### Health Care Utilization and Out-of-Pocket Expenditure by Older Persons in India

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The older persons are living longer, and it is important to ensure that they lead a healthy. Health is the single most important determinant of the quality of life. The utilization of health care services is equally important which is governed by many factors. With advancing age, ill health becomes a major hindrance for the well-being of older persons. The National Programme for Health Care of the Elderly (NPHCE) provides accessible, affordable and high-quality long-term care services to the older persons in India. The Ayushman Bharat National Health Protection Scheme is one of the largest government-funded health insurance schemes, launched in 2018. In 2024, this is expanded to cover all senior citizens aged 70 years and above, regardless of their income level. The study aims to examine healthcare expenditure by type of disease, health care facility, and economic strata of older persons, especially among 70+ years using LASI data. The mean expenditure for hospitalization is much higher for the richer older persons, however, older persons from the bottom forty percentile quintile of MPCE also had to spend Rs. 27,111 in private facilities. Moreover, it is even higher than the richer older persons incurring hospitalization in a public health facility.

# Introduction

Population ageing is an inevitable and irreversible demographic reality resulting from declining fertility, reduction in mortality and increasing survival at older ages. The age structure of the Indian population is changing with demographic transition, exhibiting an increase in both the share and number of older persons (60 years and above). As on 1 July 2024, there are 157 million 60-plus persons in India, comprising around 10.8 percent of its population, a share that is expected to double by 2050 (reaching 20.6 percent), with an absolute number of 346 million.<sup>4</sup>

The longevity in India is increasing due to improvements in general health of the population. As a result, an older person is expected to live for another 18 years after reaching age 60. As we live longer, it is important to ensure that the older persons are able to lead a healthy and fulfilling life.

Health is the single most important determinant of the quality of life among older persons. While health status is determined by various economic, social, physiological psychological factors, the utilization of health care services is equally important, which in turn is governed by many factors including knowledge, affordability, availability, and accessibility of the health services. With advancing age, ill-health becomes a major hindrance for the well-being of the elderly.

The Ministry of Health and Family Welfare launched National Programme for Health Care of the Elderly (NPHCE) during in 2011 to provide accessible, affordable and high-quality long-term care services to the older persons of India, which also supports them for hospitalization.

Health insurance of senior citizens is also a priority area for the government. Pradhan Mantri Jan Arogya Yojana (PMJAY), also referred to as Ayushman Bharat National Health Protection Scheme, is one of the largest government-funded health insurance schemes, launched in 2018. It aims to provide free access to health insurance coverage for low-income earners across the country. The scheme provides a health cover of ₹500,000 per family per year for secondary and tertiary care hospitalization to over 107.4 million poor and vulnerable families (approximately 500 million beneficiaries) that form the bottom 40 percent of the Indian population.

In 2024 (on 11 September), the government approved a major expansion of the PMJAY to cover all senior citizens aged 70 years and above, meaning that anyone in this age group to be eligible for health insurance, regardless of their income level. This expansion aims to address the healthcare needs of the elderly, who

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<sup>&</sup>lt;sup>4</sup> World Population Prospects (2024 Revision), United Nations Department of Economic and Social Affairs.

often face higher medical expenses as they age. There are many families which are already covered and have senior citizens. In such families, additional coverage, top-up coverage will be Rs 5 lakh.

By lifting income restrictions, the government is ensuring that more senior citizens can benefit from much-needed health coverage, which will help ease the financial burden of healthcare. It is expected that the scheme will covers an additional 6 crore individuals from 4.5 crore families, focusing on seniors aged 70 and above. Each senior citizen will be given a health card, allowing them easy access to healthcare services under the scheme. The scheme provides Rs 5 lakh coverage annually per family. If there are multiple senior citizens in the same family, this coverage is shared among them. Older persons who are part of other public health schemes will need to choose between their current insurance and the new scheme.

## **Objective**

The main objective of the paper is to analyze in-patent and out-patent care expenses by the older persons in India with a focus on their morbidity / disease pattern and economic strata they belong to. The specific objectives are:

- 1. To examine expenses incurred for out and in patient care by the older person according to type of morbidity / diseases
- 2. To investigate gradient of health care expenses especially by the economic strata of the older persons
- 3. To establish a benchmark on the out-of-pocket expenses for the universal insurance scheme for the older persons above 70 years of age announced by the government in 2024

# **Data and Methodology**

The study is based on the analysis if unit level data of the Longitudinal Ageing Survey in India (LASI), conducted during 2017-18. This is a nationally and state representative longitudinal study of ageing and health. Its main goal is to provide valid, reliable and continuous scientific data on the health, social, mental and economic well-being of India's older adults (45 years and above) population. LASI is undertaken as a globally harmonized study carried out in more than 44 developed and developing countries worldwide; and the survey schedules, protocols and methodologies are harmonized across these countries. LASI is undertaken under the aegis of the Ministry of Health and Family Welfare (MoHFW), Government of India. The International Institute for Population Sciences (IIPS), Mumbai is the nodal institution for implementing LASI.

### **Findings**

#### In and Out-patient Care by Older Persons

The morbidity and diseases are clearly linked with the advancement of age so as expenses related to health care utilization. The higher prevalence of diseases and consequently higher expenditure makes the older persons as well as their households more vulnerable unless they are being covered by the government programmes or any health insurance coverage. As is evident from Tabel – 1, 7.9 percent of the older persons above the age 60 years were hospitalized during one year prior to the survey, which was higher among those 70 years and above at 8.8 percent. Although the hospitalization was seen higher among those belonging to richer and richest monthly per capital income (PMCE) quintile, the study later examines the expenses incurred by these economic gradients of the older persons. Even in terms of seeking out-patient care, higher percentage of older persons above 70 years, higher percentage of those belonging to higher MPCE quintile received out-patient care.

Table-1: Percentage of older adults who utilized out-patient care and inpatient care in one year prior to survey by background characteristics, India, LASI Wave 1, 2017-18

	Inpatient care				Outpatient care			
Background characteristics	60-69 years	70+ years	Total	Number	60-69 years	70+ years	Total	Number
Place of residence								
Rural	7.2	8.4	7.7	20725	60.0	58.8	59.5	20725
Urban	7.8	9.5	8.6	10739	55.5	63.1	58.7	10739
Sex of Respondent								
Male	8.0	8.7	8.3	15098	56.6	59.7	57.9	15098
Female	6.8	8.8	7.6	16366	60.5	60.4	60.4	16366
MPCE quintile								
Poorest	5.4	5.3	5.4	6484	52.1	53.6	52.7	6484
Poorer	6.4	7.4	6.8	6477	59.0	59.8	59.4	6477
Middle	6.5	7.9	7.1	6416	59.3	60.7	59.9	6416
Richer	6.7	10.7	8.4	6170	60.1	65.0	62.1	6170
Richest	12.9	14.2	13.4	5917	64.2	62.4	63.5	5917
Total	7.4	8.8	7.9	31464	58.7	60.1	59.2	31464

### Morbidity / disease among Older Persons

The major reason for seeking outpatient treatment was on acute diseases among the older persons. These include communicable diseases, skin, tuberculosis, fever, urinary tract infection etc. and round 28-30% of the older persons aged 60-69 and 70+ years respectively received treatment (Table -2). This was followed by chronic diseases such as cancer, diabetes, heart problem and stroke, for which 20-23% of the older persons received outpatient care. Urban residents, especially in the 70+ age group, are notably more likely to seek care for chronic diseases (33.3%) compared to rural residents (18.9%). Bone diseases occupy third position and around 15 to 18% of them sought treatment for this while another 11% received outpatient care for other reasons including generalized pain, follow up from any surgery and nutritional malfunctions.

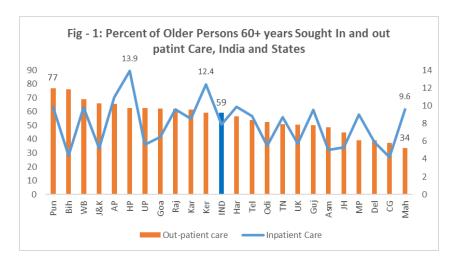
Table - 2: Percent distribution of older adults who received out-patient care in one year prior to survey by various diseases according to age group, sex and place of residence, India, LASI Wave 1, 2017-18

Age 60-69 years					Age 70+ years					
	Place of 1	esidence		Sex		Place of residence		Sex		
Type of disease	Rural	Urban	Male	Female	Total	Rural	Urban	Male	Female	Total
Chronic diseases*	15.7	32.0	19.7	20.5	20.2	18.9	33.3	24.1	22.0	23.0
Respiratory	5.3	5.5	7.0	4.0	5.4	7.2	4.8	7.8	5.3	6.5
Bone disease	16.5	12.7	12.4	18.0	15.5	14.2	17.4	12.4	17.7	15.1
Gastrointestinal	5.8	4.2	6.1	4.7	5.4	6.4	3.4	5.7	5.5	5.6
ENT	3.0	3.0	2.8	3.1	3.0	2.8	2.4	2.4	3.0	2.7
Neuro and Psychiatric condition	0.8	0.8	0.9	0.8	0.8	0.7	0.4	0.7	0.6	0.6
Eye Disease	2.9	3.0	3.0	2.9	2.9	3.4	3.4	3.1	3.7	3.4
Vector Born Disease	2.0	0.9	1.8	1.5	1.7	1.5	0.8	1.3	1.3	1.3
Acute disease#	32.7	25.1	32.2	29.3	30.6	30.4	22.3	28.3	27.9	28.1
Injury/Accident	3.5	3.0	4.1	2.7	3.3	3.3	2.1	2.8	3.2	3.0
Other Diseases\$	11.8	9.7	9.9	12.4	11.3	11.2	9.6	11.6	10.0	10.8
Number	6,339	3,407	4,356	5,390	9,746	4,222	2,282	3,156	3,348	6,504

\* Includes cancer, diabetes, hypertension, problem with heart and stroke. # Includes communicable diseases, skin, tuberculosis, fever, urinary tract infection etc. \$ includes generalized pain, follow up from any surgery and nutritional malfunctions.

# State Differentials in Health Care by Older Persons

The findings on state wise health care sought for out-patient care indicate a much higher percentage of older persons (77%) in Punjab and Bihar (Fig -1), followed by West Bengal, Jammu & Kashmir and Andhra Pradesh (65 - 69%) than the national average of 59%. In Chhattisgarh and Maharashtra, this percentages were lowest (34 - 37%). As far as in-patient care is concerned, it was found highest in Himachal Pradesh (14%) followed by Kerala (12%) and Andhra Pradesh (11%).



#### Expenditure on Health Care by Older Persons

The out-of-pocket expenses vary by type of disease and also by type of facility being a private or public. Mean out-of-pocket expenditure by the older persons 60 years and above was Rs. 32,029 for hospitalization in private facility which is four times higher than expenditure in a public facility at Rs. 8,152 (Table -3). A higher mean expenditure for those belonging to 70+ years was noticed for hospitalization in both private and public facility. The highest expenditure was incurred by the older persons for chronic diseases both in public or private facilities, which is followed by for injury and accidents. Strikingly abdominal causes also accounted for a sizable mean expenditure, and this caused higher expenses by older persons 70+ in public health facility as compared to private facility. Moreover, mean expenditure for injury and accident was quite high (Rs. 32,047) even in public facility by 70+ years older persons as compared to their counterparts in age group 60-69 years.

Table - 3: Mean out-of-pocket expenditure (in ₹) of older adults on inpatient care (last hospitalization) in one year prior to survey by type of disease

	Age 60-69 years		Age 70+ years		Total Ag	e 60+ years
Type of disease	Public	Private	Public	Private	Public	Private
Chronic diseases	10437	46990	10389	47078	10410	47028
Respiratory	4955	45844	8315	15328	6787	32488
Bone disease	5727	24912	8844	40825	7420	30828
Gastrointestinal	5643	19892	5502	18092	5591	19015
Abdominal Causes	9178	27992	37167	33359	20344	30717
Neuro and Psychiatric condition	2562	21628	3051	14237	2714	19166
Vector Born Disease	3029	11789	1207	57743	2167	22793
Acute disease	3398	15607	4361	18766	3948	17369
Injury/Accident	8478	29865	32047	45232	16744	37500
Other Diseases	8690	31734	13019	37934	11264	33611
Number	6272	31436	10245	32763	8152	32029

For out-patient care, the mean out-of-pocket expenses was relatively lower than hospitalization, as usual. For the older person 60 years and above, it comes out to be 1,585 for private facility and Rs. 859 in a public health facility (Table -4). This was higher for those above 70 years of age with Rs. 1607 and Rs. 1053 in private and public facilities, respectively. It was highest for eye related disease in private hospital (Rs. 3,225) and for Gastrointestinal diseases in public health facilities (Rs. 1,117).

Table - 4: Mean out-of-pocket expenditure (in ₹) of older adults on Outpatient care (last hospitalization) in one year prior to survey by type of disease

	Age 60-69 years		Age 70+ years		Total Age 60+ year	
Type of disease	Public	Private	Public	Private	Public	Private
Chronic	942	2220	818	1987	891	2118
Respiratory	633	1686	643	2136	637	1892
Bone disease	710	1394	846	1224	760	1319
Gastrointestinal	1419	2197	710	1883	1171	2073
ENT	408	1236	710	1407	490	1296
Neuro and Psychiatric condition	401	1823	656	2115	522	1922
Eye Disease	1296	3423	509	2908	871	3225
Vector Born Disease	862	1630	1402	2138	1079	1776
Acute disease	449	842	480	1104	461	941
Injury/Accident	771	1648	1119	3772	928	2413
Other Diseases	670	1486	4221	1091	2030	1338
Total	733	1570	1053	1607	859	1585

#### Out-of-Pocket Expenditure for Health Care by MPCE category of Older Persons

Table – 5 brings out mean out-of-pocket expenses by the bottom 40 percentile of MPCE category as compared to the richer quintile of more than 80 percentile for hospitalization. The expenditure has been much higher in private facility for the richer older persons (Rs. 40,220) as they could afford it, but even for those older persons above 70 years of age belonging to the poorest or poorer category, had to spend Rs. 27,111 in private hospital, which is even higher than the richer persons incurring hospitalization in a public health facility.

Table - 5: Mean out-of-pocket expenditure (in ₹) of older adults on inpatient care (last hospitalization) in one year prior to survey by type of disease and MPCE Category by Older Persons 70 Years and above

	Bottom 4	40% PMCE	Richer 80	+% MPCE
Type of disease	Public	Private	Public	Private
Chronic	4806	44579	16925	63071
Respiratory	4837	19952	19834	21171
Bone disease	11689	51035	7758	43947
Gastrointestinal	1756	21780	7422	22765
Abdominal Causes	6709	22822	110933	32626
Neuro and Psychiatric condition	928	8016	3960	24294
Vector Born Disease	685	50000	2630	38371
Acute disease	2475	7984	11990	18803
Injury/Accident	3253	28210	6156	53952
Other Diseases	8134	18133	12365	43825
Total	3884	27111	18423	40220

For out-of-pocket expenses for out-patient care seem to be higher for richer persons availing services in a public health facility (Rs. 4,290) than in the private health facility (Table -6). For the older persons

70 years and above from the bottom 40 percentile category had a mean expenditure of Rs, 1090 in the private sector and Rs. 443 in public sector health facilities. For the poorer older persons, a higher mean expenditure was seen for vector borne diseases followed by neuro conditions and injury and accidents.

Table - 6: Mean out-of-pocket expenditure (in ₹) of older adults on Outpatient care in one year prior to survey by type of disease and MPCE Category by Older Persons 70+ years

	Bottom	40% PMCE	Richer 8	0+% MPCE
Type of disease	Public	Private	Public	Private
Chronic	366	1709	2003	3092
Respiratory	272	1321	1313	3422
Bone disease	401	919	1431	1744
Gastrointestinal	618	1039	993	2095
ENT	395	709	1002	2502
Neuro and Psychiatric condition	519	2212	605	2632
Eye Disease	376	836	1790	8830
Vector Born Disease	456	3414	4079	2003
Acute disease	471	725	996	1494
Injury/Accident	799	1662	3101	6728
Other Diseases	449	754	30658	1896
Number	443	1090	4290	2730

The study findings clearly indicate that there are state differentials in hospitalization and utilization of out-patient health care by the older persons in India, which has implications for roll out the newly launch Ayushman Bharat schemes in these states on priority basis. Similarly, attempt should be made to reach out to the vulnerable older persons belonging to poorest and poorer strata of the society to reduce out-of-pocket expenses on health care by covering them in the insurance scheme. This will go a long way in improving the overall well being of the older persons in the country.