

Making Health Insurance Responsive to Citizens to Improve Enrolment and Utilization: Learning for Universal Health Insurance in Pakistan

Nabila Kunwal¹

<https://doi.org/10.62345/jads.2025.14.3.156>

Abstract

Health utilization largely depends on both demand and supply-side factors, where affordability is critical, especially for the poor segments. The Sehat Sahulat Program (SSP) is a breakthrough in Pakistan that aims to provide free indoor health services to the population. The present study has analyzed the factors that can adversely impact the utilization of indoor health services, including challenges related to enrolment, communication, awareness, and other supply-side factors. Besides conducting in-depth interviews with supply-side stakeholders, the study also conducts a household survey with the beneficiaries. The analysis reveals that the program still has a catch-up potential where a significant population is not enrolled in the program, and many of them are deprived of treatment. We consider that the program should opt for a co-payment formula to create a health insurance market in the country. To better utilize the program, a comprehensive consultative process among stakeholders is required to address design and operational inefficiencies.

Keywords: Sehat Sahulat Program, Health Insurance, Communication and Awareness.

Introduction

Equity in health and health care is a guiding principle in health policy documents that everyone receives fair and affordable health services, especially the poor and vulnerable (Levesque et al., 2013). The primary function of a country's health system is to protect the population from catastrophic health expenses by providing affordable health services (Rahman et al., 2013). In many low-income countries, limited public health infrastructure and weak health financing mechanisms compel households to rely heavily on out-of-pocket (OOP) payments for health care (Vujicic et al., 2016). Such expenditures disproportionately burden poorer households and often lead to chronic poverty traps (Bredenkamp et al., 2010).

Globally, countries adopt different health financing arrangements to reduce financial barriers to care. High-income countries typically rely on tax-financed or insurance-based systems that pool health risks across populations (Eling, 2020; Finkelstein et al., 2012). In contrast, low-income countries remain heavily dependent on OOP payments due to limited fiscal space, a large informal economy, weak insurance markets, and institutional constraints. Broadly, health financing approaches can be categorized into supply-side models, which focus on publicly provided services, and demand-side models, which aim to improve access through insurance-based mechanisms (Hills et al., 1994; Kulesher &

¹Research Fellow, Pakistan Institute of Development Economics (PIDE), Islamabad. Email: biya@pide.org.pk



Forrestal, 2014). Where public provision is insufficient, publicly financed health insurance has increasingly been adopted to enhance financial protection and service utilization. Several developing countries have introduced public health insurance schemes to expand coverage among poor and vulnerable populations, including India, Ghana, Kenya, and South Africa.(Kazungu & Barasa, 2017; Van Der Wielen, et al., 2018; Thakur, 2016) While these programs have improved financial protection, evidence consistently shows that enrolment and utilization remain below potential due to weak awareness, limited access to empaneled facilities, and operational and design challenges. Studies from South Asia highlight that poor communication and limited beneficiary understanding significantly constrain utilization even when insurance coverage exists (Jehangir, 2015; Thakur, 2016). The effectiveness of public health insurance programs, therefore, depends not only on financial coverage but also on information dissemination, awareness, and the removal of both demand- and supply-side barriers (Philip et al., 2016; Rao et al., 2016; Sood & Wagner, 2018). Demand-side constraints include limited awareness, social and cultural norms, and difficulties in navigating health systems, while supply-side barriers include geographic access, denial of services, limited availability of empaneled hospitals, and administrative complexities (Capuno et al., 2016; Setswe et al., 2015; Wagstaff et al., 2016). Evidence suggests that consistent communication, user-friendly systems, and effective grievance redressal mechanisms play a critical role in improving the utilization of insured services (Kotoh et al., 2018).

Against this background, Pakistan presents a relevant case. The country has historically relied on OOP payments as the dominant mode of health financing, exposing households to significant financial risk. In response, the Government of Pakistan introduced the Sehat Sahulat Program (SSP) to provide free inpatient health services and reduce catastrophic health expenditures. Despite rapid expansion toward universal coverage, emerging evidence indicates that enrolment awareness and utilization of inpatient services under the SSP remain below expected levels.

This study examines the factors constraining effective enrolment and utilization of inpatient services under the SSP. Using household survey data, administrative records, and qualitative interviews with key stakeholders, the paper assesses the program's potential role in reducing catastrophic poverty, estimates utilization gaps and associated financial losses, analyzes household willingness to contribute through co-payment mechanisms, and identifies demand- and supply-side constraints that limit effective access. The findings aim to inform policy reforms for making universal health insurance more responsive to citizens in Pakistan.

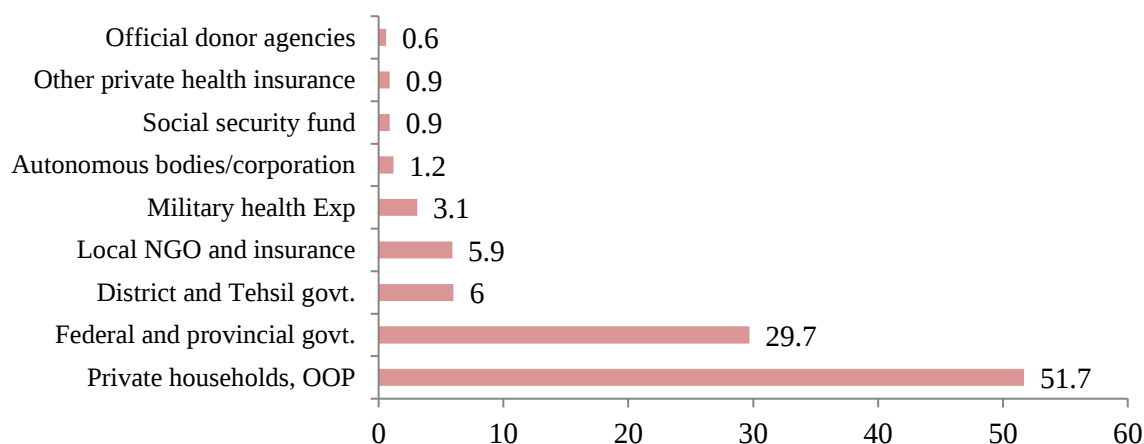
Pakistan's Health Insurance Program

Pakistan has historically relied heavily on out-of-pocket (OOP) payments to finance health care, reflecting limited public health spending and weak risk-pooling mechanisms. As a result, health-related expenditures have remained a major source of financial shock for poor and vulnerable households. To address these challenges, the Government of Pakistan launched the Sehat Sahulat Program (SSP) in 2015 to provide financial protection against inpatient health expenditures.

The program initially targeted poor and vulnerable households identified through the Benazir Income Support Program database and was implemented in selected districts. In 2021, the SSP was expanded toward universal health insurance coverage, extending eligibility to all citizens and allowing access to inpatient services using the national identity card (CNIC). Benefits are provided at the household level, covering parents and unmarried children. As of December 2023, the program was operational in 140 districts,

covering approximately 193 million individuals, and had recorded more than 14.9 million inpatient admissions since inception.

Figure 1: Sources of Health Financing in Pakistan (%)



Source: GoP., National Health Accounts, 2018

Under the SSP, eligible families are entitled to inpatient care through predefined benefit packages, with annual coverage limits of PKR 120,000 for secondary care and PKR 600,000 for priority or tertiary care. Coverage includes hospitalization, diagnostic tests, surgical procedures, physician fees, and medicines during admission, along with a transport allowance at discharge. Services are provided through empaneled public and private hospitals, with package rates varying by hospital type and location.

Institutionally, the SSP operates as a federal–provincial joint initiative. The federal government provides overall policy direction and technical oversight, while provincial governments supervise implementation within their jurisdictions. Program operations including hospital empanelment, claims management, front-desk operations, and grievance handling are managed by the State Life Insurance Corporation (SLIC), with data support and beneficiary feedback facilitated by NADRA. The roles and responsibilities of key stakeholders are summarized in Table 1.

Despite its rapid expansion and substantial fiscal commitment, evidence suggests that inpatient utilization under the SSP remains below expected levels. This raises important policy questions regarding whether universal coverage alone is sufficient to ensure effective access, or whether design, communication, and service delivery constraints limit the program’s impact. These issues are examined in detail in the subsequent analysis.

Table 1: Roles and Responsibilities of SSP Stakeholders

Department	Role in SSP operation
Federal SSP	Overall custodian of program through policy formulation and provision of technical assistance
Provincial Health Departments	Provincial custodian of program by supervising all operational activities
NADRA	Provide updated family level data, and manage an out-bound call center to acquire feedback from discharged patients
State Life Insurance Corporation (SLIC)	Sole insurance company to manage all operational responsibilities including hiring of empanel hospitals, manage front desk in hospitals, resolve all grievances related to enrolment and treatment, manage an in-bound call center to address queries of public and to register complaints.
Empanel hospital	Provide in-door health services on agreed packages by charging no money on admission, lab tests, surgery, doctor fee, medicine etc. Also, provides transport fare (PKR 1,000) at discharge and 05 days medicine.

Data and Methodology

Data Description

This study employs a mixed-methods approach combining secondary data analysis with primary qualitative and quantitative data collection to examine enrolment, utilization, and effectiveness of the Sehat Sahulat Program (SSP). The analysis addresses four objectives: (i) assessing the potential role of publicly financed inpatient health insurance in reducing catastrophic health expenditures and poverty; (ii) estimating inpatient utilization gaps and associated financial losses; (iii) examining household willingness to contribute to health insurance financing; and (iv) identifying demand- and supply-side determinants of enrolment awareness and service utilization.

Secondary data are drawn from the 2018/19 Household Integrated Economic Survey (HIES), a nationally and provincially representative survey that captures household consumption, poverty status, and out-of-pocket (OOP) health expenditures. A dedicated health module enables estimation of catastrophic health payments and poverty impacts. Administrative data from the SSP provide district-level information on enrolment, inpatient utilization, empaneled hospitals, and premium payments.

Primary data include qualitative interviews with key supply-side stakeholders at federal, provincial, and district levels covering SSP management, provincial health departments, NADRA, the State Life Insurance Corporation (SLIC), district medical officers, hospital management, and front-desk officers and a quantitative household survey conducted in 25 districts in 2021.

Sampling Design

A two-stage stratified sampling design was employed. Villages or urban blocks were selected as Primary Sampling Units (PSUs), and households as Secondary Sampling Units (SSUs). A total of 4,114 households were interviewed across 273 PSUs, with 15 households randomly selected from each PSU. The sampling framework was developed in collaboration with the Pakistan Bureau of Statistics to ensure provincial representation, rural–urban balance, and regional heterogeneity. (Table 2). The survey was conducted in 2021.

Table 2: Sample size for Household Survey (in Numbers)

Province/region	Total	Rural	Urban	PSUs
AJK	656	525	131	44
Gilgit Baltistan	666	533	133	44
Balochistan	514	437	77	34
ICT	306	153	153	20
Khyber Pakhtunkhwa	450	297	153	30
Punjab	960	634	326	64
Sindh*	562	281	281	37
Total	4,114	2,860	1,254	273

* The program is operational only in one district Tharparker

Methodology

Out-of-pocket health expenditures are defined as catastrophic when they constitute a large share of household consumption and compromise the household's standard of living. The share of OOP health expenditures is defined as:

$$OOP_i = Ti/TE_i * 100 \quad (1)$$

Where

OOP_i = percentage share of health expenditure in total household expenditures

T_i = household expenditure on health

TE_i = total expenditures of a household

Following standard practice, two thresholds are used to define catastrophic health expenditures:

- (i) OOP payments exceeding 10 % of total household consumption, and
- (ii) OOP payments exceeding 40 % of non-food household consumption.

The incidence (headcount) of catastrophic health expenditure is calculated as:

$$H = 1/N \sum_{i=1}^N E_i \quad (2)$$

where:

$E_i = 1$ if $OOP_i > z_{(cat)}$, otherwise 0

$z_{(cat)}$ = catastrophic threshold

N = total number of households

To capture the intensity of catastrophic payments, the catastrophic payment gap (CPG) is estimated as:

$$CPG = 1/N \sum_{i=1}^N O_i \quad \text{where} \quad O_i = E_i [(T_i/TE_i)z_{cat}] \quad (3)$$

However, both incidence (H) and intensity (O) are related through the mean positive gap (MPG) which is defined as follows:

$$MPG = O/H$$

Utilization Framework and Benchmarking

The second research question examines whether health insurance coverage improves inpatient utilization. Utilization depends on both demand- and supply-side factors. The analysis draws on the Tanahashi framework, which distinguishes between nominal (potential) and effective (actual) coverage by identifying gaps between service availability and service use (Bhaudin, 2018).

Within this framework, access to health care is conceptualized along four dimensions: availability, geographic accessibility, affordability, and acceptability (Jacobs, et al., 2012). Barriers to utilization may arise from the demand side such as limited awareness, social norms, and inability to navigate health systems (O'Donnell, 2007) or from the supply side, including geographic constraints, service denial, administrative complexity, and quality of care issues (Ensor & Cooper, 2004; Peters et al., 2008). Rather than detailing all potential barriers, this study focuses on those most relevant to insurance-based service delivery, including information gaps, hospital availability, selective service provision, and operational constraints. These factors help explain why insurance coverage may not translate into effective utilization.

Ideally after instating of the SSP, the utilization rate from insurance schemes should improve and public should avoid the self-financed inpatient services. However, it still the citizens are self-financing the inpatient health services from their own pockets due to multiple reasons, it would be the loss of public resources and ultimately the beneficiary is insurance company. The 2018/19 HIES can provide the benchmark of inpatient utilization rates, although still the poor may hold a less utilization rate due to affordability issues. However, we use these rates and applied the same on program. Using the average cost per patient, we have calculated the public financial losses due to underutilization of inpatient health services.

In addition to utilization benchmarking, the analysis examines whether universal premium financing is justified. The household survey includes a module on willingness to pay annual health insurance premiums under alternative benefit scenarios, which is used to assess the feasibility of introducing co-payment or contributory mechanisms for households with greater ability to pay.

Finally, the study examines determinants of enrolment awareness and knowledge of program features using regression analysis. Two models are estimated. In the first model, the dependent

variable captures whether a household is aware that it is enrolled in the Sehat Sahulat Program and is specified as:

$$Enrol_i = \alpha_0 + \alpha_1 Hh_i + \alpha_2 Media_i + \alpha_3 Reg_i + \mu_i \quad (4)$$

$$Know_i = \alpha_0 + \alpha_1 Hh_i + \alpha_2 Media_i + \alpha_3 Reg_i + \mu_i \quad (5)$$

In Equation (1), the dependent variable indicates whether a household is aware of its enrolment in the program. In Equation (2), the dependent variable captures knowledge of key program features. This knowledge index is constructed using five components: identification of the institution managing the program, awareness of the annual benefit ceiling, knowledge of the nearest empaneled hospital, awareness that only inpatient treatment is covered, and knowledge of the required documentation for accessing services.

On the right-hand side, Hh_i represents household characteristics, including gender of household head, education within the household, and the presence of a chronically ill or disabled member. $Media_i$ captures exposure to media through television ownership and internet use, while Reg_i denotes household location (urban or rural). Since the dependent variable in Equation (1) is binary, a logistic regression model is applied. Equation (2) is estimated using an ordered logistic regression model, as the knowledge index ranges from 0 to 5 with equal weights assigned to each component.

Analysis and Findings

Potential Role of Health Insurance in Reducing Poverty

The first objective of the analysis is to assess the potential role of publicly financed health insurance in reducing catastrophic health expenditures and poverty in Pakistan. Using data from the 2018/19 Out-of-Pocket (OOP) Health Expenditure Survey and the Household Integrated Economic Survey (HIES), the analysis examines the incidence and intensity of catastrophic health payments and their implications for household welfare.

Per capita annual OOP health expenditure is estimated at PKR 3,098, with total national OOP spending of approximately PKR 650 billion. Although outpatient care accounts for the largest share of health spending, inpatient care involves substantially higher per-patient costs across all provinces (Table 3). On average, OOP health payments constitute about 5 % of total household consumption, with relatively similar shares across consumption quintiles.

Table 3: Per Person Annual Cost by Type of Type of Healthcare Accessed (in PKR)

Province	Inpatient	Outpatient	Self-Medication
Khyber Pakhtunkhwa	85,645	13,118	6,471
Punjab	46,067	10,859	2,208
Sindh	72,297	6,966	653
Balochistan	49,364	7,982	489
National	59,624	10,352	1,614

Source: estimated from 2017 OOP micro dataset

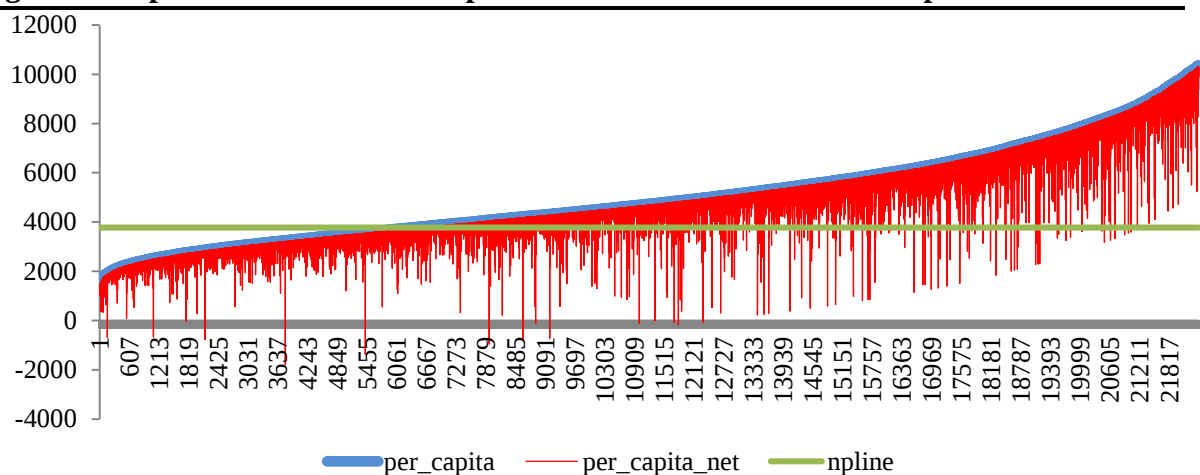
At a threshold of 10% of total household consumption, approximately 13 % of households incur catastrophic health expenditures (Table 4). While the incidence declines at higher thresholds, the intensity and mean positive gap increase, indicating severe financial stress among affected households.

Table 4: Incidence and Intensity of Catastrophic Health Payments

Threshold	Incidence	Intensity	Mean Positive Gap
<i>OOP health expenses as share of total consumption (in %)</i>			
5%	28.4	2.6	9.1
10%	12.8	1.6	12.8
15%	7.1	1.1	16.3
20%	4.6	0.9	19.1
<i>OOP health expenses as share of non-food consumption (in %)</i>			
25%	8.4	2.2	26.3
30%	6.4	1.8	28.9
35%	4.9	1.6	31.7
40%	3.9	1.3	34.8

Source: Estimated from 2018/19 OOP and HIES micro dataset

Poverty estimates before and after excluding OOP health expenditures show that health spending pushes a significant proportion of households below the poverty line. National headcount poverty increases from 21.5 % to 29.4 % after accounting for health expenditures.

Figure 2: Impact of OOP Health Expenditures on Household Consumption

Source: Estimated from 2018/19 OOP and HIES micro dataset

To evaluate the poverty impact of health payments, consumption-based poverty measures are estimated before and after excluding OOP health expenditures. The Pen's Parade analysis illustrates that a significant proportion of households are pushed below the poverty line as a result of health-related spending (Figure 2).² Focusing specifically on inpatient care, which is covered under the Sehat Sahulat Program (SSP), excluding inpatient OOP payments reduces national headcount poverty by 4.7 percentage points. Table 5. Similar reductions are observed across rural and urban areas, highlighting the substantial potential of publicly financed inpatient health insurance to protect households from catastrophic health shocks provided that insured services are effectively utilized.

²Pakistan follows a consumption based poverty approach, named as cost of basic need (CBN) approach where the poverty line meets the basic needs including food (2,350 caloric intake) and non-food consumption.

Table 5: Potential role of SSP in Reducing Poverty (in %)

Measures	Pre-payment head count	Post payment head count	Poverty impact PI=net-gross
<i>Both Inpatient and Outpatient</i>			
National	21.5	29.4	7.9
Rural	27.6	37.1	9.5
Urban	10.7	17.2	6.5
<i>Inpatient only</i>			
National	19.6	24.3	4.7
Rural	25.7	30.7	5.0
Urban	9.1	13.5	4.4

Source: estimated from 2018/19 OOP and HIES micro dataset

Is Insurance Helpful in Improving Inpatient Utilization Rate?

A central objective of publicly financed health insurance is to improve utilization of inpatient services by removing financial barriers to care. Evidence from the 2018/19 HIES shows that, prior to the SSP, inpatient utilization in Pakistan was strongly associated with household welfare. Overall inpatient utilization was 4.3 %, rising from 2.7 % in the poorest quintile to 5.7 % in the richest quintile. (Table 6). Lower utilization among poorer households reflects both affordability constraints and non-financial barriers.

Table 6: Health Utilization Rates by Type of Healthcare Accessed and Quintile (in %)

Quintile	Inpatient	Outpatient	Self-Medication
1st	2.7	56.6	16.0
2nd	3.9	64.9	16.4
3rd	4.3	72.2	18.5
4th	4.9	79.9	18.7
5th	5.7	91.4	20.8
Overall	4.3	73.0	18.1

Source: estimated from 2018 OOP and HIES micro dataset

Despite the expansion of the SSP toward universal coverage, inpatient utilization under the program remains below these benchmarks. Administrative data for 2023 indicate that only 2.6 % of registered beneficiaries utilized inpatient services nationwide (Table 7). Even after accounting for provincial variation, observed utilization falls well below the benchmark rate of 5–6 % suggested by pre-insurance utilization patterns. The national utilization gap is estimated at approximately 3.1 percentage points.

Table 7: Health Utilization Rate in the Sehat Sahulat Program and Utilization Gap Year 2023

Province	Families (in million)	Number of Beneficiaries (in million)	Inpatient Admission (in 000)	Annual Utilization Rate (in %)	Utilization Gap*
AJK	1.54	5.24	140.80	2.69	3.01
Gilgit Baltistan	0.37	1.28	44.78	3.50	2.20
ICT	0.28	0.92	25.69	2.79	2.91
Khyber Pakhtunkhwa	9.60	31.20	739.90	2.37	3.33
Punjab	32.00	107.32	2,984.54	2.78	2.92
Sindh***	0.38	0.95	10.38	1.09	4.61
Balochistan	2.00	6.71	**		
National	46.17	153.62	3,946.09	2.57	3.13

* the gap is calculated by assuming the inpatient utilization of top quintile (5.7%) and SSP utilization

** the program was started in November 2023

*** the program is operational only in one district Tharparker out of 30 districts

Source: Information were provided by Sehat Sahulat Program

The underutilization led to significant financial losses as well as the left-out losses where a person has to receive inpatient treatment by financing him/herself although his/her premium was paid by the government. Our estimates reveal that around 4.4 million potential inpatients were left out that costed around PKR 266 billion by excluding the analysis of Balochistan (Table 8). Ultimately it has benefited the insurance company. The program must have to address a number of loopholes at the design, policy and operational level.

Table 8: Health Utilization Rate in the Sehat Sahulat Program 2023

Province	Number of Persons that has been Left Out	Approximate Cost of Left Out (in billion)
AJK	158	9.5
Gilgit Baltistan	28	1.7
ICT	27	1.6
Khyber Pakhtunkhwa	1,039	62.3
Punjab	3,133	188.0
Sindh**	44	2.6
Balochistan	***	***
National	4,428	265.7

Note: left out gap is calculated by assuming the inpatient utilization of top quintile (5.7%) and SSP utilization

** the program is operational only in one district Tharparker out of 30 districts

*** the program was started in November 2023

Source: Information were provided by Sehat Sahulat Program

Program Challenges: Design, Access, and Service Delivery Constraints

Despite its ambitious scope, the Sehat Sahulat Program (SSP) faces several demand- and supply-side challenges that limit effective utilization of insured inpatient services. These challenges relate to program design and governance, enrolment and access barriers, service delivery constraints, and weaknesses in grievance redressal mechanisms.

Design and Governance Constraints

The SSP operates in the absence of a comprehensive national health financing framework. Although health is a provincial subject, consensus among provinces on the program's long-term design and financing remains limited. While Punjab, Khyber Pakhtunkhwa, AJK, and Gilgit-Baltistan participate in the program, Sindh has adopted a limited rollout, and AJK and GB continue to rely heavily on federal financing. Weak intergovernmental coordination constrains harmonized implementation and undermines program effectiveness.

Another design concern is the reliance on a single insurer. The State Life Insurance Corporation (SLIC) holds a nationwide monopoly over SSP operations, limiting incentives to improve service quality, expand provider networks, and strengthen grievance redressal. SLIC's dual role in service delivery oversight and complaint handling also raises concerns about conflicts of interest in grievance resolution.

Service Delivery and Hospital-Level Challenges

Supply-side constraints further restrict inpatient utilization. The number of empaneled hospitals remains limited relative to population needs, particularly in remote and underserved regions. As shown in (Table 9), only a small proportion of public and private hospitals are empaneled nationwide, with substantial provincial variation. In several districts, beneficiaries have access to only one empaneled hospital, limiting choice and weakening accountability. Field evidence indicates selective service provision by hospitals, with preference for treatments that offer higher reimbursement margins. Instances of service denial, non-availability of

medicines, and informal referrals to private facilities were reported. Limited availability of hospital front desk officers outside regular working hours further constrains access, especially for emergency admissions.

Operational challenges are exacerbated by weak integration between SSP and NADRA databases. Delays in updating family composition such as changes following marriage often result in temporary exclusion of newly eligible individuals. These administrative frictions undermine beneficiary trust and discourage service utilization.

Table 9: Province-Wise Empanel Hospitals

Province	Total public hospitals (numbers)	Total private hospitals (numbers)	Public empaneled hospitals (numbers)	Private empaneled hospitals (numbers)	% of public empaneled hospitals	% of private empaneled hospitals
Punjab	317	4,000	124	411	39	10
KP	214	400	42	119	20	30
AJK	25	23	9	10	36	43
GB	41	25	5	5	12	20
ICT	9	16	2	9	22	56
Balochistan	83	10	0	0	0	0
Sindh	146	502	2	14	1	3
Total	835	4,976	184	568	22	11

Note: the number of public and private hospital is still under-reported

Source: Provincial Annual Statistics and SSP Hospital database

Enrolment and Documentation Barriers

The program offers health insurance to all the citizens as per design, still a significant population lacks CNI/B-form and hence they cannot avail the inpatient services. The latest Census shows that around 18% of the adults lack NIC (10% male and 26% female) as found by the 2017/18 Census. Similarly, a significant percentage of children lack birth registration (Table 10).

Table 10: % of Adult having CNIC and Children having Birth Registration

Province	CNIC (aged 18 & above)*		Birth Registration (children under 5 years)	
	Male	Female	Boys	Girls
KP	93	78	30	29
Punjab	91	76	75	75
Sindh	86	71	34	32
Balochistan	82	62	44	41

Source: Population Census 2017*, Multiple Indicator Cluster Survey at provincial level (2017-18 Punjab, 2018-19 Sindh, 2019-20 KP, 2019-20 Balochistan)**

These documentation gaps disproportionately affect women, children, and residents of poorer provinces, limiting effective coverage despite nominal eligibility.

Household survey results further reveal substantial gaps in enrolment awareness. Many households are unaware of their enrolment status or key program features, despite being eligible. Multivariate analysis indicates that awareness is significantly higher among households with better education, media exposure, urban residence, and the presence of chronically ill members (Table 11). These findings highlight the role of information asymmetries in limiting effective utilization.

Table 11: The Determinants of Knowledge about Program

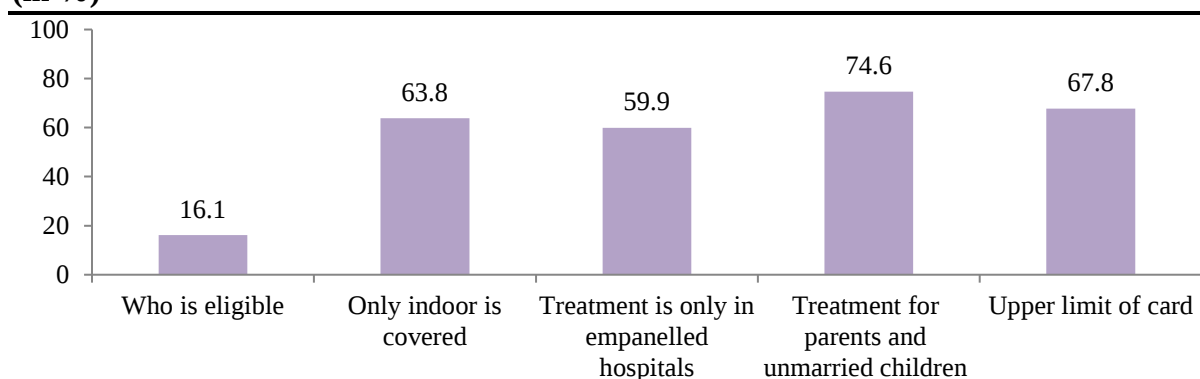
Correlates	Knowledge that Family is Registered in program by Logistic Regression		Knowledge about various Features of Program by Ordered Logit Model	
	Odds Ratio	Std. Error	Odds Ratio	Std. Error
Sex of household head (male=1)	1.215***	0.127	1.237**	0.132
Education in home (illiterate/below primary as reference)				
6 to 10 grades	1.246**	0.140	1.930***	0.268
11 grade and above	2.246***	0.299	2.297***	0.458
TV in home (yes=1)	1.597**	0.368	1.409***	0.044
Use of social media (Yes=1)	3.460***	0.611	4.120***	0.613
Presence of chronically sick and/or disabled person (yes=1)	1.411***	0.038	1.135**	0.132
Urban (yes=1)	1.778**	0.131	1.878**	0.174
Constant	0.321***	0.098	0.821***	0.173
Pseudo-R ²	0.17		0.182	
Number of Observations (N)	4,089		4,089	

***significant at 1%, ** significant at 5%, * significant at 10%

Source: Estimated from Household Survey 2021/22 micro dataset

Communication and Grievance Redressal Challenges

The program is quite comprehensive, however, it lacks a robust communication strategy for the households. We found that overall citizens have poor knowledge about various features of program, i.e., only 37% have the right knowledge that who is running program, 16% of the respondents did not know who is eligible and should be part of the program, 64% did not know that only indoor treatment is covered, 60% did not know that treatment can be taken only in empaneled hospitals; 75% did not know that treatment is only for parents with unmarried children; and 68% was unaware of the upper financial limit of the card.

Figure 3: Proportion of beneficiaries' lack of clear knowledge about features of program (in %)

Source: Household Survey 2021

The absence of district- or tehsil-level SSP offices further constrains access to information. Except for hospital-based front desks, there are no in-person facilities where beneficiaries can seek guidance, resolve queries, or lodge complaints. Although a call center exists, public awareness of this service remains limited. Communication efforts are largely supply-driven and episodic, while informal channels such as word-of-mouth dominate information flows, often reinforcing misconceptions and local myths about the program.

As a result, a notable proportion of eligible individuals remain unable to utilize inpatient services when needed. The household survey indicates that approximately 6.4 % of respondents faced barriers to inpatient care. Of these, 4 % did not visit a hospital despite requiring inpatient treatment due to lack of information, documentation issues, or distance to facilities, while 2.4 % visited empaneled hospitals but were unable to receive services because of database errors, non-availability of treatment, or denial of services.

Operational Challenges

The operational challenges are multiple. *First*, there are a limited number of empanel hospitals and they are opting a ‘pick and choose’ behavior. Denial of services was also reported by patients and hospital management, and hence they offer treatment only in that sickness where they have a profit (i.e., surgery) and avoid treating the medical patients. The SSP package bounds hospitals to provide medicine during in-door treatment but we found that medical stores were not open 24/7, making people buy medicines from their pocket. In some districts, there is only one empanel hospital and despite complaints against it, the authority has no option to close its services. We also found that HFOs lack proper information about the program. They usually available in the daytime and there could be a denial of services if a patient visits the hospital at night are on the weekend when HFO is not present.

Both the AJK and GB lack a single tertiary empanel hospital and there is only one empanel hospital in a number of districts or the empanel hospitals have sub-standard facilities. The SSP registration data is not live integrated with NADRA. If a girl gets married, she may have to wait six months after the NADRA database is updated. Ideally, the SSP must be integrated with the NADRA database and any up-dation should automatically be available in the SSP database. Similarly, newly married couples cannot avail the health services as they are part of separate families.

Weak Grievance Redressal System

The SSP provides multiple channels for complaint registration, including an online portal, an inbound call center managed by SLIC, an outbound feedback mechanism operated by NADRA, and postal submissions. However, grievance management lacks institutional capacity and effective oversight.

Complaints are largely managed manually using spreadsheets, without a standardized taxonomy, automated complaint management system, or clearly defined investigation procedures. Approximately 17 % of genuine complaints such as reports of bribes, denial of services, and non-payment of transport allowances were marked as “acknowledged” without investigation. In many cases, complaints were classified as “resolved” or “invalid” without verification, raising concerns of conflict of interest, as SLIC simultaneously manages operations and grievance resolution.

Technical limitations further weaken grievance handling, including the absence of complaint tracking numbers, limited call monitoring, lack of caseload analysis, and insufficient capacity to handle regional languages. The SSP also lacks a dedicated monitoring and evaluation framework to periodically review grievance data, particularly complaints reported as resolved, undermining accountability and beneficiary confidence.

Willingness to Co-Payment and Financing Sustainability

While the SSP has expanded financial access to inpatient care, the current model where the government pays insurance premiums for the entire population raises serious concerns regarding fiscal sustainability. This approach has led to duplication in public health spending, as inpatient services in public hospitals continue to be financed through regular health budgets alongside insurance premiums.

Table 12: Household's Willingness to pay Annual Premium (% distribution)

Amount (in PKR)	Inpatient Treatment with PKR 300,000 limit	Inpatient Treatment with PKR 600,000 limit	Inpatient Treatment with limited OPT with PKR 300,000 limit	Inpatient Treatment with limited OPT with PKR 300,000 limit
No amount	23	23	23	23
Upto 1,000	19	14	16	9
>1,000-2,000	30	18	26	22
>2,000-3,000	8	14	11	12
>3,000-4,000	9	15	10	14
>4,000-5,000	6	6	5	8
>5,000 & above	5	10	9	12
Total	100	100	100	100

Source: Information were provided by Sehat Sahulat Program

Household survey evidence shows that nearly one-fourth of respondents are unwilling to pay any premium, primarily due to affordability constraints and religious considerations. However, a substantial proportion of households expressed willingness to contribute toward insurance premiums, with the amount varying by income level and the scope of benefits offered (Table 12). These findings indicate scope for introducing a differentiated financing model.

International experience suggests that no low-income country fully finances universal health insurance premiums. Given that national headcount poverty in Pakistan is approximately 21 %, a targeted subsidy approach is more appropriate. Under such a framework, the government could fully subsidize premiums for the poorest 30 % of households, provide partial subsidies for lower- and middle-income groups, and require higher-income households to pay full premiums. The government's role should shift toward regulation and oversight, rather than full financial responsibility.

Currently, the government pays approximately PKR 200 billion annually in insurance premiums at an average rate of PKR 4,350 per family. Estimates suggest that a contributory model focused on poor and vulnerable households could reduce public expenditure to PKR 60–70 billion, while expanding risk pooling and minimizing duplication in public health spending (Table 13). Such reforms would improve both the efficiency and long-term sustainability of the SSP.

Table 13: Health spending and Estimated amount Required for Health Premium Payment

Province	Govt. spending on health (in billion Rs.)*	Total health spending (in billion Rs.)*	Expected number of families based on Census 2017/18	Estimated cost at various premium trajectories (in billion Rs.)	
				Current Rs. 4,350 per family	Estimated Rs. 6,000 per family
KPK	64.8	173.6	10.0	43.5	60.0
Punjab	240.4	612.6	32.0	139.2	192.0
Sindh	95.7	276.6	10.0	43.5	60.0
Balochistan	5.5	71.9	2.0	8.7	12.0
GB	0.6	0.6	0.4	1.6	2.2
AJK	N/A	6.1	1.5	6.7	9.2
ICT	1.1	9.7	0.3	1.2	1.6
Unregionalised	61.4	61.4	-	-	-
Total	469.5	1212.5	56.2	244.3	337.0

* Govt. spending includes federal and provincial, armed forces, local government, public sector zakat, etc. Source: National Health Accounts, 2017/18

Conclusion

This study assessed the performance of Pakistan's Sehat Sahulat Program (SSP) by examining enrolment, utilization, and financing through a combination of household survey data, administrative records, and qualitative field evidence. The findings demonstrate that publicly financed inpatient health insurance has substantial potential to reduce catastrophic health expenditures and poverty. Excluding inpatient out-of-pocket payments lowers national headcount poverty by nearly five percentage points, underscoring the protective role of effective health insurance.

However, this potential remains only partially realized. Despite near-universal coverage on paper, inpatient utilization under the SSP is significantly below expected levels. A sizeable utilization gap persists, resulting in foregone health benefits for eligible households and inefficient use of public resources.

Key Drivers of Underutilization

The analysis identifies both demand- and supply-side constraints that limit effective use of insured services. On the demand side, weak awareness of enrolment status and program features, documentation barriers related to CNICs and birth registration, and rural–urban disparities reduce effective coverage. On the supply side, limited empanelment of hospitals, selective service provision, administrative rigidities, and weak grievance redressal mechanisms undermine access and beneficiary trust. These constraints prevent the translation of nominal insurance coverage into actual service utilization.

Financing and Sustainability

The current financing model where the government pays insurance premiums for the entire population raises concerns regarding fiscal sustainability, particularly in the presence of parallel public financing of inpatient services in public hospitals. Evidence from the household survey indicates that a substantial proportion of households is willing to contribute toward health insurance premiums, especially for more comprehensive benefit packages. This suggests scope for introducing a differentiated financing model that combines full public subsidies for poor and vulnerable households with contributory mechanisms for households with greater ability to pay.

Way Forward

To enhance effectiveness and sustainability, the SSP needs to transition from a focus on nominal coverage to effective access. This requires integration of the program into a broader national health financing framework, reduction of duplication in public health spending, and clearer federal–provincial coordination. Strengthening community-level communication, expanding and regulating empaneled hospital networks particularly in underserved areas and improving data integration with civil registration systems are critical to improving utilization. Finally, robust monitoring, evaluation, and grievance redressal mechanisms are essential to ensure accountability and protect beneficiary rights.

Overall, while the Sehat Sahulat Program represents a significant step toward universal health coverage in Pakistan, its success depends on addressing structural and operational constraints that limit utilization. A shift toward effective coverage and sustainable financing can enable the SSP to better respond to citizens' needs and deliver meaningful health and welfare gains.

Acknowledgements

We acknowledge the support of Health Service Academy (HSA), World Health Organization and Federal Sehat Sahulat Program (SSP) for their overall strategic guidance and for

facilitating the provision of necessary secondary data. We acknowledge their support in linking with various stakeholders and actors of the SSP, including NADRA, State Life Insurance Corporation (SLIC), provincial Health Departments, empanel hospitals and many other actors.

References

- Annear, P. L., Lee, J. T., Khim, K., Ir, P., Moscoe, E., Jordanwood, T., Lo, V. (2019). Protecting the poor? Impact of the national health equity fund on utilization of government health services in Cambodia, 2006-2013. *4*(6), e001679.
- Bawa, S. K., & Ruchita, M. (2011). Awareness and willingness to pay for health insurance: an empirical study with reference to Punjab India. *Int J Humanit Soc Sci*, *1*(7), 100-108.
- Bhaudin, K. I. (2018). *Quality Of Care Provided To Adolescents Aged 10 Upto 19 Years In Kenyatta National Hospital, Nairobi, Kenya*. University of Nairobi,
- Bredenkamp, C., Mendola, M., & Gragnolati, M. (2010). Catastrophic and impoverishing effects of health expenditure: new evidence from the Western Balkans. *Health policy and planning*, *26*(4), 349-356.
- Capuno, J. J., Kraft, A. D., Quimbo, S., Tan Jr, C. R., & Wagstaff, A. (2016). Effects of price, information, and transactions cost interventions to raise voluntary enrollment in a social health insurance scheme: A randomized experiment in the Philippines. *Health economics*, *25*(6), 650-662.
- Devadasan, N., Seshadri, T., Trivedi, M., & Criel, B. (2013). Promoting universal financial protection: evidence from the Rashtriya Swasthya Bima Yojana (RSBY) in Gujarat, India. *Health Research Policy and Systems*, *11*(1), 1-8.
- Din, M. U., Mashhadi, S. F., Khan, S. A., Zubair, S., Khan, A., & Hussain, S. J. T. P. M. J. (2022). Sehat Sahulat Program: Assessing the awareness and utilization effectiveness of Sehat Insaf Card among the general population of District Rawalpindi. *29*(07), 1061-1066.
- Eling, M. (2020). Financing Long-term Care: Some Ideas From Switzerland: Comment on "Financing Long-term Care: Lessons From Japan". *International Journal of Health Policy and Management*, *9*(1), 39.
- Ensor, T., & Cooper, S. (2004). Overcoming barriers to health service access: influencing the demand side. *Health policy and planning*, *19*(2), 69-79.
- Farooq, S., & Masud, F. (2021). Catastrophic Health Expenditure and Poverty in Pakistan. *The Pakistan Development Review*, *60*(1), 27-48.
- Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, J. P., & Oregon Health Study Group. (2012). The Oregon Health Insurance Experiment: Evidence from the first year. *The Quarterly Journal of Economics*, *127*(3), 1057–1106. <https://doi.org/10.1093/qje/qjs020>
- Forman, R., Ambreen, F., Shah, S. S. A., Mossialos, E., & Nasir, K. (2022). Sehat sahumat: A social health justice policy leaving no one behind. *7*.
- Fujita, M., Sato, Y., Nagashima, K., Takahashi, S., & Hata, A. (2017). Impact of geographic accessibility on utilization of the annual health check-ups by income level in Japan: A multilevel analysis. *PloS one*, *12*(5), e0177091.
- GoP, G. o. P. (2013). *National Health Accounts 2013/14*. Retrieved from Pakistan Bureau of Statistics
- Hills, J., Ditch, J., & Glennerster, H. (1994). *Beveridge and social security: An international retrospective*: Oxford University Press.
- Jacobs, B., Ir, P., Bigdeli, M., Annear, P. L., & Van Damme, W. (2012). Addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian countries. *Health policy and planning*, *27*(4), 288-300.
- Jehangir, D. N. a. F. (2015). Beneficiaries' experience, satisfaction and hospital utilization under Benazir Income Support Programme's Waseela-E-Sehat Scheme. In *A report prepared by PIDE with the financial support of GIZ*.
- Kazungu, J. S., & Barasa, E. W. (2017). Examining levels, distribution and correlates of health insurance coverage in Kenya. *Tropical Medicine & International Health*, *22*(9), 1175-1185.

- Kotoh, A. M., Aryeetey, G. C., & Van Der Geest, S. (2018). Factors that influence enrolment and retention in Ghana's National Health Insurance Scheme. *International journal of health policy and management*, 7(5), 443.
- Kulesher, R., & Forrestal, E. (2014). International models of health systems financing. *Journal of Hospital Administration*, 3(4), 127-139.
- Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *International journal for equity in health*, 12(1), 18.
- O'Donnell, O. (2007). Access to health care in developing countries: breaking down demand side barriers. *Cadernos de saude publica*, 23, 2820-2834.
- Peters, D. H., Garg, A., Bloom, G., Walker, D. G., Brieger, W. R., & Hafizur Rahman, M. (2008). Poverty and access to health care in developing countries. *Annals of the new York Academy of Sciences*, 1136(1), 161-171.
- Philip, N. E., Kannan, S., & Sarma, S. P. (2016). Utilization of comprehensive health insurance scheme, Kerala: a comparative study of insured and uninsured below-poverty-line households. *Asia Pacific Journal of Public Health*, 28(1_suppl), 77S-85S.
- Rahman, M. M., Gilmour, S., Saito, E., Sultana, P., & Shibuya, K. (2013). Health-related financial catastrophe, inequality and chronic illness in Bangladesh. *PloS one*, 8(2), e56873.
- Rao, M., Singh, P. V., Katyal, A., Samarth, A., Bergkvist, S., Renton, A., & Netuveli, G. (2016). Has the Rajiv Aarogyasri Community Health Insurance Scheme of Andhra Pradesh Addressed the Educational Divide in Accessing Health Care? *PloS one*, 11(1), e0145707.
- Rath, P., Mukherji, A., & Sen, G. (2012). Rashtriya Swasthya Bima Yojana: evaluating utilisation, roll-out and perceptions in Amaravati district, Maharashtra. *Economic and Political Weekly*, 57-64.
- Setswe, G., Muyanga, S., Witthuhn, J., & Nyasulu, P. (2015). Public awareness and knowledge of the National Health Insurance in South Africa. *Pan African Medical Journal*, 22(1).
- Sood, N., & Wagner, Z. (2018). Social health insurance for the poor: lessons from a health insurance programme in Karnataka, India. *BMJ global health*, 3(1), e000582.
- Thakur, H. (2016). study of awareness, enrollment, and Utilization of rashtriya swasthya Bima Yojana (national health insurance scheme) in Maharashtra, india. *Frontiers in public health*, 3, 282.
- Van Der Wielen, N., Channon, A. A., & Falkingham, J. J. B. g. h. (2018). Does insurance enrolment increase healthcare utilisation among rural-dwelling older adults? Evidence from the National Health Insurance Scheme in Ghana. 3(1).
- Vujicic, M., Buchmueller, T., & Klein, R. (2016). Dental care presents the highest level of financial barriers, compared to other types of health care services. *Health Affairs*, 35(12), 2176-2182.
- Wagstaff, A., Nguyen, H. T. H., Dao, H., & Bales, S. (2016). Encouraging health insurance for the informal sector: a cluster randomized experiment in Vietnam. *Health economics*, 25(6), 663-674.
- Watson, J., Yazbeck, A. S., & Hartel, L. (2021). Making Health Insurance Pro-poor: Lessons from 20 Developing Countries. *Health Systems & Reform*, 7(2), e1917092.