# Assessment of the Value for Money of Social Service Units

# A rapid case study of four hospitals

Report submitted by Nepal Health Sector Support Programme to

Ministry of Health and Population

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# Executive summary

**Introduction**

The Federal Ministry of Health and Population (FMoHP) with support of Nepal Health Sector Support Programme (UKaid/NHSSP) Technical Assistance (TA) has adapted the scope and coverage of Social Service Units (SSUs) based on the changing context and learnings. SSUs have expanded from their original focus on tertiary and referral level hospitals to cover all hospitals including Federal, Provincial, District and Local Level hospitals. The SSU has also been tasked to facilitate access to all social protection schemes available at each hospital including health insurance. This has broadened the scope of work of the SSU. Some of the SSUs have integrated all social protection schemes and others only partly. The major functions of SSU are to:

1. Facilitate access to subsidised hospital level services for targeted groups including people who are poor and ultra-poor, helpless, people with disabilities, gender based violence (GBV) survivors, emergency patient (poor), people affected by disasters and natural calamities, people from marginalized and endangered tribes, female community health volunteers (FCHV), malnourished children, martyrs family member, and target groups identified by respective hospitals considering the local context.
2. Provide the following services:
    - Promote awareness of subsidies
    - Identify target group
    - Facilitate access to services
    - Recording and reporting of services provided
3. Coordinate and harmonise all social health protection schemes at the hospital level.

Value for money is a methodology for calculating the impact of an investment on improving poor people's lives using the 4Es of economy, efficiency, effectiveness and equity. This value for money (VfM) study aims to inform policy makers of the contribution of SSUs, how existing SSUs can be strengthened for greater impact, and the scaling up of SSU to other hospitals. It also provides evidence for allocating more resources to the poor and excluded groups.

**Objectives**

- To assess fairness of the distribution of benefits to the poor and excluded groups (**equity**).
- To assess whether the outputs produced by SSU interventions are having the intended effect (**effectiveness**).
- To assess the process of converting inputs into outputs (**efficiency**).
- To assess whether the purchasing of inputs achieves appropriate quality at the right price (**economy**).
- To assess the costs and benefits of SSU.

**Methodology**

This rapid case study used purposive sampling to select four hospitals for study. The sample includes three federal hospitals - National Trauma Centre (NTC), Western Regional Hospital, Pokhara (WRH) and

Bharatpur Hospital (BH) - and one provincial hospital Lumbini Provincial Hospital (LPH). In WRH and NTC, SSUs are fully integrated with the administration of health insurance and other social protection programmes, and in BH and LPH they are partially integrated. Data was collected using key informant interviews (KIIs) with the Chief of SSU, Head of Department (HOD), and medical superintendents of the hospitals. Group interviews were held with facilitators. Unstructured in-person interviews were held with a small number of inpatients in each hospital (3-5). Observation was employed to understand the process of exemption from user fees. Physical and financial data were retrieved from the medical records and financial management sections of the hospitals respectively.

**Major findings**

**Economy**: The SSUs deliver services at a lower cost than if they were delivered by Government. The price (salary) of facilitators is 46-47% less compared to equivalent staff if they were employed on the Government pay scale.

At NTC hospital, the price of implant (used in the treatment of spinal injuries) was 60 percent less than the comparable market price.

**Equity:** Utilisation data from the four sample SSUs showed that over half of the health subsidies that SSUs facilitated access to benefited people who were ultra-poor (53%), followed by senior citizens (35%), people who were helpless/destitute (5%) and people with disabilities (3%). These figures indicate that SSUs made a marked contribution to promoting equity in access to and utilisation of health care. However, the utilisation data of the four sample hospitals shows that on average, only 2-4% of the total patients served received discounted care, which was a much lower proportion than the national poverty rate[1]. This suggests there is a significant gap in the coverage of hospital level subsidies for poor and target groups.

Human resource is the major input of SSU, it accounts for more than 80% of the total cost. About 60% of the facilitators belong to Brahmin/Chhetri group, which is over represented compared to the total staff recommended for recruitment by Public Service Commission (47.83%)[2] and national population (28.8%)[3]. Almost all staff are female (only 2 out of 47 are males). Facilitators ranked themselves as from "middle income group." SSU staff are not representative of the cultural diversity of Nepal or gender balanced. The low renumeration and volunteer commitment that SSUs try to leverage may partly explain the imbalance and the pool of people they attract.

**Efficiency**: The study analysed the total hospital budget at each of the sample hospitals and the percentage of funds at each allocated to targeted health care programs for the poor and excluded. The analysis includes the federal and provincial conditional grants and internal income of the hospitals but excluded the earmarked funds such as Aama, HIV/AIDS control, nutrition rehabilitation home, incentive for neonatal care etc. because those earmarked funds cannot be re-allocated to poor and excluded groups. On an average only 6-7% of the total fund has been allocated to poor and excluded groups in the selected hospitals. The fund allocated to poor and excluded groups ranges from 6.87-8.84% at NTC, 7.30-11.90% at WRH, 5.55-6.55 % at BH, and 3.38%-5.88% at LPH. In the past, FMoHP issued a circular to

[1] Head count poverty rate was 19 as reported by National Planning Commission (2021) in the Fifteenth Plan.
[2] Public Service Commission (2021). 62 Annual report, 2020-21.
[3] Central Bureau of Statistics (2012). National Population and Housing Census 2011.

allocate 10% of the internal income to poor and excluded groups. But none of the hospitals allocated 10% of their fund to targeted programmes (social protection) for poor and excluded peoples. Budget constraints were given as the reason why the internal income of the hospital is mostly allocated to salaries and allowances of doctors and nurses hired by the hospital development committee.

In terms of efficiency of use of SSU human resources (facilitators), at NTC and WRH where SSUs and other social protection programmes are fully integrated, the staff are fully utilised in administrating benefits to the large number of clients. In contrast, at BH and LPH where SSU and health insurance are not integrated, there is some room to increase efficiency in utilisation of human resources.

**Effectiveness:** As discussed above, only 2-4% of the total patients received discounted care, which was much lower than the poverty rate[4]. As reported by SSU Chiefs at two of the hospitals, of those patients who received subsidies only 5-10% received full exemption of user fees. The effectiveness of the hospitals to provide subsidies to patients that are poor and vulnerable varies. NTC performs relatively well, 9-14% of the total patients received discounted care in NTC whereas it ranges from 1.6-3.2% in WRH, 2-3.15% in BH and 2.6-3.9% in LPH.

Patient perspectives on the services offered by SSUs was positive; and many of them stated that they could have died without the SSU.

**Transaction cost:** By integrating SSU and social protection programmes, WRH has resourced the SSU with 1 coordinator and 14 facilitators and NTC with 1 coordinator and 12 facilitators. In BH where the SSU and social protection programmes are not integrated, the SSU has 1 coordinator and 11 facilitators and the health insurance unit has an additional 1 coordinator and 17 facilitators. Similarly, in LPH, the SSU is staffed by 1 coordinator and 12 facilitators and the health insurance unit has an additional coordinator and 17 facilitators. As per the norms of the standalone schemes, 14 coordinators (a coordinator for each programme) and 117 facilitators would be needed to operate all standalone social protection schemes in the four hospitals. It is calculated that the size of the human resource needed for SSU and all social protection programmes could be reduced by more than 50%, and transaction costs reduced by 55% on average by integrating and merging these together at each of the sample hospitals.

Comparison of the cost of running the SSU with integration of all social protection schemes versus without integration shows that the total transaction cost of SSUs at the four hospitals could be reduced from NPR 43.7 million to 19.5 million under the integration scenario.

**Benefit cost ratio**: The SSU offers four benefits: 1) time saved of providers, 2) time saved of patients, 3) reduced transaction cost, and 4) subsidy saved by detecting false poor.

SSUs yield 2.3 to 3.1 times more benefits by saving the time of patients and care providers, integrating and merging social protection programmes for poorer and excluded groups. The benefit cost ratio of SSU ranges from 2.3-3.1. In addition, the love and affection offered by SSU facilitators to poor and excluded patients is reported to make a difference in treatment outcome though it is difficult to measure this in monetary terms.

[4] National Planning Commission. 2021. Fifteenth Plan.

**Recommendations**

From the findings described above, the SSU model is providing 2.3 to 3.1 times more benefits than its cost by saving the time of patients and care providers, saving money through detecting the false poor, and reducing transaction costs by integrating and merging social protection programmes for the poor and excluded groups. While there is room for improvement, the evidence justifies the further scaling up of SSUs with some adjustments.

The specific recommendations from this case study are:

1. Allocate more funding for the treatment of poor and excluded groups from federal government grants and the internal income of the hospital.
2. Integrate and merge the fragmented targeted programmes for poor and excluded groups to reduce the transaction cost and increase efficiency. Develop integrated hospital social service guidelines accommodating all social health security programs.
3. Provide free and discounted care to at least 19% of total hospital patients to match with the current poverty rate.
4. Make transparent the income and expenditure of SSUs.
5. Transition from the paper-based recording and reporting system at SSUs, and add the “tracker” in the new software to reduce the workload of facilitators.
6. Rollout the SSU to all remaining 50 plus bedded-hospitals to increase access to and utilisation by poor and excluded groups.
7. Promote public-private-partnerships for the treatment of poor and excluded groups including referral of destitute patients to homes for the destitute after completion of treatment. Make formal memorandum of understanding (MoU) between Manavsewa Ashram and hospitals to transfer destitute/helpless patients after completing their treatment if they consent.

# Abbreviations

| | |
|---|---|
| ANM | Auxiliary nurse midwife |
| BCR | Benefit-cost ratio |
| BH | Bharatpur Hospital |
| CMA | Community medical assistant |
| DFID | Department for International Development |
| FMoHP | Federal Ministry of Health and Population |
| FMIS | Financial management information system |
| GBV | Gender based violence |
| HMIS | Health management information system |
| HoD | Head of Department |
| LPH | Lumbini Provincial Hospital |
| MoU | Memorandum of Understanding |
| NGO | Non governmental organisation |
| NHSSP | Nepal Health Sector Support Programme |
| NPC | National Planning Commission |
| NPR | Nepali rupees |
| NTC | National Trauma Centre |
| OCMC | One Stop Crisis Management Centre |
| O&M | Organisation and management |
| PPP | Public private partnership |
| SSU | Social Service Unit |
| TA | Technical Assistance |
| VfM | Value for money |
| WRH | Western Regional Hospital, Pokhara |

# Contents

# Chapter 1: Introduction

## 1. Background

Social Service Units (SSUs) were first piloted in 2012/13 to facilitate access to free or subsidised services for target groups. Since then, the Federal Ministry of Health and Population (FMoHP) with support of NHSSP Technical Assistance (TA) has adapted the scope and coverage of SSUs based on the changing context and learning. SSUs have expanded from their original focus on tertiary level hospitals to cover all hospital levels including Federal, Provincial, District and Local Level hospitals. The SSU has also been tasked to facilitate access to all social protection schemes available at each hospital including health insurance. Earmarked fund by the federal, provincial and local governments and internal income of the hospital are the major sources of expenditure.

From 5 SSUs in 2012/13, SSUs are operational in 58 hospitals as per 2021/22 and are to be scaled to 87 hospitals in 2022/23. The major functions of SSU are as follows:

1. Facilitate access to subsidised hospital level services for targeted groups including people who are poor and ultra-poor, helpless, people with disabilities, gender-based violence (GBV) survivors, emergency patient (poor), people affected by disasters and natural calamities, people from marginalized and endangered tribes, female community health volunteers (FCHV), malnourished children, martyrs' family member, and target groups identified by respective hospitals considering the local context.
2. Provide following services:
    - Promote awareness of subsidies
    - Identify target group
    - Facilitate access to services
    - Recording and reporting of services provided

    Coordinate and harmonise all social health protection schemes at the hospital level.

Each SSU functions under the SSU management committee and is run by hospital administrators who serve as chiefs and deputy chiefs. Each SSU appoints a local social service NGO to facilitate and support service delivery to targeted patients. Through this public private partnership (PPP) approach, SSUs promote awareness of subsidies for target groups, identify target group patients and prevent false claims, guide patients, facilitate the collection of drugs, record who receives benefits, how much and for what. The intention is that partner NGOs and facilitators work in a spirit of volunteerism to help their communities and those in need of assistance. Depending upon the daily client flow at the hospital, each SSU has between 2 to 12 NGO facilitators to serve targeted patients. A SSU facilitator undertakes a short interview of the patient and observes their clothes, shoes, and ornaments etc. to decide who is eligible for subsidized health care. The roles, responsibilities and working modalities are laid out in the SSU Operational Guidelines. The guidelines give SSU facilitators and health workers joint responsibility for identifying target group patients.

NHSSP has supported this important initiative with technical assistance to FMoHP, the erstwhile Population Management Division and individual SSUs in the hospitals.

The SSU receives funding from the federal and provincial governments and user fees from the hospitals. The SSU operates as per the SSU guidelines. A poor or excluded patient requests for exemption. The facilitators screen patients and cross-match the recommendation letter of the Municipality with their observations, then recommends for full or partial exemption[5]. The SSU coordinates and harmonises the targeted free care for 12 groups, deprived citizen treatment fund (Bipanna), free emergency, geriatric care and health insurance schemes at the hospital level.

Value for money (VfM) is a methodology for calculating the effect or impact of an investment on improving poor people's lives using the 4Es of economy, efficiency, effectiveness and equity. In addition, it contributes to increasing access to and use of services particularly by poor and excluded groups. In this case study, the VfM approach measures the contribution of SSUs, identifies how existing SSUs could be strengthened to increase effect and impact, and considers the evidence for scaling up to other hospitals.

## 1.2. Objective of the assessment

- To assess fairness of the distribution of benefits to the poor and excluded groups (**equity**).
- To assess whether the outputs produced by SSU interventions are having the intended effect (**effectiveness**).
- To assess the process of converting inputs into outputs (**efficiency**).
- To assess whether the purchasing of inputs achieves appropriate quality at the right price (**economy**).
- To assess the costs and benefits of SSUs.

## 1.3 Limitations of the study

This rapid case study was undertaken to provide policy makers with insights on the performance of SSUs as they are quickly being taken to scale by Government. It builds on a similar study undertaken in 2015, The SSU Evaluation Report, when SSUs were still being piloted. The rapid nature of the study means that it is limited in scope and depth and this needs to be considered when interpreting the findings.

The case study focuses on the supply side considerations of VfM due to time constraints. It includes only a small number (3-5) of unstructured interviews with in-patients at each of the case study sites; outpatients were not interviewed due to the time pressures on outpatient service providers and users. The information obtained from hospital users therefore does not represent the full range and complexity of demand side issues and concerns related to SSUs. Patients were informed about the objectives and benefits of the study and were assured that their identity and responses are kept confidential.

While approaching VfM from the supply side, this study does not cover quality of care provided by SSUs. The VfM of medicines is also not covered as this was the focus of an earlier NHSSP study.

One of the strong arguments for the establishment of SSUs is the time saved by health providers and clients. The figures included in this study on time saved are based on data reported by providers and clients, and findings are indicative only.

[5] Federal Ministry of Health and Population. 2021. Social service unit-establishment and operation guidelines.

# Chapter 2: Methodology

## 2.1: Approach and method of data collection

The study employed the Value for Money (VfM) methodology of the UK Government, Department for International Development, (2019)[6]. Based on the VfM approach, the following methods of data collection were used in the assessment.

### 2.1.1: Retrieval of physical and financial information

Social service-related physical information was retrieved from the Social Service Unit (SSU) of the respective hospital, and financial information from the financial administration section. This data was cross checked with the integrated health management information system (IHMIS) and financial management information system (FMIS) respectively. In case of discrepancy, clarification was sought from the SSU to correct the information.

### 2.1.2: Key informant interview

Key informant interview was conducted with the medical superintendent, selected head of department (HoD), account officers and SSU chief, to understand the benefits and supply side constraints. This included time saved of providers and clients, detecting the false poor, and reducing the transaction cost.

### 2.1.3: Group interview

Group interview was held with SSU facilitators to understand the implementation process, recording and reporting process, required supporting evidences, user friendliness of the recording and reporting tools, patient-facilitator interaction, extent of user fee charges and capacity to pay, and possible solutions to overcome the problems.

### 2.1.4: Direct interview with selected inpatients

Direct interview of selected inpatients sought to understand the facilitator's guidance and support, behaviours of facilitator and care providers, perceived quality of care, problems encountered in course of service seeking, perceived discrimination if any, and other areas of importance to the patient.

### 2.1.5: Short observation of SSUs

During the field visits, approximately 1 hour was spent at each SSU to observe the process of exemption of user fees and record the facilitator-patient interactions to understand the functioning and problems experienced by SSUs.

## 2.2: Tools for data collection

A total of four spreadsheets were developed to collect the quantitative data (physical and financial).

Three interview guides (Medical Superintendent, Chief SSU, and finance officers) were developed to collect the qualitative information to complement and supplement the quantitative data.

[6] https://www.ukaiddirect.org/wp-content/uploads/2021/02/Equity-and-VfM-Guidance-2019_FCDO_EXTERNAL.pdf

## 2.3: Study sites

For this case study, hospitals were selected based on purposive sampling. A total of four hospitals were selected out of 58, based on size and partial and full integration of the social security schemes and advancement of SSU. The four hospitals selected were: National Trauma Centre (NTC), Western Regional Hospital in Pokhara (WRH), Lumbini Provincial Hospital (LPH) and Bharatpur Hospital (BH). The four hospitals vary by the extent to which they are under full vs partial integration, and secondly vary by whether they are federal level vs provincial level hospitals. Some hospitals have fully integrated the social security schemes to reduce the transaction cost but others are unaware of the benefits of integration. NTC and WRH hospitals had fully integrated social security schemes and BH and LPH had only partially integrated them.

- Full integration includes integration of deprived citizen treatment fund, social health insurance, targeted free care (12 targeted groups) and free emergency care.
- Partial integration means the above four schemes are managed and run by separate chiefs and facilitators but their reporting, recording and coordination is undertaken by the SSU.

*Table 1: Selection of sample hospitals*

| Advancement of Integration | **Fully integrated hospitals** | **Partially integrated hospitals** |
|---|---|---|
| | 1. National Trauma Centre<br>2. Western Regional Hospital, Pokhara | 3. Bharatpur Hospital<br>4. Lumbini Provincial Hospital |
| Governance level | **Federal level hospital**<br>1. National Trauma Centre<br>2. Western Regional Hospital, Pokhara<br>3. Bharatpur Hospital | **Provincial level hospital**<br>4. Lumbini Provincial Hospital |

## 2.4: Data summarization

Physical and financial data are summarised in number, mean, percentage, rate, ratio and proportions.

# Chapter 3:Major findings

Findings of the assessment are organised around the 4Es of VfM.

## 3.1: Economy

**Right price** of major inputs is a common concern of all hospital managers and procurement related officers. Salary is the major cost item which accounts for more than 80% of the total recurrent cost of SSU. Table 2 shows that price (salary) of SSU facilitators which are hired by NGO service organisations is 47-49% lower compared to the equivalent pay scale of the Government of Nepal. The SSU facilitators hired by NGOs receive 12 months salary and 1 month Dashain bonus only, whereas government employees get 12 months salary, 1 month Dashain bonus and 1 month leave compensation.

A second high cost input at the National Trauma Centre is the price of implant (used in the treatment of spinal injuries). However, the cost per implant is 50 percent lower at NTC (NPR 60,000.00) compared to market price, when this service is provided at private hospital (NPR 90,000.00 at B&B Hospital). The SSU took the initiative to purchase the implant for the poor and excluded patients (Bipanna) only, whereas other patients (non-poor) are still purchasing the implant at the higher price from the private supplier. The price of implant at the National Trauma Centre is reportedly lower due to economies of scale and by avoiding unofficial commission to the prescriber.

*Table 2: Price of major inputs and savings compared to Government salary*

| | Price of inputs | | | | | GoN salary structure | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hospital** | **Inputs** | **No** | **Incentives /Rate** | **Months** | **Total salary** | **No** | **Salary/ Incentive** | **Months*** | **Total salary** | **% Reduction in the price** |
| National Trauma Centre | Facilitators | 12 | 20000 | 13 | 3120000 | 12 | 34730 | 14 | 5834640 | 46.53 |
| WRH Hospital Pokhara | Facilitators | 14 | 19000 | 13 | 3458000 | 14 | 34730 | 14 | 6807080 | 49.20 |
| Bharatpur Hospital | Facilitators | 11 | 19000 | 13 | 2717000 | 11 | 34730 | 14 | 5348420 | 49.20 |
| Lumbini Provincial Hospital | Facilitators | 12 | 19000 | 13 | 2964000 | 12 | 34730 | 14 | 5834640 | 49.20 |

* 12 months salary, 1 month Dashain bonus and 1 month leave compensation

## 3.2: Equity

**Fairness** in the distribution of benefits is assessed based on the UK Government VfM guidance. Equitable access to and utilisation of services by different and especially vulnerable socio-economic groups is the common concern of policy makers.

The SSU has been established to ensure equity of access to and use of hospital services by target groups defined considering gender inequality, poverty and social exclusion. The multidimensional poverty rate of Nepal is 28.61% in 2021 (NPC, 2021) and head count poverty rate is as high as 19%[7] but utilisation data

[7] National Planning Commission. 2021. Fifteenth Plan.

show that only 2-4% of total hospital clients have benefited from targeted free care programmes including targeted care for 12 groups and deprived citizen treatment fund.

### 3.2.1: Equity in inputs

Human resources are the major input of SSU, it accounts for more than 80% of the total cost. It is assumed that facilitators who are women, and from poor and excluded groups understand the problems of the target groups they are serving, therefore efforts have been made by NGOs to recruit facilitators from these groups. Almost all facilitators are women (only 2 males out of 47) with health background mostly Auxiliary Nurse and Midwife (ANM) and Community Medical Assistant (CMA), and majority of them fall into the middle-income group. One came from Maoist conflict affected group in NTC, one is a survivor of GBV, and one facilitator in Bharatpur Hospital is from an endangered group. One facilitator received training on "sign language" in Lumbini Provincial Hospital before joining as a facilitator. About 60% of the facilitators belong to Brahmin and Chhetri groups, which is over-represented compared to the total staff recommended for recruitment by Public Service Commission (47.83%)[8] and national population (28.8%)[9], whereas Dalit, Janajati and Madhesi are under-represented.

*Table 3: Caste/ethnicity of facilitators*

| Hospital | Dalits | Janajati | Madhesi | Brahmin/Chhetri | Total |
|---|---|---|---|---|---|
| NTC | 1 | 2 | 1 | 8 | 12 |
| WRH | 1 | 3 | | 10 | 14 |
| BH | 0 | | | 8 | 11 |
| LPH | 4 | 2 | 1 | 5 | 12 |
| Total | 5 | 7 | 2 | 31 | 47 |

### 3.2.2: Equity in output

Equity is measured by using the following principles:

"Equal utilisation for equal need and unequal utilisation for unequal need"
"Equal expenditure for equal need and unequal expenditure for unequal need"[10]

Horizontal equity is defined as the principle in which people with the same health needs should have similar access to health care services regardless of their socio-economic situation. This contrasts to vertical equity, denoting unequal access to health care for people with different needs.[11]

[8] Public Service Commission (2021) 62 Annual report, 2020-21
[9] Central Bureau of Statistics (2012). National Population and Housing Census 2011
[10] https://www.healthknowledge.org.uk/public-health-textbook/medical-sociology-policy-economics/4c-equality-equity-policy/balancing-equity-efficiency
11 - Miguel San Sebastián, Paola A. Mosquera, Nawi Ng, Per E. Gustafsson, Health care on equal terms? Assessing horizontal equity in health care use in Northern Sweden, European Journal of Public Health, Volume 27, Issue 4, August 2017, Pages 637–643, https://doi.org/10.1093/eurpub/ckx031

Both vertical and horizontal equity are important to assess the value for money. The poor and excluded groups have higher health care need as they are more exposed to poor nutrition, communicable diseases and injuries, and more likely to be living with a disability, but have less access to and utilisation of care. Moreover, there is evidence that the poor and excluded are deprived of care or do not seek care because of incapacity to pay.[12] Therefore, provision of targeted free care is made in the SSU guidelines.

*Table 4: Health care service utilisation by target groups in 4 hospitals*

| Cases | 2019/20 | 2020/21 | 2021/22 | Total of 3 years: 2019-2022 | Percent |
|---|---|---|---|---|---|
| People with disability | 824 | 714 | 719 | 2257 | 2.82 |
| Disaster Victim | 153 | 16 | 53 | 222 | 0.28 |
| Accidents | 47 | 12 | 44 | 103 | 0.13 |
| FCHVs | 124 | 124 | 59 | 307 | 0.38 |
| GBV survivors | 61 | 32 | 56 | 149 | 0.19 |
| Helpless/Destitute | 1291 | 1509 | 1541 | 4341 | 5.42 |
| Undernourished children | 237 | 229 | 328 | 794 | 0.99 |
| Marginalised and endangered | 153 | 101 | 111 | 365 | 0.46 |
| Police brought cases | 108 | 63 | 64 | 235 | 0.29 |
| Martyr family member | 5 | 2 | 7 | 14 | 0.02 |
| Senior citizen | 8342 | 8503 | 10849 | 27694 | 34.60 |
| Staff | 0 | 834 | 0 | 834 | 1.04 |
| Ultra-Poor | 11267 | 12111 | 19280 | 42658 | 53.30 |
| National player | 65 | 0 | 0 | 65 | 0.08 |
| Others | 13 | 57 | 62 | 132 | 0.16 |
| Sub-total SSU | 22557 | 24307 | 33173 | 80037 | 100.17 |

The utilisation data of the four SSUs sampled shows that over half (53%) of the health care benefit is used by ultra-poor followed by senior citizens (35%). These groups are supposed to be covered by the health insurance scheme but the majority of ultra-poor and senior citizens are not yet covered[13]. The SSU

[12] WHO. 2010. Poverty, social exclusion and health systems in the WHO European Region. Copenhagen, WHO Regional Office for Europe. https://www.euro.who.int/__data/assets/pdf_file/0004/127525/e94499.pdf

[13] Health Insurance board. 2021. Annual report. https://hib.gov.np/public/uploads/shares/notice_hib/annual-report-2077-078.pdf

continues to include ultra-poor and senior citizens as target population groups while they are being transitioned to coverage under health insurance. Helpless/destitute and people with disability accounted only for 3% and 5% of the total beneficiaries respectively at the selected SSUs.

It is difficult to screen the patients in the absence of documentation, but it is also difficult to produce proof of being poor by ultra-poor. It is assumed that poor and helpless could not go back to their community to bring the recommendation letter therefore, SSU has exempted their user fee fully. But it is mandatory to get the recommendation from the HoD of the hospital before being exempted fully by the medical superintendent there are thus checks and balances in the system.

As discussed above, Nepal multidimensional poverty was 28.61% in 2021 (NPC, 2021) and head count poverty rate was as high as 19%[14] but utilisation data show that only 2.62-3.99% of total hospital clients have benefited from targeted free care programmes including targeted care for 12 groups and deprived citizen treatment fund in the sample hospitals. The exemption rate is much lower than the poverty rate. Reports suggest that so far only 10% of total poor have received poverty card, and of those only a small segment of population is enrolled under the health insurance scheme[15]. Therefore, it is anticipated that a segment of poor either could not come to the hospital or could not get the benefits of free care. As reported, poor, Dalits and disadvantaged Janajati tend to seek care at the public hospital whereas wealthier and advantaged at private ones.

In principle, health insurance is supposed to cover all poor and senior citizens but only a small section is enrolled under the scheme, therefore, they have been getting benefits from the SSU at the four sample hospitals. While observing the SSU at NTC, it came to be known that a citizen came to SSU by holding a identity card of senior citizen and wearing a gold-chain around their neck. According to the guidelines, they are eligible to receive discount, but facilitators requested them to pay the bills. According to SSU guidelines, it is desirable but not mandatory to produce proof of being poor or a recommendation letter from the local bodies, therefore, facilitators exempted the user fees of real poor without proof. Responding to questioning on this issue, facilitators explained that often the ultra-poor could not bring the recommendation letter because their house is located in a distant place, and therefore facilitators exempted them with the consent of the medical superintendent. These examples showed that real poor received free care but false poor were prevented from accessing subsidies.

## 3.3 Efficiency

Both allocative and technical efficiencies are important to assess the value for money.

### 3.3.1 Allocative efficiency

The study analysed the total hospital budget at each of the sample hospitals and the percentage of funds at each allocated to targeted health care programs for the poor and excluded. The analysis includes the federal and provincial conditional grants and internal income of the hospitals but excluded the earmarked funds such as Aama, HIV/AIDS control, nutrition rehabilitation home, incentive for neonatal care etc.

[14] National Planning Commission. 2021. Fifteenth Plan.

[15] Khanal. 2019. Only 10 percent of Poor ID cards distributed in seven years. Kathmandu Post. https://kathmandupost.com/money/2019/05/06/only-10-percent-of-poor-id-cards-distributed-in-seven-years

because those earmarked funds cannot be re-allocated to poor and excluded groups. Figure 1 shows that on an average 6-7% of the total hospital budget has been allocated to poor and excluded groups. This is much less than the head count poverty rate (19%)[16], the percent increases if disability, caste/ethnicity, senior citizens, and disaster survivors are taken into account. In the past, there was a circular from FMoHP to allocate at least 10% of the internal income, and 10% from the federal fund to targeted programmes for poor and excluded but that was removed with the introduction of federal structure. Only WRH Pokhara allocated 10% of their fund to targeted programme for poor and excluded groups in 2019/20 and 2021/22 out of the sample.

The share of user fees to total hospital fund is higher in Bharatpur Hospital (47%-62%) compared to NTC (29%-41%). Bharatpur hospital is forced to generate the higher volume of user fee to pay the salary of doctors and nurses hired by the Hospital Development Committee. In all hospitals, resources generated by user fees is mostly allocated to salaries and benefits of doctors and nurses, and there is little room for allocating additional funds to poor and excluded groups from the internal income of the hospitals.

*Figure 1: Percentage of allocation to targeted health care programmes*

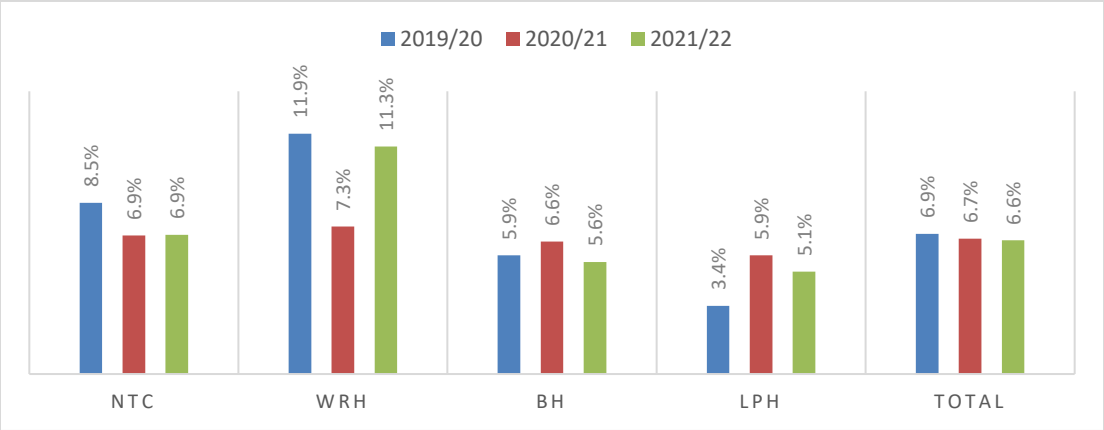


*Table 5: Allocative efficiency*

| Hospital | 2019/20 | | 2020/21 | | 2021/22 | |
|---|---|---|---|---|---|---|
| | **Total fund** | **Allocation to targeted schemes** | **Total allocation** | **Allocation to targeted schemes** | **Total allocation** | **Allocation to targeted schemes** |
| **NTC** | 435,255,000 | 36,865,184 | 526,240,297 | 36,134,311 | 588,221,782 | 40,572,339 |
| Share of user fees to total fund in percent | 40.68% | | 28.92% | | 29.11% | |
| % Allocation to poor and excluded | | 8.47% | | 6.87% | | 6.90% |

[16] National Planning Commission. 2021. Fifteenth Plan.

| | | | | | | |
|---|---|---|---|---|---|---|
| **WRH, Pokhara** | 348,075,933 | 41,424,778 | 565,512,697 | 41,303,525 | 398,900,839 | 44,931,953 |
| Share of user fees to total fund in percent | 27.49% | | 15.47% | | 35.55% | |
| % Allocation to poor and excluded | | 11.90% | | 7.30% | | 11.26% |
| **BH** | 688,390,293 | 40,460,120 | 718,359,446 | 47,121,054 | 917,849,537 | 50,950,683 |
| Share of user fees to total fund in percent | 61.52% | | 47.31% | | 53.54% | |
| % Allocation to poor and excluded | | 5.88% | | 6.56% | | 5.55% |
| **LPH** | 469,943,817 | 15,861,149 | 409,588,510 | 24,070,447 | 649,292,023 | 32,879,097 |
| Share of user fees to total fund in percent | 34.74% | | 48.88% | | 39.39% | |
| % Allocation to poor and excluded | | 3.38% | | 5.88% | | 5.06% |
| Total | 1,941,665,043 | 134,611,231 | 2,219,700,950 | 148,629,337 | 2,554,264,181 | 169,334,072 |
| Share of user fees to total fund in percent | 39.39% | | 44.27% | | 35.13% | |
| % Allocation to poor and excluded | | 6.93% | | 6.70% | | 6.63% |

### 3.3.3 Technical efficiency

The subsidy per patient cannot be compared between the hospitals due to nature of illness such as kidney disease, cancer, spinal and head injuries; and employed technology for treatment; for example, treatment of a pneumonia case costs a few hundred rupees only at Lumbini Provincial Hospital but surgical correction of a spinal case costs several thousand at Bharatpur Hospital. Therefore, it is hard to compare between the hospitals. The SSU provides lower rate of subsidy (25%) in the case of suspected poor rather than arguing for longer whereas destitute/helpless and ultra-poor get 100% free care even if they do not produce any proof. Moreover, people with disabilities (red card holder), highly marginalized Janajati and endangered ethnic groups have also been getting 100% free care as mentioned in the guidelines.

As reported by SSU chiefs, time of human resources are fully used in BH and WRH whereas there is still room for increasing the efficiency of human resources in NTC and LPH.

*Table 6: Per patient subsidy by hospital*

| | 2019/20 | 2020/21 | 2021/22 |
|---|---|---|---|
| NTC | 960.67 | 584.76 | 850.45 |

| | | | |
|---|---|---|---|
| WRH | 1,648.43 | 1,821.59 | 1,698.90 |
| BH | 2,401.72 | 2,839.89 | 2,839.89 |
| LPH | 1,443.01 | 1,181.13 | 1,337.05 |

### 3.3.4 Transaction cost

Efforts have been made to determine the counterfactual by adapting a quasi-experimental design (with and without integration). As discussed in methodology section, SSUs in NTC and WRH are under full integration and SSUs in BH and LPH under partial. There are still separate chiefs and facilitators for SSU, health insurance and Deprived Citizen Treatment Fund in BH and LPH. The number of coordinators and facilitators was calculated in WRH and NTC if there was no integration (without integration) based on the BH and LPH scenario.

*Table 7: Savings in human resources with integration of social protection programmes*

| **Without integration** (separate programmes) | **NTC** | **WRH** | **BH** | **LPH** | **Total** |
|---|---|---|---|---|---|
| Coordinator | 3 | 4 | 4 | 4 | 15 |
| Deputy Coordinator | 1 | 1 | 1 | 1 | 4 |
| Facilitators | 24 | 31 | 31 | 31 | 117 |
| Space (room) | 6 | 9 | 6 | 5 | 26 |
| **With integration under SSU** | | | | | |
| Coordinator | 1 | 1 | 1 | 1 | 4 |
| Deputy Coordinator | 1 | 1 | 1 | 1 | 4 |
| Facilitators | 12 | 14 | 14 | 14 | 54 |
| Space cost (room) | 3 | 3 | 3 | 3 | 12 |
| **Saved human resource and space** | | | | | |
| Coordinator | 2 | 3 | 3 | 3 | 11 |
| Deputy Coordinator | 0 | 0 | 0 | 0 | 0 |
| Facilitators | 12 | 17 | 17 | 17 | 63 |
| Space cost (room) | 3 | 6 | 3 | 2 | 14 |

There is a norm of appointing a focal person and other human resources for each targeted programme as per need. Social security schemes have been planned and implemented by the Population Management Division, Family Welfare Division, Nursing and Social Protection Division, and Health Insurance Board, therefore without SSU, there would be at least 3-4 focal persons to implement the above-mentioned programmes in a hospital. Tentatively, there would be 10 - 12 facilitators for targeted programme for 12 groups, 10 -17 facilitators for health insurance, 1 for the deprived citizen treatment fund (Bipanna), and 1 for OCMC. By integrating the schemes, hospitals have been managing the SSU with 1 coordinator and 12-14 facilitators in NTC and WRH. The required human resource for SSU has reduced markedly, from 15 coordinators to 4 and, 117 facilitators to 54. If the integrated approach of NTC and WRH, where social

protection schemes are merged and integrated into SSU, was applied to BH and LPH there would be a reduction of more than 50% of human resources required.

Administration of all social protection schemes have been integrated in NTC and WRH under SSU whereas schemes have been running as vertical (standalone) in BH and LPH. The counterfactual shows that transaction cost will more decrease heavily if integrated approach is applied in BH and LPH (over 56%), from NPR 43.7 million to 19.5 million. On average, transaction cost of selected SSUs will be decreased by 55% by integrating and merging administration of the schemes at the hospital level.

There is a possibility of further reducing the transaction cost of SSU by avoiding the double recording and reporting systems. It came to be known at the time of hospital visit that facilitators fill both paper and online forms. The paper-based recording and reporting system unnecessarily takes up the time of facilitators. Nearly, half of the facilitators' time can be saved by avoiding the paper-based recording and reporting system. Moreover, paper and printing cost of recording and reporting forms can be saved by avoiding the paper-based reporting and recording system.

*Table 8: Reduction in transaction cost*

| **Without integration** (separate programmes) | **NTC** | **WRH** | **BH** | **LPH** | **Total** |
|---|---|---|---|---|---|
| Coordinator | 1,845,656 | 2,460,874 | 2,460,874 | 2,460,874 | 9,228,278 |
| Deputy Coordinator | 535,899 | 535,899 | 535,899 | 535,899 | 2,143,596 |
| Facilitators | 6,240,000 | 7,657,000 | 7,657,000 | 7,657,000 | 29,211,000 |
| Space cost (room) | 720,000 | 1,080,000 | 720,000 | 600,000 | 3,120,000 |
| Total | 9,341,555 | 11,733,773 | 11,373,773 | 11,253,773 | 43,702,874 |
| **With integration** | | | | | - |
| Coordinator | 615,219 | 615,219 | 615,219 | 615,219 | 2,460,874 |
| Deputy Coordinator | 535,899 | 535,899 | 535,899 | 535,899 | 2,143,596 |
| Facilitators | 3,120,000 | 3,458,000 | 3,458,000 | 3,458,000 | 13,494,000 |
| Space cost (room) | 360,000 | 360,000 | 360,000 | 360,000 | 1,440,000 |
| Total | 4,631,118 | 4,969,118 | 4,969,118 | 4,969,118 | 19,538,470 |
| **Saved human resource and space cost** | | | | | - |
| Coordinator | 1,230,437 | 1,845,656 | 1,845,656 | 1,845,656 | 6,767,404 |
| Deputy Coordinator | - | - | - | - | - |
| Facilitators | 3,120,000 | 4,199,000 | 4,199,000 | 4,199,000 | 15,717,000 |
| Space cost (room) | 360,000 | 720,000 | 360,000 | 240,000 | 1,680,000 |
| Total | 4,710,437 | 6,764,656 | 6,404,656 | 6,284,656 | 24,164,404 |
| Percent reduction | 50 | 58 | 56 | 56 | 55 |

### 3.3.5 Utilisation of human resource

The case load per facilitators increased tremendously by integrating health insurance schemes into SSU at WRH. The size of hospitals of WRH, BH and LPH is almost the same (500 plus bedded) and output per day is also same (1200-1400 OPD visits). In case of WRH, chief medical record section coordinates 4 programmes, targeted free care for 12 groups, health insurance, deprived citizen treatment fund, free

emergency whereas BH and LPH used 3-4 additional focal persons for the same business. In case of WRH, a total of 14 facilitators operated four schemes (targeted free care for 12 groups, deprived citizen treatment fund, free emergency care for poor, health insurance,) whereas BH and LPH used 30-31 facilitators (17 in health insurance 11 in SSU, and two other staff nurses) for the same business. All hospitals have 1200-1400 OPD visits per day and over half (600-700) of the visits belong to health insurance only. Optimum utilization of staff could be seen in Pokhara Hospital under the integrated approach.

### 3.4 Effectiveness

Effectiveness refers to the question of how well the outputs produced by an intervention are having the intended effect? (‘**Spending wisely’**). It is very difficult to assess the effectiveness of the SSU in the absence of defined output and impact indicators. The study assessed effectiveness against the objective of the SSU. The overarching objective of SSU is to ensure access to and utilisation of care by poor and excluded groups. No one should be deprived of medical care because of incapacity to pay. The intermediate objectives are to facilitate poor and excluded patients in the process of treatment and to exempt the charge for them so as to remove the financial barrier.

On an average, only 2-4% of the total patients at the four sample hospitals received discounted care during the past three years, which was much lower than the proportion of poor in the population (19%)[17]. Data does not allow us to examine how many of them have received full and partial exemptions. As reported by chief of SSU at NTC and BH, only 5-10% of the targeted group received full exemption of user fees. Which is much lower than the proportion of poor in the population. At least one-fourth of the patients should get subsidised care to match with the poverty and exclusion rates. Comparing the hospitals, we see that the effectiveness of NTC to provide subsidies to the estimated poor and target population was relatively good, 9-14% of the total patients received discounted care while this was much lower at the SSU under WRH, BH, LPH (2-4%). The proportion of exemption is higher at NTC mainly due to the number of road traffic accidents/emergency cases without relatives in attendance.

*Table 9: Effectiveness of SSU coverage of poor and targeted patients*

| Hospitals | 2019/20 | 2020/21 | 2021/22 |
|---|---|---|---|
| **NTC** | | | |
| Total patients (HMIS) | 79250 | 57905 | 103025 |
| Sub total of poor and excluded (SSU) | 7496 | 7893 | 9466 |
| Poor and excluded patients as a percent of total | 9.46 | 13.63 | 9.19 |
| **WRH** | | | |
| Total patients (HMIS) | 270345 | 170715 | 333564 |
| Sub total of poor and excluded (SSU) | 4427 | 3951 | 6281 |
| Poor and excluded patients as a percent of total | 1.64 | 2.31 | 1.88 |
| **BH** | | | |
| Total patients (HMIS) | 280736 | 194035 | 307351 |
| Sub total of poor and excluded (SSU) | 5614 | 6113 | 7426 |

[17] NPC. 2021. Fifteenth Plan.

| | | | |
|---|---|---|---|
| Poor and excluded patients as a percent of total | 2.00 | 3.15 | 2.42 |
| **LPH** | | | |
| Total patients (HMIS) | 229742 | 186323 | 366225 |
| Sub total of poor and excluded (SSU) | 5871 | 7250 | 10359 |
| Poor and excluded patients as a percent of total | 2.56 | 3.89 | 2.83 |
| **Total of 4 hospitals** | | | |
| Total patients (HMIS) | 860073 | 608978 | 1110165 |
| Sub total of poor and excluded (SSU) | 23408 | 25207 | 33532 |
| Poor and excluded patients as a percent of total | 2.72 | 4.14 | 3.02 |

Facilitators, chief of SSU and medical superintendent claimed that they have detected false poor. They reported that there were as many as 25-30% false poor in the past, but now it is reduced to below 10%. It is difficult to resist the political pressure to come down to zero.

Poor patients reported that doctor and nurse are poor friendly and kind-hearted. While discharging, a few patients drop the saved medicine in the wards to re-distribute to poor and this was done so by the nurses. They also recommend for free treatment. All interviewed patients reported that there is no discrimination between the fully paid and exempted in course of treatment.

A few poor patients reported that they had no idea about the recommendation letter. It is not compulsory to bring the recommendation letter from the local level but they noted that SSUs are reluctant to provide free care without a recommendation letter from local level. All poor are supposed to be exempted the user charges but in practice only some are and those poor who do not have the recommendation letter are more likely to be pushed to the payment counter and seen to be false rich. According to section 21(A) of SSU guidelines, bringing a recommendation letter for treatment is only desirable. All facilitators understand that it is difficult for poor people to bring the recommendation letter from the local level as majority of them have come from distant places and have no money to go back to the community.

Patient perspectives on SSU services was positive.

"I had no money, If there was no SSU my baby could have died."

Nepali (Sarki, Dalit), female, age 30, literate, seasonal agricultural labourer, Parbat.

"If there was no provision of patient support, my legs could have gone"

Sunar (*Dalit*), female, age 20 years, grade 7 passed, no house no land, grown up in maternal uncle's home (Mama Ghar), currently living in a rented room, Kaski.

"SSU exempted my fee even I had no recommendation letter, they do understand my problem."

Gurung (Janajati), male, age 65, illiterate, Chitwan, staying in the Ashram

"If there was no SSU, I would have been waiting to death, there was no other way"

Bishwakarma (Dalit), male, age 60, literate, Nawalparasi

"I am waiting to get the exemption, SSU asked me to bring the recommendation letter, but I have no money to go back"

Bishwakarma, female, age 21, Chitwan

The coordinator at LPH Hospital reported that the overwhelming majority of patients are poor at the kidney dialysis centre, and they will die if government does not provide financial support. Poor patients have been waiting a long time to receive kidney dialysis service in all visited public hospitals.

## 3.5 Valuing costs and benefits of SSU

Both capital and recurrent costs are taken into account in calculating the cost-benefit ratio. Capital cost includes equivalent annual cost of building and equipment. Recurrent cost includes salary and benefits of facilitators, planning and programme review, refreshment, communication, stationeries, printings, and utility costs etc.

The total benefit includes 1) time saved of providers, 2) time saved of patients, 3) reduced transaction cost, and 4) subsidy saved by detecting false poor.

*Table 10: Benefit cost ratio of SSU, 2021/22 in NPR*

| Benefit cost ratio | NTC | WRH | BH | LPH | Total |
|---|---|---|---|---|---|
| Total benefit in a year | 12,672,812 | 14,322,226 | 15,285,354 | 13,533,279 | 55,813,672 |
| Total cost of SSU in a year | 5,562,702 | 5,196,891 | 4,871,947 | 5,496,447 | 21,127,987 |
| Benefit cost ratio | 2.28 | 2.76 | 3.14 | 2.46 | 2.64 |

The benefit-cost ratio (BCR) is an indicator showing the relationship between the relative costs and benefits of a proposed programme/project, expressed in monetary terms. By integrating and merging targeted programmes for poor and excluded groups under the administration of SSU the yield is 2.3 to 3.1 times more than the cost. The benefit cost ratio of SSU ranges from 2.3-3.1. The BCR is higher in BH because of higher number of false poor detected and higher per patient subsidy, see Table 10.

### 3.5.1 Cost of SSU

Human resource is the main cost driver of SSU, it accounts for over 80% of the total cost, other recurrent costs such as refreshment, communication, stationeries, printing, and utility accounts for 13% of the total cost. BH has slightly lower cost because of the lower number of facilitators (11) and limited computers (3) and printers. The per patient facilitation and administration cost of SSU in WRH is at lower level (NPR 36) because of higher number of insured cases (OPD 135,771 and IPD 2735) facilitated but it is at higher level at BH (NPR 636) and LPH (NPR 531) because there is a separate unit and staff to facilitate and administer the insurance scheme in those hospitals.

*Table 11: Cost of SSUs in the selected hospitals in NPR*

| Cost of SSU | NTC | WRH | BH | LPH | Total cost | Percent |
|---|---|---|---|---|---|---|
| Sub total - capital cost | 244,585 | 290,774 | 246,329 | 246,329 | 1,028,017 | 4.87 |
| Recurrent cost | | | | | | |
| Human resource cost | 4,433,118 | 4,271,118 | 3,990,618 | 4,580,118 | 17,274,970 | 81.76 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Other recurrent costs | 885,000 | 635,000 | 635,000 | 670,000 | 2,825,000 | 13.37 |
| Subtotal - recurrent cost | 5,318,118 | 4,906,118 | 4,625,618 | 5,250,118 | 20,099,970 | 95.13 |
| Total cost | 5,562,702 | 5,196,891 | 4,871,947 | 5,496,447 | 21,127,987 | 100.00 |
| Total patients facilitated including insurance | 25934 | 144788 | 7426 | 10,359 | 188,507 | |
| Per patient facilitation cost | 214.49 | 35.89 | 656.07 | 530.60 | 112.08 | |

### 3.5.2: Benefits of SSU

Integration of the social protection schemes under SSU has saved the time cost of care providers and patients by facilitating, navigating and guiding. According to patients, at least a day (8-10 hours) was spent arranging the money (borrowing and/or collecting donations) for the treatment, and as a result this delayed care seeking. That time is cut down by the provision of SSU. As reported by the providers, 10% of their time has been saved by SSU. The Medical Superintendent and Head of the Department used to spend 10-20% of their time for screening/identifying poor patients.

Table 3.11: Benefits of SSU in NPR (yearly)

*Table 12: Annual benefits of SSU in NPR*

| **Yearly benefits of SSU** | **NTC** | **WRH** | **BH** | **LPH** | **Total** |
|---|---|---|---|---|---|
| Saved time cost of providers | 891,158 | 1,799,753 | 1,436,315 | 1,799,753 | 5,926,978 |
| Saved time cost of patients | 5,461,154 | 3,623,654 | 3,238,846 | 3,526,731 | 15,850,385 |
| Subsidy saved by detecting false poor cases | 1,610,064 | 2,134,164 | 4,205,538 | 1,922,140 | 9,871,906 |
| Reduced the transaction cost | 4,710,437 | 6,764,656 | 6,404,656 | 6,284,656 | 24,164,404 |
| **Total benefit of SSU** | 12,672,812 | 14,322,226 | 15,285,354 | 13,533,279 | 55,813,672 |

The practices of National Trauma Centre and Western Regional Hospital, Pokhara showed that all of the social protection programmes can be managed by a chief and 10-14 facilitators. Similarly, space and overhead costs also reduced by integrating and harmonising the targeted health care programmes.

In case of poor and senior citizens, the SSU facilitators request the patients to enrol under health insurance without any premium. They tell patients that the government pays the premium of the poor and senior citizens. The facilitators link the patient with enrolment assistant (health insurance) and are increasing the enrolment of poor and senior citizens under the health insurance scheme. SSU will be an enrolment site for poor and social excluded in future.

In addition, the love and affection offered to patients by the facilitators and their empathetic listening and problem-solving skills are invaluable but difficult to measure in monetary terms.

## 3.6 Good practices

A few good practices were collected during the field visits and are noted below.

### 3.6.1: Screening poor patients

The progress report of the government showed that only 10% of the poor have received an identity card (Khanal, 2019)[18]. Detecting poor patients remains a challenge to the SSU. Many clients come with the recommendation letter from the local government and declare themselves ultra-poor but their shoes, dress, and ornaments do not match with the self-declaration. SSUs reported that the ward in-charge roughly estimates the capacity to pay by asking household income, and observing the dress, shoes and ornaments etc and assess their capacity to pay for medicine and procedures. Those patients who could not buy the full dose of the medicine are identified as ultra-poor and are referred to SSU for further assessment.

### 3.6.2: Putting a sticker on the beds

NTC and BH have started to put stickers (marking poor and helpless patients) on beds allocated to poor and helpless to avoid the use of health care by false poor. A few reported "the sticker humiliates the actual ultra-poor".

False poor are reluctant to stay in beds with a marked sticker. They do not like to be seen as poor in front of their visitors, and a few false poor were reported at NTC and Bharatpur hospital to have paid the hospital bills to remove stickers. It warns other false poor not to use the resource allocated to poor.

### 3.6.3: Introducing three steps of screening system

The local government offers the recommendation letter for the treatment of poor without assessing the economic status of the patients, as a result, many false poor have got recommendation letters. The Ward Mayor does not like to lose the votes in the upcoming election; therefore it was reported in LPH that they issue the letter of recommendation without any assessment. It makes the screening process complicated and open to misuse. The hospitals reported that they are forced to introduce three staged screening process to identify the real poor which reduces the efficiency of the SSUs.


First, HoD of out-patient (OP) and Indoor patient (IP) departments or in-charge of the wards screen the poor by observing their dress, ornaments, shoes and food; and assessing the capacity to pay. Those who are recommended by the OP and IP departments are further assessed by SSU as per the given criteria and format. As stated by the SSU chief, about 90% of poor patients get discount from the SSU. The authority for exemption has been given to the SSU chief, and facilitators (whenever SSU Chief remains absent). It has increased the administrative efficiency. Remaining 10% suspected poor with bigger bills are further assessed by the medical superintendents based on the justification provided by SSU Chief. Thus, there is less likely to get the free care by false poor.

[18] https://molcpa.gov.np/department/page/523, https://kathmandupost.com/money/2019/05/06/only-10-percent-of-poor-id-cards-distributed-in-seven-years

### 3.6.4 Enrolled staffs under health insurance

In the past, hospitals tended to offer free care to hospital staffs and their relatives and charged their bill under SSU.[19] This was the misuse of government resources. But now, all four hospitals have enrolled their employees into health insurance and paid the premium from the hospital's development fund. The charging of medical bills of staff to SSU has completely stopped in all four sample hospitals. SSU facilitators reported that a few staff still approach the SSU for subsidies for the treatment of their relatives but SSU does not entertain them.

In addition, following good practices have been reported by the SSU chiefs and facilitators:

1. Power decentralised to the SSU Chief and facilitators for the exemption of user fee has increased the administrative efficiency of SSU.
2. The NTC has allocated 10 beds for destitute persons who could not go back to their home after the completion of treatment and were refused to be taken by Ashram (home for destitute and helpless).
3. Many clients reported that they are referred by the lower-level hospitals, while asking to show the referral slip, many patients said that they left their referral slip at home. The SSU records as per the verbal statement of the patients.
4. In case of NTC, many patients by-pass the lower level hospital due to severity of the illness (mostly trauma cases). However, SSU understand the problem and feed back to the lower-level hospital for follow up treatment.
5. The NTC has saved NPR 250,000.00 from administrative cost (review meeting, refreshment and stationeries) and that has been re-allocated to medicine budget. This increases both allocative and technical efficiency.
6. The ultra-poor could not go back to their community to bring the recommendation letter, therefore, SSU Chiefs of all hospitals reported coordinating with the local bodies and requesting them to send recommendation letter in their messenger and Viber.

[19] Ministry of Health and Population, Population Management Division and NHSSP (2015). Social Service Unit Pilot Initiative in Eight Hospitals in Nepal (2013-2015). Evaluation Report. Kathmandu

# Chapter 4: Discussion and Recommendations

As discussed above, SSUs yield 2.3 to 3.1 times more benefits than they cost by saving costs through detecting the false poor, saving the time of patients and care providers, and reducing transaction cost by integrating and merging social protection programmes for poor and excluded groups. The majority of SSU beneficiaries are poor (53%) and excluded groups (senior citizens 35%, helpless/destitute 5% and people with disabilty 3%). While there is some room for improvement, the SSU model is recommended for further scaling up with minor changes.

## 4.1 Fostering public private partnerships

There is strong rationale for public private partnerships (PPP) as per the SSU model. Public hospitals have rules, regulations and salary scale for hiring human resource therefore, hospital managers are unable to hire human resources at a lower price. As discussed above, public hospitals have shortage of funds and expertise for social service. The PPP arrangement has brought NGO resources and comparative advantages and skills to public institutions. International Nepal Fellowships (an NGO) has provided 4 additional facilitators to WRH Pokhara, accounting for a third of total facilitator costs of the hospital. There is also opportunity to attract more private funds and expertise to public hospitals as per WRH Pokhara though this needs further effort to accommodate under the SSU agreement. There is a provision of charging 5% of the facilitator's cost in the guidelines by partner NGOs as an overhead cost but it was removed on the request of the hospital.

An informal partnership arrangement has been made with *Manav Sewa Ashram* by all four hospitals to transfer the destitute and helpless after completion of their treatment. In the past, SSU faced difficulties in discharging the destitute/helpless patients from hospital as relatives did not come to receive them. As a result, bed output ratio was adversely affected as beds were occupied by a patient ready for discharge for a long time (there is an example of 11 months in LPH). The bed could have produced more outputs, if the hospital had been able to discharge the patient in a timely way. More formal partnership arrangements between hospitals and Ashrams (home for destitute and helpless) could reduce the time spent by homeless patients in hospital after their treatment. This will increase the efficiency in bed use.

## 4.2: Enhancing technical efficiency

Transaction cost of the SSU can be reduced by integrating and harmonizing administration of social protection schemes and avoiding the double recording and reporting systems (paper based and online). The paper-based recording system should be avoided. Evidence showed that integration of all social scheme increases the efficiency of human resource costs as demonstrated in NTC and WRH Pokhara. However, the workload of SSU will likely increase as enrolment of poor and senior citizens under health insurance steps up.

## 4.3: Improving the reporting and recording system

The recording and reporting system of SSU has been included in health management information system (HMIS) and harmonised with the national reporting system. It is user friendly, however the recording system only "captures" data and does not "track" records. Moreover, SSU code is essential for the patient's record. Therefore, as reported by software-users, this unnecessarily absorbs the time of

facilitators. Moreover, there is a risk of double counting the patients. Therefore, a "tracking" system should be built into the new software as was available in the earlier software. The SSU Chief of WRH Pokhara and NTC, reported that they have already provided feedback to the software designer to make the software changes.

## 4.4: Enhancing equity

At present a large part of the internal income of the hospital is allocated for the salary and allowances of doctors and nurses hired by the hospital development committee, less than 2% has been allocated for the treatment of poor and excluded groups. Recently, all hospitals have undertaken an organisation and management (O&M) survey to add more doctors and nurses for service delivery. Hospital can free some fund for salary and benefits of the doctors and nurses hired by hospital development committee if those O&M survey positions requested are approved by the federal government. In this case, the freed fund should be re-allocated for the treatment of poor and excluded groups to increase coverage and equity.

## 4.5: Enhancing effectiveness

On average, only 2-4% of the total patients at the sample hospitals received subsidised care, which is much lower than the current poverty rate (19%)[20]. This suggests that many poor people are deprived of medical care or pushed to pay hospital costs making them vulnerable to catastrophic health costs and further impoverishment. The effectiveness of the NTC is relatively better with 9-14% of the total patients receiving subsidy compared to other hospitals (2-4%), but the per patient subsidy is relatively lower at NTC. There is an urgent need to expand the population coverage of poor and excluded patients under the social health protection programmes.

## 4.6: Harmonising the targeted programmes

Practice at WRH Pokhara and NTC showed that facilitators encourage the poor and excluded groups to enrol under health insurance. Those poor and senior citizens who have health insurance memberships are charged under health insurance which frees up social protection funds. This is a good practice. However, the study identified the less optimal practice of hospitals sending health insured patients that exceed the benefit ceiling of health insurance to SSU. This is a problem that needs to be addressed via the health insurance scheme, and in the immediate term until a policy change has been introduced, through the Medical Superintendent.

## 4.7: Promoting transparency

Names of poor and excluded beneficiaries are posted regularly on the wall of the SSU, and a few hospitals updated the list of subsidized in-patients on the white board in front of SSU. However, financial statement of the SSU is hardly posted on the white board and SSU wall. The financial statement should also be posted on the wall and on the SSU website to maintain transparency.

## 4.8: Recommendations

Based on the above findings and discussions, following recommendations are made.

[20] NPC (2020), 15th Plan,

1. Allocate more funding for the treatment of poor and excluded groups both from federal government grants and internal income of the hospital.
2. Integrate and merge the administration of the fragmented targeted programmes for poor and excluded groups at hospital level to reduce the transaction cost and increase the efficiency. Develop integrated hospital social service guidelines covering all social health security programs/services (health insurance, deprived citizen treatment fund, emergency health services, neo-natal free care, geriatric health care, etc.)
3. Provide free and discounted care to 19% of the total patients to match with the poverty rate.
4. Make transparent the income and expenditure of SSU.
5. Avoid the paper-based recording and reporting system and add the “tracker” in the new SSU software to reduce the workload of facilitators.
6. Rollout the SSU to all 50 plus bedded hospitals to ensure access to and utilisation by poor and excluded groups and remove financial barriers.
7. Promote additional PPP for the treatment of poor and excluded groups. Where patients consent, transfer patients to the home for destitute persons after the completion of treatment. Make formal MoU between Manavsewa Ashram and hospitals to transfer destitute/helpless patients after completing their treatment if they consent.

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Annex 1: Selected case studies

1. R**espondent #1 (Sarki, Dalit), female, 30, illiterate**

She is a seasonal agricultural labourer (*Jyami*), lives at a village of Parbat.

Her baby aged 6 months got pneumonia, therefore went to Parbat hospital for treatment, stayed a day there but could not be improved the condition of her baby. The hospital referred her baby at the WRH for treatment but she had no money to come to WRH Pokhara. Therefore, she borrowed NPR 14000 from her relatives. The ambulance took NPR 10000.00, therefore, she had not enough money to pay hospital bills, she had no idea what to do and to whom to approach. The health condition of her baby became further worse. She cried at the hospital premises for a while. The visitors brought her at the OPD. She paid NPR 100 for registration and immediately admitted in the hospital. The money ran out after 3 days.

She told her problem to the ward In- charge. The ward in- charge asked her about her family background, source of income and occupation. After inquiry, she reported to the doctor about her financial condition. The doctor recommended for 50% discount in the user fees with the condition of bring the recommendation letter from the Ward Office. Her husband had no money to go to Parbat back therefore requested to his sister in law to send the recommendation letter. She faxed the recommendation letter on the following day. Then, requested to the SSU facilitator. She got 50% off in user charge but it was very difficult to pay the other half. Her husband worked in the field as labourer in Pokhara and collected some money to pay the remaining bill of hospital.

Responding the question about the discrimination between the discounted and full paid patients, she said, "there is no any discrimination". I got the same treatment as others.

"I am happy with the offered service by the doctor and nurses, and extended support by the SSU facilitators, if there was no SSU my baby could have died. "Thank to the nurse (Didi) and facilitator for saving my baby".

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**2. Respondent #2** (*Dalit*), female, 20 years, grade 7 passed, no house no land, grown up in maternal uncle's home (Mama Ghar) living in rented room. She is a seasonal agricultural labourer (*Jyami*), lives at Vijayapur of Kaski.

While she was collecting the sand on the bank of Vijayapur river. Her younger sister aged 7 fell into the river. She hurriedly jumped into the river and caught her younger sister and saved her life but her both legs got fractured badly. Fortunately, a boy (*Dai*) who was on motorcycle saw the incident and brought her at the emergency department of the hospital. The doctor checked her and told that her one leg could be repaired but other was was less likely.

"I often cried but the doctor and a nurse counsel me well." said the patient.

Now she doesn't cry. She has no regular source of income. Whatever, she earned was just enough to pay the rent and buy food grains. The Tol Basi (neighbours) collected the donations for her treatment. That ran out after a week. Then, her elder sister shared her problem to the ward in charge (Didi).

The patient reported that the ward nurse is kind-hearted, she is good, she gave the saved medicine (dropped medicine by patients) to her. She, also requested to the doctor to recommend for free treatment. The patient had no house and land therefore staying at the rented room. The landlord (*Aunty*) helped her by bringing recommendation letter from the Ward Mayor.

She doesn't know, how much she should pay, but the facilitator told to her elder sister "not to worry about the payment". The doctor told her that every problem comes with the solution. She is happy with the provided care. The SSU provided medicines and materials to her, also provided the food to her and her elder sister. Responding the question of discrimination, she said that there was no discrimination between the poor and wealthier patients in course of treatment, rather she got more time of doctor compared to others because of her severity of illness.

"Doctor is God" He saved my both legs" said the patient.

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3. **Respondent #3** (Magar), disadvantaged Janajati, male, age 56, illiterate, food is enough for 6 months (as reported by his brother).

He was in convulsion due to brain haemorrhage. His brother had brought him at the Bharatpur Hospital by collecting the donations. He is waiting for operation. He had no money and a police has assisted him to bring him at the hospital. A facilitator has been taking care of him and supporting him by supplying medicine and medical supplies and collecting his medical reports. She carries him at the diagnostic centres. Last year, his wife got sick, sold his whole piece of land and a house therefore, became landless. According to police, he has nothing at his house, used to work as a seasonal agriculture labourer. Police handed over the case to facilitator. He got full exemption. The SSU provides food to his care taker as well.

There is a good coordination between the police and SSU.

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**4. Respondent #4** (Majhi), locally defined beneficiary group, age 32, Khaireni, literate, son is in community school.

She was a pregnant women, came to SSU for the exemption of user fee on ultrasound. Responding the question of Ama Surakhshya, she said, Ama does not cover the ultrasound of pregnant women. She said, Majhi gets full exemption, because, they are the poorest segment of the society. As told by a facilitator, Ama should cover her expenses. SSU covers the expenses if other schemes do not. She said that there is no discrimination between the exempted and full paid cases, same queue and same treatment by doctor and nurses.

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**5. Respondent #5** (Dalit), male, age 68, literate, Nawalparasi,

He had the house and land, was a taxi driver. Three years before he got heart attack, sold all property to pay the bill of heart surgery. He recovered well.

It was a rainy season, he was going to collect the grass for his goats, sudddenly fell down on the yard, he had broken his leg. The neighbours brought him at the hospital. He had NPR 10,000 saving, ran out in a week therefore, approached to SSU. His wound got infected twice because of the diabetes. The SSU exempted his operation charge, also provided the rod (implant) free of charge. Rod alone costs NPR 35000.00 at the market, therefore he had no means to buy the rod, if there was no SSU.

My leg was cut out if there was no SSU. Doctors and nurses are kind hearted, they have recommended for free treatment. I am getting well.

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**6. Respondent #6** ( Chhetri), male, age 29, ultra poor, used to wok in a small hotel, as utensils cleaner, literate only.

He got road traffic accident (RTA) in India, his friends brought him to Nepal. He has been lying on the bed for last 11 months. His friends collected donations for the treatment but that lasted only a week. Now, nobody come to see him. Doctor wants to discharge him but he does not like to leave the hospital. The SSU has coordinated with the Manab Sewa Ashram (home for helpless and destitute), and prepared to transfer him but he was still reluctant to leave the hospitals. He said, “coming back to hospital for follow up would be difficult.”

The nurses and ward assistant take care about him, he reported that nurse and a ward assistant helped him a lot to take a bath and to change his clothes. The SSU bears all the medical costs.(medicine, tests and procedure) and non medical cost such as food and clothes. He said “nurse is like my mother.” He got full exemption. He said that there is no discrimination between the wealthier and helpless patient.

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