Volume-Based to Value Based Care:

Ensuring Better Health Outcomes and Quality Healthcare under AB PM-JAY

Policy Document
2022
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MESSAGE

The Government of India launched the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) in 2018, with an aim to provide health assurance of up to five lakh rupees per family per year for hospitalizations requiring secondary and tertiary health care. The scheme was launched with the vision to achieve Universal Health Coverage. The scheme aims to undertake path breaking interventions to holistically address the healthcare system.

Since its inception, provision of quality healthcare services to its beneficiaries has been the motto of PM-JAY. Continuing on the same path of providing holistic quality healthcare, PM-JAY is now introducing the concept measuring performance of hospitals, and providing Value Based Incentives to its healthcare providers. This is the first time in the Indian Healthcare System when monetary incentives, based on patient reported outcomes, are being designed for healthcare providers. Value based care provides a holistic approach to the treatment being rendered with noticeable improvements in outcomes which are the result of the treatment provided.

Over the years, the Government of India and National Health Authority has undertaken several initiatives to improve the quality of care delivered to the PM-JAY beneficiaries. These include encouraging the hospitals for quality certification and accreditation, creating Quality Cells at the State Health Agencies, and the development of Standard Treatment Guidelines. The process of improving quality is an ever-evolving process.

This policy document for introducing the value-based incentives is a step in that direction. It provides the overall vision for implementation of Value Based Incentive System under PMJAY and outlines operational framework which has been developed after extensive consultations with a variety of stakeholders involving the public and private sector.

I am confident that this policy document shall revolutionize the Indian healthcare scenario and would provide guidance to Union and State Health Ministries for patient-centric approach with quality of care at its core.

(Dr. Mansukh Mandaviya)
MESSAGE

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) was started with the vision of achieving Universal Health Coverage in India. The prime motto of the scheme is provision and access to affordable and quality health care for the poorest 40% of Indian population. In order to provide greater impetus to the concept of quality, the vision of Value Based Healthcare is now being introduced for the first time in Indian Healthcare System under the AR PM-JAY.

Value-based care aims at improving the quality of care and health outcomes for the patients with the objective of standardizing the healthcare processes through best practices. It focuses on improvement of outcome of treatment among patients. It is a healthcare delivery model in which healthcare providers (hospitals and physicians) are paid based on the health outcomes brought about in their patients because of the treatment. Thus, incentivizing healthcare providers to focus on the quality of health services rendered, as opposed to merely the quantity, as is currently happening in the traditional healthcare delivery model.

The benefits of a value-based healthcare system extend not only to the patients but to providers, payers, suppliers, and society as well. Under the system, the patients get better health outcomes and higher satisfaction out of the services they receive and providers get better care efficiencies. Similarly, payers are able to maximize the health benefits generated out of the spending incurred.

Such a system is now being adopted by many developed nations with promising results. India, which is fast emerging and progressing should also match the steps of the world and adopt systems and practices for the betterment of its population in the long run. I am grateful to the stakeholders who have participated in the consultation process and provided valuable suggestions in building the AB PM-JAY Value Based Incentive Policy outlining the vision and the operational framework of its implementation under PM-JAY. We intend to continuously innovate and enhance the design of the scheme based on our experiences during its implementation.

(Dr.R.S.Sharma)
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Dated : 14th September, 2022
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Acknowledgements

At the outset, we would like to acknowledge our deep sense of gratitude to Dr R.S. Sharma, Chief Executive Officer, NHA for his astute stewardship, and ever encouraging feedback to all the new initiatives being undertaken by the National Health Authority. This policy document is a culmination of his vision. Dr Vipul Aggarwal, Deputy CEO, NHA, provided overall strategic guidance, feedback, and facilitation of the process for formulation of this policy document.

The concept of introducing Value Based Care under PMJAY was conceived by Dr Parminder Gautam, Principal Consultant, NAFU, NHA with inputs provided by Dr Sudha Chandrashekhar, Executive Director, Health Policy & Hospital Engagement Assurance, NHA & Dr Shankar Prinja, Executive Director, Health Policy, and Quality Assurance, NHA.

The Consultation paper which was published by the NHA on Value Based Care was envisioned by Dr Shankar Prinja, Executive Director, Health Policy, and Quality Assurance, NHA. Dr Priyanka Bhadoria, Consultant, HPQA, NHA and Dr Gaurav Jyani, PGIMER Chandigarh prepared the first draft of Consultation paper. The Consultation Paper was reviewed and edited by Dr Shankar Prinja, Executive Director, Health Policy, and Quality Assurance, NHA.

The Policy Document was finally revised and reviewed by Dr Gaurav Jyani, PGIMER Chandigarh and Dr Priyanka Bhadoria, Consultant, HPQA, NHA and Dr Shankar Prinja, Executive Director, Health Policy, and Quality Assurance, NHA.

We gratefully acknowledge the valuable inputs received from the members of the NHA Committee to “Evaluate and devise incentive framework for empanelled hospitals under AB PMJAY”, members of the Quality Steering Committee of the NHA, as well as the stakeholders from State Health Agencies, public and private hospitals, industry representatives, academics, researchers, and development partners who provided valuable feedback and comments to an earlier version of the document. We also thank Dr Meenu Sharma and Dr Reedima Kukreja for their support in drafting responses to the stakeholder comments.

The main objective of this policy document of National Health Authority (NHA) is to give an overview of the process entailed for undertaking implementation of Value Based Care under AB PMJAY. This document has been prepared for guidance purposes only.
### List of Abbreviations

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<tr>
<td>ABDM</td>
<td>Ayushman Bharat Digital Mission</td>
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<td>ABHA</td>
<td>Ayushman Bharat Health Account</td>
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<td>AB PM-JAY</td>
<td>Ayushman Bharat Pradhan Mantri Jan Arogya Yojana</td>
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<td>CHSI</td>
<td>Cost of Health Services in India</td>
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<td>Diagnosis Related Group</td>
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<td>EHCP</td>
<td>Empanelled Health Care Provider</td>
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<td>FFS</td>
<td>Fee for service</td>
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<td>HBP</td>
<td>Health Benefit Package</td>
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<td>HeFTA</td>
<td>Health Financing and Technology Assessment</td>
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<td>HEM</td>
<td>Hospital Empanelment Module</td>
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<td>HTA</td>
<td>Health Technology Assessment</td>
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<td>HTAIn</td>
<td>Health Technology Assessment in India</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>NABH</td>
<td>National Accreditation Board of Hospitals</td>
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<td>NHA</td>
<td>National Health Authority</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NQAS</td>
<td>National Quality Assurance Standards</td>
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<td>OOPE</td>
<td>Out-of-pocket expenditure</td>
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<td>PM-JAY</td>
<td>Pradhan Mantri Jan Arogya Yojana</td>
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<td>PROM</td>
<td>Patient Reported Outcome Measure</td>
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<td>QCI</td>
<td>Quality Council of India</td>
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<td>TMS</td>
<td>Transaction Management System</td>
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<td>UHC</td>
<td>Universal Health Coverage</td>
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<td>UK</td>
<td>United Kingdom</td>
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Executive Summary

Value-based care is a form of reimbursement in which payments to the healthcare providers for care delivery is made on the basis of quality of care provided. Under value-based care model, healthcare providers are rewarded for helping the patients to improve their health, which consequently reduces the effect of disease in the population in the long term. This form of reimbursement has emerged as an alternative of the traditional fee-for-service reimbursement, which pays providers merely on the basis of quantity of services delivered. The value-based care model centres on health outcomes generated in the patients and how well healthcare providers can improve quality of care, which can be ascertained based on specific measures, such as reduced need of hospital readmission, improvement in health-related quality of life, better patient satisfaction, and enhanced financial protection. The benefits of a value-based healthcare system extend to patients, providers, payers, suppliers, and society, and value-based care has the promise to significantly increase the overall health gains of the population.

This policy document aims to establish effective ways to adopt value-based care model in the largest tax-funded health insurance scheme of the world- PM-JAY. The mechanism of value-based incentives proposes to reward the health care providers with incentives for the quality of care they give to the beneficiaries of PM-JAY. In this regard, the first section of the paper aspires to define the theoretical background of the value-based care and its conceptual framework. After describing how the ‘value’ can be defined from the perspective of different stakeholder of a health system, the document aims to describe the diverse avenues through which the National Health Authority (NHA) attempts to instil the value in the healthcare services provided to the beneficiaries of PM-JAY. Thereafter, learning from the experiences of different health systems across the globe, the policy document presents a choice of patient-centric measurable indicators which can be used to assess the performance of healthcare providers. The rationale behind selection of each of these indicators has also been described. As health systems across the world are increasingly embracing the value-based care agenda, the consultation paper also explains the global experience of adopting value-based care model. Understanding of the enablers and barriers in application of value-based care agenda yield important insights for NHA, as it strives for a more patient-focused, value-based care delivery environment.

Finally, besides appraising the current method of incentivizing healthcare providers under PM-JAY, the policy document aims to improve the methods of performance assessment of healthcare providers, by making them more outcome-oriented and patient-centric. In the last section, the document presents the operational framework of integrating the value-based incentives in PM-JAY. In each of these sections, we seek stakeholders’ comments on the proposed methods/ways to make provider incentivization under PM-JAY more efficient, patient-centric, and outcome oriented.

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New Delhi
Section 1: Value Based Care: Concepts, Need, and its Application in different Healthcare Systems

Section outline
- Background
- What is Value- Based Care?
- Defining the ‘Value’ in Value- Based Care
- Potential avenues in PM-JAY for infusing ‘Value’
- Need of enhancing Value- Based Care in PM-JAY
- Application of Value- Based Care in different settings

Background
Universal health coverage (UHC) has been identified as a priority for international development by the World Health Organization, the United Nations General Assembly, and the G-20. Since it was explicitly incorporated into the sustainable development goals (SDGs) as target 3.8, much effort has been expended on promoting UHC. India is committed to achieving UHC by 2030, which is fundamental to achieving the other Sustainable Development Goals. As one of the landmark developments to achieve UHC, India launched its tax-funded health insurance scheme – Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), in 2018. This insurance scheme, as a part of Government’s flagship program – Ayushman Bharat, aimed to bolster India’s aspirations for UHC. PM-JAY is the world’s largest tax funded health insurance scheme, aimed at covering 500 million Indian population which constitute the bottom 40% of the socio-economic strata. The benefit package of the scheme provides coverage of cashless hospitalization of up to ₹ 500,000 per year for a family. Conforming to the Indian federal system, PM-JAY provides flexibility to Indian states for the choice of implementation model. The scheme is financed jointly by the Central as well as the State government. A range of public and private hospitals are empanelled to provide healthcare services.

These efforts envisage attainment of universal access to equitable, affordable and quality health care which is accountable and responsive to the needs of people. The Ayushman Bharat, with its holistic focus on preventive care through Health and Wellness Centres (HWCs), and curative care through PM-JAY lays the foundation for ‘value-based care’. Traditionally, from the payer’s perspective, the healthcare model so far has been focussed on the quantity of services delivered, where case- based bundled payment is made on the basis of the number of services provided. This model is proposed to be slowly replaced by ‘value-based care’, where payment will be outcome based and providers will be rewarded according to the quality of the treatment delivered. Thereby, the payment mechanism of PM-JAY needs to be adapted in accordance with the gradual shift from volume-based to value-based care. Value-based health care will not only help in the delivery of cost-effective care but will ultimately benefit the most important health care stakeholder in India: The patient.

What is Value Based Care?
Value-based care is a proactive concept of improving the quality of care and health outcomes for the patients with the objective of standardizing the healthcare processes through best practices. It is a healthcare delivery model in which healthcare providers (hospitals and
physicians) are paid based on the health outcomes brought about in their patients because of treatment. Under value-based care settings, the providers are rewarded for helping the patients improve their health, which consequently reduces the effects of disease in the population in the long term. This value-based care model differs from the current approach, in which providers are paid solely based upon the quantity or amount of healthcare services they deliver (for example, number of procedures done, or number of patients treated). In contrast to it, the healthcare providers in value-based healthcare systems are paid on the basis of ‘value’ of the healthcare services, and this ‘value’ is derived from measuring health benefits which are generated. As a result, this system incentivizes healthcare providers to focus on the quality of health services rendered, as opposed to mere the quantity. In broader terms, this ‘value’ may be defined as the contribution of the health system to the societal wellbeing.

In fact, the benefits of a value-based healthcare system extend to patients, providers, payers, suppliers, and society. Whereas the patients get better health outcomes and higher satisfaction out of the services they receive, providers get better care efficiencies. Similarly, payers are able to maximize the health benefits generated out of the spending incurred. In a value-based healthcare system, the payers can also exercise strong cost controls. A healthier population with fewer claims translates into less drain on payers’ premium pools and investments. Suppliers benefit from being able to align their products and services with positive patient outcomes and reduced cost. Altogether, from the perspective of society, value-based care has the promise to significantly increase the overall health gains.

As we know, the public health interventions play a key role in managing the health needs of the population by making the population healthier. The value-based care, with its focus on the measurement of health gains, has the potential to manage the health needs by clarifying which subgroups are most likely to be benefited from a health intervention, ensuring patients are aware of the potential benefits and harms of interventions, and managing innovations to ensure that they are not only effective but also provide value. It ensures that the limited resources are used for the greatest patient benefit. Provision of interventions or care to patients that do not add value from the patient's perspective is an example of overuse and may lead to more harm than good, as all healthcare is associated with some amount of opportunity cost. Underuse also reduces value, as patients do not receive care that adds value to their lives and may lead to greater cost down the line. The focus of value-based care is on funding procedures which are of highest value to patients, to make the best use of limited resources and avoid waste through overuse of low-value interventions.

**Defining the ‘Value’ in Value Based Care**

There are diverse definitions of value, and value in a health system can be considered from many perspectives including that of the payer (government, insurance company, or individual), clinician, healthcare industry, caregivers and most importantly, the patient. Some definitions of value focus on the moral aspects, such as principles, standards, and importance, whereas others focus on the economic meaning. For example, the definition proposed by Porter proposes that value is the difference between health outcomes generated and money spent. Likewise, Gray defines value in healthcare as ‘the net benefit, that is the difference between the benefit and the harm done by a service, taking into account the amount of resources invested.’ Broadly, the value in healthcare can be divided into four parts:

1. **Allocative value**: How to allocate resources equitably in such a way that maximum value for the whole population is obtained (equitable distribution of resources across all patient groups).
2. **Technical value**: How to achieve the best possible outcomes with available resources, or increased value associated with improvements in quality and safety of healthcare.

3. **Personalised value**: Individual patient values, in combination with best evidence and assessments of the person’s condition (appropriate care to achieve each patient’s personal goals).

4. **Societal value**: Contribution of health care to social participation and connectedness. The importance of providing value, as opposed to just effectiveness of health interventions, is increasingly being recognised, and this value in healthcare is the measured improvement in a person’s health outcomes for the cost of achieving that improvement. It is worthwhile to mention in the beginning itself that the description of value-based health care combines the concept of quality improvement (improvement in quality of care as well as improvement in the health-related quality of life of the patient), patient satisfaction, and cost reduction. Thereby, to increase the value of healthcare services, all these elements should be given due consideration, as none of them fully captures the concept of ‘value’ when measured alone (Figure-1).

![Figure 1: The elements of value in value-based care](image)

For example, the notion of ‘value’ used in the paradigm of value-based care is not limited to ‘quality’ of healthcare services alone. The quality is often measured with the help of inputs and process compliance. In the healthcare industry, quality of care has become essential to patient well-being and financial survival. However, it has been illustrated that the quality improvement efforts may not guarantee an improvement in patients’ health outcomes. Even with similar processes, the results of different teams may vary. In addition, requirements to track and report process compliance may distract healthcare providers from the more significant goal of improving health outcomes which matter most to the patients. For example, diabetes care in Italy shows that process compliance does not ensure better health outcomes. Analysis of regional variations in process compliance and in outcome indicators showed better process compliance in the north Italy, but better outcomes for patients in the south Italy. Thereby, although the healthcare providers should certainly practice with the consistency...
prescribed by the scientific methods and follow evidence-based care guidelines, yet, their furthest objective should be to achieve the results (health outcomes) which matter the most to the patients.

The primary objective of PM-JAY is to improve people’s health. A fundamental goal within this is to improve patients’ health outcomes which are measured with the help of reduction in mortality and improvement in their health-related quality of life (HRQoL). In recent decades, a more patient centred approach in medical care has led to an increase in the use of patient assessed HRQoL, or patient reported outcome measures (PROMs). However, in the paradigm of value-based care, mere improvement in HRQoL doesn’t convey the complete information of the generated value, as the HRQoL may be improved in the short term with the help of symptomatic treatment. Similarly, the ‘value’ cannot be defined solely on the basis of patient satisfaction. While the patient satisfaction movement has brought a much-needed emphasis on treating people with dignity and respect, the essential purpose of health care is improving health. Value is about helping patients. Satisfaction surveys ask patients, “How were we?” Value-based care providers ask, “How are you?”

Likewise, as value is created only when a person’s health outcomes improve, descriptions of value-based health care that only focus on mechanisms of cost reduction are incomplete. Improving a patient’s health outcomes relative to the cost of care is an aspiration embraced by the stakeholders across the health care system, however, the critics who characterize value-based health care as underpinning a model of ‘industrial health care’ distort the meaning of the term ‘value’, misinterpreting it as focused on cost-cutting. Instead, value-based care’s focus on better health outcomes aligns clinicians with their patients. Measured health outcomes demonstrate clinicians’ ability to achieve results with patients, and drive improvement in the results that matter most to both patients and clinicians. This intrinsic motivation is sometimes missing in the health care system, where clinicians are directed to spend countless hours on tasks that do not impact their patients’ health. Better outcomes also reduce healthcare spending and decrease the need for ongoing care. By improving patients’ health outcomes, value-based health care reduces the compounding complexity and disease progression that drive the need for more care. For example, a patient whose diabetes does not progress to kidney failure, blindness, and neuropathy is, over time, dramatically less expensive to care for than a patient whose condition continually worsens.

Health systems generate value by creating health benefits (improvement in HRQoL) and non-health benefits (such as value for money and financial protection). These benefits contribute to wellbeing but should be examined in relation to the costs incurred. For this reason, most concepts of value examine some ratio of valued outcomes to the costs incurred. Therefore, it is important to take a holistic view of ‘value’ while accurately identifying and correctly measuring its elements, so that it can be transparently placed at the centre of healthcare, which would help to ensure that available resources are used to provide the greatest possible benefit to patients.

Lessons learned from the performance of health systems across the globe have suggested that competition among the healthcare providers should shift to value-based competition with providers seeking to achieve the best outcomes for patients at the provided costs. Providers should no longer focus on discrete treatments but on the complete care cycles, as it is the health outcomes of entire care cycles and their total cost that make up the end value for the patients. This shift of focus, also referred to as the ‘value agenda’ (proposed by Michael Porter and Elizabeth Teisberg), is expected to improve the fragmented, largely supply-driven health systems. Their proposed value agenda involves six components that are to be facilitated
by insurers’ initiatives (PMJAY in the context of India), such as moving from fee-for-service (FFS) or simple case-based payments determined by volume to performance-based payment. The six components of the value agenda are:

1. Organisation of care around medical conditions rather than around skills and facilities (organizing care around patients’ medical conditions rather than physicians’ medical specialties).
2. Systematic measurement of outcomes and costs at the patient level.
3. Moving towards performance-based payments for care cycles (to replace simple case-based payment for separate services).
4. Integration of care delivery systems by clearly defining the scope of the services.
5. Expanding geographic reach of providers, especially for specialised providers, and working in collaboration with less specialised ‘satellite’ ones.
6. The final component, which supports the previous ones, is the construction of an information technology platform which supports integrated, multidisciplinary care across locations and services.

Potential avenues for infusing ‘value’ in provision of healthcare: Framework of Value-Based Care in PM-JAY

The National Health Authority (NHA), being the guardian of the interests of patients, has a legitimate role in defining what is meant by the value its policies create. In principle, this value should reflect the contributions that the health system can make to national wellbeing, in whatever manner it is defined. The NHA is therefore responsible for formulating a concept of value for the health system, and then transmitting this concept to all actors in the system, and ensuring that the value is maximized, both by individual entities and in aggregate. Whatever concept of value is chosen by the NHA for its application in PM-JAY, it should relate to the eventual outcomes secured by the health system (health gain of the population), and not merely by the intermediate outcomes, such as the process consistency or operational targets. In many respects, the most problematic aspect of specifying value is the process by which its definition is reached. The ultimate arbiters of the contribution made by the health system to wellbeing should be citizens and patients, but the process of assessing and integrating their views into a statement of value may be far from straightforward and requires extensive stakeholder consultation. Thereby, once the value has been defined, the NHA in partnership with State Health Agencies (SHAs) will have a plethora of tasks to fulfil to ensure that all elements of the health system promote those aspects of value over which they have control.

As PM-JAY has shown its commitment to instil value in the provision of healthcare services, its efforts can also be summarized in the light of the value-agenda discussed in the preceding section:

1. Organisation of care around medical conditions rather than around skills and facilities: PM-JAY adopts a continuum of care approach, comprising of two interrelated components, i.e., first, creation of Health and Wellness Centres (HWCs) which will bring health care closer to the homes of the people by providing Comprehensive Primary Health Care (CPHC), covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services; and second, PM-JAY, which provides health protection cover to poor and vulnerable families for secondary and tertiary care. Further, for provider payments, PM-JAY follows the system of case-based bundled prices. Under this system, the healthcare providers are paid fixed rate for a bundled set
of services provided against a defined Health Benefit Packages (HBP). The reimbursement rates were initially set based on a process which included review of provider payment rates under existing publicly financed insurance schemes, consultation with stakeholders and experts, as well as a review of the limited cost data at the time of inception of the scheme. As the scheme evolved, more and more evidence on cost of health services was generated and used in order to revise these payment rates. Case based bundled payment system is a particular form of payment mechanism that has been found to be an effective way to increase both technical and allocative efficiency, as well as create more accountable systems in the purchaser provider relationship. Under the PM-JAY, the HBPs are first classified into the different specialties such as medicine, general surgery etc. Within each speciality packages of care are identified. Further within each package there can be multiple procedures. The provider payment rates are specific to a given procedure depending upon the intensity of resource utilisation.

In addition to it, in the overall design of the scheme, the target beneficiaries comprise of the bottom 40% of the Indian population in terms of the socio-economic status, which is an effort to fulfil the objective of ensuring equity during provision of healthcare. Furthermore, as the PM-JAY covers the diseases which have the maximum potential of causing OOP expenditure, it aims to achieve the objective of providing financial protection to the population of the country while addressing their health needs.

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2. **Systematic measurement of outcomes and costs at the patient level:** The NHA has established the Health Financing and Technology Assessment (HeFTAs) unit to ensure best value for money in PM-JAY finances by employing the principles of health technology assessment (HTA), which primarily takes into the account the measurement of costs and health outcomes while assessing any given health intervention. The objective of the HeFTAs unit is to improve access to healthcare, increase financial

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**Figure 2: Framework of Value- Based Care in PM-JAY**
protection, and reduce inequalities in health by facilitating evidence informed priority setting at national and state level. In order to achieve these objectives, the HeFTA unit will inform decisions regarding inclusion and non-inclusion of interventions and procedures in the health benefit package (HBP) by using the evidence on cost-effectiveness of the health technologies to inform such decisions. The HeFTA unit will also make decisions regarding the costing and pricing of newer technologies which are proposed for inclusion in the HBP. It will employ techniques of threshold price analysis to determine the value-based ceiling price of such health technologies. Acknowledging the quintessential role of cost evidence in price setting decisions, the HeFTA unit will establish a continuous mechanism of price discovery for HBP. A mechanism of market-price assessment of the components of HBP will also be developed. The prices of the HBPs in the PM-JAY are decided by reviewing the existing prices of these packages in the other publicly funded insurance schemes, as well as by referring to the evidence generated on the cost of healthcare services in India (CHSI study) and consultation with stakeholders (professional associations, specialist societies and organizations representing hospitals, Association of Healthcare Providers, FICCI, etc.). In addition to it, this unit will utilize the economic evidence to inform standard treatment guidelines (STGs), as it comparatively evaluates all the costs attached and clinical effectiveness offered with the available alternatives and select the option which offers the best value for money. These STGs and quality assurance indicators will be used to incentivise providers for delivering services as per the standard norms. This process will facilitate improvement in quality of care and ensure value-based healthcare provision. PM-JAY also aims to instil value in healthcare by establishing Quality Cells and checklists. These quality cells will have a handholding as well as a supervisory role towards the healthcare providers to help them improve their quality standards.

3. Moving towards performance-based payments for care cycles: In an effort to adopt a more refined system of provider payment, PM-JAY is shifting from a uniform case-based payment system to diagnosis related group (DRG) based payment system. The DRG based payment system enhances the value in the provision of care because if healthcare providers are paid according to the nature of severity of the case. In such a scenario, there is less incentive to perform perfunctorily in treating more severe cases, as instead of getting a predefined fixed payment, now the healthcare providers will be getting a payment which is linked to the severity, or complications, or comorbidity level of the case. In contrast, the case-based payment is a payment mechanism under which a hospital is paid a fixed rate for each discharged patient. The calculation of reimbursement rate to the healthcare provider can vary from a uniform rate for a hospital or uniform rate for each clinical speciality or procedure specific rate for each health benefit package (HBP), or a refined system of DRG based payment. PM-JAY is in the process of upgrading the system of reimbursing the providers moving from a cruder to a much more refined value-driven approach, which accurately approximates the value of resources used to deliver services, as well as incentivise certain behaviour and practices. In the latest version of HBP 2022, a differential pricing system has been introduced. This differentiates the payments to hospitals as per the city where the hospital is located and the specialty level (tertiary/secondary)- two variables which determine hospital level drivers of resource use and cost. In the next proposed iteration of pricing, as part of DRG reforms, the prices will be differentiated as per the clinical characteristics of the patient, i.e., degree of severity, comorbidities, and complications.
Importantly, PM-JAY also envisages the provision of value-based incentives to the healthcare providers, as it establishes whether the real improvement in the health is made, which is the fundamental objective of the health system. The operational aspects of the performance-based incentive system have been discussed in detail in the subsequent sections.

4. Integration of care delivery systems by clearly defining the scope of the services:
   The NHA aims to adopt a continuum of care approach, comprising of two inter-related components, i.e., first, creation of Health and Wellness Centres (HWCs) which will bring health care closer to the homes of the people by providing Comprehensive Primary Health Care (CPHC), covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services; and second, PM-JAY, which provides health protection cover to poor and vulnerable families for secondary and tertiary care. At the community level, it intends to integrate the beneficiary support through the HWCs by beneficiary identification, providing telemedicine for specialist care, referrals to higher facilities for diagnostic and hospital care, transport, and ensuring post-hospital follow-up in the community (for example, during the down-referral, the care can be provided to the patients at the HWCs, or in the home-based settings after the discharge). Such an integration in the care pathway is being envisaged through linkages in the care pathways, IT processes, and information linkages through creation of ABHA (Ayushman Bharat Health Account) ID and portability, as well as sensitization of functionaries across the different levels of health system. Eventually, the patient will have the key to exercise choice of healthcare provider.

Moreover, in the design of HBPs, follow-up packages and day-care packages are being included. The inclusion of these packages enhances the quality of care as the availability of these follow-up packages ensures better follow up, which eventually reduces the chances of complications or failure of procedure and reduces consequent hospitalization. Such follow-up packages have been included for procedure under the specialities of cardiology, cardio-thoracic and vascular surgery, and urology.

5. Expanding geographic reach of providers:
   The pricing structure within the PM-JAY is designed in a way that it not only tries to cover the costing structure of hospitals in different types of locations and cities, but it also incentivises the supply of healthcare services in difficult and hard to reach areas. In its recent revision of the HBP 2022, the NHA has announced a system of differential pricing for procedures, wherein the price paid to a given hospital will be dependent on the location of the hospital (tier 1, 2 or 3 city), and whether the procedure is a secondary or tertiary care procedure. In addition to this, in order to maintain the social policy objective of enhancing access and coverage in difficult and hard-to-reach underdeveloped regions, a 10% incentive is set for procedures performed in hospitals located in aspirational districts.

6. Construction of an information technology platform which supports integrated, multidisciplinary care across locations and services:
   One of the important components of the scheme design is the Ayushman Bharat Digital Mission (ABDM), which aims to develop the backbone necessary to support the integrated digital health infrastructure of the country. It envisages to bridge the existing gap amongst different stakeholders of the healthcare ecosystem through digital highways. The ABDM aspires to strengthen the accessibility and equity of health services, enable the continuum of care with citizen as the owner of data, in a holistic healthcare
programme approach leveraging IT & associated technologies and support the existing health systems in a 'citizen-centric' approach. It aims to establish state-of-the-art digital health systems, to manage the core digital health data, and the infrastructure required for its seamless exchange. The current strong public digital infrastructure, including that related to Aadhaar, Unified Payments Interface (UPI) and wide reach of the internet and mobile phones provides a strong platform for establishing the building blocks of ABDM. The existing ability to digitally identify people, doctors, and health facilities, facilitate electronic signatures, ensure non-repudiable contracts, make paperless payments, securely store digital records, and contact people provide opportunities to streamline healthcare information through digital management. The implementation of ABDM is expected to significantly improve the efficiency, effectiveness, and transparency of health service delivery overall. Patients will be able to securely store and access their medical records (such as prescriptions, diagnostic reports, and discharge summaries), and share them with health care providers to ensure appropriate treatment and follow-up. They will also have access to more accurate information on health facilities and service providers. Further, they will have the option to access health services remotely through tele-consultation and e-pharmacy. ABDM will empower individuals with accurate information to enable informed decision making and increase accountability of healthcare providers. Moreover, it will also provide choice to individuals to access both public and private health services, facilitate compliance with laid down guidelines and protocols, and ensure transparency in pricing of services and accountability for the health services being rendered. Similarly, health care professionals across disciplines will have better access to patient’s medical history (with the necessary informed consent) for prescribing more appropriate and effective health interventions. The integrated ecosystem will also enable better continuum of care. ABDM will help digitize the claims process and enable faster reimbursement. This will enhance the overall ease of providing services amongst the health care providers. At the same time, policy makers and programme managers will have better access to data, enabling more informed decision making by the Government. Better quality of macro and micro-level data will enable advanced analytics, usage of health-biomarkers and better preventive healthcare. It will also enable geography and demography-based monitoring and appropriate decision making to inform design and strengthen implementation of health programmes and policies. Finally, researchers will greatly benefit from the availability of such aggregated information as they will be able to study and evaluate the effectiveness of various programmes and interventions. ABDM would facilitate a comprehensive feedback loop between researchers, policy-makers, and providers.

In addition to it, the upgraded system of incentive disbursement proposed in this policy paper have a strong linkage with ABDM and boost the proposition of value-based care included in it. For instance, as described in the preceding paragraph, when the protocols for the continuum of care will be established, there will be a linkage across the levels of care to be delivered. Since there will be a linkage in the data of health and wellness centre (HWC) and PM-JAY, the ABDM will strengthen the digital architecture of healthcare, which will facilitate the flow of information across the different levels of care delivery.

A timeline of the steps taken by NHA to instil the value-based care framework in the operationalisation of AB PM-JAY, along with their implementation status, has been presented in Figure 3.
Need for enhancing Value Based Care in PM-JAY

Health systems of all types have for a long time been seeking to create as much value as possible out of their available resources. The urgency of this endeavour has been heightened in most countries by the ageing of the population, the growth in numbers of people with complex morbidities, advances in health technology, the increased expectations of citizens, and rapidly increasing expenditure on health services, and so is the case with India. India is currently experiencing a triple burden of disease, that is, rising non-communicable diseases (NCDs), the unfinished agenda of infectious and communicable disease control and diseases arising due to climate change. 

Approximately 4.7 million deaths (49% of all-cause mortality) occurred in India in 2017 due to NCDs. Communicable diseases contribute to 27.5% of all the deaths as per the Global Burden of Disease Study. It is increasingly worrisome when around half of the total health expenditure is incurred through out-of-pocket expenditure (OOPE) by households in India. The overall burden of these diseases coupled with low public health spending, high OOPE and lack of protection against catastrophic health expenditure (CHE) could lead to devastating effects. It is estimated that each year, 32-39 million people are pushed into poverty due to health care expenditure in India. This complexity has also been amplified by health systems shocks, such as the global financial crisis of 2007–2008, and in the aftermath of the COVID-19 pandemic and its economic repercussions. In this backdrop, the uptake of concepts such as value for money, value-based health care, cost-effectiveness, patient-reported outcomes, and patient responsiveness are need of the hour for creating ‘value’ in the health system, so that it becomes more efficient, methodical, and streamlined to answer the health needs of the population.

Over decades, increasing accessibility to healthcare has always been the focus in low- and middle-income countries. We are now at a turning point where these volume-based systems no longer address the greatest threats to public health. In 2018, the Lancet Quality Commission’s analysis showed that of the mortality amenable to healthcare, 60% is due to poor quality of care, compared to 40% due to lack of access. It was found that worldwide 8 million deaths were amenable to health care, resulting in estimated welfare losses of US$ 6 trillion to low- and middle-income countries (LMICs) in 2015. In India, over 24 lac deaths are
treatable, and 16 lac deaths every year are occurring due to quality issues. Quality of care has thus become the key in addressing this pressing issue. The objectives of quality under AB PM-JAY are:

- Providing ‘quality healthcare’ to beneficiaries is primary objective of the scheme.
- Ensuring transparency in care provided to patient and reducing fraudulent cases.
- Build a network of empanelled healthcare providers delivering quality clinical and support services while following the healthcare protocols.
- Raise the awareness about quality care and establish quality system in all empanelled hospitals

Figure 4: Current PM-JAY initiatives to promote quality healthcare

In addition to it, in collaboration with Quality Council of India (QCI), NHA has established AB-PMJAY Quality Certification Program with Bronze, Silver and Gold certification of the empanelled health care providers (EHCPs). To promote and encourage quality certification, there are linked incentives with accreditation/ certifications (Figure 5). This is to mention that National Accreditation Board for Hospitals & Healthcare Providers (NABH) is a constituent board of Quality Council of India (QCI), set up to establish and operate accreditation program for healthcare organizations. The board while being supported by all stakeholders including industry, consumers, government, have full functional autonomy in its operation. The Certifications/ Accreditations are provided by QCI/NABH. Similarly, for the public hospitals, certifications under the NQAS is encouraged and linked with 15% incentive, at par with the NABH accreditation. The advantages and disadvantages of this design having certification- based incentive are as follows:

Advantages:

- Independent assessment and certification by 3rd party.
- Standards duly approved and internationally recognized.
- Adequately covers structure and processes for quality with measurement of outcomes.
- Robust documentation.
Disadvantages:

- Stationary/ Single point mechanism to evaluate quality- There is limited scope of improvement in quality through this system at given point of time.
- High dependency on documentation- With high reliability on documentation it creates extra burden of work on hospitals.
- No direct monitoring- As the accreditations /certifications are provided by 3rd party (QCI/NABH), there is no mechanism of direct ongoing monitoring of the hospitals.
- Critical component of PM-JAY not covered- Quality aspects which are missed in this model are measurement of improved health outcomes in the patients receiving treatment, occurrence of frauds and grievances, assessment of the OOP expenditure incurred by the patients despite their enrolment in the scheme, level of beneficiary satisfaction.

In an analysis of the of the hospitals booked for the fraudulent cases under PM-JAY, it has been observed that some NABH accredited/certified hospitals are also involved in fraudulent activities and are also availing benefits of quality-based incentives. This illustrates that with the current design, the intent of PM-JAY to instil value and quality in the healthcare services has not been fully met. In fact, in the current design, those hospitals are paid incentives which have registered frauds, denying for treatment, where beneficiaries are charged with out-of-pocket expenses, and where several grievances are raised against accredited/ certified hospitals. It emphasizes that the current design has some loopholes, and a new way needs to be explored for ensuring the quality, monitor the value in the healthcare services, and provide financial incentives to the healthcare providers.

Application of Value Based Care in different settings

Health care systems across the world have increasingly embraced a value-based care agenda. In this section, the experience of some of the representative health systems, which use value-based care, has been described. To facilitate the policy discussions, other countries’ experiences with the implementation of value-based care could prove valuable. Primarily, four health systems, representing a broad spectrum, from a public health care model to a more privately run model, are analysed from the point of view of using value-based care- United States of America (USA), the Netherlands, Norway, and England (UK). It has been illustrated that...
the elements of the theoretical framework which we have discussed in the previous sections function better in some health care systems than others. Understanding of these strengths and weaknesses can yield insights for NHA, as it strives for a more patient-focused, value-based care delivery environment. The key observations are that firstly, involvement of the Government can facilitate change by setting the right conditions (e.g., for regional system integration). Secondly, continuous IT improvements to ensure the availability of outcome data across the full care cycle and instituting a value-based culture among providers are keys to driving value-based care implementation.

These the health systems which are being compared here differ not only in size but also in how governments and private payers are involved in the organization and funding. Whereas the value-based care in the USA has been mostly an effort to move away from the fee-for-service, other countries, particularly the more public-run systems in Europe, have been focusing on coordinating patient care among providers and creating outcome platforms to drive quality improvement and appropriateness of care. Further, if we look at the characteristics of the health systems included in this comparison, USA’s health care system is predominantly privately run with multiple payers, with some governmental involvement as both regulator and payer (e.g., setting spending caps, offering public insurance to citizens with low-level income). Moreover, it is the birthplace of the value-based care theory. The Netherlands has functioned as a hybrid system that is both publicly and privately run (before 2006 it was mostly a public system), although strongly regulated by the government, which mandates and determines a basic insurance scheme for all citizens. Norway has a more public system, designed on the National Health Services (NHS) model. The Norwegian health system is tax-based with one national insurance body covering all citizens. Specialty care is organized in four government-owned regional health trusts (RHTs) that each own public hospitals, the RHTs are free to buy services from independent health foundations or private providers. The United Kingdom (UK) has the most public system compared to the other countries/states. It is a tax-based system that gives universal coverage for all citizens through the National Health Services (NHS). The Department for Health remains responsible for health care organization and funding in the country, although NHS England has significant power over how government funds are spent. There are also private clinics or hospitals that offer elective services running parallel to the NHS system. The private providers are paid out-of-pocket or through private supplemental insurance (approximately 10% of the population has private insurance).

Value-based care requires that the healthcare provided by the providers should be based on standardized outcome data to facilitate informed decision-making and improved performance through benchmarking. It has also been recommended that the outcome data should cover multiple aspects of patient health, be relevant for both clinicians and patients, and cover the full cycle of care.

1. The Netherlands: Increasingly, health care organizations are expanding outcome measurements. In the Netherlands, both the hospitals and the government are focused on collecting outcomes, including Patient-Reported Outcome Measures (PROMs) and Patient-Reported Experience Measures (PREMs). Also, the government has agreed with all key stakeholders that, by 2022, outcome data will be available for 50% of the disease burden in specialty care. To this end, the government started the outcome-driven health care program in January 2020. On the provider side, the collaboration of 28 general hospitals spread across the country, has implemented outcome measurement sets for seven conditions (colon cancer, hip fracture, breast cancer, inguinal hernia, gall bladder, perinatal care, and heart failure) across 22 hospitals. Data are benchmarked across the

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participating hospitals and nationally, and actively discussed within the clinical teams to determine improvement initiatives. Similarly, the hospitals have developed a scorecard that not only includes outcome metrics but also cost and process metrics, which are benchmarked and discussed across the hospitals.

2. USA: In USA, the implementation of outcome measurement is mainly driven by providers. The providers are actively working with Patient-Reported Outcome Measures (PROMs) in driving clinical decision-making. The providers have recently launched an electronic PROM dashboard for all departments with data trends extending several years back. To increase further adoption, some hospitals have mandated data collection on PROMs in some contracts with providers.

3. England: In England, NHS hospitals have started collecting PROMs and plan to include patient experience data to support shared decision-making between clinicians and patients. One example is the introduction of PROMs for total hip and knee arthroplasty throughout all hospitals as part of a national registry. However, some clinicians have indicated that use of data in clinical practice is limited due to the poor IT infrastructure, lack of benchmarks across hospitals, and a strict cost-containment regime within the NHS, leaving little room to incorporate outcomes in the clinical workflows.

4. Norway: For years, the Norwegian Health Services has been collecting outcomes for specific conditions on a national level in high-quality, disease-specific registries, and there is ongoing work to make this data available in the electronic health record. For comparisons among public hospitals (90% of all hospitals), the Norwegian government has made quality metrics available online like infection rates, mortality rates, etc. Two important strengths of the Norwegian outcome data set are the high compliance and coverage rates. For example, the data collected as Norwegian Spine Registry has 70%–80% follow-up rates and accounts for 80% of the operations performed in the country, making it possible to produce population benchmarks for different conditions. A main challenge, however, is the dependence of the regional health trusts and the government to make the outcome data available not only for researchers, but also for physicians and patients in clinical practice. So far, this has not been a priority for either of them, although the government recently has launched a project aiming to make all data sets more accessible through one national platform.

These experiences suggest that there is a lot to learn for every system. Importantly, no country has the ideal environment for value-based care, and not all the elements of value-based care paradigm need to be necessarily implemented in one go in order to create a value-based system. As explained in the preceding paragraphs, there is a heterogeneity in the implementation not only between countries, but also within countries. It is therefore proposed to look not only at each element, but also try to analyse the underlying enablers and barriers when formulating recommendations for establishing and scaling up the implementation of value-based care in India.
Section 2: Promoting Value Based Care: Introduction of Value Based Incentives under PM-JAY

Section outline

- Current model of incentive disbursement
- Upgrading the method of performance assessment of healthcare providers
- Integration of Value Based Indicators into PM-JAY
- Benchmarking, piloting, and implementation of Value Based Indicators
- Capacity building for effective integration

Current Model of Incentive Disbursement

The previous section describes that since its inception, the PM-JAY has shown its ceaseless commitment to instil value in the provision of healthcare services. In this regard, one of the vital strategies employed by the NHA is that in collaboration with Quality Council of India (QCI), it has established PM-JAY Quality Certification Program which provides bronze, silver, and gold certification to the empanelled health care providers (EHCPs). This 3-tier certification programme has been launched to help the hospitals in continuously improving quality and patient safety. The empanelled hospitals qualifying for the certification receive financial incentives linked to different levels of accreditation/certifications. The empanelled hospitals qualifying for Bronze Certification receive an additional 5% financial benefit, whereas NABH entry level certified hospitals receive an additional 10% financial benefit. NABH accredited hospitals are eligible for an additional 15% incentive. The Silver and Gold certifications under PM-JAY are at par with the NABH entry level and NABH full accreditation, respectively. In addition, the public hospitals are entitled to a 15% incentive subject to NQAS certification.

The main intent of NHA behind introduction of certification-based incentives in the PM-JAY is to instil value and quality in the healthcare services by upstreaming the standards of care. However, as discussed in the previous chapter, several NABH accredited/certified hospitals are involved in fraudulent activities and are still availing the benefits of certification-based incentives. Moreover, the current model of incentivisation does not adequately measure the processes and health outcomes. Finally, the current system makes an omission to incorporate a few important indicators which represent an important ‘value’ proposition under PM-JAY and UHC framework. This highlights that with the current design, the intent of PM-JAY to instil value and quality in the healthcare services has not been fully met. In fact, in the current design, those hospitals are paid incentives which have registered frauds, denying for treatment, where beneficiaries are charged with out-of-pocket expenses, and where several grievances are raised against accredited/certified hospitals. It emphasizes that the current design has loopholes, and a new way needs to be explored for ensuring the quality and monitor the value in the healthcare services. Thereby, it is imperative for NHA to streamline the process of providing financial incentives to the EHCPs, so that the interests of the patients can be protected, and the quality of care can be enhanced.
Upgrading the method of performance assessment of healthcare providers: Use of Value-Based Indicators

Measurement of performance is central to the concept of quality improvement and value-based care, as it provides a means to define what healthcare providers can actually do, and to compare that with the original targets in order to identify opportunities for improvement. In the ongoing scheme of providing financial incentives to the healthcare providers under PM-JAY, this assessment is solely dependent upon certification and accreditation, as all the incentives are certification based. However, ideally, the design of performance measurement systems should not rely on single sources of data but should transparently use a range of information. Moreover, as discussed in the previous chapter, the patient should be prominently involved in assessing the performance, as she/he is the most important stakeholder in any health system. Therefore, the preceding model of providing certification-based incentives to the healthcare providers is proposed to be upgraded by employing the principles of ‘value-based care’, where payment will be outcome based and providers will be rewarded according to the quality of the treatment delivered. The conceptual underpinnings of using the outcome-based indicators to assess the performance of healthcare providers have been discussed in detail in the previous chapter.

In the upgraded scheme of providing value-based incentives, the incentives are divided into two components, i.e., certification-based incentives, and outcome-based incentives (Figure 6). To begin with, this is to mention that both the incentives will be assigned equal weightage while measurement of total incentives which will be awarded to the healthcare providers. Thereby, half of a healthcare provider’s incentive will be based on its quality certification status, and rest half will be determined based on the outcome-based indicators (measurable indicators which focus on the health outcomes of the PM-JAY beneficiaries). Eventually, once the system is implemented and gained acceptance, a greater share of incentives can be attributed to outcome-based incentives.

Benefits to the public hospitals: It is worthwhile to highlight here that public hospitals will especially be benefitted by the upgraded method of incentive disbursement. As stated earlier, in the current system of incentive disbursement, only those public hospitals are entitled to a 15% incentive which have the NQAS certification. The public hospitals without the NQAS certification are not entitled to any financial incentive. However, in the upgraded system of incentive disbursement, as half of the incentives are not linked to certification, public hospitals will be entitled to their share of outcome-based incentives irrespective of their NQAS certification status. Therefore, the public hospitals which don’t have NQAS certification, but are imparting good healthcare services will be entitled to financial incentives. The public hospitals which don’t have the NQAS certification can avail a maximum of 2.5% of financial incentive on account of outcome-based incentives. Another benefit which public hospital will avail in the upgraded scheme of incentivization is the potential of enhancing the professional reputation and increasing the market share, as the information regarding the performance of all the healthcare providers will be shared in the public domain with the help of a dashboard (described in detail in the subsequent sections), and patients will have a choice of selecting their preferred healthcare provider.
In the upgraded mechanism of providing financial incentives, whereas the accredited/entry level healthcare providers will continue to get the financial incentives as per their respective entitlement, the non-accredited healthcare providers will also have an opportunity to receive financial incentives (outcome-based incentives), which is not there in the current system. Regarding Accreditation, as implementation of ABDM is expected to significantly improve the efficiency, effectiveness and transparency of health service delivery overall, NHA is already in consultation with NABH to make ABDM compliance mandatory for NABH accreditations. Once implemented, ABDM compliance would be a mandatory criterion for claiming the certification-based incentives. As the proposed upgradation of the incentivization mechanism will change the overall quantum of financial incentives which NHA currently grants to the healthcare providers, its implementation also requires corresponding financial approval. The outcome-based indicators will comprise of five indicators illustrated in figure-7.

**Figure 7: Outcome Based Indicators under PM-JAY**
These indicators are selected considering the following three criteria (figure- 8):

1. The indicators should reflect the underlying principles of universal health coverage, value-based care, and aligns with the objectives of health-system.
2. The data which is required for the computation of financial incentives on the basis of these indicators should be easy to collect. This data should be easily obtainable on the routine basis and should not impose too much of extra work on the administrative machinery.
3. The collected data should have internal validity. The indicators should accurately measure what they intend to measure.

Figure 8: Criteria for selecting outcome-based indicators

The choice of these indicators is primarily guided by the principles of value-based care described in the earlier section, and these indicators are directly linked to the concept of UHC and health system performance (Figure- 9). The indicators are selected in a way that they align with the three independent and outcome-oriented objectives of health system, i.e., health utility, process utility, and financial fairness. Thus, the selected indicators primarily aim to measure the efforts of the healthcare providers in improving the quality of the care provided, improving patient outcomes, and reducing the cost of care. Secondly, their choice is based on the fact that the indicators should be measurable in a transparent manner, and it should be easy to collect data on the routine basis for these indicators. The third criteria which guided the choice of the indicators was the validity of the collected information, as this information should not be amenable to twisting, alteration and ‘gaming’.
The five indicators thus selected for inclusion in the framework of outcome-based incentives are:

1. **Beneficiary satisfaction rate**: It demonstrates the extent to which a patient is content with the healthcare services received during the current episode of hospitalization or visit to OPD. The level of beneficiary satisfaction is a direct representation of one of the three goals of health system described by the World Health Organization, i.e., responsiveness of the health system to the expectation of the population.\(^{28}\)

2. **Hospital readmission rate**: Any hospitalization which is related to the original condition, potentially preventable and occurring within 30 days in same or any other hospital empanelled under PMJAY. This shall exclude instances of staged readmission and instances where readmissions are required. As readmission is dependent on the nature of treatment for certain diseases, the disease specific thresholds are defined for its calculation. Hospital readmission rate is an established indicator of the quality of health services.

3. **Extent of out-of-pocket (OOP) expenditure**: It accounts for the expense that the patient or its family pays directly to the health care provider on account of direct medical cost while availing the treatment as a PM-JAY beneficiary. This indicator is directly linked to the overall goal of the health system and the UHC framework, i.e., financial risk protection.

4. **Confirmed grievances**: A grievance is the complaint or dissatisfaction about an act, omission, decision or a service provided to the patient. The level of grievances is one of the key performance indicators for the service providers an important metric for measuring patients’ experience and perceived care quality.

5. **Improvement in health-related quality of life**: It conveys the information about improvement in patients’ health outcomes, as it is measured once before the treatment and once after the treatment with the help of recognised tools. It is an overarching indicator of health outcome. It can be measured with the help of a generic, standardised, and validated tool, i.e., EQ-5D-5L.\(^{29}\) An Indian health-related quality of life (HRQoL) value-set is available for EQ-5D-5L, which describes the quality-of-life scores (utility values) for all the possible health states.\(^{30, 31}\) This contains the information that how good or bad a health state is according to the preferences of the Indian population.
**Selecting the appropriate indicator:**
In addition to the indicators listed above, there can be other indicators to measure the performance of healthcare providers. However, these indicators could not be considered for inclusion because of the following reasons:

**Hospital acquired infections rate:** as it is self-reported at the level of healthcare providers, it is likely to be underreported or not reported at all. Thus, in case of hospital acquired infections rate, it is difficult to ensure the validity of the collected information which ideally should not be amenable to ‘gaming’.

**Disease specific mortality rate:** Considering the diseases- specific mortality rate to measure the performance of the healthcare providers may serve as a deterrent for the hospitalisation of the cases with poor prognosis.

**Length of stay:** It is difficult to standardise the length of stay for the health-conditions, as it is primarily dependent on the severity of the diseases and extent of comorbidities. Moreover, it may serve as a deterrent for the required period of hospitalisation.

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**Integration of Value Based Indicators into PM-JAY**
This section describes the method of calculation of financial incentives for the healthcare providers. To begin with, it is worth highlighting that as NHA has a zero-tolerance policy against frauds, hence, all the healthcare providers must fulfil the precondition of ‘no proven fraud’ against them to be eligible for the award of incentives. No incentive will be paid to any healthcare provider which has even a single case of proven fraud against it in the past six months. The healthcare provider will become eligible to avail financial incentive only after a review of frauds by the NHA after the next six months.

Corresponding with the current model of incentivization, the maximum limit up to which any healthcare provider can avail the financial incentive will be 15%. As described in the preceding section, the financial incentives will comprise of two components, i.e., certification-based and outcome-based, having equal weightage in calculation of incentives. Thereby, any healthcare provider can avail a maximum of 7.5% of financial incentive on account of each of these components.

**Calculation of certification-based incentives:** The calculation of certification-based incentives will follow the three-tier certification methodology, as being used in the current model of incentive disbursement. The empanelled hospitals qualifying for Bronze Certification will receive an additional 2.5% financial benefit, whereas NABH entry level certified hospitals receive an additional 5% financial benefit. NABH accredited hospitals are eligible for an additional 7.5% incentive. In addition, the public hospitals will be entitled to a 7.5% incentive subject to NQAS certification. Moreover, ABDM compliance would require patient health records being generated at the facility should be machine readable and linked with the ABHA address of the patient. Compliance to above would require self-certification by the facility and the same would be verified by NHA.

**Calculation of outcome-based incentives:** The objective of evaluating the performance of the healthcare providers on the basis of outcome-based indicators is to encourage them to focus on the health outcomes of the PM-JAY beneficiaries, thereby enhancing the uptake of principles of value-based care during the provision of healthcare. The five components of
outcome-based incentives will hold equal weightage in computation of incentive. As a result, any healthcare provider can avail a maximum of 1.5% of financial incentive on account of each of these five components. The detailed method that will be followed in computation of each of these components has been described here:

1. **Beneficiary satisfaction rate:** The information on the beneficiary satisfaction will be collected after the discharge of the patient from the healthcare facility. This information will be collected by the call centre through a questionnaire, i.e., beneficiary satisfaction survey. The questions to be asked while collecting this information are presented in Table-3. Each patient will be assigned an identification number when patient’s Ayushman card is issued, and the patient will be identified on the basis of this unique identification number. During the beneficiary satisfaction survey, the call centre employee will record the answers against the respective question on a Likert scale (very good/ good/ satisfactory/ poor/ very poor). It will be recorded by the call centre on the second day of the discharge of the patient. The score will then be calculated based on the response captured on the Likert scale. The total beneficiary satisfaction rate of a particular healthcare provider will be computed by aggregating the responses of all the beneficiaries using the following formula:

\[
\text{Beneficiary Satisfaction Rate} = \left( \frac{\text{Total Score Obtained}}{\text{Maximum Score}} \right) \times 100
\]

Depending upon the level of beneficiary satisfaction rate obtained from the above formula, the reward points will be assigned to a healthcare provider using the matrix presented in Table-1. Ultimately, the percentile ranking of the level of patient-satisfaction will be determined. This implies that eventually, the user satisfaction will be computed relative to the best user experience in the PM-JAY.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Beneficiary Satisfaction Percentile</th>
<th>Reward Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>≥85%</td>
<td>5 Points</td>
</tr>
<tr>
<td>2.</td>
<td>&lt;85% to ≥70%</td>
<td>4 Points</td>
</tr>
<tr>
<td>3.</td>
<td>&lt;70% to ≥60%</td>
<td>3 Points</td>
</tr>
<tr>
<td>4.</td>
<td>&lt; 60% to ≥50%</td>
<td>2 Points</td>
</tr>
<tr>
<td>5.</td>
<td>&lt;50%</td>
<td>1 Point</td>
</tr>
</tbody>
</table>

2. **Hospital readmission rate:** The hospital readmission rate will be captured from the Transaction management system (TMS) of the PM-JAY. The patient is identified in the TMS on the basis of this unique identification number of the assigned Ayushman card. Some specific packages like dialysis, chemotherapy, staged treatment, and other day-care procedures which require frequent/multiple cycles of hospital use will be identified and excluded from this criterion. In such case, the overall score of the healthcare provider will be calculated based on the remaining indicators. As a general rule, if a patient is booked for the same presenting complaint under the same package within 30 days of discharge it will be considered as a readmission. This readmission can happen in any hospital; however, the attribution of readmission will be made to the hospital with
the first admission. Moreover, diseases specific thresholds will be defined for the calculation of readmission rate, as the possible extent of readmission differs across the diseases. Likewise, readmission rate will not include planned staged treatment, which itself warrants patient’s readmission to the health facility due to repetitive nature of service delivery. For example, there can be a case of bilateral cataract, which impels the healthcare provider to undertake the procedure on one eye, followed by the second eye after a period of some days. Such planned staged treatments will be identified and excluded while calculating the readmission rate. Similarly, chain admissions will also be reviewed. The hospital readmission rate of a particular healthcare provider will be computed by aggregating the responses of all the beneficiaries using the following formula:

\[
\text{Hospital Readmission Rate} = \left( \frac{\text{Number of Readmissions}}{\text{Cases Treated}} \right) \times 100
\]

Depending upon the level of hospital readmission rate obtained from the above formula, the reward points will be assigned to a healthcare provider using the following matrix (Table-2):

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Hospital Readmission Rate</th>
<th>Reward Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>≤5%</td>
<td>5 Points</td>
</tr>
<tr>
<td>2.</td>
<td>&gt;5% to ≤10 %</td>
<td>4 Points</td>
</tr>
<tr>
<td>3.</td>
<td>&gt; 10% to ≤20%</td>
<td>3 Points</td>
</tr>
<tr>
<td>4.</td>
<td>&gt;20% to ≤30%</td>
<td>2 Points</td>
</tr>
<tr>
<td>5.</td>
<td>&gt;30%</td>
<td>1 Point</td>
</tr>
</tbody>
</table>

**Table 2: Rewarding criteria for hospital readmission rate under PM-JAY**

3. **Extent of out-of-pocket (OOP) expenditure:**

The OOP expenditure consists of the payment charged by the healthcare providers from beneficiaries as part of direct medical cost or informal charges for the treatment. It is worthwhile to mention here that the premise on which the PM-JAY has been built is financial risk protection of the eligible population. Thereby, any incident wherein the healthcare provider is found charging the beneficiary is strongly discouraged and considered as a serious deviation from the principles outlining the structure of the scheme. Charging the beneficiaries not only forfeits the purpose for which the scheme was created, but it also goes against the principles of UHC which the government of India is aspiring to achieve. As a result, it is being proposed that any healthcare provider that found charging the beneficiaries must not be considered eligible for payment of financial incentive, as it is indeed a financial reward to encourage value-based healthcare, which is given to the healthcare providers over and above the HBP rate.

In the current guidelines of PM-JAY, it has been mentioned that if any provider is found charging the beneficiaries of the scheme for the services included in the package, it is liable to punitive action. The proposed framework of no financial incentive to the healthcare provider charging its patients in fact strengthens the intent of the existing clause, as it will penalize the defaulting healthcare provider not only for that particular patient, but for all the patients seen in the respective quarter, by not awarding any
incentive on account of this indicator for one quarter.

The information regarding the OOP expenditure incurred by a PM-JAY beneficiary will be obtained from the questionnaire administered by the call centre (Table 3). It will be recorded by the call centre on the second day of the discharge of the patient. Care will be exercised to exclude the expenditure incurred on travel, food of attendants, and boarding/ lodging of the attendants. The extent of OOP expenditure will be measured based on a predefined scale and a score will be assigned to the respective healthcare provider.

**Table 3: Questionnaire used by call centres to elicit patient satisfaction and extent of OOP expenditure among PM-JAY beneficiaries**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Feedback Questions</th>
<th>Drop-Down options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Did you pay any money to hospital or anyone? If yes</td>
<td>YES/NO</td>
</tr>
<tr>
<td>1a.</td>
<td>To whom did you pay this money?</td>
<td>Hospital/PM-AM/Others</td>
</tr>
<tr>
<td>1b.</td>
<td>What was the purpose of giving money?</td>
<td>Service/Medicine/Consumables/Tests</td>
</tr>
<tr>
<td>1c.</td>
<td>How Much Money You Paid?</td>
<td></td>
</tr>
<tr>
<td>1d.</td>
<td>Do you have any receipt for the money you have paid to the hospital?</td>
<td>YES/NO</td>
</tr>
<tr>
<td>2</td>
<td>Have you received post discharge medicine?</td>
<td>YES/NO</td>
</tr>
<tr>
<td></td>
<td>If no,</td>
<td></td>
</tr>
<tr>
<td>2a.</td>
<td>Why was the medicine not Provided?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tell us overall experience of the treatment in Hospital</td>
<td>V Good/Good/Satisfactory/Poor/V Poor</td>
</tr>
<tr>
<td>4</td>
<td>How was your experience with Pradhan Mantri Arogya Mitra (PMAM)?</td>
<td>V Good/Good/Satisfactory/Poor/V Poor</td>
</tr>
<tr>
<td>4a.</td>
<td>Reason for Poor?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tell us overall experience about the PM-JAY scheme</td>
<td>V Good/Good/Satisfactory/Poor/V Poor</td>
</tr>
</tbody>
</table>

The calculation of reward points on the basis of the OOP expenditure incurred by the beneficiaries of PM-JAY will be done based on grievance scoring criteria. This implies that if no OOP expenditure is incurred in any PM-JAY beneficiary receiving care in a particular health facility, the provider will be assigned maximum (five) reward points. However, if any OOP expenditure was incurred by any beneficiary, no points will be assigned (Table 4).
4. **Confirmed grievances:** The grievance registered by the beneficiaries against the healthcare providers through Central Grievance Redressal and Management System (CGRMS) portal of NHA and confirmed by the state will be considered in the marking criterion for this indicator. The detailed process of grievance redressal through CGRMS portal is given in Annexure 1. If no confirmed grievance exists against a particular healthcare provider, it will be assigned 5 reward points. In the event of any confirmed grievance, no point will be assigned to the healthcare provider (Table 5). This mechanism of rewarding reiterates the zero-tolerance policy of PM-JAY towards the grievances, as it will penalize the defaulting healthcare provider not only for that particular patient, but for all the patients seen in the respective quarter, by not awarding any incentive on account of this indicator for one quarter.

Table 5: Rewarding criteria for confirmed grievances under PM-JAY

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Confirmed Grievances</th>
<th>Reward Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No confirmed grievance</td>
<td>5 Points</td>
</tr>
<tr>
<td>2.</td>
<td>Any confirmed grievance</td>
<td>0 Points</td>
</tr>
</tbody>
</table>

5. **Health related quality of life (HRQoL):** HRQoL is measured with the help of patient-reported outcome measures (PROMs). PROMs are standardised, self-reported, measures that are typically developed to capture a person’s perspective on outcomes related to their health status and health-related quality of life (HRQoL), such as symptoms, functioning, overall health, or wellbeing. For the purpose of assessing the improvement of health outcomes in a PM-JAY beneficiary as a result of treatment, EQ-5D-5L tool will be used. The EQ-5D-5L is the most commonly used generic preference-based HRQoL measure across the globe. In addition to it, the selection of EQ-5D-5L as a preferred instrument to measure the HRQoL of PM-JAY was guided by the facts that first, it is very easy to administer, second, it is generic patient reported outcome measure equally applicable in all the health conditions irrespective of the type of diseases, and third, Indian value-set is available for it, which can be used to assess the HRQoL index score for any health state based upon the preference of the Indian population. The EQ-5D-5L descriptive system is presented in Figure 10.
Under each heading, please tick the ONE box that best describes your health TODAY.

**MOBILITY**
- I have no problems in walking about
- I have slight problems in walking about
- I have moderate problems in walking about
- I have severe problems in walking about
- I am unable to walk about

**SELF-CARE**
- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

**USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)**
- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

**PAIN/DISCOMFORT**
- I have no pain or discomfort
- I have slight pain or discomfort
- I have moderate pain or discomfort
- I have severe pain or discomfort
- I have extreme pain or discomfort

**ANXIETY/DEPRESSION**
- I am not anxious or depressed
- I am slightly anxious or depressed
- I am moderately anxious or depressed
- I am severely anxious or depressed
- I am extremely anxious or depressed

As illustrated in the figure, the descriptive system of EQ-5D comprises five dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Each dimension has 5 levels of responses: no problems, slight problems, moderate problems, severe problems and extreme problems. The patient will be asked to indicate his/her health state by indicating the most appropriate statement in each of the five dimensions. This decision will result in a 1-digit number that expresses the level selected for that dimension.
The digits for the five dimensions will then be combined into a 5-digit number that describes the patient’s health state/health profile. This health state will be converted to the corresponding utility value/quality of life score using the India specific EQ-5D-5L value-set, which has already been prepared and published (Figure-11).

Figure 11: Computing HRQoL of a patient with the help of Indian EQ-5D-5L value-set integrated in the PM-JAY system

As a part of outcome-based indicators, the HRQoL of a PM-JAY beneficiary will be collected at two levels (Figure 12). First it will be recorded at the time of admission of the patient by the Pradhan Mantri Arogya Mitra (PMAM). The PMAM will record the response of the patient and upload it in TMS. At the second level it will be recorded by the call centre after 30 days of discharge of patients. For certain conditions, for example cancer, the call centre will make calls after completion of the treatment-cycles. Thereby, the responses for the HRQoL will be collected by PMAM/call centre operative from the patients. If the patient is subconscious/not in a condition to answer, in that case the response will be collected by the close attendant of the patient. In addition to it, to track the health outcomes in the long-term, the HRQoL of the patients will also be recorded after 6 months and 1 year of discharge. This information on long-term HRQoL will not be used for incentive calculation initially. The possibility of inclusion of long-term HRQoL in the calculation of incentives will be explored in future. Once the pre- and post-treatment EQ-5D-5L health states of the PM-JAY beneficiary has been collected, they will be converted to their respective utility scores based on the Indian EQ-5D-5L value-set. The difference between the pre- and post-treatment utility score will represent the extent of health gain achieved by the patient as a result of the treatment. Based on the percentage improvement in the HRQoL of the patient, a mean percentage improvement in the HRQoL of the patients at the healthcare provider level will be computed. Thereafter, a percentile scoring will be calculated for the healthcare providers based on improvement in HRQoL of their patients, and reward points will be assigned according to the matrix presented in Table 6.

Table 6: Rewarding criteria for health-related quality of life under PM-JAY

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Percentile based upon improvement in HRQoL</th>
<th>Reward Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>≥85%</td>
<td>5 Points</td>
</tr>
<tr>
<td>2.</td>
<td>&lt;85% to ≥70%</td>
<td>4 Points</td>
</tr>
<tr>
<td>3.</td>
<td>&lt;70% to ≥60%</td>
<td>3 Points</td>
</tr>
<tr>
<td>4.</td>
<td>&lt;60% to ≥50%</td>
<td>2 Points</td>
</tr>
<tr>
<td>5.</td>
<td>&lt;50%</td>
<td>1 Point</td>
</tr>
</tbody>
</table>

Figure 12: Framework for assessment of improvement in health outcomes under PM-JAY
Table 6: Rewarding criteria for health-related quality of life under PM-JAY

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<td>&lt;85% to ≥70%</td>
<td>4 Points</td>
</tr>
<tr>
<td>3.</td>
<td>&lt;70% to ≥60%</td>
<td>3 Points</td>
</tr>
<tr>
<td>4.</td>
<td>&lt;60% to ≥50%</td>
<td>2 Points</td>
</tr>
<tr>
<td>5.</td>
<td>&lt;50%</td>
<td>1 Point</td>
</tr>
</tbody>
</table>

Figure 12: Framework for assessment of improvement in health outcomes under PM-JAY

ADMINISTRATION OF EQ-5D-5L
PMAM administers the tool at the time of admission.

INITIAL HEALTH PROFILING
Responses entered in the system to generate the five-digit health-state of patient (e.g., 12322).

GENERATION OF HRQoL SCORE
The system will convert this health-state into HRQoL score with the help of Indian value-set (e.g., 0.793).

FOLLOW-UP CALL
On 15th day of discharge, EQ-5D-5L will be administered again by call-center.

FOLLOW-UP HEALTH PROFILING
Responses entered in the system to generate the five-digit health-state of patient (e.g., 12111).

GENERATION OF FOLLOW-UP HRQoL SCORE
The system will convert this health-state into HRQoL score with the help of Indian value-set (e.g., 0.949).

MEAN IMPROVEMENT AT PROVIDER LEVEL
A mean % improvement in the HRQoL across all the patients treated in a defined time will be computed.

ASSESSMENT OF IMPROVEMENT IN HRQoL
Based on the initial and follow-up HRQoL scores, the system will measure the improvement (0.949-0.793=0.156=19.67%).
As the scoring for the calculation of financial incentives will be one across the hospitals, it mandates the adjustment of the scoring on the basis of case-mix being treated at these hospitals. For instance, there can be a tertiary care hospital which is predominantly involved in treating severe spectrum of the patients, where the chances of improvement in the HRQoL are already relatively low. In this case, if a head-to-head comparison is made between the improvement of HRQoL in the patients being discharged from this tertiary hospital versus those of another hospital which treats only milder cases, it can place the tertiary care hospital at a disadvantageous position. The same applies to other outcome-based indicators like hospital readmission rate. Therefore, while calculation of financial incentives based on the outcome-based indicators, risk adjustment according to case mix of every healthcare provider will be done. This risk adjustment will be done on the basis of type of morbidity, severity of morbidity (based on ICD coding and DRG), and the age of the patients.

In the beginning, the data collected for each of the value-based indicator will be studied for one quarter for the purpose of relative benchmarking of indicators where the scores are based on relative performance. Thereafter, it will become a persistent process in quarterly cycles, as the benchmarks will be revised subsequently every quarter on the basis of data collected in the preceding quarter for each of the indicator. It is worthwhile to highlight here that the reference period to be used for the assessment on a given day (which is the cut-off day for the assessment), will be fourth, third and second month (T-1 month) preceding to the day of assessment. Thereby, the assessment for the quarter of May-June will be undertaken in the month of August. Similarly, the assessment for the quarter of July-September will be undertaken in the month of November. This arrangement will be done keeping in mind the turn-around time of indicators of HRQoL and confirmed grievances is 30 days.

In the first phase of implementation, the unit of performance assessment will be a healthcare provider (hospital). It is envisaged that eventually, the performance can be estimated at the level of specialty within a hospital, and at the

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**Benchmarking, Piloting, and Implementation of Value Based Indicators**

In addition to the follow-up call from the call-centre, the patients can also provide their responses to the value-based indicators from the Ayushman Bharat PM-JAY mobile application. This in fact places the power of reporting the experience in the hands of patients. Nevertheless, given the limited technical literacy, the call-centre will contact each of the beneficiaries of the scheme, as discussed in the operational framework in the preceding paragraphs. For the beneficiaries who have already got their responses recorded from the mobile application, the call-centre will obtain a confirmation of their responses.

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**Value-Based Incentives**

*Placing the “power” in the hands of patients*

Figure 13: Illustration for ratings of hospitals for beneficiaries under PM-JAY

Pilot for Value Based Incentives:

A pilot will be conducted across the country for three months before its implementation. The PMAM and call centre employees trained for filling the HRQoL tool will be monitored in collaboration with the Quality cells. The filling up of HRQoL tool will be monitored. The data collected will be analysed for its accuracy. Any inconsistencies found during the process will be corrected and implemented accordingly. The results of the pilot and the consequent scoring mechanism will be discussed with stakeholders. After the stakeholder consultation, the mechanism of providing the value-based incentives will be rolled-out on a formal basis.
level of the team of healthcare personnel within a specialty.

Initially, this process will be commensurate with the IT integration of the outcome-based indicators into PM-JAY. For the purpose of IT integration, the new scheme of indicators will be integrated into the Hospital Empanelment Module (HEM) and TMS of PM-JAY system, so that the varying incentives can be captured, and incentives be imparted to the healthcare providers based on their performance on a quarterly basis. A public dashboard will also be developed to display the rankings and scores at national, state, district, and hospital level so that performance of the healthcare providers can be monitored.

Based on the data collected on the value-based indicators, a rating of healthcare providers will also be made available on website of PM-JAY, which besides improving the uptake of principles of value-based care, will become a principal driver of supply-side and demand-side behaviour. This rating will help the beneficiaries to select the provider of their choice according to their requirement with respect to geographic reach and type of specialty/care. The healthcare providers will also be encouraged to improve themselves accordingly, as the information regarding their performance on the value-based indicators will be used by the patients to choose good-quality providers, and good performers will gain the market share and enhanced professional reputation.

**Figure 13: Illustration for ratings of hospitals for beneficiaries under PM-JAY**

Pilot for Value Based Incentives: A pilot will be conducted across the country for three months before its implementation. The PMAM and call centre employees trained for filling the HRQoL tool will be monitored in collaboration with the Quality cells. The filling up of HRQoL tool will be monitored. The data collected will be analysed for its accuracy. Any inconsistencies found during the process will be corrected and implemented accordingly. The results of the pilot and the consequent scoring mechanism will be discussed with stakeholders. After the stakeholder consultation, the mechanism of providing the value-based incentives will be rolled-out on a formal basis.
Data Quality Assurance: The high volume and complexity of data collected across multiple sources in the proposed mechanism of incentive disbursement will create an enormous task in terms of data quality management. It is essential to mention that the issues in data quality can directly affect analytics and decision-making. For these reasons, data quality is recognized as a critical factor. In order to ensure accuracy, completeness, consistency, timeliness, and validity of the data, random verification of records will be done by the NHA and SHA officials. In addition to it, range and consistency checks will be applied at the time of analysis. If there will be any outliers in the data (for example, an empanelled healthcare provider is consistently obtaining full reward points), physical verification will be undertaken for the detailed assessment.

Role of National Health Authority in implementation of Value-Based Incentives: The National Health Authority shall be apex body for implementation of Value Based Incentives. The NHA shall be responsible for the following:

1. Technical leadership for Value Based Incentives
2. Resolution of technical and operational issues related to Value Based Incentives implementation
3. Propose policy direction as per the directives of Governing Board of NHA and MoHFW.
4. Implementation of Policy decisions
5. Coordination with the states/UTs
6. Capacity building of various stakeholders

Role of State Health Agency in implementation of Value-Based Incentives: The state health agency (SHA) along with National health authority shall be responsible for implementation of value-based incentives. The SHA shall be responsible for the following:

1. System strengthening: Help in identification of gaps, give timely feedbacks and help in improvement of the overall program
2. Implementation of value-based incentives
3. Ensure collection of data at hospital level for value-based incentives
4. Undertaking quality assurance of the data collected for value-based incentives
5. Capacity building at district levels and at EHCPs level

Role of District Implementation Unit in implementation of Value-Based Incentives: The district health authorities shall:

1. The district health authorities shall nominate the master trainers for training of PMAMs and call centre employees
2. The district health authorities shall ensure capacity building of PMAMs and call centres.
3. The district health authorities shall provide support to SHA in implementation of value-based incentives
4. The district health authorities shall provide support for monitoring activities to SHA in implementation of value-based incentives

Role of Pradhan Mantri Arogya Mitra (PMAM) in implementation of Value-Based Incentives: The PMAM will be responsible for the following under value-based care initiative:

1. Assigned to interview the patients and upload in TMS
2. Interview the patient based on HRQoL tool at the time of admission
3. Responsible for uploading and submitting the response to HRQoL in TMS for each patient

Role of Call Centre in implementation of Value-Based Incentives: The call centre will play a key role in capturing beneficiary response
The role of Call centre is listed below:

1. Follow up with the beneficiaries on second day of discharge to assess satisfaction level and extent of OOP expenditure.

2. The call centre will call the beneficiaries after 15 days of discharge to collect and fill HRQoL tool.

Capacity Building for Effective Integration

‘Quality healthcare’ is one of the primary objectives of the PM-JAY. Continuous efforts are being made by the authorities to set clearer guidelines that require stringent enforcement to create a robust regulatory framework for the scheme. It, therefore, becomes critical to define a quality framework based on the basic principles of patient safety that enables to monitor and measure adverse events and take corrective and preventive measures as and when required. Global evidence suggests that incentives play a pivotal role in improving the performance, motivation and creating healthy competition. Incentives have been an integral part of PM-JAY, since its inception. In the current model of incentive disbursement, the incentives are being paid on the basis of certification/accreditation status, geographical location and level of care provided by the hospital. The new concept of Value Based Incentives focuses not only on certification/accreditation but also on performance of the healthcare providers.

For effective integration of value-based incentives in PM-JAY, cascade model of training will be used for capacity building of the personnel involved in its implementation. This cascade model of training defines the training to be imparted to Master trainers, state health agency (SHA) officials, PMAMs, and call-centre employees who will collect the beneficiary satisfaction survey, information on OOP expenditure, and the HRQoL of the beneficiaries using EQ-5D-5L tool. The cascade model will be implemented in the following manner:

**Figure 14: Cascade model of training for capacity building**
The trainings shall be imparted on following topics:

1. Orientation to Value Based Care
2. Introduction to HRQoL: tool, its importance and impact on Value Based Care
3. Introduction to Beneficiary Satisfaction Survey and its impact on Value Based Care

The trainings will be imparted with the support of ‘Insurance Institute of India’ and after successful completion of training a certificate shall be issued to PMAMs and Call centre employees.

**Target Audience:** The target audience for outcome measurement tool at SHA level:

1. SHA Officials
2. SHA - Call centre nodal Officer
3. Quality Cell Members
4. SHA Grievance officer
5. SHA IT officer

The target audience for outcome measurement tool at district level:

1. Call Centre employees
2. Pradhan Mantri Arogya Mitra (PMAM)
3. Concerned officials from empaneled hospitals

**1. Module & Session Plan for trainings of officials at State Health Agency:**

**Learning Objective:**

1. Introduction to the Concept of Value Based Care.
2. To provide general understanding of tools to be used for value-based care.
3. To enable them to advise stakeholders on HRQoL tool to be used for evaluation and its effects.

**Eligibility Criteria:** Any official who is primarily working with SHA under role of nodal officer – call center and Quality cell coordinator/manager/nodal officer are eligible for undertaking this training course.

**Preferred Batch Size:** 20 to 40 Participants

**Training Methodology:** Instructor Led using PPT through online mode

**Pre – Read Material:**

- Quality of life tool
- Patient satisfaction data collection methodology

**Key Learnings:**

1. Quality Assurance in health care is non-comprisable
2. Incentives have been introduced in PM-JAY for promoting continuous quality improvement
3. A transparent and objective IT enabled system is created for incentivization based on performance and quality certification

**Take Home Message**

1. HRQoL and Beneficiary Satisfaction Survey will form an important part of value-based care, and thus have an impact on incentives.

2. **Module and Session Plan for trainings of PMAM/ Call Centers/ Officials from the empaneled hospital:**

**Learning Objective:**

1. To make PMAMs/Call Centre employees/concerned officials aware of the importance of HRQoL.
2. To equip the PMAMs Call Centre employees/concerned officials to conduct HRQoL assessment in the facility.
3. To prepare the PMAMs Call Centre employees/concerned officials to coordinate with other functionaries and beneficiaries in the hospital and undertake and upload HRQoL assessment in TMS.

**Eligibility Criteria:** Any designated PMAM/Call Centre employees/concerned officials from the empaneled hospitals under PM-JAY is eligible to undergo this training

**Preferred Batch Size:** 20 – 40 Participants
**Training Methodology:** Instructor Led using PPT through online mode

**Key Learnings**
- The new method for ensuring quality of care – Value Based Care
- Value Based Incentives is dependent on two pillars – performance indicators and quality certification
- HRQoL tool and patient satisfaction tools are important measures in determining the performance of the hospitals.

**Training plan:**
A plan for training various stakeholders specified in the previous section including the timelines and responsible officials for organizing the training programmes is presented in Table- 7.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Target Audience</th>
<th>First Time Training</th>
<th>Refresher / Duration</th>
<th>Responsible Official</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SHA officials</td>
<td>Introduction to concept – within a month of onboarding of the state</td>
<td>Every 6 months</td>
<td>Quality Team, HPQA division</td>
</tr>
<tr>
<td>2</td>
<td>PMAM/Call center employees/ Hospital officials</td>
<td>Within one month from the date of training of SHA officials</td>
<td>Every 6 months</td>
<td>SHA officials</td>
</tr>
</tbody>
</table>
The process flow of grievance redressal has been described below (detailed diagram given above):

A complainant can register a grievance-on-grievance redressal portal www.cgrrms.pmjay.gov.in or grievance.pmjay.gov.in.

Once the case is registered it will automatically reflect in concerned officer login. The DGNO/SGNO shall have 15 days to act on a case. If no action taken it will get escalated to next higher authority. If any party (complainant or aggrieved against party) is not satisfied with the decision of officers or committee, they can re-open the case and it will automatically be escalated to next higher committee. Committees at each level shall have 30 days of time to redress the grievances.

SOS cases (cases which are emergency in nature) or cases against district administrations are directly being sent to SGNO. SGNO will have 6 working hours to resolve SOS cases and 15 days to resolve normal cases. If no action taken, case will be escalated to CEO of SHA.
References


8. Gray M. The 'triple value agenda' must be our focus this century. NHS Confederation. 2015.


For any further queries, please contact:

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