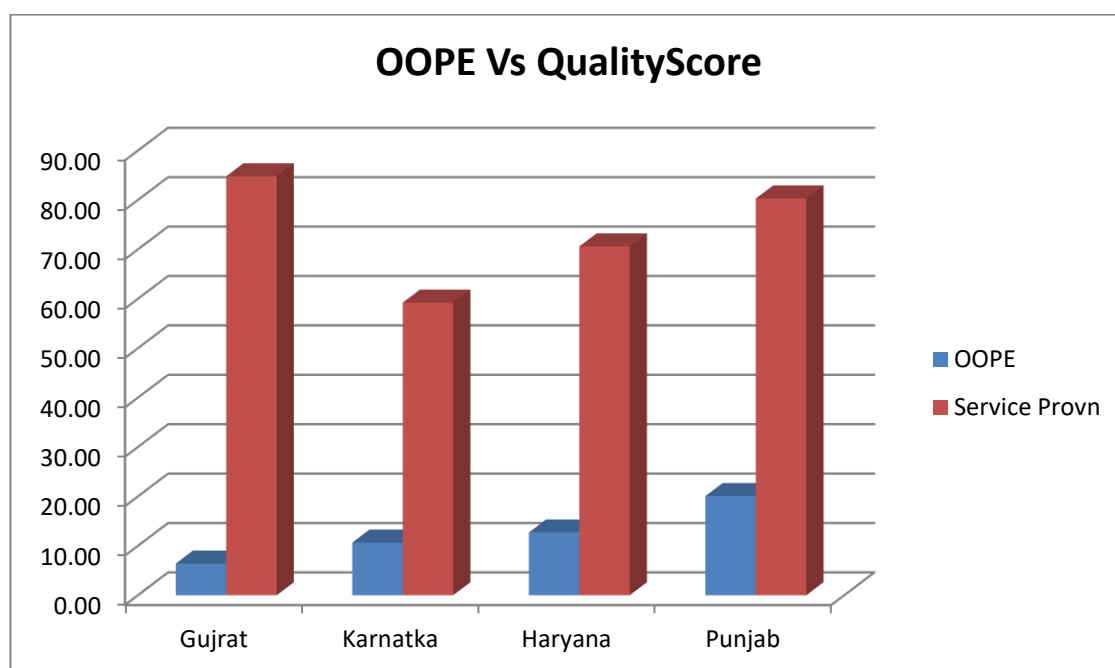


Figure 5.2

**Interpretation:-** As the Quality of Service decreases the OOPE increases.

5.3 To study the correlation between various Areas of Concern (8) and OOPE, both variables were tabulated and graphically represented for ease of interpretation and analysis.

<b>Table 5.3- Statewise OOPE Vs Service Provision</b>		
<b>State</b>	<b>OOPE</b>	<b>Service Provn</b>
<b>Gujarat</b>	<b>6.42</b>	<b>84.8</b>
<b>Karnatka</b>	<b>10.66</b>	<b>59.23</b>
<b>Haryana</b>	<b>12.70</b>	<b>70.6</b>
<b>Punjab</b>	<b>20.08</b>	<b>80.3</b>

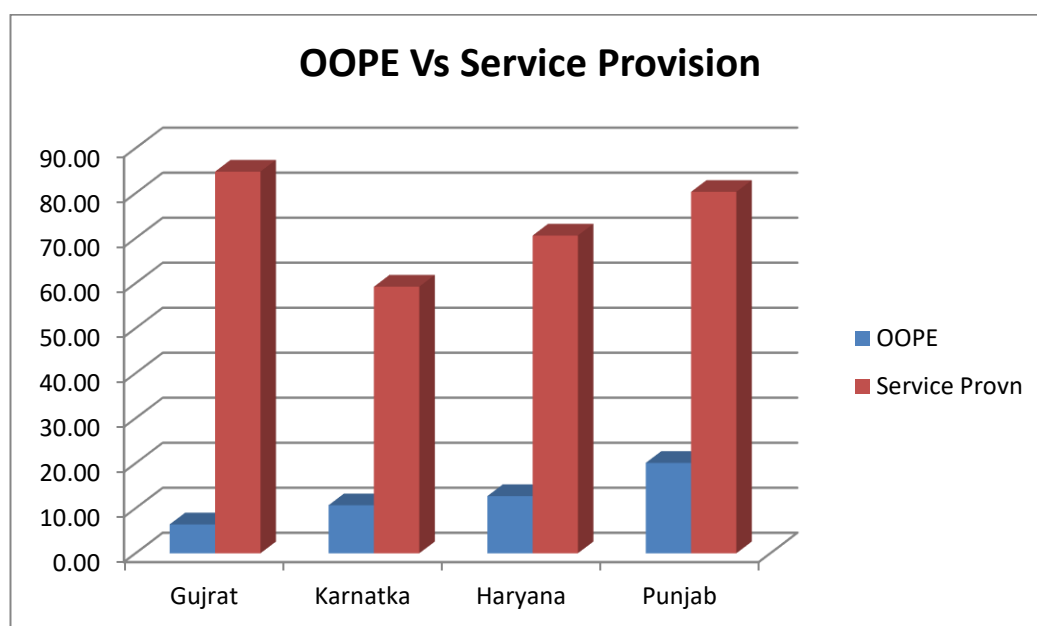


Figure 5.3

**Interpretation:-** As the OOPE increases, the Service Provision also improves

except in case of Gujarat which is the highest.

#### 5.4 Graphical representation of OOPE Vs Patient Right Score of all four states :-

<b>Table 5.4- Statewise OOPE Vs Patient Right</b>		
<b>State</b>	<b>OOPE</b>	<b>Patient Right</b>
<b>Gujarat</b>	<b>6.42</b>	<b>88.97</b>
<b>Karnatka</b>	<b>10.66</b>	<b>67.3</b>
<b>Haryana</b>	<b>12.70</b>	<b>67.4</b>
<b>Punjab</b>	<b>20.08</b>	<b>80.76</b>

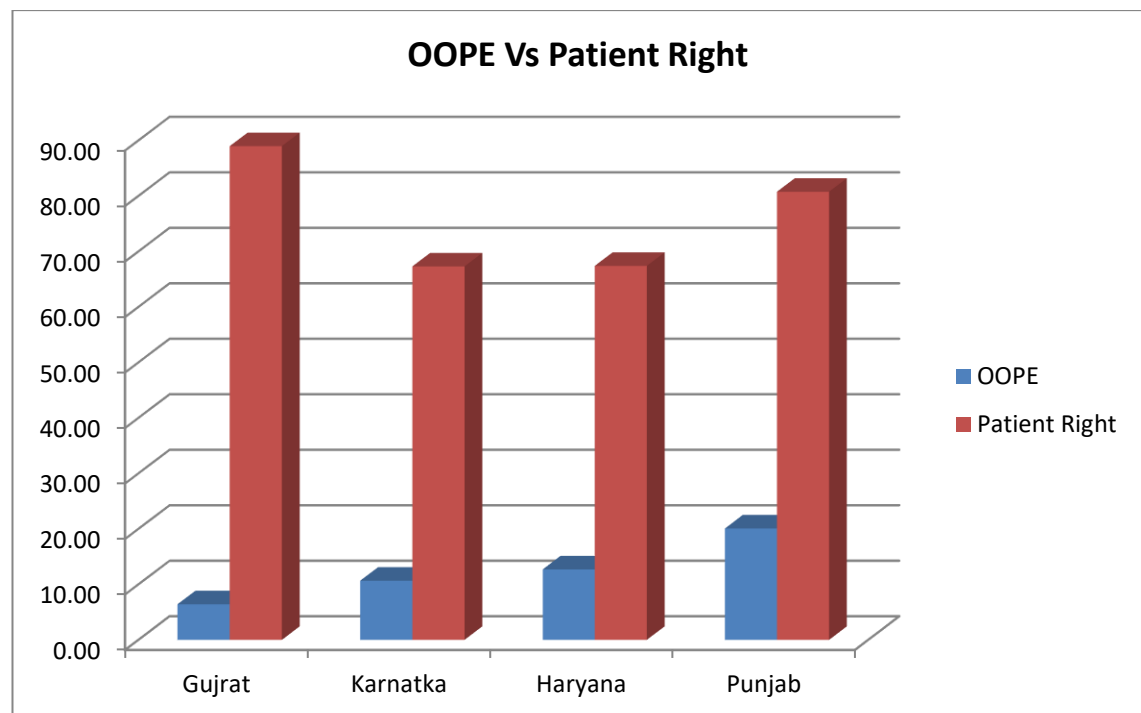


Figure 5.4

**Interpretation:-** As the OOPE increases, the Patient Rights also improves

but in case of Gujarat patient right score is the highest with OOPE being the least.

5.5 Graphical representation of OOPE Vs Input Score of all four states :-

Table 5.5- Statewise OOPE Vs Input		
State	OOPE	Input
Gujarat	6.42	80.9
Karnatka	10.66	66.23
Haryana	12.70	59.33
Punjab	20.08	70.83

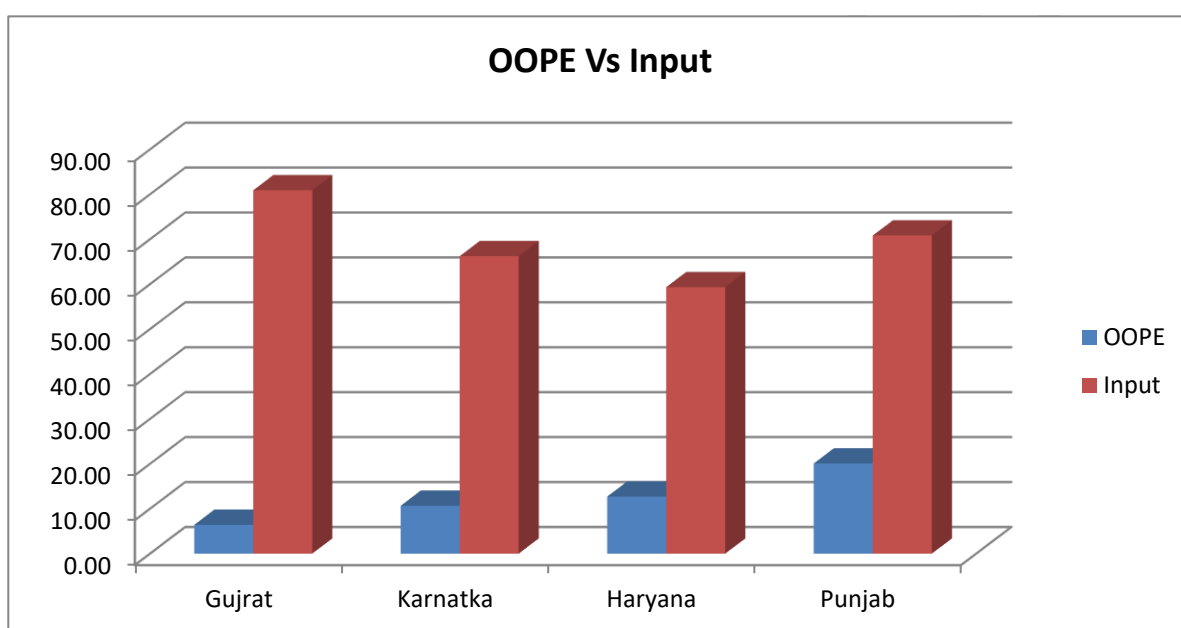


Figure 5.5

**Interpretation:-** As the OOPE increases, the Input Score decreases,

except in case of Punjab where it rises out of proportion.

Better infrastructure at UPHCs, lesser is the OOPE.

## 5.6 Graphical representation of OOPE Vs Support Service Score of all four states:-

Table 5.6- Statewise OOPE Vs Sp Service		
State	OOPE	Sp Service
Gujarat	6.42	91.3
Karnatka	10.66	73.23
Haryana	12.70	64.2
Punjab	20.08	73.97

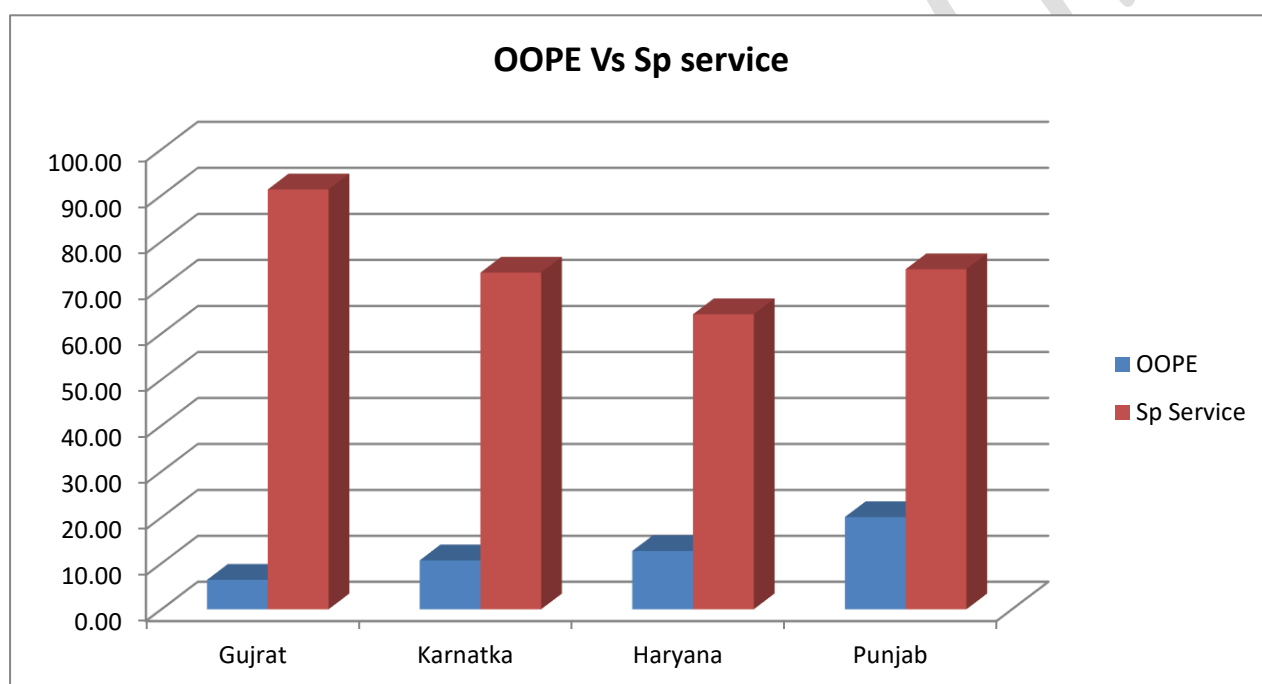


Figure 5.6

**Interpretation:-** States with higher OOPE , have the support Service Score lower

except in case of Punjab where it rises out of proportion.

Better are the support services at UPHCs, lesser is the OOPE.

### 5.7 Graphical representation of OOPE Vs Clinical Service Score of all four states :-

Table 5.7- Statewise OOPE Vs Clinical Service		
State	OOPE	Clinical Service
Gujarat	6.42	85.77
Karnatka	10.66	69.97
Haryana	12.70	71.2
Punjab	20.08	80.77

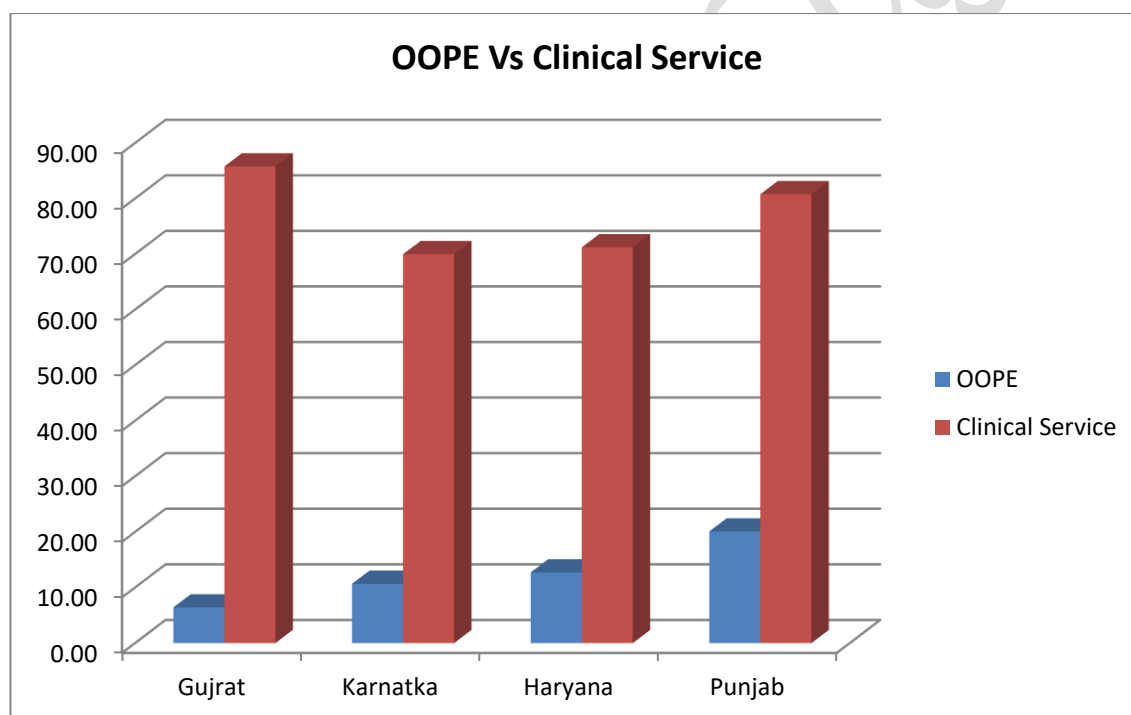


Figure 5.7

**Interpretation:-** States with higher OOPE , have the clinical Service Score lower

except in case of Punjab where it rises out of proportion.

Better are the clinical services at UPHCs, lesser is the OOPE.

## 5.8 Graphical representation of OOPE Vs Infection Control Score of all four states :-

Table 5.8- Statewise OOPE Vs Infection Control		
State	OOPE	Infection Control
Gujarat	6.42	95.6
Karnatka	10.66	85.6
Haryana	12.70	58.33
Punjab	20.08	94.23

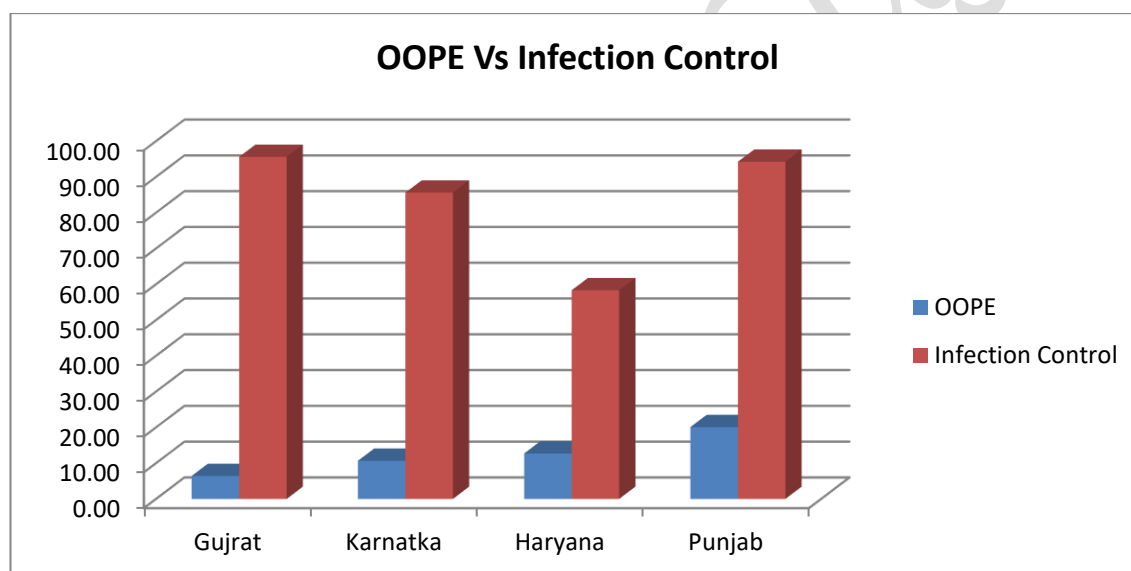


Figure 5.8

**Interpretation:-** States with higher OOPE , have the lower Infection Control Score

except in case of Punjab where it rises out of proportion.

Better are the Infection Control measures at UPHCs, lower is the OOPE.



5.9 Graphical representation of OOPE Vs Quality Management Score of all four states :-

Table 5.9- Statewise OOPE Vs Quality Mgt		
State	OOPE	Quality Mgt
Gujarat	6.42	79
Karnatka	10.66	0
Haryana	12.70	12.6
Punjab	20.08	8.93

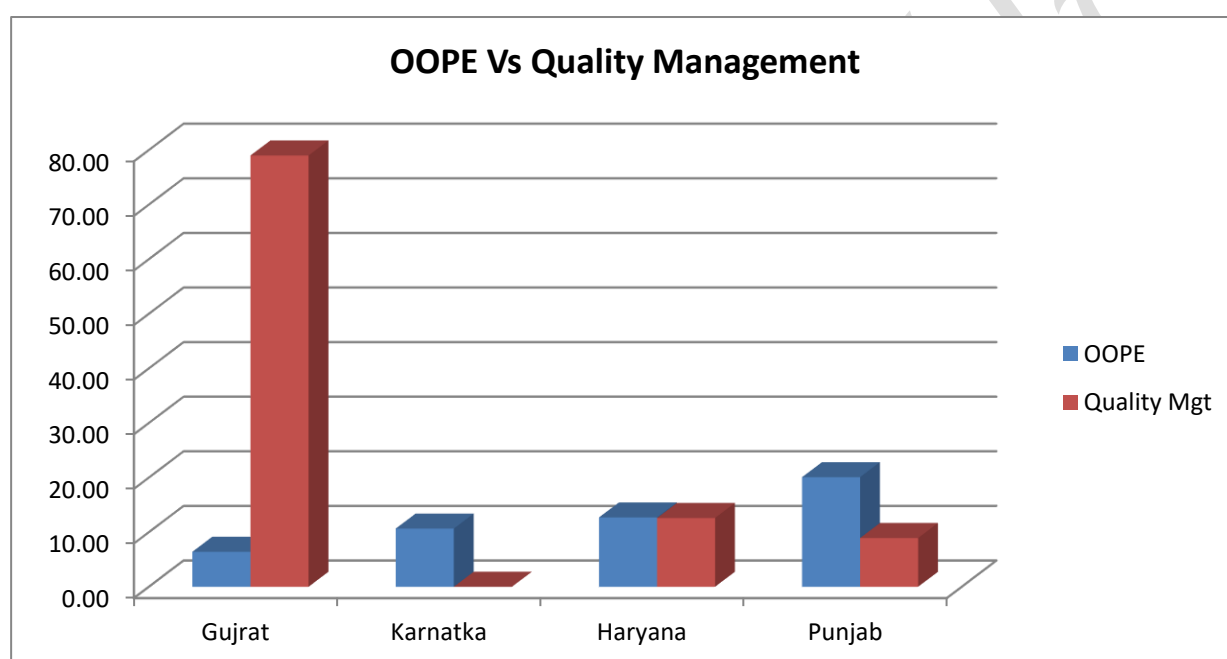


Figure 5.9

**Interpretation:-** States with higher OOPE , have the Quality Management Score lower except in case of Karnataka where it Zero.

**Better is the Quality Management at UPHCs, lesser is the OOPE.**

5.10 Graphical representation of OOPE Vs Outcome Score of all four states :-

Table 5.10- Statewise OOPE Vs Outcome		
State	OOPE	Outcome
Gujarat	6.42	84.53
Karnatka	10.66	5.93
Haryana	12.70	23.16
Punjab	20.08	22.8

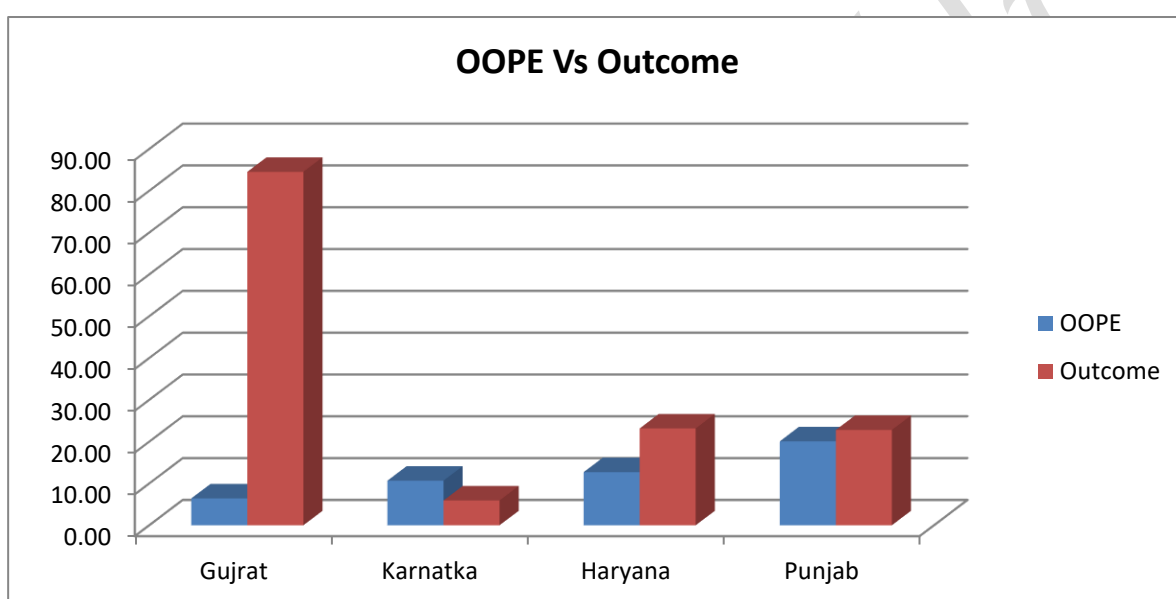


Figure 5.10

**Interpretation:-** As the OOPE of States increases, the Outcome Score decreases (Poor outcome) except in case of Karnataka where it decreases out of proportion.

**Better is the Outcome at UPHCs, lesser is the OOPE.**

## Chapter 6

### Pearson Correlations

**Table 6.1 Correlations OOPE Vs Quality Score**

		OOPE	Quality
OOPE	Pearson Correlation	1	-.393
	Sig. (2-tailed)		.607
	N	4	4
Quality	Pearson Correlation	-.393	1
	Sig. (2-tailed)	.607	
	N	4	4

6.1 A co-relation analysis was performed on two variables (Independent Variable: Quality and Dependent Variable: OOPE). The analysis shows an inverse correlation between the quality and OOPE. The Pearson coefficient is -.393 for this data. In this case, the quality is moderately negatively related with OOPE with (p value = .607, Pearson correlation value being -.393. This relationship is statistically not significant (p value = 0.607).

**Table 6.2 Correlations OOPE Vs Service Provision**

		OOPE	Service Provision
OOPE	Pearson Correlation	1	.044
	Sig. (2-tailed)		.956
	N	4	4
Service Provision	Pearson Correlation	.044	1
	Sig. (2-tailed)	.956	
	N	4	4

6.2 A co-relation analysis was performed on two variables (Independent Variable: Service Provision and Dependent Variable: OOPE). The analysis shows weak positive correlation between the service provision and OOPE. The Pearson coefficient is .044 for this data. In our case, the service provision is weakly positively related with OOPE with (p value = .956, Pearson correlation value =.044). This relationship is statistically not significant as (p value = .956).

**Table 6.3 Correlations OOPE Vs Patient Right**

		OOPE	Patient Right
OOPE	Pearson Correlation	1	-.156
	Sig. (2-tailed)		.844
	N	4	4
Patient Right	Pearson Correlation	-.156	1
	Sig. (2-tailed)	.844	
	N	4	4

6.3 A co-relation analysis was performed on two variables (Independent Variable: Patient Right and Dependent Variable: OOPE). The analysis shows an inverse correlation between the patient right and OOPE. The Pearson coefficient is -.156 for this data. In our case, the patient right is weakly negatively related with OOPE with (p value = .844, Pearson Correlation value is -.156). This relationship is statistically not significant (p value = .844).

Table 6.4 Correlations OOPE Vs Input

		OOPE	Input
OOPE	Pearson Correlation	1	-.356
	Sig. (2-tailed)		.644
	N	4	4
Input	Pearson Correlation	-.356	1
	Sig. (2-tailed)	.644	
	N	4	4

6.4 A co-relation analysis was performed on two variables (Independent Variable: Input and Dependent Variable: OOPE). The analysis shows an inverse correlation between the input and OOPE. The Pearson coefficient is -.356 for this data. In our case, the input is negatively related with OOPE with (p value = .644, Pearson correlation value = -.356). This relationship is not statistically not significant (p value = .644).

Table 6.5 Correlations OOPE Vs Support Service

		OOPE	Support Service
OOPE	Pearson Correlation	1	-.545
	Sig. (2-tailed)		.455
	N	4	4
Support_Serv	Pearson Correlation	-.545	1
	Sig. (2-tailed)	.455	
	N	4	4

6.5 A co-relation analysis was performed on two variables (Independent Variable: Support Service and Dependent Variable: OOPE). The analysis shows an inverse correlation between the support Service and OOPE. The Pearson coefficient is -.545 for this data. In our case, the quality is weakly negatively related with OOPE with (p value = .455, Pearson correlation value = -.545). This relationship is statistically significant (p value = .455).

**Table 6.6 Correlations OOPE Vs Clinical Service**

		OOPE	Clinical Services
OOPE	Pearson Correlation	1	-.099
	Sig. (2-tailed)		.901
	N	4	4
Clinical_Serv	Pearson Correlation	-.099	1
	Sig. (2-tailed)	.901	
	N	4	4

6.6 A co-relation analysis was performed on two variables (Independent Variable: Clinical service and Dependent Variable: OOPE). The analysis shows an inverse correlation between the clinical service and OOPE. The Pearson coefficient is -.099 for this data. In our case, the clinical service is strongly negatively related with OOPE with (p value = .901, Pearson correlation value = .099). This relationship is statistically not significant (p value = .901).

**Table 6.7 Correlations OOPE Vs Infection Control**

		OOPE	Infection Control
OOPE	Pearson Correlation	1	-.004
	Sig. (2-tailed)		.996
	N	4	4
Infection Control	Pearson Correlation	-.004	1
	Sig. (2-tailed)	.996	
	N	4	4

6.7 A co-relation analysis was performed on two variables (Independent Variable: Infection Control and Dependent Variable: OOPE). The analysis shows an inverse correlation between the infection control and OOPE. The Pearson coefficient is -.004 for this data. In our case, the infection control is weakly negatively related with OOPE with (p value = .996, Pearson correlation value = -.004). This relationship is statistically not significant (p value = .996).

**Table 6.8 Correlations OOPE Vs Quality Management**

		OOPE	Quality_Management
OOPE	Pearson Correlation	1	-.654
	Sig. (2-tailed)		.346
	N	4	4
Quality_Mgt	Pearson Correlation	-.654	1
	Sig. (2-tailed)	.346	
	N	4	4

6.8 A co-relation analysis was performed on two variables (Independent Variable: Quality Management and Dependent Variable: OOPE). The analysis shows an inverse correlation between the quality management and OOPE. The Pearson coefficient is -.654 for this data. In our case, the quality management is negatively related with OOPE with (p value = .346, Pearson correlation value = -.654). This relationship is statistically not significant (p value = .346).

**Table 6.9 Correlations OOPE Vs Outcome**

		OOPE	Outcome
OOPE	Pearson Correlation	1	-.579
	Sig. (2-tailed)		.421
	N	4	4
Outcome	Pearson Correlation	-.579	1
	Sig. (2-tailed)	.421	
	N	4	4

6.9 A co-relation analysis was performed on two variables (Independent Variable: Outcome and Dependent Variable: OOPE). The analysis shows a negative correlation between the outcome and OOPE. The Pearson coefficient is -.579 for this data. In our case, the outcome is negatively related with OOPE with (p value = .421, Pearson correlation value = -.797). This relationship is statistically not significant (p value = .421).



## Chapter 7

### Discussion

7.1 The data was depicted and analysed graphically. The graphical interpretations are summarised below:-

- (a) As quality of care increases amongst the states, the OOPE decreases except in case of Punjab where OOPE is the highest (**Figure 5.1 & 5.2**).
- (b) As the OOPE increases, the Service Provision also improves except in case of Gujarat (**Figure 5.3**).
- (c) As the OOPE increases, the Patient Rights also improves but in case of Gujarat patient right score is the highest with OOPE being the least (**Figure 5.4**).
- (d) As the OOPE increases, the Input Score decreases except in case of Punjab where it rises out of proportion. Better is the infrastructure at UPHCs, lesser will be the OOPE (**Figure 5.5**).
- (e) States with higher OOPE, have the support Service Score lower except in case of Punjab where it rises out of proportion. Better are the support services at UPHCs, lesser is the OOPE (**Figure 5.6**).
- (f) States with higher OOPE, have the clinical Service Score lower except in case of Punjab where it rises out of proportion. Better are the clinical services at UPHCs, lesser is the OOPE. (**Figure 5.7**).
- (g) States with higher OOPE, have the lower Infection Control Score except in case of Punjab where it rises out of proportion. Better are the Infection Control measures at UPHCs, lower is the OOPE. (**Figure 5.8**).

(h) States with higher OOPE, have the Quality Management Score lower except in case of Karnataka where it is Zero. Better is the Quality Management at UPHCs, lesser is the OOPE.

**(Figure 5.9).**

(j) As the OOPE of States increases, the Outcome Score decreases (Poor outcome) except in case of Karnataka where it decreases out of proportion. Better is the Outcome at UPHCs, lesser is the OOPE **(Figure 5.10).**

7.2 To determine the correlation between quality variables and OOPE the Pearson correlation analysis using IBM SPSS Statistics 22 Package was carried out. The findings of Pearson correlations are summarised below:-

(a) The quality is moderately negatively related with OOPE with (Pearson correlation value =  $-0.393$ ) and relationship is statistically not significant ( $p$  value =  $0.607$ ).

(b) The service provision is very weakly related with OOPE with (Pearson correlation value =  $-0.044$ ) and relationship is statistically not significant ( $p$  value =  $0.956$ ).

(c) The patient right is very weak negatively related with OOPE with (Pearson correlation value =  $-0.156$ ) and relationship is statistically not significant ( $p$  value =  $0.844$ ).

(d) The input is moderately negatively related with OOPE with (Pearson correlation value =  $-0.356$ ) and relationship is statistically not significant ( $p$  value =  $0.644$ ).

(e) The support service is moderately negatively related with OOPE with (Pearson correlation value =  $-.545$ ) and this relationship is statistically not significant. (p value =  $0.455$ ).

(f) The clinical service is weakly negatively related with OOPE with (Pearson correlation value =  $-.099$ ) and the relationship is statistically not significant (p value =  $.901$ ).

(g) The infection control is strongly negatively related with OOPE with (Pearson correlation value =  $-.654$  and the relationship is statistically not significant (p value =  $.346$ ).

(h) The quality management is strongly negatively related with OOPE with (Pearson correlation value =  $-.654$ ) and this relationship is statistically not significant (p value =  $.346$ ).

(j) The outcome is strongly positively related with OOPE with (Pearson correlation value =  $-.579$ ) and the relationship is statistically not significant (p value =  $.421$ ).

### Conclusion

7.3 The quality is moderately negatively related with OOPE with (Pearson correlation value =  $-.393$ ) and relationship is statistically not significant (p value =  $.607$ ) in selected four states.

## Chapter 8

### Conclusion

8.1 The graphical analysis shows that there is a definite correlation between quality of care and OOPE. In states where quality of care is better the OOPE reduces and vice versa.

8.2 The Pearson correlation analysis shows an inverse correlation between the quality of care and OOPE. The quality of care is moderately negatively related with OOPE with (Pearson correlation value =  $-0.393$ ) and the relationship is statistically not significant ( $p$  value =  $0.607$ ) in selected urban areas of Punjab, Haryana, Gujarat and Karnataka.

8.3 In other words if the quality of care is improved, the out of pocket expenditure reduces and vice versa.

### Recommendations

8.4 Quality of care in UPHCs should be improved to reduce the out of pocket expenditure at OPD service.

8.5 A detailed study to be conducted with larger sample size to include more number of UPHCs and more number of states for better representation and statistical analysis.

8.6 Correlation analysis should be carried out periodically at state level to undertake timely corrective action.

8.7 OOPE of dependent population to be compiled at UPHC level for better validity and reliability of data and applicability of results.

## Chapter 9

### **Limitations of the study**

The study has following limitations:-

- 9.1 Study is based on limited secondary data made available by NHSRC.
- 9.2 Data of four states was in the aggregated form. Hence some results are statistically not significant.
- 9.3 The score cards of three UPHCs per state were considered. Therefore, the study may not necessarily represent the entire state.
- 9.4 The figures of OOPE and UPHC scorecards have been taken merely for the purpose of learning research methodology.

## Appendix A

### Gujarat

**Table1: Indicators on Utilization and Out of Pocket Expenditures (OOPE) on Healthcare: 2014(in current prices)**

Indicators	Gujarat		All India	
	Rural	Urban	Rural	Urban
<b>Utilization Indicators</b>				
Proportion (per thousand) of ailing persons	92	103	89	118
% of non-hospitalized cases using public facility	22	14	25	20
% of non-hospitalized cases using private facility	70	82	64	73
% of non-hospitalized cases using Informal care (friends/relatives/medicine shops/others)	8	4	11	8
Proportion (per thousand) of hospitalized persons	48	49	44	49
% of hospitalized cases using public facility	23	23	42	32
% of hospitalized cases using private facility	77	77	58	68
<b>Out of Pocket Expenditures on Healthcare (OOPE)</b>				
<b>Hospitalization Expenditure (excluding child birth) (In Rs.)</b>				
OOPE per hospitalized case(Rs)-All	14171	17137	14473	21985
OOPE per hospitalized case(Rs)-Public	6620	7213	5369	7189
OOPE per hospitalized case(Rs)-Private	16482	20160	21034	28958
<b>Child Birth Expenditure (as inpatient) (In Rs.)</b>				
OOPE per child birth-(Rs)All	4991	9645	5518	11033
OOPE per child birth(Rs)– Public	762	1477	1572	2094
OOPE per child birth(Rs)– Private	7454	12888	14727	19107
<b>Non-hospitalized expenditure (In Rs.)</b>				
OOPE per non-hospitalized ailing person(Rs) – Public	1753	6416	9840	9620
OOPE per non-hospitalized ailing person(Rs) – Private	12288	12246	15804	18919
OOPE on antenatal care(ANC) per pregnant woman(Rs)-Public	682	1258	1388	1859
OOPE on ANC per pregnant woman(Rs)-Private	3395	5401	4791	5727
% of diagnostics expenditure as a proportion of outpatient medical expenditure	9%	13%	11%	12%
% of drugs expenditure as a proportion of outpatient medical expenditure	57%	54%	73%	68%
% of drugs expenditure as a proportion of outpatient medical expenditure-Public	83%	70%	76%	67%

\*OOPE is net of reimbursemen

**Karnataka - Table1: Indicators on Utilization and Out of Pocket Expenditures (OOPE) on Healthcare: 2014(in current prices)**

Indicators	Karnataka		All India	
	Rural	Urban	Rural	Urban
<b>Utilization Indicators</b>				
Proportion (per thousand) of ailing persons	93	103	89	118
% of non-hospitalized cases using public facility	25	14	25	20
% of non-hospitalized cases using private facility	71	80	64	73
% of non-hospitalized cases using Informal care (friends/relatives/medicine shops/others)	4	6	11	8
Proportion (per thousand) of hospitalized persons	52	49	44	49
% of hospitalized cases using public facility	27	18	42	32
% of hospitalized cases using private facility	73	82	58	68
<b>Out of Pocket Expenditures on Healthcare (OOPE)</b>				
<b>Hospitalization Expenditure (excluding child birth) (In Rs.)</b>				
OOPE per hospitalized case(Rs)-All	12779	19532	14473	21985
OOPE per hospitalized case(Rs)-Public	4258	4027	5369	7189
OOPE per hospitalized case(Rs)-Private	15904	23001	21034	28958
<b>Child Birth Expenditure (as inpatient) (In Rs.)</b>				
OOPE per child birth-(Rs)All	6341	12622	5518	11033
OOPE per child birth(Rs)- Public	1762	2634	1572	2094
OOPE per child birth(Rs)- Private	15677	19482	14727	19107
<b>Non-hospitalized expenditure (In Rs.)</b>				
OOPE per non-hospitalized ailing person(Rs) – Public	7293	10659	9840	9620
OOPE per non-hospitalized ailing person(Rs) – Private	11895	16212	15804	18919
OOPE on antenatal care(ANC) per pregnant woman(Rs)-Public	1810	2040	1388	1859
OOPE on ANC per pregnant woman(Rs)-Private	4810	5993	4791	5727
% of diagnostics expenditure as a proportion of outpatient medical expenditure	9%	10%	11%	12%
% of drugs expenditure as a proportion of outpatient medical expenditure	68%	64%	73%	68%
% of drugs expenditure as a proportion of outpatient medical expenditure-Public	82%	71%	76%	67%

\*OOPE are net of reimbursements

## Haryana

**Table1: Indicators on Utilization and Out of Pocket Expenditures (OOPE) on Healthcare: 2014(in current prices)**

Indicators	Haryana		All India	
	Rural	Urban	Rural	Urban
<b>Utilization Indicators</b>				
Proportion (per thousand) of ailing persons	56	75	89	118
% of non-hospitalized cases using public facility	10	8	25	20
% of non-hospitalized cases using private facility	85	90	64	73
% of non-hospitalized cases using Informal care (friends/relatives/medicine shops/others)	5	2	11	8
Proportion (per thousand) of hospitalized persons	42	50	44	49
% of hospitalized cases using public facility	33	18	42	32
% of hospitalized cases using private facility	67	82	58	68
<b>Out of Pocket Expenditures on Healthcare (OOPE)</b>				
<b>Hospitalization Expenditure (excluding child birth) (In Rs.)</b>				
OOPE per hospitalized case(Rs)-All	17734	25478	14473	21985
OOPE per hospitalized case(Rs)-Public	9647	12098	5369	7189
OOPE per hospitalized case(Rs)-Private	21764	28480	21034	28958
<b>Child Birth Expenditure (as inpatient) (In Rs.)</b>				
OOPE per child birth-(Rs)All	8484	11953	5518	11033
OOPE per child birth(Rs)- Public	1530	1674	1572	2094
OOPE per child birth(Rs)- Private	16206	18769	14727	19107
<b>Non-hospitalized expenditure (In Rs.)</b>				
OOPE per non-hospitalized ailing person(Rs) – Public	11698	12701	9840	9620
OOPE per non-hospitalized ailing person(Rs) – Private	15728	23460	15804	18919
OOPE on antenatal care(ANC) per pregnant woman(Rs)-Public	1304	1588	1388	1859
OOPE on ANC per pregnant woman(Rs)-Private	9120	8497	4791	5727
% of diagnostics expenditure as a proportion of outpatient medical expenditure	14%	13%	11%	12%
% of drugs expenditure as a proportion of outpatient medical expenditure	72%	67%	73%	68%
% of drugs expenditure as a proportion of outpatient medical expenditure-Public	79%	90%	76%	67%

\*OOPE is net of reimbursements



## Punjab

**Table1: Indicators on Utilization and Out of Pocket Expenditures (OOPE) on Healthcare: 2014(in current prices)**



Indicators	Punjab		All India	
Utilization Indicators	Rural	Urban	Rural	Urban
Proportion (per thousand) of ailing persons	161	170	89	118
% of non-hospitalized cases using public facility	16	20	25	20
% of non-hospitalized cases using private facility	80	68	64	73
% of non-hospitalized cases using Informal care (friends/relatives/medicine shops/others)	4	13	11	8
Proportion (per thousand) of hospitalized persons	41	40	44	49
% of hospitalized cases using public facility	29	30	42	32
% of hospitalized cases using private facility	71	70	58	68
<b>Out of Pocket Expenditures on Healthcare (OOPE)</b>				
<b>Hospitalization Expenditure (excluding child birth) (In Rs.)</b>				
OOPE per hospitalized case(Rs)-All	26906	28863	14473	21985
OOPE per hospitalized case(Rs)-Public	11667	14703	5369	7189
OOPE per hospitalized case(Rs)-Private	33209	35002	21034	28958
<b>Child Birth Expenditure (as inpatient) (In Rs.)</b>				
OOPE per child birth-(Rs)All	9083	12529	5518	11033
OOPE per child birth(Rs)- Public	2195	3153	1572	2094
OOPE per child birth(Rs)- Private	18001	17915	14727	19107
<b>Non-hospitalized expenditure (In Rs.)</b>				
OOPE per non-hospitalized ailing person(Rs) – Public	12169	20077	9840	9620
OOPE per non-hospitalized ailing person(Rs) – Private	14870	17869	15804	18919
OOPE on antenatal care(ANC) per pregnant woman(Rs)-Public	2436	4775	1388	1859
OOPE on ANC per pregnant woman(Rs)-Private	6326	7388	4791	5727
% of diagnostics expenditure as a proportion of outpatient medical expenditure	12%	13%	11%	12%
% of drugs expenditure as a proportion of outpatient medical expenditure	77%	73%	73%	68%
% of drugs expenditure as a proportion of outpatient medical expenditure-Public	88%	66%	76%	67%



\*OOPE is net of reimbursements

## Appendix-B

# UPHC REPORTS

## UPHC JUNCTION PLOT, RAJKOT (GUJARAT)

 <b>Summary – UPHC Score</b> 			
UPHC QUALITY SCORE CARD DEPARTMENT WISE			
<b>Dressing Room &amp; Emergency</b>	<b>General Clinic</b>	<b>Maternity Health</b>	<b>New Born &amp; Child Health</b>
78.6	92.8	98.4	79.9
<b>Immunization</b>	<b>UPHC Score</b>		<b>Family Planning</b>
98.1			86.5
<b>Communicable Disease</b>			<b>Non Communicable Disease</b>
88.5	<b>88.2</b>		81.9
<b>Outreach</b>			<b>General Administration</b>
92.4	<b>Pharmacy</b>	<b>Laboratory</b>	81.4
	87.6	94.2	
Urban Health Center Junction Plot, District – Rajkot, Health & Family Welfare Department- Gujarat			

 <b>Area of Concern wise Score</b> 			
Area of Concern wise Score			
<b>Service Provision</b>	<b>Patient's Right</b>	<b>Input</b>	<b>Support Services</b>
83.9%	87.3%	81.0%	90.6%
<b>Clinical Services</b>	<b>Hospital Infection Control</b>	<b>Quality Management</b>	<b>Outcome</b>
89.9%	100.0%	83.7%	90.6%
Urban Health Center Junction Plot, District – Rajkot, Health & Family Welfare Department- Gujarat			

## UPHC NEW RAGHUVIR, RAJKOT (GUJARAT)



### Summary – UPHC Score



UPHC QUALITY SCORE CARD DEPARTMENT WISE			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
81.7	89.9	97.6	87.4
Immunization	UPHC Score		Family Planning
99.4			82.9
Communicable Disease			Non Communicable Disease
90.9	89.90		82.6
Outreach			General Administration
91.8			86.9
Pharmacy	Laboratory		
91.3	95.6		

Urban Health Center New Raghuvir, District – Rajkot, Health & Family Welfare Department- Gujarat



### Area of Concern wise Score



Area of Concern wise Score			
Service Provision	Patient's Right	Input	Support Services
84.6%	94.0%	83.3%	93.3%
Clinical Services	Hospital Infection Control	Quality Management	Outcome
90.0%	99.0%	87.4%	90.8%

Urban Health Center New Raghuvir, District – Rajkot, Health & Family Welfare Department- Gujarat

## UPHC SHAYAMPUR, RAJKOT (GUJARAT)



### Summary – UPHC Score



UPHC QUALITY SCORE CARD DEPARTMENT WISE			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
71.3	72.6	87.4	73.0
Immunization	UPHC Score		Family Planning
89.2			73.5
Communicable Disease			Non Communicable Disease
75.0	81.0		72.8
Outreach	Pharmacy	Laboratory	General Administration
93.6	90.9	80.3	81.6
Urban Health Center Shayamnagar, District – Rajkot, Health & Family Welfare Department- Gujarat			



### Area of Concern wise Score



Area of Concern wise Score			
Service Provision	Patient's Right	Input	Support Services
85.8%	85.6%	78.4%	90.0%
Clinical Services	Hospital Infection Control	Quality Management	Outcome
77.4%	87.8%	65.9%	72.2%
Urban Health Center Shayamnagar, District – Rajkot, Health & Family Welfare Department- Gujarat			

## UPHC GANDHI NAGAR, YAMUNA NAGAR (HARYANA)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
15.6	35.6	62.6	33.9
Immunization	UPHC Score		Family Planning
61.4			35.3
Communicable Disease	39.0		Non Communicable Disease
35.7			15.1
Outreach	Pharmacy	Laboratory	General Administration
59.8	58.7	19.4	32.8

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
55.1%	51.5%	40.5%	40.0%
HOSPITAL SCORE			
39.0%			
Clinical Services	Infection Control	Quality Management	Outcome
54.5%	18.3%	5.3%	12.2%

## UPHC LAXMAN VIHAR, GURGAON (HARYANA)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
60.9	71.2	87.8	68.4
Immunization	UPHC Score		Family Planning
84.8			70.0
Communicable Disease	67.7		Non Communicable Disease
64.3			43.4
Outreach	Pharmacy	Laboratory	General Administration
75.6	77.1	56.1	60.1

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
78.2%	78.8%	67.7%	77.3%
HOSPITAL SCORE			
67.7%			
Clinical Services	Infection Control	Quality Management	Outcome
79.4%	68.9%	19.5%	30.6%

## UPHC RAJENDRA NAGAR, GURGAON (HARYANA)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
70.8	79.8	85.4	73.0
Immunization	UPHC Score		Family Planning
77.2			67.6
Communicable Disease	68.5		Non Communicable Disease
61.9			44.0
Outreach	Pharmacy	Laboratory	General Administration
74.1	78.0	57.8	60.7

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
78.5%	71.9%	69.8%	75.3%
HOSPITAL SCORE			
68.5%			
Clinical Services	Infection Control	Quality Management	Outcome
79.7%	87.8%	13.0%	26.7%

## UPHC PREET COLONY, ZIRAKHPUR (PUNJAB)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
74.5	80.8	87.8	78.2
Immunization	UPHC Score		Family Planning
84.8			58.2
Communicable Disease	70.9		Non Communicable Disease
56.3			54.2
Outreach	Pharmacy	Laboratory	General Administration
79.3	73.9	65.6	64.1

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
80.4%	80.8%	76.0%	73.6%
HOSPITAL SCORE			
70.9%			
Clinical Services	Infection Control	Quality Management	Outcome
81.3%	95.8%	7.7%	25.6%



## UPHC BALTANA, ZIRAKHPUR (PUNJAB)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
75.0	81.7	86.6	78.7
Immunization	UPHC Score		Family Planning
81.6			54.1
Communicable Disease	69.3		Non Communicable Disease
53.6			51.8
Outreach	Pharmacy	Laboratory	General Administration
77.1	66.5	62.2	65.7

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
80.1%	76.9%	68.8%	74.7%
HOSPITAL SCORE			
69.3%			
Clinical Services	Infection Control	Quality Management	Outcome
81.6%	96.2%	7.7%	21.1%

## UPHC PHASE-1, MOHALI (PUNJAB)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
77.6	81.7	87.4	78.2
Immunization	UPHC Score		Family Planning
82.3			72.9
Communicable Disease	69.0		Non Communicable Disease
56.7			47.6
Outreach	Pharmacy	Laboratory	General Administration
80.2	69.7	36.4	67.2

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision	Patient Rights	Inputs	Support Services
80.4%	84.6%	67.7%	73.6%
HOSPITAL SCORE			
69.0%			
Clinical Services	Infection Control	Quality Management	Outcome
79.4%	90.7%	11.4%	21.7%

## UPHC NS PALYA, BANGLORE (KARNATAKA)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
55.7	74.8	74.8	57.5
Immunization	UPHC Score		Family Planning
85.4			43.3
Communicable Disease	58.8		Non Communicable Disease
46.4			22.9
Outreach	Pharmacy	Laboratory	General Administration
65.5	77.5	52.0	52.7

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision 54.2%	Patient Rights 64.6%	Inputs 66.1%	Support Services 75.8%
<b>HOSPITAL SCORE</b> 58.8%			
Clinical Services 66.1%	Infection Control 85.9%	Quality Management 0.0%	Outcome 3.3%

## UPHC SHANTHINAGAR, BANGLORE (KARNATAKA)

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
62.0	75.5	81.3	63.2
Immunization	UPHC Score		Family Planning
80.4			84.7
Communicable Disease	63.0		Non Communicable Disease
59.5			27.1
Outreach	Pharmacy	Laboratory	General Administration
72.9	60.6	56.1	49.2

Table 1.2 –Area of Concern Wise Score

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision 66.1%	Patient Rights 71.9%	Inputs 66.9%	Support Services 74.5%
HOSPITAL SCORE 63.0%			
Clinical Services 74.5%	Infection Control 85.6%	Quality Management 0.0%	Outcome 11.1%

## UPHC VIDYAPEETA, BANGLORE (KARNATAKA)

Table no 1.1

UPHC Quality Score Card			
Dressing Room & Emergency	General Clinic	Maternity Health	New Born & Child Health
54.7	78.5	81.0	50.6
Immunization	UPHC Score		Family Planning
81.6			52.9
Communicable Disease	58.9		Non Communicable Disease
47.2			19.9
Outreach	Pharmacy	Laboratory	General Administration
67.1	66.1	58.2	50.6

Table 1.2 –Area of Concern Wise Score

HOSPITAL QUALITY SCORE CARD			
AREA OF CONCERN WISE			
Service Provision 57.4%	Patient Rights 65.4%	Inputs 65.7%	Support Services 69.4%
HOSPITAL SCORE 58.9%			
Clinical Services 69.3%	Infection Control 85.3%	Quality Management 0.0%	Outcome 3.4%

## **Bibliography**

- 1 Out-of-Pocket Spending on Out-Patient Care in India: Assessment and Options Based on Results from a District Level Survey, Gupta and Chowdhury, et al 2016.
- 2 Out of pocket expenditure among the households of a rural area in Puducherry, South India, R Archana and Sekhar Kar, KC Premarajan, and Subitha Lakshminarayanan, 2012.
- 3 Health Expenditure and Catastrophic Costs for Inpatient- and Out-patient Care in Iran. Zohreh Anbari and Mohammadbeigi et al, 2014.
- 4 Health services utilization and out-of-pocket expenditure at public and private facilities in low-income countries World Health Report 2010.
- 5 Study of Out-of-Pocket Expenditures for Outpatient Imaging Services in Imam-Khomeini Hospital, Sima Marzban et al 2014.
- 6 Out-of-pocket expenditure and its determinants in the context of private healthcare sector expansion in sub-Saharan Africa urban cities: evidence from household survey in Ouagadougou, Burkina Faso, Idrissa Beogo,corresponding author Nicole Huang, Marie-Pierre Gagnon, and Djesika D. Amendah, 2016.
- 7 Quality Standards for Urban Primary Health Centre January 2016.
- 8 Key Indicators of Social Consumption in India Health, NSS 71<sup>st</sup> Round January-June 2014.
- 9 Operational Guidelines for Quality Assurance in Public Health Facilities 2013.MoHFW, GoI.
- 10 Health care and equity in India. Lancet , Balarajan Y, Selvaraj S, Subramanian SV, 2011;377:505–15.
- 11 The cost of universal health care in India: A model based estimate,. Prinja S, Bahuguna P, Pinto AD, Sharma A, Bharaj G, Kumar V, et al, 2012