# Improving Quality of Care

## Kampot Operational District, Cambodia

**February 2010**


Nathalie Abejero nathalie.abejero@gtz.de
Bettina Schwind bettina.schwind@gtz.de
GTZ Secretariat gtzadmin@online.com.kh

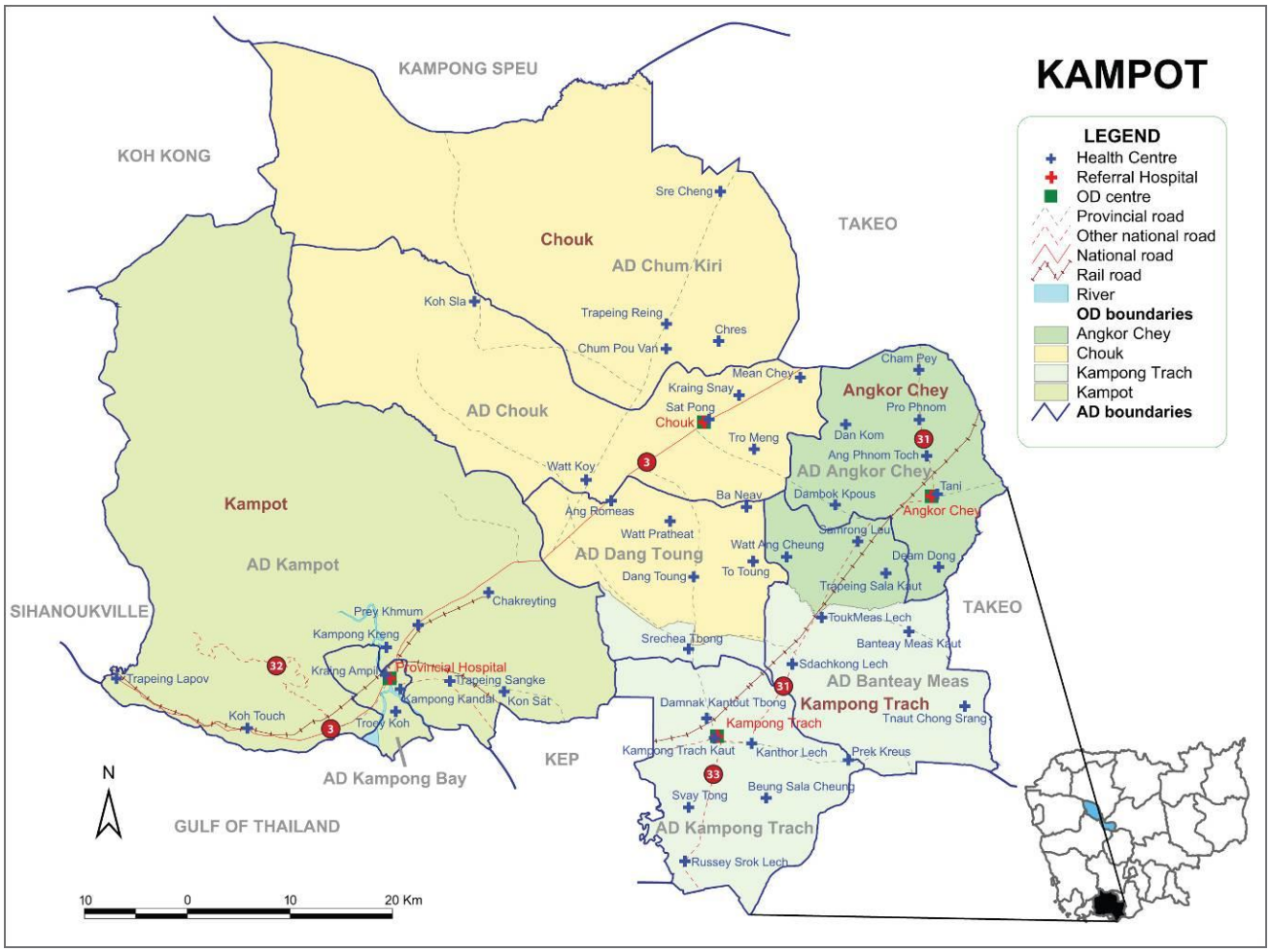

gtz

**Acknowledgements**

The management team at the Kampot Provincial Health Department and the Kampot Operational District contributed valuable insight, time and support throughout the data collection process.

The GRET/SKY team, the managers in Phnom Penh and the staff in Kampot, contributed much valuable information and facilitation during the qualitative study.

The entire team of the GTZ Social Health Protection Programme assisted in the procurement of data and in finalising this report, particularly the Provincial Health Advisor in Kampot and the Health Financing Advisor in Phnom Penh.




Kampot Province is located 148 km south of Phnom Penh, the capital of Cambodia. This report focuses on Kampot Operational District (OD), which is the westernmost OD in the province.

# List of Abbreviations

| | |
|---|---|
| AFD | Groupe Agence Française de Développement |
| ANC(-2) | Antenatal Care (2nd visit) |
| AOP | Annual Operational Plan |
| ARI | Acute Respiratory Infection |
| BMZ | Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry of Economic Cooperation and Development) |
| BS | Birth spacing |
| CBHI | Community-Based Health Insurance |
| CC | Commune Council(s) |
| CE | Continuing Education |
| CET | Clinical Expert Teams |
| CMDG | Cambodian Millennium Development Goals |
| CP | Counterpart(s) or Clinical Pathways |
| CPA | Complementary Package of Activities |
| CPG | Clinical Practice Guidelines |
| CPR | Contraceptive Prevalence Rate (among women 15-49 yrs) |
| CRPR | Clients' Rights and Providers' Rights-Duties Package |
| C-section | Cesarian section |
| CSS | Client Satisfaction Surveys |
| DED | Deutscher Entwicklungsdienst (German Development Service) |
| DPHI | Department of Planning and Health Information, MOH |
| EBM | Evidence-based Medicine |
| EF | Equity Fund |
| EI | Exit Interviews |
| EOC | Emergency Obstetric Care |
| EPI | Expanded Programme on Immunisation |
| EPOS | German consulting firm implementing HRD component |
| EOC | Emergency Obstetric Care |
| FGD | Focus Group Discussions |
| GFATM | Global Fund for AIDS, TB, Malaria |
| GRET | Groupe de Recherche et d'Echanges Technologiques |
| GTZ | Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (German Agency for Technical Cooperation) |
| HAT | Hospital Assessment Tool |
| HC1 | Health Centre reporting tool to OD level (HIS) |
| HC | Health Centre |
| HCAT | Health Centre Assessment Tool |
| HCMC | Health Centre Management Committee |
| HEF | Health Equity Fund |
| HF | Health Financing |
| HFC | Health Financing Committee |
| HIS | Health Information System |
| HMT | Hospital Management Training |
| HO2 | Referral Hospital reporting tool to PHD level (HIS) |
| HP | Health Partner |
| HRD | Human Resources Development |
| HSMT | Health Service Management Training |
| HSP | National Health Sector Strategic Plan 2003 – 2007 |
| HSSP | Health Sector Support Project |
| HTA | Health technology assessment |
| IEC | Information Education Communication (Materials) |
| ILO | International Labour Organisation |
| IMCI | Integrated Management of Childhood Illnesses |
| IPPC | Integrated Postpartum Care package |
| KgT / Kg Thom | Kampong Thom |
| Lab | Laboratory |
| LSS | Life Saving Skills |
| MCH | Mother and Child Health |
| Mgmt | Management |
| MoEF | Ministry of Economics and Finance |
| MoH | Ministry of Health |
| MoLVT | Ministry of Labour and Vocational Training |
| MOSVY | Ministry of Social Affairs, Veterans and Youth |
| MOU | Memorandum of Understanding |
| MPA | Minimum Package of Activities |
| MPH | Master in Public Health |
| MVF | Most Vulnerable Families (Kampot) |
| NGO | Nongovernmental Organisation |
| NIPH | National Institute of Public Health |
| NMCHC | National Maternal and Child Health Center |
| Obs | Obstetrics |
| OD | Operational District |
| OP | Operational Plan |
| OPD | Out-patient Department<br>As an indicator: # of contacts per inhabitant per year |
| OT | Operational theater |
| Ped | Paediatrics |
| PHD | Provincial Health Department |
| PNC | Post-natal care |
| PPC | Post-partum care |
| PRH | Provincial Referral Hospital |
| QA | Quality Assurance |
| QAO | Quality Assurance Office, DPHI, MOH |
| QI | Quality Improvement |
| QC | Quality Circles |
| QIWG | Quality Improvement Working Group |
| QM | Quality Management |
| RACHA | Reproductive and child health alliance |
| RMNCH | Reproductive, maternal, neonatal and child health |
| R&R | Reward & Reinforcement, formerly Reward & Sanction |
| RDU | Rational Drug Use |
| RGC | Royal Government of Cambodia |
| RH | Referral Hospital |
| RN | Nurse |
| RTC | Regional Training Centre |
| SHI | Social Health Insurance |
| SHIC | Social Health Insurance Committee |
| SHO | Social Health Protection |
| SHPC | Social Health Protection Committee |
| SKY | NGO *"Sokapheap Kroussat Yeugn"* (Khmer for: Health for our Families) |
| Sur | Surgery |
| TA | Technical assistance |
| TB | Tuberculosis |
| TC | Technical cooperation |
| VHV | Village Health Volunteer |
| VHSG | Village Health Support Group |

# Contents

# Figures



# Tables

# Executive Summary

A number of quality improvement (QI) initiatives have been implemented in OD Kampot, thanks to the commitment of the management teams at the Provincial Health Department and the Operational District. With support from the MOH and health partners, OD Kampot continues to pilot and implement programming corresponding to improving the quality of public health service delivery and to the growing need for regulating quality of care.

This review aims to capture the changes in quality of care in OD Kampot over the period of three years, 2007-09, according to quality criteria identified by MOH in the National Policy for Quality in Health (NPQH). These changes are framed within the context of the broad strategies for the NPQH. The role that the SHP scheme played in these changes is also explored.

OD Kampot has made great strides towards improving quality of public health services over the period reviewed. Overall, gains are had across nearly all service areas, management processes, and output indicators. Crucial services are increasingly in place. Management capacities are improving. And there is a positive change in the community's perceptions towards public facilities. With patient load rising, despite the increasing regularity of processes (eg documentations and meetings) and improvements in most service areas, further support to strengthen management skills across the OD can be beneficial. Currently, gains are had in the main indicators for the health of the sector in Kampot and OD, but they are comparatively low against other provinces and national averages.

Within the context of the national policy of quality, due to the Kampot team's history of piloting QI programmes, the OD is closely engaged in the development of the various components of quality. It is particularly evident in the strategic areas of Empowerment of Consumers, Institutional Management and Clinical Practice.

Since a Social Health Protection (SHP) scheme in the form of a linkage between a Community-based Health Insurance (CBHI) and a Health Equity Fund (HEF) was operationalised in OD Kampot in January 2008, its role was also explored to see where synergies between health financing and QI can be optimised. Interviews with the major stakeholders (provider, insurer, advocates, community) indicates the scheme is valued by the community in its engagement with the public health care system. In facilitating processes that the facilities lack resources and support to ensure, the scheme enables each stakeholder. At its most basic role, the scheme augments provider salaries, aids advocates in feedback mechanisms and strengthens the social infrastructure among and between the community and its public health system.

Given these developments and the facilitative support from the SHP scheme, it is possible the momentum for accelerating QI is overcome in Kampot OD. It is an opportune time to optimise the gains made in quality of care.

# 1 Introduction

With a newly rebuilt infrastructure and health corps as well as rapidly improving health coverage, the Ministry of Health (MOH) in 2005 committed itself to the pursuit of continuing quality improvement (QI) in health care by endorsing the National Policy for Quality in Health (NPQH). Priority areas for action are further guided by the subsequent roadmap for institutionalizing QI in the health sector (see Annex). Strategies outlined in this road map are embedded within the Health Strategic Plan 2008-2015 (HSP2), which mandates the Ministry of Health to "ensure a supportive environment for increased demand and equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the highest level of health and well-being".

The HSP 2008-2015 further designates "quality" as broadly encompassing the actions and systems for the continuous improvement of health care services. The MoH commits itself to providing quality health care that is safe, effective, patient-centred, accessible, efficient, equitable and continuous (definitions in Annex).

However, only a rudimentary system of quality assurance (QA) processes is in place to ensure that provision of care meet these criteria. A growing need for regulating quality of care, particularly pressured by the growth of third-party purchasing, entails the development of an accreditation system and strategies for priority action. A roadmap for institutionalizing organizational standards (Annex) for the setup of such a system was developed to prioritise approaches and these include:

1. Empowering consumers
2. Institutional management
3. Clinical practice
4. Professional development
5. Management development

Given such quality characteristics and strategies aimed at attaining these criteria for care, the MOH has committed itself to distinct values and working principles within its NPQH, including the right to health, equity in access, pro-poor principles and social protection. These are understood to contribute to quality in care. Such a wide-ranging comprehensive policy requires the coordinated efforts of the MOH and its development partners.

Concurrently, the long-term vision for health financing in Cambodia is universal coverage with funded pre-payment mechanisms[1]. A mix of different financing initiatives is being implemented by the MOH which operate simultaneously. These include supply side schemes such as user fees and contracting, and demand-side financing like health equity funds (HEF) and community-based health insurance (CBHI), where the goal is to increase access of the informal sector to affordable quality health services. Such health financing schemes

1 Strategic Framework for Health Financing 2008-2015. Kingdom of Cambodia: MOH. April 2008.

are expanding throughout Cambodia. And in line with the NPQH strategies, the MOH has begun a certification process to complement efforts towards a national Social Health Protection (SHP)[2] system.

Essential to the aims of both SHP and QI is the active coordination by the MOH and other stakeholders on linking financing to attaining quality performance. With a patchwork of interventions to date around the country, the MOH is interested in documenting experiences in order to inform the design of continuing and future interventions in both areas. After two years' implementation of a CBHI scheme in OD Kampot[3], substantive membership has been achieved and a wealth of data on quality of care has been collected. It is an opportune time to assess whether quality of health service provision has improved and the role(s) of health financing schemes within that process.

## 1.1 Purpose

The purpose is to document the changes in quality of care in OD Kampot's public health facilities during a three year period beginning in 2007, in light of developments which play a considerable role on QI e.g. policy efforts towards a national SHP programme and the implementation of an SHP scheme in Kampot OD by GRET/SKY in 2008. While SKY's effects on QI are not measurable within the scope of this analysis, its role in QI is explored.

The overall aim of the review is to provide GTZ and the MOH with information on the quality of public health service delivery, specifically by the quality criteria identified by the MOH-endorsed tools and in the CBHI Implementation guidelines, but also within the context of the OD's health indicators and perceptions of the health care system's stakeholders. These discussions are framed within the context of the broad strategies for the NPQH (see Annex).

The main questions explored for this review are:

- How has quality of health care services changed in OD Kampot 2007-09?
- Has the SHP scheme played a positive role in the changes in quality health care services?

## 1.2 Methodology and Limitations

The period under review spans three years, with baseline 2007. The methodology to document the changes in quality of health service provision consists of a mixed methods retrospective approach of quantitative and qualitative techniques, such as document analysis, surveys and semi-structured interviews. Analysis is made using available data with respect to five[4] of the above seven criteria for quality of care: safe, effective, efficient, continuous and patient-centred.

2 The SHP scheme refers to the linkage between the Health Equity Fund (HEF) and Community-based Health Insurance (CBHI)

3 In January 2008 GTZ joined a partnership with the Ministry of Health (MOH) and Groupe de Recherche et d'Echanges Technologiques (GRET) to implement a unique health financing scheme in Kampot Operational District (OD), in the province of Kampot. The scheme aimed at boosting access by poor and vulnerable families to affordable quality health services by using the HEF, to finance the inclusion of poor families into SKY3, a CBHI scheme which enrols voluntary paying members. By merging support for the poor with an intervention that helps address access issues, the linkage is seen to optimise the benefits that the two financing mechanisms each offer on their own.

4 This review complements a recent but yet unpublished study by Peter Annear which focuses on equity and accessibility in access to health care services. While Annear's study focuses on the demand-side, this paper looks at the supply-side and focuses on quality related issues. However, it considers the role of the social health

A desk review of the following quantitative data was made to explore the above questions:

- Secondary data from formal quantitative assessments of hospital and health centres, conducted by the MOH, is systematically collected but is limited by the focus on inputs.
    - Hospital assessment (HA) via the hospital assessment tool (HAT)
    - Health centre assessment (HCA) via the health centre assessment tool (HCAT)
- Statistics for main indicators from the Health Information System (HIS) provide information on the cumulative effects of interventions and the overall health of the health care system in the OD.
- For the PRH, one Integrated Supervision was conducted in 2009. Although similar in assessment areas as the HAT, some findings complement the HA scores.
- MCH assessments were conducted in 2007 and again in 2009. It employs a tool developed in Kampong Thom and used by the MCH team for supervision visits to the hospital and facilities. As the SHP programme puts particular emphasis on MCH also in regard to CMDGs this area is specifically looked into in terms of quality improvements.
- With the additional objective being to understand the role of SKY in promoting changes in quality of care, financial sheets from PHD/PRH Kampot for the years 2007 until today were reviewed.
- GRET/SKY statistics on coverage and utilisation were reviewed.
- GRET/SKY studies and reports on client satisfaction

Interviews and focus group discussions with specific stakeholders were conducted to understand the direction of change in quality of care in the public health facilities over the past three years, what the perception on quality of care is currently, and whether SKY is perceived to play a role in ensuring quality of care (see annex for details on methodology):

- Providers: these include management from the PHD and OD, Chiefs of Wards, Health Centre Chiefs and health staff
- Insurer: the SKY Manager, Medical Officer, insurance representatives and field agents
- Advocates: members of the Village Health Support Group, Village Chiefs
- Community: users of the public health system, both members of SKY and non-members. Non-users were not excluded but they were not targeted for interviews.

In awareness that a direct attribution concerning the impact of GRET/SKY on quality improvements is impossible due the design of the study as well as in the face of multiple stakeholders involved in quality

protection scheme in changes in quality in care made, as the scheme is a central and growing stakeholder within the health sector of OD Kampot.

assurance measures and processes, qualitative data from a multi-stakeholder perspective was included so as to investigate their perceptions, gains and roles concerning the scheme and quality aspects of care.

# 2 Assessing Quality in Care

This review explores the changes in quality in the public health facilities of OD Kampot over the past three years. Overall, the QI culture had a good start in OD Kampot. On the hospital level, the PHD and four PRH directors collaborated to implement Quality Circles (QC), a monthly forum for the four referral hospitals in Kampot province from 2004-2008. Using this medium, the QC teams were tasked to identify quality-related problems to understand their causes, formulate corrective measure and share best practices.[5]

On the health centre level, a commitment to improvement is particularly evident in the conception and implementation of a Reward and Reinforcement (R&R) programme, where facilities were ranked every year from 2002-2006 according to specific quality criteria. The tool was developed by the Provincial Health Department (PHD) for R&R and provided input to the current health centre assessment (HCA) instrument. Some HCs were also designated as "QI facilities" with special support for supervision, equipment and infrastructure, upgrades and trainings.

In 2008 SKY initially contracted the five HCs which scored highest in the 2007 baseline assessment, but all HCs of OD Kampot were gradually incorporated by the scheme's second year. The table below shows the annual aggregate scores of all HCs. Scores for most HCs increased steadily over the years.

A pre-defined target of 65% is endorsed by the MOH for HCs to participate in health financing schemes. Most HCs passed in 2009 with improved score over the previous year except two. Koh Touch did not meet this target score (it scored 58.7%), but it is one of the newer facilities in the OD and it delivered a promising 33% improvement from its previous assessment. Kampong Kreng met the target (67.3%), although it was a decrease from its previous assessment.

PRH Kampot went from a low baseline of 60% in 2007 to 95% in 2009. The pre-defined target of 75%, as approved by MOH for hospitals to take part in health financing schemes, was passed in 2008. At baseline in 2007, four crucial areas were non- or poorly-functioning at baseline: The referral system was non-functioning; OPD was a bare room open to the street in 2006-07, which operated more as a registration office that refers patients without examination. It did not have emergency drugs. Inventory and documentation were sloppy; the radiology department had basic equipment, but staff practices in use of materials were poor. Registration was sparsely carried out. Hygiene was unacceptably poor; the pharmacy kept expired drugs on shelf with no report to OD. Basic drugs and supplies were not available. Emergency drugs were not dispensed to each ward.

5 Evangelista, Annie (2006). Exploring the Potential of QUALITY CIRCLES to Improve the Quality of Health Services: Experiences from the Province of Kampot. Kingdom of Cambodia: GTZ and MOH.

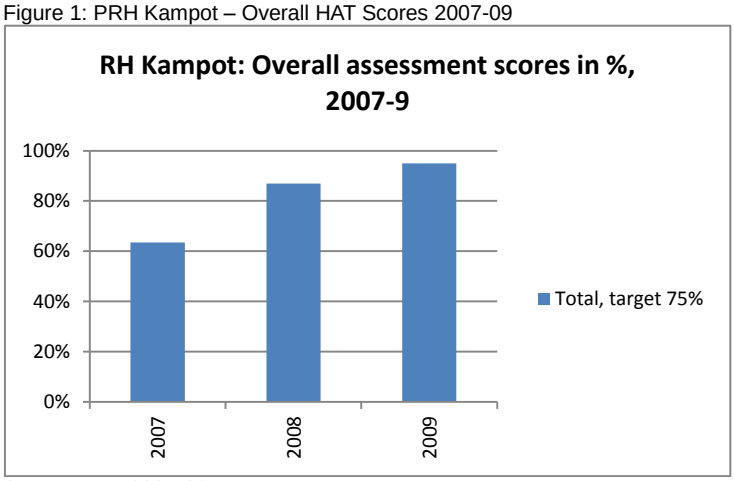
Table 1: HCAT Scores by Facility, OD Kampot

| Health Centre | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **Tg Lapov** | 66.20% | 89.70% | 90.50% | 36.60% |
| **Troey Koh** | score unavailable | 80.10% | 80.00% | -0.10% |
| **Kg Kandal** | | 63.20% | 79.80% | 26.10% |
| **Chakreyting** | 60.20% | 78.00% | 79.30% | 31.80% |
| **Stung Keo** | | 48.50% | 75.00% | 54.70% |
| **Chum Kriel** | | | 72.10% | |
| **Prey Kmum** | | 56.40% | 71.40% | 26.60% |
| **Kg Ampil** | 62.50% | 62.30% | 71.00% | 13.70% |
| **Tg Sankeo** | | 52.30% | 70.60% | 34.90% |
| **Kon Sat** | | 57.20% | 68.00% | 18.90% |
| **Kg Kreng** | 56.70% | 73.40% | 67.30% | 18.90% |
| **Koh Touch** | | 44.30% | 58.70% | 32.60% |
| ***Average*** | ***61.40%*** | ***64.10%*** | ***73.80%*** | ***20.20%*** |

Source: HCA 2007-09.

Today there are still drug shortages at all levels of care – from PRH down to the HC level. In general, basic pharmaceuticals should be available in accordance with the essential drug list, reflecting MPA/CPA definitions; in line with CBHI guidelines, essential drugs are covered by schemes, however, with the contracted provider being liable in case running out of stock. Existing drug shortages at PRH Kampot level are somewhat mitigated by SKY, whereas this is not the case at the HC level. At PRH level the social health protection scheme contracted a pharmacy to provide non-essential medicines that the hospital runs short of. Yet, no data on the share of the consumption of drugs that is financed by SKY's resources was obtained.

Figure 1: PRH Kampot – Overall HAT Scores 2007-09




Source: HAT 2007-09.

At PRH Kampot wards with acceptable scores at baseline continued to improve over the next two years (see table below). These are the paediatric, surgery, operating theatre and TB departments. In 2009 all received a score of at least 98%. These areas have had or continue to have strong support from health partners.

In comparison, the medicine ward was not functioning optimally at baseline. Main problems included absent staff, disorganized patient files, disorderly scheduling, and professionalism. All of these areas improved with the ward receiving an overall score of 99% in 2009.

Two wards scoring continuously relatively low in 2009 are the OPD and laboratory. Their difficulties are more discussed in the following chapters.

Table 2: HAT Scores – Overall Scores by Ward, PRH Kampot, OD Kampot

| Overall Scores by Ward | 2006 | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|---|
| **Mgmt** | 30% | 44% | 78% | 81% | 170% |
| **Ped** | 79% | 70% | 85% | 99% | 25% |
| **Obs** | 58% | 59% | 93% | 99% | 71% |
| **Med** | 55% | 67% | 87% | 99% | 80% |
| **Sur** | 72% | 74% | 89% | 98% | 36% |
| **OT** | 71% | 82% | 96% | 98% | 38% |
| **TB** | 84% | 86% | 87% | 98% | 17% |
| **Pharmacy** | 24% | 37% | 92% | 96% | 300% |
| **Referrals** | 2% | 2% | 93% | 93% | 4550% |
| **Radiology** | 30% | 49% | 92% | 92% | 207% |
| **OPD** | 27% | 35% | 76% | 85% | 215% |
| **Lab** | NA | 43% | 76% | 73% | 70% |
| **Average** | **57%** | **60%** | **87%** | **95%** | **67%** |

Source: HAT 2006-09.

## 2.1 Management

It is the MPA/CPA that provide comprehensive guidance on services and management aspects for public health facilities, elaborating respective structures, roles and responsibilities. Management functions that are accordingly looked into by both, HCAT and HAT, include planning processes such as whether an annual work plan is up to date; whether monthly plans are accessible to all staff; staffing schedule, the completeness of register books and the presence of an organisational chart and job descriptions are also scored; whether management meetings are regular, that are those of the HC management committee at HC level and the health financing as well as the management/technical committees as PRH level. It further assesses whether continuum of care to community is in place by inviting VHSG to participate in HC meetings. Setting-up and managing a HIS is outlined in MPA/CPA guidelines and assessed by HCAT/HAT.

Overal, there are throughout all levels and public health facilities healthy gains in the area of management (see tables below). At HC level, scores rose to 72.2% average from very low baseline scores averaging 51.2% in 2007. Despite progress made, these management functions need ongoing support in all facilities to maintain gains and continue positive trends.

Management of infrastructure is improving. There are accurate equipment lists. While electricity and water supply is not always ideal, improvements were made in this area through a number of procurements and infrastructure investments by the MOH. Accuracy is increasing in the inventory lists and procurement orders. Minutes exist for routine meetings and appropriate agenda topics are on record. All HCs scored well in HIS management and reporting are largely maintained in all HCs.

Table 3: HCA Scores – Management, OD Kampot

| Management | 2007 | 2008 | 2009 | % change 2007-09 |
|---|---|---|---|---|
| **Administration** | 33.40% | 32.10% | 51.90% | 55.50% |
| **Infrastructure** | 68.30% | 58.30% | 81.70% | 19.50% |
| **HIS** | 87.50% | 82.60% | 92.20% | 5.40% |
| ***Average Mgmt*** | ***51.20%*** | ***54.90%*** | ***72.20%*** | ***41.10%*** |

Source: HCA 2007-09.

On the whole, management scores at PRH Kampot increased over baseline. A vice director was interviewed on management and problem-resolution mechanisms, emphasising that management skills and financial transparency in relation to revenues and expenses have increased over the years; alas more training would be needed to assure sustainability of improvements made. Overall, this is an accordance with hospital management outcomes of the HAT 2007-09, displaying a substantial improvement over baseline (see table below) with major advancements in the areas of administration and committees. Both, ISC 2009 and HAT 2007-09 highlight that hospital's committees (management, health financing and technical committees) meet on a regular basis with their minutes being taken and reflecting an appropriate content of the meeting. The ISC 2009, however, emphasis some contextual/procedural critique concerning committees and respective minutes: Although minutes are taken, the committee's agenda remains unclear (management committee); even though topics are clearly formulated within minutes, participants lack understanding of the matter (financial committee); and, though topics are clearly formulated within minutes, the personnel set-p of the committee is not accordingly, e.g. no medical doctor attending the technical committee.

Table 4: HAT Scores – Hospital Management, PRH Kampot, OD Kampot

| Hospital management | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Administration** | 26% | 68% | 91% | 250.00% |
| **Committee** | 35% | 92% | 83% | 137.14% |
| **Infrastructure** | 49% | 77% | 58% | 18.37% |
| **Finance** | 80% | 77% | 90% | 12.50% |
| **HIS** | 47% | 80% | 86% | 82.98% |
| **Average** | **47%** | **79%** | **82%** | **100%** |

Source: HAT 2007-09.

PRH Kampot administration improved tremendously between 2008 and 2009: An AOP is prepared; an organigram is in place; staff schedule is available; comprehensive job descriptions identify specific tasks; regular and fixed staff meetings are organized. However, although an AOP is in place and achievements reviewed, these are neither analysed, nor reflected within quarterly plans; indicators mirror MOH targets, but are too ambitious to be achievable; mechanisms for reporting exposure to blood or body fluids are insufficient (HAT 2008).[6] Overall, HIS processes also made gain and assessors verified the accuracy of reported figures.

Overall, the SHP scheme does not directly request any commitments of the providers to improving and maintaining any management areas such as the quality of the HIS, but indirectly has an influence on such functions as overall CBHI guidelines call for pre-defined target scores of HCAT/HAT so that providers may be contracted by financing schemes. For more detailed information and discussion on the role of SKY in quality of care, please see chapter on SKY.

6 Although overall HAT scores for 2009 were obtained, by the time of report writing no scores were obtainable in a more detailed manner. Hence and where the need was felt it is reverted to the details of HAT 2008. In this case and throughout the review, it is returned to 2008 outcomes when it comes to details in outcomes.

## 2.2 Overall Processes

Overall processes include such dimensions as staff and organisation, equipments and supplies, as well as documentation and are assessed across health facility service areas.

Taken as a whole, overall processes across health facility levels improved (see tables below). The sole exception is the category equipment at health center level with the overall score for 2009 even showing a decrease over baseline and particularly highlighting further the need in the area of delivery and birth spacing concerning equipment (-17.% and -40.80% respectively). Outcomes are all the more worrying, because inventory lists and procurement orders are increasingly correct in the face of decreasing scores.

Table 5: HCA Scores – Equipment, OD Kampot

| Equipment | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **ANC** | 100.00% | 87.30% | 95.00% | **-5.00%** |
| **Del** | 97.10% | 84.40% | 80.60% | **-17.10%** |
| **BS** | 100.00% | 82.30% | 59.20% | **-40.80%** |
| **EPI** | 76.30% | 71.60% | 85.20% | **11.70%** |
| **OPD & Minor Surgery** | 66.30% | 63.60% | 67.70% | **2.20%** |
| **TB** | 57.50% | 70.90% | 81.40% | **41.50%** |
| **Pharmacy** | 85.90% | 76.40% | 75.10% | **-12.60%** |
| **Overall** | **83.29%** | **76.64%** | **77.74%** | **-6.70%** |

Source: HCA 2007-09.

The PRH Kampot previously faced challenges in keeping adequate equipment and supplies on hand as well, but vast improvements have been made over years (see table below). However, the laboratory shows a decrease in its equipment scores over baseline, underlining difficulties in working for quality outcomes in this area. Today inventory lists are on the whole regularly updated. Maintenance schedules are in place. Records are timely and equipment is adequately labelled. Disposal of sharps is organized. The grounds and wards are free of hazardous materials. Backup generators are in place.

Table 6: HAT Scores- Equipments and Supplies, PRH Kampot, OD Kampot

| Equipments and Supplies | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Ped** | 86.00% | 100.00% | 100.00% | 14.00% |
| **Obs** | 70.00% | 100.00% | 100.00% | 30.00% |
| **Med** | 73.00% | 100.00% | 100.00% | 27.00% |
| **Sur** | 73.00% | 100.00% | 100.00% | 27.00% |
| **TB** | 70.00% | 70.00% | 100.00% | 30.00% |
| **OT** | 89.00% | 100.00% | 100.00% | 11.00% |
| **OPD** | 100.00% | 70.00% | 90.00% | -10.00% |
| **Lab** | 32.47% | 69.86% | 80.00% | 47.53% |
| **Overall** | **74.18%** | **88.73%** | **96.25%** | **22.07%** |

Source: HAT 2007-2009.

Greatest improvements since 2007 throughout facilities were achieved in the area of staff and organisation, achieving a more than 100% change rate (see tables below). At HC level the availability of staff increased. Clean uniforms and nametags properly identifying the staff's position are more and more in place. Interviews with staff show that their knowledge of user fees, its management and allocation are becoming more

transparent. Services making the most improvement in these areas are antenatal care, delivery, postnatal care, birth spacing, OPD and minor surgery.

Table 7: HCA Scores – Staff and Organisation, OD Kampot

| Staff and Organization | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **ANC** | 45.00% | 75.90% | 87.70% | 94.80% |
| **Del** | 22.70% | 40.90% | 100.00% | 341.20% |
| **PNC** | 12.00% | 36.80% | 90.90% | 657.60% |
| **BS** | 15.00% | 44.00% | 93.00% | 520.00% |
| **EPI** | 70.00% | 68.40% | 90.30% | 29.00% |
| **OPD & Minor Surgery** | 47.00% | 80.40% | 97.30% | 107.10% |
| **TB** | 62.00% | 59.30% | 97.30% | 57.00% |
| **Pharmacy** | 62.00% | 82.20% | 92.70% | 49.50% |
| **Overall** | **41.96%** | **60.97%** | **93.66%** | **123.20%** |

Source: HCA 2007-09.

In comparison, at PRH Kampot scheduling sheets are up to date covering day and night shifts, and staff is present with appropriate appearance and behaviour. Although in 2008 some difficulties still existed with the filing system (see table below), by 2009 their performance improved dramatically with documentation materials being used and functioning reporting systems (paediatric, obstetric, medical and surgery ward). And, in general wards improved tremendously in the area off staff and organisation over the baseline, reaching almost entirely full scoring by today. However, OPD and laboratory are the two service areas that do not reach full scores in 2009 with the laboratory even showing a decrease in outcomes in comparison to the previous year. In 2008, no job descriptions were available. In comparison, OPD shows a slow, but steady increase. In 2008 it faced troubles in putting up the filing system (patient and admission sheets).

Table 8: HAT Scores – Staff and Organisation, PRH Kampot, OD Kampot.

| Staff and Organisation | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Ped** | 40.00% | 88.57% | 100.00% | 150.00% |
| **Obs** | 28.57% | 88.57% | 100.00% | 250.02% |
| **Med** | 43.00% | 89.00% | 100.00% | 132.56% |
| **Sur** | 45.00% | 90.00% | 100.00% | 122.22% |
| **TB** | 33.00% | 100.00% | 100.00% | 203.03% |
| **OT** | 92.00% | 92.00% | 100.00% | 8.70% |
| **OPD** | 91.00% | 95.00% | 72.00% | -20.88% |
| **Lab** | 75.00% | 92.00% | 83.00% | 10.67% |
| **Overall** | **55.95%** | **91.89%** | **94.38%** | **107.04%** |

Source: HAT 2007-09

Documentation has stronger improved on PRH Kampot level than on HC level, but adequate scores are generally maintained at HC level. At HCs registers are accessible and up to date. Appropriate checklists are followed (eg partograph) and records match across registers (eg patient records on registers and in reporting forms to the OD). Somewhat worrying is the decrease in scoring in the area of EPI and documentation at HCs.

Table 9: HCA Scores – Documentation, OD Kampot.

| Documentation | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **ANC** | 61.40% | 67.90% | 77.00% | **25.40%** |
| **Delivery** | 82.30% | 63.90% | 91.60% | **11.30%** |
| **PNC** | 87.80% | 68.10% | 84.50% | **-3.70%** |
| **BS** | 85.50% | 78.50% | 85.80% | **0.40%** |
| **EPI** | 83.80% | 57.70% | 65.00% | **-22.40%** |
| **OPD & Minor Surgery** | 96.70% | 85.50% | 91.30% | **-5.60%** |
| **TB** | 79.20% | 84.80% | 83.60% | **5.60%** |
| **Pharmacy** | 53.60% | 82.50% | 77.70% | **44.80%** |
| **Overall** | **78.77%** | **73.62%** | **82.07%** | **4.20%** |

Source: HCA 2007-09.

Table 10: HAT Scores – Documentation and Quality of Care, PRH Kampot, OD Kampot

| Documentation and Quality of Care | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Ped** | 74.34% | 97.28% | 100.00% | 34.52% |
| **Obs** | 72.77% | 89.57% | 100.00% | 37.42% |
| **Med** | 64.92% | 81.31% | 100.00% | 54.04% |
| **Sur** | 66.44% | 90.51% | 100.00% | 50.51% |
| **TB** | 74.19% | 89.68% | 100.00% | 34.79% |
| **OT** | 64.00% | 100.00% | 100.00% | 56.25% |
| **OPD** | 97.33% | 83.56% | 72.00% | -26.02% |
| **Lab** | 57.14% | 85.71% | 83.00% | 45.26% |
| **Overall** | **71.39%** | **89.70%** | **94.38%** | **35.84%** |

Source: HAT 2007-09.

Although almost all wards reached nearly a 100% scoring at PRH Kampot, OPD shows a decrease in its documentation capabilities over time. Of concern is that for both, OPD and laboratory, scores in documentation decreased compared to the previous year where OPD struggled with the number of new patients in the register not equalling the HIS forms and the laboratory had no request forms available. Overall documentation improved dramatically with eg update and correctly filled in registration books being the norm today, available consent forms are used and laboratory samples numbered and labelled.

## 2.3 Pharmacy and Prescribing Habits

According to HCAT/HAT scores, pharmacy and prescribing habits improved over years and throughout all facility levels, although drug shortages still persist. Improvements made in drug dispersal are somewhat reflect among community members with the impression during focus group discussions being that overall confidence increased in relation to the availability of pharmaceuticals.

At HC level improvements were made in the overall functioning of the pharmacy, including correct and timely documentation, in the orders to the Central Medical Stores. Drugs on the shelves have been within their expiry date. OPD prescribing habits were assessed in the HCA and trended positively as well (see below).[7]

7 It covers very general formulas such as the number of drugs prescribed per patient, how many patients receive antibiotics, and the prescribed medications and action for diarrhoea and ARI.

Table 11: HCA Scores – Pharmacy and Prescribing Habits, OD Kampot

| Pharmacy and Prescribing Habits | 2007 | 2008 | 2009 | % change 2007-09 |
|---|---|---|---|---|
| **Pharmacy** | 69.80% | 80.70% | 80.10% | 14.80% |
| **OPD Prescribing Habits** | 53.90% | 55.80% | 69.90% | 29.70% |

Source: HCA 2007-09.

At PRH Kampot, the performance of the pharmacy increased over the baseline too (see table below) with drug shortages being somewhat lessened by SKY, which contracted a pharmacy to assure access to non-essential drugs. According to SKY Patient Exit Interviews 2009, outside purchases of drugs generally correspond with specialized drugs or happen when occasional shortages of essential drugs arise. Most SKY patients are fairly/well satisfied with the provision of drugs (89%), but with 10% being not confident it leaves too many unsatisfied customers. In relation, treatment and drugs services obtained the worst outcomes in frequencies among SKY inpatients – also in comparison to other rural RHs contracted by SKY (referral hospitals in Kandal Takmau, Kampong Thom and Koh Thom).[8] Accordingly, hospital assessment displayed flaws in the availability of basic drugs and supplies in 2008.

Table 12: HAT Scores – Pharmacy, PRH Kampot, OD Kampot

| | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Pharmacy** | 36.4% | 91.7% | 96% | 60% |

Source: HAT 2007-09.

## 2.4 Hygiene and Infection Control

An area which tends to fluctuate by different assessments is Hygiene. Basic infection control processes are in place in both health centre and hospital levels (e.g. sharps disposal, incinerators and their use, cleanliness of surroundings, toilet access). The wards, grounds and toilets are also increasingly clean. But there are rounds of patient interviews in which cleanliness scores takes a small dip.

On the HC level, hygiene in Post-partum care (PPC) and BS require particular attention, as both the formal health centre and MCH assessments found these areas needing much improvement. Integrated PPC and BS interventions are only recently implemented in the OD (most other service areas have been targeted by specific programming for years), so during workshops this is an area to emphasise.

In the PRH, cleanliness improved by observation and annual assessment despite a large construction project to build a new surgery ward, which everyone expected to lower hygiene scores. Electricity and water supply are adequate, grass is trimmed and grounds are maintained. Kitchen and toilet facilities are functional. Parking is adequate, but currently not ideal due to the construction.

8 Exit Patient Interview Semi Annual Report. Kingdom of Cambodia: GRET/SKY June 2009.

Table 13: HCA Scores – Hygiene, OD Kampot

| Hygiene | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **ANC** | 65.00% | 98.50% | 86.00% | 32.30% |
| **Del** | 100.00% | 84.00% | 100.00% | 0.00% |
| **PPC (PNC in the HIS)** | 100.00% | 80.00% | 71.00% | -29.00% |
| **BS** | 100.00% | 89.60% | 66.40% | -33.60% |
| **EPI** | 60.00% | 72.40% | 79.20% | 32.00% |
| **OPD & Minor Surgery** | 58.30% | 71.20% | 61.90% | 6.20% |
| **TB** | 37.00% | 63.00% | 65.10% | 75.90% |
| **Pharmacy** | 83.30% | 87.90% | 86.70% | 4.00% |
| **Overall** | **75.46%** | **80.83%** | **77.04%** | **2.10%** |

Source: HCA 2007-09.

Table 14: HAT Scores – Hygiene, OD Kampot

| Hygiene | 2007 | 2008 | 2009 | %change |
|---|---|---|---|---|
| **Ped** | 70.0% | 85.2% | 100.0% | 42.9% |
| **Obs** | 86.7% | 86.7% | 100.0% | 15.3% |
| **G Med** | 73.3% | 73.3% | 100.0% | 36.4% |
| **Sur** | 74.3% | 88.6% | 100.0% | 34.6% |
| **TB** | 84.1% | 86.7% | 100.0% | 18.9% |
| **OT** | 72.7% | 90.9% | 91.0% | 25.2% |
| **OPD** | 67.7% | 86.7% | 100.0% | 47.7% |
| **Lab** | 60.0% | 84.0% | 68.0% | 13.3% |
| ***Overall*** | ***73.6%*** | ***85.3%*** | ***94.9%*** | ***29.3%*** |

Source: HAT 2007-09.

## 2.5 MCH

The MCH Assessment[9], conducted at baseline 2007 and in 2009, complements the HCAT in several ways. Where the HCAT takes a look at the inputs level, the MCH assessment factors in the process of care. Overall there is an 11.4% increase in scores from baseline.

Availability of drugs is an important consideration in choosing which provider to go to. The MCH assessment looked into the dispense and supply of drugs specific to MCH. In contrast to HCA findings, there is an improvement over baseline in the availability of drugs needed for MCH services.

Midwives' documentation of vital signs, apgar scoring of the newborn and use of the partograph all appear to have improved. The partograph is an important aid in monitoring labour and observations show that, though used correctly, it is only applied in the later stages of labour[10]. Numerous pre- and in-service trainings in its use have been conducted, and while competency in its use is increasing, midwives still do not optimize its potential in tracking danger signs during labour by using it early enough.

Lastly, direct observation (role play if a patient is not available) is also a main component of the MCH assessment. Compared to baseline, the following areas appear to have improved:

9 This checklist (Annex 2) was developed and used by the Kampong Thom PHD team for bimonthly supervision visits for four years.

10 A partograph is used to record all observations made on a woman in labour. Its central feature is a graph, where dilatation of the cervix as assessed by vaginal examination is plotted. By noting the rate at which the cervix dilates, it is possible to identify women whose labour is abnormally slow, thus requiring special attention. These women are at risk of developing prolonged and obstructed labour, which may lead to serious problems such as postpartum hemorrhage, ruptured uterus, death of the fetus or infections. Therefore, a partograph is an important tool for Midwifes to identify women at risk and to refer them in time to the next Comprehensive Emergency Obstetric Health facility.

1. Risk factors are checked during ANC and BS consultation.
2. Health education for ANC and BS using the flipchart is complete and appear to be a regular part of the consultation routine.
3. Health staff behaviour towards client is respectful and friendly.
4. Records appear complete and well-organised.

In the PRH, the Obstetric ward was not functioning optimally at baseline. Main problems include absent staff, disorganized patient files, disorderly scheduling which was not complied with, and professionalism when the staff did present to the ward. All of these areas improved by 2009. It is very clean in all areas, thanks to a recent renovation. Water supply and electricity availability increased. Drug supply is better-organised. Vital signs and apgar scores are accurately taken. Partographs are used correctly (though documentation here also begins late).

Additionally, more patients are seen now in Maternity. The number of deliveries increased since baseline. The C-section rate has been (at baseline) and continues to be at a healthy range given the total number of deliveries. This C-section rate is much better than the expected rate in the general population of the entire province (<1%).

Table 15: HIS Data – Deliveries and C-Sections, PRH Kampot, OD Kampot

| Deliveries and C-Sections | 2007 | 2008 | 2009 |
|---|---|---|---|
| **All deliveries** | 761 | 819 | 1083 |
| **Normal deliveries** | 616 | 692 | 910 |
| **C-Sections** | 65 | 54 | 101 |
| **C-section as % of all deliveries** | 8.5% | -6.60% | -9.30% |

Source: HIS 2007-09.

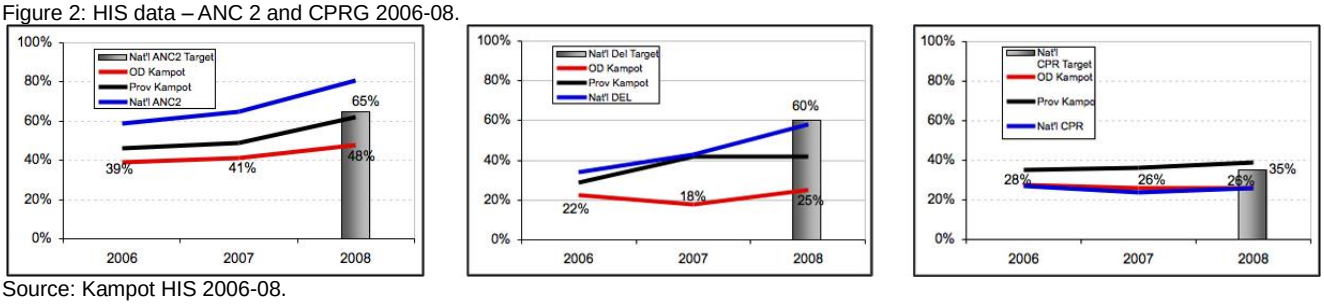
One area which raised some questions is rational drug use. One of the women in the hospital was given unneeded antibiotics after delivery. In witnessing this one event, it is likely that there are many other such events of irrational prescribing in the hospital.

Worth noting is that PRH Kampot received four years of Life Saving Skills training and supportive supervision (by RACHA) and in 2008 became a training site for family planning and safe abortion.

In the HCs, there is increasing management capability, but decreasing scores in equipment and supplies. Procurement requests present a challenge, as there are gaps in the distribution mechanism from central to provincial levels. Even financial disbursements are inadequate, with only 39% of its funds disbursed from central level to Kampot PHD in 2008. With this gap in resources, options at health center level are limited.

A look at the health information system (HIS) (2006-08, as 2009 figures are not yet available) shows improvements year on year in the main MCH indicators with Kampot OD, Kampot Province and National averages, and the target for each indicator. Indicators in the OD are trending positively, but more work is needed because compared to other averages and MOH indicator targets, Kampot's gains are small.

Figure 2: HIS data – ANC 2 and CPRG 2006-08.




Source: Kampot HIS 2006-08.

## 2.6 Referral System

At PRH level, referral processes were essentially non-functioning at baseline; today they play an important role in patient management. The chart below shows the absolute number of referrals by HC to the PRH, from baseline to current year. There are vast increases in use of referrals, and that trend keeps increasing.

Despite this trend, GRET/SKY diagnosed a continuous and fairly high self-referral rate in Kampot of 29% with particular emphasis on cases of no emergency (17%), but attributing this result to the fairly recent enter of OD Kampot into the scheme. Similar development trends have been observed in other rural areas such as OD Koh Thom that entered the scheme but where through a close collaboration between SKY and hospital staff a lower self referral rate was achieved. GRET/SKY now expects the same process to take off in OD Kampot (GRET/SKY, Exit Patient Interview Semi Annual Report 2009).

Table 16: HIS Data – Total Number of Referrals, Kampot Province

| Total Number of Referrals | 2007 | 2008 | Jan-Nov 2009 |
|---|---|---|---|
| **Chakreyting** | 18 | 72 | 330 |
| **Chum Kriel** | | | 1 |
| **Kampong Kandal** | 16 | 13 | 169 |
| **Kampong Kreng** | 4 | 63 | 116 |
| **Koh Touch** | 2 | 8 | 154 |
| **Kon Sat** | 21 | 13 | 30 |
| **Kraing Ampil** | 24 | 72 | 418 |
| **Prey Kmum** | 1 | 3 | 46 |
| **Stung Keo** | | | 74 |
| **Troey Koh** | 45 | 212 | 276 |
| **Trapeang Lapov** | 15 | 101 | 189 |
| **Trapeang Sankeo** | 0 | 11 | 101 |
| **Sub-total** | **146** | **568** | **1904** |
| **Kampot OD** | | | |
| **Total** | **478** | **1012** | **2823** |
| **Kampot Province** | | | |
| **OD's Percentage of Province Referrals** | **30%** | **56%** | **67%** |

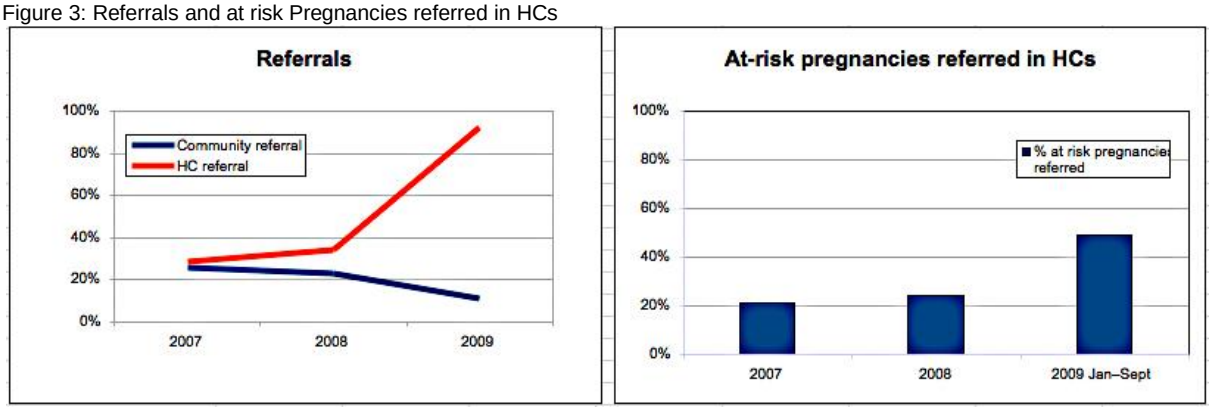
Source: HIS 2007-09.

On the HC level, the HCA looked at the timeliness and accuracy in the facilities' referral letters and registers; the registers for OPD, MCH areas and IMCI; and the HC1 form to determine HC referral function. Vast improvement

is seen in the HC referral system especially between 2008 and 2009 (Figure 9). This improvement can be seen in the referral of at-risk pregnancies, which steadily improved from baseline (Figure 10).

For the community referral system, assessors interviewed village level health volunteers (VHSG, TBA) to determine their knowledge of danger signs and referral habits, and checked for evidence of a village-level emergency referral system. But scores for the community referral system steadily decreased between 2007 and 2009.

Figure 3: Referrals and at risk Pregnancies referred in HCs




Source: Referrals - HCA Kampot 2007-09, at risk pregnancies - Kampot HIS Sept 2009.

## 2.7 Perceptions of Community

Patient interviews are a component of the HAT to verify they were seen as per facility records. Scores in this area are improving, with a large jump between 2008 and 2009. Data collection on client satisfaction also began with a baseline study conducted in late 2005. These rapid assessments are conducted by the PHD at least twice a year on 10% of the PRH's previous year's average BOR.

By both accounts, patients report that providers are increasingly discussing their illness with them. Vital signs are taken. Staff is available. The fee schedule is made known to patients. They are told where the toilet and kitchen are. Receipts are given for payment.

Recurring concerns by the patient satisfaction survey include unofficial fees, 24-hour availability of staff, a proper drug supply, staff behaviour and hygiene. On average there is improvement in these areas, shown overall improvement but with periodic dips. This highlights the need for constant attention and support to maintain gains.

## 2.8 Role of SKY in Quality in Care

As of August 2009, 16371 individuals, corresponding to 3351 families, were enrolled in SKY, for a coverage rate of 5.90% in Kampot OD (see table below). Over half of the members (53%) are women. The average age is around 25 years.

There are two groups of members: voluntary members pay a monthly premium according to the fee schedule in table, and Health Equity Fund (HEF) beneficiaries who are automatically enrolled in the scheme after a process of poverty identification carried out in the OD by the Ministry of Planning. Twenty-eight percent of the membership is voluntary. Membership is family-based and premiums depend on the size of a household, which is defined as the head of family, his or her spouse, and economically dependent children and parents living under the same roof.

Services for voluntary members began in January 2008 at the PRH Kampot and primary care level. Monthly premiums for voluntary members start at 4000 Riel for one person to 11000 Riel for a family of eight or more (see table above). In April 2008 the linkage incorporating Health Equity Fund beneficiaries was operationalised, with the poor comprising 70% of SKY membership by August 2009 (see table below).

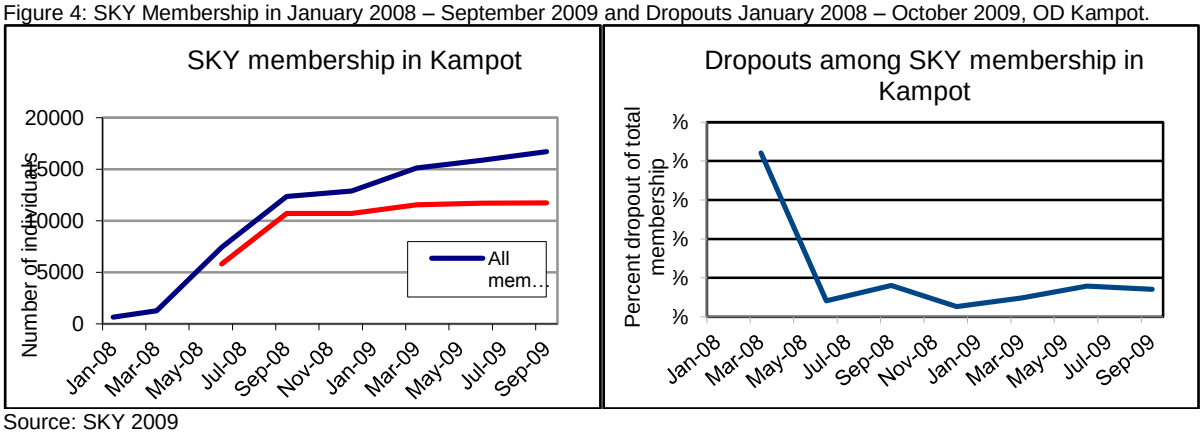
Membership has followed expected increases, as shown in the figure below. The average monthly dropout rate in the first year was 6.1%, skewed high by an initial large number of dropouts by civil servants who were enrolled but later could not be subsidised by the government. In 2009 the average monthly dropout rate is 1.4%.

Table 17: SKY Membership, OD Kampot.

| SKY Membership | Male | Female | NA | Total | Coverage Rate |
|---|---|---|---|---|---|
| **Voluntary** | 2252 | 2381 | 4 | 4637 | 3.45% |
| Average Age | 25.4 | 27.3 | | | |
| **Poor** | 5188 | 6217 | 329 | 11734 | 8.14% |
| Average Age | 21.9 | 28.5 | | | |
| **Total** | 7440 | 8598 | 333 | 16371 | 5.90% |

Source: SKY August 2009.

Figure 4: SKY Membership in January 2008 – September 2009 and Dropouts January 2008 – October 2009, OD Kampot.

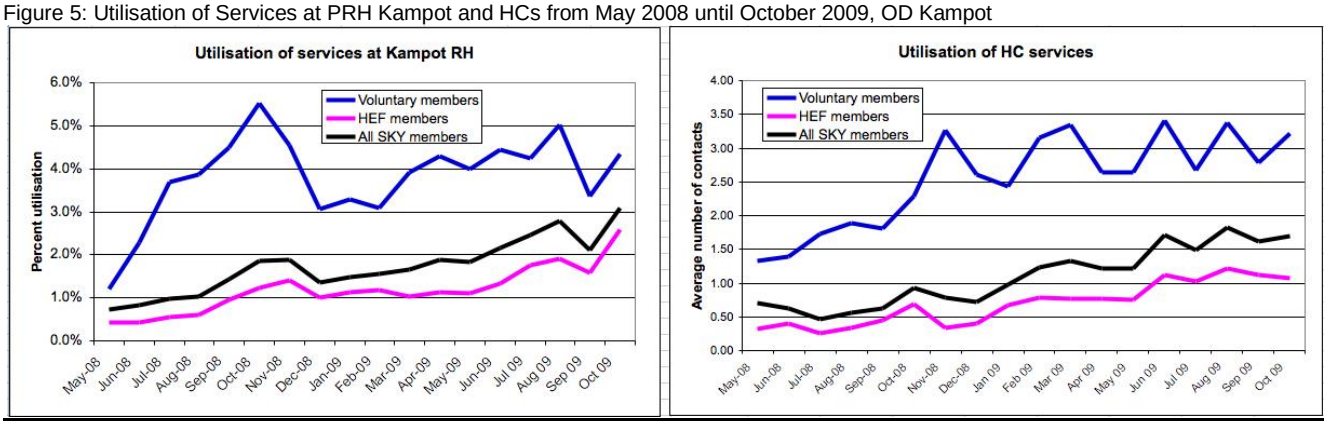



Source: SKY 2009

In the first four months of operation the scheme contracted with the PRH and five HCs which were assessed to have better quality services in the OD in 2007: Chakreyting, Trapeing Lapov, Kampong Kreng, Troey Koh and Kraing Ampil. Though this was the case, trainings were extended to all staff in the OD with the intent of contracting all public facilities in the OD (1 RH and 12 HCs in total) in stages by Jan 2009 to deliver SKY services.

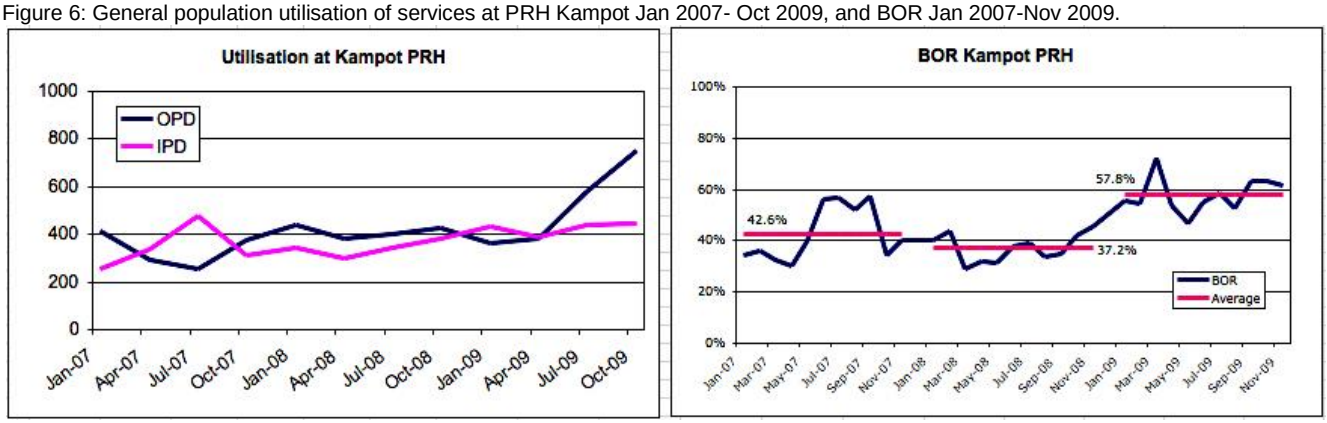
Over the life of SKY, utilisation of services at both the RH and HC level has been steadily much better than in the general population. In OD Kampot, the indicator used to measure contact rates at the public health facilities is OPD. It remains a challenge every year for the OD to raise utilisation of the general population to meet the target rate of 0.50 set by the MOH for utilisation (HC level). This figure is around 0.26 in the general population in the OD and province, 0.54 nationally (HIS 2008). For all SKY members the average contact rate is 1.73% at PRH and 1.10 at HC. These rates are much higher among the voluntary members (3.82% at RH; 2.55 at HC) than among the HEF members (1.19% at RH; 0.69 at HC).[11]

Figure 5: Utilisation of Services at PRH Kampot and HCs from May 2008 until October 2009, OD Kampot




Source: SKY 2009

Figure 6: General population utilisation of services at PRH Kampot Jan 2007- Oct 2009, and BOR Jan 2007-Nov 2009.




Source: Kampot HIS 2009.

11 Song, C (2010). SKY Kampot Status Report. Kingdom of Cambodia: GTZ.

Table 18: New contacts in HCs January 2007-November 2009, OD Kampot.

| Number of new Contacts | 2007 | 2008 | 2009 (Jan-Nov) | % change |
|---|---|---|---|---|
| **Chakreyting** | 4860 | 4997 | 5614 | 15.50% |
| **Chum Kriel** | | | 1873 | |
| **Kampong Kandal** | 1467 | 1408 | 2478 | 68.90% |
| **Kampong Kreng** | 5418 | 7712 | 4243 | -21.70% |
| **Koh Touch** | 1634 | 1792 | 3858 | 136.10% |
| **Kon Sat** | 3738 | 3719 | 4008 | 7.20% |
| **Kraing Ampil** | 3225 | 3102 | 4209 | 30.50% |
| **Prey Kmum** | 3295 | 6654 | 4999 | 51.70% |
| **Stung Keo** | | | 5308 | |
| **Troey Koh** | 3109 | 4064 | 6881 | 121.30% |
| **Trapeang Lapov** | 3152 | 3627 | 3733 | 18.40% |
| **Trapeang Sankeo** | 3043 | 3688 | 3701 | 21.60% |
| **Sub-total** | **32941** | **40763** | **50905** | **54.50%** |
| **Kampot OD** | | | | |
| **Total** | **130132** | **172314** | **206642** | **58.80%** |
| **Kampot Province** | | | | |
| **OD's Percentage of Province Referrals** | **0.25** | **0.24** | **0.25** | **-2.70%** |

Source: SKY 2009.

### 2.8.1 SKY Scheme

### 2.8.2 SKY and its Contribution to Revenues

Management functions regarding health financing matters are overall improving at both hospital and health centre levels (see table below). However, financial management committees at hospital level need a little bit of oversight since there seems some questions from ISC 2009 assessors about the efficiency of their meetings. Capacity development measures may be considered to improve the committee's management skills in health financing issues.

Table 19: Health Center and Hospital Assessment Scores – Health Financing, OD Kampot

| Health Financing Managment | 2007 | 2008 | 2009 | % change |
|---|---|---|---|---|
| **Health Centers** | 37.90% | 69.10% | 83.30% | 119.80% |
| **PRH Kampot** | 80.00% | 77.10% | 90% | 12.50% |

Source: HCA and HAT 2007-09.

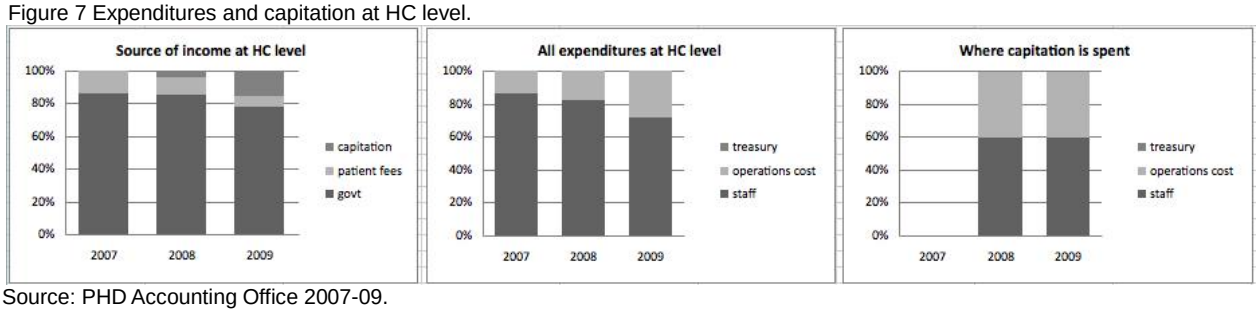
Nonetheless, health financing management works increasingly well. User fee systems are adhered to and fee schedules are more transparent as well as centrally displayed at each facility. Receipts are regularly provided to patients. Accounting records are up to date and easily accessible with receipt books matching the accounting. In comparison, the PRH scores higher, highlighting the need for HCs to catch up with improvements made.

The ability to manage increasingly complex finances is improving. Revenues from both, user fees and SKY capitation (regulated by CBHI guidelines and according to SKY contract with facilities), must be allocated in

accordance with the Health Financing Charter (HFC) for user fees: 60% to incentives for staff; 39% to operating costs; and 1% to taxes.[12]

Financial reports were obtained for the 3rd quarter in each year 2007-09 for three HCs in the OD[13] for a cursory review of income and expenditure. The first chart shows the aggregate source of income in these HCs. An increasing percentage of expenditures are going towards operations costs, as seen in the second chart, but there is consistent adherence to the allocation guidelines in the HFC (3rd chart). Staff is aware of the HFC and user fee allocation, including staff incentives and accounting.

Figure 7 Expenditures and capitation at HC level.

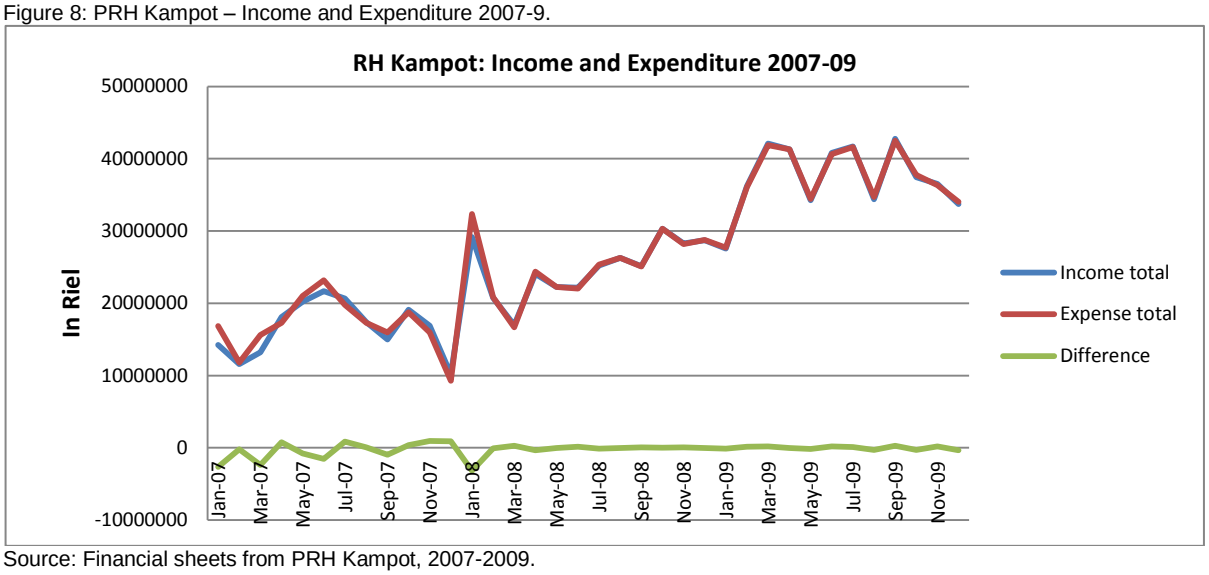



Source: PHD Accounting Office 2007-09.

A more in-depth analysis is made of the PRH financing. At hospital level distribution of staff incentives is regulated and takes into account their position and qualification. For further details, please compare with stakeholder perspective below.[14]

Health financing sheets obtained from PRH Kampot display a steady increase in both, income and expenditure from 2007 until end of 2009 with a steady increase from 2008 onwards. However, it is seemingly impossible to safe any of the income, but the facility is operating at its financial limits.

Figure 8: PRH Kampot – Income and Expenditure 2007-9.




Source: Financial sheets from PRH Kampot, 2007-2009.

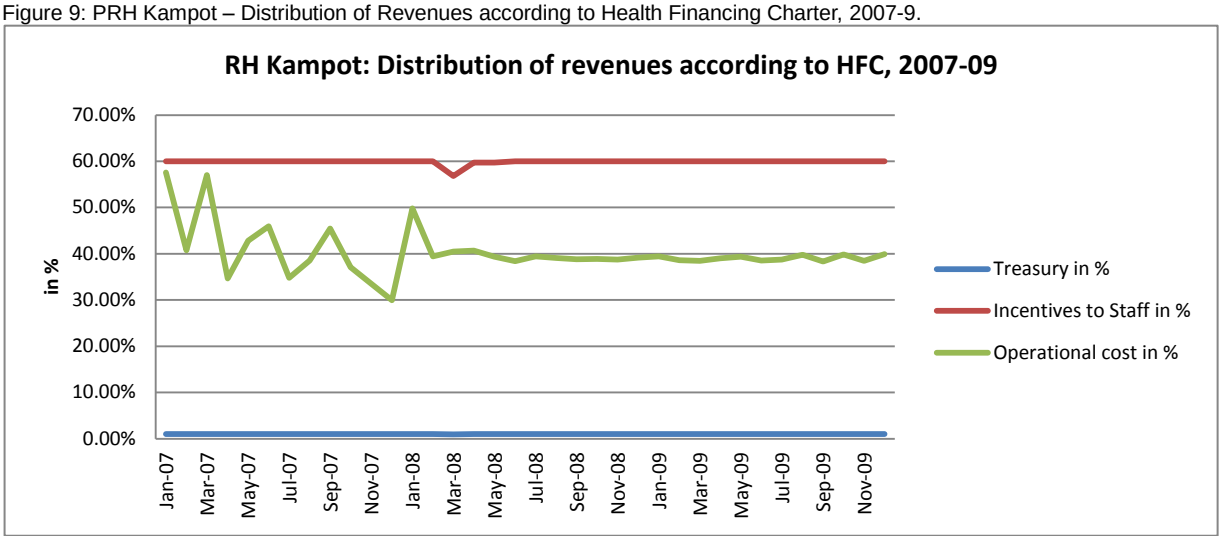
12 Ministry of Health. Guidelines for the Implementation of CBHI. Kingdom of Cambodia (2005) Section 3.4.2 Use of Revenues by Health Care Provider.

13 Health Centres Trapeing Lapov, Koh Touch, and Kraing Ampil were chosen as representative of all HCs in cursory review of financial reports for their ranking in the last HC assessment of #1, #11 and #5, respectively. Only the 3rd Quarter financial sheet of each year for each HC was released.

14 e.g. a primary midwife is distributed less than a secondary midwife; a committee member receives a greater degree of additional incentives.

Although a negative balance was reported from mid 2009 onwards and was apparent in financial sheets obtained from the PHD, this seemingly no longer is the case when looking at financial data received from the PRH Kampot (see figure above). Among the reasons possibly contributing is the re-negotiation with SKY concerning reimbursement mechanisms; resulting in an agreement between insurer and provider that capitation was raised from 560 to 570 Riel per family with further reimbursement of the negative balance in January 2010 by SKY. Differences in balances between data sets may possibly be taken as a representation for the need in aligning data collection/statistics between stakeholders (public health facilities, PHD and SKY); this need is further underlined when comparing SKY patients per month with data obtained from both, public facilities and SKY, showing differences in their total reported numbers in covered SKY patients obtaining services at PRH Kampot. The distribution of revenues in accordance with the HFC at PRH Kampot reveals that while incentives and treasury have been distributed accordingly, operating costs until mid 2008 regularly exceeded the 39% threshold given. However, managing operational costs has seemingly improved from mid 2008 onwards (see figure below), also enabling a more steady balance over time (compare with above figure).

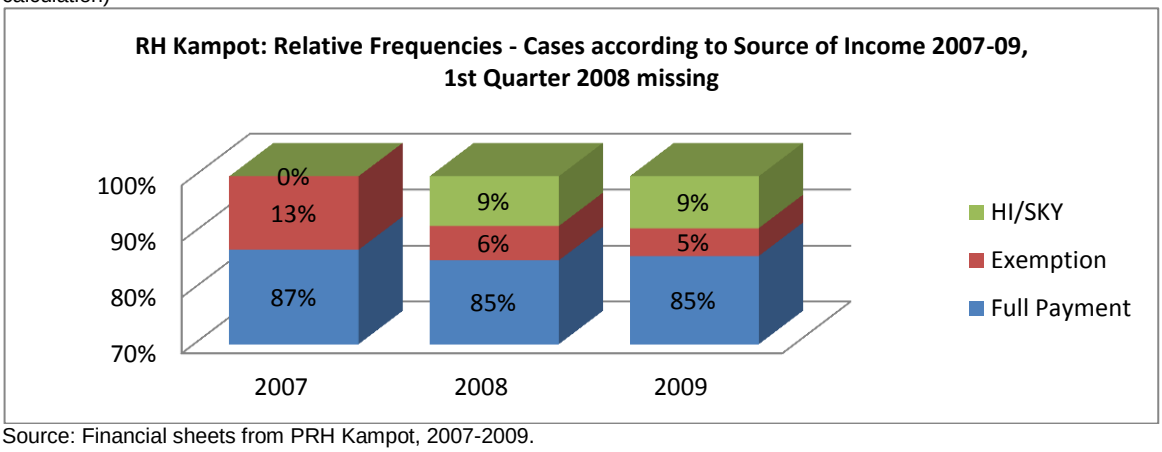
Figure 9: PRH Kampot – Distribution of Revenues according to Health Financing Charter, 2007-9.




Source: Financial sheets from PRH Kampot, 2007-2009.

Demand-side financing mechanisms have contributed to the overall increase in income of the PRH Kampot. With the implementation of SKY in 2008 a reduction in user fee exemptions is seen (see figure below) due to the inclusion of the poor.

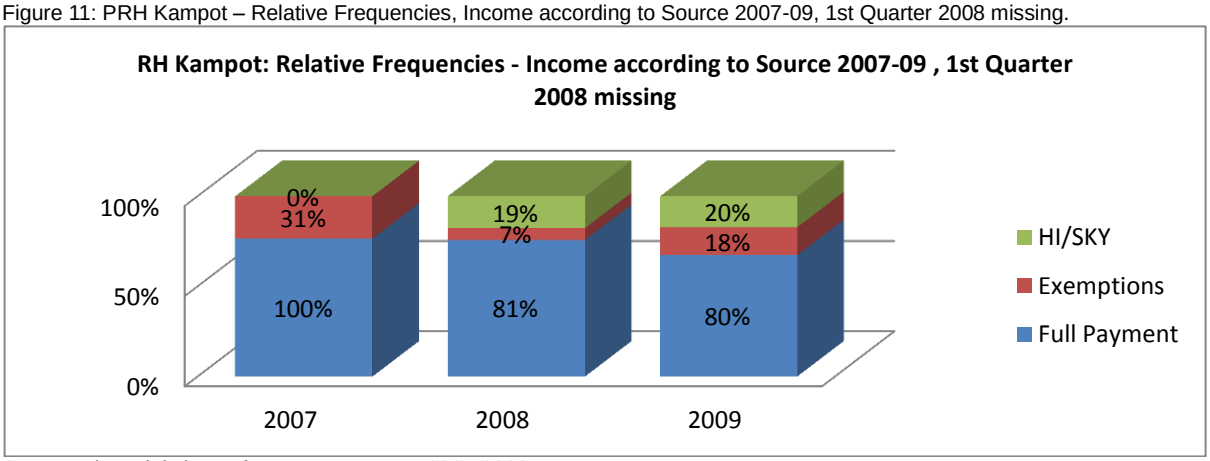
Figure 10: PRH Kampot – Relative Frequencies, Cases according to Source of Income 2007-9 (1st Quarter of 2008 missing in calculation)[15]




Source: Financial sheets from PRH Kampot, 2007-2009.

However, exemptions are also given e.g. to medical staff (differentiated poor/staff exemptions are only available for 2007 with about 28% of overall exemptions being to medical staff), as well as patients coming from other ODs within the province that are poor, but not covered by any HEF scheme so far (e.g. OD Chouk); and not all poor within OD Kampot are identified as such with a post-identification processes filling the gap. Overall, exemptions result in income loss for the hospital. These have re-gained momentum in 2009 after a drop in 2007 in both, absolute and relative terms (compare figure below).

Figure 11: PRH Kampot – Relative Frequencies, Income according to Source 2007-09, 1st Quarter 2008 missing.




Source: Financial sheets from PRH Kampot, 2007-2009.

### 2.8.3 Perceptions of Stakeholders

To complement the quantitative data, a qualitative study was conducted in 2009[16] on the perceptions of stakeholders on the quality of care in OD Kampot. These stakeholders are the providers, insurer, advocates and community (including users). While the term “quality” may mean wholly separate things to different stakeholders, perceptions information provide the less tangible, or technical, dimensions of care. These are important components of quality and deserve consideration. The importance of meeting the needs of each

15 The missing data of the 1st Quarter in 2008 of income financial sheets from RH Kampot is of minor relevance concerning the relative outcomes, as the scheme itself kicked off from the 2nd quarter of 2008 onwards. The annual totals thus possibly almost resemble the overall cases and income by SKY.

16 This qualitative approach was based on focus group discussions, considering community’s outlooks on the issue and highlighting their experiences with health care in the area of quality in care. It was of particular interest to investigate whether community members have perceived any changes made over the last years. A consultant was hired for conducting this task (see below).

stakeholder in order that QI objectives are met were also made clear during these discussions. Capturing their stories provides insight to these critical areas.

Providers: Improvements in quality and the change in staff behaviour are credited to many factors. From PHD to the facility management, there is a common thread of commitment to improving the services they provide. Providers see "quality" in terms of clinical, or technical, capacity. They cite many trainings and workshops over the years which contribute to increased knowledge and skill sets. These are well appreciated by managers and staff, encouraging them to do better work. Thus, they also wish to keep receiving such trainings. Providers at different levels (who were interviewed) feel that the care they provide is increasingly better because of the efforts of the MOH and partners to increase their capacity to deliver good care.

In fact, providers report there is sometimes more intent to service the population well than there is the supportive mechanism for them to provide good care eg supplies and equipment are increasingly difficult to procure, since they now have to be specified in the AOP a year in advance, which is not always possible. Providers appreciate their obligation to patients, but find it difficult to motivate all staff when disbursements (for procurements, outreach funds, or salaries) are inconsistent or insufficient. These problem areas are out of the control of management and staff; this is an area where they report needing the most support.

Thus, particular mention is made of the SHP scheme (SKY) for its support to several areas, but particularly to staff incentives. SKY incentives (around $50-70/month for PRH providers and $25/month for HC staff) are a significant motivator. Because SKY conducts marketing and awareness campaigns to communities about the services offered at public health facilities, there is increased traffic, leading to a bump in incentives. Another advantage SKY provides is the financial support for the poor to use the facilities without need for exemption, which adversely impacts staff salaries. There is also appreciation on the feedback through SKY. Staff are keenly aware of the national attention on their facilities because of the SHP scheme. All of these are positive developments for their working environment.

Insurer: From the field coordinator to the field agents and hostesses, there is a consensus that quality of care – as perceived by SKY and by members – has improved over the past two years (of SKY implementation). To the provincial representatives, quality is manifested by the number of complaints from members they have to resolve. Quality is also manifested as the output of care which adversely impacts the balance sheets. For example, a high number of drugs or diagnostics per patient is unsatisfactory, and the SKY Medical Officer will begin investigations for such cases.

For their part, in order to resolve conflicts or mitigate dissatisfaction, there are a number of mechanisms put in place by SKY. For example, there is a hotline for members who want to log a complaint and have access to a mobile phone. SKY also maintains a presence in each facility (with SKY hostesses) as well as in the villages (with field managers). The presence of hostesses in the facility alleviates patient anxiety about the strangeness of a public facility. The field managers are tasked with collecting premiums, recruitment, and collecting feedback. Medical records are reviewed by the SKY Medical Officer should there be any anomalies or severities.

SKY history shows that members are not shy in making complaints; members are observed to have higher confidence and assertiveness when they seek health services, when compared to non-members. In fact, providers have expressed a concern that members tend to be more vocal than non-members who utilise public health facilities. The provincial staff fielded the expected high number of complaints at the start of the scheme, centred mostly on the areas of availability of staff and drugs, behaviour of staff and cleanliness. These member complaints are fed back to the facilities on a regular basis. While there are still lingering issues, the number of complaints is decreasing. SKY representatives report that members are increasingly satisfied with services, though there are still some cases of unofficial fees requested from members.

The Kampot SKY manager, the Phnom Penh manager and Medical Officer all report that cases where an unnecessarily high number of drug prescriptions or diagnostics are decreasing. In the beginning, many cases were reviewed individually and checked against the existing guidelines. All cases are reviewed individually until today, but reportedly overall these are decreasing.

Advocates: Village Health Support Group (VHSG) and Pagoda and Mosque facilitators have the special role of bridging their communities with the health system. They receive the news and gossip whenever neighbours, friends and family engage with the providers. They note that staff availability and friendliness at both PRH and HC are improving, but they make a distinction between the PRH and the HC; located in the community, HC providers are familiar to patients and are thus better trusted than the providers at PRH. Smaller workloads at the HC also allow HC staff to be friendlier to patients than PRH staff.

Advocates, particularly the VHSG who are more intimately involved in health problems in the village, report a decrease in the number of complaints about the public health system over the past two years. There are less instances of botched care reported to or witnessed by the VHSG recently than a few years ago. Public providers also have more drugs now, and better facilities for patients. With increasingly positive experiences with public health providers, VHSG report that villagers are more willing to trust the public providers and take the advice to go to the public facilities. After receiving care from public providers, villagers report back to them that they feel more confident about the care received; they believe the PRH and HC staff have improved skills and knowledge, and that the technology is sufficient to address the medical needs of patients.

Also reported by the VHSG are the decrease in waiting time, better treatment of poor people, and that public providers are more and more asking questions and responding to patients (presumably so that appropriate treatment can be provided). Overall, VHSG report they have higher satisfaction in the past two years about the technology, infrastructure and quality of care (quality in the perception of patients includes whether they were cured).

VHSG also bring up SKY as an added value to the community's experience with providers. The opportunity to complain is given to SKY members, something the community finds particularly important because if they are paying for services then they should be allowed to give feedback on these services.

Patients and community: Patients report that they increasingly trust the public health system to meet their needs. Patients who visited PRH and HC providers lately state that they are kinder and increasingly available even late at night when patients need them. Providers are more communicative today than a few years ago.

Providers are increasingly discussing with patients the cause of illness and how to take the prescribed medicines, and giving patients exit advice, which raises perceptions of reliability. Patients also report they are increasingly satisfied with the cleanliness and hygiene in the facilities. These developments are important to patients.

Members also mention SKY as a positive development which gives them confidence to seek health services when they need it. They report that they can rely on affordable regular payments rather than sudden high costs in case someone in their family falls ill, recognising the value SKY adds to their household expenditures. Members interviewed also admit that because of health insurance they are more inclined to visit health facilities rather than self-medicate and wait until an illness has progressed, before seeing a health professional. Members appreciate that hostesses who are present in the facilities during the busiest times (mornings) encourage them to seek early consultation and preventative services, and they pass that advice onwards to friends and family. They are also welcome the fact that they no longer have to pay unofficial fees, because if they are asked for it they can report to SKY hostesses. Non-members who were interviewed report great interest in joining the SKY scheme; their constraint is they cannot afford the premiums.

## 2.9 Context within the National Policy of Quality in Health (NPQH)

With passage of the NPQH in 2005, many components of quality are being developed and institutionalised. Strategies in line with this national policy are simultaneously being addressed at different levels, by different stakeholders. Quality performance is also central to the success of health financing interventions. Contractual obligations between the different parties involved in a health financing scheme places pressure on improving health services. Quality achievements in OD Kampot, as well as the role of SHP to support QI objectives, will now be put into the framework of the strategies of the NPQH.

***Empowering Consumers***

As people become more aware of the components making up quality health care provision and more vocal as to their needs, then the efficiency and quality of health care can be influenced. As such, the principle of solidarity is important to SHP schemes, implying a social fabric held together by trust in local leaders and institutions. This strengthening of the social infrastructure is seen as one of the values of SHP schemes[17] and is a topic of increasing interest[18]. It reflects an important pressure point for the public health system in Kampot OD which can be harnessed.

Health sector strategies have begun to reflect a trend towards strengthening the rights of patients. In Cambodia, policies to promote citizen participation and patients' rights (as well as providers' rights and duties) are in place, and the strategic direction for implementation framework and legal structures have been developed. The National Centre for Health Promotion has taken the lead to discuss resources and mobilised partners to carry out action plans. Provincial authorities are rolling out awareness campaigns to staff on down to the village level.

17 C Atim, "Social movements and health insurance: a critical evaluation of voluntary, non-profit insurance schemes with case studies from Ghana and Cameroon," Social Science & Medicine (1982) 48, no. 7 (April 1999): 881-896.

18 Conference on "Assuring Quality Health Care through Social Health Protection: The role of strategic purchasing and quality management" (2007). Rwanda: Kigali. GTZ-ILO-WHO WHO/HSS/HSF/Rep/2008.

What is remarkable so far about the SHP schemes (not just in Kampot) is the tangible change in patient attitudes towards engaging their health system[19]. The availability of feedback mechanisms (for example, being able to complain to the SKY hostess when provider is rude) is valued by patients more than actually following up a complaint. While response mechanisms are being concepted and implemented by the MOH, SKY provides this interim feedback and complaint resolution process. It formalises the role that the community has in participating in the improvement of their health care system.

***Institutional Management:***

OD and PHD management are supportive of annual assessments as it facilitates improvements in various aspects of service delivery. Facility-level QI management are improving, per HCA trends. This is occurring despite minimal supervision from OD and PHD, due to lack of functional support from central level. Since the change in management in 2007 in the PRH, QI processes have strengthened – eg better hygiene, documentation and reporting. In its fourth annual assessment, PRH Kampot received a score of 95%, which has attracted the attention of MOH and other provinces. These results are complemented by positive trends in outputs and in perceptions. Such shared results and recognition motivate providers in strengthening the QI culture.

The transitional accreditation processes of national standards and annual assessment processes for the public sector is being institutionalised in Kampot OD. Contractual obligations with SKY require facilities to comply with CPA and MPA, and official assessments measure degree of compliance. Soon the newly drafted CPGs (the earliest one being Gyneco-Obstetric) will be piloted in the OD. Thus as health facility assessments are increasingly routine – especially in ODs where SHP schemes are implemented – the attendant follow-up to improve gaps and weaknesses are put in place, and the more conducive the environment for successful implementation of CPGs.

***Clinical Practice***

In restructuring health care practices, health technologies assessment (HTA) is applied to strengthening the role of Evidence-based Medicine (EBM) and Clinical Practice Guidelines (CPG) in Cambodia. While it is more policy-oriented, HTA supports the process of decision making in health care by providing reliable information, allowing the transfer of knowledge between scientific research (evidence), the individual clinical level (EBM) and patient group level (CPG). By collecting and analysing evidence from research (eg from assessment reports) and making it accessible and usable for decision-making purposes, HTA, EBM and CPGs build a body of best practice initiatives[20].

EBM, CPG and HTA strategies work together to ensure that patients receive the most effective and cost-effective treatment possible, by improving clinical practice. Algorithms in CPGs provide options to both the clinician and patient while reducing variations in care. This consistency in the clinical management of disease

19 Rada, C and Abejero N. Disseminating the Rights-Duties package in Kampot and Kampong Thom. Kingdom of Cambodia: Phnom Penh. GTZ 2007.

20 Perleth M, Jakubowski E, Busse R. 'Best Practice' in health care - Filling an emerging concept with meaning. International Society of Technology Assessment in Health Care. Meeting. 1999; 15: 79.

helps to make outcomes more predictable, and thus is an important element to quality objectives of a health financing scheme.

From Kampot, Deputy Director Dr Touch Sokha and PRH Deputy Director Neak Saroeun provided guidance to the update of the 1999 CPGs. New guidelines for priority morbidities (post-partum hemorrhage, neonatal sepsis, periodontal disease and depression disorder) are now being drafted, finalised and sent for submission to MOH. As mentioned above, Kampot is slated for piloting the CPGs. Such coherence between local involvement/awareness of central policies is important for ownership of the process and products.

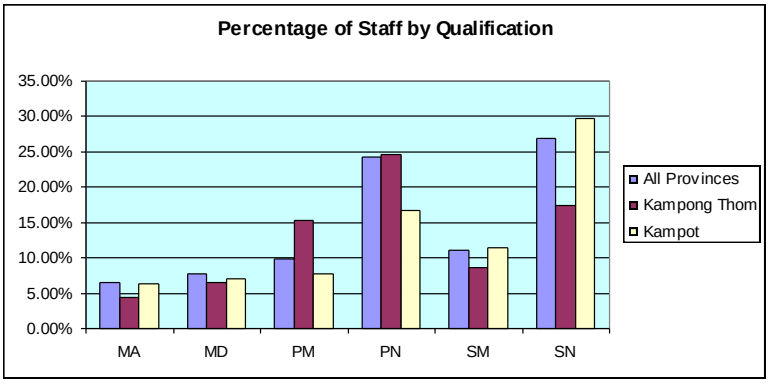
Kampot and the SHP scheme are well-positioned partners to support each other in this QI strategy, by requiring participating facilities to deliver services according to the CPGs.

***Professional Development***

This strategy refers mainly to continuing education related to the technical competency of health staff. Ongoing capacity building is a necessary component of a quality agenda. Continuing education courses, registries and selection processes for licensing medical and paramedical professionals are all implemented at province level but not systematically. For this section, findings from the training needs assessment conducted in Kampot in 2008[21] bears mentioning as it carries considerable implications for health financing development in this province:

> "Of all MOH provincial staff, 5.6% are employed in Kampot province. Aggregated provincial level data shows that qualification of staff in Kampot is largely similar to the average provincial makeup, except they have more primary level nurses (see figure below). While the PRH was found to have sufficient staff to provide safe delivery, emergency obstetric care and child care (the training needs objectives), at the time of assessment there is a ~12% shortage of professional staff in the HC level. ...

*Figure 12: Percentage of Staff by Qualification, 2008.*



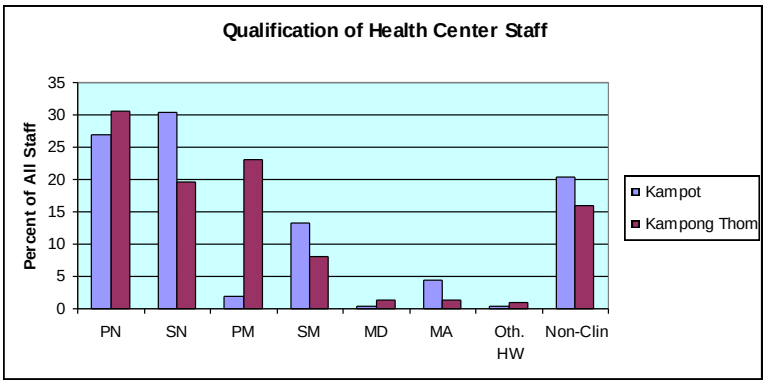

*Source: Fields, Huy 2008.*

> "Additionally, many will retire (30% of all HC staff) in Kampot in the next 5–10 years. An earlier retirement age for women (55 years, compare to 60 for men) means that safe delivery services, which are provided by women, will be particularly impacted. Inadequate staffing limits the potential impact

21 Fields, B., Lim, H. Report on Staffing and Training Needs Assessment in Kampot and Kampong Thom (2008). GTZ Phnom Penh.

that other QI processes can have on service provision. There is growing awareness at PHD and OD level of the need for succession planning."

*Figure 13: Qualification of Health Center Staff, 2008.*




*Source: Fields, Huy 2008.*

**Management Development**

Management development refers to management training, which was previously available at the National Institute for Public Health: the Hospital Services Management Training (HSMT) and Hospital Management Training (HMT) courses. Several hospital-level managers including the directors have received this training. But neither course has convened in about two years and there are no concrete plans for reviving these courses in the foreseeable future. While the SHP scheme has not supported management or facility management training courses, the active feedback loop from the insurer and patients that is facilitated supports and complements management competencies.

# 3 Discussion

This review explores the changes in quality of health service delivery in OD Kampot and the role of SKY in facilitating these changes. The quality environment has improved over the past three years. With its positive influence to make routine the processes crucial to the goals of QI, SKY enables both the public providers and its community to meet their goals.

As recognised in Cambodia's CBHI implementation guidelines, quality assurance is a joint collaboration among the insurer, the providers and its members[22]. The MOH is rapidly institutionalising quality mechanisms. Through the years, the MOH and health partners provided inputs towards QI objectives. Thus the very basic requirements for infrastructure, equipment and materials, staffing levels, trainings and skills were slowly being introduced in OD Kampot to deliver CPA3 in the provincial hospital and MPA in the health centres. But in lacking sufficient incentives to operationalise and sustain necessary facility functions, it was difficult to increase utilisation. Implementation of a SHP scheme provided both the positive pressure and the traffic, facilitating collaboration among these three stakeholders.

22 2006 Guidelines for the implementation of Community Based Health Insurance (MOH). Cambodia Section 5.4 Quality Assurance

The hospital recently underwent its fourth annual assessment and the health centres their third. With each round of assessments facilities were expected to improve, creating a de facto supervision system that encourages activities that address gaps and weaknesses identified by these assessments.

Regularity of such processes have led to improving management capacities. This is evident in increasingly routine meetings with agenda, implementation of basic infection control processes, increased transparency in user fee management and allocation, as well as better reporting accuracy of health indicators. Particularly important are the operationalising of referrals and the vast improvements in Pharmacy, Radiology and OPD in the PRH. At the Joint Annual Performance Review held in the first quarter, facilities with the highest scores are given special attention in an awarding ceremony attended by the Minister of Health. This year, with a score of 95%, Kampot PRH will be featured. Recognition of this sort is a high motivator for staff.

Since performance is rarely as simple as a question of skills[23], the underlying elements that affect the quality of care were explored. With the SHP scheme in place came a regular clientele and a public relations tool for the network of facilities it contracts with. While the technical aspects of quality service delivery are certainly important, intangible effects are critical to the level of quality achieved by contracted facilities.

Most significant is that patient satisfaction in OD Kampot's public health system is rising[24] despite the overall perception of poor quality health care in Cambodia's public sector[25]. Users who avail of services, including SKY members, take note of positive changes in the delivery of care and that generates further promotion for the facilities. Those interviewed were happy to recommend the public providers to their friends and family; it is an improvement over three years ago. Additionally, mapping exercises conducted in 2009[26] of those joining the scheme show increasing social movement around the purchase of SKY memberships; people's confidence in their public health providers are improving. One significant development is the change in health seeking practices reported such as more preventive visits rather than waiting until a condition deteriorates to visit a health professional.

This larger engagement with their community from increased traffic leads to increased incentives allocation to staff that allows them to use and improve their skills. This was reported during interviews with staff and managers as positive developments occurring in the public health system in OD Kampot, leading to an increase in their motivation.

Because disputes and complaints were regularly communicated back to facility management, the role of mediation body fell on SKY in this interim period where official grievance bodies and mechanisms are still being drafted and negotiated in the policy sphere. In absence of regular supervision visits and feedback from a resource-constrained PHD and OD, this setup ensures a proxy monitoring system on the facilities. It is reported by users and staff as a value added to their engagement and an advantage as this feedback option does not exist in the private sector. With word spreading about this collaboration between the health facilities

23 Fields, B and Huy L (2008). Report on Staffing and Training Needs Assessment in Kampong Thom and Kampot Provinces. Kingdom of Cambodia: EPOS.

24 Baseline Survey on Client Satisfaction. Kingdom of Cambodia: CAS 2005 and subsequent Client Satisfaction surveys in Kampot PRH.

25 Cambodian emographic and Health Survey 2005.

26 Mapping of SKY clients, report not yet published. Kingdom of Cambodia: Domrei Research Group 2009.

and SKY, both advocates for patients and the community itself validate reports that trust is indeed increasing in OD Kampot public providers.

Some of the reasons posited in the literature[27] for CBHI's poor record include weak management, poor quality government health services, low revenues which can be mobilised from poorer communities, exclusion of the poor without subsidization and the small size of the risk pool. Here there is not the question of whether basic services can be of high quality; given the appropriate supportive environment providers can exceed the quality criteria. The Kampot experience is rather of particular interest because of the subsidized inclusion of all identified poor in the province to the scheme. This provides a substantial pool to provide traffic and revenues.

The concern faced, rather, seems to be that of sustained gains. OD Kampot's history demonstrates rapid regression to old habits once an intervention is completed and the attention removed. This is a crucial period in which the momentum that accelerates QI is overcome; perceptions across stakeholders indicate high optimism about the changes concurrent with the implementation of SKY. It is a momentum in Kampot that should be optimised as much as possible. It is possible with the long term commitment of stakeholders, and strong communication channels from policy to implementation, from patient to provider, and between all stakeholders.

Given this review of the quality of care in OD Kampot and the role the SHP scheme played in these changes, a few recommendations follow for further consideration.

# 4 Recommendations

**Assessments:** The Hospital Services Department (HSD) conducts the hospital and health centre assessments, which take about ten staff five days. The Department of Preventive Medicine (DPM) oversees the Integrated Supervision which takes around five staff one day to complete. Both tools are first level tools looking primarily at inputs. Both assessments take a lot of person-hours to complete. Though this integrated supervision is scheduled every month, in the past year the PHD conducted this assessment only once as there were no funds to support it. As of now, and since they are regarded as duplicated effort and there is little incentive for the effort, a review of these two assessments can better streamline their respective functions so findings complement each other.

**PHD level Financial Management:** The PHD Accounting Office Director reports no involvement or knowledge in the financial management of revenues at facility level. Rather, his office receives balance sheets from the HCs for file; there is no review of the accounting. There was also no orientation on SKY for the accounting department. Financial management training should be given at the PHD level and advocacy for SKY should be made across all levels of provincial health staffing.

**Impending staff reductions nationwide:** The training needs assessment identifying Kampot OD's vulnerabilities to staff reductions in the next 5-10 years was conducted in late 2007, so it bears immediate consequences for this first phase of SHP-P. Support is needed at PHD level for a comprehensive strategy to

27 Tabor, S. 2002. Community-based Health Insurance and Social Protection Policy. Social Protection Discussion Paper Series No. 0503. Washington DC, World Bank

address the gaps this will soon create, so that resources are maximized. For example, one of the training slots for the pilot for Integrated Post Partum Care was given to a midwife in the PHD MCH unit who will be retiring in 2010.

**SKY-Facility Contract:** A SHP scheme facilitates affordable access to health services. Due to its purchasing position, the scheme commands an advocacy role (as well as a responsibility) for ensuring continuing quality improvement in services rendered to its clients. In Cambodia the MOH endorses such relationship by mandating that payment to health facilities be subject to fulfilment of quality assurance criteria.[28] Pre-contract criteria for health care providers of CBHI are outlined in the MOH's CBHI Guidelines 2006 (see Annex). More specific benchmarks, including supportive processes to help the facilities achieve them, should be included in the contract, eg raising utilisation by the poor and, in 2010, compliance with CPGs.

**SKY Incentives:** At issue is the reinforcement mechanism through capitation payments. SKY has in the past recalculated the capitation when expected figures are not reached in utilization or membership. It is not immediately transparent to lower-level staff and the greater community why their incentives have suddenly decreased (superiors who receive the briefings from SKY will not necessarily provide this info to lower level staff) and serves actually to disincentivise and demoralize the community towards SKY. Efforts should be made to ensure that revenues not decrease by reasons beyond the control of staff, and that all staffing levels are invited to meetings to ensure that information is communicated properly.

**SKY Managers:** Given an SHP scheme's role in QI, it is important that SKY staff be at least briefed in the national QI agenda. This is especially important for the SKY Medical Officer, as he is tasked with ensuring that all SKY teams are implementing quality processes in accordance with MOH developments.

**Quality Technical Input:** The scope and purpose of a standards-based assessment programme are still being defined, with a slow participative process on the technical process of drafting standards, developing assessment procedures and conducting training for surveyors. With pilot testing soon to begin for one of the CPGs (Gyneco-Obstetric), briefings to the province level managers and staff is encouraged to continue, so that uptake is smoother. Since the SKY Medical Officer is very familiar with the diagnoses of SKY members it is recommended he seek/receive regular updates of CPG developments.

**Hospital Management:** Technical support for committees, particularly the financing committee, is in need according to the Integrated Supervision. Meetings with appropriate agendas are held, but sometimes participants were not the most appropriate given the topic (no clinicians at a meeting to discuss clinical issues), and that topic is not always understood by those in attendance (physician attending meeting with accounting agenda). Capacity in managing finances vastly increased over the years, however, competencies need further support on the hospital level and health centre levels.

- **OPD and Laboratory:** Performance of OPD and Laboratory is limping behind in delivering quality care at PRH level, in some areas performance even decreased and hence, calling for some in-depth

28 Guidelines for the implementation of Community Based Health Insurance 2006. Kingdom of Cambodia: MOH. Section 3.2 Payment to providers.

research for their decreasing results, particularly as both are crucial in ensuring quality hospital services. The insurer should be involved in this process.

- **Drugs:** Drug shortages are somewhat mitigated by a SKY arrangement with the hospital that non-essential drugs bought at a contracted pharmacy will be reimbursed. It will be good to compare 1) drug dispensing with the morbidities members are presenting with, and 2) comparing this information between members and non-members. This is currently not being analysed but data is available (or can be easily collected). Awareness raising messages on rational drug use aimed at both providers and communities via mass communications are also irregular. With SKY members at least, there should be effort to expand knowledge about harmful drug use, including poly-pharmacy and excessive self-medicating with antibiotics, IVs and injections.

- The MCH assessment found unnecessary antibiotics being prescribed after delivery. Rational Drug Use trainings from MOH to clinical staff are scheduled but dependent on financial support and thus irregularly conducted. This can be included in existing trainings in RMNCH.

**MCH:** While there is a positive trend for main MCH indicators tracked in the HIS, there is much work to do in order to match other provinces in meeting national targets. Many programmes have been addressed in a vertical manner, but integrated interventions are starting to be implemented. If the continuum of service and care is fragmented then achievements in this very important area will continue to be limited. A specific example is in the ANC and Delivery areas where attention to hygiene is thorough. The same midwives conduct the PPC and BS services but infection control in these areas are not as meticulous.

**Health Centre Management:** Results from the HCA show that equipment lists and procurement orders are increasingly correct, but equipment scores are slightly decreasing. With rising patient load these shortfalls in equipment and supplies are important to look into. While overall performance and each HC's score are trending positively, the following HCs can use attention in additional areas:

- Scoring very low in management functions in 2009 are the following HCs: Koh Touch (scoring 17% in Administration in 2009), Kampong Kreng (50%) and Chakreyting (32%).

- HCs that need support in the area of Infrastructure include Trapeing Sangkeo (score 57% in 2009) and Koh Touch (30%).

- Difficulties in ANC documentation are had in Koh Touch (58%), Prey Kmum (58%), Stung Keo (49%) and Kon Sat (49%), and PNC documentation in Koh Touch (60%).

- These HCs should improve their pharmacy and prescribing habits because their scores are below target: Kraing Ampil (38%), Trapeing Sankeo (38%), Chum Kriel (63%), Kampong Kreng (31%) and Kon Sat (63%).

- Shortages in equipment, supplies and IEC materials are most evident in the following HCs in the service area of Birth Spacing (BS): Trapeing Lapov (55% in Equipment), Kraing Ampil (55%),

Trapeing Sankeo (20%), Kampong Kandal (55%), Chum Kriel (25%), Kampong Kreng (45%), Kon Sat (35%),

- These shortages also exist in the service areas of OPD and Small Surgery in the following HCs: Koh Touch 45%, Prey Khmum (58% in Equipment), Trapeing Sangkeo (43%), Stung Keo (28%) and Kon Sat (43%).

- Two HCs scored relatively low in health financing, Chum Kriel (score 50% in 2009) and Koh Touch (score 53% in 2009), and should be supported to improve their financial management.

- **HCMC:** Also needing improvement is the process of operationalising the Health Centre Management Committees (HCMC), as they are technically in place but not yet functioning.

- Comparison of the trends of monthly drug consumption, supply and purchasing drug can shed light on facility and PHD/OD drug management.

**Hostesses and Pagoda Facilitators:** SKY hostesses and Pagoda facilitators are public health advocates and serve as a useful link between the facility and community. It would be beneficial to the scheme to explore whether their role can be expanded, for greater advocacy to the poor for changing their health seeking patterns. As utilization indicators show, changes are evident among the voluntary members but the poor are still exhibiting low awareness of SKY benefits.

**Continuum of care:** A more holistic approach, for example increasing community interventions to complement efforts at facility level, particularly in the areas of MCH, can greatly benefit QI objectives. Some areas to consider:

- Since 2004 until its USAID funding to Kampot ended in 2008, the local NGO RACHA supported regular meetings, trainings and supplies to the village level in the OD to ensure a continuum of care from the village to its health system. This included training in referral mechanisms from community to HC, and HC to PRH. It is seen already that the community link to HC has deteriorated. A strong community network should be sustained, fostered and harnessed. While it may be too soon to feel the impact of RACHA's departure, it is nevertheless a concern that there are few community-side interventions in the OD. It leaves a gap in the continuum of care. A comprehensive communications approach at the community level is particularly important for interventions across different areas of Reproductive, Maternal, Neonatal and Child health (RMNCH).

- Scores for the community referral system steadily decreased between 2007 and 2009. A network of Pagoda and Mosque committees are involved in the administration of funds for HEF beneficiaries. Tap these community networks in a two-way approach to quality objectives; spread messages through it, collect data and feedback through it and strengthen the community referral system.

- HEF beneficiaries comprise 37% of women enrolled in the Safe Motherhood Programme and only 27% of HEF mothers who enrol successfully comply with the SM protocols. Voluntary members are enrolling in and completing the programme at the expected rate, but they are privy to more

information because of active marketing and recruitment. Passive enrolment of HEF beneficiaries result in less information made available to them and thus they have lower utilisation rates. Pagoda committees conduct extensive dissemination campaigns to the poor; perhaps the methods for doing so require adjustment to ensure that information about RMNCH services, particularly the SM programme, are made more widely available to the poor communities.

- Of interest are whether VHSG participate regularly in meetings with HC staff, so that continuity of services to community level is had. Scores in management processes suggest that effort is made to include them, but regularity is not specified.

**Patient side:** From the patient side are ongoing concerns which are not necessarily Kampot-specific, but certainly affect the success of SKY in Kampot. These include patient perception of quality (eg demand for irrational treatment such as IV or injections), poor health-seeking behaviour (eg clients don't want to return for a follow up as HCs recommend, and thus they go to private providers who don't ask them to return), weak knowledge of good practices and preventive measures etc. With RACHA's exit from Kampot, it is a concern that the strong network from facility to community, particularly important in disseminating information, will weaken. Options for other partners to fill this role as GTZ does not operate on this level should continue to be pursued.

**Areas where further research can yield useful information to QI objectives:**

1. The key questions of why, for whom and in what circumstances CBHI interventions that do work succeed, are the contextual dimensions which matter the most for SHP strategies[29]. As there seems to be vast differences in success between the different SKY schemes, it is worth a comparative review of all CBHI/SHP schemes in the country to collect best practices and lessons learned.

2. Additionally, morbidities information is available in the GRET SKY database; this information can be compared with those of the general population in the HIS.

3. Analysis of the relationship between membership, utilisation and quality.

29 Bart Criel et al., "Editorial: CHI in sub-Saharan Africa: researching the context," Tropical Medicine & International Health 9, no. 10 (2004): 1041-1043.

# 5 Annex

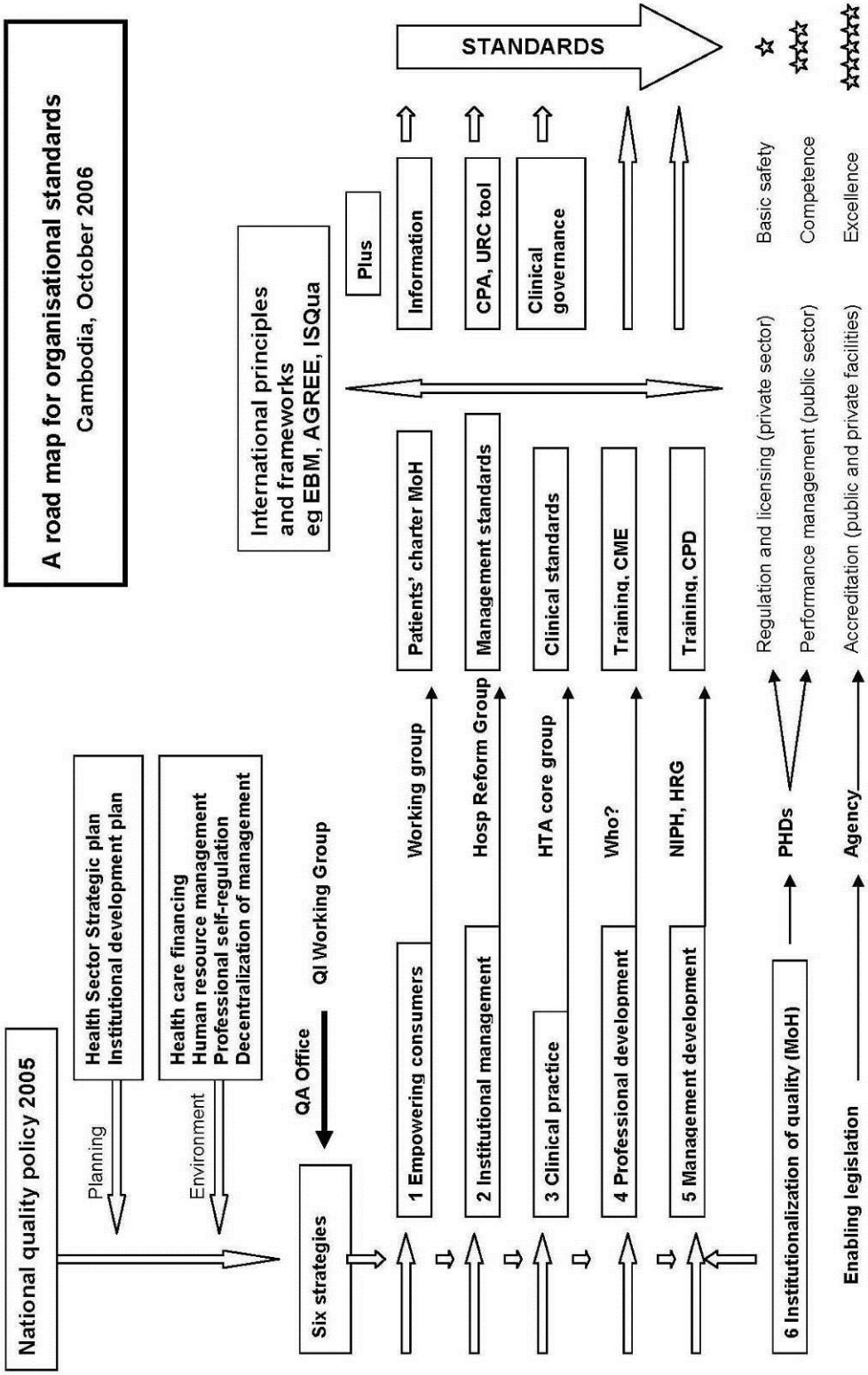
## 5.1 National Policy for Quality in Health, Cambodia, 2005

The National Policy for Quality in Health shall provide a guiding framework for quality assurance and improvement in health care in Cambodia. It's policy is defined as the following by Chapter 2.a.:

The MoH commits itself to providing quality health care that is safe, effective, patient-centered, timely, efficient and equitable.

1. Safe: Health care ensures that the patients and staff do not suffer undue harm from the treatment itself and from the manner it was given.
2. Effective. Any form of treatment or patient care will be based on guidelines that follow current scientific evidence.
3. Patient-centered. Health care will be responsive to and respectful of the patient's values and choices to ensure patient satisfaction at every health care encounter.
4. Accessible. This refers to care that is timely and affordable. Efforts will be made to ensure that no unnecessary delays occur in providing care. Likewise the cost of providing health care will be reasonable and within the financial capacity of the majority of the population.
5. Efficient. Wastes are avoided and resources are used appropriately to ensure optimum benefits for the patients and the health care providers.
6. Equitable. Health care is accessible and is provided to all who need it regardless of gender, ethnicity or socioeconomic status.
7. Continuous. Efforts will be made to ensure that care is coordinated within the health care provider organization itself and with other providers, including the community, to ensure that the health needs of patients are met.

## 5.2 A Roadmap for Organsiational Standards, Cambodia, 2006



## 5.3 Methodology – MCH Checklist

CHECKLIST FOR ANC, BS, HYGIENE AT HC

Name of HC: Date: Name of Supervisor:

| ***ANC*** | ***YES Complete (1)*** | ***YES Incomplete (0,5)*** | ***NO (0)*** | ***RECOMMENDATION*** |
|---|---|---|---|---|
| ***1. Examination*:** | | | | |
| History taking | | | | |
| Weight | | | | |
| Blood pressure | | | | |
| Abdominal Examination | | | | |
| Foetal heartbeat (>20 weeks) | | | | |
| Position of foetus | | | | |
| Anaemia | | | | |
| Oedema | | | | |
| **SCORE: 8** | | | | **…. / 8** |
| ***2. Drug supply:*** | | | | |
| Correct distribution of Ferro-Sulphate | | | | |
| Tetanus-status of pregnant woman and TT-vaccination with correct interval | | | | |
| **SCORE: 2** | | | | **…. / 2** |
| ***3. Administration:(MH record)*** | | | | |
| History of client | | | | |
| Risks, dangerous signs | | | | |
| Week of Gestation | | | | |
| Estimated date of birth | | | | |
| Date for revisit | | | | |
| **SCORE: 5** | | | | **…./ 5** |

| | | | | |
|---|---|---|---|---|
| ***4 .Counselling and information:*** | | | | |
| Asking for health problems | | | | |
| Nutrition for pregnant women | | | | |
| Breastfeeding after delivery | | | | |
| Information about dangerous signs during pregnancy:<br><br>(Vaginal bleeding, oedema, headache, severe vomiting, blurred vision, foetal position) , to be treated at hospital | | | | |
| Encourage the client to deliver by trained health staff | | | | |
| Information about BS method | | | | |
| Vaccination for the newborn | | | | |
| Date for revisit | | | | |
| **SCORE: 8** | | | | **…./ 8** |
| ***ANC*** | ***YES Com Plete (1)*** | ***YES Incom Plete (0,5)*** | ***NO (0)*** | ***RECOMMENDATION*** |
| ***5 .Behaviour of HC staff:*** | | | | |
| Polite attitude | | | | |
| Good communication skills | | | | |
| **SCORE: 2** | | | | **…./ 2** |
| ***6. Equipment and drugs at HC:*** | | | | |
| Adult weight scale | | | | |
| Sphygmomanometer | | | | |
| Stethoscope | | | | |
| Foetal stethoscope | | | | |
| Height scale | | | | |
| Scale for weight for baby | | | | |
| Thermometer | | | | |
| Delivery kid | | | | |
| IEC material for ANC | | | | |
| Mother health record | | | | |
| Ferro Sulphate | | | | |

| | | | | |
|---|---|---|---|---|
| Tetanus vaccine | | | | |
| **SCORE: 12** | | | | **…./ 12** |
| ***7. Time frame**:* | | | | |
| Was enough time spent for ANC client? | | | | |
| **SCORE: 1** | | | | **…./ 1** |
| ***8. Number of ANC clients:*** | | | | |
| ***9. Training:*** | | | | |
| Any training needs identified? | | | | |
| **ANC TOTAL SCORE: 38** | | | | **…./ 38** |

| ***BS*** | ***YES Com Plete (1)*** | ***YES Incomplete (0,5)*** | ***NO (0)*** | ***RECOMMENDATION*** |
|---|---|---|---|---|
| ***1. Examination*** | | | | |
| Weight | | | | |
| Blood pressure | | | | |
| Varicose veins | | | | |
| **SCORE: 3** | | | | **…./ 3** |
| ***2. Administration: (green card)*** | | | | |
| History of client | | | | |
| Asking for present possibility of pregnancy? | | | | |
| Menstruation(date, severity, regularity) | | | | |
| Date for revisit | | | | |
| **SCORE: 4** | | | | **…./4** |
| ***2.1. Administration: (monthly report)*** | | | | |

| | | | | |
|---|---|---|---|---|
| Monthly report of BS user for OD filled out correct and regularly? | | | | |
| **SCORE: 1** | | | | **…./ 1** |
| ***3. Counselling and information*** | | | | |
| Asking for health problems | | | | |
| Counselling and explaining of BS methods | | | | |
| Information about BS methods:<br><br>IUD + sterilisation at PRH K.Thom IUD at HCs: AchaLeyk, K.Thom, Salavisay, Sambo, Sandan | | | | |
| Information about side effects of BS methods | | | | |
| Date for revisit | | | | |
| **SCORE: 5** | | | | **…./ 5** |
| ***4. Behaviour of HC staff*** | | | | |
| Polite attitude | | | | |
| Good communication skills | | | | |
| **SCORE: 2** | | | | **…./ 2** |
| ***5. Equipment and drugs at HC:*** | | | | |
| Condom | | | | |
| Injection | | | | |
| Pill | | | | |
| Green card | | | | |
| ***BS*** | ***YES Com Plete (1)*** | ***YES Incomplete (0,5)*** | ***NO (0)*** | ***RECOMMENDATION*** |
| Sphygmomanometer | | | | |
| Stethoscope | | | | |
| Adult scale | | | | |
| IEC material for BS | | | | |
| **SCORE: 8** | | | | **…./ 8** |
| ***6. Time frame*** | | | | |
| Was enough time spent for BS client? | | | | |

| | | | | |
|---|---|---|---|---|
| **SCORE: 1** | | | | **…./ 1** |
| ***7. Number of BS clients:*** | | | | |
| ***8. Training*** | | | | |
| Any training needs identified? | | | | |
| **BS TOTAL SCORE: 24** | | | | **.** ..../ **24** |

| ***HYGIENE*** | ***YES Complete (1)*** | ***YES incomplete (0,5)*** | ***NO (0)*** | ***RECOMMENDATION*** |
|---|---|---|---|---|
| Bathroom clean? | | | | |
| Water supply? | | | | |
| Is the consultation room clean? | | | | |
| Is the ANC room clean? | | | | |
| Is the BS room clean? | | | | |
| Washing basin in ANC room?<br>Hand washing after each client? | | | | |
| Washing basin in BS room?<br>Hand washing after each client? | | | | |
| **Are there rubbish bins in:** | | | | |
| ANC room and in use? | | | | |
| BS room and in use? | | | | |
| Incinerator in use? | | | | |
| **HYGIENE TOTAL SCORE: 10** | | | | **…./ 10** |
| | | | | |
| **ANC/BS/Hygiene TOTAL SCORE** | | | | **…./ 72** |

## 5.4 Methodology - Qualitative Research

| Stakeholder | Level | Method | No. Conducted |
|---|---|---|---|
| **Provider** | PHD, OD, PRH, HC | Key Informant Interview | 6 |
| **Insurer** | SKY | Key Informant Interview | 1 |
| | | Focus Group Discussion | 1 |
| **Advocates** | Pagoda Committee, VHSG | Key Informant Interview | 4 |
| | | Focus Group Discussion | 2 |
| **Community** | SKY/Non-SKY Members | Focus Group Discussion | 9 |
| | | In-Depth Interview | 2 |