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Comprehensive and Psychology Review of PM-JAY Performance in the Opinion of Man Power Key Stakeholders- Health and Hospital

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Abstract:

A highly ambitious community healthcare programme by name PM-JAY was rolled out in India during September 2018 as a part of Ayushman Bharat initiative. The scheme offered significant increase in amount of cover over previous schemes apart from targeting five hundred million people. As it offered increased cover of INR half a million per family for inpatient treatment per year, naturally required huge amount of resources. In the background of challenges experienced by previous healthcare programmes and since the programme has now completed almost 4 years, it becomes necessary to evaluate the programme delivery through the opinion of two most critical stakeholders who are Health and Hospitals Departments. The researcher had done an exhaustive primary survey of beneficiaries earlier. Later, to have 360 degree check on end to end basis, the critical stakeholders were approached which is part of this article**.** One hundred health department officials and one hundred hospital officials in the state of Karnataka are interviewed through well drafted instrument containing 20 questions each. Independent sample t-test and one way ANOVA was employed to test the framed hypothesis on 5 variables from both the departments. The survey broadly indicates that, the performance of the scheme is reasonably good but there are few areas which require improvement in terms of providing the access to these benefits and improve the delivery of the benefits. The results also indicate that, the eligibility norms to be redefined for including all deserving poor people to avail the benefits. The results of hypothesis differ based on demographic variables. While the coverage of INR half million is good amount, the access to facilities is limited and man power with necessary infrastructure needs to be scaled up substantially. The improvement in awareness amongst beneficiaries will advance the success ratio further.

Key Words: AB, PM-JAY, Public Healthcare, Health Insurance,

1. Introduction

The Government of India introduced a new mega healthcare scheme called PM-JAY during September 2018 with number of improvements over its earlier public health scheme called RSBY which could not see much success due to various problems. RSBY had been implemented in many states in India earlier. After meticulously identifying the faults in RSBY and taking note of good as well as bad points of various other health programmes of different states, the central government tried to bring in, a completely new scheme through NHA, with various innovative and need based features. This is a very aspiring scheme, as it targeted to cover more than107 million families for hospitalization treatments up to INR half a million per family per year with there being no limit in terms of family size or age thus marking huge improvement over all other schemes in existence then. After all, good health is provided as one of the important constitutional right to individuals. Article 21 of the Constitution promises, essential right to life. It imposes responsibility on State to take care of every individual's life by ensuring immediate medical aid to all people. However, the government's investment on health care is lowest in India as compared to many other similar economies and hence considerable shortage

of medical professionals and facilities is experienced in the country (Angell et al., 2019). Both the amount of cover and the number of families targeted in PM-JAY being huge in number; it required tremendous efforts to scale up the administrative machinery as well as delivery logistics to make this programme reach the last person in the society. Under this scheme, all the eligible families are entitled to inpatient treatment in hospitals with cashless facility covering all types of expenses whilst in hospital and also pre and post hospitalization cover of 3 days and 15 days respectively. However, being a government scheme requiring to reach all beneficiaries in every tier II and III cities including remote villages of the country, it has its own set of challenges in providing the timely benefits and financial relief thereby. NHA provides operational guidelines and SHA implements the scheme through any manner as deemed appropriate by them. States are at liberty to choose between insurance, trust or mixed approach to take the scheme benefits to beneficiaries. SHA implements in respective states through health department. Therefore, the role of health department happens to be important in every state. The benefits of the scheme in the entire logistic arrangement reach beneficiaries through hospitals who provide required inpatient care. Therefore, it is hospitals that interact with the patients and their family members on day to day basis and they work in close coordination with SHAs for references and reimbursement. The scheme does encourage the private hospitals also to be part of the delivery chain subject to these hospitals meeting the standards set and getting empanelled. In view of the same, the actual experience of state health department and hospitals who are at the end of implementation chain can give correct understanding of issues related to various facets of the scheme in reaching beneficiaries effectively. This scheme is implemented by all states but for Delhi, West Bengal and Orissa. The expenses are shared between central government and state government with central government taking higher share of expenses. As most of the government schemes have been a drain on government resources, a systematic and regular scrutiny is very essential (Garg et al., 2019).

1.1 Problem Statement / Research Questions

For, benefits of public healthcare scheme to reach beneficiaries properly and in time, there has to be seamless coordination between various stakeholders involved in implementation. Guidelines, roles and responsibility of all should be clear. There should be adequate number of people and facilities available in all places. Any public healthcare scheme has number of challenges in meeting the expectations of all the people in the country. India is land of people with different cultural backgrounds, race, ethnic practices, varying climatic zones, different types of exposures to natural calamities in each place and different types of food habits too. Large numbers of people live in remote areas making it difficult for health department to provide healthcare access. Frauds of different types are very common in any government scheme. Bureaucratic approach of government run schemes makes timely delivery tougher as we have seen in most of the government initiatives. While the intent behind most of the big initiatives is very good, systems are fraught with lack of manpower and materials to support implementation of the scheme. Many of these are the cited reasons in research survey of various public healthcare schemes. With government announcing such a mammoth initiative in PM-JAY, requiring considerably high amount of money, there is a dire need to scrutinise the effectiveness of the scheme implementation comprehensively in respect of benefits extended, proximity provided to avail the healthcare and actual experience of getting the timely healthcare support by targeted people. Healthcare happens to be one of the major concerns especially for aged people too. (Ahmed et al., 2015)

1.2 Importance of this Study

This study is of extreme importance as the PM-JAY Scheme is a very ambitious scheme covering five hundred million people from 107 million families. The eligible people are those who are poorest of the poor and thus a life saver to large section of the society. Huge amount spent by government should not get wasted. When the sole bread winner of the family is adequately protected, the entire family will get benefited. Healthy people are happy people and remain national assets at productive age. Government is also striving for Universal Health by 2030 so that; Health for All is fully taken care of. That will help in maintaining Sustainable Developmental Goals (SDG) and honour commitment given to World Health Organization. (WHO) This PM-JAY is a welcome step in that direction. Developing different types of data and studying the same are very crucial for government to decide policies especially in respect of epidemics. (Manzoor et al., 2015). Earlier, the researcher had undertaken pilot study of 35 beneficiaries availing benefit under the scheme during 2019 -2020. Later, the

researcher using learnings from pilot study, embarked on detailed survey of 405 beneficiaries who had used the scheme benefits during 2020-2021. Majority of them were found to be not much educated. Later to have validation in respect of the findings in respect of this beneficiary's survey and have larger understanding of all other issues, the researcher was guided to survey the key stakeholders who are health department officials and hospital officials to examine the issues better.

1.3 Objectives

The core objective of this research is to assess the problems if any across supply chain link in implementation of the PM-JAY programme and bring the same to the notice of government for immediate measures to rectify the same. In this regard, health department officials and hospital officials are identified as people who play crucial role in effective implementation of the scheme. These people are consulted with a separate set of questions in the form of comprehensive instruments. Both the instruments are customized and drafted in such a way that, it captures all the important and relevant points related to coverage, connectivity and execution. With that motive, the instruments administered had questions related inter-departmental coordination, clarity of roles to all employees and training, appropriateness and adequateness of IT support, hospital empanelment, monitoring and support extended to hospitals by government especially timely reimbursement of bill for the full amount, etc. The involvement of private hospitals also raises a pertinent question which also is examined. While, majority of the beneficiaries prefer to get treated in private hospitals, the concerns with regards to inflation of bills remain a major issue.

In total six hypotheses were framed to fulfil the objective:

H_1: Opinion of health department stakeholders (Private Hospital Compliance, Awareness, Private Hospital Reach, Serving the Social Cause, and Stakeholders Coordination) varies based on gender.

H_2: Opinion of health department stakeholders (Private Hospital Compliance, Awareness, Private Hospital Reach, Serving the Social Cause, and Stakeholders Coordination) varies based on age.

H_3: Opinion of health department stakeholders (Private Hospital Compliance, Awareness, Private Hospital Reach, Serving the Social Cause, and Stakeholders Coordination) varies based on experience.

H_4: Opinion of hospital department stakeholders (Scheme benefits, Eligibility, Awareness, Quality Care, and Stakeholders Coordination) varies based on gender.

H_5: Opinion of hospital department stakeholders (Scheme benefits, Eligibility, Awareness, Quality Care, and Stakeholders Coordination) varies based on age.

H_6: Opinion of hospital department stakeholders (Scheme benefits, Eligibility, Awareness, Quality Care, and Stakeholders Coordination) varies based on experience.

2. Literature Review

The AB-PMJAY awareness percentage was 78.9%, with 362 of 459 eligible individuals having knowledge of the same. Amongst eligible individuals, the AB-PMJAY was used by only 1.3%. There was a statistically significant relationship with AB-PMJAY awareness and eligible study category, ration card, and work status. The level of utilisation was found to be very low, at 1.3%; therefore, training of healthcare workers at the grass-roots level, such as accredited social health activists (ASHA) and Anganwadi workers (AWW), should be done on a regular basis to improve community connection and effective utilisation of the Ayushman Bharat-PMJAY scheme (Prasad et al., 2023). Knowledge level amongst the beneficiaries is key aspect for scheme success. Decision makers need to acknowledge limited understanding of the government benefits amongst poor people. (Ansari et al., 2020).The state has the definitive authority on hospital enlistment decisions, with the insurance company having little influence. The preponderance of empanelled providers was private hospitals with district-by-district bed capacities in states varying widely. Assessing hospitals' clinical decisions presented difficulties for support agencies in states. It is necessary to facilitate a better distribution and guarantee the quality care in hospitals that have been accredited. Adoption of standard treatment guidelines is required to aid hospitals and implementing agencies in achieving superior claim management. In order to determine the cost-effectiveness of trusts and insurance companies as purchasers, it would be beneficial to assess the comparative performance of trusts and insurance companies in all states at a later stage of scheme implementation (Furtado et al., 2022).

Ever since the age of Veda, the laudable Indian heritage has good medical practice which is scientifically accepted. During those days, Ayurveda and yoga assumed huge importance to take care of overall health of the individuals. This is now again becoming the trend. State has onus to ensure health of its people. Today, nearly seventy per cent of healthcare professionals in the country are with private healthcare providers. Shortage of manpower is noticed to the extent of 18% medical practitioners, 38% lab attendants and 16% chemists (Jha, 2020). The people covered in PM-JAY scheme are not able to get the benefits as per their actual requirement. The private establishments providing healthcare support does not seem to be happy with the amount being paid and it is quite unlikely that they will support for more years. The various institutions are involved in implementation. There is lack clarity with regard to individual's role and there is a limited transparency. The inclusion of private network providers was in fact the root cause of failure of RSBY scheme earlier (Dholakia, 2020). In India, the states where the healthcare requirement is more on account of incidence of illnesses and large percentage of poor people, the utilization of healthcare scheme is found to be much less, sadly. The incidence of sickness and poverty is found to be directly related. States like Kerala has done well in terms scheme utilization with improvement in health status of its people whereas Assam is found to be opposite with least percentage of people being healthy. State of Chattisgarh has more poor people and has not utilized the scheme benefits properly. Similarly states like Bihar, Madhya Pradesh and Uttar Pradesh also have more poor people but at the same time, the consumption of scheme benefits is low. The causes for such imbalance are attributed to eligibility norms being not right, defective data of beneficiaries and lesser number of hospitals (Smith et al., 2019). The Government Hospitals handle 45.6% of all in-patient cases. 37% of the overall poor people also avail treatment in private establishments. The average out of pocket expenses is much less when the treatment is availed in public hospital. It is just 20% of expenses compared to private healthcare providers. Huge variation is experienced in average expenditure when a similar treatment for same duration is undertaken through different schemes like private hospital with no insurance, private hospital through public scheme (package), public hospital without any insurance and public hospital under public scheme (package). The difference is noted to be in the range of INR 22,604, INR 17,741, INR 4,919, and INR 3,204 respectively (Ranjan et al., 2018). For a very long time, India's performance is quite bad in healthcare system in view of low level of spending, inadequate access, low quality of services and limited accountability on the part of people involved. Essential medicines is available only to the extent of 35% as against target level of 82% and achievement in respect of vaccination up to 12 years of age is just 60% as against target of 90%. Big gap is noticed in man power and infrastructure availability (Tabish, 2018). The major issues in connection with achieving the ambitious goal of universal health care are high health care expenses and aligning all players in the health care system for better synchronisation. The technological advancement in medical field is high. Good coordination between central government and various state governments is key factor in effective implementation of public healthcare schemes. Scaling up of infrastructure is essential to achieve universal health care. However, improvement in life expectancy and specific improvement in maternal and infant mortality is commendable (Chikermane & Kurien, 2018). Proximity and deployment of facilities in rural India is not satisfactory, resultantly, it is not only adversly affecting the life of the people but their families too when earning member in the family is affected. There are many common diseases that affect rural people specifically. 66% of people in mofussil places suffer from lack of medicines and 30% of people are required to travel for over 30 kilometers to take treatment. Thus, there is no equity in distribution of healthcare benefits. Creating better awareness with regard to good healthy habits are eluding them (Bharadwaj et al., 2018). The poor people living in remote villages requires regular intervention through engaging and enabling them to uplift their overall well-being. Social media is also found to be of great use in this regard. (Biclar, 2022). Poor levels of government funding and poor accountability are the main reasons for failure of public health care implementation. When major schemes are announced like National Rural Health Mission (NRHM), they do talk of novel things but not enough work happens and are found poor at implementation. Independence and delegation of power in financial planning to local institutions does lot of good in improving the health care institutions but seldom happens. Institutions in fact performed well with introduction of cash transfer for institutional delivery system (Nagpal, 2013).

The above points noted in literature survey related to earlier health schemes in vogue for long time and PM-JAY in particular with reference to private healthcare providers offer number of issues to ponder about. It has also helped in fine tuning the questionnaire.

3. Materials and Methods

Primary Survey of one hundred health department officials and one hundred hospital officials who are dealing with the scheme aspects is done with two separate customized sets of instruments. This survey is done in the state of Karnataka which has overall population of 70 million with reasonable percentage being poor and good number of them being scheme beneficiaries. Further, Karnataka shares its borders with six other states. As the scheme provides portability benefits, the beneficiaries availing treatment here does include people from other states too. In view of the same, the health department and the hospital officials should always be geared to support typical regional health issues as well.

The instruments administered to health department and hospitals had questions on 5-point Likert scale. The options in the Likert scale are 1. Strongly Disagree, 2. Disagree 3. Neither Disagree nor Agree 4. Agree and 5. Strongly Agree. For survey related to healthcare system, these choices are found to be most appropriate. The set of questions include few common points for better validation and few inter related questions also for understanding the points related to mutual recognition and respect. The majority of the questions are those which are important from the perspective of effective functioning of respective teams, be it health department or hospital. The data is analysed using SPSS 25.

4. Results

4.1 Descriptive Statistics

Data from our descriptive statistical analysis of the respondents' demographics are shown in Table 1.

Table: 1 Descriptive statistics for Respondents' Profile

Variable		Health Department (%)	Hospital Department (%)
Gender	Male	80	75
	Female	20	25
Age	Less than 25 years	5	14
	26-35 years	24	26
	36-45 years	31	19
	46-55 years	21	19
	56-65 years	16	10
	Above 65 years	3	12
Experience	Up to 2 years	10	14
	2-5 years	19	11
	5-10 years	30	21
	10-25 years	28	27
	More than 25 years	13	27

Table 1 indicates that male are more prevalent than female in both the health department (male: 80% and female: 20%) and hospital department (male: 75% and female: 25%). In the health department, 5% of

respondents were under the age of 25, 24% were between the ages of 26-35, 31% were between the ages of 36-45, 21% were between the ages of 46-55, and 16% and 3% were between the ages of 56 and 65 as well as above 65 years respectively. In hospitals, the majority of respondents are between the ages of 26-35 with 26%; 14% are under the age of 25; 19% each are between the ages of 36-45 and 46-55 years; and 10% and 12% are between the ages of 56-65 and above 65 years respectively. In terms of experience, 10% of respondents from the health department and 14% of the respondents from the hospital department have up to 2 years of experience, 19% from the health department and 11% from the hospital department have experience between 2-5 years, 30% from the health department and 21% from the hospital department have experience between 5-10 years, 28% from the health department and 27% from the hospital department have experience between 10-25 years, and 13% of the health department respondents and 27% of the hospital department respondents have experience of more than 25 years.

Table: 2 Statements and Agreement level of Health Department Officials

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)
All the employees across the department have fair understanding of role and procedures	2	12	11	46	29
All employees are adequately trained to handle most of the issues	2	15	12	53	18
The Admission and Discharge Procedures are done fast and in a simple manner	0	5	11	56	28
The Health Authority is fast to act in addressing any new problems	0	5	8	45	42
Systems and IT support is good enough	2	21	23	48	6
There is no shortage of staff within the health department	6	47	16	28	3
On the whole, the Ayushman Bharat (AB) Scheme benefits the needy	0	2	2	44	52
All Government Hospitals are taking care of patient's needs well	0	7	4	47	42
All Private Hospitals are doing well in following Ayushman Bharat guidelines	4	26	27	41	2
Beneficiaries are reasonably aware of AB guidelines and procedures	10	33	5	36	16
By and large, the scheme provides for all types of hospitalization treatments	0	3	1	57	39
Allowing Private Hospitals for AB scheme has helped to reach more people	12	42	27	19	0
Care at Private Hospitals is found to be good	7	7	37	47	2
The Hospital empanelment procedure is good and transparent	0	10	12	59	19
There is a good practice of monitoring treatment standards at ALL Hospitals	3	14	12	57	14
The participation in AB scheme has helped the Private Hospitals, Railways, ESI etc, to serve the cause of humanity	0	2	7	64	27
Most of the commonly required medical tests are available in all hospitals	0	0	1	56	43

The amount of cover at Rs. 5 lakh is good enough to take care of all types of medical exigencies by and large	0	3	0	34	63
The scheme has encouraged availability of adequate number of medical doctors and support staff at all places	5	27	25	34	9
The scheme facilitates good coordination amongst all stake holders for reaping benefits	1	2	5	61	31

Note: SD=Strongly Disagree, D= Disagree, N=Neutral, A=Agree, and SA=Strongly Agree

In table 2 above, it shows how respondents responded about Pradhan Mantri Jan Arogya Yojana in healthcare department. As per the table, the statement "All the employees across the department have fair understanding of role and procedures" showed that there are total of 75% of respondents who agreed and have proper understanding of role and procedure. While the statement "All employees are adequately trained to handle most of the issues" there are 71% of respondents who said that employees are very well trained to handle the problems. Besides, "The Admission and Discharge Procedures are done fast and in a simple manner" had shown that there are 84% of the respondents being agreeable with this statement. With the statement "The Health Authority is fast to act in addressing any new problems" majority 87% of the respondents agreed. While on the statement "Systems and IT support is good enough" almost half of the respondents 54% agree but 23% are neutral and 23% disagree that there is sufficient IT and systems support. Besides, "There is no shortage of staff within the health department" had shown that only 31% of the respondents agreed with this statement. Moreover, almost all of the 96% of respondents agreed with the statement "On the whole, the Ayushman Bharat (AB) Scheme benefits the needy". On the statement "All Government Hospitals are taking care of patient's needs well", 89% of the health officials agreed. However, in respect of statements "All Private Hospitals are doing well in following Ayushman Bharat guidelines", "Allowing Private Hospitals for AB scheme has helped reach more people", and "The scheme has encouraged availability of adequate number of medical doctors and support staff at all places", the majority of respondents do not agree with the statement.

Table: 3 Statements and Agreement levels of Hospital Department Officials

Statement	**SD (%)**	**D (%)**	**N (%)**	**A (%)**	**SA (%)**
The treatment amount is reimbursed in time to hospitals	10	19	18	40	13
The reimbursement of treatment amount is done in full	7	30	22	34	7
Bill particulars along with expenses allowed and disallowed are stated by Government while reimbursing which helps easy reconciliation	2	28	27	34	9
The procedure prescribed for billing the Government is simple	1	24	23	42	10
The expectations set by Government is fair and practical	2	21	4	56	17
Government Department acts to serve while dealing with Private Hospitals	2	30	20	34	14
On the whole, the Ayushman Bharat (AB) Scheme benefits the needy	0	7	4	55	34
IT Platform used is compatible	2	20	19	46	13
AB Programme covers all needy people	15	43	7	28	7
Beneficiaries are aware of AB guidelines	22	48	7	22	1
By and large, the scheme, provides for all types of hospitalization treatments	0	14	7	59	20

Allowing Private Hospitals for AB scheme has helped reach more people	2	16	12	57	13
Allowing Private Hospitals for AB scheme offers quality care	1	8	7	52	32
The Hospital empanelment procedure is easy	1	22	16	54	7
There is a good practice of monitoring treatment at Private Hospitals	4	32	26	33	5
The participation in AB scheme has helped the Private Hospitals to serve the cause of humanity	0	1	11	67	21
Most of the commonly required medical tests are available in all hospitals	0	9	2	60	29
The amount of cover at Rs. 5 lakh is good enough to take care of all types of medical exigencies	0	11	4	39	46
The scheme has encouraged availability of adequate number of medical doctors and support staff at all places	0	14	10	56	20
The scheme facilitates good coordination amongst all stake holders for reaping benefits	0	1	5	61	33

Note: SD=Strongly Disagree, D= Disagree, N=Neutral, A=Agree, and SA=Strongly Agree

In table 3 above, it shows how respondents responded about Pradhan Mantri Jan Arogya Yojana in hospital department. As per table, with the statement "The treatment amount is reimbursed in time to hospitals" showed that there are total of 53% of respondents who agreed. While the statement "The reimbursement of treatment amount is done in full" there are 41% of respondents who agreed. Besides, 70% respondents agreed to "Allowing Private Hospitals for AB scheme offers quality care". With the statement "The procedure prescribed for billing the Government is simple" 52% of the respondents, agreed. While on the statement "The expectations set by Government are fair and practical" majority of the respondents 73% agree but 4% are neutral and 23% disagreed. Besides, "Government Department acts to serve while dealing with Private Hospitals" had shown that only 48% of the respondents agreed with this statement. Moreover, almost all of the 89% of respondents agreed with this statement that "On the whole, the Ayushman Bharat (AB) Scheme benefits the needy". On the statement "IT Platform used is compatible" 59% of the hospital officials agreed. However, in respect of statements like "AB Programme covers all needy people", "Bill particulars along with expenses allowed and disallowed are stated by Government while reimbursing which helps easy reconciliation", "There is a good practice of monitoring treatment at Private Hospitals", the majority of respondents do not agree with the statement.

Table 4: Descriptive Analysis related to key performance areas- Mean Scores

The mean scores on Likert scale in respect of 100 respondents in respect of each category are noted in Table 4.

Health Department Officials Mean Score		**Hospital Officials Mean Score**	
Statement Number	Mean Score	Statement Number	Mean Score
S1.	3.88	S1.	3.27
S2.	3.70	S2.	3.04
S3.	4.07	S3.	3.20
S4.	4.24	S4.	3.36
S5.	3.35	S5.	3.65
S6.	2.75	S6.	3.28

S7.	4.46	S7.	4.16
S8.	4.24	S8.	3.48
S9.	3.11	S9.	2.69
S10.	3.15	S10.	2.32
S11.	4.32	S11.	3.85
S12.	2.53	S12.	3.63
S13.	3.30	S13.	4.06
S14.	3.87	S14.	3.44
S15.	3.65	S15.	3.03
S16.	4.16	S16.	4.08
S17.	4.42	S17.	4.09
S18.	4.57	S18.	4.20
S19.	3.15	S19.	3.82
S20.	4.19	S20.	4.26

Keeping in mind the primary objective of end to end analysis of the PM-JAY scheme implementation, the following three broad categories of mean score are made with high standards set.

a. Areas where the performance of the scheme is very good with mean score of 4 (80%) and above.
b. Areas where the performance of the scheme is good but can be improved further with mean score of 3 (60%) and above, but below 4 (80%).
c. Areas where the performance of the scheme is low with mean score less than 3 (60%).

Table 5: Summary Statement of scores related to key performance areas on the basis of mean scores.

Performance Level	**Health Department Data-No. of Parameters**	**Hospital Data- No. of Parameters**	**Remarks**
Very Good Performance	9	6	Need to Sustain
Good Performance	9	12	Need to look for improvement in possible areas
Poor Performance	2	2	Must improve steeply

From the above table 5, we can make out that, in respect of 2 variables in each set, the scheme functioning must improve substantially. In respect of 9 variables related to health department and 12 variables related to hospital, the scope for improvement needs to be examined wherever possible. However, in this middle segment, the score is just above 3 in respect of few parameters which must be explored by Government for further improvement definitely. Nevertheless, the scheme is doing very well in respect of 9 variables as noted from health department segment and 6 variables as noted from hospital officials segment. The current levels of performance should be sustained so that, the scheme remains effective.

Table 6: Reliability Test Results of all statements used in the Primary Survey

Respondents / Results	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
Health Department	0.906	0.916
Hospital Officials	0.834	0.841

The entire data collected from both the sets of respondents is established to be of high reliability and thereby found good for further processing.

4.2 PM-JAY performance in the opinion of key stakeholders- Health Department Officials

Five key items were selected to measure the opinion of key stakeholders regarding PM-JAY performance in health department with each demographic variables. The sample includes Private Hospital Compliance, Awareness, Private Hospital Reach, Hospitals Serving the Social Cause, and Stakeholders Coordination based on gender, age, and experience.

4.2.1 Opinion based on Gender

Table: 7 Independent Sample t-test (Gender as PHC, AW, PHR, SSS, and SC)

Variable	Gender	N	Mean	SD	SE Mean	t value	df	p value
PHC	Male	80	3.08	1.003	0.112	-0.733	98	0.035
	Female	20	3.25	0.716	0.160			
AW	Male	80	3.11	1.331	0.149	-0.569	98	0.579
	Female	20	3.30	1.261	0.282			
PHR	Male	80	2.45	0.967	0.108	-1.725	98	0.051
	Female	20	2.85	0.745	0.167			
HSS	Male	80	4.15	0.658	0.074	-0.315	98	0.538
	Female	20	4.20	0.523	0.117			
SC	Male	80	4.20	0.683	0.076	0.282	98	0.353
	Female	20	4.15	0.813	0.182			

Source: Primary data; SE= Standard Error; SD= Standard Deviation; df= Degree of freedom; *p<0.05; PHC= Private Hospital Compliance; AW= Awareness; PHR= Private Hospital Reach; HSS= Hospitals Serving the Social Cause; SC= Stakeholders Coordination

The result of table 7 shows opinion of health department people varies between male and female. The independent t-test indicated presence of a significant difference in the opinion of male and female stakeholders in some respects. Overall it is noted that for private hospital compliance, p=0.035 which is less than 0.05; and for private hospital reach, p-value is found to be 0.051 which is marginally more. No significant relationship was found in other aspects as p-value is more than 0.05. Therefore, hypothesis 1 of the study was partially supported by the results.

4.2.2 Opinion based on Age

Table: 8 One way ANOVA (Age as PHC, AW, PHR, SSS, and SC)

		Sum of Squares	df	Mean Square	F	Sig.
PHC	Between Groups	2.233	5	.447	.480	.791
	Within Groups	87.557	94	.931		
	Total	89.790	99			
AW	Between Groups	10.433	5	2.087	1.223	.304
	Within Groups	160.317	94	1.706		
	Total	170.750	99			
PHR	Between Groups	4.026	5	.805	.913	.476
	Within Groups	82.884	94	.882		
	Total	86.910	99			
HSS	Between Groups	3.067	5	.613	1.585	.172
	Within Groups	36.373	94	.387		
	Total	39.440	99			
SC	Between Groups	1.659	5	.332	.653	.660
	Within Groups	47.731	94	.508		
	Total	49.390	99			

Source: Primary data

Hypothesis 2 states that opinion varies with age of the health department employees. This hypothesis was tested using one way ANOVA, which compared the opinion of stakeholders at different age bands in the health department. The table 8 shows the results of the test conducted. ANOVA results pointed no significant difference in the opinion of stakeholders based on age for private hospital compliance, awareness, private hospital reach, Hospitals- Serving the social cause, and stakeholders' coordination because p-value is more than 0.05 for all the five variables.

4.2.3 Opinion based on Experience

Table: 9 One way ANOVA (Experience as PHC, AW, PHR, SSS, and SC)

		Sum of Squares	df	Mean Square	F	Sig.
PHC	Between Groups	1.247	4	.312	.334	.854
	Within Groups	88.543	95	.932		
	Total	89.790	99			
AW	Between Groups	7.904	4	1.976	1.153	.337
	Within Groups	162.846	95	1.714		
	Total	170.750	99			
	Between Groups	3.351	4	.838	.953	.437

PHR	Within Groups	83.559	95	.880		
	Total	86.910	99			
HSS	Between Groups	2.995	4	.749	1.952	.108
	Within Groups	36.445	95	.384		
	Total	39.440	99			
SC	Between Groups	.950	4	.238	.466	.761
	Within Groups	48.440	95	.510		
	Total	49.390	99			

Source: Primary data

The third hypothesis examines if experience influences health department officials opinion. This hypothesis was tested using a one-way ANOVA that compared the opinion of health department stakeholders with varying levels of experience. Table 9 displays the results of the conducted test. The ANOVA results p-value is more than 0.05 indicated that there was no significant difference between the opinion of stakeholders based on level of experience for private hospital compliance, awareness, private hospital reach, Hospitals- Serving the Social Cause, and coordination among stakeholders. Thus, the study's third hypothesis was not supported.

4.3 PM-JAY performance in the opinion of key stakeholders-Hospital Officials

A set of five key questions were utilized to assess the viewpoints concerning the performance of PM-JAY in the hospital department who are important stakeholders. The sample encompasses an examination of the scheme benefits, eligibility, awareness, quality care, and stakeholders' coordination, with a focus on gender, age, and experience.

4.3.1 Opinion based on Gender

Table: 10 Independent Sample t-test (Gender as SB, E, AW, QC, and SC)

Variable	Gender	N	Mean	SD	SE Mean	t value	df	p value
SB	Male	75	4.13	0.827	0.096	-0.575	98	0.813
	Female	25	4.24	0.723	0.145			
E	Male	75	2.63	1.250	0.144	-0.892	98	0.386
	Female	25	2.88	1.166	0.233			
AW	Male	75	2.29	1.088	0.126	-0.425	98	0.799
	Female	25	2.40	1.080	0.216			
QC	Male	75	4.04	0.936	0.108	-0.385	98	0.739
	Female	25	4.12	0.781	0.156			
SC	Male	75	4.20	0.615	0.071	-1.760	98	0.768
	Female	25	4.44	0.507	0.101			

Source: Primary data; SE= Standard Error; SD= Standard Deviation; df= Degree of freedom; *p<0.05; SB= Scheme Benefits; E= Eligibility; AW= Awareness; QC= Quality Care; SC= Stakeholders Coordination

The result of table 10 tests if the opinion of hospital officials varies with male and female. The independent t-test indicated presence of no significant difference in the opinion of male and female stakeholders as p value is more than 0.05 for scheme benefits (p=0.813); eligibility (p=0.386); awareness (p=0.799); quality care

(p=0.739), and stakeholders coordination (p=0.768) with female having higher mean than males. Therefore, hypothesis 4 of the study was not supported by the results.

4.3.2 Opinion based on Age

Table: 11 One way ANOVA (Age as SB, E, AW, QC, and SC)

		Sum of Squares	df	Mean Square	F	Sig.
SB	Between Groups	2.747	5	.549	.851	.517
	Within Groups	60.693	94	.646		
	Total	63.440	99			
E	Between Groups	11.929	5	2.386	1.631	.159
	Within Groups	137.461	94	1.462		
	Total	149.390	99			
AW	Between Groups	11.422	5	2.284	2.058	.078
	Within Groups	104.338	94	1.110		
	Total	115.760	99			
QC	Between Groups	3.613	5	.723	.893	.489
	Within Groups	76.027	94	.809		
	Total	79.640	99			
SC	Between Groups	1.596	5	.319	.892	.490
	Within Groups	33.644	94	.358		
	Total	35.240	99			

Source: Primary data

According to Hypothesis 5 it says there exists a correlation between the age of hospital officials and their respective opinions. The present study employed a one-way ANOVA to examine the opinion of stakeholders across various age groups within the hospital department, in order to test the stated hypothesis. Table 11 displays the outcomes of the administered examination. The ANOVA analysis revealed that there was no statistically significant difference observed between the opinion of referred stakeholders based on age for the scheme benefits, eligibility, awareness, quality care, and stakeholders' coordination as p-value for all the statement is above 0.05.

4.3.3 Opinion based on Experience

Table: 12 One way ANOVA (Experience as SB, E, AW, QC, and SC)

		Sum of Squares	df	Mean Square	F	Sig.
SB	Between Groups	3.265	4	.816	1.289	.280
	Within Groups	60.175	95	.633		
	Total	63.440	99			
	Between Groups	7.372	4	1.843	1.233	.302

E	Within Groups	142.018	95	1.495		
	Total	149.390	99			
AW	Between Groups	11.810	4	2.952	2.698	.035
	Within Groups	103.950	95	1.094		
	Total	115.760	99			
QC	Between Groups	3.956	4	.989	1.241	.299
	Within Groups	75.684	95	.797		
	Total	79.640	99			
SC	Between Groups	.566	4	.141	.387	.817
	Within Groups	34.674	95	.365		
	Total	35.240	99			

Source: Primary data

The sixth hypothesis examines if hospital official's experience influences employee opinion. This hypothesis was examined using a one-way ANOVA that compared the opinion of hospital department stakeholders with varying levels of experience. Table 12 displays the results of the conducted test. The ANOVA results indicated that there was no significant difference between the opinion of this stakeholders based on experience for scheme benefits, eligibility, quality care, and stakeholders' coordination as calculated p-value exceed 0.05; however, there is a significant difference between the mean score of awareness, as the p-value is less than 0.05. Thus, the study's sixth hypothesis was not supported for the four variables.

5. Discussion and Conclusion

It is noted from the survey findings that, the following are the most important areas where the performance has to improve drastically.

On the basis of survey of health department agreement level, the concern areas are:

1. Private hospital need to do well by following Ayushman Bharat guidelines (S9).
2. All hospitals including Private hospitals need to be encouraged appropriately, to reach more and more remote areas. Thus, they will be able to cover every person throughout the country (S12).
3. There is need to improve the man power and also educate beneficiaries about AB guidelines and procedures (S6, S10).
4. The hypothesis were tested on five key variables (S9, S10, S12, S16, and S20) based on gender, age, and experience which shows no significant difference based on age and experience but there is a significant difference in the opinion of male and female stakeholders for private hospital compliance and marginally significant difference for private hospital reach (with female having higher mean than males). This aspect need to be borne in mind while deciding the action plan.

On the basis of survey of hospital officials, the concern areas noted are that,

1. The scheme as of now is still not able to cover all needy people, meaning there are lot more deprived people who are not part of scheme for some reason or the other. The beneficiaries who are covered under the scheme currently are those whose names figured in Socio Economic Caste Census (SECC) data of 2011 and beneficiaries who were part of earlier RSBY scheme. Therefore there is a urgent need for review of the eligibility norms and bring all deserving poor people in to the scheme (S9).
2. There is a need for improvement in awareness of AB guidelines by beneficiaries (S10). This opinion from hospital authorities need to be given due importance as it is hospital authorities who generally entertain or send back the patients based on the beneficiaries data available with them or through reference from health department for admission in to hospital.

3. The hypothesis were tested on five key variables (S7, S9, S10, S13, and S20) based on gender, age, and experience which shows no significant difference based on gender and age but based on experience there is a significant difference between opinion of stakeholders for awareness. This aspect need to be borne in mind while deciding the action plan.

The NHA needs to take few urgent actions to correct the problems noticed so that, every rupee spent is justified and translates in to benefits reaching the poor people. Some of the key points that the Authorities should take note of are, as under.

1. People do prefer private medical establishments for the sake of better quality of service. However, private investments may not be viable unless they see value for money and reasonable returns (Peters et al., 2003). Health schemes are not fully immune to fraud. Therefore, while encouraging the private enterprises for establishing hospitals in remote places with adequate incentives, there has to be restrictions and regulations to control possibility of misuse. That will also help in preserving government resources to more critical needy areas. Public and Private partnership is also a welcome model (Garg et al., 2019).
2. There is urgent requirement to increase the public spending through higher allocation in budget for PM-JAY. (Vitsupakorn et al., 2021).That alone will help in opening up more and more hospitals in rural and semi-urban areas and improve the proximity of healthcare services to beneficiaries. Increased fund allocation will not only support hiring more health care professionals like doctors as well as support staff but will also help in improving infrastructure in the form of medical facilities, hospitals and equipment's'. This should supplement and complement promoting private healthcare spending for the cause of poor people.
3. The current norms of eligibility for beneficiaries should be completely overhauled to include all the poor people who need to be extended with this support. Therefore, the revised yardstick could be on the lines of modified kuppuswamy scale which recommends total family income, overall education and job of head of the family. Modified Prasad's grouping considers both social and economic factors. This approach also makes sense (Debnath & Kakkar, 2020).
4. The Authorities should focus on improving the awareness amongst the beneficiaries for the scheme benefits to reach the needy people in time and properly. (Dash et al., 2020). Many people are not aware about their entitlement or benefits under the scheme or modalities to avail the benefits thus fall prey to private health care system and spend lot of money for treatment putting them in to lifetime financial hardship.
5. Restructuring of institutions and scaling up of man power with equal focus on training, motivation, delivery with sense of responsibility is very essential while dealing with public especially poor people. The 3 tier formula should harp on delegation, integration and convergence with special focus on healthcare delivery towards ladies and aged people (Sahu, 2020).

The study design that is being described is the first attempt to jointly assess the early outcomes of the biggest government-funded health insurance programme ever introduced in India. We think that by thoroughly outlining our study design and findings, the Government will be able to quickly address the key issues thus justifying the use of public money and also ensure right treatment at right time for needy people. The similar survey can be replicated to other major states in India to examine if there are region specific issues.

Authors' Contributions

N.S.Prakash conceived the idea, designed the project, collected the data, did the analysis and wrote the draft manuscript.

Dr. Geetha also added value to conceptualization, did the supervision, gave valuable guidance from time to time and edited the manuscript.

Dr. N.S.Viswanath, Director - Bhavan's Management Research Center and Director & Principal - M.P. Birla Institute of Management, did the final editing.

All the authors have read and approved the final manuscript.

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