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Tamilnadu Chief Minister Comprehensive Health Insurance Scheme: A Rapid Review

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ABSTRACT

Health is viewed as one of the necessitous commodities for every individual and it is highly dependent on the government spending. Social insurance is the best choice for Universal Health Coverage and one such initiative by Tamil Nadu government is the Tamil Nadu Chief Minister Comprehensive Health Insurance Scheme (CMCHIS), inaugurated in 2009. This retrospective longitudinal study analyzed the secondary data given in official website and government reports to understand the utilization of the scheme. From the data of smart cards issued and pre-authorization count from 2009 to September, 2022, it was evident that the number of beneficiaries was low compared to the number of enrolments. Identifying the reasons for poor utilization need further study on this area.

Key words: Insurance, Beneficiaries, Comprehensive Health, Insurance Scheme, Government, Utilization, World Health Organization

Introduction

Health being a mandate for any country to prosper, World Health Organization (WHO) envisages the highest level of health to all countries.[1] This can be viewed in many ways like delivery of quality care, improving physical infrastructure, training, educating and recruiting adequate manpower in health sector, and focusing on preventive services. India is the capital for out of pocket expenditure for health, as huge population approach private players for healthcare services. Universal Health Coverage is viewed as a tool to lower the burden of financial impoverishment resulted by health.[2] With the advancement in science and technology, the more accurate diagnosis of a patient and optimum treatment comes with a high cost to the individual.[3] To prevent paying such exorbitant fees/ medical bills, we require an insurance, failure to which will push a common man to poverty.[4] As minimizing the out-of-pocket expenditure is essential for Universal Health Coverage, health insurance coverage for all is the only way to attain it.[5] Health is earmarked as a state government entity where funds from the Central government will be contributing for the successful implementation of the health policies or the centrally funded schemes will also play its role in improving the health index.

Insurance in simple terms is paying a premium to meet uncertainties. Insurance ensure benefits such as peace of mind, loss control and social benefits such as well maintained income and continuation in contributing to the national economy.[6] The parties involved in health insurance are policy holder and a third-party payer or government.

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Based on the policy, the premium paid ensures the reimbursement of the cost of treatment process including preventive care and especially during surgery and hospitalization.[7] Health insurance is meant to increase the utilization of health care services, decrease the healthcare cost and protection of individuals against high medical bill.[8] Public spending in India accounts to only 1.4 percent of GDP, whereas the global average is 6% of GDP. Though National Health Policy 2017 insists on 2.5 % of GDP to be spent on public health expenditure by 2025, High Level Expert Group Report on UHC in India estimate the public expenditure to 3% in 2021-2022 with a ratio of 2:1 from State and Central Government respectively. National Institute for Transforming India (NITI) Ayog classify states as Front runners, achievers and aspirants (aspirants with minimal score and front runners with maximum score) based on the population and assessment of its performance based on 24 health index indicators such as Under-five mortality rates, Total Fertility Rate, Sex ratio at Birth, Full immunization coverage, proportion of functional 24*7 PHCs, level of registration of births percent and so on.

Health systems of Tamil Nadu are one among the best three performers, along with Kerala and Telangana in the country as the health index score was 72.42.[9] There may be many reasons for the State to perform better than many other states. Implementation of the Public Health insurance scheme is one of the factors for the success. Better insurance coverage is an indicator of better health index, hence proved by a strong linear association between the factors among front runners.[10] But, in Andhra Pradesh and Telangana, near universal access for major surgeries still shows use lower than one-tenth of the estimated rate compared to the financial access provided by the government.[11] Though the percentage of awareness of health insurance is high, the enrollment is invariably low. This article examines the trend and usage of public health insurance scheme in Tamilnadu.

Objectives

Primary Objective

- To study the number of enrollments (smart cards issued) and the number of number of beneficiaries (who received pre-authorization for claim) in each district

Secondary Objectives

- To analyze the number of beneficiaries and the claim money sanctioned under CMCHIS.
- To examine the infrastructure available and the utilization of CMCHIS in each district.

Healthcare delivery in Tamilnadu

Tamilnadu comes under the category of larger states and its contribution in health care delivery system of our country is phenomenal. As per the National Family Health survey (NHS-5) 2019-21, the state showed progress in maternal and child care, delivery care, immunizations, infant and child mortality rates compared to NHS-4. The percentage of households with family member covered under a health insurance increased from 64.1% to 66.5%.[12]

CMCHIS: History and today

Chief Minister Comprehensive Health Insurance Scheme (CMCHIS) was introduced to the public on 23rd July, 2009, which covered 1.34 crore poor families in the state who can receive free treatment upto Rs. 1 lakh. Beneficiary can avail treatment at empanelled government and private facility based on the approval given to the facility to treat selected disease conditions. In 2012, it covered 1.58 crore families for whom annual income is less than Rs. 72000 per annum. In 2018, Government of India introduced Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY) which was merged with CMCHIS and extended benefits to 77.71 lakh families for which Union Government will pay 60% of premium. In January, 2022, the income ceiling to decide the eligibility was revised from 72000 to 120000 and the sum assured had an increase from Rs. 1 lakh to Rs. 5 lakh per family. Also, orphans certified by the State Government,

accredited journalists and periodical journalists' families were included in the scheme irrespective of their income level. One smart card for one family, which includes the eligible member and the members of his/her family as detailed below.

- Legal Spouse of the eligible person
- Children of the eligible person
- Dependent parent of the eligible person

Methodology

This retrospective longitudinal study accessed secondary data[13] given in CMCHIS official website since the inception of CMCHIS till September 2022. Data on infrastructure were extracted from the Rural Health Statistics report, 2021. Utilization ratio was calculated based on the number of smart cards issued and the pre-authorization approvals given in each district using Microsoft Excel.

Utilization of CMCHIS

Real-world data on health insurance are invaluable. It has a plethora of merits such as (a) evaluating the health outcomes in a real-world settings (b) application of results to a huge population (c) cost effective than other data collection methods (d) information from a wide range of demographics (e) time series data can lead to retrospective cohort studies (f) eliminating recall bias (g) consistent statistical methods because of large data size. Proper analysis of the claims data can arouse insights on health care trends, efficacy and effectiveness.[14] This research paper assesses the utilization of CMCHIS scheme in Tamil Nadu. Based on the distribution of smart cards (CMHIS enrolment card) in each districts, the number of pre-authorization approval count was considered till September 2022. Pre-authorization is the process of obtaining approval from the TNCMCHIS office for reimbursement for the patient before providing the treatment. Pre-authorization approved count is the total number of approvals given in each district. Pre-authorization amount is the money received as reimbursement by the hospitals for the treatment provided under the TNCMCHIS scheme. Pre-authorization amount approved for each patient is sufficient for the whole treatment process and the out-of-pocket expenditure done for more comfort will not be considered as direct cost for the treatment. Hence, ratio of the smart cards and the pre-authorization approval count was calculated, which showed an average of 0.36% and the district wise data is tabulated in Table.1

Table-1: Utilization of CMCHIS across the districts in Tamilnadu

Name of the District	Number of smart cards	Pre-authorization approved count	Pre-authorization approved Amount (in INR)	Utilization Ratio
Ariyalur	171459	45797	827937838	0.27
Chengalpet	456553	1949	30238620	0.00
Chennai	556121	352772	6109059312	0.63
Coimbatore	612890	234694	4929590114	0.38
Cuddalore	544581	146094	2599459993	0.27
Dharmapuri	336739	97286	1867026329	0.29
Dindigul	406629	146591	2863772014	0.36
Erode	546855	180964	3663722924	0.33
Kallakurichi	296501	2532	35439310	0.01
Kancheepuram	231704	294421	5047633647	1.27

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Name of the District	Number of smart cards	Pre-authorization approved count	Pre-authorization approved Amount (in INR)	Utilization Ratio
Kanyakumari	385064	162500	2488337345	0.42
Karur	229213	75041	1486532935	0.33
Krishnagiri	389358	87555	1648548349	0.22
Madurai	562834	242168	4457661783	0.43
Mayiladuthurai	168698	678	10134085	0.00
Nagapattinam	137268	85071	1622704046	0.62
Namakkal	364659	136512	2885195499	0.37
Nilgris	160144	39228	918243825	0.24
Perambalur	135861	53489	1018590846	0.39
Pudukkottai	322476	105797	1956232085	0.33
Ramanathapuram	269457	103062	1746689150	0.38
Ranipet	234016	2276	35656665	0.01
Salem	631487	252092	4987291775	0.40
Sivaganga	275664	110700	1848484286	0.40
Tenkasi	278828	2105	31958219	0.01
Thanjavur	467614	140536	2758847502	0.30
Theni	284893	97241	1872013958	0.34
Thiruvallur	627155	299209	4944776496	0.48
Thiruvannamalai	482861	177959	3105877486	0.37
Thiruvarur	271705	86699	1584610635	0.32
Tirunelveli	283864	191424	3258862332	0.67
Tirupattur	222908	910	15967597	0.00
Tiruppur	519681	150474	3209784878	0.29
Trichirappalli	494042	165565	3345536376	0.34
Tuticorin	290972	130811	2100012553	0.45
Vellore	268322	241514	4598577844	0.90
Villupuram	440943	246710	4225239290	0.56
Virudhunagar	393079	150258	2427008632	0.38
Total	**1,13,01,706**	**50,40,684**	**9256,32,56,573**	

Source: Ministry of Health and Family Welfare (Accessed on September, 2022)

As Ranipet, Tirupattur, Tenkasi, Kallakurichi districts and Mayiladuthurai were declared in 2019 and 2020 respectively, those districts showed 0.1 or less than one percentage which cannot be considered based on the usage duration. Though the scheme was introduced in 2009, by March, 2022 a total of 1,09,23,539 individuals enrolled, among that less than 50% of the population utilized and benefited by a treatment worth of Rs. 9,256 crore.

Findings: Table 1 showed that the number of beneficiaries opted for pre-authorization is too less as compared to the number of smart cards issued, which indicates the poor level of awareness among the public. The process

evaluation report of CMCHIS published in 2017 also admits that that many were unaware of how to utilize the card, although they are enrolled.[15]

Table- 2: Number of government healthcare facilities in each district of Tamilnadu

Sl. No.	Name of the District	(As on 31st March, 2021) Number of functional				
		Sub Centres	PHCs	CHCs	Sub-divisional Hospital	District Hospital
1	Ariyalur	117	33	6	3	0
2	Chengalpattu	221	41	8	7	0
3	Chennai	0	144	15	4	0
4	Coimbatore	328	77	12	12	1
5	Cuddalore	319	58	13	9	1
6	Dharmapuri	218	43	8	3	1
7	Dindigul	311	59	14	12	0
8	Erode	311	62	14	7	1
9	Kallakurichi	212	36	9	4	0
10	Kanchipuram	143	23	5	3	1
11	Kanniyakumari	267	38	9	8	1
12	Karur	168	29	8	6	1
13	Krishnagiri	239	51	10	6	0
14	Madurai	314	75	13	7	1
15	Mayiladuthurai	147	26	5	6	0
16	Nagapattinam	111	21	6	5	0
17	Namakkal	240	48	15	8	0
18	Perambalur	90	25	4	3	1
19	Pudukkottai	242	63	13	12	1
20	Ramanathapuram	244	48	11	9	0
21	Ranipet	163	29	7	4	1
22	Salem	398	87	20	11	1
23	Sivaganga	275	40	12	16	1
24	Tenkasi	177	42	10	8	1
25	Thanjavur	309	63	14	13	1
26	The Nilgiris	194	33	4	5	0
27	Theni	162	33	8	5	1
28	Thiruvallur	303	54	14	11	0
29	Thiruvarur	195	40	10	7	1
30	Tiruchirappalli	307	70	14	9	1
31	Tirunelveli	202	43	9	8	0
32	Tirupathur	134	31	6	4	0
33	Tiruppur	242	54	13	9	0
34	Tiruvannamalai	410	81	18	9	1
35	Tuticorin	253	48	12	8	1
36	Vellore	157	39	7	4	0
37	Villupuram	345	52	13	7	0
38	Virudhunagar	245	47	11	10	0
	Total Districts = 38	**8713**	**1886**	**400**	**282**	**20**

Source: Rural Health Statistics report, 2021

As Vellore, Tirunelveli and Chennai are the second, third and fourth maximum benefited districts respectively, those districts do not have a district hospital but teaching hospital. Kanchipuram which is the top performer in CMCHIS do not have a teaching hospital, but district hospital (Table 2). Improving the service of district hospital will help the teaching hospital to focus on tertiary care and also it can act as a bridge to overcome the geographical barrier.[16] India, being globally known for its private healthcare system, Chennai having maximum number of private players, it stood only fourth rank in the number of beneficiaries. Evidently, the utilization of CMCHIS is also not co-related with the physical infrastructure.

Discussions

Though the insurance scheme covers diagnostic procedures, expenses in the hospital and post-hospitalization, it was not opted by the public. The primary objective of government funded insurance scheme is not just reducing the out of pocket expenditure, but, cashless service. In India, on an average, an individual without any health insurance admitted to a public hospital has to spend Rs. 3994 which is only 20 percent of total cost incurred by a patient in a private hospital. Despite the fact many choose private providers due to high service quality, less waiting time and accessibility.[17]

Health researchers view the shortage of human resources and infrastructure as reasons for increase in the out-of-pocket expenditure on health in states which have government-funded insurance schemes.[18] In Tamilnadu, we have adequate infrastructure, where we need optimum human resources in the government facilities for appropriate use of the infrastructure. Government can also relate the health index of the district with its utilization rate of CMCHIS. Other demographic factors of each district to be explored to identify the reasons for poor utilization of CMCHIS. A recent study suggested a dynamic list to identify the aspirational districts and villages should be prepared to know the areas of additional focus to achieve Sustainable Development Goal by 2030.[19] Similar lists on the coverage and utilization of CMCHIS would be much helpful to focus on the areas which need more interventions. As both Central and State governments provided adequate infrastructure and implemented the insurance scheme, other measures to ease the process of enrolment and claim settlement in a user friendly manner can be introduced. In countries like Vietnam and Philippines, government gave options to non-poor to enroll in subsidized insurance premium voluntarily,[20] providing such options in our state will be beneficial to lower middle income population who are ineligible in the current policy based on their income.

Conclusions

The three common reasons for farther healthcare assured in India can be attributed to minimal public investment, lack of trust in all the healthcare industry organizations and ineffective stewardship which lead to fragmented healthcare sector as the coordination between central and state government is poor.[21] In this situation, setting up a comprehensive health insurance scheme for a populous state like Tamilnadu has undoubtedly required heroic effects. With the efforts and initiatives taken by Government of Tamil Nadu and considering the corpus fund of Rs. 35 Crore and other investments, the outcome of CMCHIS can be further improved. A case study on utilization of health insurance scheme in Kerala revealed that 42% of the respondents utilized the scheme and 97.3% of the respondents enrolled in the scheme through a self-help group, Kudumbasree.[22] The same can be applied in Tamilnadu, where government has to seek the help of self-help groups to promote enrollment and utilization can be improved by introducing referral system in the self-help group. Successful implementation of CMCHIS demands a continued commitment to ensure the fundamental right of healthcare to all.

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