

## Review Article

# Road to universal health coverage: unique model of Karnataka, India

Pooja Sancheti<sup>1\*</sup>, Suresh G. Shastri<sup>1</sup>, Pujari K. Srinivas<sup>1</sup>, Gagana G. Dayananda<sup>1</sup>,  
Murugesh Jayaprakash<sup>1</sup>, Shivashankara N. Ninge Gowda<sup>2</sup>, Sudha Chandrashekar<sup>2</sup>,  
Sushil K. Ichini<sup>3</sup>, Mohamed Asif<sup>2</sup>, Sangeetha M. R.<sup>2</sup>, Randeep Devendiran

<sup>1</sup>AB-ArK Cell, Commissionerate of Health and Family Welfare Services, Karnataka, India

<sup>2</sup>Suvarna Arogya Suraksha Trust, Karnataka, India

<sup>3</sup>CARE India Solutions for Sustainable Development, India

<sup>4</sup>Health and Family Welfare, Government of Karnataka, Karnataka, India

**Received:** 10 February 2023

**Revised:** 18 March 2023

**Accepted:** 20 March 2023

### \*Correspondence:

Dr. Pooja Sancheti,

E-mail: [pooh.s830@gmail.com](mailto:pooh.s830@gmail.com)

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

With the goal of achieving universal health coverage (UHC), Karnataka, a national leader in healthcare, launched the Arogya Karnataka scheme in March 2018. It was later integrated with the government of India's national health protection scheme Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) to help with financial protection for accessing curative care at the secondary and tertiary levels through collaboration with the public and private sectors. The AB-PMJAY is a rare opportunity to enhance the health of hundreds of millions of Indians and get rid of a significant cause of the country's poverty. The study intends to define the State's distinctive characteristics with relation to AB-PMJAY-ArK and to highlight the State's top initiatives through the scheme. Karnataka has a unique scheme even if it is integrated due to various striking features. The country has an opportunity to address persistent and deeply ingrained issues with governance, quality assurance, and stewardship owing to AB-PMJAY-ArK. The complete approach used by the AB-PMJAY-ArK cell of the department of health and family welfare, government of Karnataka has enhanced the performance of public health institutions and can be adopted as a model by all the Indian States. Access to care, compliance, and timely assistance have all drastically enhanced. This has improved national health indices, but more crucially, it has led to the development of a bigger and stronger public health system, leading the road to UHC.

**Keywords:** UHC, AB-PMJAY, Ayushman Bharat-PMJAY-Arogya Karnataka, Karnataka's model, Health insurance

## INTRODUCTION

Sustainable development goal (SDG) 3.8 aims to achieve UHC to ensure the health and welfare of everyone.<sup>1</sup> UHC emphasises the significance of fairness in access to high-quality medical care for everyone without running the risk of facing financial hardship.<sup>2</sup> India confronts many obstacles on the path to UHC, including poor access, lack of service availability, poor quality of care, and high out-of-pocket expenditure.<sup>3</sup>

Indian national government and several state governments have pledged to achieve UHC on numerous occasions. Despite this, UHC remains a distant goal, and the Indian health system continues to be marked by serious issues in the areas of labour, infrastructure, standards and quantity/quality of services.<sup>4</sup>

Despite an increase in healthcare spending in India since 2019, public expenditure on medical services is lowest in the world, according to national health profile (NHP) data.<sup>5</sup> The organization for economic co-operation and

development (OECD) estimates that 3.6% of India's GDP is spent on healthcare.<sup>6</sup> According to a poll by Indian consumer economy 360, the average cost of medical care in India is approximately Rs. 9,373.<sup>7</sup> A sizeable fraction of Indian households cannot receive healthcare due to high out-of-pocket expenditure and financial constraints. Most urban or rural residents reduce their health-related expenses by taking out bank loans or liquidating their possessions.<sup>7</sup>

The health profile report released by WHO states that in India because of high out of pocket expenditure annually about 3.2% Indians fall below the poverty line.<sup>8</sup> To protect the financial health of 500 million of the nation's most impoverished Indians and prevent the yearly slide into poverty of 50-60 million of them due to medical expenses, the government of India launched the AB-PMJAY in March 2018. This program has been hailed as a historic step towards achieving UHC in India.<sup>7,9</sup>

Co-operative federalism and flexibility for the states are the fundamental tenets of Ayushman Bharat, the national health protection programme made of two components, namely health and wellness centres (HWCs) and PMJAY insurance scheme. The programme, known as "Modicare" informally in honour of Indian Prime Minister Narendra Modi,<sup>4</sup> encapsulates a progression towards promotive, preventive, palliative, and rehabilitative aspects of UHC through access to HWCs at primary level and provision of financial protection for accessing curative care at the secondary and tertiary levels through engagement with both public and private sector, improving the health of the population.<sup>10</sup> PMJAY covers 1350 medical packages inclusive of surgery, day care, prescription drugs, and diagnostic tests.<sup>11</sup>

Karnataka has been a leader in health reform across the nation; as a result, the State began the Arogya Karnataka programme on March 2, 2018, as a component of UHC ideated in the Karnataka Health Policy 2017 and Vision document 2025.<sup>12,13</sup>

As the GoI launched the PMJAY under UHC theme for the benefit of 10.5 crore families of SECC and RSBY beneficiaries with same goals and objectives but with a higher annual floater of Rs. 5 lakhs as against the State's outlay of Rs. 2 lakhs, Arogya Karnataka was integrated with Ayushman Bharat under the cobranded title of "Ayushman Bharat-PMJAY-Arogya Karnataka" from 30<sup>th</sup> October, 2018.<sup>14,15</sup>

This paper's objective is to articulate the State's distinctive characteristics with regard to AB-PMJAY-ArK and to highlight the State's top strategies for achieving the aim of UHC.

## OVERVIEW/ DISTINCTIVE FEATURES

The population of the State is 6,11,30,704 as of 2011 Census, and it is estimated to be 7,20,04,938 as per 2021

Census.<sup>16</sup> Currently, considering census 2011 data, the programme serves 6.11 crore beneficiaries (Table 1), of which 5.09 beneficiaries are the targeted population according to food civil supply data.

**Table 1: Socio-demographic profile.**

Variables	Categories	Frequency	%
Age (Years)	0-29	20597925	40.7
	30-75	28426849	56.2
	>75	1531501	3
Gender	Male	25416822	50.3
	Female	25137880	49.7
	Other	1573	0
Type	Rural	37552529	61.4
	Urban	23578175	38.6
Family type	BPL	42307352	83
	APL	8617907	17

The scheme is implemented through the Suvarna Arogya Suraksha Trust (SAST), the State Health Agency (SHA) established in 2009 which functions entirely on an Assurance Mode. The process of approval of claims and preauthorization is done under SAST.

Karnataka is the only state in the nation with a specialised AB-ArK cell under the department of health and family welfare services (HFWS), that focuses on enhancing the calibre, credibility, and reach of public health institutions (PHIs) and has laid out various strategies through the scheme to enhance health outcomes and strengthen the health system throughout the state.

The cell is headed by the joint director with additional staff in order to coordinate with SAST. Its main role is to identify best practices, assess capabilities and gaps, support the PHIs with the implementation, capacity building and weekly review and follow up.

There are clear guidelines on the roles and responsibilities of the stakeholders to strengthen PHIs. Weekly review meetings are held under the chairmanship of commissioner, HFWS. Regular review has helped identify poorly performing hospitals, doctors, initiate needful corrective action and ensure improvement in performance. AB-ArK cell has access to data within the health department for triangulation and feedback to the government hospitals. It also bridges the gap between the state and the government hospitals and engages with the SHA, advocating for the government hospitals to enable better reach.

The state scheme is unique as it includes majority of the resident population of Karnataka i.e., above poverty line (APL) and below poverty line (BPL) beneficiaries unlike any other State.

Coverage through the integration is-Rs. 5 lakhs per family/ annum on family floater basis for BPL i.e., 100% coverage and Rs. 1.5 lakhs per family/ annum on family floater basis for APL i.e., 30% co-payment (Figure 1).

**Eligible Patient**

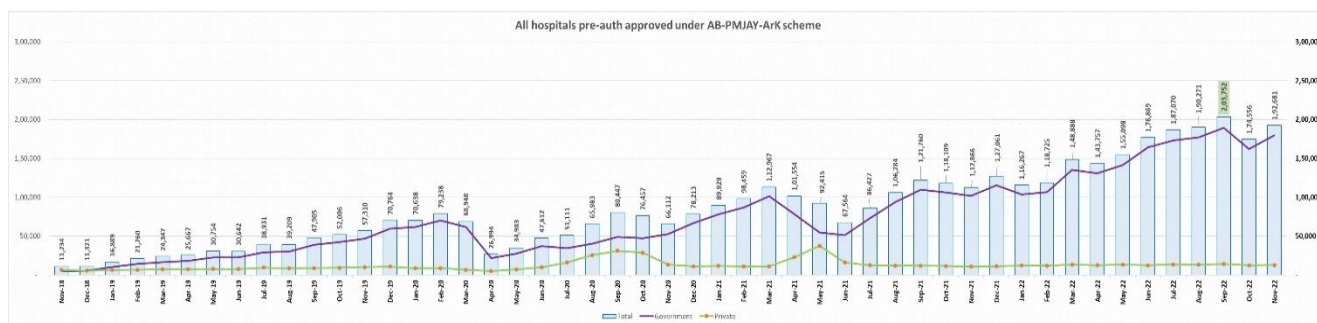
- Resident of Karnataka State
- "Eligible Household" as per National Food Security Act, 2013 Holder of **BPL ration card**
- (or) Beneficiaries listed in the SECC data (or)
- Enrolled members of existing Rashtriya Swasthya Bhima Yojane
- Cashless upto **Rs.5 lakhs as family floater per year**

**Excludes**  
persons with  
other forms of  
insurance – ESI,  
CGHS, Private  
insurance etc

**General Patient**

- Resident of Karnataka State
- does not come under "Eligible Household" as per National Food Security Act, 2013 (or)
- Not a holder of the eligible household card.
- Has a **APL ration card**
- 30% of Govt package upto Rs.1.5 Lakh per family per year**

**Figure 1: Inclusion and exclusion criteria.**



**Figure 2: PreAuth month-wise in government and private sector.**

**Table 2: Code wise treatment packages.**

Code	Procedure	N	Treatment availed
2A	Simple secondary	294	Government hospital
2B	Complex secondary	251	Government hospitals based on availability. On non-availability, treatment can be availed at private hospital on referral basis with patient’s choice.
3A	Tertiary	934	Government hospitals based on availability. On non-availability, treatment can be availed at private hospital on referral basis with patient’s choice.
4A	Emergency	171	Government or private hospital without any referral.
<b>Total</b>		<b>1650</b>	

**Table 3: Cumulative PreAuth contribution sector wise.**

Years	Government		Private		Total	
	N	Amount	N	Amount	N	Amount
<b>FY 2018-19 (Nov-18 to Mar 19)</b>	43954 (64%)	70.53	24306 (36%)	130.15	68260	200.7
<b>FY 2019-20</b>	495090 (83%)	386.57	101302 (17%)	475.97	596392	862.6
<b>FY 2020-21</b>	641953 (78%)	449.06	181534 (22%)	925.66	823487	1374.7
<b>FY 2021-2022</b>	1131015 (86%)	744.32	185949 (14%)	1062.15	1316964	1806.5
<b>FY 2022-23 (Till Nov, 2022)</b>	1318443 (93%)	664.87	105611 (7%)	399.77	1424054	1064.6
<b>Total</b>	3630633	2315	598525	2993.70	4229158	5309.1

**Table 4: Facility wise beneficiaries treated.**

Facility wise	N	Amount (in crores)
<b>District hospitals</b>	506410	343.59
<b>Medical colleges</b>	632926	578.83
<b>Super speciality hospitals</b>	191847	711.96
<b>Taluk hospitals</b>	1274122	465.31
<b>Community health centres</b>	537623	129.44
<b>Primary health centres</b>	487010	856.54
<b>Private hospital</b>	599220	2994.30
<b>Grand total</b>	4229158	5309.10

While PMJAY covered 1350 treatment packages, Karnataka through the integration included additional packages, a total 1650 treatment packages can be availed under any empanelled government or private hospital. And with the implementation of HBP 2022 shortly, the treatment packages will increase to 2743 (Table 2).

Karnataka is ranked first in the nation with the highest number of hospitals empanelled under the programme.<sup>17</sup> Since inception of the scheme, 42.29 lakh beneficiaries have been treated and Rs. 5309 crores have been spent on treatment as on November, 2022 of which 1.04 lakh are APL amounting to 35.9 crore and 41.24 lakhs are BPL amounting to 5273.2 crores (Table 3 and Figure 2).

As per Table 4, the scheme has strengthened the entire public health system and helped in better revenue generation to the hospitals.

### STATE SPECIFIC STRATEGIES

The department of health and family welfare, GoK has been unique in innovations towards strengthening PHIs using the AB-ArK platform. Through AB-PMJAY-ArK the State has launched various strategies to improve and strengthen the health system.

#### Online referral system

The physical referral has been recently upgraded to online referral system (ORS) for ease of referral, transparency and audit trail. With the aim of ensuring maximum healthcare coverage, to strengthen the PHIs and add more specialisation under the PHIs, from community health centres upto Taluk hospitals (TH) and district hospitals ORS was launched. Referral system is enabled for those procedures beyond the ringfenced 294 simple secondary procedures taken up at PHIs.

Referral can be provided to empanelled private hospitals for complex secondary and tertiary care procedures in the event that the procedure is not available on a given day based on capability module uploaded by the hospital. If a particular complex secondary or tertiary care procedure is not available in a peripheral hospital then the patient gets a referral to the district hospital (DH) or medical college

hospital (MC) or centre of excellence in the state capital which has the facility to perform the procedure. Only if it is not available in the nearby district hospital, then the hospital can provide a referral to any empanelled hospitals. In case of emergency procedures, patients can approach the PHIs or empanelled private facility without referral.

Karnataka is the first state to implement ORS for in-patient care. It is patient centric and ensures the patient receives a referral letter with the details of the hospitals empanelled for the particular specialization with the address, contact details and the distance of the hospital from the referring hospital. The referral letter is bilingual. (English and Kannada).

**Table 5: Speciality wise number of referrals.**

Speciality wise	N
<b>Urology</b>	2099
<b>Neurosurgery</b>	1455
<b>Medical oncology</b>	1408
<b>General surgery</b>	1091
<b>Cardiology</b>	969
<b>Orthopaedics</b>	925
<b>Radiation oncology</b>	813
<b>Surgical oncology</b>	649
<b>Cardiothoracic surgery</b>	590
<b>Neonatal and paediatrics</b>	538
<b>Ent</b>	421
<b>Obstetrics and gynaecology</b>	364
<b>Ophthalmology</b>	281
<b>Cardiovascular surgery</b>	78
<b>Dental and oral and maxillofacial surgery</b>	53
<b>General medicine</b>	41
<b>Burns</b>	22
<b>Interventional neuroradiology</b>	7
<b>Polytrauma</b>	7
<b>Mental disorders packages</b>	2
<b>Grand total</b>	11813

The referring facility cannot mention any specific hospital for referral in order to enable patients to approach

empanelled hospitals of their choice in an empowered manner. It prevents the unnecessary referrals as well as an unhealthy nexus of the government and private institutions. It also encourages enhancement of capacity of the medical college hospitals and autonomous institutions in the State. It helps to understand and prioritize the gaps in the government hospitals that need to be addressed. Due to the pandemic, the system has been operational since June 2022, receiving 11,813 referrals in total, of which 35.8% came from DH, 9.4% from MC, and 54.6% from TH.

The ORS also offers insight into the specialties that are most frequently referred to, providing information on both the regions and specialties that need to be strengthened and improved (Table 5).

### Ringfencing PHI's for exclusive simple secondary procedures

All 294 simple secondary procedures are conducted at PHC level to strengthen the PHC. It is implemented with novelty in classification of treatment packages and treating facilities reserving the primary health care and simple secondary care exclusively in the domain of PHIs, there by facilitating their growth as per the envisaged policy of state and centre.

### Simple secondary general procedures

The 40 treatment packages of the 294 are identified as simple secondary general procedures (SSGP) which can be performed by all MBBS doctors. Through this revenue is generated at all levels of PHIs and can also help potentially identify disease patterns in the community by rigorous documentation (Figure 3).

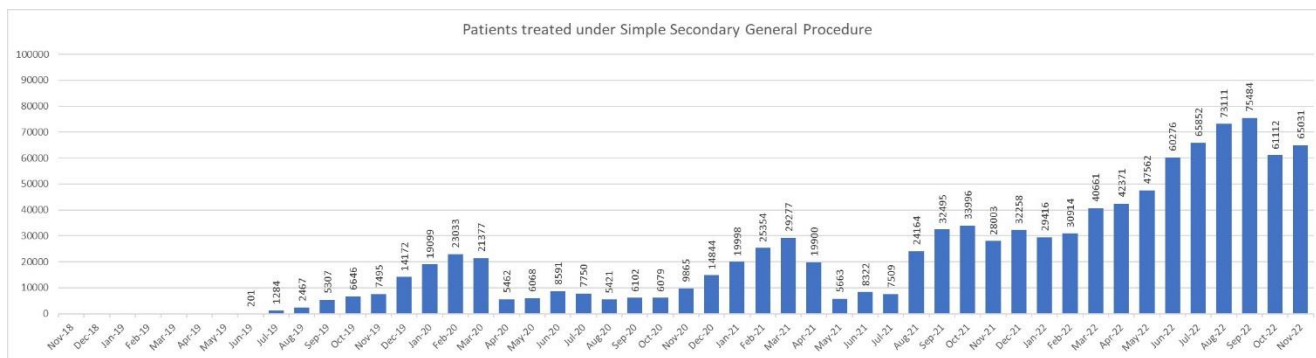


Figure 3: Impact of SSGP since inception.

\*SSGP affected during April 2020-Dec 2020 due to COVID 1<sup>st</sup> wave as only emergency services were active and May 2021- July 2021 due to 2<sup>nd</sup> wave.

### Universal empanelment of PHIs

Facilities from the primary level (i.e., PHC) up to the tertiary level is empanelled through the scheme, hence strengthening the entire public health system from grassroot level with 3386 hospitals empanelled under the scheme, of those, 2907 are public and 479 are private.

### Consideration of APL beneficiaries

First state in the country which pioneered the inclusion of APL beneficiaries also in the scheme design, to provide services to overall targeted 6 crores population, as early as March-18 before the launch of AB PM-JAY, true to the meaning of universal coverage.

### Claim executive

MC, DH and TH in Karnataka are PHIs with a high patient load and perform a large number of procedures. In the initial months of the scheme, the number of preauthorizations and claims uploaded by the PHIs were low and PHIs were unable to make use of the opportunity

to improve services provided. In order to have better health services, reduce loads on medical staff and ease patient services, a separate cadre of personnel called claims executives were deployed to upload claims under AB-Ark in the high load PHIs. The criteria are 1 for every TH, 2 for each DH with <400 Beds and 3 for DH and MC with ≥400 Beds.

It is a critical innovation which has helped improve the performance of the hospitals. They are the prime movers of not only resource generation of the facility but also facilitating the beneficiaries to access the right package of service and make hospitalization completely cashless in so far as treatment and investigations are concerned. There has been close to a three-fold increase in the performance of the MC, DH and TH. The time taken to upload claims has decreased. Until now, 239 claim executives have been appointed.

### Freelance data entry operator

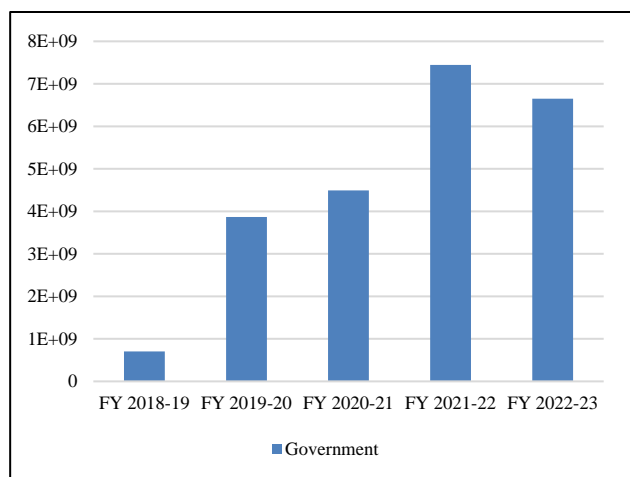
While we have claim executives at higher facilities, the medical staff would upload cases at the PHC and CHC

level, which increased workload and hampered service delivery. As a result, a freelance data entry operator (DEO) is deployed, funded by Arogya Raksha Samitis, to strengthen pre-registrations, reporting, and improve the performance of PHC and CHC.

**Team incentives (15-30%)**

Arogya Raksha Samitis (ARS) were set up in each of the government hospitals in order to improve community ownership, better efficiency and quality of government hospitals through untied funds in the late 1990s. In the last decade, there have been multiple accounts set up for each of the government hospitals for the development of the hospital and disbursement of salaries of those contractually engaged.

Shortly, a common accounting and monitoring software called the ARS accounts software developed by national informatics centre, Bangalore will be launched for the government hospitals to view and manage multiple accounts in the hospital, monitor multiple sources of revenue, divide incentives to the treating team in a quick, efficient, and transparent manner and plan the financial allocation of the hospital.



**Figure 4: Revenue flow in government sector.**

\*FY 2018-19: October 2018 to March 2019, FY 2022-23: April 2022 to November 2022.

With the aim to develop the capacities of the hospitals with better utilization of the additional revenue and improve the performance of the government hospitals, incentives upto 30% have been given to the treating team in government hospitals from the revenues received under

AB-ArK (30% for PHC, CHC and TH, 20% for MC and DH and 15% for tertiary facilities). Higher percentage of incentive is provided to the hospital in Taluk/ CHC/ PHC in order to encourage staff in the hospitals located farther away from the district headquarters to retain specialist. The revenue flow into the government hospitals has markedly increased with the implementation of the AB-ArK (Figure 4).

This effectively streamlines and simplifies the formerly complicated and time-consuming incentive division to hospital staff under AB-PMJAY-ArK. To aid hospital management in better planning and reducing needless expenses, all of the hospital's receipts and outlays are collected in one location making it simple to audit. To ensure monitoring and surveillance, dashboards are provided at the district and state levels. It has improved the financial systems at government hospitals, which is the first step in strengthening the health system. It can be utilized by government hospitals across India with state-specific customization.

**Green channel payment to PHIs**

With the view of providing in time revenue to the hospitals a green channel payment process developed by national health authority has been adopted whereby government hospital shall receive 50% of the amount during preauthorisation itself and remaining 50% post claim approval for simple secondary procedures. For other procedures, 25% is released in advance. So far, 3.75 lakhs claims are paid under green channel amounting to Rs.80.60 crores.

**Convergence with national programmes**

AB-PMJAY-ArK has converged with various national programmes and led to better and improved health outcomes such as national programme for control of blindness and visual impairment (NPCB and VI), reproductive, maternal, newborn, child and adolescent health (RMNCH+A), Rashtriya Bal Swasthya Karyakram (RBSK), national tuberculosis elimination program (NTEP), mental health, etc.

**COVID-19 treatment**

Apart from the existing 1650 treatment packages, additional packages were added for management of COVID-19 and treatment is being provided for COVID as well as severe acute respiratory infection (Table 6).

**Table 6: Treatment provided during COVID-19 sector wise.**

COVID	FY 2020-21		FY 2021-22		Total	
	N	Approved amount (Rs. in crores)	N	Approved amount (Rs. in crores)	N	Approved amount (Rs. in crores)
<b>Government</b>	66,185	107.1	82,916	140.2	1,49,101	247.3
<b>Private</b>	75,064	499.7	63,389	539.3	1,38,453	1039
<b>Grand total</b>	1,41,249	606.8	1,46,305	679.5	2,87,554	1286.3

### **Accident victims**

Accidents involving motor vehicles frequently require emergency medical attention/hospitalisation. Therefore, 76 life-saving treatment modalities are identified for which free, quick and immediate medical support and treatment are given to victims of road accidents during the golden hour (1 hour after accident) for up to 48 hours, up to a maximum of Rs. One lakh/victim every episode of admission to all empanelled hospitals. Any person involved in a traffic accident in Karnataka is eligible for treatment under the programme, regardless of BPL/APL status, place of residence/nationality.<sup>18</sup>

### **DISCUSSION**

In pursuit of improving the health of the world's population and end the scourge of the medically-related poverty, UHC has emerged as a major global health care policy aim.<sup>19</sup> Many welfare programmes are started with the best of intentions, but due to poor execution, lack of knowledge and poor coordination amongst organisations, they often fail to produce the desired results.<sup>20</sup> The AB-PMJAY-ArK, on the other hand, establishes the framework for a strong healthcare and insurance system with convergences throughout the State, from primary to tertiary level.

Empanelment of facilities is a vital component of every health insurance scheme in order to offer accessible and affordable care. In contrast to other states, Karnataka has the highest empanelled facilities, along with 500 private facilities.<sup>17,20</sup> A recent study in India's aspirational districts revealed that nine states had no private hospitals empanelled in any aspirational districts, and that aspirational districts had fewer hospitals accessible to deliver important tertiary care services than other districts.<sup>21-23</sup>

Its implementation will need a concurrent concentrated drive towards quality assurance, adequate governance, and suitable referral channels in both the public and private healthcare providers, according to a study by Angell et al.<sup>4</sup> Karnataka has successfully addressed these issues through the adoption of strong patient referral channels, quality audits of providers, incentives to enhance service efficiency and quality, and a general improvement of the public sector's capability.

### **CONCLUSION**

The opportunity to address persistent and deeply ingrained issues with governance, quality assurance, and stewardship is provided by AB-PMJAY-ArK for the country.

The foundation of every monitoring process and essential to the transparency and accountability of any health system is the availability of timely, reliable data in the public domain. The AB-PMJAY website (NHA and the

SHA portal) offers comprehensive facility-related data that could be useful for comprehending the nuances of scheme operation and advancement. Hospital financial systems are more organised, operated more efficiently and have motivated staff. It has resulted in prompt treatment, better health outcomes, patient happiness, increased productivity and efficiency, and the creation of jobs, all of which have improved quality of life.<sup>24</sup>

### **Recommendations**

The AB-ArK cell's comprehensive model has improved public health institutions' performance and serves as a model for states all across India in terms of how to successfully and sustainably execute health protection on an assurance basis. Each state can modify the current model to meet its unique needs. Hence having a dedicated cell will make it easier to access care, improve compliance, and provide quick assistance, improving national health indices and, more importantly, creating a bigger and better public health system.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

### **REFERENCES**

1. Goal 3: Ensure healthy lives and promote well-being for all at all ages SDG Indicators. Available at: <https://unstats.un.org/sdgs/report/2017/Goal-03/>. Accessed on 12 January, 2023.
2. Universal Health Coverage. WHO | Regional Office for Africa. Available at: <https://www.afro.who.int/health-topics/universal-health-coverage>. Accessed on 12 January, 2023.
3. Lahariya C. 'Ayushman Bharat' Program and Universal Health Coverage in India. *Indian Pediatr*. 2018;55:495-506.
4. Angell BJ, Prinja S, Gupt A, Jha V, Jan S. The Ayushman Bharat Pradhan Mantri Jan Arogya Yojana and the path to universal health coverage in India: Overcoming the challenges of stewardship and governance. *PLOS Med*. 2019;16:e1002759.
5. National health profile India 2021.pdf. Available at: <http://www.indiaenvironmentportal.org.in/files/file/national%20health%20profile%20india%202021.pdf>. Accessed on 12 January, 2023.
6. Mehra P. India's economy needs big dose of health spending. *Mint*. 2020. Available at: <https://www.livemint.com/news/india/india-s-economy-needs-big-dose-of-health-spending-11586365603651.html>. Accessed on 12 January, 2023.
7. Dhaka R, Verma R, Agrawal G, Kumar G. Ayushman Bharat Yojana: a memorable health initiative for Indians. *Int J Community Med Public Heal*. 2018;5:3152-3.

8. Press information Bureau Government of India. Ministry of Finance. Ayushman Bharat for a new India. 2022.
9. Selvaraj S, Farooqui HH, Karan A. Quantifying the financial burden of households' out-of-pocket payments on medicines in India: a repeated cross-sectional analysis of National Sample Survey data 1994-2014. *BMJ Open*. 2018;8:e018020.
10. Ayushman Bharat for a new India 2022, announced. Available at: <https://pib.gov.in/newsite/PrintRelease.aspx?relid=176049>. Accessed on 12 January, 2023.
11. National Health Authority. Available at: <https://setu.pmjay.gov.in/setu/>. Accessed on 12 January, 2023.
12. Arogya Karnataka GO-English.pdf. Available at: <http://arogyakarnataka.gov.in/sast/Details/Arogya%20Karnataka%20GO-English.pdf>. Accessed on 12 January, 2023.
13. karnataka\_integrated\_public\_health\_policy\_2017.pdf. Available at: <https://karunadu.karnataka.gov.in/hfw/kannada/documents/karnatakaintegratedpublichealthpolicy2017.pdf>. Accessed on 12 January, 2023.
14. G O AB-AK.pdf. Available at: <http://arogyakarnataka.gov.in/sast/details/G%20%20AB-AK.pdf>. Accessed on 12 January, 2023.
15. About AB\_ArK. Available at: <http://arogyakarnataka.gov.in/sast/english/index.php/site-map/2018-11-23-07-28-59/about-ab-ark>. Accessed on 12 January, 2023.
16. India-Census of India 2011, National Population Register and Socio Economic and Caste Census. Available at: <https://censusindia.gov.in/nada/index.php/catalog/42619>. Accessed on 12 January, 2023.
17. NHA. Setu Dashboard. Available at: <https://dashboard.pmjay.gov.in/pmj/#/>. Accessed on 12 January, 2023.
18. GO Accident victims.pdf. Available at: [https://morth.nic.in/sites/default/files/RA\\_2021\\_Compressed.pdf](https://morth.nic.in/sites/default/files/RA_2021_Compressed.pdf). Accessed on 12 January, 2023.
19. Chellaiyan VG, Rajasekar H, Taneja N. Pradhan Mantri Jan Arogya Yojana-Ayushman Bharat. 2020;32.
20. Joseph J, Sankar DH, Nambiar D. Empanelment of health care facilities under Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) in India. *Plos one*. 2021;16:e0251814.
21. Transformation-of-AspirationalDistricts-Primer-A-New-India2022.pdf. Available at: <https://www.niti.gov.in/sites/default/files/2018-12/Transformation-of-AspirationalDistricts-Primer-A-New-India2022.pdf>. Accessed on 12 January, 2023.
22. Policy Brief 3\_PM-JAY and India's Aspirational Districts (PRINT)WB. Available at: <https://www.niti.gov.in/aspirational-districts-programme>. Accessed on 12 January, 2023.
23. Policy Brief 9\_PM-JAY: The role of Private hospitals-November 2020. Available at: [https://pmjay.gov.in/sites/default/files/2020-11/Policy\\_Brief\\_9\\_Private\\_PM-JAY\\_201123\\_WB\\_NHA\\_R.pdf](https://pmjay.gov.in/sites/default/files/2020-11/Policy_Brief_9_Private_PM-JAY_201123_WB_NHA_R.pdf). Accessed on 3 June 2022.
24. Agrawal P, Chauhan AS, Pandey DC, Tiwari R. Ayushman Bharat for Inclusive Health Insurance in India: A Critical Review. *YTMER*. 2022;21(11):1483-92.

**Cite this article as:** Sancheti P, Shastri SG, Srinivas PK, Dayananda GG, Jayaprakash M, Gowda SNN, et al. Road to universal health coverage: unique model of Karnataka, India. *Int J Community Med Public Health* 2023;10:1947-54.