Service Tracking Survey

2012

Nepal Health Sector Programme II

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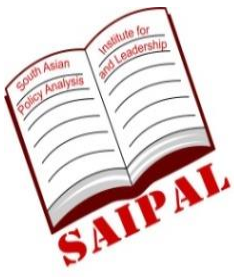

TABLE OF CONTENTS

ACRONYMS XII

STS 2012: EXECUTIVE SUMMARY ..... a

A. INTRODUCTION ..... a

B. METHODOLOGY ..... a

C. KEY FINDINGS ..... a

CHAPTER 1 - INTRODUCTION 1

1.1 NEPAL HEALTH SECTOR PROGRAMME 1

1.2 STS 2012 AIM AND OBJECTIVES 2

1.3 STRUCTURE OF REPORT 3

CHAPTER 2 - METHODOLOGY 4

2.1 SURVEY DESIGN 4

2.2 SAMPLE DESIGN 4

2.3 QUESTIONNAIRE DESIGN 7

2.4 SELECTION OF FIELD SUPERVISORS AND ENUMERATORS 8

2.5 TRAINING AND ORIENTATION 8

2.6 DATA COLLECTION 9

2.7 SUPERVISION AND SUPPORT 9

2.8 QUALITY ASSURANCE 9

2.9 ETHICAL CONSIDERATION 9

2.10 DATA MANAGEMENT 9

2.11 LIMITATIONS OF THE STUDY 12

CHAPTER 3 - BACKGROUND CHARACTERISTICS 13

3.1 INTRODUCTION 13

3.2 RESULTS 13

CHAPTER 4 - FREE CARE 35

4.1 INTRODUCTION 35

4.3 KEY FINDINGS 45

CHAPTER 5 - AAMA PROGRAMME....46
5.1 INTRODUCTION....46
5.2 RESULTS....47
5.3 KEY FINDINGS....67
CHAPTER 6 - FINANCIAL MANAGEMENT....68
6.1 INTRODUCTION....68
6.2 RESULTS....69
6.3 KEY FINDINGS....79
CHAPTER 7 - GOVERNANCE AND ACCOUNTABILITY....80
7.1 INTRODUCTION....80
7.2 RESULTS....80
7.3 KEY FINDINGS....103
CHAPTER 8 - HUMAN RESOURCES FOR HEALTH....105
8.1 INTRODUCTION....105
8.2 SELECTED RESULTS....106
8.3 KEY FINDINGS....133
CHAPTER 9 - DRUG SUPPLY AND STORAGE....135
9.1 INTRODUCTION....135
9.2 RESULTS....135
CHAPTER 10 - QUALITY OF CARE....151
10.1 INTRODUCTION....151
10.3 KEY FINDINGS....190
CHAPTER11- PROGRESS AGAINST NHSP-2 LOGFRAME TARGETS....193
11.1 INTRODUCTION....193
11.2 RESULTS....194

LIST OF TABLES

Table 0.1Progress of LF indicators ..... b
Table 0.2: Free care ..... g
Table 0.3: Aama programme ..... g
Table 0.4: Financial management ..... h
Table 0.5: Governance and accountability ..... h
Table 0.6: Human resources i
Table 0.7: Drug supply and storage i
Table 0.8: Quality of care ..... j

Table 1. 1: NHSP-2 logical framework indicators monitored by the STS 2012 2

Table 2. 1: Districts selected for STS within the 13 sub regions (selected districts in bold) 5
Table 2. 2: Number of facilities by type in selected districts (total and STS 2012 sample) 6
Table 2. 3: Sections covered in questionnaire and desired respondent 8

Table 3. 1: Ownership of facility building, by level of facility 13
Table 3. 2: Presence of a compound wall or barbed wire and areas that need repair or maintenance 14
Table 3. 3: Facilities with permanent and overnight accommodation 15
Table 3. 4: Number of nursing staff that can be housed in permanent accommodation 15
Table 3. 5: Waiting area for clients and companions 16
Table 3. 6: Availability and adequacy of separate delivery room 17
Table 3. 7: Availability of power supply 18
Table 3. 8: Main source of water and availability of drinking water 19
Table 3. 9: Availability of sink, running water and soap 20
Table 3. 10: Availability of functional toilets 21
Table 3. 11: Availability and functionality of phone 21
Table 3. 12: Availability and functionality of ambulance service 22
Table 3. 13: Number of exit interviews conducted in each district 22
Table 3. 14: Urban /rural residence 23
Table 3. 15: Reside in same or different district 24
Table 3. 16: Demographic characteristics of clients 25
Table 3. 17: Persons involved in care-seeking decision-making 26
Table 3. 18: Mode of transportation used to reach facility 27
Table 3. 19: Distance, cost of transportation and time taken to reach facility 28
Table 3. 20: Persons who accompanied clients to facility 28
Table 3. 21: Difficulties faced prior to arrival at facility 29
Table 3. 22: Type and timing of maternity complications 33
Table 3. 23: Mode of delivery and reason for assisted delivery/caesarean section 34
Table 3. 24: Time of delivery 34

Table 4. 1: Awareness of free care among outpatients, by ecological zone 37
Table 4. 2: Awareness of free care among outpatients, by caste/ethnicity 38
Table 4. 3: Payments made for outpatient services, by facility type 39
Table 4. 4: Payments made for outpatient services, by caste/ethnicity 40
Table 4. 5: Payments made for outpatient services, by ecological zone 40
Table 4. 6: Service type used and amount paid by outpatients for care, by level of facility 42
Table 4. 7: Reasons given for payment for care, by caste/ethnicity 44
Table 4. 8: Reasons given for payment for care, by ecological zone 44

Table 5. 1: Implementation of the Aama Programme 48
Table 5. 2: Procedure to claim transport incentives 48
Table 5. 3: Disclosure of Aamabeneficiaries 49
Table 5. 4: Place where information about Aama Programme beneficiaries is disclosed 50
Table 5. 5: Amount received and paid out under 4ANC and travel incentive schemes, by facility level 51
Table 5. 6: Amount received by facilities for Aama Programme compared to number of deliveries . 53
Table 5. 7: Receipt of entire amount and reasons for non-receipt 55
Table 5. 8: Aware of free delivery care, by ecological zone 56
Table 5. 9: Aware of free delivery care, by caste/ethnicity 57
Table 5. 10: Aware of transport incentives, by ecological zone 59
Table 5. 11: Aware of transport incentives, by caste/ethnicity 60
Table 5. 12: Perceived benefits of free delivery care and transport incentives 61
Table 5. 13: Patients' views on what is not good about free care/ transport incentive 62
Table 5. 14: Receipt of incentive payments and payment for delivery care, by ecological zones 63
Table 5. 15: Receipt of incentive payments and payment for delivery care, by caste/ethnicity 64
Table 5. 16: Receipt of incentive payments and payment for delivery care,by level of facility 64
Table 5. 17: Provider comments regarding non-receipt of transport incentive 65
Table 5. 18: Amount received in transport incentives, by ecological zone 65
Table 5. 19: Percentage of clients paying and median amount paid, by type of payment 66

Table 6. 1: Sources of income, by facility type 69
Table 6. 2: Budget received in last fiscal year, by source of income and facility type 70
Table 6. 3: Number of times facilities requested and received budget from MoHP, by facility type .. 71
Table 6. 4: Receipt of full budget and reasons for non-receipt of full budget, by facility type 71
Table 6. 5: Mean amount of MoHP funds received and spent by level of facilities 72
Table 6. 6: Average amount of MoHP budget received and spent, by line item 73
Table 6. 7: Reasons for not spending the full budget received 74
Table 6. 8: Procurement process of medical products 75
Table 6. 9: Disclosure of financial information, by disclosure method 75
Table 6. 10: Facilities that submitted financial report in FY 2011/12 76
Table 6. 11: Facilities received final audit, timing of audit and the recommendations 78
Table 6. 12: Access to bank account and bank balance 78

Table 7. 1: Facilities that conducted social audit in the last fiscal year (2011/12) 83
Table 7. 2: Availability and content of citizen's charters, by facility level 85
Table 7. 3: Information displayed by information source 86
Table 7. 4: Frequency of HDC/HFOMC meetings 86
Table 7. 5: Sex and caste or ethnic make-up of HFOMC/HDC by facility level 87
Table 7. 6: Presence, participation and initiatives for the inclusion of women and marginalized caste/ethnic groups in HFOMC/HDCs, by facility level 89
Table 7. 7: Capacity building activities undertaken for HFOMC/HDC members, by facility level . 90
Table 7. 8: Activities to reach socially excluded groups, by facility level 90
Table 7. 9: Procedures for dealing with, and actions taken on, suggestions or complaints, by facility type 91
Table 7. 10: Frequency and timing of staff meetings, by facility type 92
Table 7. 11: Staff assessment of user-friendliness of HMIS recording and reporting tools, by facility type 93
Table 7. 12: HMIS tools identified as not user-friendly, with reasons, by facility type 93
Table 7. 13: Stock-outs of HMIS tools in the last fiscal year, by facility type 94
Table 7. 14: Comfort levels with HMIS compilation and reporting process, by facility type 95
Table 7. 15: Staff time spent in last month on data recording and reporting, by facility type 96
Table 7. 16: Use of HMIS data, by facility type 97
Table 7. 17: Workload related to recording and reporting other than HMIS, by facility type 98
Table 7. 18: Suggestions to improve the HMIS recording and reporting process, by facility type . 99
Table 7. 19: Supervision visits in the last fiscal year, by facility type 100
Table 7. 20: Type of feedback received from supervision visits, by facility type 100
Table 7. 21: Feedback given on increasing service coverage, by facility type 101
Table 7. 22: Suggested ways to improve supervision and feedback, by facility type 101
Table 7. 23: Presence of emergency contingency plan for health services during conflict or emergency situation, by facility type 102

Table 8. 1: Number of sanctioned positions and proportion that are filled, at higher level hospitals 107
Table 8. 2: Number of sanctioned positions and proportion that are filled, at district level hospitals 108
Table 8. 3:Number of sanctioned positions and proportion that are filled, at PHCCs 109
Table 8. 4: Number of sanctioned positions and proportion that are filled, at health posts 110
Table 8. 5: Number of sanctioned positions and proportion that are filled, at SHPs 111
Table 8. 6: Effect of staff shortage on services 112
Table 8. 7: Sanctioned staff currently deputed in and out 113
Table 8. 8: Service-contract mix 115
Table 8. 9: Skills mix at higher level and district hospitals (includes filled, contract, deputed in and excludes deputed out) 117

Table 8. 10: Skills mix at PHCCs, HPs and SHPs (includes filled, contract, deputed in and excludes deputed out) 117
Table 8. 11: Staff currently in filled positions (excluding deputed out) who ever received training. 119
Table 8. 12: Staff currently in temporary positions (includes deputed in/contract, excludes deputed out) who ever received training 122
Table 8. 13: Staff turnover in the last fiscal year 125
Table 8. 14: Breakdown of attendance by type of provider 128
Table 8. 15: Breakdown of staff by sex 130
Table 8. 16: Breakdown of staff by caste/ethnicity 131

Table 9. 1: Storage of drugs that do not require refrigeration, by facility level 136
Table 9. 2: Storage of drugs that require cold-chain/refrigeration 137
Table 9. 3: Storage of drugs in first expired first out (FEFO) approach 138
Table 9. 4: Drugs most likely to bestored past expiry dateat time of visit 139
Table 9. 5: Drugs most likely to be stored past expiry date during last fiscal year, as reported by provider 140
Table 9. 6: Experience of stock-outs of essential drugs at health facilities during the last fiscal year 142
Table 9. 7: Number of stock-outs of essential drugs in last fiscal year 143
Table 9. 8: Number of days that essential drugs had stock-outs 144
Table 9. 9: Stock out of essential drugs at time of visit 145
Table 9. 10: Drugs reported to have most problems with in regards to stock-outs in last fiscal year 146
Table 9. 11: Provider response to stock-outs of drugs included under the free care policy 147
Table 9. 12: Provision of community drugs schemes and review of drugs 148

Table 10. 1: Process for disposal of biomedical waste 153
Table 10. 2: Presence of bins for biomedical waste 153
Table 10. 3 Shortages and usage of supplies and equipment in last fiscal year 154
Table 10. 4: Experiences in receiving equipment 156
Table 10. 5: Review of equipment in the last fiscal year and attitude towards equipment swapping 157
Table 10. 6: Recommendations for improving the supply management systems for equipment and supplies 157
Table 10. 7: Recommendations for improving the repair and maintenance for equipment 158
Table 10. 8: Provisions ready before conducting the last delivery 160
Table 10. 9: Provide oxytocin to women before and after delivery 161
Table 10. 10: Maternal and infant monitoring during last delivery 162
Table 10. 11: PV examinations and use of gloves/aprons during last delivery 163
Table 10. 12: Newborn care practices 164
Table 10. 13: Main difficulties faced during the last delivery 164

Table 10. 14: Cleanliness of delivery table and availability of cleaning products 165
Table 10. 15: Maternity clients informed by providers 166
Table 10. 16: Requested any companion while seeking care 166
Table 10. 17: Referral for caesarean section/assisted deliveries 167
Table 10. 18: Time taken and distance to nearest referral facility (using quickest means of transport) 168
Table 10. 19: Respondents referred to another facility 169
Table 10. 20 Proportion of facilities officially recognized as CEONC, BEONC and birthing centres... 170
Table 10. 21 Availability of normal delivery services 170
Table 10. 22 Availability of BEONC services 171
Table 10. 23: Availability of BEONC services 172
Table 10. 24: Availability of CEONC services 173
Table 10. 25: Provision of family planning methods 173
Table 10. 26: Family planning methods in stock at time of visit 174
Table 10. 27: Number of stock-outs of family planning methods in the last fiscal year 175
Table 10. 28: Availability of post-partum and post-abortion family planning services 176
Table 10. 29: Waiting time between arrival and first assessment by a provider and level of satisfaction 177
Table 10. 30: Satisfaction with the level of cleanliness 178
Table 10. 31: Measures used to maintain privacy 179
Table 10. 32: Satisfaction with the level of privacy 179
Table 10. 33: Overcrowding of the facility/maternity department reported by client 180
Table 10. 34:Type of provider who provided most care 180
Table 10. 35: Comfortable with sex of the provider, by sex of client 181
Table 10. 36: Satisfaction with information received from providers 182
Table 10. 37: Satisfaction with provider skill level 182
Table 10. 38: Clients scolded by staff and perceived reason of the clients being scolded 183
Table 10. 39: Satisfaction with staff politeness 184
Table 10. 40: Maternity clients likes and dislikes about delivery care 185
Table 10. 41: Place of previous delivery 186
Table 10. 42: Comparison of last delivery with previous 186
Table 10. 43: Satisfaction with the care received 187
Table 10. 44: Main client recommendations for facility improvements 188

Table 11. 1 Logical framework indicators generated from STS 2012 193

Table 11. 2 Achievement of logical framework indicators measured by STS 2012 against targets... 205
Table 11. 3: NHSP-2 logframe indicators that have achieved the 2013 target 209
Table 11. 4: NHSP-2 logframe indicators that are on track to achieve the 2013 target 209
Table 11. 5: NHSP-2 logframe indicators that will not achieve the 2013 target 210

LIST OF FIGURES

Figure 2. 1: Map of districts selected for STS 2012 5
Figure 3. 1: Services received by outpatients 30
Figure 3. 2: Reasons maternity clients chose to deliver in a facility 31
Figure 3. 3: Timing of visit for maternity clients 32
Figure 4. 1: Percentage of outpatients who were aware of entitlement to free care by ecological zone 36
Figure 5. 1: Mean amount received by facilities for normal and complicated deliveries 52
Figure 6. 1: Percentage of hospitals receiving an internal audit in each trimester FY 2011/12 77
Figure 7. 1: Facilities that conducted social audit in the last fiscal year (2011/12) 82
Figure 7. 2: Facilities that had a citizen charter at the time of survey 84
Figure 7. 3: Presence of women and marginalized caste/ethnic groups in HDCs/HFOMCs 88
Figure 7. 4: Percentage of health facilities with filled monthly monitoring sheets, by facility type 97
Figure 9. 1 Storage of drugs that do not require refrigeration 136
Figure 9. 2: Percentage of facilities with 'most' or all drugs stored using FEFO principle 138
Figure 9. 3: Provider responses to stock-out of drugs under free care policy 147
Figure 9. 4: Percentage of outpatients paying for drugs and receiving drugs for free 149
Figure 9. 5: Percentage of maternity clients paying for drugs 149
Figure 10. 1 Presence of quality improvement plan 159
Figure 10. 2: Position of mother during labour of last delivery 163
Figure 10. 3 Main recommendations for maternity care 189
Figure 10. 4: Main recommendations for outpatient care 189
Figure 11. 1: Percentage of clients satisfied with care at health facilities 194
Figure 11. 2: Percentage of districts with at least one facility providing all CEONC signal functions 24/7 196
Figure 11. 3:Percentage of PHCCs providing all BEONC signal functions 24/7 197
Figure 11. 4: Percentage of health posts that are birthing centres providing deliveries 24/7 198
Figure 11. 5: Percentage of safe abortion sites with long-acting and post-abortion family planning services 199
Figure 11. 6:Percentage of health posts with at least five family planning methods 200
Figure 11. 7: Percentage of sanctioned doctors and nurses posts at PHCCs and hospitals that are filled 201
Figure 11. 8:Percentage of district hospitals with at least one obstetrician/gynaecologist or MDGP; five SBA trained nurses; and one anaesthetist/anaesthetist assistant 202
Figure 11. 9: Percentage of health facility committees with at least three female members and two Dalit or Janajati members 203
Figure 11. 10: Percentage of health facilities that undertook social audits in the last fiscal year as per MoHP guideline 204

FOREWORD

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FOREWORD

The Service Tracking Survey 2012 (STS 2012) was led by the Ministry of Health and Population (MoHP), with technical assistance from Nepal Health Sector Support Programme (NHSSP), and executed by South Asian Institute for Policy Analysis and Leadership (SAIPAL). The design and implementation was overseen by a technical working committee (TWC) with representatives from government, external development partners and NHSSP advisors.

The survey was designed to collect the relevant information needed to provide national level estimates of key indicators that can monitor the following over time: the Aama Programme and free health care; health service governance; human resources; drug supply and storage, quality of care and the NHSP II logical framework.

I believe that this report provides crucial information to help monitor the progress of NHSP II, and to help plan for NHSP III. I would like to thank all of those who contributed to the successful completion of the STS 2012.

Dr Praveen Mishra
Secretary
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ACRONYMS

AA	Anaesthetist assistant
AHW	Auxiliary Health Worker
ANM	Auxiliary nurse midwife
AWPB	Annual work plan budget
BC	Birthing centre
BEONC	Basic emergency obstetric and neonatal care
BP	Blood pressure
CAC	Comprehensive abortion care
CDP	Community drug programme
CEONC	Comprehensive emergency obstetric and neonatal care
CS	Caesarean section
CSPro	Census and survey processing system
D/PHO	District/public health office
DDC	District Development Committee
DoHS	Department of Health Services
DTCO	District Treasury Control Office
EHCS	Essential health care services
EPSEM	Equal probability sampling method
FCGO	financial controller general office
FCHV	Female community health volunteers
FEFO	First expired first out
FHD	Family Health Division
FMIP	Financial management improvement plan
FP	Family planning
GAAP	Governance and accountability action plan
GESI	Gender equality and social inclusion
GoN	Government of Nepal
HA	Health assistant
HDC	Hospital development committee
HDI	Human development index
HFOMC	Health facility operation and management committee
HMIS	Health Management Information System
HP	Health post
HRH	Human resource for health
HSRSP	Health Sector Reform Support Programme
I/NGO	International/non-governmental organization
IMCI	Integrated management of childhood illnesses
IUCD	Intrauterine contraceptive devices
LF	Logical framework
LMD	Logistic Management
MCHW	Maternal and Child Health Worker (MCHW)
MD	Doctor of Medicine
MDGP	Doctor of Medicine, general practitioner
MO	Medical officer
MoHP	Ministry of Health and Population
MRP	Manual removal of placenta
MVA	Manual vacuum aspiration
n	Sample size
NDHS	Nepal Demographic and Health Survey
NHP	National health policy

NHRC	Nepal Health Research Council
NHSP-1	First Nepal Health Sector Programme
NHSP-2	Second Nepal Health Sector Programme
NHSSP	National Health Sector Support Programme
NPC	National Planning Commission
NPR	Nepali Rupees
O/G	Obstetrician/gynaecologist
OPD	Outpatient department
ORS	Oral rehydration solution
OT	Operating theatre
PAC	Post abortion care
PEEA	Public expenditure and financial accountability
PHCC	Primary health care centre
PHC-ORC	Primary health care outreach clinic
PHCRD	Primary Health Care Revitalization Division
RMS	Regional medical store
RTI	Research Triangle Institute
SAIPAL	South Asian Institute for Policy Analysis and Leadership
SBA	Skilled birth attendant
SDIP	Safe Delivery Incentive Programme
SHP	Sub-health post
SN	Staff nurse
SPSS	Statistical package for social science
Stata	Statistics/data analysis
STS	Service Tracking Survey
SWAp	Sector Wise Approach
VDC	Village development committee
VHW	Village Health Worker

STS 2012: EXECUTIVE SUMMARY

A. INTRODUCTION

The second Nepal Health Sector Programme (NHSP-2), from 2010–2015, focuses on increasing access to and utilization of essential health care services (EHCS), particularly among women, the poor and excluded populations. Following an initial Service Tracking Survey (STS) in 2011, STS 2012 is the second health facility survey conducted to monitor the progress of NHSP-2.The objectives of STS 2012 were to monitor:

1. indicators in the NHSP-2 Logical Framework
2. the implementation of the Aama Programme and Free Care
3. the financial management capacity of health facilities
4. quality of care, including client experience
5. governance and gender equality and social inclusion (GESI)

B. METHODOLOGY

STS 2012 is a nationally representative cross-sectional survey. As in STS 2011, a two-stage cluster sampling design was employed: first selecting the districts, and then the health facilities. The same districts were selected for the Household Survey (HHS) 2012 and STS 2012, with one district randomly selected from each of 13 sub-regions.Similar proportions of health facilities (by type) were selected in STS 2012 (100% of government hospitals, 77% of PHCCs, 41% of HPs and 16% of SHPs), as in STS 2011 (100% of government hospitals, 76% of PHCCs, 41% of HPs and 15% of SHPs). However, the total number of facilities was higher in 2012 (198) than STS 2011 (169).As with STS 2011, three questionnaires were used in the STS 2012: health facility questionnaire (N=198); exit interview with outpatients (N=787) and exit interview with maternity clients who had recently delivered or experienced complications during the puerperium (N=260). Data were collected between 22nd August and 17th October 2012. In order to obtain nationally representative results, the data for 'total' facilities and clients were weighted.

C. KEY FINDINGS

The key findings are presented according to the five objectives of STS 2012.

OBJECTIVE 1: To monitor indicators in the NHSP-2 Logical Framework

A logical framework (LF) was developed to monitor the success of NHSP-2, consisting of 12 goal level, 14 purpose level, 19 outcome level and 42 output level indicators. STS 2012 is the source for 13 LF indicators. There has been mixed progress for these indicators (see Table 0.1): two have already exceeded the 2013 target set by NHSP-2; three indicators have shown good progress to date and may meet the 2013 target, but eight indicators have still not met their 2011 targets (where a target is specified) and are unlikely to meet the 2013 target (notably five of these relate to human resources).

Table 0.1Progress of LF indicators

Already achieved 2013 target	On track to reach 2013 target	Will not reach 2013 target
• Percentage of clients satisfied with their health care provider at public facilities • Percentage of health posts that are birthing centres providing deliveries 24/7	• Percentage of districts with at least one public facility providing all CEONC signal functions 24/7 • Percentage of PHCCs providing all BEONC signal functions 24/7 • Percentage of health facilities that have undertaken social audits as per MoHP guidelines in the current or last fiscal year	• Percentage of safe abortion (surgical and medical) sites with long acting family planning services • Percentage of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC) • Percentage of health posts with at least five family planning methods • Percentage of sanctioned posts that are filled - doctors at PHCC • Percentage of sanctioned posts that are filled - doctors at district hospitals • Percentage of sanctioned posts that are filled - nurses at PHCC • Percentage of sanctioned posts that are filled - nurses at district hospitals • Percentage of district hospitals that have at least one obstetrician-gynaecologist or MDGP, five SBA trained nurses and one anaesthetist or anaesthetist assistant

OBJECTIVE 2: To monitor the implementation of the Aama Programme and Free Care

Aama Programme

- Most clients were aware of free delivery care and transport incentives.
- Not all facilities that should be implementing the Aama Programme were: notably only half of HPs. However, over one in ten SHPs chose to implement the programme. Compared to 2011 there was a fall in the percentage of HPs (from 82% to 53%) and SHPs (from 19% to 11%) implementing the Aama programme.
- All hospitals, PHCCs and HPs implementing the Aama Programme reported that they gave transport incentive payments to the clients. However, 6% of clients from the implementing facilities reported that they had not received transport incentive payments.

- All health facilities implementing the Aama Programme reported that they did not charge clients for any deliveries. However, one in ten maternity clients from the implementing facilities reported that they had paid for delivery services.

Free Care

- Most outpatients (93%) knew that they were entitled to free care. A higher proportion of outpatients from the mountain (99%) and hill (98%) districts were aware of free care than outpatients from the Terai districts (87%).
- Despite good knowledge of free care, one-fifth of the outpatients reported paying for outpatient services (20%). Among those, only 7% did so voluntarily, the remaining 93% were told to pay by the provider. Among those who paid, most had paid a registration fee (89%), and this was the most common reason for payment.
- Outpatients from district hospitals (96%) were more likely to have paid for services than those from the lower level health facilities. Among those who paid, over nine out of ten were told to pay by the provider in each facility type.
- Outpatients from mountain districts (15%) were less likely to have paid for services than those from the hill (21%) and Terai (21%) districts.
- The highest charges were for laboratory fees (overall average NPR 250), followed by medicines (NPR 186) and x-ray/ultrasound fees (NPR 100).

OBJECTIVE 3: To monitor the financial management capacity of health facilities (including a detailed accounting of the flow of services and finance).

- The MoHP/D(P)HO was the main financier for all facilities, but accounted for a higher percentage of income at hospitals. For lower level facilities the VDC/Municipality body was a key source of finance, while internal income was important for hospitals and PHCCs.
- Nearly two thirds of facilities did not make any budget requests. Facilities implementing the Aama Programme had a higher number of budget requests/receipts.
- All hospitals received all of their allocated finance, but not all lower level facilities had. However, there was a still a big improvement compared to 2011.
- Local procurement by facilities was less common at the lower level facilities (19% of SHPs, and 30% of HPs) compared to higher level facilities (88% of hospitals, and 58% of PHCCs). Among facilities procuring locally, most procured directly from the vendors (100% of SHPs, 96% of HPs, 78% of PHCCs, and 57% of hospitals).
- The practice of preparing a financial report was less common at the lower level health facilities, where only 29% of SHPs, 44% of HPs and 45% of PHCCs had submitted a financial report, compared to most of the hospitals (94%). Similarly, the audit was less common at lower level facilities (15% of SHPs, 23% of HPs) compared to the higher level facilities (100% of hospitals, 45% of PHCCs).

OBJECTIVE 4: To monitor quality of care, including client experience

Quality of Care

- Availability of colour-coded bins was good in hospitals, but reduced by level of facility.
- Having equipment that no services providers were trained to use was most common in PHCCs. In hospitals, expensive machines were unused due to an absence of trained personnel, including radiant warmers, ventilator and USG machines. PHCCs were most likely to have conducted a review of equipment.
- Just under a third of facilities (32%) were found to have a quality improvement plan. Lower level facilities were least likely to have one.
- With regard to the last delivery, in all health facilities that provided delivery services the floor had reportedly been disinfected prior to the delivery. Availability of delivery sets with all necessary sterilized equipment was also good. However, delivery attendants from 11% of PHCCs and HPs and 6% of hospitals reported that some essential equipment was broken at the time of the last delivery. Staff from almost all facilities reported that they had given oxytocin after delivery. Most delivery attendants from hospitals (94%) had used a partograph while attending the last delivery, although this reduced to just over a half at other facility levels. Only four-fifths of staff at hospitals (81%) and 77% of PHCCs reported that they had checked the mother's blood pressure at least once an hour during labour. A higher proportion of staff at HPs reportedly faced more difficulties than staff at other facilities. The main reasons for difficulties reported by delivery attendants were inadequate staff, a lack of electricity, a lack of equipment and a lack of beds.
- Most (94%) maternity clients were informed about the importance of breastfeeding within an hour of giving birth, but clients were less likely to be informed about exclusive breastfeeding for six months. More than half of the maternity clients were informed about immunization (59%), postnatal danger signs (56%) and newborn danger signs (50%). Less than a third of clients were informed about family planning (32%). All of these were least common at hospitals.
- Among maternity clients requesting a companion, 65% were permitted during labour pain and 67% after delivery, but notably this dropped to 44% during the actual delivery.
- All CEONC facilities provided all BEONC and CEONC signal functions 24/7. However, only 62% of districts had at least one facility providing all CEONC signal functions 24/7.
- Only 77% of BEONC facilities provided all BEONC signal functions, with 73% doing so on a 24 hours basis. The BEONC signal function least likely to be performed was assisted delivery.
- All health facilities provided condoms, oral contraceptive pills and injectables. Hospitals and PHCCs were more likely to provide IUCDs and implants. Minilap was available in 63% and vasectomy in 69% of hospitals. Nearly a fifth of facilities experienced a stock out of at least one temporary family planning method in the last fiscal year. Encouragingly, all safe abortion sites were providing post abortion family planning services.
- Only 58% of the PHCCs and 6% of SHPs were providing adolescent friendly health services.

Client experience:

- Most clients reported satisfaction with the waiting time (90% of maternity clients and 81% of outpatients), the cleanliness of the facilities (72% of maternity clients and 76% of outpatients), the level of privacy (81% of maternity clients and 69% of outpatients), information provided (73% of maternity clients and 89% of outpatients), skill level of provider (95% of maternity clients and 92% of outpatients), and politeness of provider (94% of maternity clients and 96% of outpatients).
- Overall, the level of satisfaction for both maternity clients and outpatients was very high with 90% reporting that they were satisfied/very satisfied with the care they received. Maternity clients (8%) were more likely to report dissatisfaction with their care than outpatients (4%). Most outpatients (99%) reported that they would be willing to revisit the facility, but only 69% of maternity clients who planned to have another child. Although most maternity (96%) and outpatient (98%) clients reported that they would recommend the facility to others.
- Many maternity clients who had previously given birth at a health facility reported that this time it cost less (67%); it was cleaner (57%);they received better quality care (45%) and the staff behavior was better (43%).

OBJECTIVE 5: To collect information related to governance and gender equality and social inclusion (GESI)

Governance and Accountability (G&A)

- Just over a quarter of health facilities had conducted a social audit in the last fiscal year, with one-fifth following MoHP guidelines. PHCCs were most likely to have conducted social audits. Nearly half of those that conducted social audits implemented the recommended actions.
- Almost two thirds of facilities had a Citizen's Charter, and among these most contained information on free drugs and outpatient services, but only two-thirds showed the opening hours and just half showed the costs of services and drugs.
- Four-fifths of hospitals (81%) had a suggestion/complaints procedure, but most PHCCs (74%),HPs(81%) and SHPs (90%)didn't have any formal mechanism to address suggestions and complaints from clients. The average number of complaints or suggestions received was three per year per SHP, four per year per PHCC and five per year per HP. Not surprisingly, given the higher caseload, hospitals had the highest average number of complaints or suggestions at ten per year per hospital.

Gender equality and social inclusion (GESI)

- Male outpatients (83%) were more likely to be involved in their care-seeking decision-making process than female outpatients (75%) or maternity clients (47%).
- Male outpatients were more likely to have accessed the facility unaccompanied (61%) than female outpatients (47%). Male outpatients (65%) were more likely to report that they did not face any difficulties prior to arrival than female outpatients (58%) or maternity clients (29%). Women outpatients were more likely to face problems with long travel times, someone to accompany them and someone to take care of their children.
- Muslims had the highest level of awareness of free care (100%), but were also most likely to have paid for the services they received and, of those who paid, all were told to pay and had paid a registration fee. A higher proportion of outpatients from the mountain and hill districts were aware of free care than those from the Terai districts, and outpatients from mountain regions (15%) were less likely to pay for services than outpatients from hill (21%) and Terai districts (21%), and all of those who paid from mountain districts had been told to pay and paid the registration fee.
- Only half of the health facilities (49%) fulfilled the NHSP-2 requirement of having at least three females and two Dalit/Janajati members on HFOMCs/HDCs. Lower level facilities were more likely to meet the criteria than hospitals, but if they did have representatives, hospitals were more likely to include them in the decision-making processes. Facilities were more likely to meet the criteria for Dalits/Janajatis than women. A small number of facilities (7%) had no Dalit or Janajati members (four district hospitals, one PHCC, four HPs, and four SHPs).
- Half of the hospitals (50%), PHCCs (58%) and HPs (51%) had carried out activities to reach women as a target group compared to just two-fifths of SHPs (40%). Hospitals were more likely to report carrying out activities for the poor/very poor (44%) in comparison to PHCCs (26%), HPs (32%) and SHPs (17%).
- With regard to staffing at health facilities, more senior positions tend to be filled by men, while women tend to fill the nursing positions. Staff largely come from the Brahmin/Chhetri castes especially for higher level facilities and more senior positions, while the representation from Dalits and Muslims was low.

D. STS KEY INDICATORS

Table 0.2 presents the key STS indicators, reflecting each of the study themes. Those that are included in the NHSP-2 LF are shaded.

Table 0.2: Free care

STS indicators	STS 2012	95%CI
% of outpatients aware of free care	93.2	88.8-95.8
% of Dalit and Janajati outpatients aware of free care	91.2	84.3-95.7
% of outpatients from mountain districts aware of free delivery care	98.6	95.6-99.7
% of outpatients who paid for care under the free care policy	20.6	14.1-29.0
% of Dalit and Janajati outpatients who paid for care under the free care policy	20.3	12.1-29.5
% of clients from mountain districts who paid for care under the free care policy	15.3	6.4-33.8

Table 0.3: Aama programme

STS indicators	STS 2012	95%CI
% of hospitals, PHCCs and health posts implementing Aama	67.0	42.1-85.0
% of maternity clients aware of transport incentive	90.9	86.6-94.3
% of Dalit and Janajati maternity clients aware of transport incentive	85.8	75.3-92.2
% of maternity clients from mountain districts aware of transport incentive	81.8	64.4-95.0
% of maternity clients aware of free delivery care	92.9	88.3-96.0
% of Dalit and Janajati maternity clients aware of free delivery care	91.5	79.5-96.7
% of maternity clients from mountain districts aware of free delivery care	100	NA
% of maternity clients who paid for delivery care	12.2	6.7-21.2
% of Dalit and Janajati maternity clients who paid for delivery care	7.5	4.0-15.9
% of maternity clients from mountain districts who paid for delivery care	9.1	2.7-30.6

Table 0.4: Financial management

STS indicators	STS 2012	95%CI
% of facilities that spent all the funds received	23.1	16.9-30.7
% of facilities with a bank account	100	NA
% of facilities that disclosed their income and expenditure to the public	73.6	61.8-82.8
% of facilities that conducted a final audit in the last fiscal year	20.0	11.4-32.6

Table 0.5: Governance and accountability

STS indicators	STS 2012	95%CI
% of health facilities that undertook social audits as per MoHP guidelines in the last fiscal year*[1]	13.7	8.2-22.0
% of facilities that conducted a social audit in the last fiscal year, made findings public and incorporated recommended actions in annual work plan and budget (AWPB)	7.4	1.9-24.5
% of facilities with a citizen's charter placed in a visible location and included information on free drugs, outpatient services and Aama (if Aama implementing facility)	55.4	40.0-69.7
% of facilities with a health management committee (health facility operation management committees [HFOMCs] and hospital development committees [HDC]) meeting on a monthly basis	30.9	23.8-39.0
% of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)*	55.1	34.1-74.4

Table 0.6: Human resources

STS indicators	STS 2012	95%CI
% of sanctioned posts that are filled		
Doctors at PHCCs	22.6	8.8-46.9
Doctors at district hospitals	63.0	35.6-78.8
Nurses at PHCCs	58.7	44.9-73.3
Nurses at district hospitals	82.7	75.1-91.1
% of district hospitals that have at least 1 obstetrician-gynaecologist or specialist general practitioner (MDGP), 5 SBA trained nurses, and 1 anaesthesiologist or anaesthetic assistants	0	NA
% of PHCCs with at least one medical officers, 1 health assistant/senior auxiliary health worker (SrAHW), 1 staff nurse, 2 AHWs, 3 ANMs and 1 lab assistants in filled post	9.7	4.8-18.4
% of category A health posts with at least 1 health assistants/SrAHW, 2 AHW, and 1 ANM in filled post	38.7	22.2-59.8
% of category B health posts with at least 1 health assistants/SrAHW, 1 AHW, and 1 ANM in filled post	16.7	9.7-24.5
% of SHPs with at least 1 AHW, 1 MCHW, and 1 VHW in post	44.4	31.9-64.9

Table 0.7: Drug supply and storage

STS indicators	STS 2012	95%CI
% of facilities with drugs stored in a cool and dry place	29.3	21.0-39.3
% of facilities with drugs stored as per first expired, first out (FEFO) principles	84.4	76.3-90.1
% of PHCCSs with at least one fridge with guaranteed power 24/7	48.4	40.2-56.7
% of maternity clients who paid for essential drugs	54.3	37.9-69.9

Table 0.8: Quality of care

STS indicators	STS 2012	95%CI
% of facilities with comprehensive biomedical waste management in place (puncture proof bin for needles; bin for disposing of plastics; bin for disposing of blood/fluid stained items; pit for placenta/deep burial)	21.9	16.8-28.2
% of CEONC facilities providing all CEONC signal functions 24/7	100.0	NA
% of district hospitals providing all CEONC signal functions 24/7	50.0	37.0-60.3
% of districts with at least one facility providing all CEONC signal functions 24/7*	61.5	38.9-80.1
% of BEONC facilities providing all BEONC signal functions 24/7	72.8	55.4-88.3
% of PHCCSs that provide all BEONC signal functions 24/7*	39.0	10.3-72.6
% of health posts that are birthing centres providing deliveries 24/7*	97.7	87.5-99.6
% of safe abortion sites with long acting family planning services*	56.1	17.4-88.5
% of district hospitals providing male and female permanent family planning services	57.1	34.4-77.2
% of health posts with at least five family planning methods*	7.6	4.1-13.5
% of outpatients who thought the facility was overcrowded	33.8	27.1-41.3
% of maternity clients who thought maternity department was overcrowded	29.2	17.5-44.6
% of clients (maternity and outpatients) satisfied with the cleanliness of the health facility[3]	74.8	69.2-83.0
% of clients (maternity and outpatients) satisfied with the provisions made to ensure privacy[3]	69.6	61.5-76.4
% of clients (maternity and outpatients) satisfied with their health care*	89.5	82.4-97.3

Note: The shaded indicators, marked with an asterisk (*), are included in the NHSP 2 logical framework

CHAPTER 1 - INTRODUCTION

Following an initial Service Tracking Survey (STS) in 2011 (Subedi et al, 2012), STS 2012 is the second nationally representative health facility survey conducted to monitor the progress of the second Nepal Health Sector Programme (NHSP-2). The survey was led by the Government of Nepal's (GoN) Ministry of Health and Population (MoHP) with technical support from the Nepal Health Sector Support Programme (NHSSP) and executed by South Asian Institute for Policy Analysis and Leadership (SAIPAL).

1.1 NEPAL HEALTH SECTOR PROGRAMME

The GoN introduced a National Health Policy (NHP) in 1991 that aimed to improve the health status of the population through increasing access to primary health care services. Following this, various sub-sector health policies, strategies and plans were developed and implemented within the health sector. The 'Health Sector Strategy: An Agenda for Reform' was introduced in 2003, with the intention to move the health sector towards strategic planning and a Sector Wide Approach (SWAp). The first Nepal Health Sector Programme (NHSP-1), from 2004-2009, was the first health SWAp in Nepal.

Building on the foundations laid by the NHSP -1 and its success, the government formulated the second Nepal Health Sector Programme (NHSP-2) for 2010–2015. The best practices and lessons learned in the course of implementing NHSP-1 were capitalized upon and used in developing NHSP-2. NHSP-2 is a national guiding document for the health sector and focuses on meeting the health-related MDGs: 1 (partly)[1], 4[2], 5[3] and 6[4]. NHSP-2 offers a strong foundation to scale-up cost-effective and evidence-based health programmes delivering successful results. It has a greater focus on increasing access to and utilization of essential health care service (EHCS) components particularly among women, the poor and excluded groups.

1.1.1. Goals and objectives

The health sector goal, as stated in the NHSP-2, is to improve the health and nutritional status of all Nepalese citizens, especially of the poor and excluded. It intends to contribute to poverty reduction by providing equal opportunities for all to receive high-quality and affordable health care services. In order to achieve the expected results of improved health status, the following objectives were set for NHSP-2:

- To increase access to and utilization of quality EHCS.
- To reduce harmful cultural practices and cultural and economic barriers to accessing health care services in partnership with non-state actors.
- To improve the health system to achieve universal coverage of EHCS.

[1] Eradicating extreme poverty and hunger
[2] Reducing child mortality rates
[3] Improving maternal health
[4] Combating HIV/AIDS, malaria and other diseases

1.1.2. Logical Framework

To monitor the success of NHSP-2, a results framework was created in 2010. The original results framework was subsequently revised in 2012 and is now called the logical framework (LF). The LF consists of 12 goal level indictors, 14 purpose level indicators, 19 outcome level indicators and 42 output level indicators. The STS 2012 is the source of data for 13 of the NHSP-2 LF indicators (Table 1.1).

Table 1. 1: NHSP-2 logical framework indicators monitored by the STS 2012

Code	Indicator
OC 2.6	Percentage of clients satisfied with their health care at facilities
OP 1.3	Percentage of HFOMCs /HDC with at least 3 female members and at least 2 members from Dalit or Janajati
OP 3.1	Percentage of sanctioned doctors and nurses posts at PHCCs and Hospitals that are filled
OP 3.1.1	Percentage of sanctioned posts that are filled - doctors at PHCCs
OP 3.1.2	Percentage of sanctioned posts that are filled - doctors at District Hospitals
OP 3.1.3	Percentage of sanctioned posts that are filled - nurses at PHCCs
OP 3.1.4	Percentage of sanctioned posts that are filled - nurses at District Hospitals
OP 3.2	Percentage of hospitals that have at least 1 obstetrician-gynaecologist or MDGP, 5 SBA trained nurses and 1 anaesthetist or anaesthetist assistant
OP 4.5	Percentage of districts that have at least one facility providing all CEONC signal functions 24/7
OP 4.6	Percentage of PHCCs that provide all BEONC signal functions
OP 4.7	Percentage of health posts that are birthing centres providing deliveries 24/7
OP 4.8	Percentage of safe abortion sites with long acting family planning services
OP 4.9	Percentage of health posts providing condom, pill, injectable, IUCD and implant
OP 8.1	Percentage of health facilities that have undertaken social audits as per MoHP guideline in the last fiscal year

1.2 STS 2012 AIM AND OBJECTIVES

The objectives of STS 2012 were:

- to monitor the implementation of the Aama and Free Care Programmes
- to monitor the financial management capacity of health facilities (including a detailed accounting of the flow of services and finance)
- to monitor quality of care, including client experience
- to monitor indicators in the NHSP-2 Logical Framework
- to collect information related to governance and gender equality and social inclusion (GESI)

1.3 STRUCTURE OF REPORT

This report consists of eleven chapters. Chapter One provides a brief description of NHSP-2 and the rationale and objectives of STS 2012. Chapter Two describes the methodology of the STS 2012 in detail (survey design, sampling strategy, questionnaire design, selection and training of data collection team, data collection, data management and limitations of the survey). Chapter Three presents the background characteristics of facilities (infrastructure, water and sanitation, communication and ambulance provision) and clients' characteristics. Chapters Four to Eleven present the main findings from the survey. Chapter Four presents the findings of Aama Programme; Chapter Five: free care; Chapter Six: financial flow; Chapter Seven: governance and accountability; Chapter Eight: human resource; Chapter Nine: drug supply and storage; Chapter Ten: quality of care and Chapter Eleven: progress against the NHSP-2 logical framework indicators. Each chapter contains introduction, results, and key findings.

CHAPTER 2- METHODOLOGY

The following factors were considered while designing the sampling strategy for the Service Tracking Survey (STS) 2012:

- the data needs to be nationally representative (but will not provide district level estimates)
- the key indicators need to be monitored over time and therefore the data needs to be comparable with STS 2011
- the districts will be randomly selected for each survey, but all regions and ecological zones will be represented in all surveys, and
- all public hospitals within the selected districts will be included, along with a proportion of primary health care centres (PHCCs), health posts (HPs) and sub-health posts (SHPs).

2.1 SURVEY DESIGN

STS 2012 is a nationally representative cross sectional survey. The sampling strategy in the STS 2012 used a two-stage sampling design:

- In the first stage of sampling, one district was randomly selected from each of 13 sub-regions. Therefore, the districts are the Primary Sampling Units (PSUs), and one PSU was selected per sub-stratum (sub-region). This resulted in three districts bring selected from the mountain zone, five from the hill zone, and five from the Terai.
- In the second stage, the facilities were selected within each of the 13 districts. The higher the level of facility, the greater the probability of being selected: all public hospitals from the selected districts were included and an equal probability sampling method (EPSEM) was used to select PHCCs, HPs and SHPs.

2.2 SAMPLE DESIGN

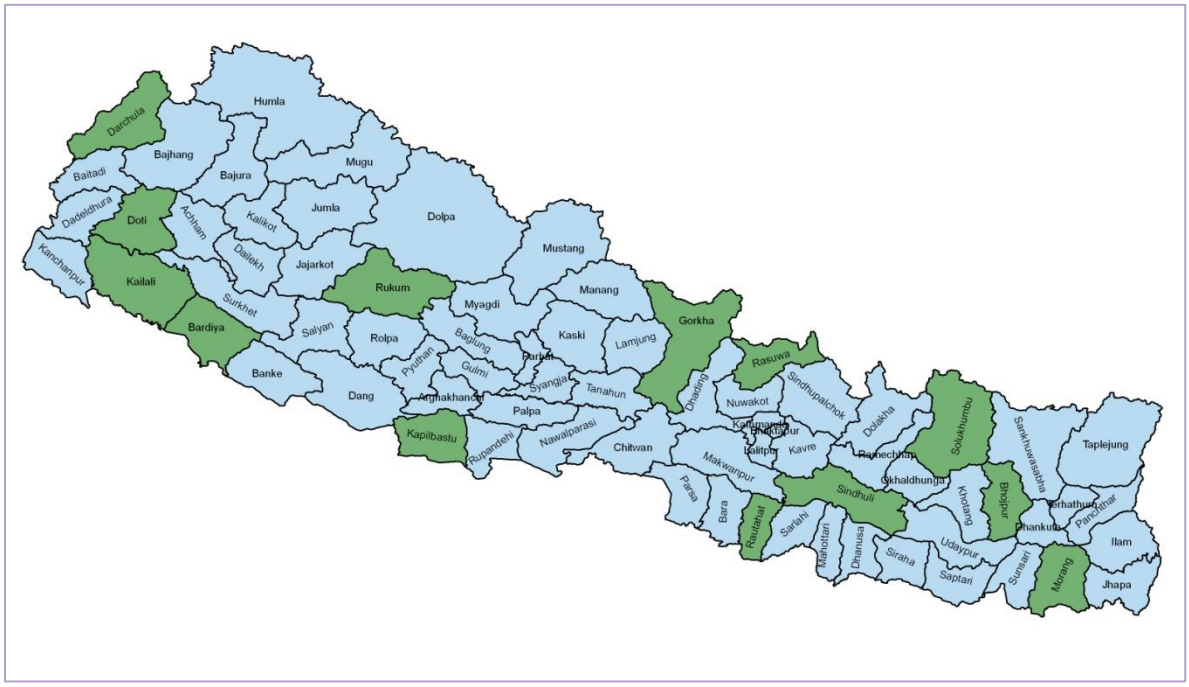
2.2.1 District selection

The same districts were selected for both the Household Survey (HHS) 2012 as the Service Tracking Survey (STS) 2012. In the Nepal Demographic Health Survey (NDHS) 2011 Nepal was divided by the three ecological zones and five development regions into 13 sub-regions (the mountain districts in the Western, Mid-western, and Far-western are combined into one sub-region owing to their relatively small populations). This 13 sub-region classification was also used in previous facility surveys conducted by Ministry of Health and Population (MoHP) and the Health Sector Reform Support Programme (HSRSP) in 2009 and 2010 and the STS 2011. As in the earlier facility surveys, including STS 2011, one district was randomly selected from each of the 13 sub-regions for the STS 2012 (see Table 2.1, with selected districts in bold). Given the districts are randomly selected each year, the same districts may be repeatedly selected by chance. Three of the districts selected in 2011 were also selected in STS2012 (Kailali, Kapilbastu and Solukhumbu). Figure 2.1 shows the geographical distribution of the districts selected for STS 2012.

Table 2. 1: Districts selected for STS within the 13 sub regions (selected districts in bold)

Sub-region (13)	Districts (75)
Eastern mountain (3)	Taplejung, Sankhuwasabha, **Solukhumbu**
Central mountain (3)	Dolakha, **Rasuwa**, Sindhupalchowk
Far-/Mid-/Western mountain (10)	Bajhang, Bajura, **Darchula**, Dolpa, Humla, Jumla, Kalikot, Manang, Mugu, Mustang
Eastern hill (8)	**Bhojpur**, Dhankuta, Ilam, Khotang, Okhaldhunga, Panchthar,Terhathum, Udayapur
Central hill (9)	Bhaktapur, Dhading, Kavrepalanchowk, Kathmandu, Lalitpur, Makawanpur, Nuwakot, Ramechhap, **Sindhuli**
Western hill (11)	Arghakhanchi, Baglung, **Gorkha**, Gulmi, Kaski, Lamjung, Myagdi, Palpa, Parbat, Syangja, Tanahun
Mid-western hill (7)	Dailekh, Jajarkot, Pyuthan, Rolpa, **Rukum**, Salyan, Surkhet
Far-western hill (4)	Achham, Baitadi, **Doti**, Dadeldhura
Eastern Terai (5)	Jhapa, **Morang**, Saptari, Siraha, Sunsari
Central Terai (7)	Bara, Chitwan, Dhanusha, Mahottari, Parsa, **Rautahat**, Sarlahi
Western Terai (3)	**Kapilbastu**, Nawalparasi, Rupandehi
Mid-western Terai (3)	**Bardiya**, Banke, Dang
Far-western Terai (2)	**Kailali**, Kanchanpur

Figure 2. 1: Map of districts selected for STS 2012



2.2.2 Health facility selection

Details of all public health facilities in the selected districts were obtained from HMIS and each District Public Health Office (D/PHO) was consulted to ensure the details were complete and up to date.

As Table 2.2 shows, similar proportions of health facilities (by type) were selected in STS 2012 as in STS 2011. However, the total number of facilities was higher in 2012 with 198 facilities compared to 169 in STS 2011.

Table 2. 2: Number of facilities by type in selected districts (total and STS 2012 sample)

SN	District	Population (2011)	HDI Rank (2004)	Hospital		PHCC		HP		SHP	
				Total	Sample	Total	Sample	Total	Sample	Total	Sample
1	Morang	964709	8	2	2	7	5	22	9	37	6
2	Bhojpur	183918	32	1	1	3	2	15	6	45	7
3	Solukhumbu	106772	30	1	1	2	2	14	6	18	3
4	Sindhuli	294621	34	1	1	3	2	17	7	35	5
5	Rasuwa	43798	62	1	1	1	1	11	5	6	1
6	Rautahat	696221	56	1	1	4	3	13	5	80	12
7	Gorkha	269388	40	1	1	3	2	19	7	46	8
8	Kapilvastu	570612	47	2	2	3	2	16	7	57	9
9	Rukum	210878	64	1	1	2	2	10	4	31	5
10	Bardiya	426946	50	1	1	3	2	12	5	18	3
11	Doti	211827	60	1	1	2	2	16	7	33	5
12	Kailali	770279	46	2	2	5	4	13	5	24	4
13	Darchula	133464	52	1	1	1	1	14	6	26	4
Total in 2012				**16**	**16 (100%)**	**39**	**30 (77%)**	**192**	**79 (41%)**	**456**	**72 (16%)**
STS 2011		**4,883,433**			**16 (100%)**		**28 (76%)**		**45 (41%)**		**80 (15%)**

Hospital selection

All 16 public hospitals in the study districts were selected, including two higher-level hospitals and 14 district level hospitals.

PHCC, HP, and SHP selection

- **PHCCs** - Between one and five PHCCs were selected from each of the 13 districts to reach the desired overall percentage: in districts with one PHCC one was selected; in those with two or three PHCCs two were selected; in those with four PHCCs three were selected; in those with five

PHCCs four were selected, and in those with six or more five were selected. This resulted in 77% of the PHCCs being selected compared to 76% in 2011.

- **HPs** – Between four and nine health posts were selected from each of the 13 districts proportionately, to result in 41% of HPs being selected, the same as in 2011 (Table 2.2).
- **SHPs** – Between one and 12 SHPs were selected from each of the 13 districts proportionately considering 16% of SHPs being selected compared to 15% in 2011 (Table 2.2).

Step 1: The PHCCs, HPs and SHPs were listed separately for each district. They were arranged and numbered in serpentine order, commencing at one corner of the sampling frame (for example, the northwest). Systematic sampling was then used to select the facilities.

Step 2: The sample was selected using the interval I = N/n, where N is the number of health facilities in the sampling frame in each district and n is the sample size. For example, Sindhuli has 13 HPs and five health posts were selected (Table 2.2) with an interval of three — I = 13/5 = 2.6 ≅ 3. A number between one and three was then selected randomly. If, for example, number three was selected, then facility number three was the first facility selected for the assessment.

Step 3: The interval (3) was then added to the first selected facility (3), i.e. 3 + 3 = 6, so health post number six was the second selected health post. Using the same interval health post numbers nine and 12 were subsequently selected from the list of health posts. The fifth and last selected health post would have been health post number 15, but given that there are only 13 health posts in Sindhuli district, using a systematic circular procedure meant that the second health post on the list became the fifth and final health post to be selected in that district.

Steps 1 to 3 were repeated to select the other levels of facilities in the district and for the remaining districts.

2.2.3 Client exit interviews

The study team aimed to interview four outpatients from each facility, however, at a few rural health facilities with smaller caseloads this was not possible. In total, exit interviews were conducted with 787 outpatients. The team aimed to conduct exit interviews with all women who were discharged on the day of data collection and successfully interviewed 258 women who had recently delivered or experienced complications during the puerperium.

2.3 QUESTIONNAIRE DESIGN

As with STS 2011, three questionnaires were used in the STS 2012, as follows:

1. health facility questionnaire
2. exit interview with outpatients
3. exit interview with maternity clients (recently given birth at the facility or visited facility for a maternal complication during puerperium).

Minor changes were made to the STS 2011 survey instruments for 2012 following suggestions from key stakeholders, and the final versions were approved by MoHP. Table 2.3 shows the sections of the questionnaires and desired respondents.

Table 2. 3: Sections covered in questionnaire and desired respondent

Section	Heading	Desired respondent
Facility Questionnaire		
1	Facility Characteristics, Infrastructure and Functionality	In charge of facility
2	Governance and Accountability	In charge of facility
3	Quality of Care	In-charge/Focal person of Aama
4	Aama Programme	Focal person of Aama Programme
5	Drug Supply and Storage	Storekeeper/focal person of free care
6	Human Resources	In charge of facility/administration officer
7	Financial Flows	In charge of facility/account officer
Exit interview: outpatients		Outpatients
Exit interview: maternity clients		Women recently delivered in the facility or experienced complication pueperium

2.3.1 Translation

The tools were first developed in English and then translated into Nepali. Translated copies of the tools were reviewed by representatives from GoN, NHSSP and SAIPAL prior to pre-testing.

2.3.2 Pre-testing

All three instruments were pre-tested in Dhading: at Gajuri PHCC, Jiwanpur SHP, and the District Hospital. The feedback from pre-testing and training were incorporated into the final version of the tools.

2.4 SELECTION OF FIELD SUPERVISORS AND ENUMERATORS

2.4.1 Supervisors - 14 district supervisors were recruited - one for each district.

2.4.2 Enumerators – 27 enumerators were recruited - two for each district, except for Morang, which had three (to reflect the larger number of facilities to be visited).

Supervisors and enumerators were recruited with backgrounds in public health, nursing, medicine, health assistant and sociology. Experience of working at health facilities was desirable, as was experience in health systems research, strong written skills, familiarity with local socio-cultural context and ability to work as part of a team.

2.5 TRAINING AND ORIENTATION

Seven days of training was provided to 44 supervisors and enumerators in the second week of August 2012. An additional one day orientation was provided to the supervisors. Role plays, presentations and

group discussions were employed during the training. The training included an introduction to STS, objectives, approach, ethical issues, survey instruments, reporting, quality assurance and operational issues.

2.6 DATA COLLECTION

Data were collected between 22nd August and 17th October 2012. Thirteen teams carried out the data collection and, depending upon the number of health facilities and geographical terrains, it took between 30 - 55 days per district to complete the work.

2.7 SUPERVISION AND SUPPORT

Monitoring and supervision visits were made soon after data collection started so that any problems could be identified and rectified early on. Representatives from the technical working group, GoN, NHSSP and SAIPAL made frequent visits to the survey sites. The research team based at the central level planned to visit all 13 districts, but visits were not possible to remote districts such as Solukhumbu, Rukum and Gorkha. One central level coordinator from SAIPAL contacted the district teams every day to check for any problems, monitor the progress and provide necessary technical support.

2.8 QUALITY ASSURANCE

All completed questionnaires were checked by the supervisors in the district before sending them to Kathmandu for data entry. Feedback was provided to the enumerators during data collection. Any issues arising from central level supervisory visits were immediately circulated to all districts by a SAIPAL coordinator. Frequent mobile phone contact with core team members at SAIPAL was maintained to address any concerns immediately. To reduce the chance of data entry errors the data entry software was developed to have the same appearance as the questionnaire and all data were double entered. Supervisors with experience in data entry and processing were recruited as data cleaning and coding officers.

2.9 ETHICAL CONSIDERATION

Before data collection began, ethical approval was sought from the Nepal Health Research Council (NHRC) and formal approval from the selected districts and facilities was requested with an authorized letter from MoHP. Before starting an interview, enumerators informed all of the respondents of the purpose of the survey; showed authorization letters from the MoHP and the D/PHO, and informed exit interview clients that they were under no obligation to participate in the survey, and that if they did choose to participate, all responses would remain confidential. The enumerators subsequently requested consent from the respondents to begin the interview.

2.10 DATA MANAGEMENT

2.10.1 Database design – Three databases, one for each survey tool, were developed in Census and Survey Processing System (CSPro) 5.0. The databases were pre-tested before data entry started and any errors were fixed.

2.10.2 Coding – Open-ended responses were coded prior to data entry. Completed questionnaires were assigned unique ID codes.

2.10.3 Data entry - The data entry officers received a one-day orientation. They were closely monitored by the database designer and back-up files were created each day to prevent data loss.

2.10.4 Data cleaning - Consistency checks and content cleaning were carried out and outliers in continuous variables were checked. Any suspect data were cross-checked against hard copies of completed questionnaires.

2.10.5 Data analysis

Statistical analysis software Statistical Product and Service Solutions (SPSS) 16 has been used for data analysis. Frequency tables of all variables have been produced, along with cross tabulation with type of facilities for all the facility level information and key socio-demographic (such as caste/ethnicity, ecological zone, and level of facilities) for exit interview clients.

2.10.6 Weighting

Facility data:

- In order to produce nationally representative results, when data from all facility levels are combined, it was necessary to calculate appropriate weights based on the sample design (Annex 2.1). The weighting has eliminated any bias related to the different probabilities of selecting different levels of facility. Without weighting the lower level facilities are under-represented, given the lower proportion selected, and the higher level facilities are over-represented, given the higher proportion selected. The data were post-stratified, so that the data from each level of facility were weighted in proportion to the number of facilities at each level of facility, at the national level, using data from the DoHS Annual Report 2010/11. However, with weighting the total figures are naturally more reflective of performance at the lower levels given the higher numbers. Given the large differences in expectations between different levels of facilities for many indicators, a more accurate picture of performance may be gained by looking at the data for the levels of facility individually, rather than the combined figure.
- The data presented for each level of facility individually were unweighted, as the weight applied to each level is constant. It was not felt appropriate to give, for example, one PHCC more weighting than another PHCC just because it was selected from a larger sub-region and so had a lower probability of being sampled. There is no evidence of greater similarities between facilities within one sub-region compared to facilities from another, and indeed neighbouring facilities can often be in stark contrast to one another.
- Different weights were applied to assess the functionality of CEONC facilities, BEONC facilities, birthing centres and Safe Abortion Services. These were calculated based on the distribution of the different levels of facilities within these categories at the national level (Annex 2.1).

Client data:

- As with the facility data, it was necessary to calculate appropriate weights for the client exit interview data based on the sample design, to produce nationally representative results. The weighting has eliminated any bias related to the different probabilities of selecting different levels of facility (Annex 2.1).
- The client exit interview data were also weighted to eliminate any bias related to the different first stage probabilities of selecting one district in each sub-region. There are differences in the level of utilization at each facility level between sub-regions and, without weighting, the characteristics of the larger sub-regions are under-represented and the characteristics of the smaller sub-regions are over-represented.
- The data were post-stratified so that the data from each sub-region and level of facility are weighted in proportion to the expected utilization of health services, using data from the DoHS Annual Report 2010/11 for the outpatient exit interview and the Nepal Demographic Health Survey 2011 (NDHS 2011) for the maternity exit interviews.
- The weights for both the outpatients and maternity clients were trimmed: any weights greater than ten were allocated a weighting of ten, and any weights less than 0.1 were allocated a weight of 0.1 which resulted in ten maternity clients having their weight trimmed.

Significance tests and Interval estimation

The sampling design involved the selection of only one PSU (district) within each sub-region (strata), and also involves post-stratification; such a design cannot be acknowledged precisely in the data analysis. However, we approximate this design as the selection of districts within strata defined by ecological zones (mountain, hill, and Terai). We acknowledged the weighting of the data, the approximate stratification, and the two-level clustering (districts as PSUs and facilities as Secondary Sampling Units (SSUs)) while computing statistical tests and confidence intervals, using the complex survey functions of SPSS. Statistical tests were performed for the client data to assess the differences in utilisation by ecological zone, caste/ethnicity and facility level. However, significance tests were not performed to assess differences by facility level when using the facility survey data due to the small number of hospitals sampled and the high sampling fractions of some facility levels, particularly hospitals.

- We have used the complex survey adaptations of the chi-squared test for the categorical variables.
- We have reported significance with a p-value of <0.05 (significant at the 5% level).
- Confidence intervals were computed for the key variables in each chapter, including all NHSP-2 LF indicators.

2.11 LIMITATIONS OF THE STUDY

The main limitations of the STS 2012 were as follows:

- The STS is a cross-sectional survey and hence provides information at one point of time.
- The timing of data collection for STS 2012 (22nd August to 17th October) varied slightly to STS 2011 (12th September-25th October) and may affect comparisons over time.
- The survey was designed to produce nationally representative estimates, but not sub-regional or district estimates.
- Some of the questions relied on the perspective of clients and their answers may be biased by subjective interpretations.
- Some of the sample sizes are small, especially when disaggregating the results by caste/ethnicity and ecological zone, and hence further research may be needed to confirm these observations.
- Only descriptive findings and associations have been reported, and no causal relationships have been deduced between data.

CHAPTER 3- BACKGROUND CHARACTERISTICS

3.1 INTRODUCTION

This chapter presents the background characteristics of the facilities surveyed and clients interviewed (from the outpatient and maternity client exit interviews). Infrastructure data are presented at the facility level, and client information is disaggregated by the level of facility they attended, place of residence, demographic characteristics and services accessed. A total of 198 health facilities (16 hospitals, 31 primary health care centres (PHCCs), 79 health posts (HPs) and 72 sub health posts (SHPs) and 1047 clients (260 maternity and 787 outpatients) were included in the survey. Unweighted data are presented for each health facility level (i.e. hospitals, PHCCs, HPs, SHPs), however, weighted data are presented when referring to all levels combined and for client exit interviews (outpatient and maternity clients).

3.2 RESULTS

3.2.1 INFRASTRUCTURE

Ownership of building

Table 3.1 shows ownership status of the facility buildings for surveyed facilities. All hospitals and PHCCs had their own buildings, along with 81% of HPs. The Ministry of Health and Population (MoHP) has no policy to construct buildings for SHPs, however, more than half of SHPs (57%) reported having their own building. This suggests that the building was constructed by local agencies and handed-over to the SHPs. The Village Development Committee (VDC)/Municipality owned 38% of SHP buildings and 9% of HP buildings, with rentals accounting for only 3% of HP buildings and none at other levels. SHP/HP buildings in the 'other' category included ownership by the community, public agencies (other than health and VDC/Municipality agencies), and Non-Government Organisations (NGOs) and hospices.

Table 3. 1: Ownership of facility building, by level of facility

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Own building	100	100	81.0	56.9
VDC/Municipality building	0.0	0.0	8.9	37.5
Rented	0.0	0.0	2.5	0.0
Others	0.0	0.0	7.6	5.6
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Presence Compound wall/fencing wire

A compound wall or fencing wire is needed to protect and maintain facility infrastructure as well as to prevent accidental exposure to health care waste. Enumerators observed whether there was a compound wall or fencing wire protection for the facilities they visited. Lower-level health facilities were less likely to have a compound wall or fencing wire than higher level facilities. While half of the hospitals (50%) and PHCCs (51%) had a secure compound wall or fencing wire, just 27% of HPs and 17% of SHPs had one. Similarly, three quarters of SHPS (75%) and more than half of HPs (56%) had no wall or wire protection, and less than a quarter of PHCCs (23%) and one-seventh of hospitals (13%) had one.

Areas in need of repair or maintenance

The enumerators assessed whether any aspects of the main facility building were in need of repair or maintenance. Overall there were a lot of repairs and maintenance needed across all levels. Over two thirds of respondents from HPs (68%) and SHPs (67%) reported a need to repair the route from the entrance to the main building (Table 3.2). At higher level facilities, although the percentages were lower they were still high, with over half of hospitals (56%) and just under half of PHCCs (45%) needing repairs to the route. Furthermore, nearly two-third of hospitals (63%), over a third of PHCCs (36%), nearly half of HPs (48%) and more than half of SHPs (56%) were in need of roof maintenance. More than half of all facility levels were in need of maintenance of windows. Other commonly identified aspects in need of repair or maintenance were walls, doors and floors.

Table 3. 2: Presence of a compound wall or barbed wire and areas that need repair or maintenance

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Presence of secure compound wall or barbed wire protection:				
Secure compound wall or barbed wire protection	50.0	51.6	26.6	16.7
Unsecured compound wall or barbed wire protection	37.5	25.8	17.7	8.3
No compound wall or barbed wire	12.5	22.6	55.7	75.0
Areas in need of repair or maintenance:				
Route from compound entrance to main building	56.3	45.2	68.4	66.7
Roof	62.5	35.5	48.1	55.6
Walls	50.0	25.8	49.4	52.8
Windows	50.0	64.5	51.9	63.9
Doors	43.8	51.6	45.6	47.2
Floors	50.0	45.2	45.6	55.6
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Staff accommodation

Staff accommodation is required to ensure round-the-clock availability of providers. All hospitals had permanent accommodation for the head of the institution and nursing staff, but the likelihood of having this decreased by facility level (Table 3.3). Overnight accommodation was less common than permanent accommodation at all levels. For nurses, overnight accommodation was available in three-quarters of hospitals (75%), more than half of PHCCs (55%), less than one fifth of HPs (18%) and only 3% of SHPs. For other health workers, half of the hospitals (50%), one-third of PHCCs (33%), and one-seventh of HPs (14%) had overnight accommodation. Most SHPs (93%) and more than half of HPs (58%) had no accommodation for staff.

Table 3. 3: Facilities with permanent and overnight accommodation

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Permanent accommodation for:				
Head of institution	100	64.5	22.8	1.4
Nurses	100	64.5	26.6	4.2
Other health workers	75.0	29.0	12.7	0.0
Overnight accommodation for:				
Nurses	75.0	54.8	17.7	2.8
Other health workers	50.0	32.3	13.9	0.0
No accommodation for staff	0.0	16.1	58.2	93.1
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

All higher level hospitals and half of the district hospitals had permanent accommodation that could hold at least five nurses (Table 3.4). Nearly half of the PHCCs (45%) that had permanent accommodation could hold at least three nursing staff. More than four-fifth of HPs (81%), and all SHPs with permanent accommodation could hold one or two nurses.

Table 3. 4: Number of nursing staff that can be housed in permanent accommodation

No. of staff	Higher-level Hospitals (%)	District Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
1-2	0.0	0.0	55	81.0	100
3-4	0.0	50.0	40	19.1	0.0
5-10	50.0	42.9	5	0.0	0.0
11-20	50.0	7.1	0.0	0.0	0.0
Total facilities that have permanent accommodation for nursing staffs (N)	**2**	**14**	**20**	**21**	**3**

Source: STS facility questionnaire

Waiting space

The survey sought information about waiting areas and the perceived adequacy of waiting spaces for clients and their companions. As reported by staff, higher-level health facilities (94% of hospitals and PHCCs) were more likely to have a designated waiting space than lower-level facilities (75% of HPs and 63% of SHPs) (Table 3.5). However, among those with waiting space, hospitals were less likely to be reported as having adequate waiting space (33%) in comparison to other facilities (59% of PHCCs, 58% of SHPs/HPs). Clients' views on the adequacy of the outpatient waiting space were more positive than the views of the facility staff. Clients across all facilities were more likely to say that the space was adequate for them, although they were less likely to report that the space was adequate for their companions. Most PHCCs and HPs clients (92% each) reported there was adequate waiting space for maternity clients, compared with fewer at hospitals (73%) and SHPs (60%). Likewise, a higher percentage of maternity clients at PHCCs (86%) and HPs (83%) reported having waiting space for their companion than at other facilities (62% of hospitals and 50% of SHPs).

Table 3. 5: Waiting area for clients and companions

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Staff reporting of facility waiting space:				
Waiting area/space for outpatients	93.8	93.6	74.7	62.5
Total facilities (N)	**16**	**31**	**79**	**72**
Sufficient waiting area/space for outpatients	33.3	58.6	57.6	57.8
Total facilities having waiting area/space (N)	**15**	**29**	**59**	**45**
Client reporting of adequate waiting space:				
Adequate waiting space for outpatient clients	68.6	82.6	72.3	67.2
Adequate waiting space for outpatient companion	60.5	70.9	60.0	44.4
Total outpatients(N)	**119**	**86**	**160**	**423**
Adequate waiting space for maternity clients	73.4	91.9	91.7	*50.0*
Adequate waiting space for maternity companion	62.1	86.1	83.3	*50.0*
Total maternity clients(N)	**203**	**36**	**12**	***2***

Source: STS facility questionnaire; The italic figures are based on <30 unweighted cases.

Availability and adequacy of separate delivery room

All hospitals (higher-level and district level) had a separate delivery room (Table 3.6), but this decreased by the level of facility, with 94% of PHCCs having a separate room compared to 48% of HPs and only 14% of SHPs. This trend of lower-level facilities having less adequate facilities was also observed in the responses regarding adequacy of the room, table, kit, and room's privacy.

Table 3. 6: Availability and adequacy of separate delivery room

	Higher-level Hospitals (%)	District Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Separate delivery room	100	100	93.6	48.1	13.9
Total facilities (N)	**2**	**14**	**31**	**79**	**72**
Adequate delivery room	50.0	78.6	72.4	60.5	40.0
Adequate delivery table	50.0	71.4	65.5	60.5	70.0
Adequate delivery kit	100	92.9	79.3	78.9	70.0
Adequate privacy	100	85.7	82.8	78.9	70.0
Total facilities having separate delivery room (N)	**2**	**14**	**29**	**38**	**10**

Source: STS facility questionnaire

3.2.2 POWER SUPPLY

The availability of a power supply increased with the level of facility and electricity was the most commonly reported source of power for all facility types. Half of SHPs (50%), 70% of HPs, 81% of PHCCs and all hospitals (100%) had an electricity supply (Table 3.7). Other commonly used sources of power included: kerosene, solar power, bio-gas and others. Similarly, lower-level facilities were more likely to report intermittent or limited access to power despite the combination of sources. While almost two-third of hospitals had power available 24 hours for seven days (63%), this proportion reduced to just over one third of PHCCs (36%), and nearly a quarter of HPs (23%). Nearly one fifth of PHCCs (19%), over one third of HPs (39%) and 61% of SHPs had no power supply at all.

Table 3. 7: Availability of power supply

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Sources of power supply:				
Electricity	100	80.7	69.6	50.0
Kerosene	43.8	25.8	22.8	13.9
Generator	87.5	19.4	3.8	0.0
Solar power	31.3	41.9	32.9	16.7
Bio-gas	6.3	6.5	0.0	0.0
Other	12.5	25.8	1.3	0.0
Availability of power supply 24/7:				
Always	62.5	35.5	22.8	11.1
Most of time	31.3	22.6	25.3	12.5
Sometimes	6.3	9.7	2.5	0.0
Rarely	0.0	12.9	10.1	15.3
Never	0.0	19.4	39.2	61.1
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

3.2.3 WATER AND SANITATION

Water

Overall, piped water and water from a tube well were the most commonly reported sources of water in health facilities: most hospitals (100%) and PHCCs (97%) had piped water or water from tube well, along with 73% of HPs and 68% of SHPs (Table 3.8). Almost one sixth of HPs (15%) and nearly a quarter of SHPs (22%) had no water source.

In addition, availability of drinking water for outpatients was less common at SHPs (63%) in comparison to HPs (72%) or higher level facilities (76% of PHCCs, 71% of hospitals). Four fifths of hospital clients and three quarters of HP clients (75%) reported drinking water was available.

Table 3. 8: Main source of water and availability of drinking water

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Main source of water:				
Piped	68.8	51.6	44.3	31.9
Tube well	31.3	45.2	29.1	36.1
Well	0.0	0.0	1.3	1.4
River, lake, pond	0.0	0.0	0.0	1.4
Fall spring	0.0	3.2	10.1	6.9
No water source	0.0	0.0	15.2	22.2
Total facilities (N)	**16**	**31**	**79**	**72**
Availability of drinking water:				
For outpatients	71.4	75.6	72.3	62.7
Total outpatients (N)	**119**	**86**	**159**	**424**
For maternity clients	83.3	86.5	75.0	*100*
Total maternity clients (N)	**203**	**37**	**12**	***2***

Source: STS facility questionnaire, outpatient and maternity exit interviews; The italic figures are based on <30 unweighted cases.

Enumerators observed whether there was a sink with running water and soap in the maternity ward, labour room, and operating theatres among the facilities with those services (Table 3.9). Only three-quarters of hospitals with maternity wards (75%) had a sink with running water, and just over two-thirds (69%) had soap available. In the case of labour rooms, most hospitals (94%) had a sink with running water and also had soap available, but only 69% of PHCCs, 37% of HPs, and 30% of SHPs had a sink with running water available. Just 69% of hospitals had a sink with running water (69%) in the operation theatre, and only 63% had soap available.

Table 3. 9: Availability of sink, running water and soap

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Maternity Ward:				
Sink with running water	75.0			
Soap	68.8			
Total facilities with maternity ward(N)	**16**			
Labour room:				
Sink with running water	93.8	68.9	36.8	30.0
Soap	93.8	72.4	57.9	70.0
Total facilities with labour room (N)	**16**	**29**	**38**	**10**
Operating theatre:				
Sink with running water	68.8			
Soap	62.5			
Total facilities with operating theatre (N)	**16**			

Source: STS facility questionnaire

Sanitation

Enumerators observed whether there were functional toilets available for women, outpatients and maternity clients in the surveyed health facilities (Table 3.10). All hospitals had an available and functioning toilet, but only 38% of them had a separate functioning toilet allocated for women. Provision of an available and functioning toilet decreased by level of facility with 93% of PHCCs, 72% of health posts and 61% of SHPs having one. The lower the level of facility the less likely they were to also have a separate functioning toilet for females: 29% of PHCCs, 14% of health posts and 6% of SHPs. Just over two thirds of hospitals (69%) and half of PHCCs (59%) had an easily accessible toilet for women in the labour room. Outpatients were asked about the availability of a toilet during their visit to the facility. Most hospital outpatients (98%) reported the availability of a toilet, but this reduced by level of facility to 60% for SHPs. A similar pattern was observed in the responses from the maternity clients, although at each facility level a higher percentage reported the availability of a toilet.

Table 3. 10: Availability of functional toilets

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Facility					
Functional toilets	100	93.6	72.2	61.1	
Functional toilets for women	37.5	29.0	13.9	5.8	
Total facilities (N)	**16**	**31**	**79**	**72**	
Easily accessible toilet for women in labour in the maternity ward/labour room	68.8	58.6	31.6	40	
Total facilities with maternity ward/labor room (N)	**16**	**29**	**38**	**10**	
Outpatients					
Toilet available for outpatients	97.5	83.7	67.9	59.9	69.8
Total outpatients (N)	**118**	**86**	**159**	**424**	**787**
Maternity clients					
Toilet available for maternity	99.5	97.3	91.7	*66.7*	98.4
Total maternity clients (N)	**203**	**37**	**12**	***3***	**255**

Source: STS facility questionnaire, outpatient and maternity exit interviews; The italic figures are based on <30 unweighted cases.

3.2.4 COMMUNICATION AND AMBULANCE PROVISION

All hospitals surveyed had constant access to a telephone 24 hours a day. Access to a telephone was less common for lower-level facilities with just 39% of PHCCs and 8% of HPs having 24 hours access to a telephone. None of the SHPs had access to a telephone (Table 3.11).

Table 3. 11: Availability and functionality of phone

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Functional phone 24/ 7	100	38.7	7.6	0.0
Functional phone, but not 24/7	0.0	16.1	8.9	0.0
No phone available	0.0	45.2	83.5	100
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Overall, more than three quarters of health facilities (76%) did not have an ambulance available (Table 3.12) and only a few facilities (6%) had a functioning ambulance available 24 hours a day. Three quarters of all hospitals (75%) had an ambulance provided by other organizations. The likelihood of not having an ambulance at all increased as the level of facility reduced (from 6% of hospitals to 90% of SHPs).

Table 3. 12: Availability and functionality of ambulance service

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Functioning facility ambulance 24/7	12.5	22.6	1.3	1.4
Functioning facility ambulance, but not 24/7	6.3	3.2	0.0	0.0
Non-functioning facility ambulance	0.0	3.2	0.0	0.0
No ambulance available	6.3	54.8	86.1	90.3
Ambulance provided by other organization	75.0	16.1	12.7	8.3
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

3.2.5 CLIENT CHARACTERISTICS

A total of 1,042 exit interviews were conducted: 788 (76%) with outpatients and 254 (24%) with maternity clients. The data are presented separately for maternity clients and outpatients. The proportion of interviews conducted for outpatients and maternity cases were similar in each district. In some health facilities the desired number of maternity clients and outpatient clients could not be interviewed due to low caseloads. The districts with the highest proportion of clients interviewed were Rautahat (16%) and Morang (15%), while the lowest number were interviewed in Rasuwa (2%) (Table 3.13).

Table 3. 13: Number of exit interviews conducted in each district

Districts	Maternity (%)	Outpatients (%)	Total (%)
Morang	15.3	14.5	14.8
Bhojpur	5.9	7.5	7.1
Solukhumbu	0.6	2.5	2.1
Sindhuli	13.1	10.6	11.1
Rasuwa	1.3	2.4	2.1
Rautahat	18.2	14.7	15.5
Gorkha	11.6	13.7	13.1
Kapilvastu	11.3	4.5	6.1
Rukum	5.4	8.7	8.0
Bardiya	5.9	7.1	6.8
Doti	2.9	4.6	4.1
Kailali	6.0	4.8	5.1
Darchula	2.4	4.3	3.8
Total exit interviews (N)	**254**	**788**	**1042**

Source: STS outpatient and maternity exit interviews

Place of residence

Of the clients interviewed, 65% of maternity and 92% of outpatient clients resided in rural areas. The percentage of rural women interviewed was substantially lower than the national population distribution (83% reside in rural areas, Census 2011). The higher proportion of rural residents in the outpatient sample is a result of the sampling process, which selected the same number of patients at each facility level. Since most lower level health facilities are located in rural areas, this created a higher proportion of rural residents. Illustrating this is the fact that there were very few urban clients in facilities below the hospital level, with most PHCC, HP and SHP outpatient and maternity clients coming from rural areas. At the hospital level, 56% of maternity clients and 58% of outpatients were rural.

Table 3. 14: Urban /rural residence

Clients	Hospitals	PHCCs	HPs	SHPs	Total
	%	%	%	%	%
Maternity clients					
Rural	56.2	100	100	*66.7*	64.7
Urban	43.8	0.0	0.0	*33.3*	35.3
Total maternity clients (N)	**203**	**37**	**12**	***3***	**255**
Outpatient clients					
Rural	58.0	100	100	96.9	92.0
Urban	42.0	0.0	0.0	3.1	8.0
Total outpatients (N)	**119**	**86**	**159**	**424**	**788**

Source: STS outpatient and maternity exit interviews; The italic figures are based on <30 unweighted cases.

Most maternity and outpatient clients resided in the same districts as the facility they were visiting (Table 3.15), although nearly one-fifth of hospital maternity clients resided in a different district to where the facility was located.

Table 3. 15: Reside in same or different district

	Higher-level Hospitals (%)	District Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Maternity						
Same district	81.4	99.4	100	92.3	*100*	96.1
Different district	18.6	0.6	0.0	7.7	*0.0*	3.9
Total maternity clients (N)	43	160	37	13	*2*	255
Outpatients						
Same district	100	100	100	99.4	99.1	99.4
Different district	0.0	0.0	0.0	0.6	0.9	0.6
Total outpatients (N)	11	107	86	160	424	788

Source: STS outpatient and maternity exit interviews;The italic figures are based on <30 unweighted cases.

3.2.5.2 Demographic characteristics of clients

As would be expected, on average maternity clients were younger than outpatient clients (Table 3.16). The mean age of maternity clients was 23 and the mean age of outpatients was 32 (33 for females and 37 for males).More than one-third of maternity clients (36%) were less than 20 (Table 3.16). All maternity clients were married, while 19% of female outpatients and 27% of male outpatients were unmarried; 4% of female outpatients and 2% of male outpatients were widowed. There was no marked difference in the distribution of caste/ethnic groups between the maternity and outpatients clients. Overall, just less than one-third of the maternity (32%) and one-third of outpatient clients (33%)were Brahmin/Chhetri, less than one-third of outpatients were Janajati (28%), and one-fifth (17%) were Dalits. Annex 3.1 shows the caste/ethnic classification used. In terms of religion, most maternity clients were Hindu (83%), followed by Muslim (9%), and Buddhist (8%). Similarly, for outpatients the majority were Hindu (86%) followed by Buddhist (6%) and Muslim (4%). Almost two-fifths of maternity clients (39%) and nearly half of the outpatient clients (49%) had never attended school.

Table 3. 16: Demographic characteristics of clients

	Maternity (%)	Outpatient		
		Female (%)	Male (%)	Total (%)
Age (Years):				
<20	36.3	18.2	15.9	17.3
20-24	29.7	14.3	12.8	13.7
25-29	24.8	17.5	12.8	15.6
30-34	5.8	13.2	6.6	10.5
35-39	1.2	10.5	8.8	9.8
40+	2.2	26.3	43.1	33.1
Mean age (years)	23	33	37	32
Marital status:				
Married (monogamous)	99.9	76.4	66.4	72.4
Married (polygamous)	0.1	0.8	4.4	2.2
Widowed	0.0	3.9	2.1	3.2
Separated	0.0	0.5	0.0	0.3
Single	0.0	18.5	27.1	22.0
Caste-ethnic group:				
Brahmin and Chhetri	31.8	33.8	30.9	32.6
Terai-Madhesi other castes	13.0	14.1	13.8	14.0
Dalits	14.4	16.7	17.3	16.9
Newar	3.9	3.2	3.1	3.2
Janajati	27.5	29.2	29.4	29.3
Muslim	9.4	3.0	5.3	3.9
Other	0.0	0.0	0.1	0.1
Education:				
Never attended school	39.1	57.0	37.1	48.9
Primary education	10.9	16.8	23.3	19.4
Secondary education	33.4	19.1	28.1	22.8
Further education	16.6	7.1	11.5	8.9
Religion:				
Hindu	82.5	86.8	85.2	86.2
Buddhist	7.6	4.9	6.8	5.7
Muslim	9.4	3.6	3.8	3.7
Christian	0.4	1.3	1.3	1.3
Kirat	0.0	2.9	2.9	2.9
Other	0.0	0.4	0.0	0.3
Total clients (N)	**254**	**468**	**320**	**788**

Source: STS outpatient and maternity exit interviews

3.2.6 CARE SEEKING

3.2.6.1 Decision making

A higher percentage of outpatients (78%) were involved in the decision making process regarding seeking care than maternity clients (47%), and male outpatients (83%) were more likely to be involved than females (75%) (Table 3.17). Nearly two-thirds of the maternity clients reported that their husband was involved in the care seeking decisions (65%), and 44%reported that their parents-in-law were involved. Respondents were also asked if they were satisfied with the decision making process regarding seeking care. Very few (0.3%) reported that they were dissatisfied with the process; these were all female outpatients.

Table 3. 17: Persons involved in care-seeking decision-making

	Maternity (%)	Outpatient		
		Female (%)	Male (%)	Total (%)
Self	46.8	75.4	82.9	78.4
Spouse	64.8	24.4	10.7	18.8
Parents	15.5	14.6	19.1	16.4
Parents-in-law	44.1	5.7	0.0	3.4
Son/daughter	1.3	4.8	2.4	3.9
Brother/sister	7.5	2.5	3.3	2.8
Brother-/sister-in-law	9.2	0.5	0.9	0.7
Other relative	11.4	3.5	2.3	3.0
FCHV	7.7	2.0	0.5	1.4
Health worker	0.6	0.0	0.1	0.0
Teachers	1.3	0.2	1.6	0.7
Friends	0.1	0.5	0.6	0.5
Neighbour	0.1	0.1	0.0	0.1
Total clients (N)	**254**	**468**	**320**	**788**

Source: STS outpatient and maternity exit interviews

3.2.6.2 Accessing the facility

A high percentage of outpatients (84%) walked to the health facility, and unsurprisingly less than 1% of maternity clients did (Table 3.18). More than one-third of maternity clients used an ambulance (34%) to reach the health facility, while 17% used public and 7% used private transport, and more than one-tenth were brought using a bullock or horse cart (6%), or on a stretcher (10%).

Table 3. 18: Mode of transportation used to reach facility

	Maternity (%)	Outpatients		
		Female (%)	Male (%)	Total (%)
Ambulance	34.0	0.0	0.0	0.0
Private vehicle	7.0	0.8	1.0	0.9
Public transport (bus/mini bus, etc.)	17.0	3.7	1.0	2.6
Rickshaw	9.3	0.8	1.2	0.9
Rickshaw ambulance	1.7	0.0	0.0	0.0
By bullock cart/horse cart	6.3	0.9	1.3	1.0
Carried (e.g. stretcher, Doko)	9.6	0.2	0.0	0.1
Bicycle	15.9	6.2	19.6	11.7
Walking	0.6	88.7	75.9	83.5
Cycle	0.6	0.0	0.0	0.0
Total clients (N)	**254**	**468**	**320**	**788**

Source: STS outpatient and maternity exit interviews

The distance from clients' homes to the health facility, transportation costs incurred in reaching the health facility, and the time taken to reach it were collected (Table 3.19). Many respondents did not know the distance travelled in kilometres (55%). Among those who did, maternity clients travelled six kilometres on average, three times that of outpatients (two kilometres). However, the median time taken to reach the health facility, which was reported by more clients, was similar for maternity clients (30 minutes) and outpatients (25 minutes). Among those who paid for transportation (N=307) maternity clients (NPR. 400) paid more for transportation costs than outpatients (NPR 60) did. The higher cost for maternity clients is likely to be due to the greater need for transport, resulting in a greater use of ambulances and public transport, while outpatients were more likely to walk.

Table 3. 19: Distance, cost of transportation and time taken to reach facility

	Maternity (%)	Outpatients		
		Female (%)	Male (%)	Total (%)
Distance (Km):				
Median	6.0	2.0	2.0	2
First quartile	3.0	1.0	1.0	1
Third quartile	20.0	3.7	4.0	4
n (total clients)	78	116	157	272
Cost (NPR):				
Median	400.0	60.0	120.0	60.0
First quartile	102.5	30.0	8.2	30.0
Third quartile	998.5	69.7	350.0	120.0
n (total clients paid for transport)	163	29	15	44
Time taken (min.)				
Median	30	30	25	25
First quartile	15	10	10	10
Third quartile	60	60	60	60
Total clients (N)	**254**	**467**	**319**	**786**

Source: STS outpatient and maternity exit interviews

Most maternity clients (99%) were accompanied to the facility, whilst many male outpatients (61%) and nearly half of the female outpatients (47%) attended alone (Table 3.21). Maternity clients were most commonly accompanied by their husbands (64%), their mother or father-in-laws (50%), and other family members or relatives (52%).

Table 3. 20: Persons who accompanied clients to facility

	Maternity (%)	Outpatients		
		Female (%)	Male (%)	Total (%)
No one	0.3	47.3	61.2	53.0
Husband/wife	63.8	6.8	4.0	5.7
Mother/Father	21.3	13.7	12.9	13.4
Mother/Father-in- law	49.8	1.4	0.0	0.9
Other family member/relative	51.5	25.5	16.8	21.9
FCHV	3.3	0.5	0.0	0.3
Friend/neighbor	6.2	7.1	6.5	6.8
Health worker	0.8	0.1	0.0	0.1
Total clients (N)	**254**	**468**	**320**	**788**

Source: STS outpatient and maternity exit interviews

3.2.6.3 Barriers faced prior to arrival at facility

Overall, 61% of outpatients did not face any difficulties prior to arrival at the facility (Table 3.22), compared to just 29% of maternity clients. Male outpatients (65%) were more likely to report that they did not face any difficulty than female outpatients (58%). Over half of the maternity clients (60%) reported difficulties travelling during labour, whilst half of the maternity clients (50%) and a quarter of the outpatients (25%) reported that their travel time was too long. More than one-third of maternity clients (36%) and almost one-tenth of outpatients (8%) reported difficulties in finding transport to get to the facility.

Table 3. 21: Difficulties faced prior to arrival at facility

	Maternity (%)	Outpatients		
		Female (%)	Male (%)	Total (%)
Did not face any difficulty	29.1	57.9	64.7	60.7
Difficulty obtaining permission from household members	2.1	2.6	0.1	1.6
Travel time too long	50.3	24.1	26.6	25.1
Difficult to travel during labour	60.4			
Difficult to find transport	36.0	9.6	6.3	8.3
Difficult to find money to cover costs	21.0	0.0	0.0	0.0
Difficult to manage service cost	27.5	5.1	3.4	4.4
Total cost expensive	0.0	5.1	4.2	4.7
No one available to accompany	10.8	12.7	6.1	10.0
No one available for child care	11.2	10.7	4.8	8.3
No men available to transport	10.6	6.7	3.2	5.3
Other	0.0	3.3	2.4	3.0
Total clients (N)	**254**	**468**	**320**	**788**

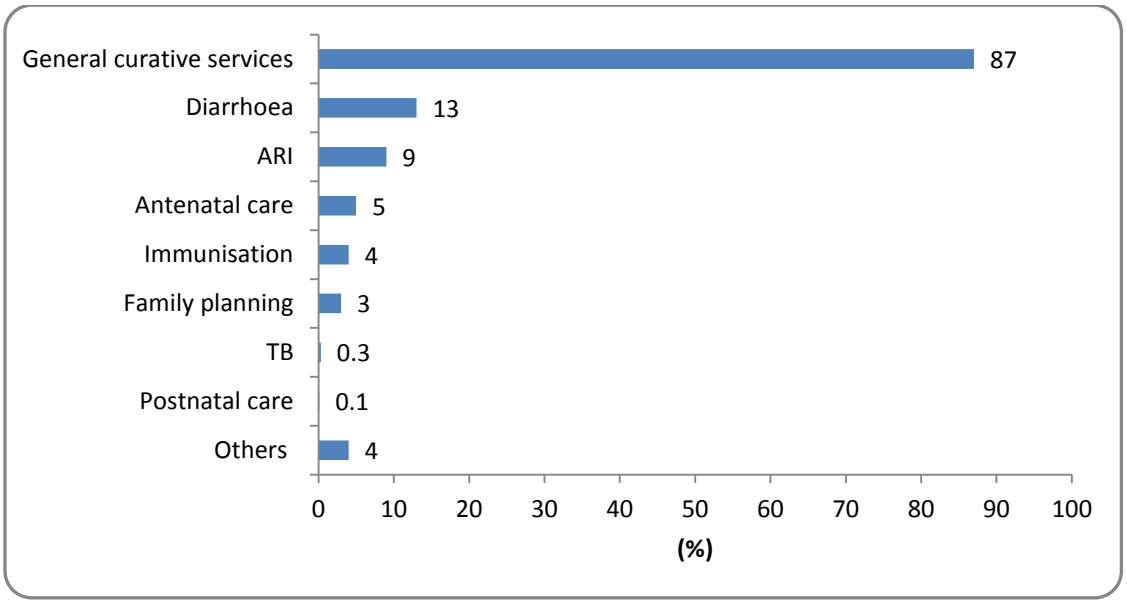
Source: STS outpatient and maternity exit interviews

3.2.7 CLIENT RECEIPT OF SERVICES

Outpatients

Looking at the services received by outpatients, most received general curative services (87%), followed by treatment for diarrhoea (13%) and acute respiratory infections (9%) (Figure 3.1).

Figure 3. 1: Services received by outpatients (N=787)

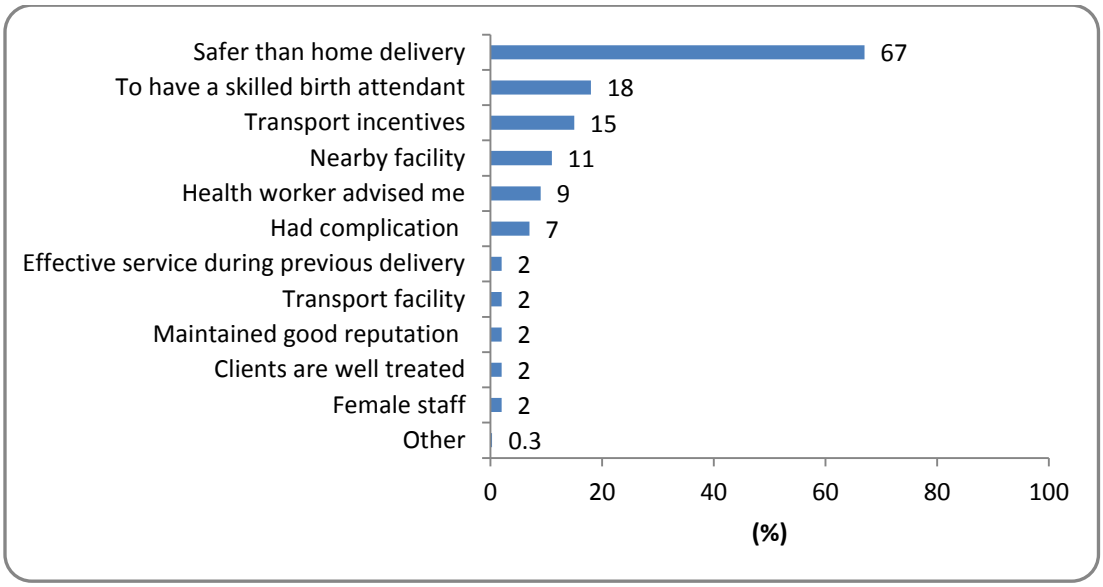


Source: STS outpatient exit interviews

Maternity

Maternity clients were asked why they chose to deliver in a facility (Figure 3.2). More than two-thirds (67%) reported that they thought it was safer than delivering at home, and nearly one-fifth (18%) reported that it was to have a skilled birth attendant (SBA). Other reasons for delivering in a facility included transport incentives (15%), and having the facility nearby (11%).

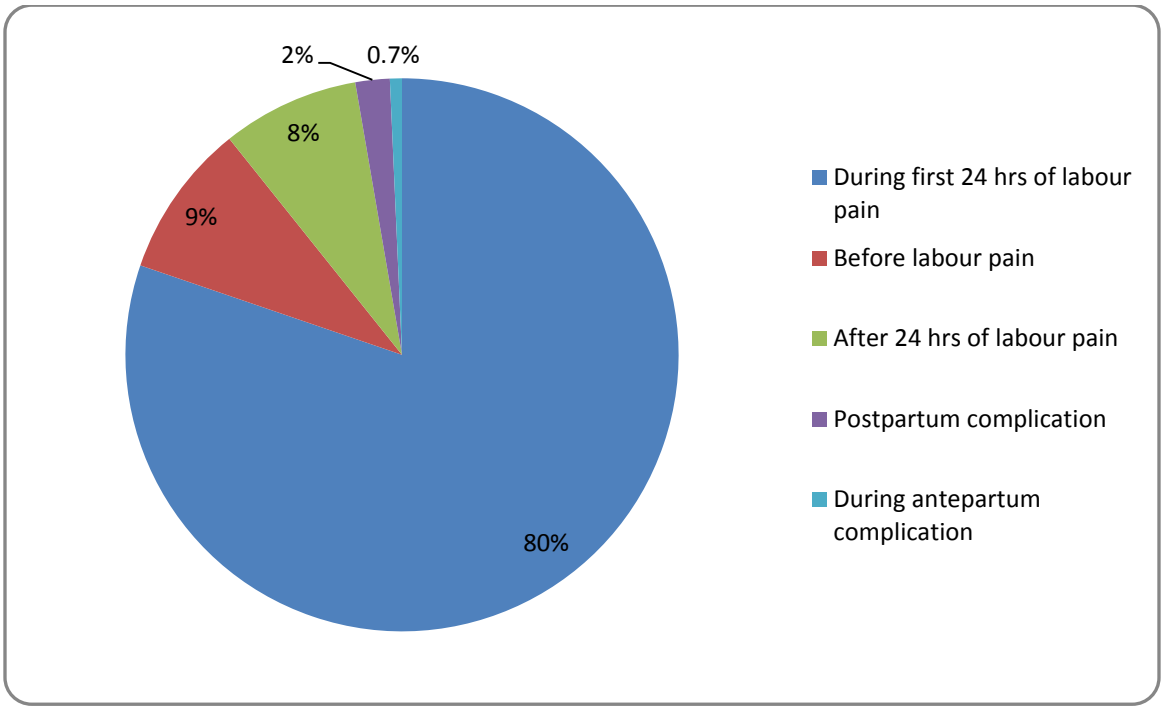
Figure 3. 2: Reasons maternity clients chose to deliver in a facility (N=254)



Source: STS maternity exit interviews

Four-fifths of maternity clients (80%) visited a facility within 24 hours of experiencing labour pain (Figure 3.3). However, nearly one in ten (9%) visited before the onset of pain, and 8% visited after 24 hours of experiencing labour pain.

Figure 3. 3: Timing of visit for maternity clients (N=254)



Source: STS maternity exit interviews

Complications

About one-fifth (17%) of surveyed maternity clients reported that they had experienced a complication prior to arriving at the facility, and nearly one-tenth of the clients (9%) reported they had experienced a complication after arrival at the health facility (Table 3.23). The most common complication experienced (prior to arrival and after arrival) was severe abdominal pain (19%), followed by premature rupture of membrane (13%).Severe abdominal pain was also the most common complication experienced after arrival (6%), followed by post-partum haemorrhage (3%). All health facilities are required to provide a discharge slip to all discharged clients. Notably, there was no discharge slip for 24% of clients who experienced a complication after arrival and 19% of clients who reported having a complication before arrival. Similarly, of those clients experiencing a complication before arrival, 51% had a discharge slip but nothing was mentioned on it, and likewise for 32% of clients with a complication after arrival.

Table 3. 22: Type and timing of maternity complications

Type of complications:	After arrival at health facility (%)	Before arrival at health facility (%)
Antepartum haemorrhage (APH)	0.0	2.4
Postpartumhaemorrhage (PPH)	2.8	0.8
Retained placenta	2.0	2.4
Prolonged/obstructed labour	0.0	5.5
Multiple pregnancy/Breech Delivery	0.8	0.8
Fits/convulsions/seizures	1.2	1.6
Blurred vision	2.8	0.8
High blood pressure	2.0	1.6
Severe abdominal pain	5.5	19.3
Severe headache	1.2	4.7
Loss of/slow foetal movement	0.8	3.5
Waters breaking more than 12 hours before labour pain/ premature rupture of membranes	1.2	12.6
Total clients with any complication	9.4	16.9
Total clients (N)	**254**	**254**

Source: STS maternity exit interviews

Mode of delivery

Most maternity clients (91%) had a normal delivery, 3% had a forceps delivery and 5% a caesarean section (Table 3.24). Among those clients who had an assisted or caesarean delivery, nearly two-thirds (65%) did not know the reason, and four of these clients did not have discharge slip, or they had a discharge slip but it did not record the reason for an assisted delivery. The main reason for an assisted delivery/caesarean section was prolonged labour (22%).

Table 3. 23: **Mode of delivery and reason for assisted delivery/caesarean section**

	%
Mode of delivery:	
Normal	91.0
Forceps delivery	3.3
Vacuum	1.2
Caesarean section	4.5
Total maternity clients (N)	**254**
Reason for assisted delivery / caesarean section:	
Prolonged labour	*22.3*
Large infant	*4.7*
Foetal distress	*3.3*
Breach position	*2.1*
Patient requested caesarean-section	*2.1*
Don't know the reason(s)	*65.4*
Total maternity clients who had assisted/caesarean delivery (N)	***23***

Source: STS maternity exit interviews; The italic figures are based on <30 unweighted cases.

Time of delivery:

One-third of clients (32%) delivered between 9am and 3pm, and a similar proportion (32%) delivered between 3am to 9 am (Table 3.24). Clients were less likely to have given birth between 3pm and 9pm and 9pm and 3am.

Table 3. 24: Time of delivery

	%
09:00- 14:59 hrs	30.1
15:00 - 20:59 hrs	23.2
21:00- 2:59 hrs	14.9
03:00- 08:59 hrs	31.7
Total maternity clients (N)	**254**

Source: STS maternity exit interviews

CHAPTER 4 - FREE CARE

4.1 INTRODUCTION

The Interim Constitution of Nepal (ICN) (2007) enshrined health as a fundamental right of the citizens of Nepal. The free care programme is part of efforts to ensure this right and is designed to reduce morbidity and mortality by increasing access to health services, especially for poor, excluded, marginalized, remote and vulnerable people. The following are the main milestones of the free care programme in Nepal:

- *2006*: the poor, people living with disabilities, senior citizens and female community health volunteers (FCHVs) became eligible for free emergency and inpatient services in district hospitals (up to 25 beds) and primary health care centres (PHCCs).
- *2008*: all citizens became eligible for free care at health posts (HPs) and sub-health posts (SHPs).
- *2009*: all citizens became eligible for selected essential drugs (see Annex 4.1) and delivery care. Targeted population groups (poorer people, poor/destitute/helpless people, people living with disabilities, senior citizens and FCHVs) became eligible for all services at district hospitals (up to 25 beds) free of charge.

At present, according to government policy, a range of services are provided free of charge for all citizens in public health facilities. These services include family planning, immunization, antenatal care, delivery care, postnatal care, integrated management of childhood illness (IMCI), Tuberculosis, Leprosy, Malaria, Kala-azar, Lymphatic Filiariasis, HIV/AIDs and STD diagnosis and treatment. In addition, outpatient consultations in district hospitals and lower level health facilities and a range of listed essential drugs are also free. Some additional services are provided to specific population groups, including destitute people, poor people, people living with disabilities, senior citizens (60+ years), and FCHVs.

Data from two questionnaires are presented in this chapter: the Service Tracking Survey (STS) facility questionnaire (198 facilities), and the outpatient exit interviews. Of the 787 exit interviews conducted, eight (from two higher level hospitals) were excluded in this analysis as the facilities are not fully covered by the free care programme (total eligible responses, N=779). The results have been disaggregated by type of facility, topological zone and ethnicity where appropriate.

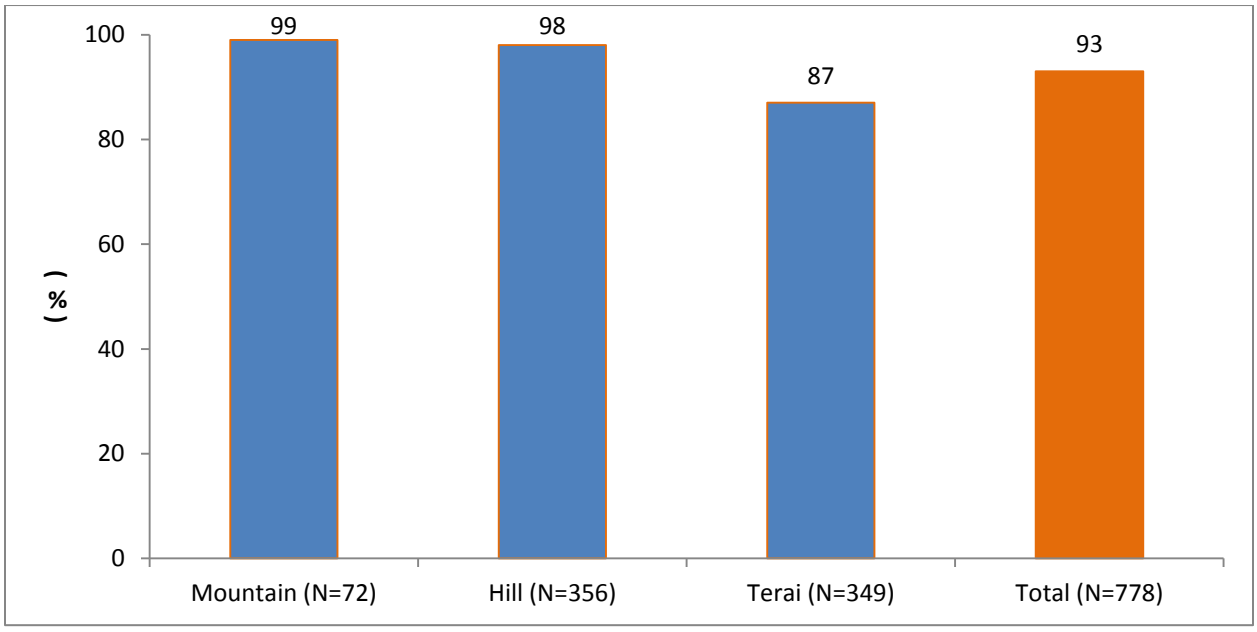
4.2 RESULTS

STS indicators	STS2012	95%CI
% of outpatients aware of entitlement to free care	93.2	88.8-95.8
% of Dalit and Janjati outpatients aware of entitlement to free care	91.2	84.3-95.7
% of outpatients from mountain districts aware of entitlement to free care	98.6	95.6-99.7
% of outpatients who paid for care under the free care policy	20.6	14.1-29.0
% of Dalit and Janajati outpatients who paid for care under the free care policy	20.3	12.1-29.5
% of outpatients from mountain districts who paid for care under the free care policy	15.3	6.4-33.8

4.2.1. AWARENESS OF FREE CARE PROVISION

Most outpatients (93%) knew that they were entitled to receive free care (Figure 4.1). Outpatients from the mountain (99%) and hill (98%) districts were more likely to be aware of free care than outpatients from the Terai districts (87%).

Figure 4. 1: Percentage of outpatients who were aware of entitlement to free care by ecological zone



Source: STS outpatient exit interviews

Respondents who were aware of their entitlement to free care at the facility (93%) were asked if they knew about it prior to arriving at the facility, or if they only became aware of it after being admitted. Nine out of ten outpatients (90%) knew about the provision of free care prior to their arrival at the facility (Table 4.1). Most commonly, outpatients obtained information on free care from friends or neighbours (51%). Health service providers were also a key source of information on free care (29%), as were FCHVs (26%), facility staff (26%), family members/relatives (25%), and the radio (22%) (Table 4.1). Health providers and facility staff were more commonly a source of information in the hill districts than other districts. Friends and neighbours were more likely to be a source in the Terai districts than other districts. FCHVs, television and radio were more commonly a source in the mountain districts than other districts.

Table 4. 1: Awareness of free care among outpatients, by ecological zone

	Mountain (%)	Hill (%)	Terai (%)	Total (%)	*P*
Aware of entitlement to free care	98.6	97.7	87.4	93.2	<0.001
Aware of free care prior to arriving at facility	97.2	97.2	81.9	90.3	<0.001
Total outpatients (N)	**72**	**356**	**349**	**778**	
Source of information:					
Friends/neighbours	36.3	42.8	62.7	50.5	
Health provider	24.4	34.4	23.5	28.9	
FCHV	49.0	28.0	18.0	25.9	
Facility staff	17.5	34.0	18.0	25.6	
Family members/relatives	16.1	22.5	29.1	24.6	
Radio/ FM	35.1	22.6	17.8	21.9	
Television	14.1	2.7	8.4	6.2	
Posters/pamphlets	7.1	2.5	1.8	2.6	
Others	0.0	6.6	5.3	5.4	
Total outpatients aware of free care (N)	**71**	**347**	**304**	**723**	

Source: STS outpatient exit interviews

Within each caste/ethnic group most outpatients (>90%) were aware of free care with no statistically significant differences between caste/ethnic groups (Table 4.2). In each caste/ethnic group most were aware of free care prior to arriving at the facility, ranging from 86% to 100%, and again there are no significant differences. It should be noted that these are the findings for those who visited the facility and may not reflect differences in awareness by caste/ethnic group at the population level. For all caste ethnic groups (except Newars which have a small sample size) friends and neighbours were the most common source of information, particularly so for Terai/Madhesi other castes (65%) and Muslims (60%). FCHVs were less likely to be reported as a source of information by Dalits and Terai/Madhesi castes than by other caste/ethnic groups. Facility staff and health providers were less likely to be mentioned as

sources of information by Muslims and Terai/Madhesi as by other castes. Radio was most commonly mentioned by Brahmin/Chhetri (34%), Newar (*30%*) and Janajati (21%), while television was most commonly reported by Brahmin/Chhetri (10%), Janajati (8%) and Muslims (10%).

Table 4. 2: **Awareness of free care among outpatients, by caste/ethnicity**

	Brahmin/ Chhetri (%)	Terai/ Madhesi other castes (%)	Dalits (%)	Newar (%)	Janajati (%)	Muslim (%)	Total (%)	*P*
Aware of entitlement to free care	94.1	92.7	92.4	*96.2*	91.2	100	93.1	0.707
Aware of free care prior to arriving at facility	91.7	86.1	90.8	*96.2*	88.9	100	90.5	0.476
Total outpatients (N)	**254**	**109**	**131**	***26***	**226**	**32**	**778**	
Source of information:								
Friends/ neighbours	41.9	64.9	50.7	*25.2*	54.8	60.4	50.5	
Health providers	25.3	19.9	39.2	*51.1*	30.7	14.6	28.9	
FCHV	32.2	16.8	19.5	*33.3*	25.3	29.5	25.9	
Facility staff	31.0	16.5	31.8	*2.3*	24.1	18.9	25.6	
Family member/relative	23.5	23.9	22.1	*19.3*	26.5	38.4	24.6	
Radio/ FM	33.6	2.4	18.1	*30.1*	20.6	10.6	21.9	
Television	9.6	1.4	0.6	*0.0*	8.1	9.6	6.2	
Posters/ pamphlets	4.8	0.0	1.5	*0.0*	2.9	0.0	2.6	
Others	5.4	1.0	2.5	*0.0*	10.7	0.0	5.4	
Total outpatients aware of free care (N)	**239**	**101**	**121**	***25***	**206**	**31**	**723**	

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS outpatient exit interviews

4.2.2. PAYMENTS FOR SERVICES

One-fifth of outpatients (20%) reported that they had paid for outpatient services. Among these, only 7% did so voluntarily, the remaining 93% were told to pay by the provider (Table 4.3). Among those who paid, most had paid a registration fee (89%) and this was the most common reason for payment. Nearly one-fifth paid for laboratory fees, and around one-tenth paid for drugs (11%) and x-rays/ultrasounds (8%).

Outpatients from district hospitals (96%) were more likely to have paid for services than those from the lower level health facilities (Table 4.3). Among those who paid, over nine out of ten were told to pay by the provider in each facility type.

Of those who paid for services, all outpatients from district hospitals, PHCCs and HPs had paid for at least one of the four key services mentioned earlier. This reduced to nine in ten outpatients from SHPs

paying for these services. Most outpatients at district hospitals paid a registration fee (98%), while more than two-third from PHCCs and HPs paid for registration fee. Approximately one-fifth also paid for the laboratory fee from district hospitals (22%), PHCCs (22%) and HPs (20%).

Table 4. 3: **Payments made for outpatient services, by facility type**

Paid for	**District hospital (%)**	**PHCC (%)**	**HP (%)**	**SHP (%)**	**Total (%)**	***P***
Paid for services	96.3	25.6	9.4	4.2	20.4	<0.001
Total outpatients (N)	**108**	**86**	**160**	**424**	**778**	
Told to pay vs voluntary:						
Told to pay	94.2	*90.9*	*93.3*	*95.0*	93.1	0.906
Voluntarily paid	5.8	*9.1*	*6.7*	*5.0*	6.9	
Paid for:						
Registration fee	97.9	*67.1*	*66.6*	*85.3*	89.4	
Laboratory	21.6	*21.5*	*20.2*	*0.0*	18.8	
Drugs	8.2	*12.6*	*26.0*	*9.6*	10.6	
X-ray/ultrasound	11.5	*0.0*	*0.0*	*0.0*	7.5	
Any of the above	100	*100*	*100*	*90.0*	98.8	
Total outpatients who paid (N)	**104**	***22***	***15***	***20***	**160**	

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS outpatient exit interviews

The associations between caste/ethnicity and payment, and whether paying voluntarily (if paying), are not statistically significant. However, we note that Muslims (42%) were most likely to have paid for outpatient services, with all of these reporting that they were told to pay (Table 4.4). Among all caste/ethnic groups the registration fee was the most common reason for payment.

Table 4. 4: **Payments made for outpatient services, by caste/ethnicity**

	Brahmin/ Chhetri (%)	Terai/ Madhesi other caste (%)	Dalits (%)	Newar (%)	Janajati (%)	Muslim (%)	Total (%)	*P*
Paid for services	22.0	*19.3*	*16.2*	*4.0*	21.1	*41.9*	20.6	0.470
Total outpatients (N)	254	*109*	*131*	*26*	226	*32*	778	
Told to pay vs voluntary:								
Told to pay	89.3	*100*	*95.2*	*100*	91.7	*100*	93.1	0.779
Voluntarily paid	10.7	*0.0*	*4.8*	*0.0*	8.3	*0.0*	6.9	
Paid for:								
Registration fee	92.5	*100*	*83.6*	*0.0*	86.4	*100*	89.4	
Laboratory fee	2.4	*60.7*	*16.0*	*100*	24.7	*0.0*	18.8	
Medicines	11.4	*2.2*	*21.4*	*0.0*	12.1	*0.0*	10.6	
X-ray/ Ultrasound fee	5.4	*39.7*	*0.0*	*0.0*	1.6	*0.0*	7.5	
Others	5.0	*0.0*	*0.0*	*0.0*	0.0	*0.0*	1.9	
Total outpatient who paid (N)	**56**	***21***	***21***	***1***	**48**	***13***	**160**	

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS outpatient exit interviews

The associations between ecological zone and payment, and whether paying voluntarily (if paying), were not statistically significant (Table 4.5).

Table 4. 5: **Payments made for outpatient services, by ecological zone**

	Mountain (%)	Hill (%)	Terai (%)	Total (%)	*P*
Paid for services	15.3	21.3	20.9	20.6	0.790
Total outpatients(N)	**72**	**356**	**349**	**778**	
Told to pay Vs voluntary:					
Told to pay	100	89.5	97.3	93.1	0.140
Voluntarily paid	0.0	10.5	2.7	6.9	
Total outpatients who paid for services(N)	**11**	**76**	**73**	**160**	
Paid for:					
Registration fee	100	91.4	85.4	89.4	
Laboratory fee	0.0	14.2	26.5	18.8	
Medicines	8.4	8.3	13.4	10.6	
X-ray/ultrasound fee	13.4	2.8	11.3	7.5	
Others	0.0	2.8	0.9	1.9	
Total outpatients who paid for services(N)	**11**	**76**	**73**	**160**	

Source: STS outpatient exit interviews

Table 4.6 presents the amount paid by outpatients for the selected services, by level of facility. The data shows that the amount paid for registration fee (the most common charge) was consistent across each of the facility types with an average of NPR5 (Table 4.4). On average, the highest charges were for laboratory fees (NPR 250), followed by medicines (NPR 186), and ultrasound or x-ray fees (NPR 100). The average cost for these items reduced by level of facility, except for medicines, which users at HPs paid more for than users at PHCCs (NPR 253 Vs NPR 73, respectively). The inter-quartile range shows that there were large variations in the amount paid for medicines, laboratory fees, and x-ray or ultrasounds at district hospitals, PHCCs, and HPs.

Table 4. 6: Service type used and amount paid by outpatients for care, by level of facility

	District hospitals (NPR)			PHCCs (NPR)			HPs (NPR)			SHPs (NPR)			Total (NPR)		
	Median	Lower quartile	Upper quartile	Median	Lower quartile	Upper quartile	Median	Lower quartile	Upper quartile	Median	Lower quartile	Upper quartile	Median	Lower quartile	Upper quartile
Registration fee	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Medicines	288	92	448	73	30	89	253	107	1098	56	50	65	186	53	448
Laboratory fee	300	250	405	106	39	202	69	60	170	0	0	0	250	60	405
X-ray/ Ultrasound fee	100	100	163	0	0	0	0	0	0	0	0	0	100	100	163
Total outpatients who paid for services (N)	**104**			**22***			**15**			**19**			**160**		

**includes one client who paid for 'other' services that are not presented in this table*

Source: STS outpatient exit interviews

Almost half (45%) of those outpatients who had paid for services reported that they would not have received the service unless they had paid (Table 4.7). One fifth (20%) reported that the drugs they were prescribed were not included in the free drug list, 13% reported that health staff told them that there was no provision of free care at that facility, and 3% didn't know the reason why they had paid (either because they didn't ask, or weren't informed by health workers when they did ask). Nearly one fifth (17%) reported other reasons, which included paying for syringes and being told it was due to a decision made by the management committee.

Table 4. 7: **Reasons given for payment for care, by caste/ethnicity**

	Brahmin/ Chhetri (%)	Terai/ Madhesi other caste (%)	Dalits (%)	Janajati (%)	Muslim (%)	Total (%)
Would not get treatment unless paid	39.3	*38.1*	*47.6*	47.9	*69.2*	44.7
Medicine not included in free drug list	33.9	*0.0*	*28.6*	14.6	*0.0*	20.1
No provision of free health service	3.6	*76.2*	*0.0*	2.1	*7.7*	13.2
No free drugs in stock	1.8	*0.0*	*4.8*	0.0	*0.0*	0.6
Not eligible for free service	0.0	*0.0*	*0.0*	0.3	*0.0*	0.0
Others	14.3	*0.0*	*14.3*	25.0	*23.1*	17.0
Don't know	3.6	*0.0*	*0.0*	4.2	*0.0*	3.1
Total outpatients who paid for services(N)	**56**	***21***	***21***	**48**	***13***	**159**

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS outpatient exit interviews
NB: Newari is not included in this analysis as the one Newar outpatient that paid for their care did not provide a reason

One quarter (25%) of outpatients in the Terai reported that the facility had no provision of free care, however, no outpatients in the hill districts reported this (0%) (Table 4.8). Those in the hill districts (26%) were more likely to have been told that their medicines were not included in the free drugs list than those in the Terai (11%).

Table 4. 8: **Reasons given for payment for care, by ecological zone**

	Mountain (%)	Hill (%)	Terai (%)	Total (%)
Would not get treatment unless paid	*45.5*	46.1	43.8	44.4
Medicine not included in free drug list	*36.4*	26.3	11.0	20.0
No provision of free health service	*27.3*	0.0	24.7	13.1
No free drugs in stock	*0*	0	1.4	0.6
Not eligible for free service	*0*	0	0	0.0
Other	*0*	21.0	15.0	27.0
Don't know	*9.1*	3.9	0.0	3.1
Total outpatients who paid for services(N)	***11***	**76**	**73**	**160**

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS outpatient exit interviews

4.3 KEY FINDINGS

Awareness of free care

- Most outpatients (93%) knew that they were entitled to free care. A higher proportion of outpatients from the mountain (99%) and hill (98%) districts were aware of free care than outpatients from the Terai districts (87%).

Payments for health care

- Outpatients from mountain districts (15%) were less likely to pay for services than outpatients from hill (21%) and Terai (21%) districts.

- Among the patients who paid, only 7% did so voluntarily, the remainder being told to pay by the provider. Almost half (45%) of the outpatients who had paid reported that the reason they did so was because they would not have received the service otherwise.

CHAPTER 5 - AAMA PROGRAMME

5.1 INTRODUCTION

The Maternity Incentive Scheme (MIS) started in 2005. It was later renamed the Safe Delivery Incentive Programme (SDIP), and again in 2009 was renamed the Aama Surakshya Programme. It currently contains four components: (a) a cash transport incentive scheme (initiated in July 2005), (b) providing financial incentives to health workers to attend home deliveries (c)free institutional delivery care (launched in mid-January 2009), and (d) an incentive to women attending four antenatal visits (initiated in July 2009). The Aama Programme, through these four components, aims to address the high financial cost of pregnancy and childbirth. By reducing the financial burden during this period, the programme intends to increase the uptake of antenatal care and the number of assisted deliveries. By doing so, they hope to improve the health outcomes for mother and child, and reduce the economic impact that maternity care can have on household finances. Without free delivery care a caesarean section can cost more than half a year's average income for women from the poorest wealth quintile.

The components of the Aama Programme include:

Transport incentives for women who have an institutional delivery: a cash payment is made to women immediately following institutional delivery: NPR. 1,500 in mountain, NPR. 1,000 in hill and NPR. 500 in Terai region.

Free institutional delivery services: a payment is made to the health facility to ensure the provision of free delivery care. For a normal delivery, health facilities with less than 25 beds receive NPR. 1,000, and health facilities with 25 or more beds receive NPR. 1,500. For complicated deliveries health facilities receive NPR. 3,000, and for caesarean-sections they receive NPR. 7,000. Unit costs for management of some complications and caesarean-sections can also be claimed.

Financial incentives provided to women to undertake four timely antenatal care visits: a cash payment of NPR. 400 is made to women on completion of four ANC visits (during the 4^{th}, 6^{th}, 8^{th} and 9^{th} months of pregnancy), an institutional delivery, and their first postnatal care (PNC) visit.

Incentives to health workers for home deliveries: a cash payment of NPR. 100 is made to health workers who attend home deliveries. Copies of birth registration or death certificate need to be produced to claim an incentive for home deliveries. However, this is in the process of being gradually phased out so as to encourage institutional deliveries.

This chapter presents information from 96 Aama Programme implementing health facilities and 260 recently delivered women. SHPs that do not provide delivery services/implement the Aama Programme are excluded from this analysis. From the facility tool this chapter looks at the implementation status of the Aama Programme, procedure for paying incentives, facility charges for delivery, disclosure of programme related information, and financial flow for Aama Programme. From the exit interviews with the recently delivered women, their knowledge, awareness, and attitude towards the Aama Programme,

experience at the facility, receipt of payments, reasons for not receiving incentive or services, and situation of payments made by them were explored.

5.2 RESULTS

STS indicators	STS 2012	95%CI
% of hospitals, PHCCs and health posts implementing Aama	67.0	42.1-85.0
% of maternity clients aware of transport incentive	90.9	86.6-94.3
% of Dalit and Janajati maternity clients aware of transport incentive	85.8	75.3-92.2
% of maternity clients from mountain districts aware of transport incentive	81.8	64.4-95.0
% of maternity clients aware of free delivery care	92.9	88.3-96.0
% of Dalit and Janajati maternity clients aware of free delivery care	91.5	79.5-96.7
% of maternity clients from mountain districts aware of free delivery care	100	NA
% of maternity clients who paid for delivery care	12.2	6.7-21.2
% of Dalit and Janajati maternity clients who paid for delivery care	7.5	4.0-15.9
% of maternity clients from mountain districts who paid for delivery care	9.1	2.7-30.6

5.2.1 FACILITY IMPLEMENTATION

All public hospitals, primary health care centres (PHCCs) and health posts (HPs) are required to implement the Aama Programme. Sub-Health posts (SHPs) can choose to implement the Aama Programme if they meet certain criteria and are approved by the Family Health Division (FHD) as a birthing centre.

All hospitals, both district and higher level (100%), and most PHCCs (97%) were implementing the Aama Programme (Table 5.1). However, only 53% of HPs were implementing it. Of the surveyed SHPs, just over one in ten (11%) were implementing the Aama Programme voluntarily. All higher and district level hospitals, PHCCs and HPs who were implementing the Aama Programme provided transport incentives. Just one in eight SHPs (13%) choosing to implement the programme did not provide transport incentives. No higher level hospitals, and just a few district hospitals (14%), PHCCs (17%), and HPs (12%) offered cash incentives to health workers attending home deliveries.

Table 5. 1: **Implementation of the Aama Programme**

	Aama Programme not optional					Aama Programme optional
	Higher level hospitals (%)	**District hospitals (%)**	**PHCCs (%)**	**HPs (%)**	**Total (%)**	**SHPs (%)**
Implement Aama Programme	100.0	100.0	96.8	53.2	67.0	11.1
Total facilities (N)	**2**	**14**	**31**	**70**	**126**	**72**
Provide transport incentive:						
Always	100.0	100.0	100.0	100.0	100.0	87.5
Sometimes	0.0	0.0	0.0	0.0	0.0	0.0
Never	0.0	0.0	0.0	0.0	0.0	12.5
Offer cash incentive to health workers attending home deliveries:						
Always	0.0	14.3	16.7	11.9	13.4	0.0
Sometimes	0.0	0.0	0.0	0.0	0.0	0.0
Never	100.0	85.7	83.3	88.1	86.6	100
Total facilities implementing Aama Programme(N)	**2**	**14**	**30**	**42**	**88**	**8**

Source: STS facility questionnaire

5.2.1.1 Procedure for paying incentives

The Aama guidelines require clients to fill out a form to claim their transport incentive payment. They do not need to show their ANC card or ID card. Most (98%) health facilities followed the procedure requiring clients to complete a form. However, 41% of the facilities incorrectly expected clients to show their ANC cards, and nearly one fifth (14%) incorrectly expected clients to show their ID card. The findings indicate that there is still some discrepancy between the policy and the implementation.

Table 5. 2: **Procedure to claim transport incentives**

	%
Procedure to claim incentive:	
Fill out form	97.7
Show ANC card	40.5
Show ID card	13.7
Total facilities implementing Aama Programme and providing transport incentive(N)-	**95**

Note: 2 SHPs did not provide transport incentives.
Source: STS facility questionnaire

5.2.1.2 Facility charges for delivery

None of the surveyed health facilities reported that they charged their clients for normal deliveries, assisted deliveries or caesarean section. However, in the client exit interviews 10% of women reported that they had paid for delivery care. This comprised 10% of hospital clients, 9% of PHCC clients and 7% of

HP clients. Only ten maternity clients were surveyed from SHPs, but three of them reported they had paid for the maternity care they received.

5.2.1.3 Disclosure of information related to the Aama Programme

Aama guidelines require that all health facilities implementing the programme must keep, and make available to the public, a record of clients who have received financial payments. Two thirds of PHCCs (67%) and half of the higher level hospitals (50%) and HPs (48%) had disclosed the list of Aama beneficiaries to the public. However, just 29% of district hospitals and 25% of SHPs (implementing Aama) did so. Over one-third of district hospitals (36%) had not maintained a list of Aama beneficiaries, compared to 13% of PHCCs and SHPs, and 12% of HPs. Remaining facilities either maintained the list (seen by enumerators) but did not display it or reported that they had maintained the list but it was not seen by the enumerators.

Table 5. 3: **Disclosure of Aama beneficiaries**

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Disclosed list of Aama beneficiaries:					
Disclosed list to public	50.0	28.6	66.7	47.6	25.0
List available, but not disclosed to public	0.0	28.6	20.0	26.2	37.5
Reportedly kept list, but not seen	50.0	7.1	0.0	14.3	25.0
Did not maintain list	0.0	35.7	13.3	11.9	12.5
Total facilities implementing Aama Programme (N)	**2**	**14**	**30**	**42**	**8**

Source: STS facility questionnaire

Aama guidelines stipulate that the list of Aama beneficiaries should be displayed on both the health facility and VDC notice boards on a monthly basis. Table 5.4 shows the different places where the lists of Aama beneficiaries are displayed to the public. One quarter of PHCCs (25%) and 30% of HPs did not display the information on the facility notice boards. Just half of district hospitals (50%), one in ten (10%) PHCCs and one quarter of HPs (25%) displayed the information on the VDC/DDC notice boards. It was not very common for facilities to disclose Aama beneficiaries annual VDC/DDC gatherings (just 25% of PHCCs and 25% of HPs), although more commonly facilities disclosed the information at HDC/HFOMC meetings: 50% of district hospitals, 65% of PHCCs, 75% of HPs and 50% of SHPs.

Table 5. 4: **Place where information about Aama Programme beneficiaries is disclosed**

Place of disclosure	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Facility notice boards	100	100	75.0	70.0	100
VDC/DDC notice boards	0.0	50.0	10.0	25.0	0.0
Annual VDC/DDC gathering	0.0	0.0	25.0	25.0	0.0
During HDC/HFOMC meeting	0.0	50.0	65.0	75.0	50.0
Total facilities disclosed Aama beneficiaries list (N)	**1**	**4**	**20**	**20**	**2**

Source: STS facility questionnaire

5.2.1.4 Amount received vs amount paid

Table 5.5 shows the amount received and the amount and percentage paid out by facilities under the Aama Programme. For four ANC incentives, the percentage paid out was lowest among highest level hospitals (58%) and SHPs (59%), compared to 75% at District hospitals, 93% at PHCCs, and 103% at HPs. However, the percentage paid out for the transport incentive was similar among all levels of health facilities, with all paying more than 90% of the received amount.

For some health facilities the amount paid exceeded the amount they received. It should be noted that the per unit cost that facilities receive is greater than the amount paid as an incentive to each client and therefore there should be some excess budget that they can save. Furthermore, a few of the facilities reported that they had paid incentives for clients from their management committee account as they didn't receive that amount from the MoHP/DPHO. This was due to them being late in claiming the funds and the DPHO closing all the financial transactions at the end of fiscal year. This explains the issues related to the fund flow and timely submissions of the claims.

Table 5. 5: Amount received and paid out under 4ANC and travel incentive schemes, by facility level

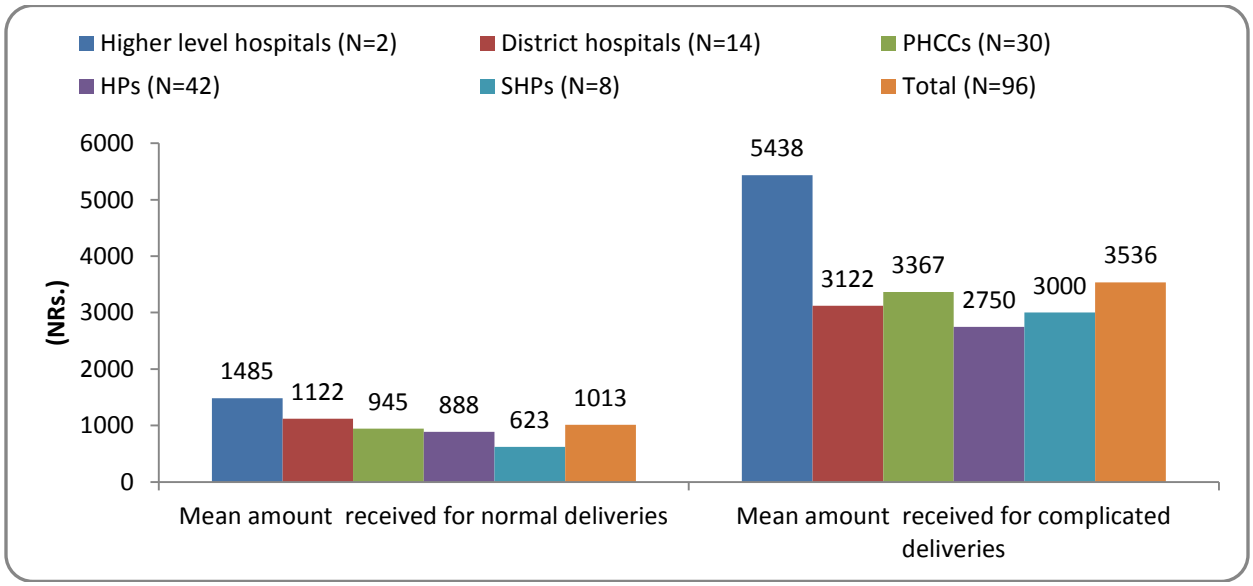
Fund Flow	4ANC incentive					Transport Incentive				
	Higher level hospitals	District hospitals	PHCCs	HPs	SHPs	Higher level hospitals	District hospitals	PHCCs	HPs	SHPs
Total received (NPR)	2,036,400	380857	193984	232224	135024	8,139,500	2065235	883200	1022130	305140
Total paid out (NPR)	1,171,400	285360	181248	239932	79420	7,436,500	2065235	833920	1022335	346940
% of received money that has been paid out	57.5	74.9	93.4	103.3	58.8	91.4	100.0	94.4	100.0	113.7
Total clients	2931	4217	1779	1749	95	14873	2597	1334	1442	433
Total facilities implementing Aama(N)	**2**	**14**	**29**	**40**	**8**	**2**	**14**	**29**	**40**	**8**

Note: Two HPs have implemented Aama Programme in this fiscal year. Hence not applicable for those cases.Record not available in one PHCC.

Source: STS facility questionnaire

The amount that facilities received for deliveries varied between normal and complicated deliveries and by the level of facility (Figure 5.1). The average payment for a normal delivery was NPR 1013 compared to NPR 3536 for a complicated delivery. The amount received for normal deliveries reduced with the level of facility, with higher level hospitals (NPR 1485) on average receiving more than twice that of SHPs (NPR 623).There was little variation between the mean amounts received by district hospitals, PHCCs, HPs and SHPs as a reimbursement cost for complicated deliveries across the level of health facilities (all around NPR 3000), but higher level hospitals (NPR 5438) received substantially more on average.

Figure 5. 1: Mean amount received by facilities for normal and complicated deliveries



The amount that facilities received for the different types of deliveries is shown by the level of facility and by ecological zone in Table 5.6. For normal deliveries, there were larger differences between levels of facilities within hill districts, than between different facility levels in mountain or Terai districts. On average, within each eco-zone, higher level facilities received more per delivery. For complicated deliveries different patterns were seen by eco-zone. The mean amount per delivery was the same for all levels in mountain districts (NR 3000). Within the Terai, although the higher level hospitals received a far higher mean amount (NPR 4077), similarly there was little difference among the other facility levels, all were around NPR 3000. However, within hill districts the mean amount per delivery decreased from district hospitals (NPR 3255) to PHCCs (NPR 2615) to HPs (NPR 1329). There was little difference in the mean amount received for caesarean section between different levels of facilities by ecological zones.

Table 5. 6: Amount received by facilities for Aama Programme compared to number of deliveries

Amount received by facilities	Mountain			Hill				Terai				
	District hospitals	PHCCs	HPs	District hospitals	PHCCs	HPs	SHPs	Higher level hospitals	District hospitals	PHCCs	HPs	SHPs
Normal deliveries:												
Received (NPR)	613,000	321,000	209,875	3,773,000	424,000	632,000	68,000	15,451,500	4,565,300	2,720,500	1,971,000	27,000
Number of normal deliveries	613	321	216	2665	561	1070	175	10378	4288	2876	2065	27
Mean amount received per delivery	1,000	1,000	972	1416	756	598	412	1489	1065	946	954	1,000
Complicated deliveries:												
Received (NPR)	234,000	42,000	3,000	1,699,000	102,000	105,000	15,000	6,792,000	2014800	1135500	258,000	0
Number of complicated deliveries	78	14	1	522	39	79	5	1666	681	359	86	0
Mean amount received per delivery	3,000	3,000	3,000	3255	2615	1329	3,000	4077	2959	3163	3,000	
Caesarean Section:												
Received (NPR)	112,000	0	0	280,000	0	0	0	19,754,000	365400	0	0	0
Number of C/S deliveries	16	0	0	40	0	0	0	2829	52	0	0	0

Source: STS facility questionnaire

Table 5.6: Amount received by facilities for Aama Programme compared to number of deliveries assisted

Mean amount received per delivery	7,000			7,000				6983	7027			
Total facilities (N)	**3**	**4**	**9**	**5**	**10**	**15**	**5**	**2**	**6**	**16**	**15**	**2**
Total amount received for implementing Aama	2,425,000	886,500	548,375	8,979,000	1,105,000	1,877,000	250,500	50,137,000	9,599,200	5,632,081	3,304,500	49,500
Number of total deliveries	707	335	217	3227	600	1149	180	14873	5021	3235	2151	27
Total facilities implementing Aama (N)	**3**	**4**	**10**	**5**	**10**	**17**	**6**	**2**	**6**	**16**	**15**	**2**

Source: STS facility questionnaire

It was more common for lower level facilities not to have received the entire amount: 50% of SHPs, 26% of HPs, compared to 17% of PHCCs, 14% of district hospitals and no higher level hospitals. Facility staff were asked about the reason for not receiving the entire amount. Reasons reported were largely due to staff not being available (20% of PHCCs and 27%of HPs) or the programme being in financial deficit (20% of PHCCs, 9% of HPs and 25% of SHPs). 'Other' responses included money not being sent by the district and central levels and having more clients than expected. There was just one response for each of remaining reasons: late provision of budget, high workload at district level, incomplete form forwarded by the health facility, facility only recently upgraded as a birthing centre, and document was lost by administrative staff.

Table 5. 7: **Receipt of entire amount and reasons for non-receipt**

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Facility did not receive entire amount	0	14.3	16.7	26.2	50.0
Total facilities implementing Aama (N)	**2**	**14**	**30**	**42**	**8**
Reasons for not receiving the entire amount:					
District staff were not available		0.0	20.0	27.3	0.0
Programme had money deficit		0.0	20.0	9.1	25.0
Did not claim at right time		0.0	0.0	9.1	0.0
Other		100	60.0	54.5	75.0
Facilities reported that they had not received entire amount (N)		**2**	**5**	**11**	**4**

Source: STS facility questionnaire

5.2.2 CLIENTS' KNOWLEDGE AND ATTITUDE TOWARDS THE AAMA INCENTIVES

5.2.3.1 Free delivery

Most clients (93%) were aware of the availability of free delivery care during their exit interview. There was little difference by ecological zone. In order for the payments to act as an incentive to have a facility delivery, clients need to be aware of the availability of free delivery care prior to their arrival at the facility. There was little difference by ecological zone, ranging from 87% of Terai residents to 100% from mountain districts (although the sample size for the latter is small).

The most common source of information through which women found out about free delivery care were the family members/relatives (45%), followed by friends and neighbours (40%), and family members and FCHVs (29%). In the mountain districts, the most common source of information for knowing about the availability of free care was also the FCHV (58%), but the radio (52%) and the health provider (46%) were also far more common than family or friend networks.

Table 5. 8: **Aware of free delivery care, by ecological zone**

	Mountain (%)	Hill (%)	Terai (%)	Total (%)	*P*
Aware of free delivery care	100	90.9	93.8	92.9	0.419
Total clients (N)	**11**	**99**	**144**	**254**	
Aware of free delivery care prior to arriving at facility	100	86.7	94.1	91.5	0.070
Total clients aware of free care (N)	**11**	**90**	**135**	**236**	
Source of information:					
Family members/relatives	16.2	30.9	56.9	45.3	
Friends/neighbours	29.7	55.7	30.2	39.8	
FCHV	57.6	24.8	29.1	28.8	
Health provider	45.6	55.7	8.7	28.4	
Facility staff	10.9	23.7	22.6	22.5	
Television	9.4	3.2	4.5	4.2	
Radio/ FM	52.0	7.5	4.2	7.6	
Posters/pamphlets	2.3	2.5	0.0	1.3	
Total clients aware of free care (N)	**11**	**90**	**135**	**236**	

Source: STS maternity exit interviews

Table 5.9 shows the awareness of free delivery care by different ethnic and caste groups. There was no significant difference in awareness by caste/ethnicity, and the small numbers in some groups means that comparisons should be made with caution.

Table 5. 9: **Aware of free delivery care, by caste/ethnicity**

Awareness of free delivery care	Brahmin/ Chhetri (%)	Terai/Madhesi other castes (%)	Dalits (%)	Newar (%)	Janajati (%)	Muslim (%)	Total (%)	*P*
Aware of free delivery care	97.5	*87.9*	94.4	*100*	90.0	*91.7*	93.3	0.722
Total clients (N)	**80**	***33***	**36**	***10***	**70**	***24***	**254**	
Aware of free delivery care prior to arriving at facility	92.3	*90.0*	94.3	*90.0*	85.7	*100.0*	91.2	0.574
Total clients aware (N)	**78**	***29***	**34**	***10***	**63**	***22***	**236**	
Source of information:								
Family member/ relative	40.4	*82.2*	40.5	*70.2*	34.9	*38.2*	45.3	
Friends/ neighbours	42.5	*14.0*	44.8	*52.7*	46.1	*34.5*	39.8	
FCHV	28.4	*28.3*	37.3	*5.0*	35.3	*8.7*	28.8	
Health providers	38.7	*9.2*	20.2	*7.2*	39.5	*5.8*	28.4	
Facility staff	22.0	*9.7*	41.1	*0.0*	18.3	*33.8*	22.5	
Television	5.3	*3.0*	7.1	*0.0*	2.6	*4.0*	4.2	
Radio/ FM	13.5	*3.0*	12.3	*0.0*	3.8	*0.0*	7.6	
Posters/ pamphlets	2.3	*0.0*	0.7	*5.0*	0.0	*0.0*	1.3	
Total clients aware of free delivery care (N)	**78**	***29***	**34**	***10***	**63**	***22***	**236**	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

5.2.3.2 Transport incentives

A similar proportion of women were aware of the transport incentives (91%) as were those aware of free delivery care (93%), and this was similar across all ecological zones. Among the clients who were aware of transport incentives, 93% were aware prior to arrival at the facility, and again this was similar across all ecological zones.

The main source of information for knowing about the transport incentive were friends and neighbours (39%), followed by family members/relatives (37%), and FCHVs (30%). Again, in the mountain districts women were perhaps more likely to name a health provider or FCHV as a source, and less likely to name friends or family networks, though the number of client interviews from the mountain zone is small.

Furthermore, clients' awareness of the amount they were entitled to receive under the transport incentive payment was also assessed. Of those who were aware of transport incentives, overall two thirds of clients (66%) were aware of the correct amount of the transport incentive payment. All clients from the mountain districts knew how much they should receive (100%), compared to just under three-quarters from the Terai zone (74%) and half of the hill clients (50%), but these findings were not statistically significant.

Table 5. 10: **Aware of transport incentives, by ecological zone**

	Mountain (%)	Hill (%)	Terai (%)	Total (%)	*P*
Aware of transport incentives	81.8	88.9	93.1	90.9	0.389
Total clients(N)	**11**	**99**	**144**	**254**	
Aware of transport incentives prior to arriving at facility	*100.0*	96.6	90.3	93.1	0.195
Total clients aware of transport incentives (N)	***9***	**88**	**134**	**231**	
Source of information:					
Family members/relatives	*18.4*	21.4	48.5	37.2	
Friends/neighbours	*14.5*	55.7	30.5	39.4	
FCHV	*52.2*	28.1	30.2	30.3	
Health provider	*48.2*	38.7	7.4	21.2	
Facility staff	*17.0*	35.2	29.3	31.2	
Television	*10.7*	2.6	4.5	3.9	
Radio/FM	*49.6*	7.5	5.3	7.8	
Posters/pamphlets	*8.0*	2.6	0.9	1.7	
Citizen charter	*0.0*	3.8	0.0	1.3	
Teacher	*0.0*	0.2	0.0	0.0	
Aware of correct amount for transport incentive entitled to	100	50.0	73.9	65.8	0.191
Total clients aware of transport incentive (N)	***9***	**88**	**134**	**231**	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

Awareness of the transport incentives was analysed by caste/ethnicity. The results did not reveal a stark difference in awareness by caste/ethnic groups and sample sizes of some groups are small, though the differences were statistically significant. Janajati reported the lowest awareness of the transport incentive (80%) compared to other caste/ethnic groups. There were no significant differences by caste/ethnicity in regards to awareness of incentive payments prior to arrival at facility (among those aware) or in regards to knowing the correct amount of the incentive payment.

Table 5. 11: **Aware of transport incentives, by caste/ethnicity**

Awareness of transport incentives	Brahmin/ Chhetri (%)	Terai/Madhesi other castes (%)	Dalits (%)	Newar (%)	Janajati (%)	Muslim (%)	Total (%)	*P*
Aware of transport incentives	95.1	*97.0*	97.2	*100.0*	80.0	*91.7*	91.3	0.008
Total clients(N)	**80**	***33***	**36**	***10***	**70**	***24***	**254**	
Aware of transport incentives prior to arriving at facility	87.0	*100*	97.1	*90.0*	92.9	*100*	93.1	0.315
Total clients aware of transport incentives(N)	**77**	**32**	**35**	**10**	**55**	**22**	**231**	
Sources of information:								
Family member/ relative	23.9	*81.1*	45.2	*70.2*	15.9	*44.2*	37.2	
Friends/ neighbours	39.2	*23.2*	40.5	*52.7*	50.9	*27.1*	39.4	
FCHV	27.8	*27.5*	37.1	*22.6*	41.2	*8.0*	30.3	
Health providers	27.5	*5.6*	21.5	*0.0*	30.1	*5.8*	21.2	
Facility staff	35.8	*15.9*	32.0	*42.3*	29.2	*34.7*	31.2	
Television	5.7	*0.0*	7.0	*0.0*	2.8	*4.0*	3.9	
Radio/ FM	14.5	*0.0*	9.0	*0.0*	5.7	*4.0*	7.8	
Posters/ pamphlets	3.9	*0.0*	1.2	*5.0*	0.5	*0.0*	1.7	
Citizen charter	0.0	*0.0*	0.0	*0.0*	6.0	*0.0*	1.3	
Teacher	0.2	*0.0*	0.0	*0.0*	0.0	*0.0*	0.0	
Aware of correct amount entitled to transport incentive	**76.6**	**53.1**	**61.1**	**40.0**	**57.1**	**86.4**	**65.7**	0.168
Total clients aware of transport incentive (N)	**77**	**32**	**35**	**10**	**55**	**22**	**231**	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

The survey explored the clients' perceptions of the benefits of free delivery care and the transport incentive. More than two fifths of respondents reported that the free delivery care made the service financially accessible (42%), enabled poorer women to deliver in the facility (42%), and encouraged women to deliver in a facility (42%). Regarding perceptions of the transport incentive scheme, more than half (55%) of the clients felt that it led to safer care for the mother and baby, and over a third thought it encouraged women to deliver in a facility (37%) and that it covered all of the costs associated with their delivery (transport, food etc) (33%).

Table 5. 12: **Perceived benefits of free delivery care and transport incentives**

Perceived benefits of free delivery care	**(%)**		**Perceived benefits of transport incentives**	**(%)**
Enables poorer women to deliver in facility	41.5		More safe at facility than home	54.9
Encourages women to deliver in facility	41.8		Encourages women to deliver in facility	36.6
Financially accessible	42.2		Covers all costs associated with delivery (e.g. transport/ food)	33.4
Good behaviour of health worker	0.5		Clothes for newborn/able to buy something	22.6
Everything is fine	1.0		Promote poor people to deliver at health facility	4.9
Nothing good about it	1.8		Nothing good about it	4.2
Saves life of mother and child/safe service	1.5		Saves lives of mothers and babies	0.6
Less cost	0.8		Safer care for mother and baby	0.2
Delivery service for all/effective delivery service	0.6		Increase in number of hospital deliveries	0.0
Don't know	10.7		Don't know	4.2
Total clients aware(N)	**236**		**Total clients aware (N)**	**231**

Source: STS maternity exit interviews

The study found that around three quarters of respondents could not name any disadvantages with free delivery care (76%) and the transport incentive scheme (71%). The aspects of free delivery care that respondents reported dissatisfaction with were: people are not aware of it (10%) and still having to pay for medicines (7%). Regarding transport incentive payments, respondents reported that it does not cover all costs associated with delivery (9%), that it does not benefit the poor (3%), and there are delays in receiving it (3%).

Table 5. 13: Patients' views on what is not good about free care/ transport incentive

	Free delivery care (%)	Transport incentives (%)
Everything is fine	75.8	70.5
People not aware of it	9.7	9.2
Does not benefit poor	4	3.3
It does not cover all the cost associated with delivery		9
Delay in receiving		3.2
Inadequate transport cost		4.9
It is difficult to get it from providers		0.5
Laboratory tests are not free		0.6
Medicines are not free of cost		1.3
Equal distribution of cost		1.6
Medicines are not free of cost	7.3	
Carelessness	2.3	
Staff still charging for services	0.4	
Ultrasound should be free	2.1	
Don't know	4.9	4.7
Total clients (N)	**236**	**231**

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

5.2.3 CLIENT PAYMENT FOR DELIVERY CARE AND RECEIPT OF INCENTIVE PAYMENTS

Most maternity clients interviewed in the exit survey reported receipt of transport incentives (94%) and nearly nine out of ten (88%) received the services free of charge (Table 5.13). Among those clients who paid for services, 81% reported that they were told to pay. The main reasons for payment included drugs not being included on the free-drugs list (23%), and payments to cleaners (16%). However, in 16% of cases they had paid voluntarily as they were content with the service.

When analysed by ecological region, a higher percentage of clients in the Terai (97%) and hill (93%) districts had received transport incentives than those from the mountain zones (73%). Residents in the hill districts (23%) were most likely to have paid for care, compared to those in the mountain (9%) or Terai (5%). Both of these findings were significant.

Table 5. 14: Receipt of incentive payments and payment for delivery care, by ecological zones

Receipt of incentive	Mountain (%)	Hill (%)	Terai (%)	Total (%)	*P*
Received transport incentives	72.7	92.9	96.5	94.1	0.021
Total clients(N)	**11**	**99**	**144**	**254**	
Paid delivery expenses	9.1	23.2	4.9	12.2	0.014
Total clients(N)	**11**	**99**	**144**	**254**	
Given option to pay:					
Told to pay				*80.6*	
Voluntarily offered to pay tips				*16.1*	
Both				*3.2*	
Total clients who paid for services(N)				***31***	
Reasons for paying for delivery service:					
Not included in free drugs				*22.6*	
Paid to cleaners				*19.4*	
Was happy				*16.1*	
USG and medicine				*16.1*	
I was told I would not get any treatment unless I paid				*6.5*	
No free drugs in stock				*9.7*	
Bought calcium tablets				*6.5*	
For bed charge				*3.2*	
Total clients who paid for services(N)				***31***	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

Table 5.15 shows the caste and ethnic breakdown of those receiving incentives and paying for care. Differences between caste and ethnic groups were not significant.

Table 5. 15: Receipt of incentive payments and payment for delivery care, by caste/ethnicity

Receipt of incentive	Brahmin/ Chhetri	Terai/Madhesi other castes	Dalits	Newar	Janajati	Muslim	Total	*P*
Received transport incentives	96.2	*97*	91.9	*80*	94.3	*95.8*	94.5	0.618
Total clients(N)	**80**	***32***	**37**	***10***	**70**	***24***	**254**	
Paid delivery expenses	17.3	*15.6*	8.3	*30*	7.2	*0*	11.9	0.398
Total clients(N)	**80**	***32***	**37**	***10***	**70**	***24***	**254**	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

Receipt of transport incentives differed significantly by level of health facility, with the percentage of clients receiving transport incentives decreasing with facility, although the number of clients interviewed who had received delivery care at HPs and SHPs was very few. All clients delivering in hospitals received their transport incentive but only 78% of those in PHCCs did (Table 5.16). There were no significant differences by level of facility in whether clients paid for delivery expenses.

Table 5. 16: Receipt of incentive payments and payment for delivery care, by level of facility

Receipt of incentive	Higher level hospitals (%)	District level hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)	*P*
Received transport incentives	100	100	78.4	58.3	*50.0*	94.5	0.002
Total clients(N)	**43**	**160**	**37**	**12**	***2***	**254**	
Paid delivery expenses	0.0	16.2	8.3	8.3	*33.3*	12.2	0.159
Total clients(N)	**43**	**160**	**37**	**12**	***2***	**254**	

Notes: *The italic figures are based on <30 unweighted cases.*

Source: STS maternity exit interviews

Those maternity clients who did not receive transport incentives (N=14) were asked about the reasons given by the provider for the non-payment. The main reasons reported by clients were that the facility did not have enough money at that time and would pay later (86%) followed by unavailability of concerned person(7%)(Table 5.17).

Table 5. 17: Provider comments regarding non-receipt of transport incentive

Comments regarding non-receipt	%
Said nothing	*7.1*
Do not have enough money now, will receive later	*85.7*
Concerned person is not here to provide incentive	*7.1*
Total clients who didn't receive transport incentive(N)	***14***

Notes: *The italic figures are based on <30 unweighted cases.*
Source: STS maternity exit interviews

All clients who received transport incentives reported that they had received at least the correct amount.

Table 5. 18: **Amount received in transport incentives, by ecological zone**

Amount received	Mountain	Hill	Terai
First Quartile (NPR)	1500	1000	500
Median (NPR)	1500	1000	500
Third Quartile (NPR)	1500	1000	500
% received at least the correct amount as per guidelines	100	100	100
Total clients who received incentive(N)	**8**	**92**	**139**

Source: STS maternity exit interviews

Aama guidelines specify that all the items used in delivery care (e.g. registration, gloves, medicine etc listed in Table 5.19) should be provided free of charge and no money in the form of tips should be given to any health personnel. However, some clients reported making payments for medicine, sanitary staff fees and tips at Aama implementing facilities.

Table 5. 19: **Percentage of clients paying and median amount paid, by type of payment**

	% paid	Median amount paid
Registration fee	1.2	5
Medicine	59.9	200
Gloves	2.3	75
Informal payment to the provider	1.1	450
Sanitary staff fee	19.1	100
Sanitary pad	1.0	70
Sanitary staff tips	16.5	135
Other	29.3	173
Total clients who paid (N)	**31**	

Source: STS maternity exit interviews

5.3 KEY FINDINGS

- All hospitals were implementing the Aama Programme, along with most PHCCs (97%) and about half of HPs (53%).
- All hospitals, PHCCs and HPs who were implementing the Aama Programme provided transport incentives.
- Most clients were aware of the free delivery care service (93%) and transport incentives (91%).
- More than two fifths of the respondents reported that the free delivery care incentives made the service financially accessible (42%), and similar percentages reported that it enabled poorer women to deliver in the facility (42%), and encouraged women to deliver in a facility (42%).
- Most clients received transport incentives (94%). Of those who received, all received the correct amount of incentives on time as per the guidelines.
- None of the health facilities reported that they charged their clients for normal deliveries, assisted deliveries or caesarean section. However, more than one in ten maternity clients reported that they had paid for delivery services (12%).
- Almost a quarter (23%) of health facilities did not receive the entire amount they were eligible to receive, either for ANC or for transport incentives or both.

CHAPTER 6 - FINANCIAL MANAGEMENT

6.1 INTRODUCTION

The Ministry of Health and Population (MoHP) acknowledges the importance of effective and efficient financial management, and has recently endorsed the Financial Management Improvement Plan (FMIP) for 2012/13 to 2015/16. This is an addendum to the plan originally contained in the Governance and Accountability Action Plan (GAAP) and draws on the standardised approach to public financial management, known as the Public Expenditure and Financial Accountability Framework (PEFA). The FMIP intends to strengthen the MoHP's current practices on financial planning, accounting procedures, internal control systems, financial reporting, monitoring, auditing, and transparency measures. The plan also intends to enhance the capacity of the human resources working in the planning and financial management sectors.

As per the financial act and regulation of Nepal only cost centres are expected to take responsibility for keeping financial records, preparing financial reports and conducting financial audits. A cost centre refers to an official entity that receives funds from the government treasury for the official activities approved by the ministry in the AWPB. It is responsible for maintaining financial records as per the rules and regulations of the financial controller general office (FCGO).Recipients of cost centres are expected to maintain records, but given they do not have the provision of an accounts or finance official they are not expected to maintain them according to the standard format recommended by FCGO. Usually recipients receive advance funds from cost centres that they then clear after expenditure by submitting all the relevant documentation to the concerned cost centre. Since the implementation of the Aama Programme and free care, health facilities are getting substantial amounts of money but, without standard recording guidelines or formats from MoHP, it is difficult to assess the receipt and expenditure of these resources.

This chapter presents the findings of the Service Tracking Survey 2012 on the financial management of 190 health facilities. It describes the sources of revenue, the amount received from these different sources, the expenditure by facilities, and the financial management procedures for the fiscal year of 2011/12. It also looks at the extent to which the surveyed health facilities disclose their financial information to the general public, and the extent to which they carry out their financial reporting and auditing obligations. Enumerators were unable to collect the required financial information from eight of the sampled health facilities. This was either due to poor record-keeping or being unable to access the records as the person responsible for financial management was not present at the time of enumeration. For some of the facilities the amount of budget received from MoHP had to be collected from the accounts section of the relevant district (public) health office, rather than the facility.

6.2 RESULTS

Indicators	STS 2012	95%CI
% of facilities that spent all the funds received	23.1	16.9-30.7
% of facilities with a bank account	100	NA
% of facilities that disclosed their income and expenditure to the public	73.6	61.8-82.8
% of facilities that conducted a final audit in the last fiscal year	20.0	11.4-32.6

6.2.1 SOURCES OF INCOME

The facilities were asked to provide information on their sources of revenue. As PHCCs, HPs and SHPs are not cost centres they do not receive routine funds directly from the MoHP. However, health facilities at all levels do receive funding to implement specific priority health programmes, for example, the Free Care and Aama Programmes.

Table 6.1 shows the different sources of income for the health facilities surveyed. MoHP/D(P)HO was a source of income for all health facilities (100%). VDCs or municipalities were a common source of income for PHCCs (73%), HPs (81%) and SHPs (70%), but not hospitals. Higher level facilities were more likely to have an internal source of income: 100% of hospitals, 43% of district hospitals, and 43% of PHCCs, compared to just 20% of HPs and 10% of SHPs.

Table 6. 1: Sources of income, by facility type

	Higher Level Hospitals (%)	District Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Source of income:					
MoHP/D(P)HO	100	100	100	100	100
VDC/Municipality	0.0	7.1	73.3	81.3	69.6
Internal source (fee, land contract, rent etc.)	100	42.9	43.3	20.0	10.1
Donor agency/(I)NGOs	0.0	21.4	36.7	22.7	10.1
DDC	0.0	7.1	10.0	9.3	7.2
Total facilities with records available (N)	**2**	**14**	**30**	**75**	**69**

Source: STS facility questionnaire (Records were not available for one PHCC, one HP and six SHPs)

The MoHP/D(P)HO was the main source of finance for all levels of health facility, accounting for over three quarters of the hospital budget (75% for higher level hospitals, 83% for district hospitals), compared to about half of the budget for PHCCs(56%), HPs (45%) and SHPs (56%), similar findings were also observed in STS 2011 for district hospitals (81%), but the percentages have decreased for PHCCs (66%) and HPs (62%) and decreased for SHPS (47%). The remaining hospital and PHCC funding largely came from internal income sources (25% of higher level hospital funding, 13% of district hospital funding and 21% of PHCC funding). The remaining income for SHPs was primarily from VDC or municipality funding, while for HPs it came from a mix of VDC or municipality funding, internal sources and donor agencies/(I)NGOs.

Table 6. 2: Budget received in last fiscal year, by source of income and facility type

	Higher Level Hospitals		District Hospitals		PHCCs		HPs		SHPs	
	Amount NPR (millions)	% of total budget	Amount NPR (millions)	% of total budget	Amount NPR (millions)	% of total budget	Amount NPR (millions)	% of total budget	Amount NPR (millions)	% of total budget
Source of income:										
MoHP/D(P)HO	191.1	75.4	122.1	82.7	18.5	56.4	11.6	45.1	6.3	56.3
VDC/Municipality	0.0	0.0	0.0	0.0	3.3	10.1	5.1	19.8	3.8	33.9
Internal source	62.3	24.6	19.8	13.4	6.8	20.7	4.4	17.1	0.7	6.3
Donor agency/ (I)NGOs	0.0	0.0	1.9	1.3	4.0	12.2	3.7	14.4	0.4	3.6
DDC	0.0	0.0	3.9	2.6	0.2	0.6	1.0	3.9	0.0	0.0
Total Budget	253.4		147.7		32.8		25.7		11.2	
Total facilities with records available (N)	**2**		**14**		**30**		**75**		**69**	

Source: STS facility questionnaire (Records were not available for one PHCC, two HPs and six SHPs)

6.2.2 MOHP BUDGET RECEIPT AND EXPENDITURE

Table 6.3 shows the number of times that budget requests were made by health facilities to the MoHP, and the number of times the budget was received. As mentioned above, facilities at PHCC level and below are not cost centres and therefore they do not make budget requests for routine expenses. However, they may request budgets to cover the Aama Programme or request the D(P)HO for additional support for infrastructure development.

Hospitals (75%) were more likely to have made budget requests than PHCCs (37%), HPs (38%) and SHPs (25%), which is not surprising given they are cost-centres. Among the PHCCs, HPs and SHPs who did request a budget, most only did so once or twice a year, whereas 38% of hospitals reported that they had made three requests within a year.

Table 6. 3: Number of times facilities requested and received budget from MoHP, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Budget requested:				
Never	25.0	63.3	62.2	75.4
Once or twice a year	37.5	26.7	29.7	18.8
Three times a year	37.5	3.3	1.4	5.8
Four times or more	0.0	6.7	6.8	0.0
Mean	2	1	1	0.4
Budget received:				
Never	0.0	0.0	0.0	0.0
Once or twice a year	56.3	76.7	89.2	92.8
Three times a year	31.3	6.7	4.1	2.9
Four times or more	12.5	16.7	6.8	4.3
Mean	4	2	2	1.0
Total facilities with records available (N)	**16**	**30**	**74**	**69**

Source: STS facility questionnaire (Records were not available for one PHCC, two HPs and six SHPs)

Receipt of allocated funds or reimbursement

The health facilities were asked whether or not they had received their allocated funds and been reimbursed for any costs incurred (e.g. through implementing the Free Care or Aama Programmes) (Table 6.4). All hospitals (100%) reported that they had received their allocated funds and appropriate reimbursement, along with nine out of ten PHCCs and HPs (90%) and 96% of SHPs. This is huge progress compared with STS 2011 where 63% of hospitals, 46% of PHCCs, 51% of HPs and 49% of SHPs had received the allocated amount.

Among those facilities that did not receive the full amount requested, one third of PHCCs (33%) and SHPs (33%) and 43% of HPs reported that the main reason for not receiving the full amount was that priority was given to other sectors. Other reasons reported by HPs and SHPs included a budget deficit, lack of money at the district level, while PHCCs also reported a lack of rules and regulations and high work-load of district staff.

Table 6. 4: Receipt of full budget and reasons for non-receipt of full budget, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Received full amount*	100	89.7	90.4	95.5
Total facilities with records available(N)	**16**	**30**	**74**	**69**
Reasons for not receiving full amount:				
Priority given to other sector		33.3	42.9	33.3
Budget deficit		0.0	14.3	33.3
Lack of money in district		0.0	14.3	33.3
Lack of rules and regulations		33.3	0.0	0.0
High workload of district staff		33.3	0.0	0.0
Carelessness of administrative staff		0.0	14.3	0.0
Don't know		0.0	14.3	33.3
Total facilities with records available(N)		**3**	**7**	**3**

*Source: STS facility questionnaire (*Information not available for one PHCC, two HPs and ten SHPs)*

MoHP funds - receipt and expenditure

The mean income and expenditure by level of health facility is presented in Table 6.5. The mean amount of MoHP income that higher level hospitals received was more than ten-fold (NPR 95.57 million) that of district hospitals (NPR 8.72 million). Likewise, PHCCs (NPR 0.61 million) received four times that of HPs (NPR 0.15 million). SHPs received an average of NPR 0.09 million from the MoHP. Notably, the expenditure ratio (0.9) for the last fiscal year was similar across the different levels.

Table 6. 5: Mean amount of MoHP funds received and spent by level of facilities

		Higher level hospitals	District hospitals	PHCCs	HPs	SHPs
Mean amount NPR (millions)	Receipt	95.571	8.725	0.616	0.154	0.091
	Expenditure	86.682	8.668	0.546	0.138	0.082
Total amount received NPR (millions)		191.14126	122.14627	18.465865	11.557421	6.290345
Total amount expended NPR (millions)		173.36352	121.34944	16.384685	10.333066	5.677243
Ratio of expenditure to receipt		**0.91**	**0.99**	**0.89**	**0.89**	**0.9**

Source: STS facility questionnaire

The total budget received by district and higher level hospitals is broken down by individual line items in Table 6.6. Most district hospital expenditure went on salaries (72%), while salaries only accounted for 30% of expenditure at higher level hospitals. The percentage of expenditure on drugs in the last year was similar for district hospitals (9%) and higher level hospitals (7%). Higher level hospitals received higher proportions of their budget for infrastructure (22%), staff training (3%), office materials (3%) and utilities and amenities (8%) compared to district hospitals. Notably, none of the surveyed district hospitals received any budget for infrastructure or staff training. Similarly, allocation for office materials (1%), utilities and amenities (1%), and programme costs (1%) for district hospitals was low, but these may be covered in the D(P)HO budget.

Table 6. 6: Average amount of MoHP budget received and spent, by line item

	Higher level hospitals				District hospitals			
	Receipt		Expenditure		Receipt		Expenditure	
	Mean amount NPR (millions)	% of total budget	Mean amount NPR (millions)	% of total budget	Mean amount NPR (millions)	% of total budget	Mean amount NPR (millions)	% of total budget
Salaries for human resource	28.79	30.1	24.62	28.4	6.18	72.1	6.15	72.2
Drugs	6.73	7.0	6.73	7.8	0.95	8.5	0.95	8.5
Equipment	1.55	1.6	1.50	1.7	0.27	3.3	0.27	3.3
Infrastructure	21.78	22.8	18.05	20.8	0.00	0.0	0.00	0.0
Furniture	0.35	0.4	0.33	0.4	0.02	0.2	0.02	0.2
Maintenance (compound wall, building renovation)	1.25	1.3	1.25	1.4	0.12	1.3	0.15	1.8
Training	2.87	3.0	2.07	2.4	0.00	0.0	0.00	0.0
Office materials	3.30	3.5	3.30	3.8	0.08	1.0	0.08	1.0
Utilities and amenities: electricity, water, telephone etc.	8.11	8.5	7.99	9.2	0.11	1.3	0.11	1.3
Supervision and monitoring	0.10	0.1	0.10	0.1	0.01	0.2	0.01	0.2
Total program cost	20.74	21.7	20.74	23.9	0.11	1.3	0.11	1.3
Campaign	0.00	0.0	0.00	0.0	0.05	0.6	0.05	0.6
Other	0.00	0.0	0.00	0.0	1.01	10.2	0.76	9.6
Total AmountNPR (millions)	**95.57**	**-**	**86.68**	**-**	**8.72**	**-**	**8.67**	**-**

Source: STS facility questionnaire

Reasons for not spending total allocated budget

Among the facilities where financial information was available, more than two thirds of hospitals (69%) and PHCCs (70%) and four-fifths of SHPs (80%) reported that they did not spend the full budget allocation that they had received in the last fiscal year. Similar findings were observed in STS 2011 for hospitals (69%) and SHPs (82%), but the percentage has increased for PHCCs (56%) and deceased for HPs (71%). Among those facilities which under-spent the received amount, the main reason cited for all levels of facility was that they did not need to spend the full amount (46% of hospitals, 48% of PHCCs, 37% of HPs and 33% of SHPs). Other frequently cited reasons included: delay in receiving budget, wanted to save some budget for the future, delay in releasing budget, and staff transfer.

Table 6. 7: Reasons for not spending the full budget received

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Did not spend full amount*	68.8	70.0	61.3	79.7
Total facilities (N)	**16**	**30**	**75**	**69**
Reasons for not spending full amount:				
No need to spend	45.5	47.6	37.0	32.7
Delay in receiving budget	18.2	33.3	15.2	27.3
Saved for future	9.1	28.6	28.3	23.6
Delay in releasing the budget	18.2	19.0	17.4	18.2
Transfer of human resources	18.2	0.0	2.2	3.6
Building construction was not complete	0.0	0.0	6.5	1.8
Not decided where to spend	0.0	0.0	2.2	3.6
Total facilities that did not spend full amount (N)	**11**	**21**	**46**	**55**

*Source: STS facility questionnaire (*Information not available for one PHCC, and six SHPs)*

6.2.3 PROCUREMENT PROCESS

The staff in charge of the facilities reported on the procurement process for medical supplies, such as drugs and other medical products. Less than half of hospitals (44%) procured products from the D(P)HOs, while most lower level facilities did (81% of PHCCs,91% of HPs and 97% of SHPs). Direct procurement of medical supplies locally was more common for higher level facilities (hospitals 88%, PHCCs 58%) in comparison to lower level facilities (HPs 30%, SHPs 19%).

Among the facilities that were procuring goods locally, direct procurement was most common (hospitals 57%, PHCCs 78%, HPs 96% and SHPs 100%), followed by procurement by tendering. Hospitals were far more likely to procure goods through a tendering process (64%) than lower level health facilities (6% PHCCs, 4% HPs and none of SHPs). E-bidding was also reported by 14% of hospitals.

Table 6. 8: **Procurement process of medical products**

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Procurement process:				
Sent by D(P)HO	43.8	80.6	91.1	97.2
Local procurement by health facility	87.5	58.1	30.4	19.4
Other (supporting organisation provides medicines)	0.0	0.0	1.3	1.4
Total facilities (N)	**16**	**30**	**75**	**69**
Procedure for local procurement:				
E-bidding	14.3	0.0	0.0	0.0
Tendering	64.3	5.6	4.2	0.0
Quotation	28.6	11.1	0.0	0.0
Direct procurement	57.1	77.8	95.8	100
Contract with cooperatives	14.3	5.6	4.2	0.0
Total facilities (N)	**14**	**17**	**23**	**13**

Source: STS facility questionnaire

6.2.4 DISCLOSURE OF FINANCIAL INFORMATION

Most facilities had disclosed information on the funds received (19%) and expenditure made (80%). But facilities were less likely to disclose their financial audit report (60% of facilities did not disclose this (Table 6.9).

The methods used to disclose this information varied, but the most common method of disclosing all of this information was during HFOMC or HDC meetings, followed by the yearly gathering of the VDCs/DDCs. The situation implies that, for most health facilities, the sharing of financial information is limited to the HFOMC/HDC, and wider public disclosure has yet to be achieved.

Table 6. 9: Disclosure of financial information, by disclosure method

	Public notice boards (%)	Notice boards of VDC/DDC (%)	In yearly gathering of VDC/DDC (%)	During HFOMC/HDC meeting (%)	Others (%)	Not disclosed (%)
Fund received	8.2	4.7	14.8	53.4	0.5	18.7
Expenditure	8.8	3.3	11.6	56.3	0.5	20.0
Financial audit report	5.7	4.1	6.4	23.3	1.0	59.5
Total facilities (N)	**198**					

Source: STS facility questionnaire

6.2.5 REPORTING AND AUDITS

Most hospitals (94%) submitted a financial report (Table 6.10).The practice was less common at the lower level health facilities, with only 45% of PHCCs, 44% of HPs, and 29% of SHPs doing so, however these were improvements compared to STS 2011 where only 36% of PHCCs, 27% of HPs and 10% of SHPs prepared a financial audit report (STS 2011).

Among those who did not submit a financial report, the most common reason for not preparing and submitting the report was that no audit was done (100% of hospitals, 24% of PHCCs, 27% of HPs and 49% of SHPs), followed by lack of awareness of the requirement to submit a report. PHCCs were most likely (41%) to report the lack of human resources in the finance section as their reason for not submitting the financial report.

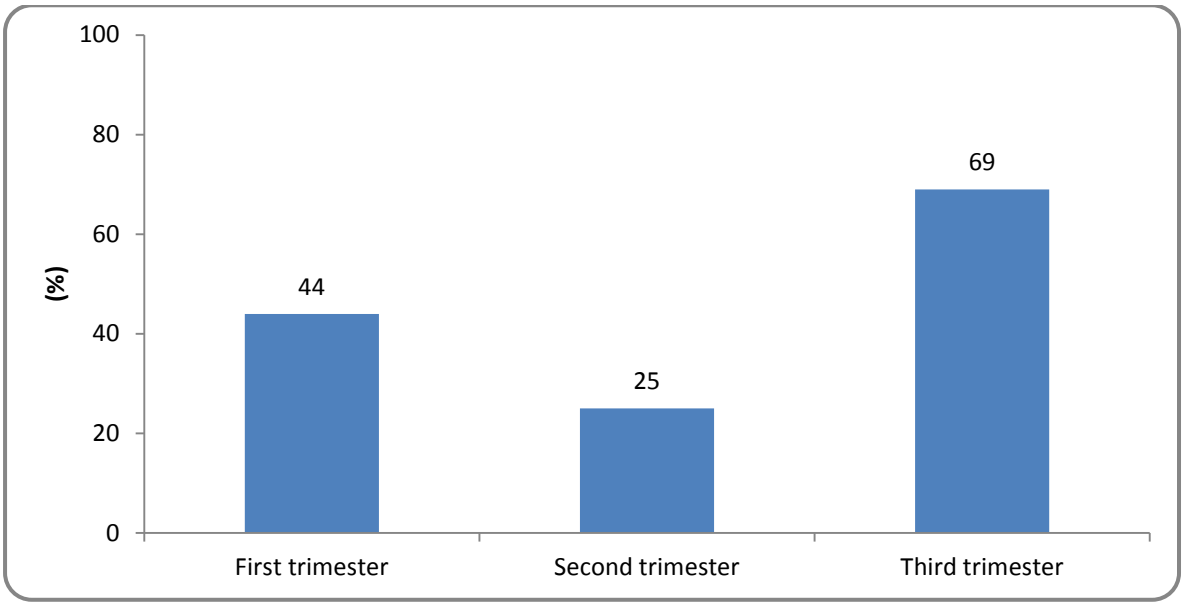
Table 6. 10: Facilities that submitted financial report in FY 2011/12

Financial report	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Submitted financial report:	93.8	45.2	44.3	29.2
Total facilities (N)	**16**	**31**	**79**	**72**
Reason for not submitting:				
No audit	100	23.5	27.3	49.0
Not aware or informed to report	0.0	17.6	36.4	29.4
Lack of human resource in finance section	0.0	41.2	15.9	11.8
Delay in clearance of advance taken by focal person	0.0	11.8	6.8	7.8
Audit in process	0.0	11.8	6.8	2.0
Lack of meeting	0.0	0.0	4.5	2.0
Don't know	0.0	0.0	2.3	0.0
Total facilities did not submit report (N)	**1**	**17**	**44**	**51**

Source: STS facility questionnaire

The FCGO is responsible for the treasury operations of the Government of Nepal and part of this function is to conduct internal audits of the government offices. At present the District Treasury Control Offices (DTCOs) are responsible for conducting internal audits of the government cost centres. DTCOs with a responsibility of internal auditing should audit cost centres on a monthly basis, but due to the inadequate number of auditors they are not even managing to perform an internal audit for all cost centres on a trimesterly basis. The survey found that DTCOs had performed internal audits for 44% of hospitals in the first trimester, just 25% in the second trimester and 69% in the third trimester of the previous fiscal year.

Figure 6. 1: Percentage of hospitals receiving an internal audit in each trimester FY 2011/12 (N=16)



Source: STS facility questionnaire

Completion of the final audit was less common for lower level facilities (15% SHPs, 23% HPs) than higher level facilities (100% hospitals, 45% PHCCs). However, substantial progress was noted while comparing with STS 2011: 75% hospitals, 29% PHCCs, 16% HPs and 9% SHPs.

The most common recommendation from the final audit for all facility levels was for facilities to improve their financial management system and practices (Table 6.11). This was most common at SHPs (91%). The main suggestions to health facilities on how to improve their financial management systems and practices were to get approval for expenditure, to use cheques for payments, to install taxes, to clear any irregularities, to do advance clearance, to use standard formats, and to regularly evaluate expenditure. Hospitals were most likely to receive a recommendation to improve general management practices (38%). In addition, hospitals and PHCCs were more likely to have received a recommendation to improve their logistics management systems and practices and hospitals were most likely to receive a recommendation to improve their human resource management.

Table 6. 11: Facilities received final audit, timing of audit and the recommendations

Audit	Hospitals(%)	PHCCs(%)	HPs(%)	SHPs(%)
Conducted final audit of FY 2010/11	100	45.2	22.8	15.3
Total facilities (N)	**16**	**31**	**79**	**72**
Timing of final audit:				
1st trimester of the following year	37.5	78.6	55.6	27.3
2nd trimester of the following year	43.8	21.4	16.7	45.5
3rd trimester of the following year	12.5	0.0	22.2	9.1
In the FY 2012/13	6.3	0.0	5.6	18.2
Major recommendations from final audit:				
Improve financial management systems and practices	50.0	64.3	50.0	90.9
Improve general management practices	37.5	14.3	11.1	0.0
Improve logistic management systems and practices	18.8	14.3	5.6	9.1
Improve human resource management and practices	12.5	0.0	5.6	0.0
No suggestions	43.8	42.9	44.4	36.4
Total facilities that conducted a final audit (N)	**16**	**14**	**18**	**11**

Source: STS facility questionnaire

6.2.6 BANK ACCOUNT AND BALANCE

All facilities (100%) had a bank account and the average amount in the account decreased significantly by facility level, ranging from an average of NPR 9.18 million at higher level hospitals to NPR 0.08 million at SHPs (Table 6.12). However, 11% of health facilities were unable to provide their bank balance at the time of the survey.

Table 6. 12: Access to bank account and bank balance

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Have bank account	100	100	100	100	100
Total facilities (N)	**2**	**14**	**31**	**79**	**72**
Bank account balance (NPR):					
< 10,000	0.0	0.0	0.0	10.3	16.9
10,000 - 1,99,999	0.0	30.8	17.2	44.1	66.2
100,000 - 1, 999,999	0.0	38.5	75.9	44.1	16.9
1,000,000 - 4,999,999	0.0	30.8	6.9	1.5	0.0
≥5,000,000	100	0.0	0.0	0.0	0.0
Mean amount NPR (millions)	9.18	1.17	0.38	0.12	0.08
Total facilities that reported bank balance (N)	**2**	**13**	**29**	**68**	**65**

Source: STS facility questionnaire

6.3 KEY FINDINGS

Source of income

- The MoHP/D(P)HO was the main financier for all levels of health facilities, but accounted for a higher percentage of income at hospitals than at lower level facilities. The VDC or Municipality body was an additional financier for many lower level facilities. Internal income streams were an important source of income for higher level hospitals (100%), district hospitals (43%) and PHCCs (43%) and accounted for around one fifth of their budgets.

Budget receipt and expenditure from MoHP

- The number of times a budget was requested and received was higher for facilities implementing the Aama Programme.
- All hospitals had received their full allocated budget, but some of the lower level health facilities (10% PHCCs and HPs and 4% SHPs) didn't receive the full amount that they were entitled to.
- In the last fiscal year (2011/12), on average, the higher level hospitals received ten times more (NPR 95.6 million) than the district hospitals (NPR 8.7 million) and HPs received twice (NPR 0.2 million) that of SHPs (NPR 0.1 million).
- Local procurement by facilities was less common at the lower level facilities (19% of SHPs and 30% of HPs) compared to higher level facilities (88% of hospitals and 58% of PHCCs). Among the facilities procuring products from facility resources, most procured directly from the vendors (100% of SHPs, 96% of HPs,78% of PHCCs and 57% of hospitals).
- The practice of preparing a financial report was less common at the lower level health facilities, where only 29% of SHPs, 44% of HPs, and 45% of PHCCs had submitted a financial report, compared to most of the hospitals (94%). Similarly, the audit was less common at lower level facilities (15% of SHPs, 23% of HPs) compared to the higher level (100% of hospitals, 45% of PHCCs).

CHAPTER 7 - GOVERNANCE AND ACCOUNTABILITY

7.1 INTRODUCTION

The second Nepal Health Sector Plan (NHSP 2) recognizes that there must be strong governance and accountability systems in place if health service provision is to be improved. In 2010, the Ministry of Health and Population (MoHP) produced a governance and accountability action plan (GAAP) which aims to make services more client-centred and accountable to those that they serve, with a particular focus on the poor and excluded.

This chapter describes findings from the 2012 Service Tracking Survey (STS) related to governance and accountability. It specifically explores the use of social audits, citizen's charters, transparency and disclosure measures, and health facility operation and management committees (HFOMCs)/hospital development committees (HDCs). Furthermore, it assesses measures taken to improve gender equality and social inclusion, the management and handling of suggestions and complaints, staff meetings, the health management information system (HMIS), supervision visits, and emergency and contingency plans.

7.2 RESULTS

	STS 2012	95%CI
% of health facilities that undertook social audits as per MoHP guidelines in the last fiscal year	13.7	8.2-22.0
% of facilities that conducted a social audit in the last fiscal year, made findings public and incorporated recommended actions in annual work plan and budget (AWPB)	7.4	1.9-24.5
% of facilities with a citizen's charter placed in a visible location and included information on free drugs, outpatient services and Aama (if Aama implementing facility)	55.4	40.0-69.7
% of facilities with a health management committee (health facility operation management committees [HFOMCs] and hospital development committees [HDC]) meeting on a monthly basis	30.9	23.8-39.0
% of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)*	55.1	34.1-74.4

7.2.1 SOCIAL AUDITS

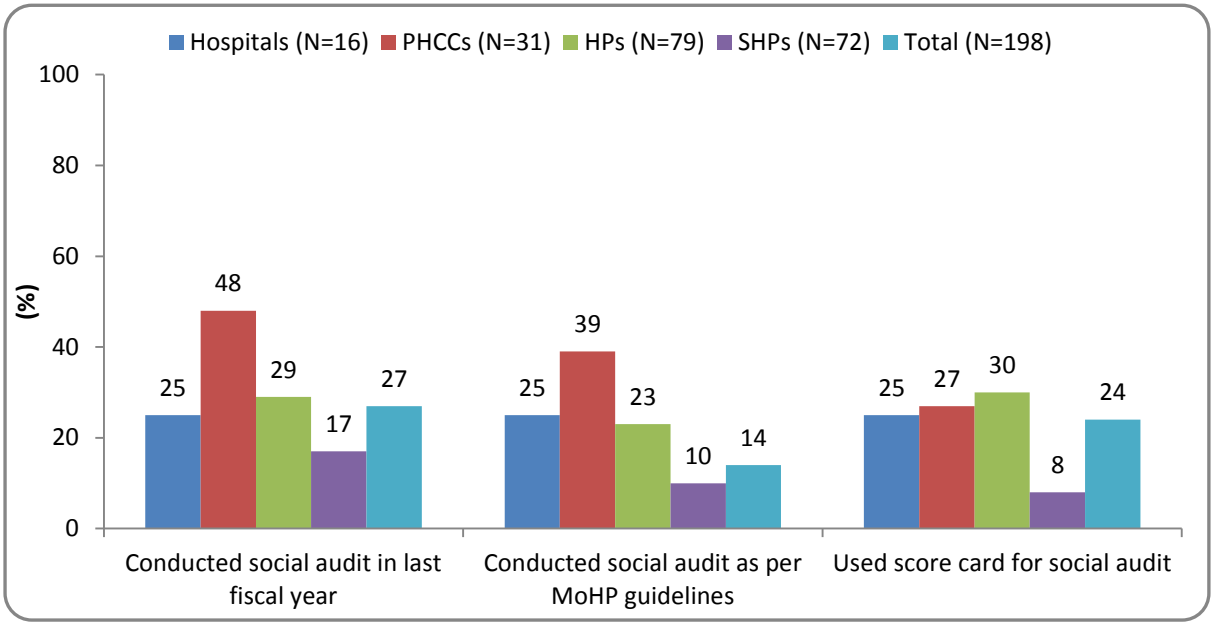
Health sector social audits are a process by which citizen's audit government health services. The main objectives of social auditing are to monitor how resources are used, to understand who is benefiting, to increase transparency and to hold service providers and officials to account. Under the Local Authority Financial Administration Regulations, 2007, the government committed to making social audits mandatory for all programmes within four months of the completion of each fiscal year. However, this is yet to be fully implemented.

In 2009, the Family Health Division (FHD), Department of Health Services (DoHS) developed a social audit model linked to the Aama Programme and, in the same year, the Management Division. DoHS also developed a social audit with broader scope, covering all health service provision. The DoHS, under the leadership of the Primary Health Care Revitalization Division (PHCRD) has recently harmonised the two social audit guidelines and developed guidelines for the whole health sector. These specified that health facilities from SHPs to district hospitals and urban health clinics should undertake social audits. The new guidelines were piloted in two districts and implemented in an additional 20 districts in 2011/12. It is now in the process of final approval from the MoHP. District (public) health offices (D/PHOs) are expected to develop action plans to ensure social audits are operational in 30% of health facilities in their district by 2015.

Over a quarter (27%) of health facilities had conducted a social audit in the last fiscal year (Figure 7.1). The practice was more common at Primary Health Care Centres (PHCCs) where nearly half (48%) had conducted social audits in the last fiscal year. Whereas, a quarter of hospitals (25%), over a quarter of HPs (29%)and less than one-fifth of SHPs (17%) had conducted one in the last year.

Social audits were conducted in line with MoHP guidelines in just over one-tenth (14%) of health facilities. Of those that had conducted social audits, around a quarter (24%) had used score cards, most commonly at HPs (31%). Enumerators observed social audit reports in less than one-quarter of health facilities (24%) that reported conducting social audits.

Figure 7. 1: Facilities that conducted social audit in the last fiscal year (2011/12)



Note: Use of score card findings are shown for those who conducted a social audit

Source: STS facility questionnaire

Of those facilities that conducted social audits, 80%reported that they had publically disclosed the findings (Table 7.1). Public display of findings was most commonly done through a public gathering (39%) or a facility information board (30%). Of those facilities that conducted social audits in the previous year, more than three-fifths (61%) reported that they had incorporated the actions in their annual work plan budget (AWPB). However, evidence that actions had been incorporated into work plans was only observed in15% of facilities that had conducted social audits. Facility-wise, SHPs were less likely to have conducted social audits (17%), in comparison to other levels (25% of hospitals, 48% of PHCCs, and 29% of HPs), and also to conduct them as per the MOHP guidelines.

Almost half (48%) of the health facilities reported that they had implemented actions recommended by social audits. Facilities commonly reported that the most significant actions they had implemented related to the expansion and improvement of health services (28%), improvement in physical infrastructure (14%), and improvement in human resource management (13%). However, it is discouraging to note that 30% of the health facilities had not taken any action on the recommendations made by social audits.

Table 7. 1: Facilities that conducted social audit in the last fiscal year (2011/12)

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Conducted social audit in last fiscal year	25.0	48.4	29.1	16.7
Conducted social audit as per MoHP guidelines	25.0	38.7	22.8	9.7
Total facilities (N)	**16**	**31**	**79**	**72**
Used score card for social audit	25.0	26.7	30.4	8.3
Social audit report prepared and available	50.0	13.3	26.1	25.0
Social audit report prepared, but could not observe	50.0	40.0	34.8	75.0
Made findings pubic – any method	100	73.3	78.3	83.3
Method used to make findings public:				
- facility information board	100	33.3	21.7	16.7
- public gathering	0.0	33.3	39.1	58.3
- HFOMC meeting	0.0	6.7	17.4	8.3
Incorporated recommended actions in AWPB - observed	25.0	13.3	21.7	0.0
Incorporated recommended actions in AWPB -not observed	75.0	60.0	39.1	33.3
Total facilities conducted social audit (N)	**4**	**15**	**23**	**12**
Implemented recommended actions	75.0	53.3	56.5	16.7
Most significant actions implemented:				
Expand and improvement in health service	42.9	40.9	10.0	60.0
Improvement in human resource management	0.0	27.3	6.7	0.0
Improved privacy	0.0	4.6	3.3	0.0
Improved financial management and procurement	0.0	0.0	16.7	0.0
improved physical infrastructure	14.3	4.6	20.0	20.0
Increased community awareness	0.0	0.0	10.0	0.0
No action taken	42.9	22.7	33.3	20.0
Total facilities conducted social audit (N)	**4**	**15**	**23**	**12**

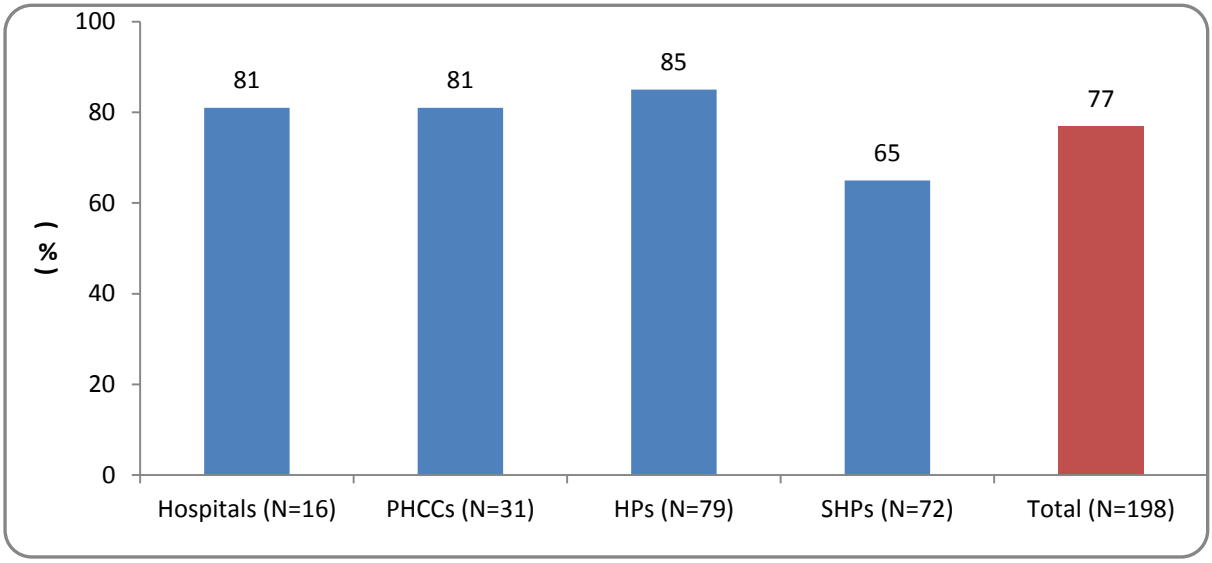
Source: STS facility questionnaire

7.2.2 CITIZEN'S CHARTERS

Across Nepal, all public organisations, including health facilities, are required to post a citizen's charter outside their buildings in places visible and accessible to the general public. Citizen's charters inform people about their public service entitlements, service availability, how to access services, fee rates, and complaint/suggestion mechanisms. Such charters are intended to improve the quality of health care by ensuring that clients are well informed about the standards of care that they can expect. Well informed clients are better placed to exert pressure on service providers to improve their performance, make informed choices, and push for greater transparency.

Just under three-quarters of health facilities (73%) had a citizen's charter (Figure 7.2). Less than two thirds of SHPs (65%) had citizen's charters in comparison to more than four fifths of other facility levels (81% hospital, 81% PHCC, and 85% HPs).

Figure 7. 2: Facilities that had a citizen charter at the time of survey



Source: STS facility questionnaire

The accessibility of charters was mixed: 3% of facilities reported having had a charter, but it was not observed by the enumerator, and a further 3% of facilities had a charter which was observed but illegible (Table 7.2). Furthermore, 5% of citizen's charters were not in a visible place. This was most common at hospitals (8% were outside the building but not visible) and SHPs (9% were inside the building but not visible).

As observed by the enumerators, among the facilities that displayed citizen's charters, most of them (94%) contained information on free drugs, with little variation by level of facility. A similar proportion of citizen's charters (93%) contained information on outpatient services, whilst 81% of facilities that were implementing the Aama Programme, included information about the programme on their citizen's charter.

Table 7. 2: Availability and content of citizen's charters, by facility level

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Facilities with a citizen's charter				
Have a charter	81.3	80.6	84.8	65.3
Do not have a charter	18.8	19.4	15.2	34.7
Availability of charter:				
Charter available – observed	81.3	77.4	81.0	62.5
Charter available – observed but not readable	0.0	3.2	3.8	2.8
Charter available – but not observed	0.0	3.2	2.5	4.2
Charter not available	18.8	16.1	12.7	30.6
Total facilities (N)	**16**	**31**	**79**	**72**
Location of charter:				
Outside building - visible place	53.9	24.0	26.9	19.2
Outside building - not visible place	7.7	0.0	1.5	0.0
Inside building – visible place	38.5	76.0	70.2	72.3
Inside building – not visible place	0.0	0.0	1.5	8.5
Charter includes information on:				
Free drugs	92.3	96.0	94.0	93.6
Outpatient services	100	92.0	92.5	93.6
Total facilities with citizen's charter (N)	**13**	**25**	**67**	**47**
Charter include information on AamaProgramme	81.3	76.7	85.7	75.0
Health facilities implementing AamaProgramme (N)	**16**	**30**	**42**	**8**

Source: STS facility questionnaire

7.2.3 TRANSPARENCY AND DISCLOSURE MEASURES

Table 7.3 shows the transparency and disclosure measures used by health facilities. Facilities were most likely to provide information about opening hours (67%) and facility workforce (61%). Almost one third of facilities provided information about the cost of services and drugs (32%), and 30% provided information on disease trends.

Of those displaying information on opening hours, list of staff and cost of services and drugs the most common method for disclosing this information was facility notice boards (64%, 71% and 52% respectively), followed by HFOMC/HDC meetings (51%, 61% and 45% respectively). In contrast, disease trends were more likely to be reported during HFOMC/HDC meetings (86%) than on public notice boards (28%). For all types of information, it was less common to use the Annual VDC/DDC gathering and even fewer used the notice boards of the VDC/DDC.

Table 7. 3: **Information displayed by information source**

	Disclosed information (%)	Method of disclosure					Total facilities disclosed information (N)
		Facility notice boards (%)	Notice boards of VDC/DDC (%)	Annual VDC/DDC gathering (%)	During HFOMC/HDC meeting (%)	Other (%)	
Current disease trends	30.4	27.6	4.1	28.5	85.9	1.9	**61**
Cost of services and drugs	31.9	52.0	6.9	18.3	45.4	14.7	**75**
List of staff	61.0	70.8	8.4	18.0	61.0	0.0	**121**
Opening hours	66.9	63.9	3.9	9.0	50.8	11.5	**113**
Total facilities (N)	**198**						

Source: STS facility questionnaire

7.2.4 FACILITY MANAGEMENT COMMITTEES

Government guidelines specify that Health Facility and Operation Management Committees (HFOMCs)/hospital development committees (HDCs) should meet once a month. However, just less than half of the PHCCs (48%), and less than one-third of HPs and SHPs (30% and 31%, respectively) reported that they held a meeting at least once a month. It was even less common at hospitals, with just 6% doing so. Information regarding the last meeting date, collected by the enumerator from the minutes' register, revealed that more than two-thirds of PHCCs (68%) had a HFOMC meeting in the last month, while only half of the HDCs (50%), HPs (48%) and SHPs (50%) had a meeting within the last month. Further, just under one-third of hospitals (31%) and PHCCs (29%), less than a quarter of HPs (24%) and less than one-fifth of SHPs (18%) held a meeting every two to three months. Holding meetings as per need was quite common in hospitals (63%), HPs (42%) and SHPs (47%) (Table 7.4).

Table 7. 4: Frequency of HDC/HFOMC meetings

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Frequency of HFOMC/HDC meetings:				
At least once a month	6.3	48.4	30.4	30.6
Every 2-3 months	31.3	29.0	24.1	18.1
As per need	62.5	22.6	41.8	47.2
No active HFOMC/HDC	0.0	0.0	1.3	0.0
Enumerator could not observe minutes	0.0	0.0	2.5	4.2
Total facilities (N)	**16**	**31**	**79**	**72**
Timing of last HFOMC/HDC meetings:				
Within last month	50.0	67.7	48.1	50.0
2-3 months ago	25.0	19.4	35.4	27.8
4-6 months ago	18.8	6.5	10.1	8.3
7-12 months ago	0.0	3.2	3.8	5.6
A year ago	6.3	0.0	0.0	1.4
Record not available	0.0	3.2	2.5	6.9
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

The 2012 STS asked about the composition of HFOMC/HDC members. The survey found that three hospitals (un-weighted) did not have the provision of individual representation, instead they reported that their committee members consisted of institutional representatives (mainly from political parties such as District Administration Office, Local Development Office, Women's

Development Office, I/NGOs, etc). These three hospitals were excluded from the analysis of the characteristics of individual members in Table 7.5.

On average, HFOMCs/HDCs had 14 members and there was little variation in the average committee size by level of facility (Table 7.5). Committees contained an average of four Dalit/Janajati members. Again, this level of Dalit and Janajati representation was found to be similar across facilities of all levels. A small number of facilities (7%) had no Dalit or Janajati members (four district hospitals, one PHCC, four HPs, and four SHPs).

The average number of male committee members (nine) was more than double the average number of female members (four), and in a small minority of committees (4%) there were no female members.

Table 7. 5: Sex and caste or ethnic make-up of HFOMC/HDC by facility level

	Hospitals			PHCCs			HPs			SHPs			Total		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Total members	13	7	24	15	7	30	14	6	30	13	5	30	14	5	30
Males	10	7	19	11	4	25	10	1	26	8	2	22	9	1	26
Females	3	0	5	4	0	11	4	0	12	4	0	10	4	0	12
Dalits and Janajatis	3	0	9	4	0	11	4	0	15	4	0	15	4	0	15
Total facilities with active HDC/HFOMC (N)	**13**			**31**			**79**			**72**			**195**		

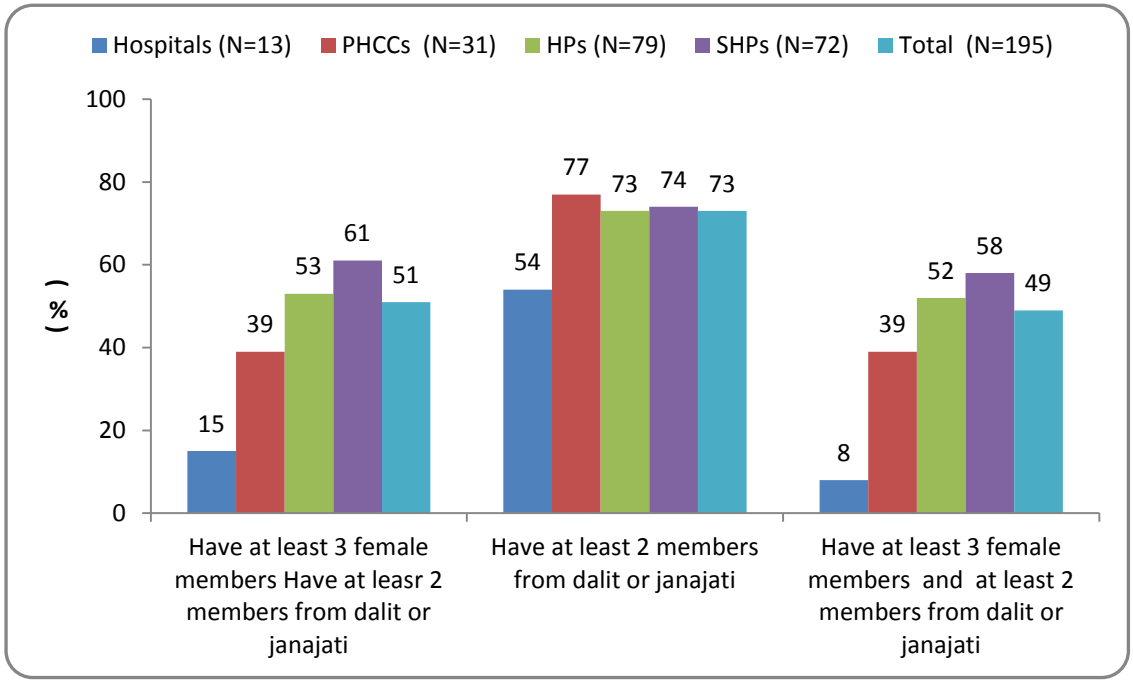
Source: STS facility questionnaire

Figure 7.3 shows the percentage of facilities that fulfill the NHSP-2 requirement of having at least three females and two Dalit and Janajati members on their HFOMCs/HDCs. Nearly half of the health facilities (49%) fulfilled this requirement. The lower level health facilities were more likely to meet the criteria (58% of SHPs, 52% of HPs, 39% of PHCCs) in comparison to the higher level facilities, with only 8% of hospitals meeting this requirement.

Only half (51%) of the health facilities met the requirement for having at least three female members in their HFOMCs. This proportion was slightly higher at the lower level health facilities with 61% of SHPs, and 53% of HPs having at least three women on their HFOMC. However, over one-third of PHCCs (39%) and just 15% of hospitals had at least three female members in their management committees.

Nearly three quarters of health facilities (73%) met the requirement of having at least two Dalit or Janajati members in their HFOMCs/HDCs. A similar pattern of low representation of minority groups was observed at the hospital level with only 54% of hospitals having the required number of Dalit and Janajatis in their HDCs.

Figure 7. 3: Presence of women and marginalized caste/ethnic groups in HDCs/HFOMCs



Source: STS facility questionnaire

Despite HDCs having lower levels of female and Dalit or Janajati membership, hospitals were only slightly more likely than other facilities to have taken measures to increase the membership of these groups (Table 7.6). However, hospitals were more likely than other levels of facilities to report that women members are included in the decision making processes; in 92% of hospitals they always participated, compared to 73% in PHCCs, 60% in HPs, and 57% in SHPs. Similar trends of participation in decision making were seen for the Dalit or Janajati members. Almost all (79%) HDCs/HFOMCs reported that they had oriented all of their members into their roles, but 9% had not orientated any members.

Table 7. 6: Presence, participation and initiatives for the inclusion of women and marginalized caste/ethnic groups in HFOMC/HDCs, by facility level

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Have at least 3 female members	15.4	38.7	53.2	61.1	51.3
Have at least 2 members from Dalit or Janajati	53.8	77.4	73.4	73.6	72.8
Have at least 3 female members and at least 2 members from Dalit or Janajati	7.7	38.7	51.9	58.3	49.2
Taken initiatives to increase the number of:					
Female members	23.1	25.8	19.4	5.1	14.9
Dalit and Janajati members	7.7	6.5	11.1	0.0	5.6
Total facilities with active HFOMC/HDC (N)	**13**	**31**	**79**	**72**	**196**
Orientated members:					
All	81.3	74.2	81.0	79.2	79.3
More than half	0.0	3.2	6.3	11.1	7.1
Half of them	0.0	6.5	1.3	1.4	2.0
Less than half	0.0	6.5	1.3	2.8	2.5
None	18.8	9.7	10.1	5.6	9.1
Total facilities (N)	**16**	**31**	**79**	**72**	**198**
Dalit and Janajati members participate in decision making process:					
Always	88.9	73.3	60.0	57.4	62.6
Most of the time	11.1	13.3	20.0	27.9	21.4
Sometimes	0.0	10.0	13.3	8.8	10.4
Rarely	0.0	3.3	4.0	4.4	3.8
Never	0.0	0.0	2.7	1.5	1.6
Total facilities (N)	**9**	**30**	**75**	**68**	**182**
Not applicable	7	1	4	4	16
Female members participate in decision making process:					
Always	91.7	73.3	64.5	57.7	65.1
Most of the time	0.0	10.0	23.7	21.1	19.0
Sometimes	8.3	13.3	5.3	15.5	10.6
Rarely	0.0	0.0	5.3	4.2	3.7
Never	0.0	3.3	1.3	1.4	1.6
Total facilities (N)	**12**	**30**	**76**	**71**	**189**
Not applicable	4	1	3	1	9

Source: STS facility questionnaire

Capacity building activities for HFOMC/HDC members are crucial to ensure effective management of the facility. This was most common at HPs (37%) and PHCCs (32%), followed by SHPs (21%), while only 6% of hospitals reported that they had done so (Table 7.7). Among the facilities that conducted such activities around half of PHCCs (50%) and HPs (45%), and more than two-thirds of SHPs (67%) had conducted activities to enhance their monitoring capacity, particularly for human resource management. Likewise, 41% of HPs and 33% of SHPs had conducted overall management and awareness orientation.

Table 7. 7: Capacity building activities undertaken for HFOMC/HDC members, by facility level

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Undertook activities for building the capacity of members of the HFOMC/HDC	6.3	32.3	36.7	20.8
Total facilities (N)	**16**	**31**	**79**	**72**
Activities conducted for HFOMC/HDC members:				
Exposure visits to good performing HFOMCs/HDCs	0.0	10	0.0	0.0
Enhanced monitoring capacity for human resource regulation	0.0	50	44.8	66.7
Management and awareness orientation/training	100	30	41.4	33.3
Total facilities that undertook activities (N)	**1**	**10**	**29**	**15**

Source: STS facility questionnaire

7.2.5 GENDER AND SOCIAL INCLUSION

At least half of the hospitals (50%), PHCCs (58%) and HPs (51%) had carried out activities to reach women as a target group compared to just two-fifths of SHPs (40%). Hospitals were more likely to report carrying out activities for the poor/very poor (44%) in comparison to PHCCs (26%), HPs (32%) and SHPs (17%). PHCCs, HPs and SHPs were most likely to try to reach target groups by expanding outreach services and using focused awareness programmes, whereas hospitals and PHCCs were more likely to organize special camps. Only about one in ten facilities (13% of hospitals, 10% of PHCCs, 9% of HPs, and 6% of SHPs) had used social mapping tools to identify marginalized and hard-to-reach populations, meaning that most facilities used no systematic process to identify those most in need.

Table 7. 8: Activities to reach socially excluded groups, by facility level

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Tried to reach the following target groups:				
Women	50.0	58.1	50.6	40.3
Those living in remote areas	43.8	48.4	51.9	43.1
Dalits and Janajati	31.3	22.6	29.1	27.8
Poor/very poor	43.8	25.8	31.7	16.7
Destitute	31.3	29.0	30.4	16.7
Disabled	31.3	22.6	27.9	13.9
Mentally ill	6.3	12.9	8.9	2.8
Others	6.3	0.0	0.0	0.0
Total facilities (N)	**16**	**31**	**79**	**72**
Type of activity:				
Expanded outreach services	16.7	65.2	78.2	70.7
Focused awareness programmes	41.7	69.6	52.7	56.1
Organised special camps	25.0	30.4	18.2	14.6
Provided user-friendly services	16.7	4.4	12.7	4.9
Others	25.0	8.7	16.4	14.6
Total facilities trying to reach target groups (N)	**12**	**23**	**55**	**41**
Means used to identify those in need:				
Mapping	12.5	9.7	8.9	5.6
No means used	87.5	90.3	91.1	94.4
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

7.2.6 SUGGESTION OR COMPLAINTS MECHANISM

Availability and utilization of the suggestion/complaint mechanism reduced by level of facility. Although more than four-fifths of hospitals (81%) had a suggestion/complaints procedure, it is discouraging to note that most PHCCs (74%), HPs (81%) and SHPs (90%) didn't have any formal mechanism to address suggestions and complaints from clients. Of those facilities that had a suggestion/complaint procedure, a suggestion box was the most common method at all levels. Many facilities also received suggestions/complaints followed by telephone or through an assigned focal person. Hospitals also received them by post.

The average number of complaints or suggestions received was three per year per SHP, four per year per PHCC and five per year per HP. Not surprisingly, given the higher caseload, hospitals had the highest average number of complaints or suggestions at ten per year per hospital (Table 7.9).Of those facilities taking action on complaints or suggestions received, facilities reported that they had improved health service delivery, ensured the availability of health workers, and improved cleanliness.

Table 7. 9: Procedures for dealing with, and actions taken on, suggestions or complaints, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Suggestion/complaints procedure:				
Yes, seen by enumerator	75.0	22.6	12.7	4.2
Yes, not seen by enumerator	6.3	3.2	6.3	5.6
No	18.8	74.2	81.0	90.3
Total facilities (N)	**16**	**31**	**79**	**72**
Type of suggestion/complaints procedure:				
Suggestion box	92.3	87.5	73.3	42.9
By phone	53.9	37.5	46.7	28.6
Focal person assigned	38.5	37.5	13.3	28.6
By post	23.1	0.0	0.0	0.0
Total facilities (N)	**13**	**8**	**15**	**7**
Mean number of suggestion/complaints received during the last 12 months	10	4	5	3
Actions taken on suggestions and complaints made:				
Improved Services	33.3	50.0	36.4	
Improved drug procurement and management	0.0	0.0	36.4	
Ensured availability of health workers	33.3	50.0	9.1	
Cleaning building /cleaning of HF	0.0	0.0	18.2	
Regular meeting	33.3	0.0	0.0	
Total facilities taking actions (N)	**3**	**2**	**8**	**0**

Source: STS facility questionnaire

7.2.7 STAFF MEETING

Regular staff meetings are important for planning and implementing facility and service delivery improvements. Less than half of the surveyed facilities (47%) reported that they held monthly staff meetings. Nearly one-fifth only had meetings when it was felt necessary (20%), and over one-quarter of health facilities did not hold any regular staff meetings (27%) (Table 7.10). HPs and SHPs were more likely to never hold staff meeting in comparison to hospitals and PHCCs.

The official meeting minutes showed that less than half of health facilities (45%) held their last meeting within the last month, a further 12% had met within the past two to three months, 7% had met four to six months ago, and 4% had last met more than six months ago. These official meeting minutes were unavailable for 33% of health facilities, and were more likely to be unavailable at lower level facilities (44% at SHPs, and 33% HPs) compared to higher level health facilities (6% at hospitals and 19% at PHCCs).

Table 7. 10: Frequency and timing of staff meetings, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Frequency of staff meetings					
At least once a month	43.8	54.8	54.4	44.4	46.5
At least once every 2 months	12.5	6.5	5.1	2.8	4.0
At least once every 3 months	0.0	3.2	0.0	2.8	2.0
At least once every 6 months	6.3	0.0	0.0	0.0	0.0
At least once a year	0.0	0.0	1.3	1.4	1.0
According to need	37.5	29.0	20.3	18.1	19.7
Never	0.0	6.5	19.0	30.6	26.8
Total facilities (N)	**16**	**31**	**79**	**72**	**198**
Timing of last staff meetings					
Within a month	68.8	45.2	43.0	41.7	45.0
2-3 months ago	12.5	16.1	15.2	5.6	11.6
4-6 months ago	6.3	16.1	5.1	4.2	6.6
7-12 months ago	6.3	3.2	3.8	1.4	3.0
A year ago	0.0	0.0	0.0	2.8	1.0
Record not available	6.3	19.4	32.9	44.4	32.8
Total facilities (N)	**16**	**31**	**79**	**72**	**198**

Source: STS facility questionnaire

7.2.8 HEALTH MANAGEMENT INFORMATION SYSTEM

All health facilities, both public and non-public, across the country are required to report their service statistics through the Health Management Information System (HMIS). There are a total of 4116 public and 921 non-public health facilities, and of these 98% of public health facilities and around three-fifths of non-public facilities reported to HMIS in the fiscal year 2011/12 (HMIS record, 2011/12). Information gained from this routine information system is essential in developing and monitoring services at the local and national level. The STS 2012 explored the facilities' views on and use of the HMIS system, particularly about the user-friendliness of the recording and reporting tools.

Three quarters of health facilities (75%) reported that health workers found the HMIS tools easy to use. Only 17% of facilities reported that their workers found the tools difficult or very difficult to use, with PHCCs, HPs and SHPs more likely to report that their workers found the tools difficult to use (Table 7.11).

Table 7. 11: Staff assessment of user-friendliness of HMIS recording and reporting tools, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Very easy	25.0	22.6	10.1	16.7
Easy	50.0	45.2	67.1	59.7
Neither easy nor difficult	12.5	16.1	5.1	6.9
Difficult	6.3	16.1	16.5	16.7
Very difficult	6.3	0.0	1.3	0.0
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

The health facilities that responded that the HMIS recording or reporting tools were 'difficult' or 'very difficult' were asked which tools they specifically had difficulties with. Health workers reported difficulties with the monthly reporting form (HMIS 32), maternal health service register (HMIS 10), and health worker's field diary (HMIS 28) (Table 7.12). The main reasons given by workers for finding tools difficult to use was a lack of training and inadequate time to complete the forms. Other reported reasons included: lack of definitional clarity, inconsistency in recording and reporting tools, and inadequate space to write in the forms.

Table 7. 12: HMIS tools identified as not user-friendly, with reasons, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Difficult HMIS tools:				
HMIS 32 (monthly reporting form)		80.0	57.1	83.3
HMIS 10 (maternal health service register)	0.0	20.0	14.3	8.3
HMIS 28 (health worker's field diary)		20.0	7.1	0.0
HMIS 31 (field progress report)		20.0	7.1	0.0
HMIS 34 (monthly reporting form - hospital)	100.0			
HMIS 16a (OPD - IMCI register)	0.0	0.0	7.1	8.3
HMIS 7 (nutrition register under five years)	0.0	0.0	7.1	0.0
HMIS 17 (outreach clinic register)	0.0	0.0	7.1	0.0
HMIS 29 (closed tally sheet)	0.0	20.0	0.0	0.0
HMIS 18b (TB sputum test request form)	0.0	0.0	7.1	0.0
HMIS 20a (TB treatment card)	0.0	0.0	7.1	0.0
Total facilities reporting difficulties with HMIS tools (N)	**2**	**5**	**14**	**12**
Reasons for being tools difficult				
Lack of training	0.0	20.0	64.3	41.7
Inadequate time	0.0	60.0	21.4	8.3
Lack of clarity – definition	0.0	20.0	21.4	16.7
Inconsistency in recording and reporting	50.0	20.0	0.0	25.0
Inadequate space	0.0	60.0	7.1	0.0
Unnecessary information for the level of HF	0.0	0.0	0.0	8.3
Other	50.0	20.0	7.1	0.0
Total facilities reporting difficulties with HMIS tools (N)	**2**	**5**	**14**	**12**

Source: STS facility questionnaire

Less than one-tenth of facilities reported that they had received HMIS tools before the start of the fiscal year with most receiving them between one and three months after the start of the fiscal year. Facilities also reported stock-outs of HMIS tools during the last fiscal year, ranging from 28% of HPs

to 36% of SHPs. Stock-outs were most common for the following tools: HMIS 32, 31, 4, 2, 27, 10. Among facilities that experienced stock-outs, higher level facilities appeared to suffer lengthier ones.

Table 7. 13: Stock-outs of HMIS tools in the last fiscal year, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Received tools:				
Before start of the fiscal year	6.3	3.2	6.3	8.3
Within 1 month of start of FY	37.5	38.7	51.9	43.1
2-3 months	56.3	51.6	32.9	31.9
More than 3 months	0.0	6.5	8.9	16.7
Run out of tools in last fiscal year	31.3	35.5	27.9	36.1
Total facilities (N)	**16**	**31**	**79**	**72**
Tools frequently run out of:				
HMIS 32	11.1	10.7	15.8	18.8
HMIS 31	11.1	3.6	8.8	20.8
HMIS 4	0.0	14.3	8.8	4.2
HMIS 2	11.1	7.1	8.8	4.2
HMIS 27	0.0	7.1	7.0	8.3
HMIS 10	0.0	7.1	8.8	4.2
HMIS 3	11.1	3.6	5.3	6.3
HMIS 1	0.0	3.6	5.3	6.3
HMIS 13	0.0	3.6	5.3	6.3
HMIS 29	0.0	7.1	5.3	2.1
HMIS 16 A	0.0	3.6	1.75	6.3
HMIS 5	0.0	3.6	3.5	2.1
HMIS 6	0.0	3.6	1.8	2.1
HMIS 7	0.0	0.0	3.5	2.1
HMIS 9	0.0	3.6	1.8	2.1
HMIS 17	0.0	0.0	5.3	0.0
HMIS 12	11.1	3.6	0.0	0.0
HMIS 34	22.2	0.0	0.0	0.0
HMIS 16 B	11.1	0.0	0.0	2.1
HMIS 15	0.0	0.0	1.8	0.0
HMIS 19	0.0	3.6	0.0	0.0
HMIS 21	0.0	3.6	0.0	0.0
HMIS 22	0.0	0.0	1.8	0.0
HMIS 28	11.1	0.0	0.0	0.0
HMIS 30	0.0	0.0	0.0	2.1
HMIS 37	0.0	3.6	0.0	0.0
HMIS 38	0.0	3.6		
Length of stock-out of tools:				
Below 1 month	11.1	28.6	36.8	45.8
1-2 months	0.0	21.4	24.6	10.4
3-6 months	66.7	32.1	29.8	39.6
More than 6 months	22.2	17.9	8.8	4.2
Total facilities that run out of tools (N)	**9**	**28**	**57**	**48**

Source: STS facility questionnaire

The survey asked health facility staff (health facility in-charges or HMIS focal persons) about how comfortable the health workers were with the data compilation and reporting process. Health

workers from most hospitals (94%), more than three-quarters of HPs (79%) and SHPs (78%), and over two-thirds of PHCCs (68%) reported the compilation and reporting preparation process was easy/very easy (Table 7.14). However, health workers were less likely to report that the feedback process was easy/very easy: 55% of hospitals, 54% of PHCCs, 65% of HPs and 74% of SHPs.

Table 7. 14: Comfort levels with HMIS compilation and reporting process, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Compilation and report preparation:				
Very easy	25.0	16.1	13.9	20.8
Easy	43.8	45.2	62.0	54.2
Neither easy nor difficult	18.8	16.1	11.4	13.9
Difficult	6.3	19.4	11.4	9.7
Very difficult	6.3	3.2	1.3	1.4
Submission of reports:				
Very easy	25	16.1	15.2	19.4
Easy	68.8	51.6	63.3	58.3
Neither easy nor difficult	6.3	9.7	10.1	1.4
Difficult	0.0	22.6	10.1	18.1
Very difficult	0.0	0.0	1.3	2.8
Feedback:				
Very easy	18.8	0.0	5.1	8.3
Easy	37.5	54.8	59.5	65.3
Neither easy nor difficult	37.5	25.8	26.6	13.9
Difficult	6.3	19.4	8.9	9.7
Very difficult	0.0	0.0	0.0	2.8
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

On average, health facilities spent 21 hours on data reporting and recording in the month preceding the survey. There was a wide variation in the time that facilities spent on this, ranging from zero to 95 hours. Those facilities reporting zero hours reporting and recording did so because their HMIS tools did not arrive leaving them with nothing to record data on.

The respondents to the facility questionnaires (facility in-charges) gave their views on whether the staff spent enough time on recording and reporting for HMIS data. Most felt that the facility staff (those whose role is relevant to reporting and recording) were giving adequate time for their recording and reporting tasks: 75% of hospitals, 90% of PHCCs, 80% of HPs and 100% of SHPs. The main reasons for staff not spending enough time on recording and reporting duties included: inadequate technical and administrative staff, clinical workload, and administrative workload. Lower level facilities were more likely to report inadequate technical and administrative staff than hospitals. However, staff from hospitals were more likely to report high clinical work load in comparison to lower facilities. Other commonly cited reasons included: high administrative workload, no assignment of focal person for HMIS recording/reporting, and lack of skills on recording/reporting.

Table 7. 15: Staff time spent in last month on data recording and reporting, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Time spent by the staff on data recording/reporting:				
Mean (hour)	44	33	23	19
Minimum (hour)	7	0	2	3
Maximum (hour)	95	72	90	72
HWs spend enough time	75.0	90.3	87.3	91.7
Total facilities (N)	**16**	**31**	**79**	**72**
Reasons for not spending enough time:				
Inadequate technical and admin staff	50.0	100	90.0	100
High clinical work load	100	33.3	40.0	83.3
High administrative workload	25.0	66.7	30.0	16.7
Staff lack recording and reporting skills	25.0	0.0	30.0	33.3
Focal person not assigned	50.0	0.0	20.0	33.3
Recording and reporting is not a high priority	0.0	0.0	20.0	0.0
Total facilities with staff not spending enough time (N)	**4**	**3**	**10**	**6**

Source: STS facility questionnaire

The main use of HMIS data for all health facilities was to report to the higher level authorities (ilaka/district) or stakeholders. When asked about other uses of HMIS data, most lower level facilities reported that they were using HMIS data to manage drugs but this was less common at hospitals. Other commonly reported uses of HMIS were to monitor health services, or select suitable locations for outreach clinics. There was little variance in the use of HMIS data between different types of health facilities, although hospitals were less likely to use the data for purposes other than reporting.

Table 7. 16: Use of HMIS data, by facility type

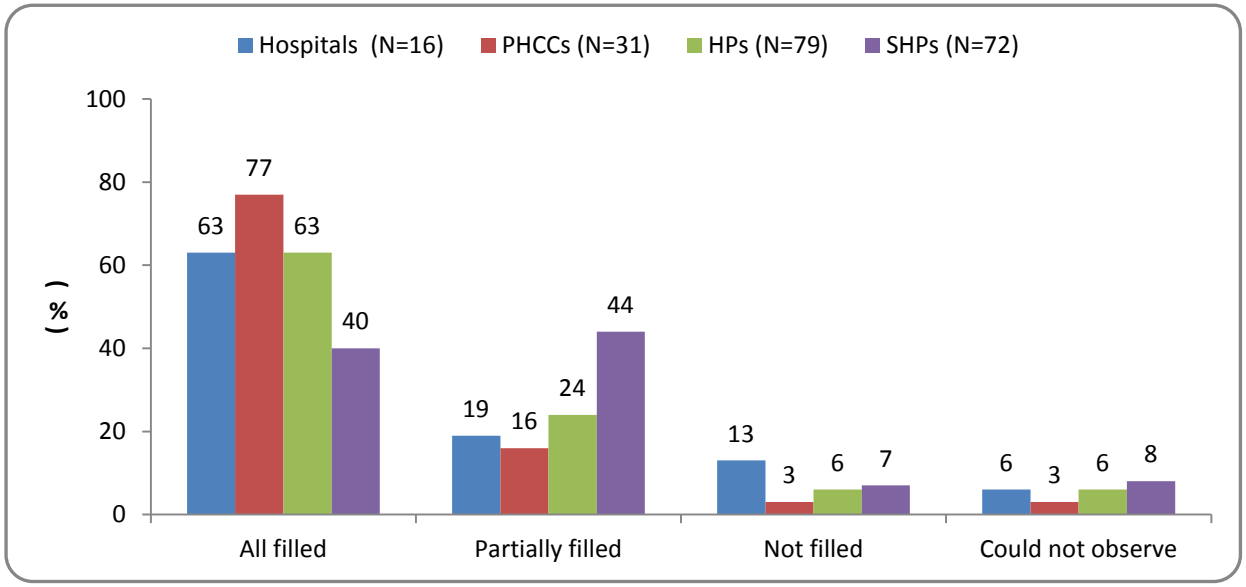
	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
To report to Ilaka/district	81.3	96.8	98.7	93.1
To manage drugs	56.3	74.2	77.2	68.1
To report to concerned authorities/ stakeholders	87.5	80.7	77.2	55.6
To monitor health services	56.3	83.9	73.4	61.1
To select suitable locations for PHC-ORC	31.3	83.9	67.1	68.1
To develop annual work plan	62.5	77.4	64.6	55.6
To run special programmes (e.g. NID, Mop-up)	43.8	74.2	70.9	52.8
To demand equipment and logistics	43.8	67.7	63.3	59.7
To increase health service coverage	50.0	71.0	64.6	54.2
To identify unreached population and expand health services	43.8	61.3	53.2	43.1
To manage human resources	50.0	51.6	41.8	38.9
To prepare VDC level health profile	37.5	51.6	44.3	37.5
Other	0.0	3.2	0.0	1.4
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Monthly monitoring sheets are tools developed by HMIS to allow monitoring of major public health programmes at different facility levels. The STS 2012 observed the completeness of the monitoring sheets for the last fiscal year at each of the surveyed health facilities.

The enumerators observed that just over half of the health facilities had filled in the monitoring worksheets completely (57%), with partial completion at 30% of facilities, and 7% had not filled their sheet in at all (Table 7.17, Figure 7.4). The enumerators could not observe monitoring sheets at 7% of health facilities due to the absence of the relevant health workers at the time of enumeration.

Figure 7. 4: Percentage of health facilities with filled monthly monitoring sheets, by facility type



Source: STS facility questionnaire

More than one third of health facilities (36%) reported that the workload for recording and reporting data that was not part of HMIS was high or very high (Table 7.17).

Table 7. 17: Workload related to recording and reporting other than HMIS, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Very high	12.5	12.9	13.9	20.8
High	37.5	22.6	22.8	12.5
Fair	43.8	35.5	39.2	34.7
Little	0.0	6.5	2.5	6.9
Very little	6.3	22.6	21.5	25
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Facilities were asked to provide suggestions for improving HMIS recording and reporting processes and 75% provided suggestions. The most common suggestions were to provide training or orientation for the health staff, to improve uniformity between the different types of reporting forms, and to revise the indicators and tools. Notable numbers of health workers suggested that computerised recording and reporting would help improve HMIS. Other suggestions included: improving user-friendliness, providing additional staff for recording and reporting, improving clarity on recording and reporting issues, providing regular support and supervision, and ensuring timely delivery of tools.

Table 7. 18: Suggestions to improve the HMIS recording and reporting process, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Suggestions to improve HMIS recording/reporting				
Provide training or orientation for health staff	12.5	19.4	21.5	26.4
Uniformity between recording, tally and reporting forms	0.0	35.5	22.8	13.9
Revise indicator, recording, reporting and monitoring tools	31.3	32.3	20.3	11.1
Computerized recording and reporting	37.5	6.5	7.6	13.9
User-friendly recording forms, tally sheets and report forms	12.5	25.8	15.2	2.8
Additional health staff for recording and reporting	18.8	3.2	7.6	11.1
Clarity on recording and reporting	6.3	0.0	7.6	4.2
Different reporting form for different levels	0.0	0.0	1.3	1.4
Support and supervision	0.0	3.2	6.3	2.8
Remove dual recording and reporting	0.0	9.7	1.3	1.4
Timely availability of tools	0.0	6.5	2.5	5.6
Change in reporting route and level	0.0	3.2	1.3	4.2
Other	18.8	12.9	5.1	6.9
No suggestions	25.0	12.9	25.3	29.2
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

7.2.9 SUPERVISION

Most facilities had received at least one supervisory visit during the last fiscal year. PHCCs, HPs, SHPs were more likely to receive district level visits, and SHPs also illaka level, while hospitals were more likely to receive visits from regional and central level.

Table 7. 19: Supervision visits in the last fiscal year, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Had a Supervisory visit in the last fiscal year	87.5	77.4	75.9	72.2	75.8
Visits from illaka level:					
Total visits				82	82
Mean number of visits				1.2	1.2
Visits from district level:					
Total visits		156	160	79	395
Mean number of visits		5.2	2	1.1	2.2
Visits from regional level:					
Total visits	31	14	16	6	67
Mean number of visits	1.9	0.5	0.2	0.1	0.3
Visits from central level:					
Total visits	19	8	14	10	51
Mean number of visits	1.2	0.3	0.2	0.1	0.3
Total visits from all levels					
Total visits	50	178	190	177	595
Mean number of visits	3.0	5.7	2.4	2.5	3.0
Total facilities (N)	**16**	**31**	**79**	**72**	**198**

Source: STS facility questionnaire

Supervision visits often resulted in feedback to the health facility. More than three quarters of lower level health facilities received feedback to improve their data quality. Feedback was also given regarding expediting the progress for increasing service coverage, ensuring the availability of services, and ensuring the availability of drugs.

Table 7. 20: Type of feedback received from supervision visits, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Improve quality of data recording and reporting	57.1	79.2	78.3	75.0
Increase service coverage	50.0	62.5	71.7	61.5
Ensure availability of services	64.3	70.8	65.0	55.8
Ensure availability of drugs	57.1	66.7	71.7	46.2
Better hygiene/cleaner facility	50.0	58.3	55.0	61.5
Ensure women receive Aama incentive payment	64.3	62.5	53.9	35.7
Report on timely basis	50.0	50.0	61.7	48.1
More focus on women	28.6	50.0	50.0	40.4
Ensure people receive free care	64.3	50.0	40.0	37.3
Ensure availability of human resource	57.1	54.2	40.0	36.5
More focus on Dalit, Janajati and other excluded groups	28.6	41.7	38.3	32.7
Others	7.1	8.3	1.7	9.6
Total facilities with a supervision visit (N)	**14**	**24**	**60**	**52**

Source: STS facility questionnaire

For the health facilities where supervisors recommended an increase in the coverage of services (N=97, Table 7.21), the services most commonly recommended for expansion were child health, safe motherhood and family planning. The 'other' suggestions included expanding services for Japanese encephalitis, snake bites, and curative services.

Table 7. 21: Feedback given on increasing service coverage, by facility type

Type of services told to increase coverage of:	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Safe motherhood	50.0	36.8	30.9	26.4
Child health services	33.3	34.2	38.3	37.7
Family planning	0.0	10.5	13.6	18.9
Disease control services	0.0	7.9	1.2	5.7
Other child health	8.3	2.6	7.4	1.9
Other	8.3	7.9	8.6	9.4
Total facilities receiving feedback (N)	**7**	**15**	**43**	**32**

Source: STS facility questionnaire

STS 2012 asked facilities about what improvements could be made to the supervisory process. The most common suggestion from health facilities was to have regular and planned supervision, followed by more supportive feedback and a reward system. Some staff suggested that supervision should be done by qualified staff or an expert. There was little variation in feedback between the different types of health facility.

Table 7. 22: Suggested ways to improve supervision and feedback, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Regular and planned supervision	42.3	47.7	45.8	40.5
Supportive feedback and reward	23.1	22.7	29.7	27.9
Supervision by qualified staff/expert	0.0	9.1	3.4	8.1
Supportive supervision	11.5	2.3	4.2	3.6
Others	11.5	4.6	6.8	9.0
No feedback	11.5	13.6	10.2	10.8
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

7.2.10 Emergency Contingency Plan

Less than one-third of PHCCs (32%) and HPs (32%) and just 18% of SHPs had an emergency contingency plan (Table 7.23). Among these, over 50% of HPs and SHPs had an emergency contingency plan for women and children, along with 70% of PHCCs. It is discouraging to note that, aside from some hospitals, very few facilities with a contingency plan had allocated a budget in their annual work plan to implement it.

Table 7. 23: Presence of emergency contingency plan for health services during conflict or emergency situation, by facility type

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Have emergency contingency plan	68.8	32.3	31.7	18.1
Had meeting on emergency contingency plan	56.3	22.6	26.6	8.3
Total facilities (N)	**16**	**31**	**79**	**72**
Have emergency contingency plan for women and children	36.4	70.0	52.0	53.6
Total facilities having emergency contingency plan (N)	**11**	**10**	**25**	**13**
Timing of last meeting				
2069/70	11.1	0.0	42.9	50.0
2068/69	55.6	42.9	47.6	33.3
2067/68	11.1	14.3	4.8	0.0
2066/67	0.0	0.0	4.8	0.0
Could not observe record	22.2	42.9	0.0	16.7
Budget allocation in last AWBP to implement emergency plan	43.8	0.0	8.9	4.2
Had meeting on emergency contingency plan (N)	**9**	**7**	**21**	**6**

Source: STS facility questionnaire

7.3 KEY FINDINGS

Social Audit, Citizen's Charter, and disclosure of information to the public

- Over a quarter (27%) of health facilities had conducted a social audit in the last fiscal year. The practice was more common at PHCCs where nearly half (48%) conducted social audits in the last fiscal year.

- Around half (48%) of health facilities that conducted social audits in the previous year reported that they had implemented the actions recommended by the auditors. The main recommendation was to expand and improve health services.

- Three quarters of health facilities had a Citizen's Charter (77%). Of those charters that were observed (74% of all charters) 94% contained information on free drugs and 93% on outpatient services. Of the facilities implementing the Aama Programme, 81% included information about the programme in their citizen charter.

- Two-thirds of facilities disclosed information on opening hours (67%), workforce (65%), and costs of services and drugs (49%), but only 35% disclosed information on current disease trends.

Health facility operation and management committees

- Only half of the health facilities (49%) fulfilled the NHSP-2 requirement of having at least three female and two Dalit/Janajati members on HFOMCs/HDCs. Lower level facilities were more likely to meet the criteria than hospitals.

- In terms of participating in the decision making process, hospitals were more likely than lower level facilities to include women and Dalit/Janajati HFOMC/HDC members in the decision-making processes.

- Just over a quarter (28%) of facilities reported that they had undertaken activities to build the capacity of HFOMC/HDC members, and only 52% of management committees had met within the previous month, as required by government guidelines.

Gender and social inclusion

- More than half of the hospitals, PHCCs and HPs had carried out activities to reach women as a target group, although this was less common at SHPs (40%). Hospitals were more likely to report carrying out activities for the poor/very poor (44%) in comparison to PHCCs (26%), HPs (32%) and SHPs (17%). PHCCs, HPs and SHPs most commonly tried to reach target groups by expanding outreach services, and using focused awareness programmes in comparison to hospitals.

Suggestions and complaint mechanisms

- Although more than four-fifth (81%) of hospitals had a suggestion/complaints procedure, it is discouraging to note that nearly three-fourth of PHCCs (74%), over four-fifth of HPs (81%)

and most SHPs (90%) didn't have any formal mechanism to address suggestions and complaints from clients.

- The most common action taken was to improve health service delivery, followed by ensuring the availability of health workers, and improving cleanliness.

Staff meetings

- Half (50%) of the surveyed facilities held monthly staff meetings, 22% had meetings when required, and 20% did not organise regular staff meetings.

Health Management Information System

- Only 17% of facilities reported that their workers found the HMIS tools difficult to use; this was more common in lower level facilities. The most common reasons given by workers for finding tools difficult to use were lack of training and inadequate time to complete the forms. Less than one-tenth of facilities reported that they had received HMIS tools before the start of the fiscal year with most receiving them between one and three months after the start of the fiscal year

- Just over half of the health facilities had filled the monitoring worksheets completely (57%).

- The most common suggestions to improve HMIS recording and reporting were to provide training/orientation for the staff, to improve uniformity between the different types of reporting forms and to revise the indicators and tools.

Supervision

- Most facilities had received at least one supervisory visit during the last fiscal year. Of these, more than three quarters of lower level health facilities received feedback to improve their data quality. Feedback was also commonly given regarding increasing service coverage.

Emergency contingency plan

- Less than one-third of PHCCs and HPs and just 18% of SHPs had an emergency contingency plan.
- Aside from some hospitals, very few facilities with a contingency plan had allocated a budget in their annual work plan to implement it.

CHAPTER 8 -HUMAN RESOURCES FOR HEALTH

8.1 INTRODUCTION

The strategic plans of the Ministry of Health and Population (MoHP) recognize the importance of an available, competent and motivated health workforce in achieving the health and health service objectives of the Second Nepal Health Sector Programme (NHSP-2). The Government of Nepal (GoNP) is legally required (through the Health Services Act 1997) to oversee recruitment, deployment, promotion, and disciplinary processes of health workers.

The Ministry has recently developed the Human Resources Strategic Plan (2011–2015), which is an update to the Strategic Plan for Human Resource in Health (2003–2017). This strategic plan encompasses the production, recruitment, deployment, career development, retention, and monitoring and evaluation of human resources in the health sector. The development of the plan was guided by NHSP-2 which identified a number of human resources for health (HRH) challenges and constraints that affect the delivery of health services and the achievement of health outcomes.

The strategic plan has identified a number of core problems in human resource management within the health sector. At the strategic level there is a fragmented approach to HRH planning, management, development and financing. The plan also identifies a shortage of health staff as well as poor distribution, absenteeism and performance of existing health staff.

This chapter presents the findings from STS in relation to human resources. The data presented includes the number of sanctioned and filled positions, the use of contract staff and the overall skills mix. The training background of permanent and temporary staff is shown, along with staff retention and attendance levels. The demographic characteristics of health staff are also presented.

8.2 SELECTED RESULTS

Indicators	STS 2012	95%CI
% of sanctioned positions that are filled		
Doctors at PHCCs	22.6	8.8-46.9
Doctors at district hospitals	63.0	35.6-78.8
Nurses at PHCCs	58.7	44.9-73.3
Nurses at district hospitals	82.7	75.1-91.1
% of district hospitals that have at least 1 obstetrician-gynaecologist or specialist general practitioner (MDGP), 5 SBA trained nurses, and 1 anaesthesiologist or anaesthetic assistants	0	NA
% of PHCCs with at least one medical officers, 1 health assistant/senior auxiliary health worker (SrAHW), 1 staff nurse, 2 AHWs, 3 ANMs and 1 laboratory assistant in filled position	9.7	4.8-18.4
% of category A health posts with at least 1 health assistants/SrAHW, 2 AHW, and 1 ANM in filled position	38.7	22.2-59.8
% of category B health posts with at least 1 health assistants/SrAHW, 1 AHW, and 1 ANM in filled position	16.7	9.7-24.5
% of SHPs with at least 1 AHW, 1 MCHW, and 1 VHW in position	44.4	31.9-64.9

8.2.1 SANCTIONED AND FILLED POSITIONS

Higher level hospitals

The number of sanctioned positions varies between different levels of hospital, and between hospitals of the same level. The Department of Health Services (DoHS) operating manual stipulates the official number of sanctioned positions for each position at higher level hospitals; these position requirements, and the extent to which the higher level hospitals sampled in STS have met them, are described in Table 8.1 (column a).

The sampled districts in STS contained two higher level hospitals. Both of these hospitals fulfilled the requirements for the number of sanctioned positions for all but one position: sister/matron/nursing inspector. Only one of the hospitals had the required number of sanctioned positions for this position.

The total number of sanctioned positions (for the selected categories) in these two higher level hospitals was 174, of which 85% were filled. All of the sanctioned positions of Auxiliary Nurse Midwife (ANM), Health Assistant (HA), Auxiliary Health Worker (AHW) and laboratory assistant/technician were filled, and most of the SN (84%) and MO (81%) positions were filled. However, none of the Specialist General Practitioner (MDGP) positions and only 33% of the anaesthetist positions were filled (Table 8.1, column e).

Table 8. 1: **Number of sanctioned positions and proportion that are filled, at higher level hospitals**

Position	(a) Official number of sanctioned positions (range)	(b) % of hospitals with the required number of sanctioned positions	(c) % of hospitals that have filled all of their sanctioned positions	(d) No. of sanctioned positions at all hospitals	(e) % of sanctioned positions filled at all hospitals
Obstetrician/gynaecologist	1-3	100	50	3	66.7
Paediatrician	1-2	100	50	2	50.0
Specialist General Practitioner (MDGP)	1	100	0	1	0.0
Anaesthesiologist	1-3	100	0	3	33.3
Medical Officer (MO)	6-32	100	50	32	81.3
Sister/Matron/Nursing Inspector	3-8	50	0	8	62.5
Staff Nurse (SN)	18-80	100	50	80	83.8
Auxiliary Nurse Midwife (ANM)	4-21	100	100	21	100
Health Assistant (HA)	1-2	100	100	2	100
Auxiliary Health worker (AHW)	5-12	100	100	12	100
Laboratory assistant/technician	2-10	100	100	10	100
All		50	0	174	84.5
Total facilities (N)	**2**				

Source: STS facility questionnaire

District level hospitals

Overall, 71% of district hospitals met the Operating Manual's requirements for the number of sanctioned positions (Table 8.2, column b). All of the district level hospitals met the required number of sanctioned positions for four of the position types (MO, ANM, HA and AHW), and 93% of hospitals met the required number of positions for the SN position. However, only 79% had the required number of sanctioned positions for laboratory assistants/technicians.

Only one (7%) of the hospitals had the required number of staff actually in filled positions for all of the sanctioned positions (Table 8.2, column c). However, around three quarters of hospitals had filled the required number of sanctioned positions for each position, but only 50% of hospitals had the required number of SN's in position, and only 64% had the required number of MO's in position.

Turning to the overall number of these sanctioned positions that had been filled, 79% of the 170 total positions were filled across the14 district hospitals (Table 8.2, column e). The percentage of these sanctioned positions that were filled varied by position; most ANM (93%) and laboratory assistant/technician (90%) positions were filled. On the other hand, less than two thirds of MO positions were filled (63%) (Table 8.2, column e).

Table 8. 2: Number of sanctioned positions and proportion that are filled, at district level hospitals

Position	(a) Official number of sanctioned positions (range)	(b) % of hospitals with the required number of sanctioned positions	(c) % of hospitals that have filled all of their sanctioned positions	(d) Total no. of sanctioned positions at all hospitals	(e) % of total sanctioned positions filled at all hospitals
Medical Officer (MO)	1-2	100	64.3	27	63.0
Staff Nurse (SN)	2-4	92.9	50.0	50	76.0
Auxiliary Nurse Midwife (ANM)	2	100	85.7	29	93.1
HA (Health Assistant)*	0-1	100	76.9	13	76.9
Auxiliary Health worker (AHW)	2-3	100	78.6	31	80.6
Laboratory assistant/technician	1-2	78.6	71.4	20	90.0
All		71.4	7.1	170	79.4
Total facilities (N)	**14**				

**District hospital at Rasuwa has no provision of HA, so percentage for HA is calculated from 13 hospitals.*
Source: STS facility questionnaire

Primary health care centres

Table 8.3 shows the number of sanctioned positions, per position, which a Primary Health Care Centre (PHCC) is required to have. All of the 31 PHCCs in this sample fulfilled the requirements for the number of sanctioned positions that they should have (Table 8.3 column b).

Of these sanctioned positions, 90% of the PHCCs had the required number of HAs actually in filled positions, and 71% had the required number of laboratory assistant/technician in position. However, less than a quarter of PHCCs (23%) had filled their sanctioned positions for the positions of MO, and just over a third had filled their SN (36%) and ANM (39%) sanctioned positions.

The total number of sanctioned positions in the 31 sampled PHCCs was 282. Of these sanctioned positions, only 64% were filled (Table 8.3 column e) with variation across different positions; 90% of HA positions were filled but only 23% of MO positions were filled.

Table 8. 3:Number of sanctioned positions and proportion that are filled, at PHCCs

Position	(a) Official number of sanctioned positions	(b) % of facilities with the required number of sanctioned positions	(c) % of facilities that have filled all of their sanctioned positions	(d) Total no. of sanctioned positions at all PHCCs	(e) % of total sanctioned positions filled at all PHCCs
Medical Officer (MO)	1	100	22.6	31	22.6
Staff Nurse (SN)	1	100	35.5	31	35.5
Auxiliary Nurse Midwife (ANM)	3	100	38.7	93	67.7
Health Assistant (HA)	1	100	90.3	31	90.3
Auxiliary Health worker (AHW)	2	100	54.8	62	79.0
Lab assistant/Lab technician	1	100	71.0	31	71.0
All		100	9.7	282	63.8
Total facilities (N)				31	

Source: STS facility questionnaire

Health posts

Health posts are divided into two categories by ecological zones: category A health posts are in the Terai districts (31 sampled), and category B are in the hill and mountain districts (48 sampled). The Department of Health Services (DoHS) operating manual stipulates that both categories of health posts should have one HA and one ANM, however, category A health posts are required to have two AHWs while category B health posts are just required to have one AHW.

Table 8.4 shows that all category A and B health posts met the requirements for the number of sanctioned HA and ANM positions. For the position of AHW, all of the category B health posts and 94% of the category A health posts met the requirements for the number of sanctioned positions.

However, only 39% of category A health posts and 17% of category B health posts had the required number of sanctioned positions filled for all positions. Breaking this down by position, over two thirds of category A health posts had the required number of sanctioned positions filled in each position: 71% had the required AHWs positions filled, 71% had the HA positions filled, and 68% had the ANM positions filled. For category B health posts, approximately half had the required number of sanctioned positions filled in each of the position types: AHW (54%), ANM (52%) and HA (44%).

Of the actual sanctioned positions, 61% of the 282 positions were filled. For the ANM positions 59% and 68% of AHW positions were filled, whilst only 54% of HA positions were filled.

Table 8. 4: Number of sanctioned positions and proportion that are filled, at health posts

Position	Category A			Category B			All	
	Official number of sanctioned positions	% of facilities with the required number of sanctioned positions	% of facilities that have filled all of their sanctioned positions	Official number of sanctioned positions	% of facilities with the required number of sanctioned positions	% of facilities that have filled all of their sanctioned positions	Total no. of sanctioned positions at all HPs	% of total sanctioned positions filled at all HPs
Auxiliary Nurse Midwife (ANW	1	100	67.7	1	100	52.1	79	58.9
Health Assistant (HA)	1	100	71	1	100	43.8	79	54.4
Auxiliary Health worker (AHW)	2	93.5	71	1	100	54.2	106	68.1
All (1 HA 2 AHW (cat. A)/1 AHW (cat. B) 1 ANM)		93.5	38.7		100	16.7	264	61.3
Total facilities (N)		**31**			**48**		**79**	

Source: STS facility questionnaire

Sub-health posts

Each sub-health post is required to have at least one AHW, one Maternal and Child Health Worker (MCHW) and one Village Health Worker (VHW) sanctioned position. All of the 72 sampled sub-health posts had the required number of sanctioned positions (Table 8.5 column a).

Of these sanctioned positions, 90% of SHPs had at least one AHW position filled (as per requirements), and 71% SHPs had the required MCHW positions filled. However, less than two thirds of SHPs (63%) had at least one VHW position filled, resulting in just 44% of SHPs meeting the requirements for having their sanctioned positions filled for each position (Table 8.5 column c).

Overall, three quarters (75%) of the total 216 sanctioned positions at sub health posts were filled. The percentage of these sanctioned positions that were filled varied by position, with most AHW positions being filled (90%). However, 71% of MCHW were filled while less than two-thirds (63%) of VHWs sanctioned positions were filled (Table 8.5, column e).

Table 8. 5: Number of sanctioned positions and proportion that are filled, at SHPs

Position	(a) Official number of sanctioned positions	(b) % of facilities with required number of sanctioned positions	(c) % of facilities that have filled their sanctioned positions	(d) Total no. of sanctioned positions at all SHPs	(e) % of total sanctioned positions filled at all SHPs
Auxiliary Health worker (AHW)	1	100	90.3	72	90.3
Maternal and Child Health Worker (MCHW)	1	100	70.8	72	70.8
Village Health Worker (VHW)	1	100	62.5	72	62.5
All (1AHW 1MCHW 1VHW)		100	44.4	216	74.5
Total facilities (N)			**72**		

Source: STS facility questionnaire

At each facility one member of staff was asked about the effect of any staff shortages on service provision. The results varied by level. Staff at hospitals most commonly reported that shortages affect surgery (46%), IMCI (36%) and safe motherhood (27%) (Table 8.6). By far the most commonly reported service at PHCCs was safe motherhood (60%). At HPs and SHPs the services most affected were safe motherhood (47% and 53% respectively), immunization (38% and 55% respectively), PHC-ORC (35% and 45% respectively), and OPD (45% and 20%).

Table 8. 6: Effect of staff shortage on services

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Staff shortages affect service delivery	68.8	80.6	73.4	70.8
Total facilities (N)	**16**	**31**	**79**	**72**
Services affected by staff shortage:				
Safe Motherhood	27.3	60.0	46.6	52.9
Immunization	0.0	16.0	37.9	54.9
PHC-ORC	0.0	8.0	34.5	45.1
OPD	0.0	28.0	44.8	19.6
IMCI	36.4	8.0	12.1	29.4
Family Planning	9.1	16.0	10.3	21.6
Surgery	45.5	16.0	0.0	5.9
Nutrition	9.1	0.0	10.3	9.8
Leprosy	9.1	4.0	0.0	5.9
Tuberculosis	9.1	0	0.0	5.9
Emergency	0.0	16.0	0.0	0.0
Malaria	0.0	4.0	0.0	3.9
Lab	9.1	8.0	0.0	0.0
X-ray	18.2	0.0	0.0	0.0
PAC/CAC	0.0	4.0	0.0	0.0
Indoor service	9.1	0	0.0	0.0
Specialist service	0.0	4.0	0.0	0.0
Surgery (CS)	9.1	0.0	0.0	0.0
Total facilities (N)	**11**	**25**	**58**	**51**

Source: STS facility questionnaire

8.2.2 SERVICE CONTRACTS

At district hospitals more staff were deputed in (5% of sanctioned staff) than out (1%), while at lower level facilities more staff were deputed out than in. The staff most likely to be deputed in at hospitals were ANMs (10% of sanctioned staff), AHWs (9%), laboratory technicians (7%) and SNs (3%). MOs were most likely to be deputed out (3% of sanctioned staff) and, in contrast to other positions, more MOs were deputed out than in (2%). The staff most commonly deputed in at PHCCs were AHWs (8% of sanctioned staff), HAs (3%), laboratory assistants (3%) and MOs (3%).More MOs (9%), SNs (6%), ANMs (4%) and laboratory assistants (7%) were deputed out than in. For HAs (3%) and AHWs (8%) the number deputed in and out matched. The cadre most likely to be deputed in at HPs and SHPs were AHWs (6% at each). ANMs were most likely to be deputed out at HPs (3%).

Table 8. 7: Sanctioned staff currently deputed in and out

	Sanctioned staff currently deputed in		Sanctioned staff currently deputed out	
	No.	%	No.	%
District Hospitals:				
Obstetrician/gynaecologist	0	0.0	0	0.0
Paediatrician	0	0.0	0	0.0
Specialist General Practitioner (MDGP)	0	0.0	0	0.0
Anaesthesiologist	0	0.0	0	0.0
Medical Officer (MO)	1	1.7	2	3.4
Sister/Matron/Nursing Inspector	0	0.0	0	0.0
Staff Nurse (SN)	4	3.1	2	1.5
Auxiliary Nurse Midwife	5	10.0	1	2
HA (Health Assistant)	0	0.0	0	0.0
Auxiliary Health worker (AHW)	4	9.3	0	0.0
Lab assistant/Lab technician	2	6.7	0	0.0
All hospital sanctioned staff	**16**	**4.6**	**5**	**1.4**
PHCCs:				
Medical Officer (MO)	1	3.1	3	9.4
Staff Nurse (SN)	0	0.0	2	6.1
Auxiliary Nurse Midwife	1	1.1	4	4.3
HA (Health Assistant)	1	3.2	1	3.2
Auxiliary Health worker (AHW)	5	8.1	5	8.1
Lab assistant/Lab technician	1	3.2	2	6.5
Maternal and Child Health Worker (MCHW)	0	0.0	0	0.0
Village Health Worker (VHW)	0	0.0	0	0.0
All PHCC sanctioned staff	**9**	**3**	**17**	**5.7**
Health posts:				
Auxiliary Nurse Midwife	1	1.1	3	3.3
HA (Health Assistant)	1	1.3	1	1.3
Auxiliary Health worker (AHW)	7	6.2	2	1.8
Maternal and Child Health Worker (MCHW)	0	0.0	0	0.0
Village Health Worker (VHW)	0	0.0	0	0.0
All HP sanctioned staff	**9**	**2.5**	**6**	**1.7**
SHPs:				
Auxiliary Health worker (AHW)	4	5.6	1	1.4
Maternal and Child Health Worker (MCHW)	0	0.0	2	2.8
Village Health Worker (VHW)	0	0.0	2	2.8
All SHP sanctioned staff	4	1.8	5	2.3
Total staff	38	3.1	33	2.7

Source: STS facility questionnaire

Table 8.8 shows the service-contract mix data comparing the contract status of the staff working at the different facilities. Filled positions are directly employed by the hospital. The table shows the number of positions filled minus those staff who were deputed out to another facility. Deputed in positions show the number of staff contracted at another facility who have been deputed in to the facility they were working in at the time of the survey. Contracted positions are staff employed by

Hospital Development Committee (HDCs)/Health Facility Operation and Management Committee (HFOMC) and also from other agencies like D(P)HO, DDC, VDC, FHD, NPC, I/NGOs etc.

Overall there were more staff than the number of sanctioned positions (1297 staff for 1216 sanctioned positions), meaning that 107% of sanctioned positions are filled. This 'over staffing' picture is similar for higher and district level hospitals (168% of sanctioned positions filled in hospitals, 140% in district hospitals). Whilst the opposite is happening in lower level facilities where there were fewer staff than sanctioned positions (PHCCs 83%, HPs 93% and SHPs 87%).

Within higher level hospitals there were high numbers of staff to sanctioned positions for positions of ANM (386% of sanctioned ANM positions filled), AHW (300%), and HAs (200%). A large proportion of these staff were contracted staff (80%), filling 276% of sanctioned ANM positions, and 183% of sanctioned AHW positions. A similar picture of potentially overstaffing and excessive use of contract staff (58% of sanctioned positions) was also occurring in the district level hospitals.

A different picture of 'under staffing' emerges for the lower level facilities with the percentage of sanctioned positions filled being 83% for PHCCs, 93% for HPs, and 87% for SHPs. Whilst they have lower levels of staff deputed out than the hospitals do, they also have much lower use of contract staff. Contract staff accounted for only 20% of sanctioned positions at the PHCC level, 23% for HPs and 12% for SHPs.

Table 8. 8: Service-contract mix

	Filled, excluding deputed out (as % of sanctioned positions)		Deputed in positions (as % of sanctioned positions)		Contract Positions				Total staff in position (as % of sanctioned positions)		Sanctioned Positions
					All (as % of sanctioned positions)		HDC/HFOMC (as % of sanctioned positions)				
	No.	%	No.	%	No.	%	No.	%	No.	%	
Higher level hospitals:											
Obstetrician/gynaecologist	2	66.7	0	0.0	0	0.0	0	0.0	2	66.7	3
Paediatrician	1	50.0	0	0.0	0	0.0	0	0.0	1	50	2
Specialist General Practitioner (MDGP)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Anaesthesiologist	1	33.3	0	0.0	0	0.0	0	0.0	1	33.3	3
Medical Officer (MO)	26	81.3	0	0.0	29	90.6	29	90.6	55	171.9	32
Sister/Matron/Nursing Inspector	5	62.5	0	0.0	0	0.0	0	0.0	5	62.5	8
Staff Nurse (SN)	66	82.5	4	5	23	28.8	23	28.8	93	116.3	80
Auxiliary Nurse Midwife	21	100	2	9.5	58	276.2	58	276.2	81	385.7	21
HA (Health Assistant)	2	100	0	0.0	2	100	2	100	4	200	2
Auxiliary Health worker (AHW)	12	100	2	16.7	22	183.3	22	183.3	36	300	12
Lab assistant/Lab technician	10	100	0	0.0	5	50.0	5	50.0	15	150.0	10
All higher level hospital positions	146	83.9	8	4.6	139	79.9	139	79.9	293	168.4	174
District Hospitals											
Medical Officer (MO)	15	55.6	1	3.7	29	107.4	4	14.8	45	166.7	27
Sister/Matron/Nursing Inspector	2	100	0	0.0	0	0.0	0	0.0	2	100	2
Staff Nurse (SN)	37	74	0	0.0	9	18	2	4.0	46	92	50
Auxiliary Nurse Midwife	26	89.7	3	10.3	22	75.9	18	62.1	51	175.9	29
HA (Health Assistant)	10	76.9	0	0.0	9	69.2	7	53.8	19	146.2	13
Auxiliary Health worker (AHW)	25	80.6	2	6.5	26	83.9	26	83.9	53	171	31
Lab assistant/Lab technician	18	90	2	10	4	20	4	20.0	24	120	20
All district level hospital positions	133	77.3	8	4.7	99	57.6	61	35.5	240	139.5	172

Table 8.8: Service-contract mix cont/…

	Filled, excluding deputed out (as % of sanctioned positions)		Deputed in positions (as % of sanctioned positions)		Contract Positions				Total staff in position (as % of sanctioned positions)		Sanctioned Positions
					All (as % of sanctioned positions)		HDC/HFOMC (as % of sanctioned positions)				
	No.	%	No.	%	No.	%	No.	%	No.	%	
PHCCs:											
Medical Officer (MO)	4	12.5	1	3.1	4	12.5	0	0.0	9	28.1	32
Staff Nurse (SN)	9	27.3	0	0.0	0	0.0	0	0.0	9	27.3	33
Auxiliary Nurse Midwife	59	63.4	1	1.1	26	28	15	16.1	86	92.5	93
HA (Health Assistant)	27	87.1	1	3.2	3	9.7	0	0.0	31	100	31
Auxiliary Health worker (AHW)	44	71	5	8.1	19	30.6	14	22.6	68	109.7	62
Lab assistant/Lab technician	20	64.5	1	3.2	7	22.6	6	19.4	28	90.3	31
Maternal and Child Health Worker (MCHW)	1	100	0	0.0	0	0.0	0	0.0	1	100	1
Village Health Worker (VHW)	15	100	0	0.0	0	0.0	0	0.0	15	100	15
All PHCC positions	179	60.1	9	3	59	19.8	35	11.7	247	82.9	298
HPs:											
Auxiliary Nurse Midwife	50	55.6	1	1.1	59	65.6	29	32.2	110	122.2	90
HA (Health Assistant)	42	53.2	1	1.3	5	6.3	1	1.3	48	60.8	79
Auxiliary Health worker (AHW)	75	66.4	7	6.2	15	13.3	8	7.1	97	85.8	113
Maternal and Child Health Worker (MCHW)	23	100	0	0.0	1	4.3	1	4.3	24	104.3	23
Village Health Worker (VHW)	50	100	0	0.0	0	0.0	0	0.0	50	100	50
All HP positions	240	67.6	9	2.5	80	22.5	39	11.0	329	92.7	355
SHPs:											
Auxiliary Nurse Midwife	1	100	0	0.0	0	0.0	0	0.0	1	100	1
Auxiliary Health worker (AHW)	64	88.9	4	5.6	15	20.8	7	9.7	83	115.3	72
Maternal and Child Health Worker (MCHW)	49	68.1	0	0.0	5	6.9	5	6.9	54	75	72
Village Health Worker (VHW)	43	59.7	0	0.0	7	9.7	7	9.7	50	69.4	72
All SHP positions	157	72.4	4	1.8	27	12.4	19	8.8	188	86.6	217
All facilities positions	**855**	**70.3**	**38**	**3.1**	**404**	**33.2**	**293**	**24.1**	**1297**	**106.7**	**1216**

Source: STS facility questionnaire

Higher level hospitals had a higher percentage of SNs than the district level hospitals (32% of staff compared to 19%) and ANMs (28% compared to 21%), but lower percentages of HAs (1% compared to 8%) and AHWs (12% compared with 22%) (Table 8.9). However, there is no difference in the percentage of MOs (19% in each).

Table 8. 9: Skills mix at higher level and district hospitals (includes filled, contract, deputed in and excludes deputed out)

	Higher level hospital positions (%)	District hospital positions (%)
Obstetrician/gynaecologist	0.7	
Paediatrician	0.3	
Specialist General Practitioner (MDGP)	0.0	
Anaesthesiologist	0.3	
Medical Officer (MO)	18.8	18.8
Sister/Matron/Nursing Inspector	1.7	0.8
Staff Nurse (SN)	31.7	19.2
Auxiliary Nurse Midwife	27.6	21.3
HA (Health Assistant)	1.4	7.9
Auxiliary Health Worker (AHW)	12.3	22.1
Lab Assistant/Lab Technician	5.1	10.0
Total number in position (N)	293	240

Source: STS facility questionnaire

Table 8.10 presents the skills mix at PHCCs, HPs and SHPs. At PHCC level 39% of staff were nurses (4% of SNs and 35% of ANMs), 28% were AHWs and 13% HAs. Laboratory assistants/technicians comprised 11%, VHW 6% and MO 4%. At the health positions a third of staff were ANMs, 30% AHWs, 15% VHW, and 15% health assistants. At the SHPs, more than two in five (44%) staff were AHWs, 29% MCHWs and 27% VHWs.

Table 8. 10: Skills mix at PHCCs, HPs and SHPs (includes filled, contract, deputed in and excludes deputed out)

	PHCC (%)	HP (%)	SHP (%)
Medical Officer (MO)	3.6		
Staff Nurse (SN)	3.6		
Auxiliary Nurse Midwife	34.8	33.4	0.5
Health Assistant (HA)	12.6	14.6	
Auxiliary Health worker (AHW)	27.5	29.5	44.1
Lab assistant/Lab technician	11.3		
Maternal and Child Health Worker (MCHW)	0.4	7.3	28.7
Village Health Worker (VHW)	6.1	15.2	26.6
Total number in position (N)	247	329	188

Source: STS facility questionnaire

8.2.3 TRAINING

Table 8.11 presents the training received by permanent staff on neonatal care practice (NCP), Integrated management of childhood illness (IMCI), IUCD, Implant, USG, adolescent friendly, skill birth attendance (SBA), Advanced SBA, OT management and anaesthesia. NCP training was the most common for HAs at the higher level hospitals(50% had received this training); matron/sister/nursing inspectors (100%) and ANMs (58%) at district level hospitals; staff nurses (100%), medical officers (75%), AHWs (71%) and VHWs (67%) at PHCCs (70%); ANMs (70%), HA/Sr AHWs (69%), AHWs (60%) at HPs, and most staff (VHWs 65%, MCHWs 61% and AHWs 59%) at SHPs. IMCI training was not common among staff at higher level hospitals, however, it is common among staff at district level hospitals (100% of matron/sister/nursing inspectors and HA/Sr AHWs, 96% of ANMs, 84% of AHWs, and 73% of MOs); PHCCs (SNs and HA/Srs, AHWs 89%, VHWs 87%, AHWs 84%, and ANM s76%); HPs (80-98% in all positions) and SHPs (80-89% in all positions).

Intrauterine contraceptive devices (IUCD) training had been most common for matron/sister/nursing inspectors at the higher level hospitals (100%), staff nurses at district level hospitals (54%) and ANMs at PHCCs (63%). Training for implants was less common in all positions and all levels of facilities except ANMs at district level hospitals (46%). Similarly, training of USG (ultrasound) was less common in all facilities except for MOs at district level hospitals (47%). It is notable that none of the staff at higher level hospitals had received adolescent friendly training, but all matron/sister/nursing inspectors (100%), most HAs (70%) and MOs (60%) at district level hospitals, all MCHWs (100%), 74% of HAs/SrAHWs and AHWs (57%) at PHCCs, 55% of HAs/SrAHWs at HPs, and 36% of AHWs at SHPs had received adolescent friendly training.

Only six MOs at district level hospitals and one at higher level hospitals had received advanced SBA training. However, SBA training was common for matron/sister/nursing inspectors at district level (100%) and higher level hospitals (60%), staff nurses at district level hospitals (87%) and PHCCs (89%).

Training in operating theatre (OT) management and anaesthesia were less common in health facilities. Only three staff nurses and two ANMs at higher level hospitals, and four staff nurses, three ANMs and one matron/sister/nursing inspector at the district level hospital and two ANMs at PHCCs had received training in OT management. Similarly, only one each from staff nurse and HA/Sr. AHW at higher level hospitals and one matron/sister/nursing inspector and HA/Sr. AHW and two SN at district level hospital had received training on anaesthesia.

Table 8. 11: Staff currently in filled positions (excluding deputed out) who ever received training

	NCP (%)	IMCI (%)	IUCD (%)	Implant (%)	USG (%)	Adolescent friendly (%)	Advance SBA (%)	SBA (%)	OT management (%)	Anaesthetic (%)	Total staff (N)
Higher level hospitals:											
Medical Officer	7.7	3.8	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	26
Matron/Sister//Nursing inspector	0.0	0.0	100	0.0	0.0	0.0	0.0	60.0	0.0	0.0	5
Staff Nurse (SN)	9.1	12.1	3.0	12.1	0.0	0.0	0.0	28.8	4.5	1.5	66
Auxiliary Nurse Midwife (ANM)	9.5	9.5	4.8	9.5	0.0	0.0	0.0	0.0	9.5	0.0	21
Health Assistant (HA)/ Sr AHW	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	2
Auxiliary Health Workers (AHW)	16.7	16.7	0.0	0.0	0.0	0.0					12
Lab assistant/Lab technician	0.0	0.0	0.0	0.0	0.0	0.0					10
District level hospitals:											
Medical Officer	46.7	73.3	33.3	13.3	46.7	60	40.0	0.0	0.0	0.0	15
Matron/Sister//Nursing inspector	100	100	50.0	0.0	0.0	100	0.0	100	50.0	50.0	2
Staff Nurse (SN)	43.2	64.9	54.1	16.2	2.7	24.3	0.0	86.5	10.8	5.4	37
Auxiliary Nurse Midwife (ANM)	57.7	96.2	42.3	46.2	7.7	34.6	0.0	0.0	11.5	0.0	26
Health Assistant (HA)/ Sr AHW	50.0	100	10.0	20.0	0.0	60.0	0.0	0.0	0.0	10.0	10
Auxiliary Health Workers (AHW)	40.0	84.0	4.0	4.0	0.0	36.0					25
Lab assistant/Lab technician	16.7	22.2	0.0	0.0	0.0	16.7					18

Table 8.11: Staff currently in filled positions (excluding deputed out) who ever received training cont/…

	NCP (%)	IMCI (%)	IUCD (%)	Implant (%)	USG (%)	Adolescent friendly (%)	Advance SBA (%)	SBA (%)	OT management (%)	Anaesthetic (%)	Total staff (N)
PHCCs:											
Medical Officer	75	50	25	0	0.0	50.0	0.0	0.0	0.0	0.0	4
Staff Nurse (SN)	100	88.9	55.6	22.2	0.0	44.4	0.0	88.9	0.0	0.0	9
Auxiliary Nurse Midwife (ANM)	61	76.3	62.7	15.3	0.0	47.5	0.0	0.0	3.4	0.0	59
Health Assistant (HA)/ Sr AHW	59.3	88.9	0.0	22.2	0.0	74.1	0.0	0.0	0.0	0.0	27
Auxiliary Health Workers (AHW)	70.5	84.1	0.0	6.8	0.0	56.8					44
Lab assistant/Lab technician	30.0	20.0	0.0	0.0	0.0	0.0					20
Maternal Child Health Worker (MCHW)	0.0	100	0.0	0.0	0.0	100					1
Village Health Worker (VHW)	66.7	86.7	0.0	0.0	0.0	26.7					15
HPs:											
Auxiliary Nurse Midwife (ANM)	72.9	79.2	33.3	10.4	2.1	33.3	0.0	0.0	0.0	0.0	48
Health Assistant (HA)/ Sr AHW	69.0	97.6	0.0	9.5	0.0	54.8	0.0	0.0	0.0	0.0	42
Auxiliary Health Workers (AHW)	60.0	78.7	0.0	6.7	0.0	36.0					75
Maternal Child Health Worker (MCHW)	48.0	80.0	4.0	0.0	0.0	28.0					25
Village Health Worker (VHW)	58.0	80.0	2.0	2.0	2	20.0					50
SHPs:											
Auxiliary Nurse Midwife (ANM)	0	0	0	0	0	0	0.0	0.0	0.0	0.0	1
Auxiliary Health Workers (AHW)	59.4	89.1	0	1.6	0	35.9					64
Maternal Child Health Worker (MCHW)	61.2	89.8	2	0	0	14.3					49
Village Health Worker (VHW)	65.1	81.4	0	0	0	11.6					43

Source: STS facility questionnaire

Staff in temporary positions were less likely to have received training in NCP, IMCI, IUCD, Implant, USG, adolescent friendly, SBA and Advanced SBA, OT management and anaesthesia than staff in permanent positions (Table 8.12).

NCP and IMCI training were common across all levels. Most MCHWs at SHPs (80%), about 40% of MOs, 38% of AHWs and 37% of ANMs at PHCCs; 30% of MOs and 36% of ANMs at district hospitals and 22% of SNs at higher level hospitals had received NCP training. With regard to IMCI training, 80% of MCHWs at SHPs, 36% of AHWs at HPs, 50% of HA/Sr. AHWs at PHCCs; 33% MOs at district hospitals and 15% of SNs at higher level hospitals had received training.

Adolescent friendly training was one of the most common trainings for temporary staff, except at higher level hospitals and SHPs. AHWs at district level hospitals had received training in adolescent friendly service provision. Half of HAs/Sr. AHWs and a fifth of medical officers at PHCCs had received adolescent friendly training. At HP level, more than a fifth of ANMs and 9% of AHWs had received training of adolescent friendly service provision.

The only temporary staff who received advanced SBA training were 7% of medical officers at district hospitals, and 19% of staff nurses at higher level hospitals. With regard to IUCD training, only a small number of SNs at higher level hospitals, MOs at district level hospitals, ANMs at PHCCs, ANMs at HPs and ANMs at SHPs had received it. One in ten MOs at district level hospitals, one ANM at HPs and one ANM at SHPs had received training on implants. None of the staff currently in temporary positions at higher level hospitals and PHCCs had received training in implants and none of the staff currently in temporary positions at higher level hospitals had received training on USG. However, three MOs (10%) at district level hospitals and one AHW (4%) at PHCCs had received training of USG. No temporary staff had received training in anaesthesia.

Table 8. 12: Staff currently in temporary positions (includes deputed in/contract, excludes deputed out) who ever received training

	NCP (%)	IMCI (%)	IUCD (%)	Implant (%)	USG (%)	Adolescent friendly (%)	Advance SBA (%)	SBA (%)	OT management (%)	Anaesthetic (%)	Total staff (N)
Higher level hospitals:											
Medical Officer	13.8	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29
Staff Nurse (SN)	22.2	14.8	7.4	0.0	0.0	0.0	0.0	18.5	0.0	0.0	27
Auxiliary Nurse Midwife (ANM)	8.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	60
Auxiliary Health Workers (AHW)	0.0	0.0	0.0	0.0	0.0	0.0					24
District hospitals:											
Medical Officer	30	33.3	16.7	10.0	10.0	16.7	6.7	0	0.0	0.0	30
Staff Nurse (SN)	11.1	22.2	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	9
Auxiliary Nurse Midwife (ANM)	36	32	0.0	0.0	0.0	12	0.0	0.0	4.0	0.0	25
Health Assistant (HA)/ SrAHW	11.1	22.2	0.0	0.0	0.0	22.2					9
Auxiliary Health Workers (AHW)	21.4	21.4	0.0	0.0	0.0	17.9					28
Lab assistant/Lab technician	0	16.7	0.0	0.0	0.0	33.3					6
PHCCs											
Medical Officer	40.0	40.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	5
Auxiliary Nurse Midwife (ANM)	37.0	33.3	11.1	0.0	0.0	11.1	0.0	0.0	0.0	0.0	27
Health Assistant (HA)/ SrAHW	0.0	50.0	0.0	0.0	0.0	50					4
Auxiliary Health Workers (AHW)	37.5	25.0	0.0	0.0	4.2	12.5					24
Lab assistant/Lab technician	0.0	0.0	0.0	0.0	0.0	0.0					8
HPs:											
Auxiliary Nurse Midwife (ANM)	28.3	23.3	10.0	1.7	0.0	23.3	0.0	0.0	0.0	0.0	60
Health Assistant (HA)/ SrAHW	16.7	16.7	0.0	0.0	0.0	0.0					6
Auxiliary Health Workers (AHW)	22.7	36.4	0.0	0.0	0.0	9.1					22

Table 8.12: Staff currently in temporary positions (includes deputed in/contract, excludes deputed out) who ever received training cont/…

	NCP (%)	IMCI (%)	IUCD (%)	Implant (%)	USG (%)	Adolescent friendly (%)	Advance SBA (%)	SBA (%)	OT management (%)	Anaesthetic (%)	Total staff (N)
SHPs:											
Auxiliary Health Workers (AHW)	10.5	10.5	0.0	0.0	0.0	5.3					19
Maternal Child Health Worker (MCHW)	80.0	80.0	0.0	0.0	0.0	0.0					5
Village Health Worker (VHW)	14.3	14.3	0.0	0.0	0.0	0.0					7

Source: STS facility questionnaire

8.2.4 Turnover

Staff turnover varied by position and level of facility. Specialist general practitioners (MDGP) at district hospitals and AHWs at PHCCs were the positions that were most likely to have had more staff join than leave (Table 8.13). Medical officers, staff nurses and ANMs at PHCCs, and MCHWs at SHPs, were most likely to have more staff leave than join.

Table 8. 13: Staff turnover in the last fiscal year

	Number of staff who joined:							Number of staff who left:									Ratio of staff In / Out
	Joined as new staff		Transferred in		Contact renewed		Total	Retired		Transfer out		Contract ended		Left for other reasons		Total	
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	No.	%		
District level hospitals:																	
Obstetrician/gynaecologist	0	0.0	0	0.0	1	100	1	0	0.0	0	0.0	1	100	0	0.0	1	1
Specialist General Practitioner (MDGP)	1	33.3	1	33.3	1	33.3	3	0	0.0	0	0.0	1	100	0	0.0	1	3
Medical Officer (MO)	4	14.8	8	29.6	15	55.6	27	0	0.0	11	47.8	11	47.8	1	4.3	23	1.2
Staff Nurse (SN)	3	21.4	5	35.7	6	42.9	14	1	10.0	9	90.0	1	10.0	0	0.0	10	1.4
Auxiliary Nurse Midwife (ANM)	3	17.6	2	11.8	12	70.6	17	2	9.1	6	27.3	16	72.7	0	0.0	22	0.8
Health Assistant (HA)/ SrAHW	1	12.5	4	50.0	3	37.5	8	0	0.0	5	62.5	2	25.0	1	12.5	8	1
Auxiliary Health Workers (AHW)	5	35.7	3	21.4	6	42.9	14	0	0.0	5	35.7	9	64.3	0	0.0	14	1
Lab assistant/Lab technician	2	50.0	1	25.0	1	25.0	4	1	20.0	4	80.0	1	20.0	0	0.0	5	0.8
PHCCs:																	
Medical Officer (MO)	0	0.0	2	100	0	0.0	2	1	8.3	4	33.3	6	50.0	2	16.7	12	0.2
Staff Nurse (SN)	1	50.0	1	50.0	0	0.0	2	0	0.0	4	66.7	1	16.7	1	16.7	6	0.3
Auxiliary Nurse Midwife (ANM)	2	10.5	4	21.1	13	68.4	19	1	2.8	15	41.7	21	58.3	0	0.0	36	0.5
Health Assistant (HA)/ SrAHW	0	0.0	2	66.7	1	33.3	3	0	0.0	1	50.0	1	50.0	0	0.0	2	1.5
Auxiliary Health Workers (AHW)	4	28.6	3	21.4	7	50.0	14	0	0.0	4	66.7	2	33.3	0	0.0	6	2.3

Table 8.13: Staff turnover in the last fiscal year cont/…

	Number of staff who joined:							Number of staff who left:									Ratio of staff In / Out
HPs:																	
Auxiliary Nurse Midwife (ANM)	10	20.4	5	10.2	34	69.4	49	1	1.8	9	15.8	46	80.7	2	3.5	57	0.9
Health Assistant (HA)/ SrAHW	1	12.5	5	62.5	2	25.0	8	3	42.9	6	85.7	1	14.3	0	0.0	7	1.1
Auxiliary Health Workers (AHW)	4	21.1	8	42.1	7	36.8	19	1	7.1	6	42.9	8	57.1	0	0.0	14	1.4
SHPs:																	
Auxiliary Health Workers (AHW)	2	13.3	8	53.3	5	33.3	15	0	0.0	11	55.0	8	40.0	1	5.0	20	0.8
Maternal Child Health Worker (MCHW)	0	0.0	1	100	0	0.0	1	0	0.0	2	66.7	0	0.0	1	33.3	3	0.3
Village Health Worker (VHW)	2	40.0	1	20.0	2	40.0	5	4	80.0	1	20.0	2	40.0	2	40.0	5	1

Source: STS facility questionnaire

8.2.5 ATTENDANCE

For each of the surveyed health facilities, enumerators checked the staff attendance register for the last fiscal year. All levels of government facilities keep staff attendance records in the same format: for each employee it records the number of days in attendance at the facility, on field supervision, in training, on deputation, and not working because of public holidays or on leave. Table 8.14 presents the attendance for selected staff at each level. Percentages are calculated from all the days from all the staff of the relevant staff group. Staff attendance at facilities tended to decrease with decreasing level of facility. All staff at higher level facilities (with the exception of Anaesthesia Assistants) spent at least 70% of their time in attendance at the facility, while at district hospitals staff spent at least 60%. Staff at higher level hospitals were least likely to be deputed. VHWs and MCHWs at SHPs were most likely to be deputed, spending a quarter of their time deputed. Staff at higher level hospitals were least likely to spend time on training.

Table 8. 14: Breakdown of attendance by type of provider

	% of time spent …					
	In attendance	**On field supervision**	**In training**	**On deputation**	**On public holidays**	**On leave**
Higher level hospitals:						
Obstetrician/gynaecologist	95.1	0.0	0.0	1.9	1.6	1.4
Paediatrician	92.1	0.0	0.0	0.0	1.4	6.6
Medical Officer	71.3	0.0	0.6	0.2	11.8	7.1
Sister/Matron	80.1	0.0	3.2	0.6	7.5	8.6
Staff Nurse	80.5	0.0	1.5	1.1	1.3	14.7
Auxiliary Nurse Midwife	86.6	0.0	1.1	0.2	2	9.5
HA/Sr AHW	79.8	0.0	0.5	1.5	10.2	8.0
AHW	82.8	0.0	0.2	0.2	8.1	8.5
Lab assistant/lab technician	83.8	0.0	0.5	0.3	7.3	8.0
Anaesthesia Assistant	56.4	0.0	0.0	0.0	10.6	33.0
District hospitals:						
Medical Officer	60.5	0.5	5.7	10.9	5.8	13.5
Staff Nurse	66.6	0.1	5.2	6.4	5.0	14.6
Auxiliary Nurse Midwife	67.2	0.1	5.9	7.1	7.4	10.2
HA/Sr AHW	65.6	0.2	1.8	10.0	6.7	13.6
AHW	76.6	0.7	0.8	6.7	7.6	7.0
Lab assistant/lab technician	64.4	0.0	3.1	10.4	11.6	8.2
PHCCs:						
Medical Officer	41.4	1.1	8.6	13.9	13.9	11.8
Staff Nurse	53.0	0.0	5.8	15.1	15.2	9.6
Auxiliary Nurse Midwife	62.2	0.0	4.1	6.2	14.4	10.7
HA/Sr AHW	53.5	1.7	5.0	13.6	15.3	9.0
AHW	65.1	0.3	3.1	7.6	14.3	6.1
Lab assistant/lab technician	60.3	0.0	5.2	7.8	17.2	6.9

Table 8.14: Breakdown of attendance by type of provider cont/…

	% of time spent …					
	In attendance	**On field supervision**	**In training**	**On deputation**	**On public holidays**	**On leave**
HPs:						
Auxiliary Nurse Midwife	61.8	0.1	5.3	10.0	17.2	3.9
HA/Sr AHW	52.2	1.6	5.1	14.0	17.3	8.2
AHW	57.2	0.4	3.7	12.3	17.1	6.5
SHPs:						
AHW	56.8	0.4	4.6	11.2	17.7	6.5
MCHW	49.4	0.9	2.1	24.2	17.1	5.8
VHW	46.9	0.9	2.1	25.9	17.4	4.5

Source: STS facility questionnaire

Note: the total working days is sum of daysfrom all staf

8.2.6 DEMOGRAPHIC CHARACTERISTICS OF STAFF

Table 8.15 presents the breakdown of the selected facility staff by sex. The positions that are largely filled by males are obstetricians, paediatricians, medical officers, health assistants, AHWs, VHWs and laboratory technicians/assistants. The positions largely filled by women are the nursing positions - sisters/matrons, staff nurses, ANMs and MCHWs.

Table 8. 15: Breakdown of staff by sex

	Male (%)	Female (%)	Total staff (N)
Higher level hospitals:			
Obstetrician/gynaecologist	100		1
Paediatrician	100		1
Medical Officer	83.3	16.7	84
Sister/Matron		100	5
Staff Nurse		100	90
Auxiliary Nurse Midwife		100	77
HA/Sr AHW	75.0	25.0	12
AHW	89.2	10.8	37
Lab assistant/lab technician	87.5	12.5	16
District hospitals:			
Medical Officer	79.7	20.3	69
Staff Nurse	1.9	98.1	54
Auxiliary Nurse Midwife	1.4	98.6	69
HA/Sr AHW	86.1	13.9	36
AHW	79.2	20.8	53
Lab assistant/lab technician	97.1	2.9	34
PHCCs:			
Medical Officer	95	5.0	20
Staff Nurse		100	14
Auxiliary Nurse Midwife	1.7	98.3	120
HA/Sr AHW	91.8	8.2	49
AHW	93.4	6.6	61
Lab assistant/lab technician	87.5	12.5	32
HPs:			
Auxiliary Nurse Midwife	1.4	98.6	141
HA/Sr AHW	91.2	8.8	68
AHW	91.0	9.0	100
SHPs:			
AHW	92.9	7.1	84
MCHW	3.7	96.3	54
VHW	89.1	10.9	55

Source: STS facility questionnaire

Table 8.16 shows the breakdown of staff by caste/ethnicity. It should be noted that the analysis does not take into account the different proportions of the caste/ethnic groups in the total population. See Annex 3.1 for the seven categories of caste/ethnic groups used within this study. The data show that the selected health facility staff cadre largely came from the Brahmin/Chhetri caste especially for higher level facilities and more senior positions. The representation from Dalits and Muslims at health facilities was very low.

Table 8. 16: Breakdown of staff by caste/ethnicity

	Brahmin /Chhetri (%)	Tarai/ma-dhesi other castes (%)	Dalits (%)	Newar (%)	Janajati (%)	Muslim (%)	Other (%)	Total staff (N)
Higher level hospitals:								
Obstetrician/gynaecologist	100	0.0	0.0	0.0	0.0	0.0	0.0	1
Paediatrician	100	0.0	0.0	0.0	0.0	0.0	0.0	1
Medical Officer	56.0	27.4	2.4	4.8	4.8	2.4	2.4	84
Sister/Matron	80.0	0.0	0.0	0.0	20.0	0.0	0.0	5
Staff Nurse	65.6	4.4	2.2	8.9	18.9	0.0	0.0	90
Auxiliary Nurse Midwife	66.2	7.8	1.3	3.9	20.8	0.0	0.0	77
HA/Sr AHW	83.3	0.0	0.0	8.3	8.3	0.0	0.0	12
AHW	51.4	18.9	0.0	2.7	27.0	0.0	0.0	37
Lab assistant/lab technician	56.3	25.0	0.0	6.3	12.5	0.0	0.0	16
Anaesthesia Assistant	100	0.0	0.0	0.0	0.0	0.0	0.0	1
District hospitals:								
Medical Officer	66.7	7.2	1.4	15.9	5.8	1.4	1.4	69
Staff Nurse	74.1	1.9	3.7	3.7	16.7	0.0	0.0	54
Auxiliary Nurse Midwife	36.2	2.9	1.4	14.5	44.9	0.0	0.0	69
HA/Sr AHW	63.9	11.1	0.0	8.3	16.7	0.0	0.0	36
AHW	50.9	5.7	15.1	3.8	22.6	1.9	0.0	53
Lab assistant/lab technician	55.9	11.8	5.9	11.8	14.7	0.0	0.0	34
PHCCs:								
Medical Officer	55.0	25.0	10.0	5.0	5.0	0.0	0.0	20
Staff Nurse	78.6	0.0	0.0	14.3	7.1	0.0	0.0	14
ANM	58.3	3.3	4.2	7.5	26.7	0.0	0.0	120
HA/Sr AHW	57.1	18.4	0.0	2.0	20.4	2.0	0.0	49
AHW	49.2	16.4	3.3	6.6	18.0	4.9	1.6	61
Lab assistant/lab technician	84.4	9.4	0.0	0.0	6.3	0.0	0.0	32

Table 8.16: Breakdown of staff by caste/ethnicity cont/…

HPs:								
ANM	57.4	5.7	2.8	3.5	29.1	0.0	1.4	141
HA/Sr AHW	73.5	10.3	1.5	4.4	5.9	2.9	1.5	68
AHW	61.0	15.0	1.0	2.0	20.0	1.0	0.0	100
SHPs:								
ANM	68.0	8.0	0.0	8	16	0.0	0.0	25
AHW	59.5	20.2	1.2	7.1	11.9	0.0	0.0	84
MCHW	59.3	13.0	3.7	1.9	20.4	0.0	1.9	54
VHW	58.2	20.0	0.0	7.3	12.7	1.8	0.0	55

Source: STS facility questionnaire

8.3 KEY FINDINGS

Sanctioned / filled positions

- Overall 85% of the 174 sanctioned positions at the two higher level hospitals were filled. It is encouraging to note that all ANM, HA, AHW and laboratory assistant/technician positions were filled. Similarly, most staff nurse positions (84%) and Medical Officers (81%) were filled, along with 67% of Obstetrician/Gynaecologists and 63% sister/matron/nursing Inspectors. None of the MDGP positions and only a third (33%) of the Anaesthestists positions were filled.
- Most ANMs (93%) and laboratory assistant/technician (90%) positions at the district level hospitals were filled. However, less than two thirds of the Medical Officer (63%) positions were filled.
- Overall, only 64% of the 282 sanctioned positions at PHCCs were filled. The percentage of these sanctioned positions that were filled varied by position. Most HAs were filled (90%) but only 22% of sanctioned Medical Officer positions were filled.
- Overall, 75% of the 216 sanctioned positions at SHPs were filled. The percentage of these sanctioned positions that were filled varied by position. Most AHW positions were filled (90%),but only 71% of MCHWs, and less than two-thirds of VHWs (63%).
- Three quarters of staff at health facilities mentioned that the staff shortages affected service delivery. Staff at about half of the health facilities reported safe motherhood services affected by staff shortages. The commonly reported services affected due to staff shortages at lower level facilities (PHCCs, HPs and SHPs) were immunization, PHC-ORC, and OPD, while nursing services and surgery reportedly suffered at hospitals.

Service contract

- The number of staff in position is higher than the number sanctioned in higher level (168%) and district level hospitals (140%) and lower than the number of sanctioned positions in lower level facilities (PHCCs 83%, HPs 93% and SHPs 87%). In the higher level hospitals about 5% of sanctioned positions were deputed in while 80% of sanctioned positions were contracted staff. At district hospitals 58% of sanctioned positions were filled by contracted and 36% of sanctioned positions were recruited by HDCs/HFOMCs. At PHCCs, only about a fifth of sanctioned positions were contracted while 12% of sanctioned positions were filled by HDCs/HFOMCs. With regards to HPs, 23% and 11% of positions were filled by contracted and HDCs/HFOMCs respectively. Similarly, 12% and 9% of staff were recruited through contract and HDCs/HFOMCs respectively in sampled SHPs.

Training

- Permanent staff were more likely to have received training than temporary staff.
- NCP training was most common for matron/sister/nursing inspectors and ANMs at district level hospitals; staff nurses, medical officers, AHWs and VHWs at PHCCs; ANMs and AHWs at HPs, and most of the staff at SHPs. IUCD training was most common for matron/sister/nursing inspectors at the higher level hospitals, staff nurses at district level hospitals and ANMs at PHCCs. Training in implants was less common for all positions and all levels of facilities, except for ANMs at district level hospitals.

Turnover

- Staff turnover varied by position and level of facility. Specialist general practitioners (MDGP) at district hospitals and AHWs at PHCCs were the positions that were most likely to have had more staff join than leave (Table 8.14). Medical officers, staff nurses and ANMs at PHCCs and MCHWs at SHPs were most likely to have more staff leave than join.

Attendance

- Staff attendance at facilities tended to decrease with decreasing level of facility. Staff at higher levels hospitals were least likely to spend time on training or be deputed, while VHWs and MCHWs at SHPs were most likely to be deputed, spending a quarter of their time deputed.

Demographic characteristics

- There is a clear split in the sex of the staff depending on the position. The positions that are largely filled by males are obstetricians, paediatricians, medical officers, health assistants, AHWs, VHWs and laboratory technicians/assistants. The positions largely filled by women are the nursing positions (sisters/matrons, staff nurses, ANMs) and MCHWs.
- Health facility staff largely come from the Brahmin/Chhetri caste especially for higher level facilities and more senior positions. The representation from Dalits and Muslims is low.

CHAPTER 9 -DRUG SUPPLY AND STORAGE

9.1 INTRODUCTION

The supply and storage of drugs enhance the provision of good quality services and are a core part of any health system; monitoring this is central to the implementation of NHSP-2.This chapter assesses the drug supply and storage at different levels of health facilities. It provides information on drug supply and storage, including place of storage and the availability of a functioning refrigerator. Presence of expired drugs and lack of drugs are also explored, along with payment by clients. Annex 4.1 lists the essential drugs by level of facility.

9.2 RESULTS

DRUG SUPPLY AND STORAGE	STS 2012	95% CI
% of facilities with drugs stored in a cool and dry place	29.3	21.0-39.3
% of facilities with drugs stored as per first expired, first out (FEFO) principles	84.4	76.3-90.1
% of PHCCSs with at least one fridge with guaranteed power 24/7	48.4	40.2-56.7
% of maternity clients who paid for drugs	54.3	37.9-69.9

9.2.1 STORAGE

An efficient management and storage system for drugs is crucial for effective and efficient delivery of health services. Whilst some drugs (such as oxytocin) and some vaccines require refrigeration, most do not. However, even drugs that do not require refrigeration still need to be stored at room temperature, protected from exposure to direct sunlight, dampness or water, and vermin such as rats. The Service Tracking Survey (STS) 2012 assessed the storage of drugs, including the maintenance of a cold-chain, for the essential drugs across different levels of facilities.

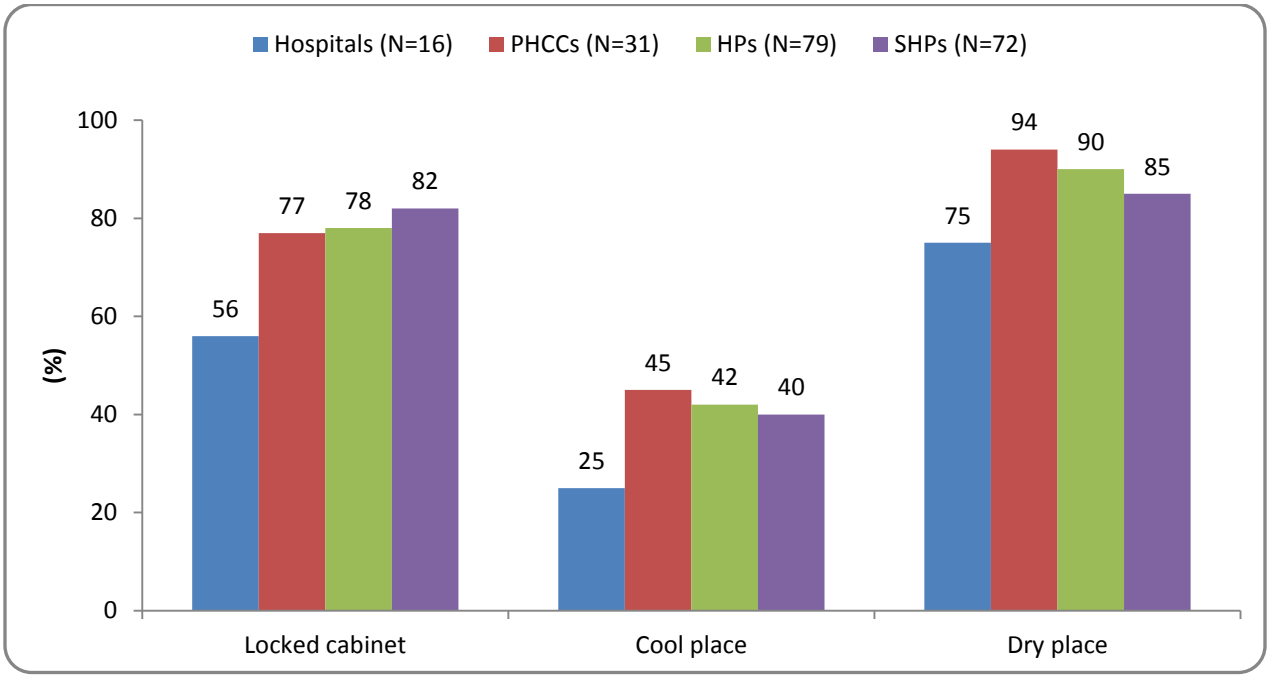
Table 9.1 and Figure 9.1illustrate the storage of drugs that do not require cold-chain management, disaggregated by facility level. Storing drugs in a locked cabinet and a cool and dry place is important to maintain the quality and efficacy of the drugs and to prevent theft. All hospitals stored drugs in a locked room, however a small percentage of the Primary Health Care Centres (PHCCs) (3%), Health Posts (HPs) (1%) and Sub Health Posts (SHPs) (4%) kept drugs in an unlocked room. More than three-quarters of lower level facilities kept the drugs in a locked cabinet (82% of SHPs, 79% of HPs and 77% of PHCCs), however this was less common in hospitals, with just 56%doing so. Similarly, storing drugs in a cool place (measured in STS 2012 as below 25^{O}C) was less common at hospitals (25%) than for lower level facilities (45% of PHCCs, 42% of HPs and 39% of SHP). The STS 2012 was conducted from August to October (Bhadra – Kartik) and many health facilities in the Terai districts were unable to meet the criterion at that time of year. Likewise hospitals were less likely to store drugs in a dry place (75%) than PHCCs (94%), HPs (90%) and SHPs (85%). Furthermore, hospitals (38%) were more likely to store drugs directly on the floor than lower level facilities (19% of PHCCs, 8% of HPs, 10% of SHPs). Hospitals may have poorer storage conditions due to the higher client load and more frequent use of drugs (and hence a larger stock of drugs), but this requires further exploration.

Table 9. 1: Storage of drugs that do not require refrigeration, by facility level

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Storage of drugs				
In a locked room or space	100	96.8	98.7	95.8
In an unlocked room or space	0.0	3.2	1.3	4.2
Total facilities (N)	**16**	**31**	**79**	**72**
Place of drug storage				
Directly on the floor	37.5	19.4	7.6	9.7
On a raised platform	87.5	87.1	92.4	90.3
On shelves	87.5	93.5	89.9	80.6
In an unlocked cabinet	12.5	51.6	46.8	37.5
In a locked cabinet	56.3	77.4	78.5	81.9
Exposed to direct sunlight	0.0	3.2	0.0	1.4
Stored in cool place	25.0	45.2	41.8	38.9
Exposed to damp/water	0.0	3.2	7.6	12.5
Stored in a dry place	75.0	93.5	89.9	84.7
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Figure 9. 1 Storage of drugs that do not require refrigeration



Source: STS facility questionnaire

The storage of drugs that require cold-chain maintenance is summarized in Table 9.2. Lower level facilities were less likely to have a functional refrigerator than hospitals. All hospitals had at least one functional refrigerator, but less than three-quarters of PHCCs (71%), just over a half of HPs(51%) and just below one-seventh of the SHPs (14%) did.

However, despite more than half (56%) of the hospitals having four or more functioning refrigerators, less than two-thirds (63%) reported that they had an adequate number of refrigerators to store all the

drugs that required cold-chain maintenance. Similarly, just over half of PHCCs (58%), just over one-third of HPs (35%), and below one-seventh of SHPs (14%) reported that they had sufficient refrigeration to maintain all of the drugs that required a cold-chain system. All facilities where a fridge was unavailable to store drugs that require a cold chain used an ice-box to maintain drug temperature.

Continuously maintaining an appropriate refrigerated temperature is important for the efficacy of some cold-chain drugs. However, even where a refrigerator or icebox was available, not all of the facilities were able to maintain an appropriate temperature level. The temperature of the refrigerator was appropriate in just three-quarters (75%) of the hospitals. Furthermore, just over two-thirds (69%) of the hospitals that were using an icebox retained the appropriate temperature. A similar pattern was observed in PHCCs and HPs, with just two-thirds of the facilities able to maintain the appropriate temperature either in a refrigerator or in an icebox. The situation was worst in SHPs where only 40% of SHPs had a refrigerator, and only 60% of those using an ice box maintained an adequate temperature.

Table 9. 2: Storage of drugs that require cold-chain/refrigeration

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Functional refrigerators				
None	0.0	29.0	62.0	86.1
1	6.3	29.0	36.7	13.9
2	12.5	32.3	1.3	0.0
3	25.0	6.5	0.0	0.0
4+	56.3	3.2	0.0	0.0
Total facilities (N)	**16**	**31**	**79**	**72**
Availability of refrigerators to store all drugs that require cold-chain	62.5	58.1	35.4	13.9
Storage place of drugs that require cold-chain where refrigerator is not available				
Use of ice-box		100	100	100
Total facilities without fridge (N)		**3**	**43**	**62**
Temperature				
Temperature of refrigerator-ok	75.0	77.3	76.7	40.0
Temperature of icebox-ok	68.8	68.2	73.3	60.0
Total facilities requiring cold-chain (N)	**16**	**22**	**30**	**10**

Source: STS facility questionnaire

Expired drugs

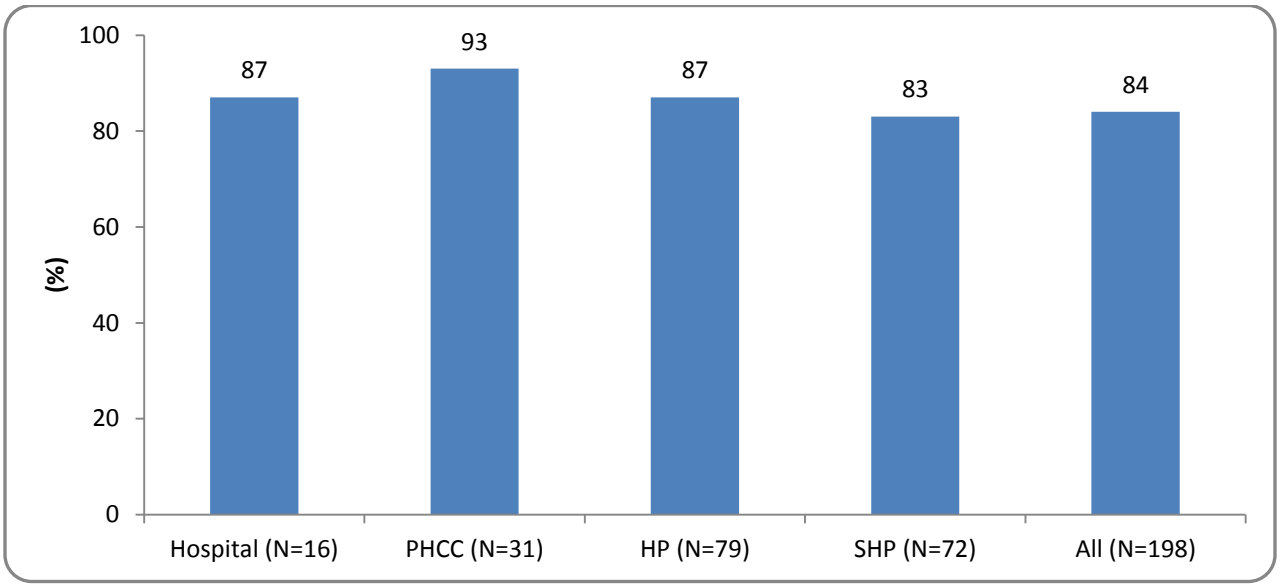
The GoN stipulate the use of the "first expiry, first out" (FEFO) system to regulate the storage of medicines in the health facilities. Table 9.3 shows that hospitals were the least compliant (38%) and PHCCs the most compliant (48%) in storing all drugs as per the FEFO approach. Notably, 17% of SHPs and 13% of hospitals and HPs did not practice the FEFO approach at all.

Table 9. 3: Storage of drugs in first expired first out (FEFO) approach

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
All	37.5	48.4	44.3	40.3
Most	50.0	25.8	30.4	19.4
Some	0.0	19.4	12.7	22.2
None	12.5	6.5	12.7	16.7
Enumerator could not observe	0.0	0.0	0.0	1.4
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Figure 9. 2: Percentage of facilities with 'most' or all drugs stored using FEFO principle



Source: STS facility questionnaire

In addition to storing drugs by their expiry date, it is also important to dispose of drugs as soon as they expire in order to prevent misuse. The presence of expired drugs in stock at the time of visit is shown in Table 9.4. Around one fifth of hospitals (19%) and PHCCs (23%) and a third of HPs (33%) and SHPs (33%) had expired drugs in stock at the time of visit. The expired drugs most commonly in stock across all levels of facilities were oxytocin, ferrous sulphate, amoxycilin, magnesium sulphate, gentamycin, and Vitamin A. HPs and SHPs were more likely to have expired drugs in stock at the time of visit. Over one in ten of HPs (11%) and one-fifth of SHPs (20%) with birthing centres had expired oxytocin injections in stock at the time of visit. Similarly, one-fifth of SHPs had both expired magnesium sulphate (20%) and expired gentamycin injections in stock.

Table 9. 4: Drugs most likely to be stored past expiry date at time of visit

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Oxytocin Injection, 10 IU in 1 ml ampoule*	0.0	0.0	10.9	20.0
Magnesium sulphate Injection, 1 gm/2ml (50 % W/V)*	0.0	3.6	5.6	20.0
Gentamycin inj. 80mg/2ml*	6.3	0.0	0.0	20.0
Ferrous salt + folic acid cap/tab 60+0.4 mg.	6.3	0.0	8.1	9.1
Chloramphenicol 1% eye applicap	0.0	3.4	1.4	7.6
Compound solution of Sodium lactate (Ringer's L)	0.0	0.0	1.4	7.6
Amoxycillin cap/tab 250 mg	0.0	0.0	10.8	6.1
Metronidazole cap/tab 200mg.	0.0	0.0	2.7	6.1
Vitamin A cap/tab 200,000IU	6.3	3.4	5.4	4.5
Albendazole cap/tab 400 mg	0.0	0.0	2.7	4.5
Amoxycillin disp tab 125 mg.	0.0	6.9	6.8	3.0
Sulfamethoxazole + Trimethoprim cap/tab 100/20 mg.	6.3	0.0	6.8	3.0
Providone iodine 5% solution	0.0	6.9	5.4	1.5
Paracetamol cap/tab 500mg.	0.0	3.4	4.1	1.5
Depo-provera	0.0	0.0	2.7	1.5
Gamma benzene hexachloride 1% lotion	0.0	0.0	1.4	1.5
Hyoscine butylbromide cap/tab 10 mg.	0.0	0.0	1.4	1.5
Zinc sulphate 20 mg	6.3	0.0	8.1	0.0
Oral Rehydration Solution (ORS)	0.0	0.0	5.4	0.0
Aluminium hydroxide + Magnesium hydroxide tab 250 mg.	0.0	0.0	4.1	0.0
Vaccine DPT, HepB, Hip (pentavalent) vial	0.0	0.0	3.4	0.0
Ciprofloxacin cap/tab 250 mg.	0.0	0.0	1.4	
Any expired drugs in the stock at the time of visit	18.8	22.6	32.9	33.3
Total facilities (N)	**16**	**31**	**79**	**72**

** the percentage for HPs and SHPs is based on the facilities having birthing centre*

Source: STS facility questionnaire

In addition to assessing which drugs were in stock past their expiry date, providers were also asked which drugs they most commonly had problems with in regards to being past their expiry date. Providers from 25% of hospitals, 48% of PHCCs, 54% of HPs and 61% of SHPs reported that they had experienced problems with expired drugs during the last fiscal year. The drugs most commonly reported to be stored past their expiry date included ferrous sulphate, amoxicillin, and gentamycin (Table 9.5). HPs and SHPs seemed to have the biggest problems with drugs being kept past their expiry date based on providers' responses, reflecting the stock outs at the time of visit in Table 9.4.

Table 9. 5: Drugs most likely to be stored past expiry date during last fiscal year, as reported by provider

	Hospital (%)	PHCCs (%)	HPs (%)	SHPs (%)
Provider reported drugs were stored past expiry date in last fiscal year	25.0	48.4	54.4	61.1
Total facilities (N)	**16**	**31**	**79**	**72**
Drugs most likely to be stored past expiry date:				
Tab Ferrous sulphate	50.0	40.0	25.6	40.9
Tab Amoxycillin 250 mg	25.0	6.7	16.3	6.8
Cap. Amoxiciilin	0.0	6.7	11.6	9.1
Inj. Gentamycin	0.0	0.0	11.6	4.5
ORS/Relyte	0.0	6.7	7.0	4.5
Tab Cotrim	25	6.7	11.6	9.1
Tab Metronidazole	0.0	0.0	4.7	9.1
Chloramphenicol eye applicab	0.0	6.7	4.7	4.5
Tetracycline eye ointment	0.0	6.7	7.0	2.3
Inj. Oxytocin	0.0	0.0	9.3	2.3
Tab. Zinc sulphate	25.0	0.0	7.0	2.3
Magnesium sulphate	25.0	0.0	7.0	2.3
Inj. Paracetamol	0.0	0.0	9.3	2.3
Syp. Metronidazole	0.0	13.3	2.3	2.3
Inj. Aminophyllin	0.0	0.0	4.7	4.5
Ringer's Lactate (RL)	0.0	0.0	2.3	6.8
Syp. Metronidazole (200mg)	0.0	6.7	2.3	2.3
Gamma benzene lotion	0.0	0.0	4.7	2.3
Povidine iodine solution	0.0	0.0	2.3	4.5
Syp. Paracetamol	0.0	0.0	4.7	2.3
Retinol (Vitamin A)	0.0	0.0	2.3	4.5
Syp. Metronidazole (100 mg)	0.0	13.3	0.0	2.3
Tab. Amoxycilin 125 mg	0.0	6.7	4.7	0.0
Syp. Cotrime/ Bactrol	0.0	6.7	2.3	2.3
Cap .Tetracycline	0.0	0.0	2.3	2.3
Tab Albendazole	0.0	0.0	2.3	2.3
Clove oil	0.0	0.0	2.3	2.3
Ciprofloxacin eye/ear drops	0.0	6.7	2.3	0.0
Tab. Hyoscine butylbromide	0.0	0.0	2.3	2.3
Tab Paracetamol	0.0	6.7	2.3	0.0
Tab. Aluminium hydroxide + Magnesium hydroxide	0.0	0.0	2.3	0.0
Scabion lotion	0.0	0.0	0.0	2.3
Cap. Amoxycilin 500mg	0.0	0.0	0.0	2.3
Inj. Lignocaine	0.0	0.0	2.3	0.0
Tab. Rifampicine	0.0	0.0	2.3	0.0
Tab. Isoniazide	0.0	0.0	2.3	0.0
Tab. Ciprofloxacin	0.0	0.0	2.3	0.0
Dexomethasone	0.0	0.0	2.3	0.0
Pills (family planning)	0.0	0.0	2.3	0.0
Tab. Chlorphenaramine	0.0	0.0	2.3	0.0
Inj. Metoclorpromide	25.0	0.0	0.0	0.0
Tab. Cotrim 960 mg	0.0	6.7	0.0	0.0
Syp. Chloramphenicol	0.0	0.0	0.0	2.3
Ciprofloxacin Eye ointment	0.0	6.7	0.0	0.0
Total facilities who experienced drugs stored past expiry date in last fiscal year (N)	**4**	**15**	**43**	**44**

Source: STS facility questionnaire

9.2.2 AVAILABILITY

As directed by Nepal's interim constitution, the Ministry of Health and Population (MoHP) is committed to providing free health services as defined in the Free Health Care Policy (FHCP). According to this policy, 25 essential drugs in SHPs, 35 essential drugs in HPs and PHCCs, and 40 essential drugs in up to 25 bedded hospitals should be provided to clients free of cost (see Annex 4.1). The supply of essential drugs to different levels of health facilities is made through different channels. Of the total drug budget LMD spends 70%, RHDs 10% and DHOs 20%. Funds are allocated to Districts on the basis of drug utilization and facility-level morbidity status. The Logistic Management Division (LMD) also carries out procurement at the central level and sends drugs in bulk to Regional Medical Stores (RMS). The RMSs supply the drugs to the Districts as per central level instruction. A stock of drugs is kept as a buffer in the District stores and the rest is sent to facilities. Despite the provision of a central supply, and local-level purchasing of essential drugs, the health facilities still face stock-outs.

Experience of stock-out

Table 9.6 shows the percentage of facilities that experienced stock-outs of essential drugs during the last fiscal year by type of drug and level of facility. Most facilities reported experiencing stock-outs in the last fiscal year, most commonly at PHCCs (87%), followed by SHPs (79%) and HPs (75%), and least commonly at hospitals, but still reported by nearly two thirds (63%). Among these, the drugs most commonly out of stock were ferrous sulphate and folic acid, hyoscinebutyl bromide and Amoxycillin at all level of facilities. Stock-outs of drugs tended to be lower at hospitals.

Table 9. 6: Experience of stock-outs of essential drugs at health facilities during the last fiscal year

	Hospital (%)	PHCCs (%)	HPs (%)	SHPs (%)
Experienced a stock out in the last fiscal year	62.5	87.1	74.7	79.2
Total facilities (N)	**16**	**31**	**79**	**72**
Drugs that stocked-out in the last fiscal year				
Ferrous sulphate + folic acid cap/tab 60+0.4 mg.	40.0	74.1	76.3	75.4
Hyoscine butyl bromide cap/tab 10 mg.	50.0	85.2	71.2	70.2
Amoxycillin disp tab 125 mg.	60.0	55.6	61.0	75.4
Aluminium hydroxide + Magnesium hydroxide tab 250 mg.	30.0	77.8	62.7	64.9
Chloramphenicol 1% eye applicap	20.0	44.4	64.4	61.4
Gamma benzene hexachloride 1% lotion	10.0	44.4	64.4	57.9
Zinc sulphate 20 mg	40.0	63.0	52.5	52.6
Sulfamethoxazole + Trimethoprim cap/tab 100/20 mg.	70.0	48.1	45.8	57.9
Amoxycillin cap/tab 250 mg	30.0	37.0	47.5	56.1
Providone iodine 5% solution	20.0	33.3	37.3	47.4
Oral Rehydration Solution (ORS)	60.0	48.1	23.7	43.9
Compound solution of Sodium lactate (Ringer's L)	30.0	29.6	30.5	43.9
Metronidazole cap/tab 200mg.	10.0	18.5	23.7	42.1
Ciprofloxacin cap/tab 250 mg.	40.0	51.9	40.7	
Gentamycin inj*. 80mg/2ml	10.0	33.3	45.8	8.8
Oxytocin Injection*, 10 IU in 1 ml ampoule	30.0	44.4	32.2	3.5
Albendazole cap/tab 400 mg	20.0	25.9	13.6	26.3
Magnesium sulphate Injection*, 1 gm/2ml (50 % W/V)	30.0	25.9	28.8	8.8
Paracetamol cap/tab 500mg.	10.0	14.8	23.7	21.1
Vitamin A cap/tab 200,000IU	10.0	7.4	10.2	17.5
Depo-provera	0.0	11.1	5.1	14.0
Vaccine DPT, HepB, Hip (pentavalent) vial	0.0	7.4	5.1	0.0
Total health facilities that experienced a stock-out (N)	**10**	**27**	**59**	**57**

Source: STS facility questionnaire; the percentage for HPs and SHPs is based on the facilities having birthing centre*

Frequency and duration of stock-outs in last fiscal year

Table 9.7 shows the frequency of stock-outs of essential drugs across different levels of health facilities during the last fiscal year. Altogether, 22 essential drugs were out of stock at least once in the last fiscal year, calculated for each drug from those facilities that experienced at least one stock-out. For most of the drugs SHPs tended to have a higher number of stock-outs in comparison to other facilities, however the pentavalent vaccine (DPT, Hep B, Pentavalent) was out of stock 12 times in one year in PHCCs and 11 times in HPs.

Table 9. 7: Number of stock-outs of essential drugs in last fiscal year

	Hospital			PHCC			HP			SHP		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Albendazole cap/tab 400 mg	1	2	2	1	3	2	1	2	2	1	5	2
Aluminium hydroxide + Magnesium hydroxide tab 250 mg.	1	1	1	1	4	2	1	4	2	1	4	2
Amoxycillin cap/tab 250 mg	1	1	1	1	3	1	1	3	1	1	4	2
Amoxycillin disp tab 125 mg.	1	1	1	1	3	2	1	3	1	1	5	2
Chloramphenicol 1% eye applicap	1	2	2	1	3	2	1	3	1	1	4	2
Ciprofloxacin cap/tab 250 mg.	1	2	1	1	4	1	1	4	1			
Depo-provera				1	2	1	1	2	1	1	2	1
Ferrous salt + folic acid cap/tab 60+0.4 mg.	1	2	1	1	5	2	1	5	2	1	7	2
Gamma benzene hexachloride 1% lotion	3	3	3	1	5	2	1	4	2	1	5	2
Hyoscine butylbromide cap/tab 10 mg.	1	2	1	1	6	2	1	5	2	1	4	2
Metronidazole cap/tab 200mg.	1	1	1	1	2	1	1	4	2	1	5	2
Oral Rehydration Solution (ORS)	1	2	1	1	5	2	1	4	2	1	7	2
Paracetamol cap/tab 500mg.	1	1	1	1	2	1	1	2	1	1	5	2
Providone iodine 5% solution	1	3	2	1	2	1	1	3	1	1	6	2
Sulfamethoxazole + Trimethoprim cap/tab 100/20 mg.	1	2	1	1	3	2	1	4	1	1	6	2
Vitamin A cap/tab 200,000IU	1	1	1	1	1	1	1	2	1	1	2	1
Zinc sulphate 20 mg	1	1	1	1	3	1	1	3	1	1	5	2
Vaccine DPT, HepB, Hip (pentavalent) vial				1	12	7	1	11	4			
Gentamycin inj*. 80mg/2ml	1	1	1	1	4	2	1	3	1	1	1	1
OxytocinInjection*, 10 IU in 1 ml ampoule	1	1	1	1	5	2	1	4	1	1	3	2
Magnesium sulphate Injection*, 1 gm/2ml (50 % W/V)	1	2	1	1	2	1	1	3	1	1	1	1
Compound solution of Sodium lactate (Ringer's L)	1	3	2	1	5	2	1	12	2	1	3	1
Total facilities that experienced stock-out (N)	**10**			**27**			**59**			**57**		

*Source: STS facility questionnaire; * the percentage for HPs and SHPs is based on the facilities having birthing centre*

Table 9.8 presents the total number of days of stock-outs for each drug in the last fiscal year, calculated for each drug from facilities experiencing at least one stock-out. The table shows that on average, across all levels, magnesium sulphate was out of stock for 66 days for hospitals, 69 days for PHCCs, 60 days for HPs, and 80 days for SHPs having birthing centres. The data also shows the minimum and maximum number of days of stock-out and for some the drug which is out of stock for the entire year.

The essential drugs that were out of stock for the most number of days, given at least one stock-out occurred, were Sulfamethoxazole + Trimethoprim, Folic Acid, Gentamycin, Amoxycillin, Gamma Benzene Hexachloride, Ciprofloxacin, Ringer Lactate, Hyoscine butyl Bromide, Chloramphenicol and Magnesium Sulphate.

Table 9. 8: Number of days that essential drugs had stock-outs

	Hospital			PHCC			HP			SHP		
	First quartile	Median	Third quartile	First quartile	Median	Third quartile	First quartile	Median	Third quartile	First quartile	Median	Third quartile
Albendazole cap/tab 400 mg	20	59	97	33	45	87	16	61	99	32	52	80
Aluminium hydroxide + Magnesium hydroxide tab 250 mg.	20	60	60	14	44	102	21	43	79	30	60	122
Amoxycillin cap/tab 250 mg	15	25	150	25	61	152	14	42	90	30	63	117
Amoxycillin disp tab 125 mg.	10	22	325	28	94	149	31	89	152	30	53	103
Chloramphenicol 1% eye applicap	140	253	365	40	90	161	40	100	165	57	87	191
Ciprofloxacin cap/tab 250 mg.	1	46	296	31	89	144	21	71	115			
Depo-provera				1	11	52	15	30	90	11	15	28
Ferrous salt + folic acid cap/tab 60+0.4 mg.	11	31.5	56	37	71	143	31	60	115	35	58	120
Gamma benzene hexachloride 1% lotion	253	253	253	50	74	108	35	76	151	44	90	148
Hyoscine butylbromide cap/tab 10 mg.	14	37	58	36	52	120	54	88	191	43	120	228
Metronidazole cap/tab 200mg.	58	58	58	31	50	77	12	31	129	25	63	89
Oral Rehydration Solution (ORS)	18	29	49	16	36	93	29	41	68	16	30	57
Paracetamol cap/tab 500mg.	10	10	10	6	11	18	8.5	17	45	17	36	70
Providone iodine 5% solution	2	20	38	13	23	88	14	36	73	17	90	150
Sulfamethoxazole + Trimethoprim cap/tab 100/20 mg.	35	65	150	23	32	102	12	34	82	25	52	116
Vitamin A cap/tab 200,000IU	210	210	210	15	40	65	31	38	83	29	55	95
Zinc sulphate 20 mg	11	66	150	25	40	81	13	30	63	16	48	110
Vaccine DPT, HepB, Hip (pentavalent) vial				25	31	36	4	18	40			
Gentamycin inj.* 80mg/2ml	60	60	60	72	90	117	12	34	135	21	30	61
Oxytocin Injection*, 10 IU in 1 ml ampoule	7	25	150	25	57	112	10	41	117	15	61	107
Magnesium sulphate Injection*, 1 gm/2ml (50 % W/V)	25	66	170	22	69	365	27	60	365	34	80	244
Compound solution of Sodium lactate (Ringer's L)	11	12	60	9	34	55	13	22	102	40	90	365
Total facilities that experienced stock-out (N)	**16**			**31**			**79**			**72**		

Source: STS facility questionnaire; the percentage for HPs and SHPs is based on the facilities having birthing centre*

Drug stock-out at time of visit

The drug stock-outs at the time of visit are presented in Table 9.9; only seven of the 22 essential drugs were available in all hospitals. Albendazole, Amoxycillin, Ciprofloxacin, Gamma benzene hexachloride and Sulfamethoxazole + Trimethoprim were out of stock in 12% of the hospitals. Similarly, only three essential drugs (Albendazole, Paracetamole, Oxytocin) were available in all PHCCs at the time of visit. Six out of 22 drugs were out of stock at one-fifth (20%) of PHCCs. The drug stock situation was even more severe in HPs and SHPs at the time of visit. At least one essential drug was out of stock at the time of visit in all of the SHPs. Among HPs, only ORS was available in all facilities, while the remaining drugs were out-of stock in at least one HP. Six out of the 22 essential drugs in HPs and eight out of 22 essential drugs in SHPs were out of stock in more than one fifth of HPs and SHPs.

Table 9. 9: Stock out of essential drugs at time of visit

	Hospital (%)	PHCC (%)	HP (%)	SHP (%)
Vaccine DPT, HepB, Hip (pentavalent) vial[#]	7.1	38.1	43.8	63.6
Amoxycillin disp tab 125 mg.	25.0	38.7	34.2	29.2
Chloramphenicol 1% eye applicap	25.0	29.0	27.8	27.8
Hyoscine butylbromide cap/tab 10 mg.	6.3	25.8	22.8	30.6
Gamma benzene hexachloride 1% lotion	18.8	16.1	20.3	25.0
Magnesium sulphate Injection*, 1 gm/2ml (50 % W/V)	6.3	9.7	24.6	41.7
Ciprofloxacin cap/tab 250 mg.	12.5	25.8	15.2	
Amoxycillin cap/tab 250 mg	12.5	22.6	16.5	16.7
Compound solution of Sodium lactate (Ringer's L)	0.0	3.2	15.2	27.8
Sulfamethoxazole + Trimethoprim cap/tab 100/20 mg.	12.5	12.9	12.7	20.8
Zinc sulphate 20 mg	6.3	19.4	7.6	13.9
Ferrous salt + folic acid cap/tab 60+0.4 mg.	0.0	12.9	3.8	18.1
Gentamycin inj*. 80mg/2ml	0.0	9.7	8.8	25
Aluminium hydroxide + Magnesium hydroxide tab 250 mg.	6.3	6.5	7.6	12.5
Vitamin A cap/tab 200,000IU	6.3	9.7	6.3	9.7
Providone iodine 5% solution	0.0	3.2	5.1	12.5
Metronidazole cap/tab 200mg.	0.0	3.2	3.8	6.9
Oral Rehydration Solution (ORS)	0.0	3.2	0.0	11.1
Oxytocin Injection*, 10 IU in 1 ml ampoule	6.3	0.0	3.5	16.7
Albendazole cap/tab 400 mg	12.5	0.0	3.8	4.2
Depo-provera	6.7	3.2	2.5	4.2
Paracetamolcap/tab 500mg.	0.0	0.0	1.3	2.8
Total facilities (N)	**16**	**31**	**79**	**72**

#Note: interpret with caution as it was not clear which are the cold centres with a responsibility to maintain vaccine storage and supply.; the percentage for HPs and SHPs is based on the facilities having birthing centre*

Source: STS facility questionnaire

Drug stock-outs

Providers were asked which drug stock-outs in the last fiscal year had caused the biggest problems. As shown in Table 9.10, 14 essential drugs were reported by providers at HPs and SHPs, 13 were reported at PHCCs and six at hospitals. ORS, Folic Acid, and Sulfamethoxazole and Trimethoprim were reported as being the most problematic in four out of ten hospitals. ORS, Folic Acid, Amoxycillin, and Sulfamethoxazole + Trimethoprim were reported as being the most problematic in more than six out of 27 PHCCs. Amoxycillin, Folic Acid and Sulfamethoxazole + Trimethoprim were most problematic in more than one-quarter of HPs, and ORS, Amoxycillin, Ferrous salts + Folic Acid, and Sulfamethoxazole and Trimethoprim were most problematic in more than one fifth of SHPs.

Table 9. 10: Drugs reported to have most problems with in regards to stock-outs in last fiscal year

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Ferrous salt + Folic acid	40.0	77.8	67.8	56.1
Sulfamethoxazole + Trimethoprim (Cotrim)	40.0	18.5	25.4	38.6
Amoxycillin	20.0	22.2	28.8	24.6
Oral Rehydration Solutions (ORS)	40.0	25.9	16.9	21.1
Metronidazole Syrup	10.0	0.0	8.5	15.8
Hyoscine butylbromide	10.0	25.9	15.3	14.0
Chloramphenicol	0.0	7.4	6.8	10.5
Gamma benzene hexachloride	0.0	3.7	13.6	8.8
Povidinelodine	0.0	3.7	3.4	8.8
Albendazole	10.0	11.1	3.4	8.8
Aluminium hydroxide + Magnesium hydroxide	10.0	11.1	6.8	3.5
Paracetamol Tab.	0.0	3.7	11.9	5.3
Ciprofloxacine	10.0	3.7	11.9	
Other	100	44.4	23.7	22.8
Total facilities (N)	**10**	**27**	**59**	**57**

Source: STS facility questionnaire

Provider response to stock-outs

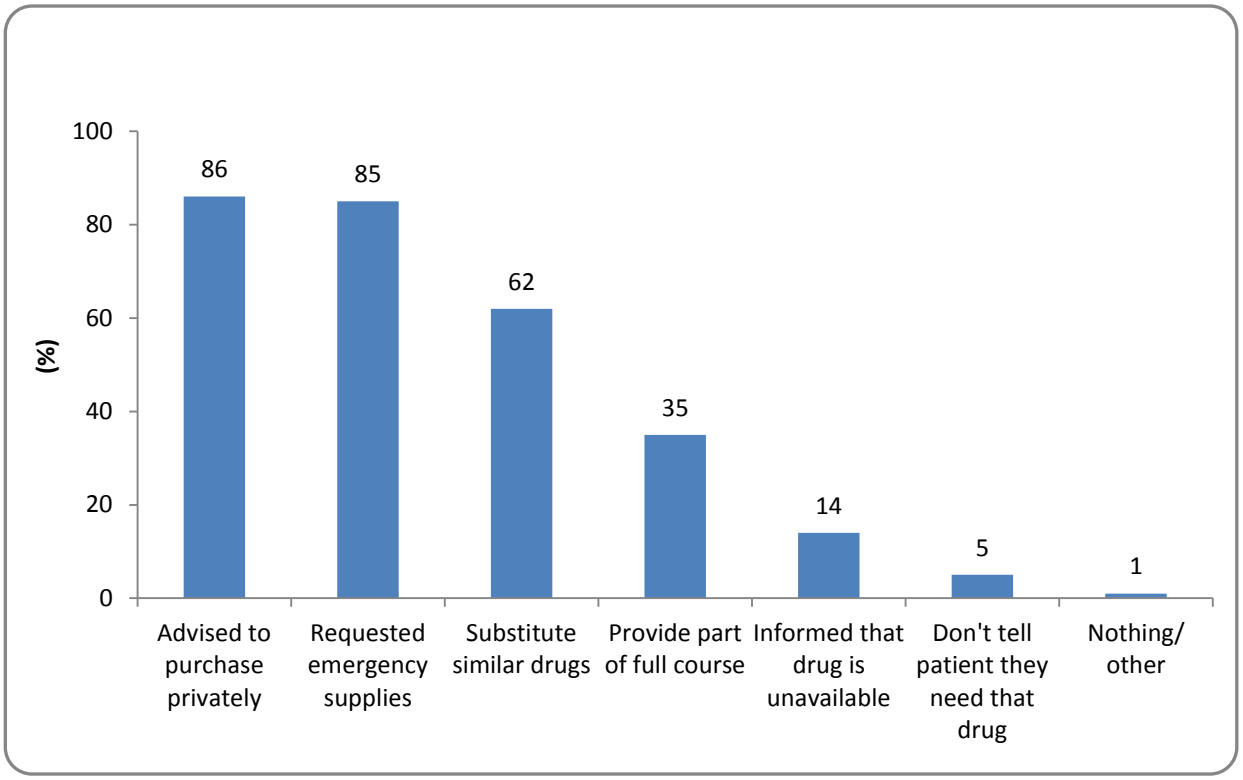
Table 9.11 and Figure 9.3 shows providers' responses to how they manage when there are stock-outs. Commonly clients were told to buy the drugs themselves, although this was more common at lower level facilities (PHCCs 87%,HPs 86%,SHPs 88%) than hospitals (75%), although providers at hospitals (81%), PHCCs (94%) and HPs (90%) were more likely to request an emergency supply of drugs. Substituting a similar drug was also relatively common, with at least half of hospitals (50%), PHCCs (58%) and SHPs (57%) reporting do this, and notably 71% of PHCCs. Providers at PHCCs, HPs and SHPs reported simply telling clients that they didn't have the drug, or telling them they didn't need the drug.

Table 9. 11: Provider response to stock-outs of drugs included under the free care policy

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Tell patients to buy privately	75.0	87.1	86.1	87.5
Request emergency supplies of the drug	81.3	93.5	89.9	77.8
Substitute with similar drugs	50.0	58.1	70.9	56.9
Provide what is available even if not full course	31.3	45.2	35.4	30.6
Just say we don't have drug	0.0	12.9	10.1	22.2
Don't tell patient they need that drug	0.0	6.5	7.6	1.4
Other	0.0	0.0	1.3	0.0
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Figure 9. 3: Provider responses to stock-out of drugs under free care policy (N=198)



Source: STS facility questionnaire

Community drug scheme (for drugs not included under free health care policy)

Year-round availability of drugs in facilities is a major challenge for the efficient management of the health care system in Nepal. To address this problem, the national Community Drug Programme (CDP) was implemented in 1995. Since then various activities have been initiated to fully implement CDP in various districts with the assistance of external development partners. The MoHP declared CDP to be a national priority programme and committed to gradually introducing CDP throughout the country.

Similarly, CDP has been given due priority in the Nepal Health Sector Programme - Implementation Plan (NHSP–IP-1). The CDP now aims at helping to provide drugs not included in the free health care policy. The availability of a CDP was assessed in STS 2012 (Table 9.12). The scheme was being implemented in 26% of PHCCs and 13% of hospitals, but just 5% of HPs and 3% of SHPs.

Table 9. 12: Provision of community drugs schemes and review of drugs

	Hospital (%)	PHCCs (%)	HP (%)	SHP (%)
Community drugs schemes for non-essential drugs	12.5	25.8	5.1	2.8
Review of drug supply in last fiscal year	75.0	54.8	40.5	22.2
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

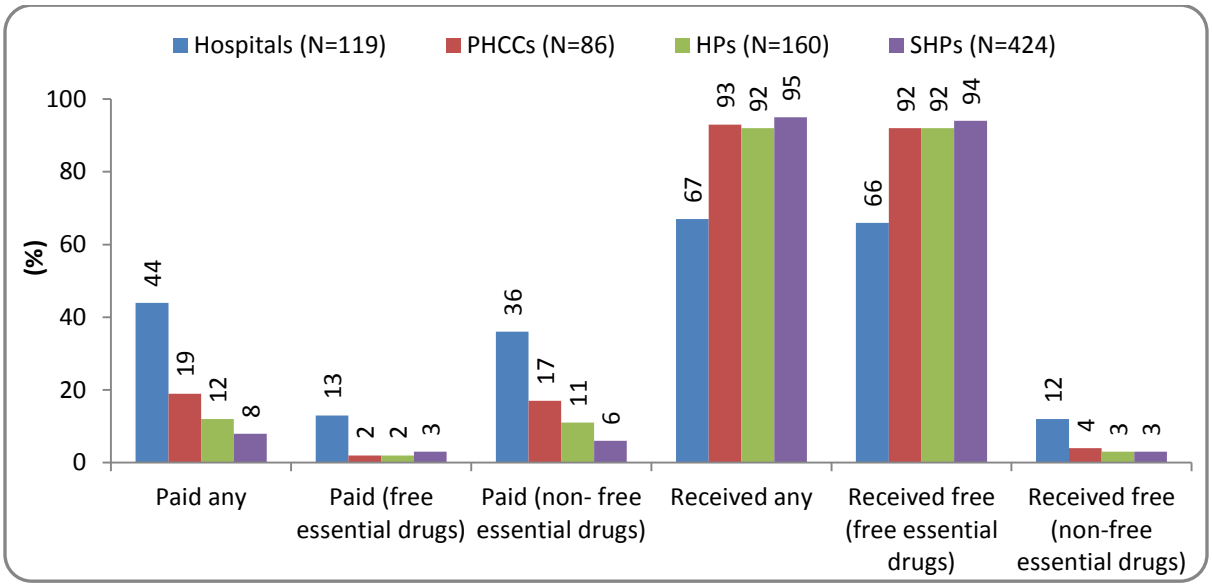
Payment by clients

Clients who had received drugs or prescriptions for drugs were asked whether they had to pay for them or whether they had received them free of charge (see Figures 9.5 and 9.6). Outpatients should receive essential drugs for free and maternity clients should receive all drugs for free during their delivery care.

Paid for drugs — Over half of maternity clients (54%) had paid for at least some prescribed drugs. Maternity clients who received care at hospitals (62%) were far more likely to have paid for drugs than those attending lower level facilities: 19% at PHCCs, 9% at HPs and 21% of SHPs. Likewise, outpatient clients at hospitals were more likely to have paid for drugs (44%) than those at lower level facilities: 19% at PHCCs, 12% at HPs and 8% at SHPs. Outpatients were more likely to have paid for non-essential than essential drugs. However, a notable percentage of outpatients (13%) had still paid for at least some essential drugs at hospitals that should have been provided free of charge.

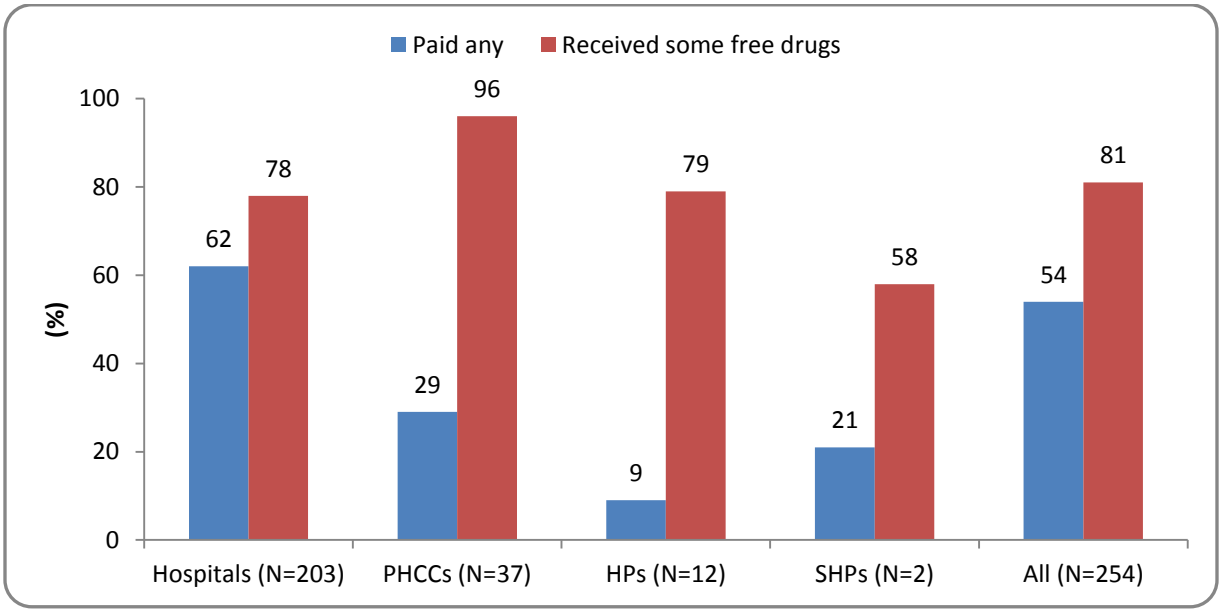
Received free of charge —Despite the notable number of clients paying for drugs that should have been free, many clients had received drugs free of charge. Nearly all outpatients at PHCCs (92%), HPs (92%) and SHPs (94%) had received at least one essential drug free of charge, along with two thirds of outpatients at hospitals(66%). Furthermore, 12% of outpatients at hospitals and a small percentage of those at PHCCs (4%), HPs and SHPs (3% each) had received non-essential drugs for free. Over four-fifths of maternity clients (81%) received some drugs free of charge, including most maternity clients at PHCCs (96%), more than three-quarters at hospitals (78%) and HPs (79%), and 58% at SHPs.

Figure 9. 4: Percentage of outpatients paying for drugs and receiving drugs for free



Source: STS outpatient exit interviews

Figure 9. 5: Percentage of maternity clients paying for drugs



Source: STS maternity exit interviews

9.3 KEY FININGS

Storage

- Most facilities, including all hospitals, stored essential drugs in a locked room. However, lower level facilities were more likely to keep drugs in a locked cabinet and in a cool and dry place than hospitals.
- All of the hospitals had at least one functional refrigerator, but less than three-quarters of PHCCs (71%), just over a half of HPs (51%), and just 14% of the SHPs did. Less than two-thirds (63%) of hospitals reported that they had an adequate number of refrigerators to store all the drugs that required cold-chain maintenance. Just over half of PHCCs (58%), just over one-third of HPs (35%), and 14% of SHPs reported that they had sufficient numbers of functioning refrigerators to maintain all the drugs that required a cold-chain system. The temperature of the refrigerator was appropriate in only three-quarters (75%) of hospitals. The condition was worse in lower level facilities.
- Less than half (41%) of the selected facilities stored all their drugs using the FEFO approach, with just 38% of hospitals storing all of their drugs in this manner. Oxytocin, Ferrus Sulphate, Magnesium Sulphate, Amoxycilin, Vitamin A and Providone Iodine Solution were the most common drugs still in stock despite being past their expiry date.

Availability

- At the time of the visit, only seven of the 22 essential drugs were in stock in all hospitals. Six out of 22 drugs were out of stock at more than one fifth of the PHCCs and drug stock-outs were even more common in HPs and SHPs.
- The most common actions when stock-outs occurred were to ask clients to buy the drugs themselves, to request an emergency supply of drugs and to substitute similar drugs. The community drugs scheme was only being implemented in 4% of facilities.

Payment

- Over half of maternity clients had paid for at least some prescribed drugs, most commonly at hospitals (62%). Over four-fifths of maternity clients received some drugs free of charge, including most maternity clients at PHCCs (96%).
- Outpatient clients at hospitals were also most likely to have paid for drugs (44%). A notable percentage of outpatients (13%) had paid for at least some essential drugs at hospitals. However, nearly all outpatients at lower level facilities had received at least one essential drug free of charge, along with two thirds of outpatients at hospitals (66%). Furthermore, 12% of outpatients at hospitals and a small percentage of those at PHCCs (4%), HPs and SHPs (3% each) had received non-essential drugs for free.

CHAPTER 10 - QUALITY OF CARE

10.1 INTRODUCTION

Increasing the utilisation of health services may not improve health outcomes unless the services are also characterised by excellence in delivery along with benchmarks for good quality. Quality of care can result in the greater use of health facilities, better uptake of health programmes by individuals and communities, and lead to better health outcomes for the population.

There is no universally-accepted definition of quality of care, but biomedical outcomes, patient satisfaction, adherence to professional standards, and providers' treatment of clients have all been included in quality of care models and frameworks.

The Service Tracking Survey 2012 (STS 2012) collected information on a range of quality of care indicators from 198 health care facilities, and 787 outpatients and 260 maternity client exit interviews. These components are classified as inputs, processes and outputs (Box 10.1). Some quality of care components in this box are covered in separate chapters, and this chapter will present the remaining ones. For a summary of how quality of care has been covered in STS 2012 see Annex 10.1.

Box 1: Quality of care components covered in STS 2012

INPUTS	PROCESSES	OUTPUTS
• Infrastructure (see Ch. 3) • Utilities (see Ch. 3) • Human Resources (see Ch. 8) • Drugs (see Ch. 9) • Biomedical waste management • Supplies & equipment	• Governance and Accountability (see Ch. 7) • Good practice • Referral systems	• Provision of services • Client experience

10.2 RESULTS

QUALITY OF CARE	STS 2012	95%CI
% of facilities with comprehensive biomedical waste management in place (puncture proof bin for needles; bin for disposing of plastics; bin for disposing of blood/fluid stained items; pit for placenta/deep burial)	21.9	16.8-28.2
% of CEONC facilities providing all CEONC signal functions 24/7	100.0	NA
% of district hospitals providing all CEONC signal functions 24/7	50.0	37.0-60.3
% of districts with at least one facility providing all CEONC signal functions 24/7*	61.5	38.9-80.1
% of BEONC facilities providing all BEONC signal functions 24/7	72.8	55.4-88.3
% of PHCCSs that provide all BEONC signal functions 24/7*	39	10.3-72.6
% of health posts that are birthing centres providing deliveries 24/7*	97.7	87.5-99.6
% of safe abortion sites with long acting family planning services*	56.1	17.4-88.5
% of district hospitals providing male and female permanent family planning services	57.1	34.4-77.2
% of health posts with at least five family planning methods*	7.6	4.1-13.5
% of outpatients who thought the facility was overcrowded	33.8	27.1-41.3
% of maternity clients who thought maternity department was overcrowded	29.2	17.5-44.6
% of clients (maternity and outpatients) satisfied with the cleanliness of the health facility	74.8	69.2-83.0
% of clients (maternity and outpatients) satisfied with the provisions made to ensure privacy	69.6	61.5-76.4
% of clients (maternity and outpatients) satisfied with their health care*	89.5	82.4-97.3

Note: The shaded indicators, marked with an asterisk (*), are included in the NHSP 2 logical framework

10.2.1 Inputs

Biomedical waste management

Since biomedical waste is hazardous both for the environment and public health, proper management is critical. Burning was the most common method for the disposal of biomedical waste for all facility types, followed by burial in a pit. Burning was practiced in all primary health care centres (PHCCs) and in approximately nine out of ten of other facility types (88% of hospitals, 99% of health posts (HPs), 92% of sub health posts (SHPs) (Table 10.1). Only half of the hospitals (50%) and 29% of PHCCs used an incinerator for waste management. This proportion was much lower for HPs (13%) and SHPs (7%). Few facilities had their waste collected and this was less common in lower level facilities.

Table 10. 1: Process for disposal of biomedical waste

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Incinerator	50.0	29.0	12.7	6.9
Bury in pit	81.3	80.7	73.4	72.2
Burn	87.5	100	98.7	91.7
Waste collected	18.8	9.7	2.5	2.8
Other	18.8	12.9	2.5	4.2
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Enumerators observed whether puncture-proof bins, for disposal of needles and sharps, were present in facilities (Table 10.2). While most of the hospitals had a puncture proof bin for disposal of needles and sharps (94%), the likelihood decreased by level of facility: 90% of PHCCs, 86% of HPs and 72% of SHPs. Red bins (for blood/fluid stained items) and blue bins (for non-infectious wastes) were available in nearly nine out of ten hospitals (88%), however only 55% of PHCCs had these bins. Furthermore, just over one-third of HPs (39% for each) and around a quarter of SHPs (25% and 24% respectively) had red or blue bins available. At all facility levels a lower proportion had green bins available for disposing organic waste in comparison to red and blue bins. Most of the hospitals (94%) and over three-quarters of PHCCs (77%) had a placenta pit/deep burial, however this was a lot less common at HPs (41%) and SHPs (8%).

Table 10. 2: Presence of bins for biomedical waste

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Puncture proof bin for disposing needles/sharps	93.8	90.3	86.1	72.2
Red bin for disposing blood/fluid stained items	87.5	54.8	39.2	25.0
Blue bin for disposing non-infectious items	87.5	54.8	39.2	23.6
Green bin for disposing organic waste	81.3	45.2	22.8	11.1
Placenta pit/deep burial	93.8	77.4	40.5	8.3
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Supplies and equipment

Supplies

A quarter of hospitals experienced a shortage of supplies (25%); along with 45% of PHCCs and 43% of HPs, and a third of SHPs (33%) (Table 10.3). Health facilities were asked to list the main supplies for which they had experienced problems with due to shortages during the last fiscal year. The main supply shortages varied by level of facility, the three most commonly reported at each level were: face mask (25%), apron (25%) and virex (25%) at hospitals; virex (21%), blanket (21%) and towel (14%) at PHCCs; towel (18%), bed sheet (15%) and surgical gloves (12%) at HPs, and bucket (29%), curtain (25%) and towel (17%) at SHPs. The full list of reported supply shortages is presented in Annex 10.2.

Table 10. 3 Shortages and usage of supplies and equipment in last fiscal year

	Hospital (%)	PHCC (%)	HP (%)	SHP (%)
Experienced shortage of supplies	25.0	45.2	43.0	33.3
Experienced shortage of equipment	56.3	71.0	59.5	58.3
Experienced equipment breakages	50.0	35.5	34.2	51.4
Have unwanted or excessive equipment	6.3	22.7	7.6	4.2
Have equipment that no one is trained to use	25.0	41.9	26.6	22.2
Have equipment not able to use	12.5	38.7	19.0	13.9
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Equipment

PHCCs (71%) were more likely to have experienced problems due to equipment shortages than other facilities in the last fiscal year (2011/12), although still more than half of the hospitals (56%), HPs (60%) and SHPs (58%) experienced shortages (Table 10.3). Health facilities were asked to list the key equipment with which they had experienced a shortage. The three most common equipment shortages reported at each level were: ECG machine (33%), forceps (22%) and scissors (22%) at hospitals; BP instrument (50%), stethoscope (18%) and suction machine (18%) at PHCCs; BP instrument (40%), suture set (13%) and otoscope (13%) at HPs; and BP instrument (38%), forceps (24%) and autoclave (21%) at SHPs. The full list of reported equipment shortages is presented in Annex 10.3.

Around half of the hospitals (50%) and SHPs (51%) reportedly faced problems due to broken equipment, compared to over one-third of PHCCs and HPs (36% and 34% respectively) (Table 10.3). Health facilities were asked to list the equipment they experienced most problems with due to breakages. The three most commonly reported at each level were: forceps (25%), scissors (25%) and BP instrument (13%) at hospitals; BP instrument (55%), weighing machine (18%) and suture set (18%) at PHCCs; BP instrument (41%), forceps (33%) and scissors (22%) at HPs, and BP instrument (54%), scissors (27%) and forceps (24%) at SHPs. The full list of reported equipment breakages is presented in Annex 10.4.

STS 2012 also explored whether facilities had any equipment that was not needed or had any excess equipment (Table 10.3).PHCCs were most likely to have unnecessary/excessive equipment (23%), for other levels less than one in ten reported having unnecessary/excessive equipment (6% of hospitals, 8% of HPs, 4% of SHPs 4%). The most commonly reported excessive equipment reported at each level was: forceps (100%) at hospitals; dental forceps (20%) at PHCCs, IUCD insertion and removal set (33%) at HPs and dental forceps (33%) at SHPs. The full list of reported equipment breakages is presented in Annex 10.5.

Having equipment that no service providers were trained to use was more common in PHCCs (42%) compared to other facilities (25% of hospitals, 27% of HPs and 22% of SHPs) (Table 10.3). The most commonly reported equipment that no one was trained to use at each level was: radiant warmer (25%) at hospitals; dental set (15%) at PHCCs; dental forceps (14%) at HPs, and dental set (25%) at SHPs. The full list of reported equipment breakages is presented in Annex 10.6.

PHCCs (39%) were most likely to have equipment available that was not used (e.g. due to lack of electricity) compared to below one-fifth of other facility types (19% of HPs, 14% of SHPs and 13% of hospitals) (Table 10.3). The most commonly reported equipment that was not able to be used at each level was: electric autoclave (50%) at hospitals, and refrigerator for vaccine and medicine (67%) at PHCCs, HPs (47%) and SHPs (30%).The full list of reported equipment breakages is presented in Annex 10.7.

Facilities were also asked about their experiences when requesting and receiving equipment (Table 10.4). At least nine out of ten facilities at each facility level reported that they had requested equipment, with little variation by level(ranging from 90% to 96%).Of these, only 20% of hospitals reported that they always received the equipment they had requested, with even fewer at lower levels (7% of PHCCs, 12% of HPs and 6% of SHPs).Most facilities had requested a certain specification when requesting equipment: 97% of PHCCs, 95% of HPs, 92% of SHPs, as well as 88% of hospitals. However, they rarely or never received the requested specification: 21% of hospitals, 43% of PHCCs, 35% of HPs, and 49% of SHPs. Most facilities had requested supplies (ranging from 93% to 99%). However, just 33% of hospitals, and even fewer PHCCs (7%), HPs (14%) and SHPs (13%) always received the supplies on request.

Table 10. 4: Experiences in receiving equipment

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Requested equipment	93.8	93.5	96.2	90.3
Total facilities (N)	**16**	**31**	**79**	**72**
Received equipment on request:				
Always	20.0	6.9	11.8	6.2
Most of the time	40.0	10.3	22.4	15.4
Sometimes	26.7	55.2	46.1	47.7
Rarely	13.3	20.7	11.8	23.1
Never	0	6.9	7.9	7.7
Total facilities who requested (N)	**15**	**29**	**76**	**65**
Requested certain specification	87.5	96.8	94.9	91.7
Total facilities (N)	**16**	**31**	**79**	**72**
Received correct specification:				
Always	42.9	23.3	24.0	9.1
Most of the time	21.4	10.0	10.7	13.6
Sometimes	14.3	23.3	30.7	28.8
Rarely	21.4	10.0	16.0	27.3
Never	0	33.3	18.7	21.2
Total facilities requested specification (N)	**16**	**31**	**79**	**72**
Requested supplies	93.8	93.5	98.7	93.1
Total facilities (N)	**16**	**31**	**79**	**72**
Received supplies on request:				
Always	33.3	6.9	14.1	13.4
Most of the time	20.0	20.7	30.8	16.4
Sometimes	33.3	37.9	29.5	34.3
Rarely	13.3	24.1	19.2	34.3
Never	0	10.3	6.4	1.5
Total facilities that requested supplies (N)	**15**	**29**	**78**	**67**

Source: STS facility questionnaire

PHCCs (58%) were most likely to have conducted a review of equipment, followed by 44% of hospitals, and just under a third of HPs (33%) and SHPs (31%) (Table 10.5). Providers were asked if they would like to see an equipment swapping programme between facilities in the future. Providers from over four-fifths of PHCCs (81%), 71% of HPs, and nearly two thirds of hospitals (63%) and SHPs (65%) favoured an equipment swapping system.

Table 10. 5: Review of equipment in the last fiscal year and attitude towards equipment swapping

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Had review of equipment	43.8	58.1	32.9	30.6
Would like equipment swapping system	62.5	80.7	70.9	65.3
Total facilities (N)	**16**	**31**	**79**	**72**

Source: STS facility questionnaire

Recommendations from providers were sought for improving supply management systems (Table 10.6). Providers from all levels of facility most commonly reported the desire for regular assessment and supply as per need (67% of hospitals, 44% of PHCCs, 57% of HPs, and 52% of SHPs) and also provided the same recommendation. Other common recommendations were that equipment should be supplied from the central level and in good time.

Table 10. 6: Recommendations for improving the supply management systems for equipment and supplies

SN	Suggestions	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
	Made recommendation(s) for improving supply system	93.8	80.6	84.8	86.1
Total facilities (N)		**16**	**31**	**79**	**72**
1	Regular assessment and supply according to facility need	66.7	44.0	56.7	51.7
2	Supply equipment from centre	20.0	28.0	16.4	16.1
3	Ensure timely supply	26.7	8.0	11.9	16.1
4	Regular supervision and monitoring	6.7	12.0	14.9	16.1
5	Procure at local level	6.7	12.0	14.9	12.9
6	Good quality equipment and supplies	6.7	4.0	9.0	4.8
7	Provide budget/manpower for transportation	0	12.0	4.5	8.1
8	Provide training before providing equipment	0	4.0	6.0	0
9	Mechanism to replace non-functional equipment	0	8.0	1.5	1.6
10	Other	20.0	24.0	11.9	8.1
Total facilities that made a suggestion (N)		**15**	**25**	**67**	**62**

Source: STS facility questionnaire

Recommendations from providers were sought for repair and maintenance of equipment, with providers from most facilities giving suggestions: 81% of hospitals, 77% of PHCCs, 61% of HPs and 69% of SHPs (Table 10.7). The most common suggestions were to: replace non-functional equipment; provide basic training to health workers for handling equipment and performing minor maintenance; ensure one technician is available per district for regular maintenance, and ensure the timely maintenance of equipment.

Table 10. 7: Recommendations for improving the repair and maintenance for equipment

SN	Suggestions	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
	Made recommendation(s) to improve the repair and maintenance of equipment:	81.3	77.4	60.8	69.4
Total facilities (N)		**16**	**31**	**79**	**72**
Recommendations for improving repair and maintenance of equipment					
1	Provide replacement for non-functional equipment	7.7	12.5	20.8	22.0
2	Basic training to HWs for handling and minor maintenance	15.4	20.8	18.8	16.0
3	Make one technician available at district for regular maintenance	15.4	20.8	12.5	16.0
4	Timely maintenance of equipment	23.1	8.3	10.4	22.0
5	Centre should provide technician	15.4	4.2	20.8	8.0
6	Send highly competent technician	7.7	12.5	10.4	14.0
7	Regular monitoring of equipment	7.7	25.0	10.4	6.0
8	Provide budget for repair and maintenance	7.7	0	10.4	6.0
9	Stock-taking of equipment that needs repair or maintenance	7.7	4.2	4.2	8.0
10	Provide good quality equipment	0	4.2	4.2	4.0
11	Other	7.7	12.5	4.2	4.0
Total facilities suggested (N)		**13**	**24**	**48**	**50**

Source: STS facility questionnaire

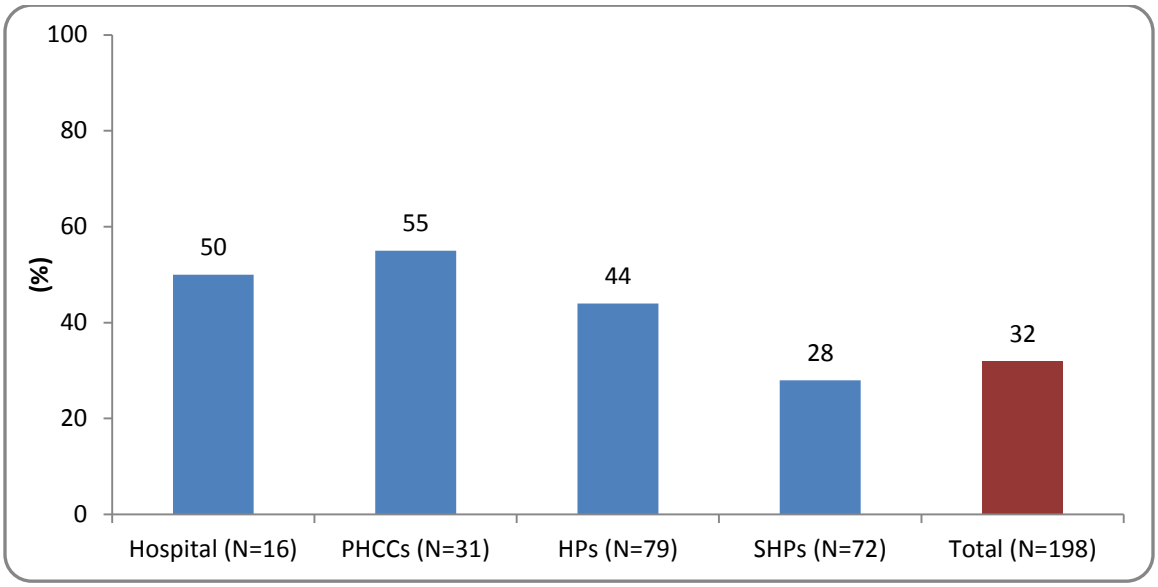
10.2.2 Processes

Good Practice

Quality improvement plans

Overall, 32% of facilities had a quality improvement plan (Figure 10.1). Half of hospitals (50%) and PHCCs (55%) had a plan in place, but this reduced slightly to 44% of HPs. A greater drop was then seen with just 28%of SHPs having a plan in place and, given the greater number of SHPs, this brought the total figure down.

Figure 10. 1 Presence of quality improvement plan



Source: STS facility questionnaire

Last delivery

Providers from the facilities that provided delivery care were asked a series of questions about the last delivery performed. The questions were designed to explore whether internationally accepted standards of obstetric care are being routinely applied across Nepal. Providers were first asked about the provisions that had been made prior to the delivery (Table 10.8). Providers at all levels reported that the floor had been disinfected before the delivery and that the delivery sets were ready, complete and sterile in most facilities (except 3% of SHPs). However, delivery attendants from 11% of PHCCs and HPs and 6% of hospitals reported that some essential equipment was broken at the time of the last delivery. The main problem was that 29% of SHPs, a quarter of hospitals (25%) and PHCCs (25%), and 17% of HPs lacked all of the necessary drugs at the time of the last delivery.

Table 10. 8: Provisions ready before conducting the last delivery

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Floor disinfected since last client	100	100	100	100
Delivery set ready	100	100	97.1	100
Delivery set complete	100	100	97.1	100
Delivery set sterilized	100	100	97.1	100
All equipment sterilized	100	96.4	97.1	100
Delivery table disinfected since last client	100	96.4	97.1	100
All necessary drugs within expiry date	93.8	96.4	97.1	100
All necessary equipment available	100	92.9	97.1	85.7
All necessary supplies available	93.8	96.4	94.3	100
All necessary drugs available	75.0	75.0	82.9	71.4
Any essential equipment broken	6.3	10.7	11.4	0
Total facilities conducting deliveries (N)	**16**	**28**	**35**	**7**

Source: STS facility questionnaire

Information regarding the use of oxytocin before and after delivery was sought from the health provider involved in the last delivery (Table 10.9). Providing oxytocin before delivery varied by level of health facility, ranging from 31% of hospitals to 14% of HPs. Providers who gave clients oxytocin before delivery were asked about the reasons for doing so, but findings should be interpreted with caution given the small sample size. Of those who provided oxytocin before delivery, providers from most facilities reported that it was because clients were suffering from complications, however providers from one in five hospitals, PHCCs and HPs reported that it was a routine practice. This goes against international best practice, and providers maybe be adopting potentially harmful practices to increase the likelihood of deliveries occurring at a time convenient to them. One third of clients (33%) delivering in hospitals reported that they received oxytocin to speed up delivery, reducing to 14% in PHCCs and 13% in HPs.

Table 10. 9: Provide oxytocin to women before and after delivery

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Oxytocin given:				
Before delivery	31.3	17.9	14.3	28.6
After delivery	100	100	97.1	100
Total facilities conducting deliveries (N)	**16**	**28**	**35**	**7**
Reason for giving before delivery:				
Client suffering complications	80.0	80.0	80.0	100
Routine practice	20.0	20.0	20.0	0
Total facilities giving oxytocin before delivery (N)	**5**	**5**	**5**	**2**
Reason for not giving after delivery:				
Mother had no complication			100	
Total facilities not giving oxytocin after delivery (N)			**1**	
Client reported provider tried to speed up delivery [#]:				
Provider did nothing	49.6	57.1	64.4	*70.0*
Used oxytocin	32.6	14.3	13.3	*20.0*
Don't know	17.8	28.6	22.2	*10.0*
Total maternity clients (N)	**135**	**70**	**45**	***10***

Source: STS facility questionnaire; #STS maternity exit interviews

In regards to maternal and infant health monitoring during delivery, providers from most hospitals reported that they had used a partograph (94%). However, the use of a partograph was less common at lower level facilities, with providers from just over half of PHCCs (54%), HPs (57%) and SHPs (57%) reporting its use during the last delivery. It was encouraging to note that all providers from SHPs providing deliveries reported that they had checked the mother's pulse, blood pressure and foetal heartbeat at least once an hour during labour (although, this should be interpreted with caution given the small sample size and is based on provider reporting). Only 81% of hospital providers and 77% of PHCC providers reported that that they had checked the mother's blood pressure at least once an hour during labour. Providers who did not use a partograph were asked their reasons for not doing so: providers from all hospitals reported that it was due to the lack of time owing to heavy case-load. Providers from 62% of PHCCs (62%), 27% of HPs and over two-thirds of SHPs (67%) reported it was due to the lack of partographs in the facility. The main reason given by those who did not check the client's pulse or the foetal heart beat was that the client gave birth immediately, and amongst those who did not check blood pressure was that they didn't have time due to the caseload. The sample sizes for the reasons given are small and should be interpreted with caution.

Table 10. 10: Maternal and infant monitoring during last delivery

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Partograph used during last delivery	93.8	53.6	57.1	57.1
Checked mother's pulse at least once an hour during labour	93.8	85.7	97.1	100
Checked mother's blood pressure at least once an hour during labour	81.3	78.6	91.4	100
Checked foetal heartbeat at least once an hour during labour	93.8	96.4	97.1	100
Total facilities conducting deliveries (N)	**16**	**28**	**35**	**7**
Reasons for not using partograph:				
Didn't have partograph	0	61.5	26.7	66.7
No routine practice of using partograph	0	23.1	20.0	0
Didn't have time due to caseload	100	7.7	20.0	0
Didn't know how to use partograph	0	7.7	13.3	0
Didn't think there was a need	0	0	6.7	0
Others	0	15.4	26.7	33.3
Total facilities not using partograph (N)	**1**	**13**	**15**	**3**
Reasons for not checking pulse:				
Gave birth immediately	100	75	100	
Didn't think there was a need	0.0	25	0	
Total facilities not checking pulse (N)		**4**	**1**	
Reasons for not checking blood pressure:				
Didn't have time due to caseload	33.3	0	66.7	
Didn't think there was a need	0	16.7	0	
Gave birth immediately	33.3	50.0	33.3	
Others	33.3	33.3	0.0	
Total facilities not checking blood pressure (N)	**3**	**6**	**3**	
Reasons for not checking foetal heart beat				
Gave birth immediately	100	0	100	
Case had no problem	0	100	0	
Total facilities not checking foetal heartbeat (N)	**1**	**1**	**1**	

Source: STS facility questionnaire

It is encouraging to note that all delivery attendants reported that they had used sterilized gloves during the last delivery (Table 10.11). Similarly, attendants from all levels of facility, except HPs (94%), reported using a plastic apron during the delivery. Among those who performed a pelvic (PV) examination during the last delivery all reported using sterilized gloves.

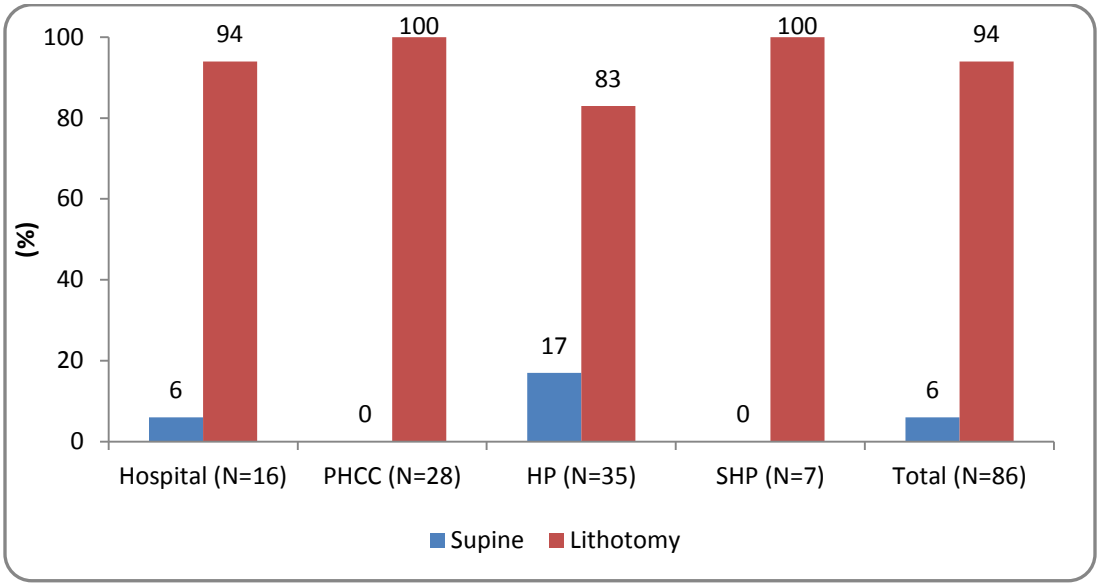
Table 10. 11: PV examinations and use of gloves/aprons during last delivery

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Use of sterilized gloves and plastic apron during delivery:				
Used sterilized gloves during delivery	100	100	100	100
Used plastic apron during delivery	100	100	94.3	100
Total facilities conducting deliveries (N)	**16**	**28**	**35**	**7**
PV examination and use of sterilized gloves:				
PV examination performed during last delivery	100	96.4	97.1	100
Total facilities conducting deliveries (N)				
Use of sterilized gloves while performing a PV examination	100	100	100	100
Total facilities performing PV examination (N)	**16**	**27**	**34**	**7**
Reason for not performing PV examination:				
Gave birth immediately		100	100	
Total facilities not performing PV examination (N)		**1**	**1**	

Source: STS facility questionnaire

Most clients delivered in the lithotomy position (94%) (Figure 10.2). No clients who delivered birth in PHCCs and SHPs gave birth in the supine position, but 17% of clients at HPs and 6% of those who gave birth at hospitals respectively, delivered in the supine position during the last delivery. International good practice encourages women's choice in the position of labour and evidence suggests that the supine position is more effective than the lithotomy position.

Figure 10. 2: Position of mother during labour of last delivery



Source: STS facility questionnaire

It was encouraging to note that, in line with best practice, all delivery attendants from all facilities (except one PHCC) reported that they had wiped and wrapped the newborn infants immediately after birth (Table 10.12). Approximately nine out of ten newborn infants delivered in PHCCs (93%), HPs (91%)

and SHPs (86%) were bathed after 24 hours. However, fewer than two-thirds of infants born in hospitals were bathed after 24 hours of birth. The timing of first bathing was unknown for about a third of infants (31%) born in a hospital.

Table 10. 12: Newborn care practices

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Infant wiped and wrapped immediately after delivery	100	96.4	100	100
Timing of first bath:				
Within 24 hrs of birth	6.3	0	0	0
After 24 hrs of birth	62.5	92.9	91.4	85.7
Don't know	31.3	7.1	8.6	14.3
Total facilities conducting deliveries (N)	**16**	**28**	**35**	**7**

Source: STS facility questionnaire

Service providers were asked if they had faced difficulties during the last delivery (Table 10.13). A far higher proportion of staff at HPs reported problems (83%) compared with other levels (44% of hospitals, 61% of PHCCs and 57% of SHPs). The most commonly reported difficulties included: inadequate staffing; lack of electricity; lack of equipment, and lack of beds. Notably, among those facing difficulties, staff from 71% of hospitals and 100% of SHPs reported that they had faced problems during the last delivery due to inadequate staffing.

Table 10. 13: Main difficulties faced during the last delivery

SN		Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
	Faced difficulties	43.8	60.7	82.9	57.1
Total facilities conducting deliveries (N)		**16**	**28**	**35**	**7**
	Difficulties faced				
1	Inadequate staff	71.4	41.2	48.3	100
2	Lack of electricity 24 hour	14.3	17.7	27.6	0
3	Lack of equipment	14.3	23.5	20.7	0
4	Lack of or inadequate beds	14.3	11.8	20.7	0
5	Lack of supplies	14.3	17.7	3.5	25.0
6	Lack of electricity	0	11.8	10.3	0
7	Lack of water supply	0	0	17.2	0
8	Recording and reporting	14.3	5.9	3.5	0
9	Lack of separate delivery room	0	5.9	6.9	0
10	Lack of staff accommodation	0	0	10.3	0
11	Non-functional equipment	0	5.9	3.5	0
12	Other	0	5.9	13.8	25.0
Total facilities experienced difficulty (N)		**7**	**17**	**29**	**4**

Source: STS facility questionnaire

Cleanliness

Enumerators observed the cleanliness of delivery tables and availability of cleaning products. The floor around the bed was clean in all hospitals, but this reduced by level of facility: 90% of PHCCs, 81% of HPs and 78% of SHPs had a clean floor around the delivery bed (Table 10.14). Most facilities had a clean delivery room floor (94% of hospitals, 90% of PHCCs, 79% of HPs and 89% of SHPs). All parts of the delivery table were clean for 81% of hospitals, 87% of PHCCs and 81% of HPs, but just two thirds of SHPs (67%) (although the number of SHPs is small). All hospitals had cleaning equipment and disinfectants available for their delivery rooms, however, this percentage reduced by level of facility (87% of PHCCs, 76% of HPs, 67% of SHPs).

Table 10. 14: Cleanliness of delivery table and availability of cleaning products

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Cleanliness of:				
Floor around bed	100	90.0	81.0	77.8
Floor of delivery room	93.8	90.0	78.6	88.9
Delivery table all parts	81.3	86.7	81.0	66.7
Availability of cleaning equipment / disinfectants for the delivery room	100	86.7	76.2	66.7
Total facilities conducting deliveries (N)	**16**	**30**	**42**	**9**

Source: STS facility questionnaire

Maternity clients were asked about the information provided to them by service providers after their delivery (Table 10.15). Encouragingly, most (94%) maternity clients were informed about the importance of breastfeeding within an hour of giving birth, but clients were less likely to be informed about exclusive breastfeeding for six months. For both of these the likelihood increased as the level of facility decreased. More than half of the maternity clients were informed about immunization (59%), postnatal danger signs (56%) and newborn danger signs (50%) and again this was least likely at hospitals. Less than a third of clients were informed about family planning (32%), and this was least common at hospitals.

Table 10. 15: Maternity clients informed by providers

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	All (%)
To breastfeed within an hour of giving birth	85.9	90.0	97.8	*100*	94.4
Exclusive breast feeding for six months	60.7	77.1	80.0	*100*	60.7
Immunization	54.8	82.9	82.2	*90.0*	59.0
Postnatal danger signs	51.1	71.4	62.2	*90.0*	56.4
Newborn danger signs	44.4	74.3	64.4	*90.0*	50.1
Family planning	28.9	50.0	42.2	*30.0*	31.7
Total maternity clients (N)	**135**	**70**	**45**	***10***	**254**

Source: STS maternity exit interviews

Companions

A woman's experience at a health facility may be improved by having support from a companion. Maternity clients and outpatients were asked whether they had requested a companion while seeking care and if so, whether a companion was permitted. Out of 1,041 clients, 23% reported that they had requested a companion while receiving care, and this was more common among maternity clients (45%) than outpatients (15%) (Table 10.16). Of those who requested a companion, 12% were refused (10% of maternity clients and 15% of outpatients). Among the maternity clients, 65% were permitted during labour pain and 67% after delivery, but notably this dropped to 44% during the actual delivery.

Table 10. 16: Requested any companion while seeking care

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Requested companion while seeking care:	45.1	19.3	9.7	15.4	22.6
Total clients (N)	**254**	**467**	**320**	**787**	**1041**
Companion permitted by the health provider and timing:					
Refused to permit companion	9.5	13.3	19.4	14.9	12.3
Permitted during labour pain	65.3				
Permitted during delivery	44.2				
Permitted after delivery	67.0				
Permitted during treatment	12.5				
Total clients requested companion (N)	115	90	31	121	236

Source: STS maternity and outpatient exit interviews

Referral Systems

The quality of the referral system between facilities is crucial to preventing maternal deaths (Table 10.17). The hierarchy of maternity facilities only becomes a functioning unit if the referral system from the lower-order health facilities to the referral unit is efficient and effective. Poor referral procedures are a key barrier to accessing effective emergency care. It is concerning that 88% of hospitals report that they transfer women for caesarean section (CS). Most health facilities (94%) mentioned that the government hospital was the usual place of referral for a CS.

More than half of the hospitals (56%) admitted referring clients for assisted delivery. As with CS, most health facilities referred clients to a government hospital for assisted deliveries (89%).

Table 10. 17: Referral for caesarean section/assisted deliveries

	Hospitals(%)	PHCCs(%)	HPs(%)	SHPs(%)	Total(%)
Ever refer clients for CS	87.5	83.9	60.8	40.3	46.7
Total facilities (N)	**16**	**31**	**79**	**72**	**198**
Usual place of referral for CS					
Government hospital	78.6	88.5	91.7	*96.6*	94.0
Mission/NGO/community hospital	0	7.7	2.1	*3.5*	3.4
Private hospital	7.1	3.9	6.3	*0*	2.0
Medical college/ teaching hospital	14.3	0	0	*0*	0.6
Total facilities refer for caesarean sections (N)	**14**	**26**	**48**	***29***	**92**
Ever refer clients for assisted delivery	56.3	54.8	55.7	40.3	43.9
Total facilities (N)	**16**	**31**	**79**	**72**	**198**
Usual place of referral for assisted delivery					
Government hospital	77.8	88.2	88.6	*89.7*	89.0
PHCC	0	0	4.6	*6.9*	5.8
Mission/NGO/community hospital	0	11.8	6.8	*3.5*	4.6
Private hospital	11.1	0	0	*0*	0.3
Medical college/ teaching hospital	11.1	0	0	*0*	0.3
Total facilities refer for caesarean sections (N)	**9**	**17**	**44**	***29***	**99**

Source: STS facility questionnaire

Table 10.18 presents the time taken to reach the nearest referral facility by level of facility. On average it took about two hours to reach the nearest referral facility. The average was two hours from hospitals, PHCCs and HPs, but one and a half hours from SHPs. Table 10.23 also presents the distance travelled to the nearest facilities. Only 5% of facilities reported that the nearest facility was less than five kilometres (km) away. More than one third (38%) of the facilities reported that the distance to the nearest facility was more than 51km. The reported distance for the nearest referral facility increased by level of facility.

Table 10. 18: Time taken and distance to nearest referral facility (using quickest means of transport)

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
Time taken to reach nearest referral facility (in minute):					
25th percentile	45.0	30.0	71.3	37.5	50.0
Median	120.0	120.0	120.0	90.0	120.0
75th percentile	150.0	300.0	300.0	240.0	300.0
Total facilities that refer and reported time (N)	**11**	**10**	**15**	**7**	**43**
Distance to nearest referral facility					
less than 5 km	0	4.6	5.3	5.3	4.6
6 - 10 km	0	9.1	10.5	15.8	10.2
11 - 20 km	0	18.2	10.5	31.6	15.9
21 - 50 km	22.2	22.7	39.5	31.6	31.8
51 km and above	77.8	45.5	34.2	15.8	37.5
Total facilities that refer clients (N)	**9**	**22**	**38**	**19**	**88**

Source: STS facility questionnaire

There was little variation, by level of facility, in the percentage of clients interviewed who were referred, ranging from 11% at PHCCs to 18% at HPs (Table 10.19). Most outpatients at all levels were referred to government hospitals.

Table 10. 19: Respondents referred to another facility

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Referred to another facility	14.5	11.2	18.2	15.0
Total clients (N)	**69**	**134**	**303**	**281**
Referred to:				
Government hospital	60.0	60.0	67.3	59.5
PHCC	0	0	7.3	19.1
HP	0	0	1.8	2.4
SHP	0	0	0	0
NGO facility	0	6.7	0	4.8
Private facility (including medical college)	40.0	26.7	18.2	7.1
Community hospital	0	6.7	5.5	2.4
Not specified higher facility	0	0	0	2.4
Don't know	0	0	0	2.4
Service referred for:				
Clinical examination	70.0	60.0	54.6	64.3
Laboratory test	0	26.7	25.5	21.4
Surgery	30.0	13.3	5.5	7.1
Other	0	0	12.7	4.8
Don't know	0	0	1.8	2.4
Total clients referred (N)	**10**	**15**	**55**	**42**

Source: STS outpatient exit interviews

10.2.5 Outputs

Provision of Services

Facilities were asked about the range of services they provide. The survey focused primarily on the availability of family planning and maternity services, including comprehensive emergency obstetric and newborn care (CEONC) and basic emergency obstetric and newborn care (BEONC).

Maternity Services

Among the selected health facilities, both higher level hospitals and 50% of the district hospitals were officially recognised to provide CEONC, and 50% of district hospitals were recognised BEONC facilities (Table 10.20). Of the PHCCs, over half (58%) were official BEONC facilities and 39% were birthing centres (BCs). Over half of the health posts were BCs along with 11% of SHPs.

Table 10. 20 Proportion of facilities officially recognized as CEONC, BEONC and birthing centres

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
CEONC	100	50			
BEONC		50	58.1		
BC			38.7	58.2	11.1
None of these			3.2	41.8	88.9
Total (N)	**2**	**14**	**31**	**79**	**72**

Source: STS facility questionnaire

Provision of normal delivery care

All higher level and district hospitals provided normal delivery services 24/7 (Table 10.21). One PHCC did not provide delivery services at all. Sixty one per cent of HPs provided delivery care and just 17% of SHPs, and among these lower level facilities providing delivery care most did so on a 24 hours basis.

All CEONC and BEONC facilities provided routine delivery care 24/7. However, 1% of BCs were not providing delivery care at all, while 9% of facilities that are not officially recognized as BCs are providing delivery care, with 6% doing so 24/7.

Table 10. 21 Availability of normal delivery services

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Available	100	100	96.8	60.7	16.7
Available 24/7	100	100	96.8	58.2	15.3
Total (N)	**2**	**14**	**31**	**79**	**72**
		CEONC (%)	**BEONC (%)**	**BC (%)**	**None of these (%)**
Available		100	100	98.8	9.2
Available 24/7		100	100	98.8	6.1
Total (N)		**9**	**25**	**66**	**98**

Source: STS facility questionnaire

Provision of BEONC services

All CEONC facilities provided all BEONC signal functions 24/7.However, only three quarters (77%) of BEONC facilities provided all BEONC signal functions, and only 73% did so on a 24-hour basis (Table 10.22). All BEONC facilities provided the following four BEONC signal functions 24/7: administer parenteral antibiotics, administer parenteral oxytocic drugs, administer parenteral anticonvulsants, and perform manual removal of placenta (MRP). Most BEONC facilities provided manual vacuum aspiration (MVA) (96%) and neonatal resuscitation (92%) 24/7, however only 84% performed assisted delivery

24/7. Seven per cent of BCs provided all BEONC signal functions 24/7, with over 95% administering parenteral antibiotics 24/7, parenteral oxytocic drugs 24/7, and parenteral anti-convulsants for pre-eclampsia/eclampsia.

Table 10. 22 Availability of BEONC services

	CEONC Facilities (%)	BEONC facilities (%)	BC facilities (%)	At least one facility in district providing service (%)
Perform assisted vaginal delivery (vacuum or forceps)	100	88.3	12.3	100
Available 24/7	100	84.4	12.3	100
Administer parenteral antibiotics	100	100	95.1	100
Available 24/7	100	100	95.1	100
Administer parenteral oxytocic drugs	100	100	98.8	100
Available 24/7	100	100	98.8	100
Administer parenteral anticonvulsants for pre-eclampsia/eclampsia	100	100	98.8	100
Available 24/7	100	100	98.8	100
Perform manual removal of placenta (MRP)	100	100	55.2	100
Available 24/7	100	100	55.2	100
Perform removal of retained products of conception (MVA)	100	96.1	8.6	100
Available 24/7	100	96.1	8.6	100
Neonatal resuscitation	100	92.2	64.5	100
Available 24/7	100	92.2	64.5	100
All BEONC services	100	76.7	7.4	100
Available 24/7	100	72.8	7.4	100
Total facilities (N)	**9**	**25**	**66**	
Total districts (N)				**13**

Source: STS facility questionnaire

All higher level hospitals and district hospitals provided all BEONC signal functions 24/7 (Table 10.23 and Figure 10.4). One in four PHCCs (42%) provided all BEONC signal functions, with 36% doing so 24/7. Most commonly PHCCs provided the following signal functions: administer parenteral antibiotics, administer parenteral oxytocic drugs, administer parenteral anticonvulsants, and perform manual removal of placenta (MRP).

Table 10. 23: Availability of BEONC services

	Higher level hospitals (%)	District hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Perform assisted vaginal delivery (vacuum or forceps)	100	100	54.8	11.4	0
Available 24/7	100	100	51.6	10.1	0
Administer parenteral antibiotics	100	100	90.3	57.0	12.5
Available 24/7	100	100	90.3	55.7	12.5
Administer parenteral oxytocic drugs	100	100	96.8	60.8	13.9
Available 24/7	100	100	96.8	58.2	13.9
Administer parenteral anticonvulsants for pre-eclampsia/eclampsia	100	100	96.8	60.8	12.5
Available 24/7	100	100	96.8	57.0	12.5
Perform manual removal of placenta (MRP)	100	100	90.3	34.2	6.9
Available 24/7	100	100	90.3	34.2	5.6
Perform removal of retained products of conception (MVA)	100	100	61.3	6.3	0.0
Available 24/7	100	100	61.3	6.3	0.0
Neonatal resuscitation	100	100	83.9	36.7	9.7
Available 24/7	100	100	83.9	34.2	9.7
All BEONC services	100	100	41.9	6.3	0
Available 24/7	100	100	35.5	6.3	0
Total facilities (N)	**2**	**14**	**31**	**79**	**72**
Total districts (N)					**13**

Source: STS facility questionnaire

Provision of CEONC services

Regarding the availability of the two additional CEONC signal functions (blood transfusion and caesarean section), all CEONC facilities, including both higher level and district hospitals, performed both of these 24/7 (Table 10.24). However, since there isn't an official CEONC facility in all districts, and in the districts without CEONC facilities none of the district hospitals provided these CEONC services, only 62% of districts had at least one facility with all CEONC signal functions available.

Table 10. 24: Availability of CEONC services

	All CEONC Facilities (%)	Higher level hospitals (%)	CEONC district hospitals (%)	Non-CEONC district hospitals (%)	At least one facility in district providing service (%)
Perform blood transfusion	100	100	100	0	61.5
Available 24/7	100	100	100	0	61.5
Perform caesarean section	100	100	100	0	69.2
Available 24/7	100	100	100	0	69.2
All CEONC services	100	100	100	0	61.5
Available 24/7	100	100	100	0	61.5
Total facilities (N)	**9**	**2**	**7**	**7**	
Total districts (N)					**13**

Source: STS facility questionnaire

Family Planning Services

All health facilities reported that they provided condoms, oral contraceptive pills and injectables (Table 10.25). Most hospitals (94%) and 74% of PHCCs provided intrauterine contraceptive devises (IUCDs), along with 17% of HPs and 1% of SHPs. Similarly, most hospitals (88%), and 42% of PHCCs provided implants, along with 15% of HPs. With regards to permanent methods, around 63% of hospitals provided minilap and 69% provided vasectomies.

Table 10. 25: Provision of family planning methods

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Temporary methods:				
Condom	100	100	100	100
Oral contraceptive pill	100	100	100	100
Injectable	100	100	100	100
IUCD	93.8	74.2	16.5	1.4
Implant	87.5	41.9	15.2	0
Total facilities (N)	**16**	**31**	**79**	**72**
Permanent methods:				
Minilap	62.5			
Vasectomy	68.8			
Total facilities (N)	**16**			

Source: STS facility questionnaire

Most health facilities had condoms, oral contraceptive pills and injectables in stock at the time of survey. Likewise, for those facilities that reported providing IUD and implant services, most had them in stock (Table 10.26).

Table 10. 26: Family planning methods in stock at time of visit

	Hospitals(%)	PHCCs (%)	HPs (%)	SHPs (%)
Condom	100	100	98.7	93.1
Oral contraceptive pills	100	96.8	97.5	97.2
Injectables	100	96.8	96.2	98.6
Total facilities providing service (N)	**16**	**31**	**79**	**72**
IUCDs	100	100	92.3	100
Total facilities providing service (N)	**15**	**23**	**13**	**1**
Implant	100	100	83.0	0
Total facilities providing service (N)	**14**	**13**	**12**	**0**

Source: STS facility questionnaire

The STS 2012 revealed that 11% of facilities had experienced at least one stock-out of a temporary family planning method in the last fiscal year (Table 10.27). On average, facilities had one stock out during the last year for each of the methods. Stock-outs of IUCDs were most likely at hospitals (average of two per year). There were no reported stock outs of condoms at Hospitals, or contraceptive pills or injectables at hospitals or PHCCs.

Table 10. 27: Number of stock-outs of family planning methods in the last fiscal year

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)	Total (%)
% of facilities that experienced stock-out of at least one FP commodity	6.3	6.5	7.6	16.7	10.6
Total facilities assessed (N)	**16**	**31**	**79**	**72**	**198**
Average number of stock outs per year per facility with stock outs:					
Condom	0	1	1.2	0.8	0.9
Oral contraceptive Pills	0	0	1.0	1.8	1.3
Injectables	0	0	0.2	1.5	0.9
IUCDs	2	0	0.0	.	0.5
Implant	1	1	0.0	.	0.7
Total facilities that experienced stock-out of at least one FP commodity (N)	**1**	**2**	**6**	**12**	**21**

Note:

All five methods were included up to the HP level while only three methods (condom, pill and depo) included in SHP analysis.

**Only one SHP reported that they were providing IUCD services and there was no stock-out of IUCD.*

Source: STS facility questionnaire

All hospitals (100%), most PHCCs (97%) and two-thirds (67%) of HPs provided post-partum family planning, along with 21% of SHPs. Encouragingly, all the listed abortion sites (hospitals, PHCs and HPs) provided post abortion family planning services (Table 10.28). Adolescent friendly health services were only assessed below hospital level, and were provided in over half of the PHCCs (58%), and nearly one third of the HPs (32%), and a few SHPs (6%).

Table 10. 28: Availability of post-partum and post-abortion family planning services

	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
Provide post-partum family planning	100	96.8	67.1	20.8
Total facilities (N)	**16**	**28**	**35**	**7**
Provide post-abortion family planning	100	100	100	
Total safe abortion sites (N)	**14**	**13**	**2**	
Provide adolescent friendly health services		58.1	31.6	5.6
Total facilities (N)		**31**	**79**	**72**

Source: STS facility questionnaire

Client experience

While the clinical quality of care in facilities is fundamental to ensuring effective care, women's actual experience of care is also important, particularly with regard to future utilisation. If women receive poor quality care at a facility, their experiences will often be shared across the community and client flow to the facility may be reduced.

Waiting time

Waiting time between the arrival at the facility and the first examination is important in shaping a client's perception of quality. Table 10.29 presents the client-reported waiting time and level of satisfaction of clients receiving maternity and outpatient care. Overall, the average waiting time for maternity and outpatients was 18 minutes, with the average waiting time for maternity clients (14 minutes) less than that for outpatients (21 minutes). Most clients were either satisfied or very satisfied with their waiting time (90% maternity client and 81% outpatients).

Table 10. 29: Waiting time between arrival and first assessment by a provider and level of satisfaction

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Waiting time:					
Immediately (0 min)	17.8	4.7	6.8	5.6	8.6
Less than 10 minute (1 - 9 min)	47.3	39.0	38.5	38.8	40.8
Ten minute to less than half hour (10 - 29 min)	25.1	33.6	27.3	31.1	29.6
Half hour to less than one hour (30 - 59 min)	5.2	12.4	13.0	12.7	10.8
One hour to less than two hour (60 - 119 min)	1.8	4.3	7.8	5.7	4.7
Two or more hour (> 120 min)	2.9	6.0	6.5	6.2	5.4
Mean	13.9	23.1	18.8	20.6	18.3
Total clients (N)	254	467	322	789	1043
Satisfaction with waiting time:					
Very satisfied	17.0	9.2	11.6	10.2	11.8
Satisfied	73.1	71.5	69.7	70.8	71.3
Neither satisfied nor unsatisfied	2.8	8.8	8.8	8.8	7.3
Unsatisfied	7.1	10.5	10.0	10.3	9.5
Total clients (N)	**254**	**467**	**322**	**789**	**1043**

Source: STS maternity and outpatient exit interviews

Cleanliness

The cleanliness of a facility is an important aspect of perceived quality of care. There was little difference in satisfaction with the level of cleanliness between maternity clients (72% were satisfied or very satisfied) and outpatients (76% were satisfied or very satisfied) (Table 10.30). It should be noted that the scoring by clients could be affected by their expectations and/or the fact they are still at the facility while conducting the exit interview.

Table 10. 30: Satisfaction with the level of cleanliness

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Very satisfied	7.2	3.6	6.5	4.8	5.4
Satisfied	64.6	74.7	65.7	71.1	69.4
Neither satisfied nor unsatisfied	8.0	9.6	9.0	9.4	9.0
Unsatisfied	17.6	12.0	17.8	14.3	15.2
Very unsatisfied	2.6	0.0	0.9	0.4	0.9
Total clients(N)	**254**	**467**	**322**	**789**	**1043**

Source: STS maternity and outpatient exit interviews

Privacy and confidentiality

Clients have a right to privacy and confidentiality when receiving health care. This includes privacy and confidentiality during counseling, physical examinations and clinical procedures, as well as in the handling of clients' medical records and other personal information. Out of 254 maternity clients interviewed, 99% reported that they had delivered in a separate room and almost two thirds (66%) of the clients had curtains on windows and doors in the delivery room (Table 10.31). Similarly, 95% of the clients reported that no unknown person was allowed to enter the room during delivery, about 14% said they had curtains around the bed and 8% had a divider between the beds.

Amongst outpatient clients, 41% of the female and 31% of the male clients reported that no unknown person was allowed to enter a room during service delivery. Only 21% of both female and male clients reported that there was a curtain on windows and/or doors of the outpatient service delivery room.

Table 10.32shows the level of client satisfaction with the level of privacy received. Overall 72% of the 1,043 clients were either very satisfied or satisfied with the privacy they experienced. Levels of satisfaction amongst maternity clients were slightly higher (81%) than that of outpatients (69%). Overall, 14% of the maternity clients and 15% of the outpatients reported that they were not satisfied with the level of privacy and confidentiality.

Table 10. 31: Measures used to maintain privacy

	%		Female (%)	Male (%)	Total (%)
Maternity client (yes only)		**Outpatient client (yes only)**			
Delivered in separate room	99.3				
Unknown person allowed in the room during delivery	5.4	Unknown person allowed in the room during consultation	58.9	68.8	62.9
Are there curtains on windows & doors	66.1	Are there curtains on doors & windows	20.7	20.5	20.6
Divider between beds	7.9	Treatment in private room	68.1	64.3	66.5
Curtain between/around beds	14.1	Consultation in private room	35.1	33.7	34.5
Total clients (N)	**254**	**Total clients (N)**	**461**	**326**	**787**

Source: STS maternity and outpatient exit interviews

Table 10. 32: Satisfaction with the level of privacy

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Very satisfied	5.1	1.9	4.1	2.8	3.4
Satisfied	75.4	65.9	66.1	66.0	68.2
Neither satisfied nor unsatisfied	5.4	19.4	12.5	16.6	13.9
Unsatisfied	14.1	12.6	16.9	14.3	14.3
Very unsatisfied	0	0.2	0.3	0.3	0.2
Total clients (N)	**254**	**467**	**322**	**789**	**1043**

Source: STS maternity and outpatient exit interviews

Overcrowding

Out of 1,043 clients receiving maternity and outpatient services, about one-third perceived that the facility was overcrowded. Perceptions of outpatient and maternity clients were similar with regards to facility overcrowding. Over a third of maternity clients (37%) perceived that the maternity unit/ward was overcrowded (Table 10.33).

Table 10. 33: Overcrowding of the facility/maternity department reported by client

	Maternity (%)	Outpatient (%)	All (%)
Overcrowding of the facility:			
Yes	46.4	33.8	33.2
No	46.4	66.0	64.2
Don't know	7.3	0.2	2.6
Total clients (N)	**254**	**789**	**1043**
Overcrowding of the maternity ward:			
Yes	36.9		
No	61.2		
Don't know	1.9		
Total clients (N)	**254**		

Source: STS maternity and outpatient exit interviews

Provider

Type of Provider

Most maternity clients reported that their main care provider was a nurse/auxiliary nurse midwife (ANMs) (88%), with just 12% reporting that it was a doctor (Table 10.33). Outpatients most commonly reported that health assistants (HA)/auxiliary health workers (AHWs) provided most of their care (58%), followed by nurses/ANMs (19%). It should be noted that this information was obtained from client exit interviews and clients may not always be aware of the correct level and designation of providers.

Table 10. 34: Type of provider who provided most care

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Doctor	12.2	13.0	15.3	14.0	13.6
Nurse/ANM	87.7	19.7	18.8	19.3	35.9
HA/AHW	0	57.1	59.7	58.1	44.0
Other health worker	0.1	7.3	3.4	5.7	4.3
Don’t know	0	3.0	2.8	2.9	2.2
Total clients (N)	**254**	**467**	**322**	**789**	**1043**

Source: STS maternity and outpatient exit interviews

Sex of provider

Clients receiving maternity and outpatient care were asked the sex of their main provider and how comfortable they felt with them. Table 10.34 shows that just 9% of maternity clients had a male provider and of these 91% were comfortable with the male provider. However, given the small sample size this should be interpreted with caution. Similarly, of the female outpatients with a male provider, 85% were comfortable with the sex of their provider. Almost all the female clients who received care from a female were comfortable with the sex of their provider for both maternity (100%) and outpatient care (99%). Likewise, 99% of male clients who received care from a man were comfortable with the sex of their provider and 97% of the male clients who received care from a woman were also comfortable with the sex of their provider.

Table 10. 35: Comfortable with sex of the provider, by sex of client

	Maternity (%)	Outpatient (%)	All (%)
Comfort of female clients with the sex of service provider:			
Female clients comfortable with **male** provider	91.3	84.9	85.3
Female clients preferred **female** provider	8.7	15.1	14.7
Total female clients who received service from male provider (N)	**23**	**337**	360
Female clients comfortable with **female** provider	100	98.5	99.4
Female clients preferred **male** provider	0	1.5	0.6
Total female clients who received service from female provider (N)	**231**	**130**	361
Comfort of male clients with the sex of service provider:			
Male clients comfortable with **male** provider		99.2	
Male clients preferred **female** provider		0.8	
Total male clients who received service from male provider (N)		**243**	
Male clients comfortable with **female** provider		97.4	
Male clients preferred **male** provider		2.6	
Total male clients who received service from female provider (N)		**77**	

Source: STS maternity and outpatient exit interviews

Explanation and advice

Clients receiving maternity and outpatient services were asked whether they were satisfied with the information received from their provider. Table 10.35 reveals that 73% of the clients receiving maternity care were satisfied or very satisfied with information received from the providers. Nearly one fifth (19%) of the maternity clients reported that they were not satisfied or very unsatisfied with the information received. Similarly, 89% of outpatients were satisfied or very satisfied with the information they received, 6% were not satisfied. There was little difference in the levels of satisfaction with the information received between male (90%) and female (88%) outpatients.

Table 10. 36: Satisfaction with information received from providers

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Very satisfied	7.7	9.8	13.4	11.3	10.4
Satisfied	65.6	78.0	76.2	77.3	74.5
Neither satisfied nor unsatisfied	7.4	6.2	5.0	5.7	6.1
Unsatisfied	19.0	5.8	5.3	5.6	8.8
Very unsatisfied	0.3	0.2	0	0.1	0.2
Total clients (N)	**254**	**468**	**320**	**788**	**1043**

Source: STS maternity and outpatient exit interviews

Provider skill

Most maternity clients (95%) were satisfied or very satisfied with their provider's skill level and just 4% were not satisfied (Table 10.36). Among outpatients, 92% were satisfied or very satisfied with their provider's skill level, and 2% were not satisfied. There was little difference between male (94%) and female (92%) outpatients reporting that they were satisfied or very satisfied.

Table 10. 37: Satisfaction with provider skill level

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Very satisfied	10.3	10.3	12.8	11.3	11.1
Satisfied	84.9	81.2	80.9	81.1	81.9
Neither satisfied nor unsatisfied	1.0	7.3	3.4	5.7	4.6
Unsatisfied	3.8	1.3	2.8	1.9	2.4
Total clients (N)	**254**	**468**	**320**	**788**	**1043**

Source: STS maternity and outpatient exit interviews

Provider attitude and behaviour

Clients receiving maternity services (4%) were more likely to report being scolded by a provider than outpatient clients (1%) (Table 10.37). Most clients who were scolded reported that this was because providers 'don't care' about clients (72%), and 11% felt that they had been mistreated because they were poor and due to their caste/ethnicity. However the sample size for the reasons given are very small and hence these findings should be interpreted with caution.

Table 10. 38: Clients scolded by staff and perceived reason of the clients being scolded

	Maternity (%)	Outpatients (%)	All (%)
Clients scolded by the staff	4.2	0.9	1.7
Total clients (N)	**254**	**788**	**1043**
Perceived reason for scolding by clients			
Don't care about patients	*51.4*	*71.1*	*72.2*
Poor	*9.4*	*9.9*	*11.1*
Caste/ethnicity	*6.5*	*15.9*	*11.1*
Treats everyone badly	*79.1*	*9.9*	*33.3*
Other	*7.3*	*28.9*	*16.7*
Total clients who were scolded (N)	***11***	***7***	***18***

Source: STS maternity and outpatient exit interviews

Provider politeness

Clients were asked to express their level of satisfaction with how polite the provider was during the care. Most maternity clients (94%) were satisfied/very satisfied with the provider's politeness (Table 10.38) and the level of satisfaction amongst outpatients was similar (96%). Overall 4% of maternity clients were unsatisfied/very unsatisfied with the provider's politeness, compared to 1% of outpatients. Most clients who reported providers were impolite perceived it was because they 'don't care' about clients (85%) and treat everyone badly (30%), rather than stating that it was something specific to them. However, these findings should be interpreted with caution given the small sample size.

Table 10. 39: Satisfaction with staff politeness

	Maternity (%)	Outpatients			All (%)
		Male (%)	Female (%)	Total (%)	
Level of satisfaction with politeness:					
Very satisfied	9.8	15.0	17.1	15.8	14.4
Satisfied	84.4	81.0	77.9	79.7	80.9
Neither satisfied nor unsatisfied	1.5	3.2	3.1	3.2	2.7
Unsatisfied	4.0	0.9	1.9	1.3	1.9
Very unsatisfied	0.3	0	0	0	0.1
Total clients (N)	254	468	320	788	1043
Perceived reason for impoliteness (multiple responses, may exceed 100 per cent):					
don't care about clients	*74.4*			*100*	*85.0*
treat everyone badly	*56.6*			*0*	*30.0*
poor	*0*			*7.2*	*5.0*
caste/ethnicity	*6.3*			*0*	*5.0*
Other	*11.2*			*0*	*5.0*
Don't know	*8.1*			*0*	*5.0*
Total clients reporting impoliteness (N)	***11***			***6***	***15***

Source: STS maternity and outpatient exit interviews

Client Satisfaction

Likes and dislikes

Maternity clients were asked what they liked and disliked about the delivery care they received. Most commonly, clients reported that safe (60%) and free (58%) care was important to them (Table 10.39). Clients also liked receiving the transport incentives (39%) and having helpful providers (33%). The preferences were similar for clients receiving care across all facility types, although one key difference was that 12% of hospital clients reported that they didn't like anything about the service, compared to just 2% of HP and no PHCC or SHP clients. Nearly three-quarters (71%) of clients reported that there was nothing they disliked about the care they received. The most commonly mentioned dislikes were the lack of beds (19%), lack of cleanliness (17%), lack of bed linen (14%), late payment of incentive (3%), and lack of privacy (10%). Differences were observed across levels of facility: some dislikes were more commonly reported by hospital clients, namely regarding lack of cleanliness, beds, bed linen and privacy; clients from PHCCs did not report lack of beds as a problem but were most likely to report problems with late payment of incentives, and clients from HPs reported problems with lack of beds and bed linen.

Table 10. 40: Maternity clients likes and dislikes about delivery care

	Hospitals(%)	PHCCs(%)	HPs (%)	SHPs (%)	Total (%)
Clients liked:					
Free service	59.3	74.3	62.2	*40.0*	58.3
Safe care	51.9	60.0	77.8	*90.0*	60.3
Transport incentives	44.4	58.6	48.9	*40.0*	38.6
Helpful health providers	28.9	54.3	53.3	*50.0*	33.4
Short waiting time	28.9	37.1	35.6	*40.0*	32.7
Cleanliness/hygiene	18.5	34.3	28.9	*60.0*	18.8
Ability to handle complications	8.2	7.1	6.7	*0*	7.3
Provision of clothes/caps for the infants	0	12.9	15.6	*0*	2.0
Free food	6.7	0	2.2	*0*	3.7
Plenty of beds	3.0	4.3	0	*0*	1.7
Other (specify)	4.4	2.9	4.4	*0*	3.8
Did not like anything	11.9	0	2.2	*0*	12.0
Clients disliked:					
Lack of beds	17.8	0	15.6	*0*	18.9
Lack of cleanliness/hygiene	17.8	5.7	4.4	*0*	17.2
Lack of bed linen	14.8	4.3	11.1	*0*	14.2
Late payment of incentives	1.5	15.7	8.9	*0*	2.5
Lack of privacy	11.1	1.4	2.2	*0*	10.3
Health provider unhelpful/ignored	7.4	0	0	*0*	6.0
Health provider rude/abusive	3.7	1.4	0	*0*	2.9
Long waiting time	3.7	1.4	0	*0*	3.8
Health provider incompetent/ Unskilled	3.0	1.4	0	*0*	3.1
Did not discharge on time	2.2	0	0	*0*	1.0
Charged money by staff	0	4.3	4.4	*0*	2.0
Performed unnecessary internal examinations	1.5	0	0	*0*	0.4
Sex of provider	0	0	4.4	*0*	0.1
Other (specify)	2.2	5.7	2.2	*0*	3.1
Everything is fine	71.9	80.0	68.9	*100*	70.6
Total maternity clients (N)	**135**	**70**	**45**	***10***	**254**

Source: STS maternity exit interviews

Comparison to previous delivery

Out of the 260 maternity clients interviewed, 49% had given birth before (Table 10.40). Out of those who had given birth previously, just over half (54%) gave birth at home, 44% gave birth at a health facility and one woman gave birth en-route to a health facility. Of those who had previously delivered at a facility, 41% had given birth at the same facility.

Table 10. 41: Place of previous delivery

	%
Delivered previously:	
Delivered previously	41.3
First delivery	58.7
Total clients (N)	254
Place of previous delivery:	
Home	60.6
Health Facility	39.4
On the way	0.1
Total clients delivered previously (N)	**105**
Type of facility:	
This facility	33.7
Public hospital	53.9
PHCC	1.8
Health Post	1.3
Private Clinic	1.5
Private/Teaching Hospital	6.2
NGO/missionary	1.7
Total clients previously delivered in a facility (N)	**44**

Source: STS maternity exit interviews

Maternity clients who had previously given birth at a health facility were asked to compare their experience during the most recent delivery with their previous delivery. Out of the 31 clients, 67% reported that it cost less this time, however, just over a fifth (22%) reported that it had cost more (Table 10.41). Over half (57%) reported that it had been cleaner/more hygienic this time, but a quarter had reported worse hygiene. Promisingly, 45% reported better care (with 9% reporting worse care) and 43% reported better staff behaviour (9% reporting worse care).

Table 10. 42: Comparison of last delivery with previous

	(%)
Cost less	67.2
Cleaner/more hygienic	57.3
Better care	45.0
Better staff behaviour	43.1
Less clean/hygiene	24.1
Cost more	21.6
Provision of free medicine	20.5
Worse staff behaviour	9.9
Worse care	9.3
Total clients previously delivered in a facility (N)	**31**

Source: STS maternity exit interviews

Satisfaction- maternity and outpatients

Client satisfaction with maternity and outpatient care is summarized in Table 10.42. Three aspects of client satisfaction were explored: satisfaction with the care received, willingness to visit the facility again, and willingness to recommend the facility to others. Overall, the level of satisfaction for both maternity clients and outpatients was very high with 90% reporting that they were satisfied/very satisfied with the care they received. Maternity clients (8%) were more likely to report dissatisfaction with their care than outpatients (4%).

Most outpatients (99%) reported that they would be willing to revisit the facility, but only 69%of maternity clients who planned to have another child (although 9% reported uncertainty) said they would. Most maternity (96%) and outpatient (98%) clients reported that they would recommend the facility to others.

Table 10. 43: Satisfaction with the care received

	Maternity (%)	Outpatients			All (%)
		Female (%)	Male (%)	Total (%)	
Satisfaction with the care received:					
Very satisfied	11.7	9.8	13.1	11.2	11.3
Satisfied	77.7	78.4	78.4	78.4	78.2
Neither satisfied nor unsatisfied	2.9	8.5	4.4	6.9	5.9
Unsatisfied	7.7	3.0	4.1	3.4	4.4
Very unsatisfied	0	0.2	0	0.1	0.1
Would visit facility again:					
Willing to visit the facility again	84.6	99.1	98.8	99.0	
Not willing to visit the facility again	4.0	0.6	0.3	0.5	
Don't know	11.4	0.2	0.9	0.5	
Total maternity clients planning to have child (N)	**208**				
Total outpatients		**468**	**320**	**788**	
Would recommend facility to others:					
Yes	95.8	97.6	99.1	98.2	97.6
No	3.2	0.4	0.3	0.4	1.0
Don't know	1.0	1.9	0.6	1.4	1.3
Total clients (N)	**254**	**468**	**320**	**788**	**1043**

Source: STS maternity and outpatient exit interviews

Recommendations for improvement

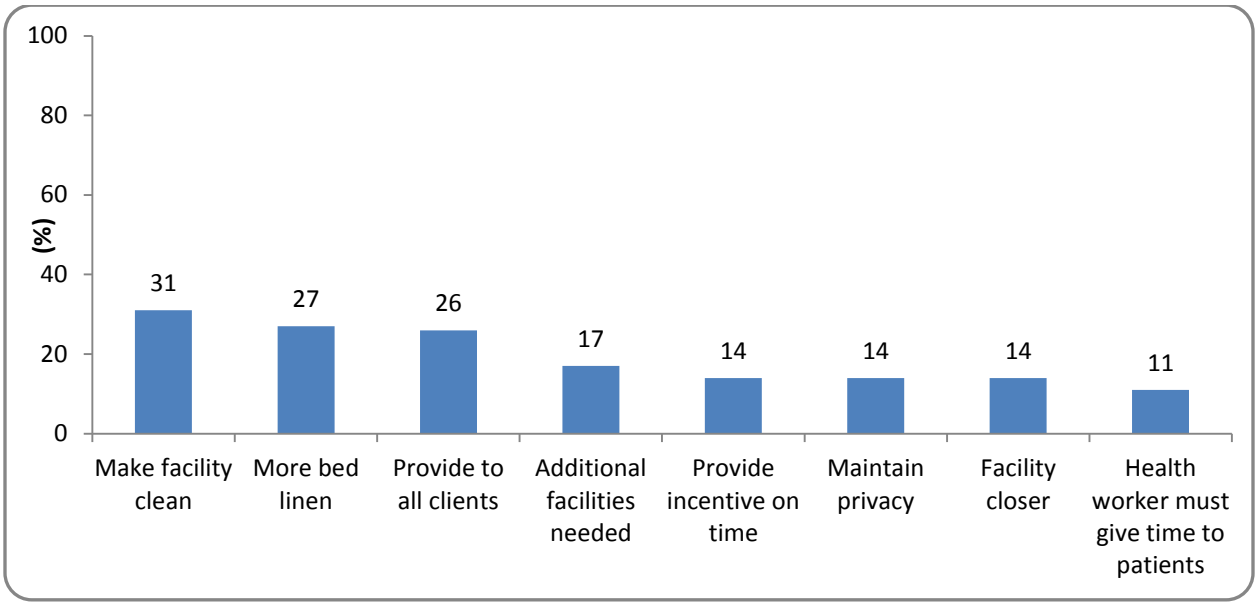
Clients were asked to provide recommendations to improve facilities (Table 10.43, Figures 10.3 and 10.4). Most clients (91%) made suggestions, and this was similar for both maternity clients (95%) and outpatients (90%). Demand for additional facilities (19%), closer facilities (16%) and greater privacy (14%) were common recommendations from both maternity and outpatient clients. Other key recommendations from maternity clients included better cleanliness/hygiene (31%), more bed linen (27%), and more beds (26%). Amongst outpatients, additional key recommendations were to: provide free blood transfusion (23%), increase staff availability (18%), increase availability of female providers (18%), and provide free care (17%).

Table 10. 44: Main client recommendations for facility improvements

		Maternity (%)	Outpatients (%)	Total (%)
Suggestions from clients:				
1	Made suggestion	94.5	89.5	90.7
2	No suggestion	4.7	5.2	5.1
3	Don't know	0.8	5.3	4.2
Total clients (N)		**254**	**788**	**1043**
Suggested improvements:				
	More health facilities	16.9	20.3	19.4
	Free blood transfusion	4.2	22.5	18.0
	Closer facilities	14.4	16.8	16.2
	Adequate human resources	9.7	17.5	15.6
	Greater privacy	14.4	14.3	14.3
	More female service providers	4.2	17.5	14.2
	Provide free service	6.8	16.7	14.2
	More competent/skilled staff	5.1	16.0	13.3
	Reduce waiting time	6.3	13.5	11.7
	Improve physical infrastructure	3.8	9.0	7.7
	Provide drinking water	5.5	7.3	6.9
	More helpful staff	6.8	6.5	6.5
	Better behaviour by staff	6.8	4.4	5.0
	More male service providers	1.3	5.7	4.6
	Provide toilet	3.0	4.6	4.2
	Provide electricity	1.7	1.7	1.7
	Better cleanliness/hygiene	32.1		
	Availability of bed linen	27.0		
	Availability of beds	25.7		
	Provide incentive on time	14.4		
	Discharge on time	3.4		
	Provide bed nets	3.4		
	Increase transport incentive	1.7		
	Ensure drugs are available		2.1	
	Provide good quality drugs		1.5	
	See clients in order of priority		1.4	
	Improve counselling		0.8	
	Health worker give adequate time to patients		0.6	
	Other	11.0	6.8	7.8
	Total clients who made a suggestion (N)	**240**	**705**	**945**

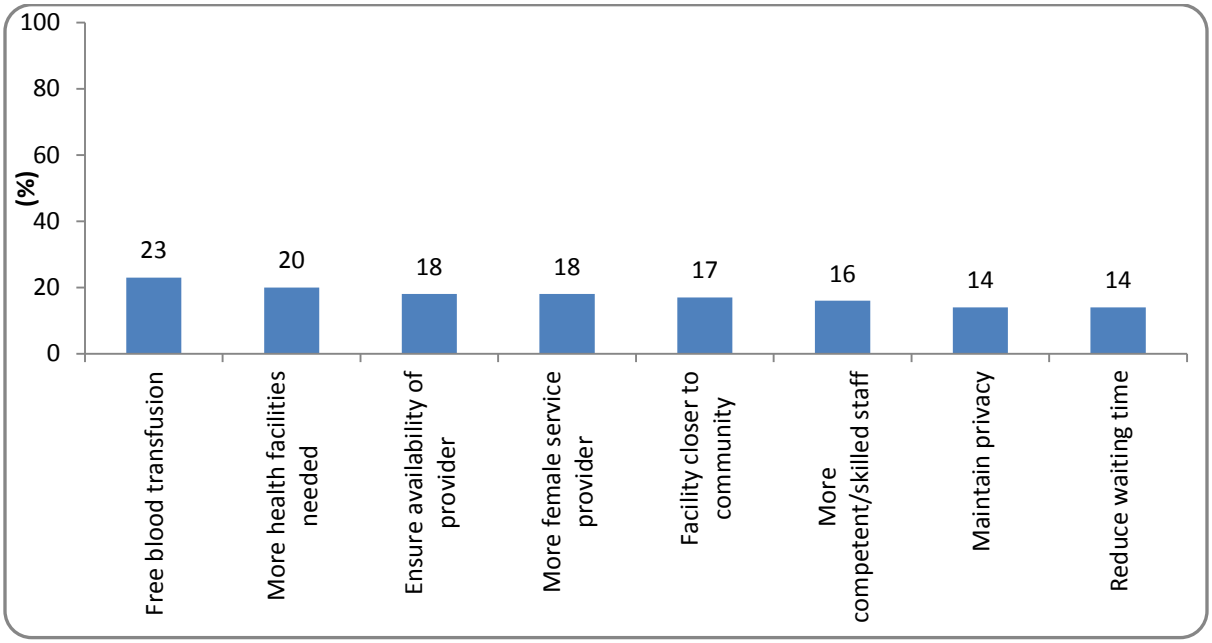
Source: STS maternity and outpatient exit interviews

Figure 10. 3 Main recommendations for maternity care (N=240)



Source: STS maternity exit interviews

Figure 10. 4: Main recommendations for outpatient care (N=787)



Source: STS outpatient exit interviews

10.3 KEY FINDINGS

Biomedical waste management:

- Burning was the most common method for the disposal of biomedical waste for all facility types, followed by burying in a pit.
- Most hospitals had a puncture proof bin for disposal of needles and sharps (94%), but fewer PHCCs (90%), HPs (86%) and SHPs (72%) had one. Red and blue bins for disposing blood/fluid stained items and non-infectious wastes respectively, were available in nearly nine out of ten hospitals (88%),however just over a half of PHCCs had such bins(55%).

Supplies and equipment:

- Towels, buckets and bed sheets were the key supplies that facilities experienced a shortage of.
- More than half of the hospitals, HPs and SHPs experienced a shortage of equipment in the last fiscal year: most common were BP instruments, forceps, autoclaves, scissors, suture sets, otoscopes, weighing machines and cheatle forceps.
- Having equipment that no services providers were trained to use was most common in PHCCs. In hospitals, expensive machines were unused due to an absence of trained personnel, including radiant warmers, ventilators, USG machines and Dialysis machines. PHCCs were most likely to have equipment unused due to a lack of electricity and other reasons. Refrigerators for vaccine and medicines, autoclaves and boilers for sterilization were most likely to be unused due to lack of electricity.
- PHCCs were most likely to have conducted a review of equipment.

Good practice:

- Just under a third of facilities (32%) were found to have a quality improvement plan. Lower level facilities were least likely to have one.
- With regard to the last delivery, all health facilities that provided delivery services had disinfected the floor of the delivery room before the delivery. Availability of a delivery set with all necessary sterilized equipment was also good. However, delivery attendants from 11% of PHCCs and HPs and 6% of hospitals reported that some essential equipment was broken at the time of the last delivery. Less than one-third (31%) of delivery attendants at hospitals had given oxytocin to the mother before delivery, largely due to complications rather than routine practice. This was more common at higher level health facilities. Staff from almost all facilities reported that they had given oxytocin after delivery. Most delivery attendants from hospitals (94%) had used a partograph while attending the last delivery. Partograph use was less common in PHCCs (54%), HPs (57%) and SHPs (57%). Only four-fifths of staff at hospitals (81%) and 77% of PHCCs reported that they had checked the mother's blood pressure at least once an hour during labour. Attendants at all hospitals, SHPs and almost all PHCCs and HPs had performed a PV examination during last delivery. Attendants from all facilities, except one PHCC, had wiped and wrapped the newborn immediately. A higher proportion of staff at

HPs faced difficulties than staff at other facilities. The main reasons reported by delivery attendants were inadequate staff, a lack of electricity, a lack of equipment and a lack of beds.

- Most (94%) maternity clients were informed about the importance of breastfeeding within an hour of giving birth, but clients were less likely to be informed about the importance of exclusive breastfeeding for six months. More than half of the maternity clients were informed about immunization (59%), postnatal danger signs (56%) and newborn danger signs (50%). Less than a third of clients were informed about family planning (32%). All of these were least common at hospitals.

Companion:

- Among maternity clients requesting a companion, 65% were permitted during labour pain and 67% after delivery, but notably this dropped to 44% during the actual delivery.

Service provision:

- All higher level and 50% of district hospitals were CEONC facilities. Half of district hospitals and over half of PHCCs were BEONC facilities. Over half of the health posts were BCs, along with 11% of SHPs.
- All CEONC facilities provided all BEONC and CEONC signal functions 24/7. However, as expected, none of the district hospitals that are not CEONC provided CEONC services and therefore only 62% of districts had at least one facility with all CEONC signal functions available. All higher level hospitals and district hospitals provided all BEONC signal functions 24/7.
- Only 76% of BEONC facilities provided all BEONC signal functions, with 64% doing so on a 24-hour basis. The BEONC signal function least likely to be performed was assisted delivery. Nearly 10% of BCs provided all BEONC signal functions 24/7, with over 90% administering parenteral antibiotics 24/7, parenteral oxytocic drugs 24/7, and anti-convulsants for pre-eclampsia/eclampsia.
- All health facilities provided condoms, oral contraceptive pills and injectables. Hospitals and PHCCs were more likely to provide IUCDs and implants. Minilap was available in 63% and vasectomy in 69% of hospitals.
- Eighteen percent of facilities experienced stock out of at least one temporary family planning method in the last fiscal year.
- Encouragingly, all safe abortion sites were providing post abortion family planning services.
- Only 58% of the PHCCs and 6% of SHPs were providing adolescent friendly health services.

Client experience:

- Most clients reported satisfaction with the waiting time (90% of maternity clients and 81% of outpatients), the cleanliness of the facilities (72% of maternity clients and 76% of outpatients), the level of privacy (81% of maternity clients and 69% of outpatients), information provided (73% of maternity clients and 89% of outpatients), skill level of provider (95% of maternity clients and 92% of outpatients), and politeness of provider (94% of maternity clients and 96% of outpatients).

- Overall, the level of satisfaction for both maternity clients and outpatients was very high with 90% reporting that they were satisfied/very satisfied with the care they received. Maternity clients (8%) were more likely to report dissatisfaction with their care than outpatients (4%). Most outpatients (99%) reported that they would be willing to revisit the facility, but only 69% of maternity clients who planned to have another child. Although most maternity (96%) and outpatient (98%) clients reported that they would recommend the facility to others.
- Many maternity clients who had previously given birth at a health facility reported that this time: it cost less (67%); it was cleaner (57%); they received better quality care (45%) and the staff behavior was better (43%).

Main recommendations from maternity clients

- Make facility clean
- More bed linen
- Provide to all clients
- Additional facilities needed
- Provide incentive on time
- Maintain privacy
- Closer facility
- More time to clients

Main recommendations from outpatients

- Free blood transfusion
- More health facilities
- Ensure provider availability
- More female providers
- Closer facility
- More competent staff
- Maintain privacy
- Reduce waiting time

CHAPTER11- PROGRESS AGAINST NHSP-2 LOGFRAME TARGETS

11.1 INTRODUCTION

This chapter presents the findings for the second Nepal Health Sector Programme (NHSP-2) Logical Framework (LF) indicators for which the Service Tracking Survey (STS) is cited as a source of information. Findings for the 13 indicators have been generated from the STS 2012 data and these have been grouped into four categories: client satisfaction, availability of services, availability of human resources, and governance and accountability (Table 11.1). Findings have been disaggregated, where relevant, by caste/ethnicity, level of health facility, and service components (Table 11.2).

Table 11. 1 Logical framework indicators generated from STS 2012

Code	Indicator
Client satisfaction with health services	
OC2.6	% of clients satisfied with their health care provider at public facilities
Availability of health services	
OP 4.5	% of districts with at least one public facility providing all CEONC signal functions 24/7
OP 4.6	% of PHCCs providing all BEONC signal functions 24/7
OP 4.7	% of health posts that are birthing centres providing deliveries 24/7
OP 4.8	% of safe abortion (surgical and medical) sites with long acting family planning services
OP 4.9	% of health posts with at least five family planning methods
Availability of human resources	
OP 3.1	% of sanctioned doctors and nurses posts at PHCCs and hospitals that are filled
	% of sanctioned posts that are filled - doctors at PHCC
	% of sanctioned posts that are filled - doctors at district hospitals
	% of sanctioned posts that are filled - nurses at PHCC
	% of sanctioned posts that are filled - nurses at district hospitals
OP 3.2	% of district hospitals that have at least 1 obstetrician-gynaecologist or MDGP, 5 SBA trained nurses and 1 anaesthetist or anaesthetist assistant
Governance and accountability	
OP 1.3	% of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)
OP 8.1	% of health facilities that have undertaken social audits as per MoHP guidelines in the current or last fiscal year

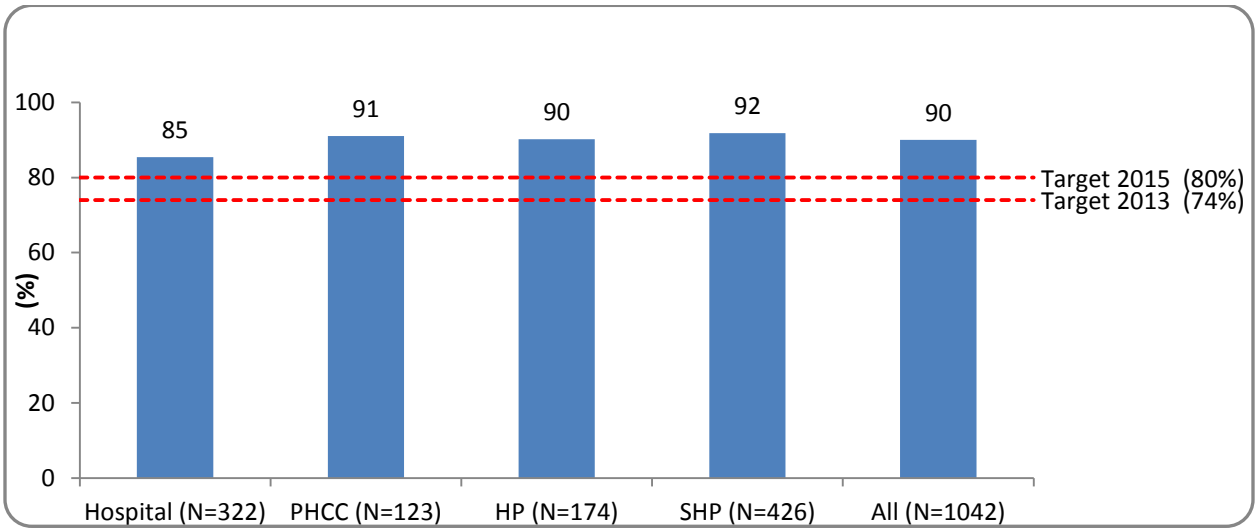
11.2 RESULTS

11.2.1 Client satisfaction with health services

OC2.6	Percentage of clients satisfied with their health care provider at public facilities

It is encouraging to note that most clients (90%) were satisfied with the care they received at health facilities which exceeds the targets set by NHSP-2 for 2013 and 2015 (74% and 80% respectively). In STS 2012 the scale used to capture satisfaction had very satisfied and satisfied at the positive end of the rating, and dissatisfied and very dissatisfied at the negative end of the rating, keeping a neutral option in the middle to record indifference. Irrespective of this change from 2011, client satisfaction is difficult to measure as it is affected by client's expectations and knowledge of their entitlements. Clients commonly under-report dissatisfaction, especially at exit interviews given they are conducted at the facilities. Hence, it is necessary to be cautious when interpreting these results. The findings show that the 2015 target (80%) was exceeded at every level of facility: 92% at SHPs, 90% at HPs, 91% at PHCCs and 85% at Hospitals (Figure 11.1).

Figure 11. 1: Percentage of clients satisfied with care at health facilities



Source: STS outpatient and maternity exit interviews

11.2.2 Availability of health services

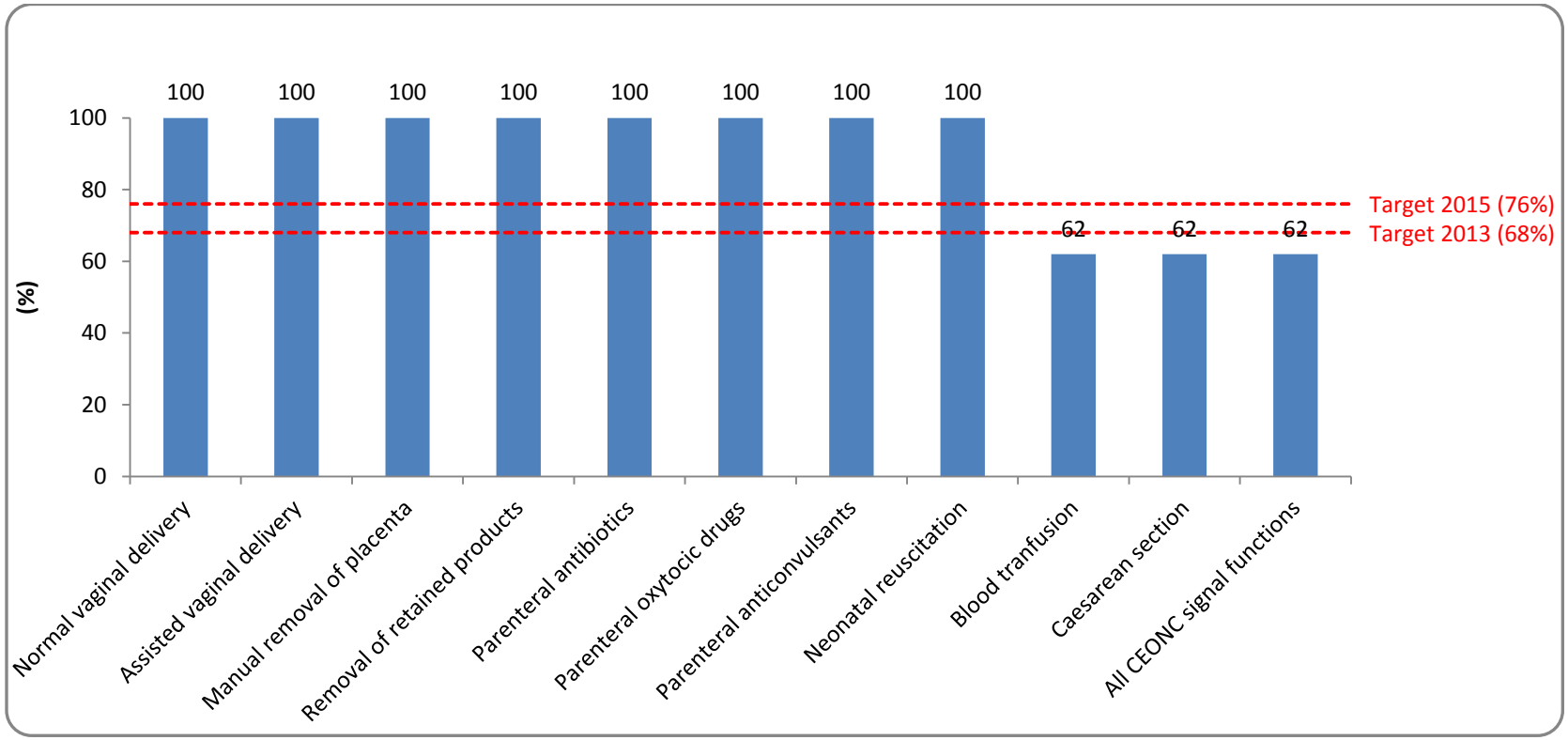
CEONC Services

OP 4.5	% of districts with at least one public facility providing all CEONC signal functions 24/7

The availability of comprehensive emergency obstetric and neonatal care (CEONC) signal functions within districts was good. All districts had at least one facility providing the signal functions applicable for both BEONC and CEONC 24/7: normal vaginal delivery, assisted (vacuum or forceps) delivery, manual removal of placenta, removal of retained products of conception, parenteral antibiotics, parenteral oxytocic drugs, parenteral anticonvulsants and neonatal resuscitation. However, provision of the

additional two CEONC only signal functions (providing blood transfusion and caesarean sections 24/7) was lower, with just 62% of districts having these. This is an improvement compared to 2011 data, where 39% of districts had a facility providing blood transfusion and 54% had one providing caesarean section. The noted improvement was due to five districts having an advanced SBA trained medical officer (able to provide caesarean sections), one district hospital had one Medical Officer (MO) who completed an MD in obstetrics/gynaecology and two district hospitals had an obstetrician/ gynaecologist. Given the increase from 2011 to 2012 it is possible that the NHSP-2 target for 2013 (68%) might be met.

Figure 11. 2: Percentage of districts with at least one facility providing all CEONC signal functions 24/7 (N=13)



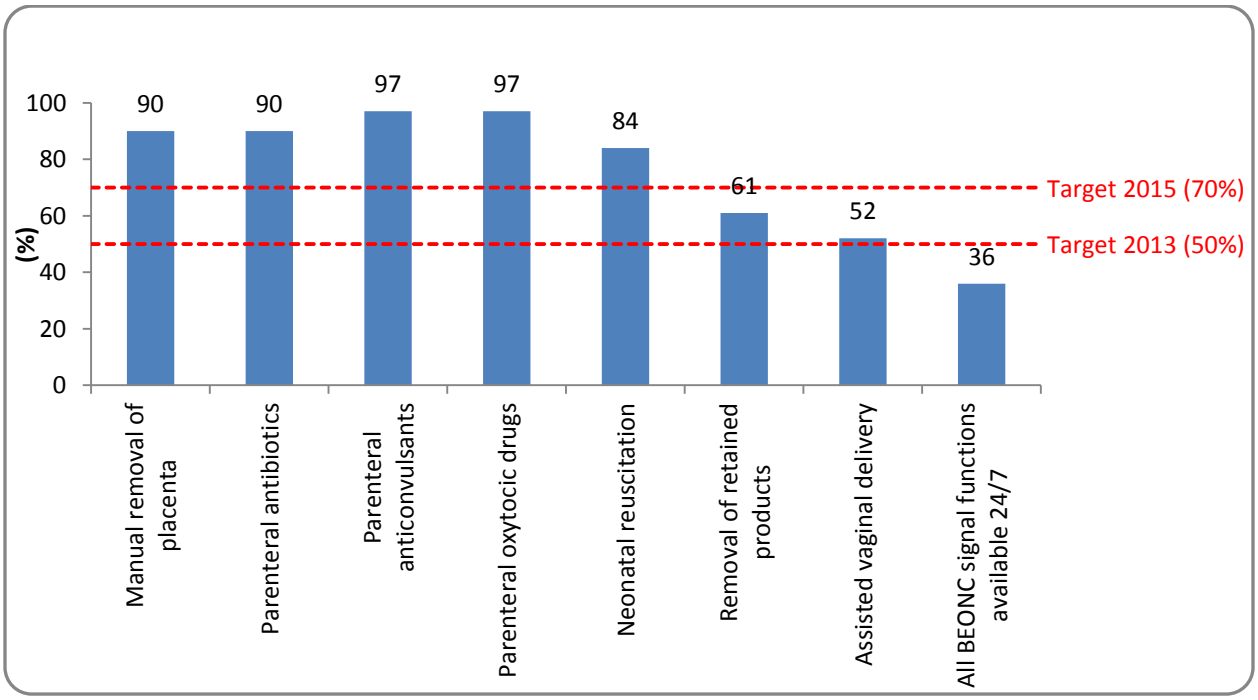
Source: STS facility questionnaire

BEONC Services

OP 4.6 % of PHCCs providing all BEONC signal functions 24/7

There has been a large increase in the percentage of PHCCs providing all BEONC signal functions 24/7, from 14% in 2011 to 36% in 2012 (Figure 11.3). It is encouraging that most PHCCs were providing normal vaginal delivery (97%), parenteral anticonvulsants (97%), parental oxytocic drugs (97%), manual removal of placenta (90%) and parental antibiotics (90%) 24/7. Given most BEONC signal functions are already above the relatively low target of 50% for 2013, additional focus is needed to enhance the skills and competency of providers to remove retained products (61%) and especially assisted vaginal deliveries (52%).

Figure 11. 3: Percentage of PHCCs providing all BEONC signal functions 24/7 (N=31)



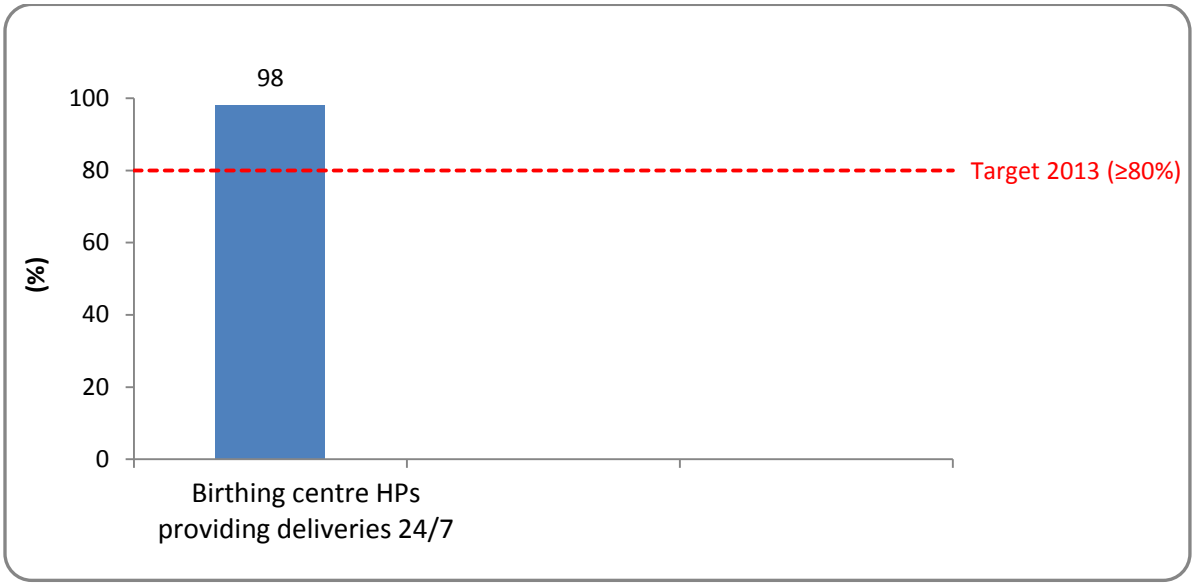
Source: STS facility questionnaire

Delivery services

OP 4.7 % of health posts that are birthing centres providing deliveries 24/7

Nearly all health posts classified as birthing centres offered delivery services 24/7 (98%)(Figure 11.4). This finding is above the NHSP-2 target set for 2011 onwards (80%). This is a substantial increase from STS 2011 (79%).

Figure 11. 4: Percentage of health posts that are birthing centres providing deliveries 24/7 (N=43)



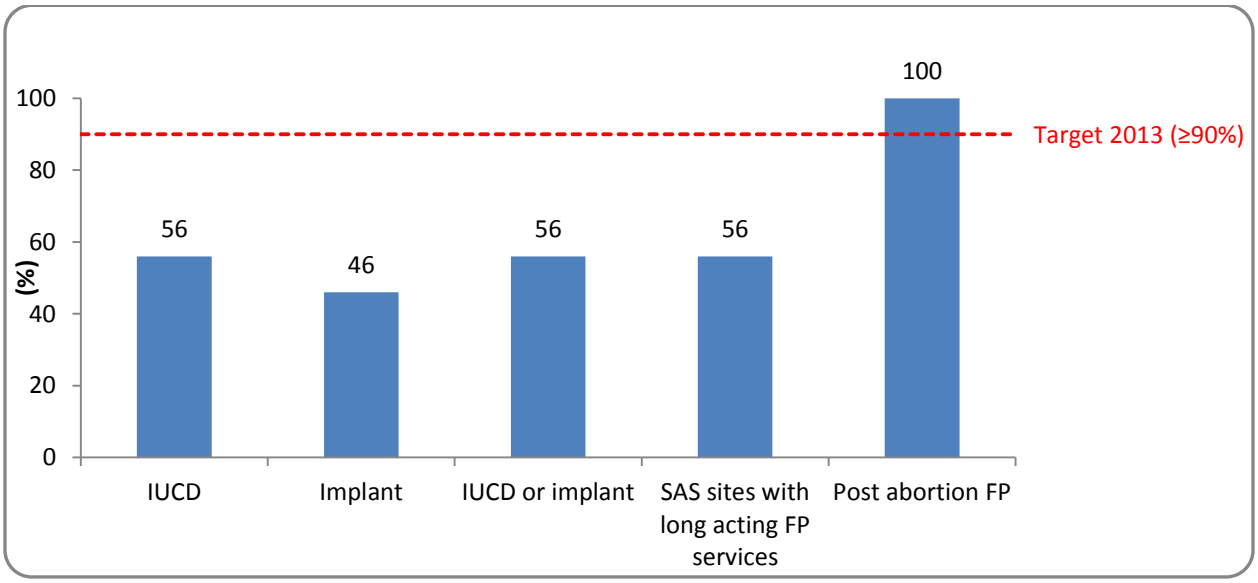
Source: STS facility questionnaire

Family planning services

OP 4.8 % of safe abortion (surgical and medical) sites with long acting family planning services

More than half safe abortion sites (56%) were providing intrauterine contraceptive device (IUCD) services, and only 46% were providing implant services. Given that only 56% of safe abortion sites had at least one type of long acting family planning services this indicator is far off track to achieve the 2013 target (90%).

Figure 11. 5: Percentage of safe abortion sites with long-acting and post-abortion family planning services (N=29)

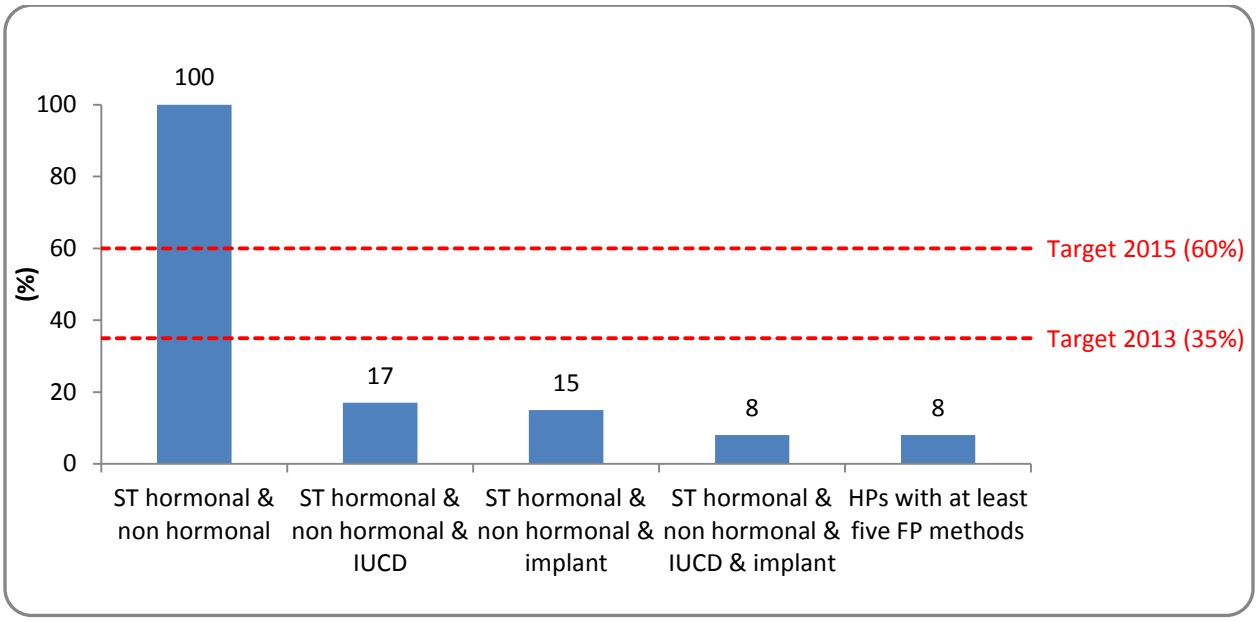


Source: STS facility questionnaire

OP 4.9 % of health posts with at least five family planning methods

As found in STS 2011, STS 2012 showed all health posts provided short term hormonal (pills and injectables) and non-hormonal contraception (condoms) (Figure 11.6). However, very few health posts provided IUCDs (17%) and implants (15%). There was a large drop in the provision of IUCD at health posts from 35% in STS 2011 to 16% in 2012, along with no progress in the provision of implants. This resulted in the percentage of health posts offering all five family planning methods reducing from 13% in 2011 to 8% in 2012. Given this lack of improvement in the provision of long term methods at health posts, the target for 2013 (35%) is unlikely to be met.

Figure 11. 6: Percentage of health posts with at least five family planning methods (N=79)



Source: STS facility questionnaire

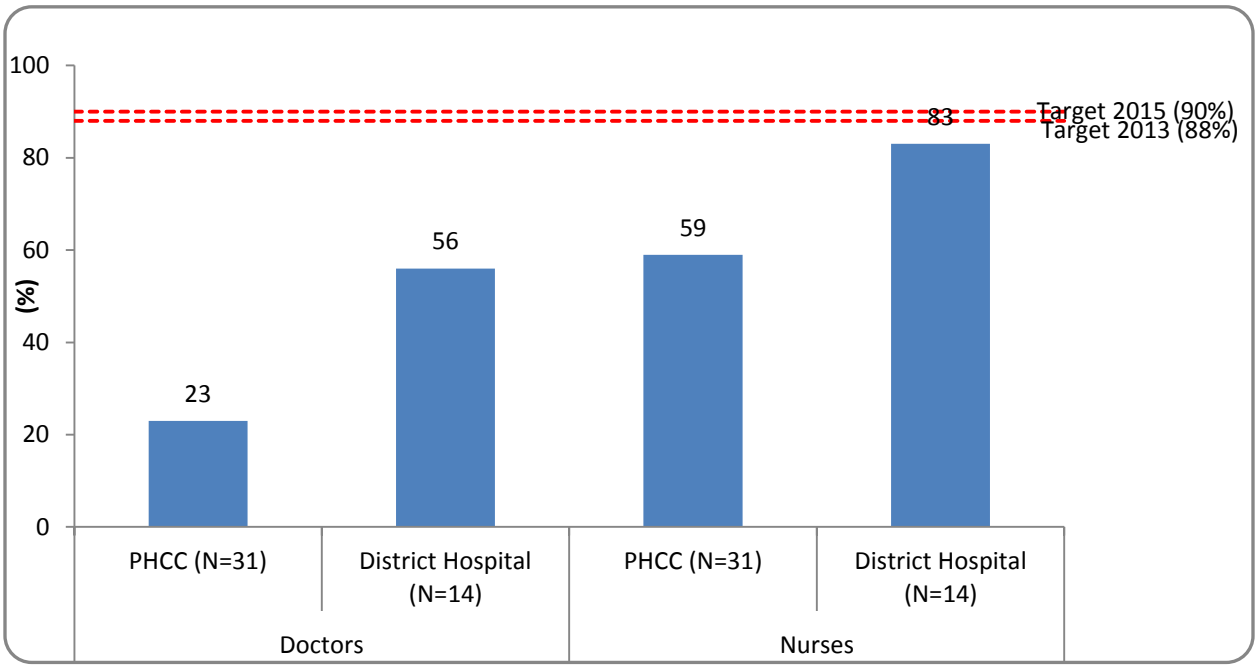
11.2.3 Availability of human resources

Doctors and nurses

OP 3.1	% of sanctioned doctors and nurses posts at PHCCs and hospitals that are filled

The availability of doctors in sanctioned posts is poor with only 19% of sanctioned posts at PHCCs filled and 56% at district hospitals. For nurses the findings are better than for doctors, but are still poor at PHCCs where only 59% of sanctioned posts were filled. At district hospitals it was more promising with 83% of nurses' sanctioned posts being filled. There has been a decrease in filled-sanctioned posts for both doctors and nurses at PHCCs and district hospitals in comparison to STS 2011 (Figure 11.7). The highest fall was observed for doctors at PHCCs. The current status, along with signs of decline rather than improvement when compared to 2011, suggests the 2013 target of 88% for all categories will not be met.

Figure 11. 7: Percentage of sanctioned doctors and nurses posts at PHCCs and hospitals that are filled



Source: STS facility questionnaire

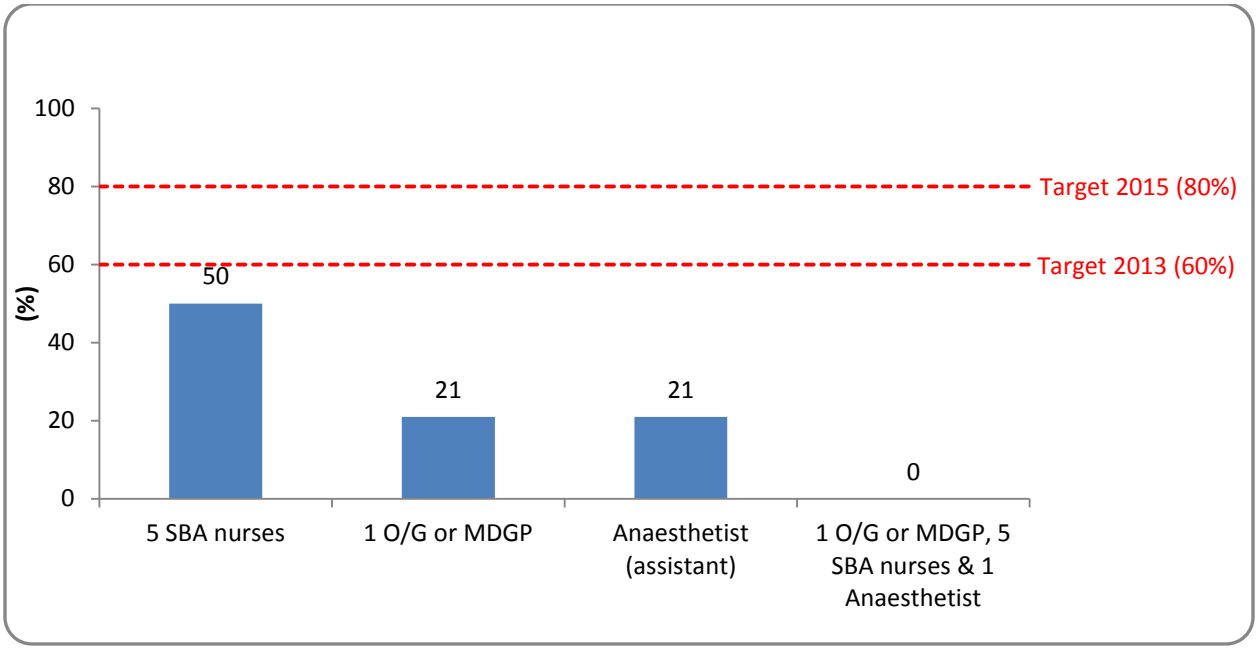
CEONC staff

OP 3.2	% of district hospitals that have at least one obstetrician-gynaecologist or MDGP, five SBA trained nurses and one anaesthetist or anaesthetist assistant

None of the district hospitals were able to meet all of the criteria for this indicator. Only 50% of district hospitals had five SBA trained nurses (Figure 11.8), compared to 94% of district hospitals in 2011 having at least five nurses. The big drop from 2011 may be explained by a change in the questionnaire: the 2011 survey simply measured the number of nurses, whereas in 2012 this was strengthened to measure whether the nurses had received SBA training. However, in STS 2012 only 21% of the district hospitals had an obstetrician/gynecologist or MDGP, compared to 44% in STS 2011. It should be noted that this indicator does not include those who have had advanced SBA training or MOs with a MD in obstetrics/gynaecology, both of whom are making a difference to the provision of CEONC services (see progress with indicator OP 4.5). More positively, there has been an increase in the percentage of district hospitals with an anaesthetist (officer or assistant) from 13% in 2011 STS to 21% in 2012 STS, although this is still low.

It should be noted that there were no sanctioned posts for obstetricians/gynaecologists or anesthetist assistants (AA) in the district hospitals assessed at the time of data collection. The Operating Manual for Department of Health Services (DoHS, 2011) has categorized district hospitals into four categories – A, B, C and D. In this round 14 district hospitals were included, out of them two were from group A, three from B, nine from group C and none were from the group D. As per the manual only group D district hospitals have the provision of obstetrician/gynaecologist posts. Out of the 14 district hospitals selected only one had a MDGP doctor in a contract position. The lack of progress for this indicator is largely attributed to the absence of sanctioned posts for these categories.

Figure 11. 8: Percentage of district hospitals with at least one obstetrician/gynaecologist or MDGP; five SBA trained nurses; and one anaesthetist/anaesthetist assistant (N=14)



Source: STS facility questionnaire

11.2.4 Governance and Accountability

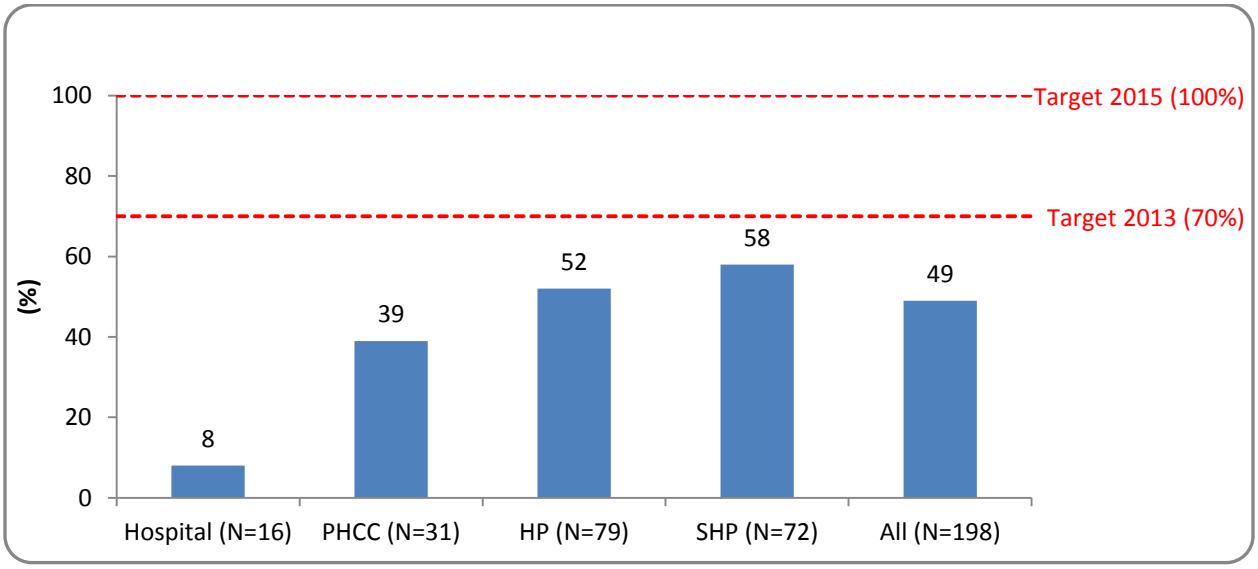
Representation of disadvantaged groups in HFOMCs/HDCs

OP 1.3	% of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)

The 2012 STS found that 49% of the health facility operation and management committees (HFOMCs) and hospital development committees (HDCs) had at least the targeted three female and two Dalit or Janajati members (Figure 11.9). Hospitals (8%) and PHCCs (39%) were least likely to meet this target, with performance better at lower level facilities: 52% of HPs and 58% of SHPs.

Three district hospitals are not included in this analysis as the membership in their HDCs is based on institutional representation from political parties, NGOs, government offices - DDC, DAO etc., rather than individual members and hence the caste/ethnicity of representatives cannot be monitored.

Figure 11. 9: Percentage of health facility committees with at least three female members and two Dalit or Janajati members



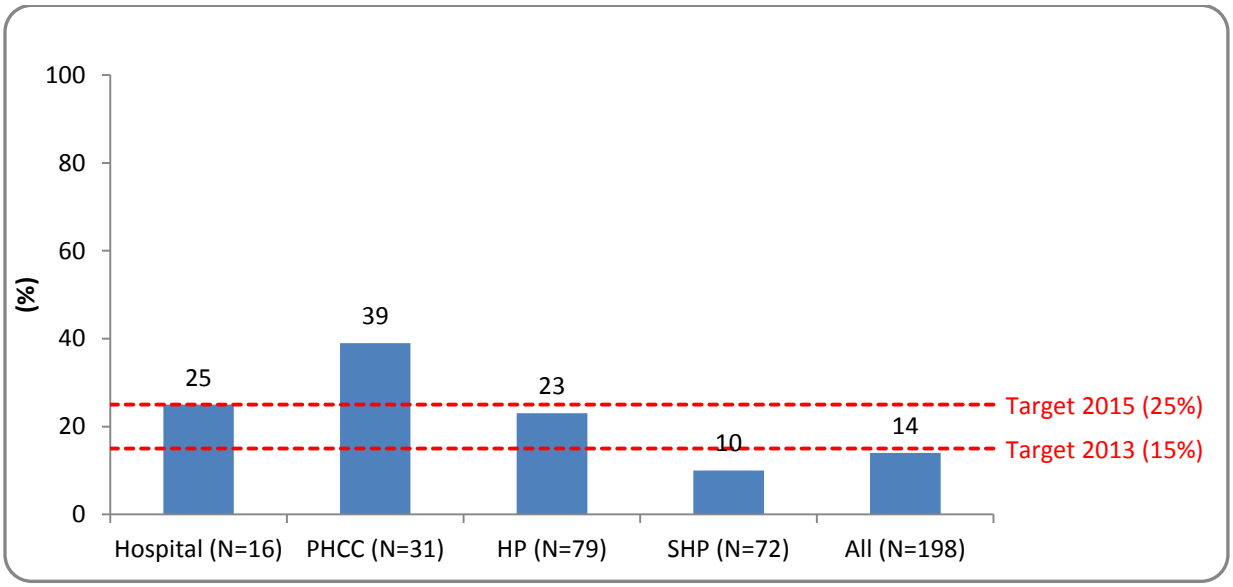
Source: STS facility questionnaire

Social audits

OP 8.1 % of health facilities that have undertaken social audits as per MoHP guidelines in the last fiscal year

STS 2012 found that 14% of health facilities had conducted a social audit, as per MoHP guidelines, in the last fiscal year. This is on track to reach the 2013 target (15%). However, the achievement varies considerably by level of health facility: only 10% of SHPs had conducted social audits as per the guideline issued by MoHP compared to 39% of PHCCs (Figure 11.10). Given the higher number of SHPs this brings the overall figure for all facilities down.

Figure 11. 10: Percentage of health facilities that undertook social audits in the last fiscal year as per MoHP guideline



Source: STS facility questionnaire

Table 11. 2 Achievement of logical framework indicators measured by STS 2012 against targets

Code	Indicator	Achieved 2012	Target		
			2011	2013	2015
OC 2.6	**Percentage of clients satisfied with their health care provider at public facilities**	**90**	**68**	**74**	**80**
	Hospital	85	-	-	-
	PHCC	91	-	-	-
	HP	90	-	-	-
	SHP	92	-	-	-
OP 1.3	**Percentage of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)**	49	-	**70**	**100**
	Hospital	8			
	PHCC	39			
	HP	52			
	SHP	58			
OP 3.1	**Percentage of sanctioned doctors and nurses posts at PHCCs and hospitals that are filled**				
	Percentage of sanctioned posts that are filled - doctors at PHCC	23	85	88	90
	Percentage of sanctioned posts that are filled - doctors at district hospitals	56	85	88	90
	Percentage of sanctioned posts that are filled - nurses at PHCC	59	85	88	90
	Percentage of sanctioned posts that are filled - nurses at district hospitals	83	85	88	90
OP 3.2	**Percentage of district hospitals that have at least one obstetrician-gynaecologist or MDGP, five SBA trained nurses and one anaesthetist or anaesthetist assistant**	0	-	**60**	**80**
	5 SBA trained nurses	50			
	1 obstetrician-gynaecologist or MDGP	29			
	1 anaesthetist or anaesthetist assistant	21			

Table 11.2 Achievement of logical framework indicators measured by STS 2012 against targets cont/…

Code	Indicator	Achieved 2012	Target		
			2011	2013	2015
OP 4.5	**Percentage of districts with at least one public facility providing all CEONC signal functions 24/7**	62	**-**	**68**	**76**
	Manual removal of placenta				
	Available	100			
	24 hrs	100			
	Removal of retained products				
	Available	100			
	24 hrs	100			
	Assisted vaginal delivery				
	Available	100			
	24 hrs	100			
	Parenteral antibiotics				
	Available	100			
	24 hrs	100			
	Parenteral oxytocic drugs				
	Available	100			
	24 hrs	100			
	Parenteral anticonvulsants				
	Available	100			
	24 hrs	100			
	Neonatal Resuscitation				
	Available	100			
	24 hrs	100			
	Blood transfusion				
	Available	62			
	24 hrs	62			
	Caesarean Section				
	Available	62			
	24 hrs	62			
	At least one facility in district providing all CEONC signal functions				
	Available	62			
	24 hrs	62			

Table 11.2 Achievement of logical framework indicators measured by STS 2012 against targets cont/…

Code	Indicator	Achieved 2012	Target		
			2011	2013	2015
OP 4.6	**Percentage of PHCCs providing all BEONC signal functions 24/7**	36	-	**50**	**70**
	Manual removal of placenta				
	Available	90			
	24 hrs	90			
	Removal of retained products				
	Available	61			
	24 hrs	61			
	Assisted vaginal delivery				
	Available	55			
	24 hrs	52			
	Parenteral antibiotics				
	Available	90			
	24 hrs	90			
	Parenteral oxytocic drugs				
	Available	97			
	24 hrs	97			
	Parenteral anticonvulsants				
	Available	97			
	24 hrs	97			
	Neonatal Resuscitation				
	Available	84			
	24 hrs	84			
	All BENOC				
	Available	42			
	24 hrs	39			
OP 4.7	**Percentage of health posts that are birthing centres providing deliveries 24/7**	98	**≥80**		
	Available 24/7	98			
	Available but not 24/7	0			
	Not available	2			
OP 4.8	**Percentage of safe abortion (surgical and medical) sites with long acting family planning services**	56	**≥90**		
	IUCD	56			
	Implant	46			
	IUCD or implant	56			
	Post abortion FP	100			

Table 11.2 Achievement of logical framework indicators measured by STS 2012 against targets cont/…

Code	Indicator	Achieved 2012	Target		
			2011	2013	2015
OP 4.9	**Percentage of health posts with at least five family planning methods**	8	-	**35**	**60**
	ST hormonal & non hormonal	100			
	ST hormonal & non hormonal &IUCD	17			
	ST hormonal & non hormonal & Implant	15			
	ST hormonal & non hormonal &IUCD& Implant	8			
OP 8.1	**Percentage of health facilities that have undertaken social audits as per MoHP guidelines in the current or last fiscal year**	14	**5**	**15**	**25**
	Hospital	25			
	PHCC	39			
	HP	23			
	SHP	10			

11.3 KEY FINDINGS

Two of the 13 logical framework indicators have already exceeded the 2013 and 2015 targets set by NHSP-2 (Table 11.3): client satisfaction and the provision of deliveries 24/7 at HPs that are birthing centres.

Table 11. 3: NHSP-2 logframe indicators that have achieved the 2013 target

Code	Indicator	STS 2012	Target		
			2011	2013	2015
OC 2.6	Percentage of clients satisfied with their health care provider at public facilities	90	68	74	80
OP4.7	Percentage of health posts that are birthing centres providing deliveries 24/7	98	≥80		

Three indicators look to be on track to meet the 2013 targets (Table 11.4). These were: CEONC services at district level, BEONC services at PHCC level and health facilities that have undertaken social audits as per MoHP guidelines in the current of last fiscal year.

Table 11. 4: NHSP-2 logframe indicators that are on track to achieve the 2013 target

Code	Indicator	STS 2012	Target		
			2011	2013	2015
OP4.5	Percentage of districts with at least one public facility providing all CEONC signal functions 24/7	62	-	68	76
OP4.6	Percentage of PHCCs providing all BEONC signal functions 24/7	36	-	50	70
OP8.1	Percentage of health facilities that have undertaken social audits as per MoHP guidelines in the current or last fiscal year	14	5	15	25

The findings for eight indicators revealed that they have still not even met their 2011 targets, where a target is specified, let alone on track to meet the 2013 target (Table 11.5). Notably these relate to human resources: sanctioned doctor and nurses' posts at PHCCs and hospitals filled and provision of staff to provide CEONC services. Although one of these (nurses at district hospitals) is not far off the target it did not show signs of improvement since 2011. The other indicators in this grouping are, safe abortion (surgical and medical) sites with long action family planning, provision of family planning at health posts and the representation of women and Dalit/Janajatis on HFOMCs/HDCs. Neither of the latter two indicators were close to the 2013 targets nor have they shown any improvement from 2011.

Table 11. 5: NHSP-2 logframe indicators that will not achieve the 2013 target

Code	Indicator	STS 2012	Target		
			2011	2013	2015
OP 1.3	Percentage of health facilities with at least three females and at least two Dalit and Janajati members in health facility operation and management committees (HFOMCs) and hospital development committees (HDC)	49	-	70	100
OP4.8	Percentage of safe abortion (surgical and medical) sites with long acting family planning services	56	≥90		
OP 4.9	Percentage of health posts with at least five family planning methods	8	-	35	60
OP 3.1	Percentage of sanctioned posts that are filled - doctors at PHCC	23	85	88	90
	Percentage of sanctioned posts that are filled - doctors at district hospitals	56	85	88	90
	Percentage of sanctioned posts that are filled - nurses at PHCC	59	85	88	90
	Percentage of sanctioned posts that are filled - nurses at district hospitals	83	85	88	90
OP 3.2	Percentage of district hospitals that have at least one obstetrician-gynaecologist or MDGP, five SBA trained nurses and one anaesthetist or anaesthetist assistant	0	-	60	80

ANNEX 2.1: WEIGHTING USED IN HHS

a. Calculation of health facility weights

Level of facility	Sampling frame*		Facility survey (Sample)		Sample weight
	N	%	N	%	
Hospital	95	2.31	16	8.1	0.29
PHCC	209	5.09	31	15.7	0.32
HPs	676	16.45	79	39.9	0.41
SHPs	3129	76.15	72	36.4	2.09
Total	**4109**	**100**	**198**	**100**	**1.0**

*Note: *Annual report 2010/11*

b. Calculation of outpatient weights

Weight - Outpatient exit interveiw	Users (Population)*		Outpatient Exit Interview (Sample)		Weight
	N	%	N	%	
Eastern mountain hospital	103296	0.43	9	1.14	0.38
Central mountain hospital	49750	0.21	4	0.51	0.41
Far-/Mid-/Western mountain hospital	162780	0.68	4	0.51	1.34
Eastern hill hospital	261592	1.10	4	0.51	2.16
Central hill hospital	465441	1.95	4	0.51	3.84
Western hill hospital	588374	2.47	4	0.51	4.85
Mid-western hill hospital	224123	0.94	4	0.51	1.85
Far-western hill hospital	138878	0.58	4	0.51	1.15
Eastern Terai hospital	432941	1.81	8	1.02	1.78
Central Terai hospital	497025	2.08	4	0.51	4.10
Western Terai hospital	54720	0.23	8	1.02	0.23
Mid-western Terai hospital	361953	1.52	4	0.51	2.98
Far-western Terai hospital	253057	1.06	8	1.02	1.04
Eastern mountain PHCC	54745	0.23	14	1.78	0.13
Central mountain PHCC	81952	0.34	4	0.51	0.68
Far-/Mid-/Western mountain PHCC	75661	0.32	4	0.51	0.62
Eastern hill PHCC	161091	0.68	8	1.02	0.66
Central hill PHCC	302386	1.27	8	1.02	1.25
Western hill PHCC	345368	1.45	12	1.52	0.95
Mid-western hill PHCC	208826	0.88	8	1.02	0.86

Weight - Outpatient exit interveiw	Users (Population)*		Outpatient Exit Interview (Sample)		Weight
	N	%	N	%	
Far-western hill PHCC	70450	0.30	8	1.02	0.29
Eastern Terai PHCC	413166	1.73	20	2.54	0.68
Central Terai PHCC	418173	1.75	12	1.52	1.15
Western Terai PHCC	119161	0.50	12	1.52	0.33
Mid-western Terai PHCC	151072	0.63	8	1.02	0.62
Far-western Terai PHCC	204824	0.86	16	2.03	0.42
Eastern mountain HP	152161	0.64	22	2.80	0.23
Central mountain HP	118395	0.50	20	2.54	0.20
Far-/Mid-/Western mountain HP	333092	1.40	24	3.05	0.46
Eastern hill HP	412045	1.73	24	3.05	0.57
Central hill HP	548059	2.30	28	3.56	0.65
Western hill HP	658630	2.76	20	2.54	1.09
Mid-western hill HP	466593	1.96	17	2.16	0.91
Far-western hill HP	249798	1.05	28	3.56	0.29
Eastern Terai HP	617638	2.59	36	4.57	0.57
Central Terai HP	490687	2.06	20	2.54	0.81
Western Terai HP	175052	0.73	28	3.56	0.21
Mid-western Terai HP	367602	1.54	20	2.54	0.61
Far-western Terai HP	228805	0.96	16	2.03	0.47
Eastern mountain SHP	282983	1.19	10	1.27	0.93
Central mountain SHP	310781	1.30	4	0.51	2.56
Far-/Mid-/Western mountain SHP	454309	1.90	16	2.03	0.94
Eastern hill SHP	957187	4.01	28	3.56	1.13
Central hill SHP	1200857	5.03	20	2.54	1.98
Western hill SHP	1684245	7.06	26	3.30	2.14
Mid-western hill SHP	1184631	4.96	17	2.16	2.30
Far-western hill SHP	646877	2.71	20	2.54	1.07
Eastern Terai SHP	2007058	8.41	24	3.05	2.76
Central Terai SHP	2111048	8.85	48	6.10	1.45
Western Terai SHP	722665	3.03	36	4.57	0.66
Mid-western Terai SHP	816000	3.42	12	1.52	2.24
Far-western Terai SHP	465036	1.95	20	2.54	0.77
Total	**23863039**	**100**	**787**	**100**	

**Source: Health Management information system: FY 2011/2012*

c. Calculation of maternity client weights

Weight - Maternity exit interview	Users (Population)*		Maternity Exit Interview (Sample)		Weight
	N	%	N	%	
Eastern mountain hospital	8	0.57	5	1.92	0.30
Central mountain hospital	13	0.93	5	1.92	0.48
Far-/Mid-/Western mountain hospital	27	1.93	10	3.85	0.50
Eastern hill hospital	54	3.87	3	1.15	3.35
Central hill hospital	163	11.67	6	2.31	5.06
Western hill hospital	131	9.38	22	8.46	1.11
Mid-western hill hospital	43	3.08	7	2.69	1.14
Far-western hill hospital	18	1.29	7	2.69	0.48
Eastern Terai hospital	195	13.96	20	7.69	1.81
Central Terai hospital	229	16.39	9	3.46	4.74
Western Terai hospital	95	6.80	20	7.69	0.88
Mid-western Terai hospital	59	4.22	6	2.31	1.83
Far-western Terai hospital	56	4.01	15	5.77	0.69
Eastern mountain PHCC	0	0.00	0	0.00	0.10
Central mountain PHCC	3	0.21	2	0.77	0.28
Far-/Mid-/Western mountain PHCC	1	0.07	4	1.54	0.10
Eastern hill PHCC	18	1.29	2	0.77	1.68
Central hill PHCC	1	0.07	6	2.31	0.10
Western hill PHCC	25	1.79	7	2.69	0.66
Mid-western hill PHCC	31	2.22	1	0.38	5.77
Far-western hill PHCC	6	0.43	6	2.31	0.19
Eastern Terai PHCC	14	1.00	10	3.85	0.26
Central Terai PHCC	13	0.93	7	2.69	0.35
Western Terai PHCC	51	3.65	10	3.85	0.95
Mid-western Terai PHCC	13	0.93	6	2.31	0.40
Far-western Terai PHCC	17	1.22	9	3.46	0.35
Eastern mountain HP	8	0.57	0	0.00	0.10
Central mountain HP	2	0.14	1	0.38	0.37
Far-/Mid-/Western mountain HP	4	0.29	3	1.15	0.25
Eastern hill HP	8	0.57	4	1.54	0.37
Central hill HP	8	0.57	2	0.77	0.74
Western hill HP	2	0.14	1	0.38	0.37
Mid-western hill HP	5	0.36	0	0.00	0.10
Far-western hill HP	10	0.72	11	4.23	0.17
Eastern Terai HP	0	0.00	0	0.00	0.10
Central Terai HP	6	0.43	7	2.69	0.16
Western Terai HP	8	0.57	4	1.54	0.37
Mid-western Terai HP	9	0.64	10	3.85	0.17
Far-western Terai HP	8	0.57	2	0.77	0.74
Eastern mountain SHP	2	0.14	0	0.00	0.10
Central mountain SHP	0	0.00	0	0.00	0.10

Weight - Maternity exit interview	Users (Population)*		Maternity Exit Interview (Sample)		Weight
	N	%	N	%	
Far-/Mid-/Western mountain SHP	3	0.21	0	0.00	0.10
Eastern hill SHP	1	0.07	0	0.00	0.10
Central hill SHP	5	0.36	4	1.54	0.23
Western hill SHP	4	0.29	0	0.00	0.10
Mid-western hill SHP	6	0.43	0	0.00	0.10
Far-western hill SHP	5	0.36	3	1.15	0.31
Eastern Terai SHP	3	0.21	0	0.00	0.10
Central Terai SHP	0	0.00	0	0.00	0.10
Western Terai SHP	1	0.07	0	0.00	0.10
Mid-western Terai SHP	3	0.21	0	0.00	0.10
Far-western Terai SHP	2	0.14	3	1.15	0.12
Total	1397	100.00	260	100.00	1.00

**Source: NDHS 2011*

d. Calculation of CEONC weights

Level of facility	CEONC sampling frame*		CEONC facilities sampled in STS		CEONC weight (w'')
	n	%	n	%	
Higher level hospital	15	40.54	2	22.22	1.82
District level hospital	22	59.46	7	77.78	0.76
PHCC	-	-	-	-	-
HPs	-	-	-	-	-
SHPs	-	-	-	-	-
Total	37	100.00	9	100.00	1.0

e. Calculation of BEONC weights

Level of facility	BEONC sampling frame*		BEONC facilities sampled in STS		BEONC weight
	n	%	n	%	
Hospital	48	30.0	7.00	28.0	1.07
PHCC	112	70.0	18.00	72.0	0.97
HPs	-	-	-	-	-
SHPs	-	-	-	-	-
Total	160.0	100.0	25.00	100.0	1.00

*Note: *Annual report 2010/11*

f. Calculation of Birthing Centre weights

Level of facility	Birthing Centre (BC) sampling frame*		Birthing centres sampled in STS		BC weight
	n	%	n	%	
Hospital	-	-	-	-	-
PHCC	148	14.70	12	19.05	0.77
HPs	533	52.93	43	68.25	0.78
SHPs	326	32.37	8	12.70	2.55
Total	1007	100.00	63	100.00	1.00

*Note: *Annual report 2010/11*

g. Calculation of Safe Abortion Site weights

Level of facility	Safe Abortion Site (SAS) sampling frame*		SAS sampled in STS		SAS weight
	n	%	N	%	
Hospital	94	21.66	14	48.28	0.45
PHCC	162	37.33	13	44.83	0.83
HPs	178	41.01	2	6.90	5.95
SHPs	-	-	-	-	-
Total	434	100.00	29	100	1.00

*Note: *FHD list 2012*

Annex 3.1: Categorisation of main caste/ethnic groups

	Main Caste/Ethnic Groupings (7)	Groups with regional divisions (11) and social groups (103) from 2001 Census	
Caste groups			
1.	Brahman/Chhetri	1.1	Hill Brahman Hill Brahman
		1.2	Hill Chhetri Chhetri, Takuri, Sanyasi
		1.3	Tarai/Madhesi Brahman/Chhetri Madhesi Brahman, Nurang, Rajput, Kayastha
2.	Tarai/Madhesi Other Castes	2.1	Tarai/Madhesi Other Castes Kewat, Mallah, Lohar, Nuniya, Kahar, Lodha, Rajbhar, Bing, Mali Kamar, Dhuniya, Yadav, Teli, Koiri, Kurmi, Sonar, Baniya, Kalwar, Thakur/Hazam, Kanu, Sudhi, Kumhar, Haluwai, Badhai, Barai, Bhediyar/Gaderi
3.	Dalits	3.1	Hill Dalit Kami, Damai/Dholi, Sarki, Badi, Gaine, Unidentified Dalits
		3.2	Tarai/Madhesi Dalit Chamar/Harijan, Musahar, Dushad/Paswan, Tatma, Khatwe, Dhobi, Baantar, Chidimar, Dom, Halkhor
Aadivasi-Janajati groups (ethnic groups)			
4.	Newar	4	Newar Newar
5.	Janajati	5.1	Hill/Mountain Janajati Tamang, Kumal, Sunuwar, Majhi, Danuwar, Thami/Thangmi, Darai, Bhote, Baramu/Bramhu, Pahari, Kusunda, Raji, Raute, Chepang/Praja, Hayu, Magar, Chyantal, Rai, Sherpa, Bhujel/Gharti, Yakha, Thakali, Limbu, Lepcha, Bhote, Byansi, Jirel, Hyalmo, Walung, Gurung, Dura
		5.2.	Tarai Janajati Tharu, Jhangad, Dhanuk, Rajbanshi, Gangai, Santhal/Satar, Dhimal, Tajpuriya, Meche, Koche, Kisan, Munda, Kusbadiya/Patharkata, Unidentified Adibasi/Janajati
Other			
6.	Muslim	6	Muslim Madhesi Muslim, Churoute (Hill Muslim)
7	Other	7	Other Marwari, Bangali, Jain, Punjabi/Sikh, Unidentified Others

Source: Bennett et al. 2008

Annex 4.1 List of essential drugs by level of health facility

	Name of drug	Hospitals	PHCCs	HPs	SHPs
A. For stocking by hospitals, PHCCs, health posts and SHPs (25)					
1	Albendazole Tab.	X	X	X	X
2	Aluminium hydroxide + Magnesium hydroxide Tab.	X	X	X	X
3	Amoxyciline Tab., Cap.	X	X	X	X
4	Calamine lotion	X	X	X	X
5	Chloramphenicol Applicaps	X	X	X	X
6	Chlorpheniramine Tab.	X	X	X	X
7	Ciprofloxacin Drops	X	X	X	X
8	Ciprofloxacin Ointment	X	X	X	X
9	Clove oil	X	X	X	X
10	Compound solution of Sodium lactate (Ringers' Lactate) Inj.	X	X	X	X
11	Ferrous salt + Folic acid Tab.	X	X	X	X
12	Gamma benzene hexachloride cream	X	X	X	X
13	Gentamycin Inj.	X	X	X	X
14	Hyoscinebutylbromide Tab.	X	X	X	X
15	Lignocaine Inj.	X	X	X	X
16	Magnesium Sulphate Inj.	X	X	X	X
17	Metoclorpropamide Inj.	X	X	X	X
18	Metronidazole Tab., Sus.	X	X	X	X
19	Oral Rehydration Solution (ORS) Powder	X	X	X	X
20	Oxytocin Inj.*	X	X	X	X
21	Paracetamol Tab., Inj., Syp.	X	X	X	X
22	Pheniramine Inj.	X	X	X	X
23	Povidinelodine Solution	X	X	X	X
24	Sulfamethoxazole + Trimethoprim Tab., Sus.	X	X	X	X
25	Vitamin B complex Tab.	X	X	X	X
B. For stocking by hospitals, PHCCS and health posts (10)					
26	Atenolol Tab.	X	X	X	
27	Atropine Inj.*	X	X	X	
28	Benzoic acid + Salicylic acid cream	X	X	X	
29	Charcoal activated powder	X	X	X	
30	Ciprofloxacin Tab.	X	X	X	
31	Dexamethasone Inj.	X	X	X	
32	Frusemide Tab.	X	X	X	
33	Promethazine Tab.	X	X	X	
34	Salbutamol Tab.	X	X	X	
35	Sodium chloride Inj.	X	X	X	
C. For stocking by hospitals only (5)					
36	Alprazolam Tab.	X			
37	Aspirin Tab.	X			
38	Chloramphenicol Cap., Powder, Sus.	X			
39	Dextrose Solution Inj.	X			
40	Phenobarbitone Tab.	X			
Total		40	35	35	25

* Drugs that require refrigeration

Annex 10.1: Measuring quality of care in STS 2012

Defining quality of care

There is no universally accepted definition of quality of care. Most definitions recognise the importance of biomedical outcomes (1), however, patient satisfaction, adherence to professional standards, and providers' treatment of clients also feature in more expansive definitions (2, 3). Donabedian's systems framework, which conceptualizes three dimensions of quality - structures, processes and outcomes (4) - has also been influential (5, 6). In the context of maternity care, the definition proposed by Pitroff and Campbell is widely cited in the literature and is relevant for the purposes of this study:

High quality services involve providing *"a minimum level of care to all pregnant women and their newborn babies and a higher level of care to those who need it. This should be done while obtaining the best possible medical outcome, and while providing care that satisfies women and their families and their care-providers. Such care should maintain sound managerial and financial performance and develop existing services in order to raise the standards of care provided to all women"* (1).

Quality of maternity care in Nepal

In Nepal, the importance of quality is discussed in several government health plans (7-9), and a Quality Assurance (QA) system is described in the 2007 *Policy on Quality Health Services* (10). However, a recent review found that the institutions responsible for QA are not necessarily functional or effective (11).

Alongside attempts to institutionalise a general health care QA process, there has also been a specific focus on the quality of maternity care in Nepal. In 2001, there was a review of several programmes that had identified and addressed quality of maternity care (QoMC) issues in selected facilities (14). This review led to the development of a guide called *Monitoring Quality of Care in Maternity Services* (15) by the Department of Health services (DoHS). The guide includes a Nepal-specific QoMC framework which draws on both the World Health Organisation (WHO) *Mother and Baby Package* and a comprehensive QoMC framework (16). This framework identifies 13 elements of quality maternity care, split between two broad categories: provision of care and experience of care (table 1). This framework was used during an assessment of selected facilities in 2004 (17), and it has also been used to develop a skilled birth attendant manual. It provided a basis for creating a framework to measure QoC in STS.

Table 1 Elements of the Nepal 'monitoring quality of care in maternity services' framework

Provision of care	Experience of care
1. Human Resources	10. Respect, dignity and equality
2. Physical resources	11. Emotional support
3. Maternity information systems	12. Prompt service, accurate information and clean facility
4. Availability of essential services	
5. Use of appropriate technologies	13. Acceptability of technologies
6. Evidence-based good practice	
7. Comprehensiveness of care	
8. Client-provider relationship	
9. Referral system	

Source: Family Health Division. *Monitoring Quality of Care in Maternity Services.* Ministry of Health; Department of Health Services; 2004.

Measurement of QoC in STS 2012

In STS 2012 we assess both:

1. the quality of the provision of care within the institution *(facility tool)*
2. the quality of care as experienced by the client (*maternity and outpatient exit interviews*)

The provision of care within the institution is assessed in regards to the extent to which it:

1. conforms with current GoN standards
2. is consistent with internationally agreed best practice

The provision of care is also broken down into three dimensions, similar to Donabedian (4): *inputs*, *processes and outputs* (see figure 1). Within each of these dimensions relevant elements of QoC are listed, and within each of these elements there are various QoC components (see table 2). Elements of both the provision of care and the client experience fall into the *outputs*.

Figure 1: STS Quality of Care Framework

Table 2 Elements and components of quality of care monitored in GoN framework (15), STS 2012, and SPA (18)

ELEMENTS	COMPONENTS	Nepal QoMC framework (15)	STS 2012	SPA (18)
INPUTS				
HUMAN RESOURCES (1)*		X	X	X
	• Skill mix	X	X	X
	• Sanctioned posts	X	X	X
	• Filled posts	X	X	X
	• Service contract	X	X	X
	• Attendance		X	
	• Turnover		X	
	• Training		X	X
	• Recruitment by HFMC/HDC	X	X	X
	• Competence	X	X	X
	• Management structure	X	X	X
PHYSICAL RESOURCES (2)		X	X	X
	• Ownership of building		X	
	• Secure perimeter		X	
	• Building structure		X	
	• Staff accommodation	X	X	
	• Waiting space	X	X	
	• Separate delivery room	X	X	X
	• Power supply	X	X	X
	• Water and Sanitation	X	X	X
	• Beds		X	
	• Equipment	X	X	X
	• Drugs	X	X	X
	• Drug storage		X	X
	• Supplies		X	X
	• Biomedical waste management		X	X
	• Safe blood		X	
		X	X	X
PROCESSES				
HMIS (3)		X	X	X
	• User-friendliness of tools	X	X	
	• Stock-outs		X	X
	• Recording / reporting process	X	X	X
	• Feedback		X	
	• Provider workload		X	
	• Use of data		X	
GOVERNANCE AND ACCOUNTABILITY			X	X
	• Social audit		X	
	• HFMC / HDCs		X	
	• Citizen's Charter		X	
	• Suggestion / complaints mechanism		X	
			X	
	• Staff meetings		X	X
	• Supervision		X	
	• Emergency contingency plan		X	

ELEMENTS	COMPONENTS	Nepal QoMC framework (15)	STS 2012	SPA (18)
	• Public disclosure of information		X	X
	• Quality improvement plan/committee		X	X
	• Annual drug review		X	X
	• Community drugs schemes			
EVIDENCE BASED GOOD PRACTICE (6)		X	X	X
	• Cleanliness	X	X	X
	• Sterilised equipment		X	X
	• Hygienic practices		X	X
	• Appropriate use of technology (5)	X	X	X
	• Appropriate use of drugs	X	X	X
	• Essential newborn care		X	X
	• PV examinations	X	X	X
	• Position during delivery	X	X	
	• Companions		X	
	• Sex of provider		X	
	• Staff training		X	X
REFERRAL SYSTEM (9)		X	X	X
	• Ambulance provision	X	X	X
	• Communication	X	X	X
	• Reasons for referral		X	X
	• Time taken / distance to closest referral site		X	X
COST OF CARE			X	X
	• Free care		X	X
	• Incentive payments for antenatal check-ups		X	
	• Incentive payments for delivery		X	
	• Payments to facilities		X	X
	• Payments to providers		X	X
CLIENT PROVIDER RELATIONSHIP (8)		X	X	X
	• Use of local language	X		
	• Ensure verbal consent	X		X
	• Client involvement in conservations about their care	X		X
FINANCIAL MANAGEMENT				
	• Sources of revenue		X	X
	• Budget (Received vs Spent)		X	X
	• Procurement		X	X
	• Financial reports		X	X
	• Audits		X	X
	• Bank accounts		X	
OUTPUTS				
COMPREHENSIVENESS OF CARE (7)		X	X	X
	• Antenatal care	X	X	X
	• Delivery care		X	X

ELEMENTS	COMPONENTS	Nepal QoMC framework (15)	STS 2012	SPA (18)
	• Postnatal care		X	X
	• Family planning services	X	X	X
	• Abortion care		X	X
	• Post abortion care	X	X	X
AVAILABILITY OF ESSENTIAL SERVICES (4)		X	X	X
	• CEONC signal functions	X	X	X
	• BEONC signal functions	X	X	X
CLIENT EXPERIENCE		X	X	X
	• Respect, dignity, equality (10)	X	X	X
	• Emotional support (11)	X	X	X
	• Prompt service (12)	X	X	X
	• Accurate information (12)	X		X
	• Clean facility (12)	X	X	X
	• Acceptability of technologies (13)	X		
	• Satisfaction		X	X
	• Overcrowding		X	

*Numbers in parenthesis relate to the elements included in Table 1

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Annex 10.2 Supplies that facilities reported a shortage of in the last fiscal year 2011/12

SN	Items	Hospital (%)	PHCC (%)	HP (%)	SHP (%)
1	Towel	0	14.3	17.7	16.7
2	Bucket	0	7.1	5.9	29.2
3	Bed sheet	0	14.3	14.7	8.3
4	Curtain	0	7.1	2.9	25.0
5	Mask	25.0	7.1	8.8	8.3
6	Apron	25.0	7.1	5.9	12.5
7	Blanket	0	21.4	11.8	0
8	Surgical gloves	0	0	11.8	8.3
9	Mug	0	7.1	2.9	16.7
10	Virex	25.0	21.4	2.9	0
11	Utility gloves	25.0	0	8.8	4.2
12	Cotton and gauge	25.0	7.1	5.9	4.2
13	Suture materials	0	0	5.9	12.5
14	Oxygen	25.0	7.1	2.9	4.2
15	Soap/detergent	0	0	5.9	8.3
16	Macintosh	0	7.1	8.8	0
17	Pillow	0	14.3	2.9	0
18	Dustbin	0	0	2.9	8.3
19	Kerosene	0	0	2.9	4.2
20	Condom	0	0	0	4.2
21	Pills	0	0	0	4.2
22	Cidex	0	0	2.9	0
23	Spirit	0	7.1	0	0
24	Chemicals for lab diagnosis (blood, urine)	0	7.1	0	0
25	Phenol	0	0	0	4.2
n (total facilities with shortage of supplies)		4	14	34	24

Annex 10.3 Equipment that facilities reported a shortage of in the last fiscal year 2011/12

SN	Item	Hospital (%)	PHCC (%)	HP (%)	SHP (%)
1	BP instrument (aneroid)	11.1	50.0	40.4	38.1
2	Forceps	22.2	13.6	10.6	23.8
3	Autoclave (non-electric)	11.1	13.6	8.5	21.4
4	Scissors	22.2	4.6	10.6	19.1
5	Suture set	0	9.1	12.8	14.3
6	Otoscope	0	0.0	12.8	16.7
7	Weighing machine	0	13.6	6.4	14.3
8	Cheatle forceps with jar	0	4.6	8.5	16.7
9	Stethoscope	0	18.2	8.5	7.1
10	Dressing set	11.1	9.1	12.8	4.8
11	ENT diagnosis set	0	4.6	8.5	14.3
12	Normal delivery set	0	4.6	10.6	9.5
13	Suction machine foot operated	22.2	18.2	8.5	0
14	Vacuum	22.2	18.2	8.5	0
15	Autoclave (electric)	0	13.6	4.3	7.1
16	Dental forcep	0	9.1	8.5	4.8
17	Weight machine newborn	11.1	4.6	4.3	4.8
18	Dental set	0	4.6	4.3	7.1
19	X ray	22.2	13.6	0	0
20	B.P instrument (paediatric)	0	4.6	0	7.1
21	Kidney trays	0	0	4.3	4.8
22	Refrigerator for vaccines and medicines	0	0	6.4	2.4
23	Torch	0	4.6	4.3	2.4
24	Four burner stove/gas and gas stove	0	9.1	4.3	0
25	ECG machine	33.3	4.6	0	0
26	Fetoscope	0	4.6	4.3	0
27	MVA set (manual vacuum aspiration)	11.1	9.1	0	0
28	Artery forceps	0	0	2.1	4.8
29	O2 flow meter	22.2	4.6	0	0
30	Needle holder	0	0.0	2.1	4.8
31	Dressing drum	0	4.6	2.1	0
32	Steam sterilizer	0	0	0	4.8
33	Resuscitation set (paediatric)	0	4.6	2.1	0
34	Height machine	0	0	0	4.8
35	Peri light	11.1	4.6	0	0
36	Radiant warmer	11.1	4.6	0	0
37	USG machine	11.1	4.6	0	0
38	Stretcher	0	0	2.1	2.4
39	Episiotomy set	0	0	2.1	0
40	IUCD insertion & removal set	11.1	0	0	0
41	Implant insertion & removal set	0	0	2.1	0
42	Rechargeable emergency lamp	0	0	2.1	0
43	Microscope	0	4.6	0	0
44	Hot air oven	0	4.6	0	0
45	Nebulizer	11.1	0	0	0
46	Boiler for sterilizer	0	0	0	2.4
47	Trolley	0	0	2.1	0
48	Electronic microscope	0	0	2.1	0
49	Thermometer	0	0	0	2.4
n (total facilities with shortage of equipment)		**9**	**22**	**47**	**42**

Annex 10.4 Equipment that facilities reported a breakage of in the last fiscal year 2011/12

SN	Items	Hospitals	PHCCs	HPs	SHPs
1	BP instrument (aneroid)	12.5	54.6	40.7	54.1
2	Forceps	25.0	0	33.3	24.3
3	Scissors	25.0	0	22.2	27.0
4	Weighing machine	12.5	18.2	14.8	16.2
5	Stethoscope	0	0	11.1	16.2
6	Cheatle forceps with jar	0	9.1	7.4	16.2
7	ENT diagnosis set	0	0	11.1	10.8
8	Weight machine newborn	12.5	9.1	0	8.1
9	Suture set	0	18.2	3.7	5.4
10	Refrigerator for vaccines and medicines	12.5	18.2	3.7	2.7
11	Artery forceps	0	0	3.7	10.8
12	Autoclave (electric)	0	18.2	3.7	2.7
13	Dressing set	0	9.1	7.4	0
14	Normal delivery set	0	18.2	3.7	0
15	Peri light	0	9.1	3.7	2.7
16	Generator	12.5	9.1	3.7	0
17	Stretcher	0	9.1	7.4	0
n (total facilities with equipment breakages)		8	11	27	37

Annex 10.5 Equipment that facilities reported an excess of in the last fiscal year 2011/12

SN	Items	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
1	IUCD Insertion & removal set	0	0	33.3	0
2	Dental forcep	0	20.0	0	33.3
3	Forceps	100	0	16.7	0
4	B.P Instrument (Aneroid)	0	20.0	0	0
5	Autoclave (Electric)	0	20.0	0	0
6	Autoclave (Non-Electric)	0	20.0	0	0
7	Weighing Machine	0	0	0	33.3
8	Normal Delivery Set	0	0	0	33.3
9	Implant Insertion & Removal Set	0	0	16.7	0
10	Suction Machine Foot Operated	0	0	16.7	0
11	Refrigerator for Vaccines and Medicines	0	20.0	0	0
12	Operation set	0	0	16.7	0
13	Hot air oven	0	20.0	0	0
14	Nebulizer	0	0	16.7	0
15	Glass syringe	0	0	16.7	0
16	Needle holder	0	0	0	33.3
17	Stretcher	0	0	0	33.3
n (total facilities with unwanted or excessive equipment)		**1**	**5**	**6**	**3**

Annex 10.6 Equipment that facilities reported having no one trained to use in the last fiscal year 2011/12

SN		Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
1	Dental set	0	15.4	4.8	25.0
2	Dental forcep	0	7.7	14.3	12.5
3	IUCD Insertion & Removal Set	0	7.7	14.3	6.3
4	Implant Insertion & Removal Set	0	7.7	14.3	0
5	Autoclave (Electric)	0	7.7	0	12.5
6	Autoclave (Non-Electric)	0	0	4.8	12.5
7	Suction machine foot operated	0	7.7	4.8	6.3
8	ENT Diagnosis Set	0	7.7	0.0	12.5
9	Refrigerator for Vaccines and Medicines	0	7.7	4.8	0
10	Speculum	0	0	9.5	0
11	CAC equipment	0	7.7	4.8	0
12	Microscope	0	7.7	0	6.3
13	Vaccum	0	0	4.8	6.3
14	O2 flow meter	0	7.7	4.8	0
15	Photo therapy machine	0	15.4	0	0
16	Abortion set	0	0	9.5	0
17	Radient warmer	25.0	7.7	0	0
18	Steam Sterilizer	0	0	4.8	0
19	I & D Set	0	7.7	0	0
20	Forceps	0	0	4.8	0
21	Operation set	0	0	4.8	0
22	MVA set (Manual Vaccum Aspiration)	0	0	0	6.3
23	Hot air oven	0	7.7	0	0
24	ECG machine	0	7.7	0	0
25	Nebulizer	0	0	4.8	0
26	Boiler for sterilizer	0	0	0	6.3
27	Lab instrument	0	0	0	6.3
28	X ray	0	7.7	0	0
29	Ventilator	25.0	0	0	0
30	Fridge	0	0	4.8	0
31	USG machine	25.0	0	0	0
32	Dialysis machine	25.0	0	0	0
n (total facilities with equipment that no one is trained to use)		**4**	**13**	**21**	**16**

ANNEX 10.7: Equipment available but unused

SN	Items	Hospitals (%)	PHCCs (%)	HPs (%)	SHPs (%)
1	Refrigerator for Vaccines and Medicines	0	66.7	46.7	30.0
2	Autoclave (non-electric)	0	0	26.7	20.0
3	Autoclave (Electric)	50.0	8.3	13.3	10.0
4	Boiler for sterilizer	0	8.3	0	30.0
5	Steam Sterilizer	0	0	0	30.0
6	Peri light	0	16.7	6.7	0
7	Suction Machine Foot Operated	0	16.7	0	0
8	Microscope	0	16.7	0	0
9	X ray	0	16.7	0	0
10	Normal Delivery Set	0	8.3	0	0
11	ENT Diagnosis Set	0	8.3	0	0
12	Torch Light	0	0	0	10.0
13	Four Burner Stove/Gas and gas stove	0	0	6.7	0
14	ECG machine	0	8.3	0	0
15	Nebulizer	0	8.3	0	0
16	O2 flow meter	50.0	0	0	0
17	Electronic microscope	0	0	6.7	0
18	Lab instrument	0	8.3	0	0
19	Otoscope	0	0	6.7	0
20	Fridge	0	8.3	0	0
21	Centrifuge machine	0	8.3	0	0
n (total facilities with equipment available but unused)		**2**	**12**	**15**	**10**