ប្រធានអោយប្រធានាធិបតីអន្តរជាតិសុខភាពក្នុងការអនុវត្តការសេវាកម្មនៃការជឿជាតិក្នុងរដ្ឋភាគប្រ៊ីក្រេណ៍

CAMBODIA CHILD SURVIVAL STRATEGY

"អ្នកដែលមិនមានជីវជាពលរឿង មិនមានអាកាសយដ្ឋានប្រជាជនដែលមានសារប្រើប្រាស់មានមុខឈឺទេ"

"Few for all rather than more for few"

ដ៏ ដ្ឋាន គោ ២០០១
Cambodia Child Survival Strategy

“Few for all rather than more for few”
Cambodia Child Survival Strategy: Few for all rather than more for few

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# Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ADCP</td>
<td>National Acute Respiratory Infection, Diarrhoea and Cholera Prevention and Control Programme</td>
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<tr>
<td>ACT</td>
<td>Artemisinin-based combination therapies</td>
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<tr>
<td>ANC</td>
<td>Antenatal Care</td>
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<td>ARI</td>
<td>Acute Respiratory Infection</td>
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<td>BBC</td>
<td>British Broadcasting Corporation</td>
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<td>BCC</td>
<td>Behavioural Change Communication</td>
</tr>
<tr>
<td>BCG</td>
<td>Bacille Calmette Guerin</td>
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<tr>
<td>CBHI</td>
<td>Community Based Health Insurance</td>
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<tr>
<td>CCSS</td>
<td>Cambodia Child Survival Strategy</td>
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<tr>
<td>CDC</td>
<td>Communicable Disease Control</td>
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<tr>
<td>CDD</td>
<td>Control of Diarrhoeal Diseases</td>
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<td>CDHS</td>
<td>Cambodia Demographic and Health Survey</td>
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<tr>
<td>CNCC</td>
<td>Cambodia National Council for children</td>
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<tr>
<td>CIPS</td>
<td>Cambodia Inter-censal Population Survey</td>
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<td>CMDGs</td>
<td>Cambodia Millennium Development Goals</td>
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<tr>
<td>CNM</td>
<td>National Centre for Parasitology, Entomology and Malaria Control</td>
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<td>CPA</td>
<td>Comprehensive Package of Activities</td>
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<tr>
<td>CRC</td>
<td>Convention on the Right’s of the Child</td>
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<td>CSCMS</td>
<td>Child Survival Coordination and Management Structures</td>
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<td>CS</td>
<td>Child Survival</td>
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<td>CSP</td>
<td>Child Survival Partnership</td>
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<td>CSMC</td>
<td>Child Survival Management Committee</td>
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<tr>
<td>CSSC</td>
<td>Child Survival Steering Committee</td>
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<tr>
<td>CSWG</td>
<td>Child survival working group</td>
</tr>
<tr>
<td>DTP</td>
<td>Diphtheria, Tetanus and Pertussis</td>
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<tr>
<td>EDDAT</td>
<td>Early Differential Diagnosis and Treatment for Malaria, ARI and Diarrhoea</td>
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<tr>
<td>EF</td>
<td>Equity Fund</td>
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<td>EPI</td>
<td>Expanded Programme for Immunisation</td>
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<tr>
<td>HCMC</td>
<td>Health Centre Management Committee</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Deficiency Virus/Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>HSP</td>
<td>Health Sector Strategic Plan</td>
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<tr>
<td>HSSP</td>
<td>Health Sector Support Project (WB, ADB, DFID, UNFPA)</td>
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<td>NRHP</td>
<td>National Reproductive Health Programme</td>
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<tr>
<td>IYCF</td>
<td>Infant and Young Child Feeding</td>
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<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
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<tr>
<td>IMR</td>
<td>Infant Mortality Rate</td>
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<tr>
<td>ITN</td>
<td>Insecticide Treated Nets</td>
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<tr>
<td>LoORS</td>
<td>Low osmolarity Oral Rehydration Salts</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>MEF</td>
<td>Ministry of Economics and Finance</td>
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<tr>
<td>MEYS</td>
<td>Ministry of Education, Youth and Sports</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MPA</td>
<td>Minimum Package of Activities</td>
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Cambodia Child Survival Strategy: Few for all rather than more for few

1. Introduction

1.1. Purpose of the strategy

The Cambodia Child Survival Strategy (CCSS) outlines the approach to reducing child mortality in Cambodia and achieving the Cambodia Millennium Development Goal 4, which aims to reduce under-five mortality rate (U5MR) to 65 per 1000 live births by 2015. The strategy aims to achieve universal coverage of a limited package of essential evidence-based, cost-effective interventions that impact on child mortality. Most Cambodian households have low income and thus striving for universal coverage of child survival interventions will reduce inequities. In contrast, provision of a comprehensive range of available high technology expensive interventions to only the few members of the population that can afford them will not significantly impact on child mortality and only lead to greater inequities. Therefore the aim of the CCSS is “few for all rather than more for few”.

The work plan of the CCSS is from 2006-2015. The CCSS will bridge the Health Sector Strategic Plan (HSP) 2003–2007, the HSP 2007-2010 and the National Strategic Development Plan (NSDP) 2006-2010 and the target is in line with the Cambodia Millennium Developments Goals (CMDGs). The purpose of this document is to guide stakeholders in designing, implementing and evaluating programmes and projects aimed at improving child survival, health and nutrition.

1.2. Scope

It is recognized that many factors determine whether a child survives. General socio-economic living conditions in households and communities where children grow up, maternal health and education, birth spacing, access to safe water and sanitation and food security are all known to be determinants of early childhood mortality rates. For child survival to improve, these determinants must also improve. Other strategies and plans, including the NSDP 2006-2010 cover the aforementioned determinants and the scope of this child survival strategy is to address the health sector only. The CCSS will outline the main directions for all players in the health sector so that they can contribute to their full potential to the common goal of decreasing child mortality in Cambodia. The CCSS strategy will build on existing national policies and strategies in particular the HSP 2003–2007 and those addressing maternal health and nutrition.

1.3. Development of the strategy

Cambodia recognized the need to improve child survival in 2000 and a global call for action was identified in 2003. The Royal Government of Cambodia (RGC) is committed to child survival and several steps have paved the way for a Child Survival Strategy in Cambodia.

2000: Cambodia Demographic and Health Survey (CDHS) 2000 released revealing persistently high early child mortality rates.
2002: Consultative group meeting raises the issue
2003: Health Sector Strategic Plan (HSP) 2003–2007 and Benchmark analytical report on slow progress in child mortality reduction
Cambodia Child Survival Strategy: Few for all rather than more for few

2004: Additional analyses conducted in partnership: High-level consultation on MDG 4 in May-June, the first National Child Survival Conference in October and Child Survival Partnership Workshop in December led to partners re-aligning their programmes

2005: Child survival coordination bodies created and Regional WHO/UNICEF Child Survival Strategy endorsed


2007: CCSS updated with Cambodia Demographic Health Survey 2005 data

Significant consultation and coordination has resulted in the alignment of government and partners in relation to action for child survival in Cambodia and the MOH has established Child Survival Steering and Management Committees as a formal coordination forum. The RGC with child survival partners initiated the development of the Cambodia Child Survival Strategy and a strategy development team prepared a first draft following a consultative process of meetings and reviews of relevant literature. Several revisions were made to the initial draft based on feedback from the child survival partners and other technical experts. The strategy was finalized through a national workshop in March 2006 with government and partners.

2. Background

Cambodia is committed to the Millennium Development Goals (MDGs)\(^7\). In 2003, the Royal Government issued the Cambodia Millennium Developments Goals (CMDGs) Report, laying out country specific goals to be reached by 2015\(^1\). The CMDGs form the basis for the National Strategic Development Plan (NSDP) 2006-2010\(^3\).

Key targets of the child survival CMDG’s include:

- Reduce under-five mortality rate (U5MR) to 65 per 1000 live births by 2015
- Reduce infant mortality rate (IMR) to 50 per 1000 by 2015
- Reduce the proportion of both under-weight and stunted children aged less than 5 years from 45% to 22% by 2015

Child health has improved considerably in Cambodia. The prevalence of measles has declined and in 2001 Cambodia was declared polio-free. The case fatality rates for malaria and dengue fever have fallen and HIV prevalence is declining in the general population. Despite this, child mortality and the prevalence of malnutrition in Cambodia remains high and 60,000 children each year are estimated to die before their fifth birthday\(^8\). The latest most reliable survey is the CDHS 2005\(^5\) that established an U5MR of 83, an IMR of 66 and a neonatal mortality rate (NMR) of 28 per 100 live births. Whereas neonatal mortality declined over the last decades, several surveys consistently reported an increasing infant mortality rates (see Figure 1). However, recent surveys, confirmed by the CDHS 2005, indicate that over the past few years, Cambodia’s early mortality rates are declining; putting it back on track for achieving the CMDGs\(^10\).
Most Cambodian children are dying from a few preventable and treatable conditions (see Figure 2). These include, by order of relative importance neonatal causes (30%), acute respiratory infections (pneumonia 21%), diarrhoeal diseases (17%), HIV/AIDS (2%), measles (2%), injuries (2%), and malaria (1%), while under-nutrition represents the single most important risk factor\textsuperscript{11}. 

Figure 1: Trends in Early Childhood Mortality Rates\textsuperscript{5,9}
Unfortunately, high-impact child survival interventions are not getting to those most in need. Significant action must be taken to improve child survival in Cambodia and achieve MDG 4. The MDG 4 consultation in 2004 achieved a common understanding on causes of child mortality, obstacles faced and the way forward. The recommendations of this meeting were to focus on achieving universal coverage of high-impact child survival interventions summarised in the **Cambodian Child Survival Scorecard**.

### 3. Situational analysis

#### 3.1. The health of the children in Cambodia

A more comprehensive situational analysis can be found in the Cambodia Child Survival Country Profile\(^\text{12}\).

##### 3.1.1. Mortality patterns\(^\text{9}\)

The CDHS 2005 established an U5MR of 83, an IMR of 66 and a NMR of 28 per 1000 live births\(^\text{5}\). After a steep decline in early childhood mortality rates in the 1980s, this trend slowed down considerably in the 1990s (see Figure 1). Just over half of childhood deaths occur in the post-neonatal period. The leading direct causes of early childhood deaths are acute respiratory infections (ARI), mainly pneumonia, diarrhoeal diseases and neonatal conditions, while malaria and dengue fever are a considerable burden on morbidity and mortality in certain geographic areas and during certain periods\(^\text{6,13}\). Neonatal mortality currently contributes to about one third of early childhood mortality in Cambodia and is expected to increase as the U5MR reduces. It is mainly due to perinatal conditions such as neonatal infections, birth asphyxia, prematurity, congenital abnormalities and low birth weight\(^\text{10}\) (see Figure 3). Neonatal tetanus represented about 2% of hospital mortality of children in 2000 and the contribution of HIV/AIDS to child mortality was 2%.
mortality probably does not exceed 2-3\%^{6}. Malnutrition is a major contributor to early childhood mortality with under-nutrition the core of the problem. Micronutrient deficiency is a significant additional factor in child mortality with Vitamin A, iron, iodine and zinc being the most important for health, growth, development and a functioning immune system\textsuperscript{14}.

![Neonatal cause specific mortality graph](image)

Figure 3: Neonatal cause specific mortality

3.1.2. Morbidity patterns\textsuperscript{9}

The reported number of measles cases was 12,327 when surveillance started in 2000 and reported cases have declined dramatically to 653 cases in 2003 and 267 cases in 2005\textsuperscript{15}. The rate of malnutrition continues to be very high in Cambodia, and is among the highest in South-East Asia. Cambodian children have evidence of chronic under-nutrition; in 2005, 36\% were underweight and 37\% were stunted. There was also a decrease in prevalence of wasting in 2005 at 7\% compared to 15\% in 2000 and 13\% in 1996\textsuperscript{5}. Breastfeeding is almost universal in Cambodia and rates of exclusive breastfeeding have increased dramatically to 60\%, up from 11\% in 2000. Early initiation of breastfeeding within one hour of birth is 35\% and those who initiated breastfeeding within one day of delivery is 68\%. Low intake of energy and nutrient rich complementary food is the major cause of malnutrition in children under five years of age with a steep rise in malnutrition seen from about age 6 months (Figure 4.).
The CDHS 2005 shows that almost two-thirds (62%) of children 6-59 months of age have anaemia and this is particularly high in the 9-11 months age group, where prevalence is up to 87% reflecting most likely an inadequate consumption of absorbable iron rich foods but with contributing factors of intestinal parasites, malaria and haemoglobinopathies. Anaemia during pregnancy is a contributing factor to low birth weight and 47% of Cambodian women in the 15-49 year age group had some degree of anaemia. The Cambodia National Micronutrient Survey 2000 showed a prevalence of Vitamin A deficiency with serum retinol less than 0.7 μmol/L in 22.3% of 344 children 0 to 59 months. Note: Serum retinol less than 0.7 μmol/L suggests inadequate Vitamin A status and where this is greater than or equal to 20% it indicates a severe public health problem.

3.1.3. Disparities in child survival

After decades of war and civil strife, Cambodia is developing economically and socially but remains one of the poorest countries in Asia. The latest household survey in 2004 found that 35% of Cambodians live below the national poverty line, compared to 47% in 1993/94 surveys. Even the poor have experienced an improvement in living standards but inequality is significantly increasing in health and education. Female literacy is 60.3% (69.6% in the general population) and only 39% of the rural population have access to safe water and 16% to sanitation facilities. Poverty in Cambodia predominantly affects rural households and is associated with landlessness, remoteness from markets and services, lack of productive assets, low levels of education and high dependency ratios. Poor people are more vulnerable to ill health and high out-of-pocket health costs are a major cause of debt and loss of land.
Poor children in Cambodia have worse health. The under-five mortality is almost three times as high in the poorest group compared to the richest socioeconomic groups: 127 versus 43 per 1,000 live births and infant mortality in the poorest 20% (quintile) of children is 101 compared to 34 per 1,000 live births in the richest group.

The CDHS 2005 showed that only 70% of the under one year old children in the poor population were covered by measles immunization compared with 82% of the rich population and the coverage for fully immunized children under one were 56% and 76% respectively. It is encouraging that the disparity has decreased for immunization rates over the past 5 years. Children in the poorest quintile are more likely to be severely underweight (10%) than those in the richest quintile (3%). Other disparities are shown in Figure 4.

Figure 5: Disparities in health service delivery and nutrition indicators by wealth ranking (CDHS 2005)
Note: trained personnel include doctors, nurses and midwives
3.2. Current Action for Child Survival

There has been a national response to child survival in Cambodia through the government and developmental partners.

3.2.1. National Health Programmes

Existing national health programmes, departments or centres with responsibilities for child survival actions include: the Department for Communicable Disease Control (CDC) which hosts the Integrated Management of Childhood Illness (IMCI) secretariat, the National Centre for Maternal and Child Health (NCMCH) incorporating the National Acute Respiratory Infections, Diarrhoea and Cholera Prevention and Control Programme (ADCP), National Immunization Programme (NIP), National Nutrition Programme (NNP) and National Reproductive Health Programme (NRHP). The National Centre for Parasitology, Entomology and Malaria Control (CNM) incorporates the National Malaria Control Programme (NMCP), National Dengue Programme (NDP) and the National Programme for the Control of Intestinal Parasites. Other relevant departments, programmes and centres with responsibilities for child health interventions include the Department of Preventive Medicine, the National Centre for Health Promotion (NCHP) and the National Centre for HIV/AIDS, Dermatology and Sexually Transmitted Diseases (NCHADS).

3.2.2 Current Successes in Delivery of Child Survival Interventions

National health programmes have achieved success in immunization, control of dengue fever, control of HIV/AIDS, increasing coverage of vitamin A supplementation and regular deworming. Each of these programmes had four elements of success: a clear target, political commitment from the Government and the donors, clear attribution of responsibilities and sufficient funding.

3.2.3. National Health Programmes Constraints

Major killers of young children including pneumonia, diarrhoea and neonatal conditions need effective case management through health service delivery that provides key interventions to the community. Delivery strategies for addressing ARI, diarrhoea, neonatal health and nutrition particularly in rural and remote areas have not been given sufficient attention and resources.

Reasons for failure of existing programmes to deliver child survival interventions have included limited human resources, fragmented responsibilities, insufficient funding, inadequate quality of services and problems with access and utilization of services.

3.2.3.1 Limited human resources

Unresolved issues related to human resources in Cambodia include staff motivation, quality of performance, productivity and distribution by geographical area. Persistent low wages have continuously undermined all efforts to improve human resources management and performance in the public sector. Many health workers maintain both public and private practice to improve personal income leading to
conflict in professional time and resources available to the public sector. Attempts to address this through fees for service at public sector referral hospitals and health centres have had mixed results. Since 1996, there has been a 10% decrease in the number of midwives and 5% decrease in the Ministry of Health (MOH) workforce. In 2005, it was estimated that 78% of health centres had staff with updated midwifery skills. There is a marked disparity between MOH health workers in Phnom Penh compared to the rest of Cambodia due to difficulties in posting staff to rural areas for economic and social reasons. Phnom Penh has 9.3% of the population and 25.1% of all MOH staff, the northeast provinces have 3.7% of the population and 5.6% of MOH staff and the rest of Cambodia has 87% of the population and 69.4% of the MOH staff. In most training programmes, clinical experience for trainees is inadequate and there are no systems in place to assure the quality of graduates through registration or licensing. The Figure 5 below shows the proportion of health centres with staff with relevant skills in midwifery, IMCI and nutrition to implement child survival scorecard interventions.

![Figure 5: Skilled Human Resources](image)

**3.2.3.2. Fragmented responsibilities**

Vertical disease control programmes have achieved important gains but are not always well coordinated with mainstream health service delivery at health facilities. This is particularly the case when preventive and curative child survival interventions could or should be delivered to the same individual at the same time but disease specific programme financing, staff training and reporting often circumvents this. Fragmentation in partner support for national health programmes to deliver key interventions and the need for additional administrative and reporting mechanisms by partners exacerbates the situation.
3.2.3.3 Inadequate funding

Financial resources provided to child survival by the RGC and external partners while growing are inadequate for the magnitude of the problem. Overall health sector funding in Cambodia absorbs approximately 12-13% of total government funding which is by far the highest share among Asian developing countries. An estimated 70% of total health expenditures are from out-of-pocket sources, mainly towards private health care providers. Donors are paying approximately two-thirds of the public budget for health. One quarter of all funds from external financing sources supported maternal and child health (including immunisations), safe motherhood, reproductive health and family planning. In comparison 35% of donor funding was allocated to HIV/AIDS and 11% to tuberculosis, malaria and dengue control programmes. The contribution of HIV/AIDS and tuberculosis to child survival is minimal.

Most MOH expenditures financed by the State budget are pre-audited by the Ministry of Economics and Finance (MEF) implying unwieldy administrative procedures and frequent delays. At provincial level, further pre-approval is required from the Governor for most expenditure with unpredictable budget disbursements to health facilities.

A costing exercise, conducted in November and December 2006 of 11 of the 12 Child Survival Scorecard Indicators (Skilled birth attendance was not able to be costed at that time), has determined approximately how much it will cost to scale-up the scorecard interventions in order to achieve the 2010 targets for each intervention.

3.2.3.4. Access and Utilization of Services

The cost of transport to public facilities is an access barrier in Cambodia, particularly for the poor and populations living in remote or difficult to access areas. The poorest socio-economic quintile is also less likely to seek medical attention from public health facilities than the richest quintile.

Low demand for effective health interventions hampers utilization of health services. Limited knowledge of caretakers in relation to when and where to seek care and provider choice leads to inappropriate health care seeking behaviour. The private sector is widely utilized but is not delivering high-impact interventions such as breastfeeding promotion and immunizations and the quality of care is often questionable.

The CDHS 2000 found that 31% of caretakers of 3000 children under five with fever or ARI did not seek care, 36% of sick children were taken to the non-medical sector (the most popular options are the village drug shop, the traditional healer or when the child is very young, the traditional birth attendant), 21% were managed by the private medical sector and only 12% of children were taken to the public medical sector.

The CDHS 2005 found that 48% of children under 5 years with symptoms of ARI and 43% with fever sought treatment at a health facility or provider (this excludes pharmacy, shop and traditional practitioner).

The majority of deliveries take place in the home (78%). Overall 44% of women received assistance from a skilled birth attendant during delivery. It is estimated that only a small proportion of the expected number of pregnancy complications are treated by the public health system.
3.2.3.5. Quality of services

The quality of services at some health facilities and referral hospitals needs improvement. Often there is lack of essential drugs and equipment and facilities may be in poor condition without basic amenities including water, sanitation and electricity. Staff performance may be poor due to lack of knowledge or skills in managing common childhood illnesses or even if health workers have appropriate skills, their motivation and interaction with patients may be unsatisfactory. In 2003 an assessment of the quality of care for children in 12 hospitals in Cambodia found that improvements were required in case management for ARI and malnutrition, feeding and nutrition of children, monitoring, triage and emergency care and communication with mothers.

Private providers, predominantly drug vendors, are the main source of health care provision in Cambodia but are unregulated and of low quality. However 80% of the out-of-pocket household spending on health is towards private sources. There is a great need for improving quality of services in both the public and private sectors in provision of health care in Cambodia.

3.2.4. Families and Communities

3.2.4.1. Knowledge and practices at household level

The behaviour of mothers and other care givers and decision-makers at home and in the community are the key to the protection of the health of the well child and the effectiveness of health care services for the sick child. There is poor knowledge and behaviour in relation to:
- Infant and young child feeding practices
- Hygiene behaviour for diarrhoea prevention
- Appropriate care-seeking behaviour for disease, particularly for ARI, diarrhoea and fever
- Appropriate home management of the sick child
- Seeking preventive services including immunisation, insecticide treated nets (ITN) and Vitamin A
- Use of ITN
- Essential care of the newborn

A behavioural change communication strategy (BCC) is necessary to improve knowledge and practices at household level.

3.2.4.2. Participation of communities

A number of community structures exist in Cambodia that may be accessed for the provision of health services. Communication and management structures supported by the Ministries of Health (MOH), Rural Development (MRD), Women’s Affairs and Social Affairs include village development committees, village health volunteers (VHVs), village health workers (VHWs), village health support groups (VHSGs) and health centre management committees (HCMCs). Village chiefs, commune councils, commune chiefs, monks, temple elders and wat grannies are also important opinion leaders and decision-makers at community level. These stakeholders together with the informal private sector including traditional healers and traditional birth attendants (TBAs) may be engaged to deliver community child health interventions including health education on nutrition, hygiene, clean water and sanitation, and promote care seeking for sick children and home care for the sick and well child. Additionally they can
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distribute commodities including soap, oral rehydration salts (ORS) and ITN and in remote areas with poor access to trained personnel, provide selected newborn interventions.

3.3. Actions of Non-Governmental Organisations (NGOs) for Child Survival

NGO’s are currently implementing a wide variety of innovative approaches for improving child health at community, health system and policy levels. Some of these programs of best practice were presented at the Child Survival Partnership Workshop (December 2005) with more than 60 local and international NGO’s participating. It was recognized that these programs worked well due to adequate resources, good management and dedicated staff but would be a challenge to scale up on a nationwide basis. NGO’s are committed to following the Cambodian Score Card interventions and many are focusing particularly on IYCF issues within their child survival programs.

Following the Child Survival Partnership Workshop, the NGO-Child Survival Working Group (NGO-CSWG) was formulated with the very important role of bridging implementers and the community with policy makers and donors. The NGO-CSWG has representation on the Child Survival Steering Committee for which provides opportunity for policy dialogue as well as reinforcing the agreed upon national strategies, policies and guidelines. NGO’s working in the area of child survival such as nutrition, breastfeeding, complementary feeding, IMCI, immunization, Vitamin A, diarrhoea, pneumonia, micronutrient, neonatal care, orphans and vulnerable children, child protection/abuse, child rights, and prevention of mother to child transmission (PMTCT) of HIV/AIDS, and they are working in 23 provinces and municipalities (except Kep) through their own programs, health contracting or directly supporting government facilities and programs. NGOs have been involved in social marketing of health commodities, working with private drug sellers to expand access to treatment closer to home and using Village Malaria Workers (VMWs) to manage malaria, diarrhoea, and pneumonia and provide supplementary immunisation activities (SIA) where access to effective care at first level facilities is limited. A BBC World Service Trust (BBC WST) project disseminated key child survival behaviour change messages through mass media including a TV drama “Taste of Life”. NGOs are committed to maximize their efforts and align their programs according to the priority needs in the Cambodian Child Survival Scorecard.

4. Policy Framework


At the MDG 4 consultation in 2004 and subsequent consensus building meetings with MOH and partners, it was agreed to focus on universal coverage of high impact child survival interventions summarized in the scorecard with clear targets for 2007. Table 1 shows the scorecard interventions, existing coverage of interventions from 2000 to 2005, targets for 2007 and the gap towards universal coverage.
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Early initiation of Breastfeeding</td>
<td>11%</td>
<td>-</td>
<td>2%</td>
<td>2%²</td>
<td>25%</td>
<td>35%</td>
<td>35%</td>
<td>60%</td>
</tr>
<tr>
<td>Exclusive Breastfeeding</td>
<td>11%</td>
<td>-</td>
<td>2%</td>
<td>-</td>
<td>60%</td>
<td>25%</td>
<td>25%</td>
<td>80%</td>
</tr>
<tr>
<td>Complementary Feeding</td>
<td>71%</td>
<td>-</td>
<td>88%¹</td>
<td>-</td>
<td>82%</td>
<td>95%</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>29%</td>
<td>46%</td>
<td>59%</td>
<td>75%</td>
<td>35%</td>
<td>80%</td>
<td>85%</td>
<td>99%</td>
</tr>
<tr>
<td>Measles vaccine</td>
<td>55%</td>
<td>52%</td>
<td>65%</td>
<td>65%</td>
<td>77%</td>
<td>80%</td>
<td>92%</td>
<td>99%</td>
</tr>
<tr>
<td>Measles vaccine</td>
<td>30%</td>
<td>45%</td>
<td>43%</td>
<td>51%</td>
<td>54%</td>
<td>70%</td>
<td>80%</td>
<td>99%</td>
</tr>
<tr>
<td>Insecticide Treated Nets</td>
<td>9%</td>
<td>45%</td>
<td>43%</td>
<td>51%</td>
<td>54%</td>
<td>70%</td>
<td>80%</td>
<td>99%</td>
</tr>
<tr>
<td>Vector control (Aedes aegypti)⁵</td>
<td>181 sites</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>&lt;10 sites</td>
<td>&lt;10 sites</td>
<td>&lt;10 sites</td>
<td>99%</td>
</tr>
<tr>
<td>Oral Rehydration Therapy (ORT)</td>
<td>74%</td>
<td>-</td>
<td>45%</td>
<td>-</td>
<td>58%</td>
<td>80%</td>
<td>85%</td>
<td>99%</td>
</tr>
<tr>
<td>Antibiotic for pneumonia</td>
<td>35%</td>
<td>-</td>
<td>75%</td>
<td>-</td>
<td>48%³</td>
<td>50%</td>
<td>75%</td>
<td>99%</td>
</tr>
<tr>
<td>Malaria Treatment</td>
<td>62%</td>
<td>31%</td>
<td>31%</td>
<td>31%</td>
<td>48%³</td>
<td>85%</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>Skilled Birth Attendance</td>
<td>32%</td>
<td>20%</td>
<td>22%</td>
<td>22%</td>
<td>44%</td>
<td>60%</td>
<td>70%</td>
<td>99%</td>
</tr>
</tbody>
</table>

¹ UNICEF, Seth Koma Follow-up Survey 2003; for ORT it includes only ORS and RHF
² Cambodia Socio-Economic Survey (CSES) Health and access to medical care in Cambodia 2004
³ 9.2% is the national average; in the provinces with high malaria transmission (Koh Kong, Kratie, Mondulkiri, Preah Vihear, Ratanakiri and Stung Treang) insecticide-treated net coverage ranged from 3 to 38%.
⁴ Report of the Cambodia National Malaria Baseline Survey 2004
⁵ 4.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the use varied from 11-37%
⁶ Given the increasing contribution of dengue fever to under-five mortality in Cambodia the Child Survival Steering Committee has decided to include vector control in the Scorecard; vector control for Aedes aegypti is the most important public health intervention to prevent dengue fever. The indicator used is the Breteau Index defined as: number of positive breeding sites per 100 houses (%) surveyed. Effective vector control is achieved when there are less than 10 breeding sites per 100 houses surveyed (<10%).
⁷ 48% represent a proportion of children under 5 with signs of ARI (cough and fast breathing) taken to a health facility or provider
⁸ 62% of children in three provinces (Preah Vihear, Pursat) with malaria transmission received any antimalarial drug, but only 2% received the recommended artemisinin-based combination therapy
⁹ 0.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the proportion of children who received anti-malarial treatment varied from 0.3-3.3%
4.1.1. Improved infant and young child feeding

Improved infant and young child feeding (IYCF) practices need to be protected, promoted and supported with exclusive breastfeeding up to 6 months of age, continued breastfeeding up to 2 years of age or beyond, and adequate and safe complementary feeding from 6 months onwards. Breastfeeding initiation within one hour of delivery has several benefits for the mother and infant including skin-to-skin contact, provision of colostrum to the baby and promoting bonding between mother and baby. Exclusive breastfeeding means that no other food or fluids, not even water should be given to the infant in the first 6 months of life. The Sub-Decree for the Marketing of Products for Infant & Young Child Feeding was passed in November 2005. A further Joint Prakas will allow implementation and enforcement of this important sub-decree.

4.1.2. Oral rehydration therapy (ORT)

Ninety-five percent of all diarrhoea cases can be managed with oral rehydration therapy with increased fluids, continued feeding, recommended home fluids and/or oral rehydration salts (ORS) solution. Zinc, if available, should be given. Children with some dehydration need to receive ORT under observation of trained health workers (Plan B). Health facilities must be equipped and staffed to provide ORT according to Plan B.

4.1.2.1. Oral rehydration salts (ORS)

After 20 years of research to improve ORS, a new formula has been developed that contains less sodium and glucose than the previous formula. This preparation decreases the volume of diarrhoea and vomiting in children presenting with acute non-cholera-related diarrhoea and significantly reduces the need for intravenous fluid treatment19.

4.1.2.2. Zinc supplementation

Zinc supplement given during an episode of acute diarrhoea has been shown to reduce the duration and severity of the episode and the risk for a relapse. Along with increased fluids and continued feeding, all children with diarrhoea should be given 20 mg per day of zinc supplementation for 10 days (10 mg per day for infants below 6 months of age)17. Zinc supplementation has been included in the updated IMCI management guidelines for Cambodia.

4.1.2.3. Intravenous Rehydration

Few diarrhoeal cases (less than 5%) require intravenous fluids. Intravenous fluids can be given at health centre level, provided that monitoring and reassessment is assured. When intravenous fluids are not available at health centres, children must be referred to hospital, where care in line with agreed upon standards of paediatric hospital care of at least CPA 1 level must be provided.
4.1.3. Antibiotic for pneumonia

Pneumonia in children requires prompt diagnosis and treatment with antibiotics. A trained health worker should see children with cough and/or difficulty breathing. Health workers at first level health facilities should correctly diagnose pneumonia and assess severity according to IMCI/MPA 3 guidelines. Children with fast breathing only should be treated with oral antibiotics. Children with any general danger sign or chest indrawing or stridor should be given pre-referral antibiotics and referred urgently to hospital, where care in line with agreed upon standards of paediatric hospital care of at least CPA 1 level must be available.

4.1.4. Insecticide treated nets

In malarious areas, insecticide treated bed-nets should be available and used as a preventive intervention for malaria. There is a currently high coverage (87%) of bed net use in children under-five in malarious areas in Cambodia20 but bed-nets are rarely adequately treated (20%). Long-lasting insecticide treated mosquito nets (LLIMN) have an advantage over insecticide dipping of conventional nets and should be distributed as they become available.

4.1.5. Malaria treatment

In malarious areas of Cambodia, treatment of falciparum malaria is with artemisinin-based combination therapies (ACT) due to high multi-drug resistance. Due to the high cost of treatment with ACT blood-sample-based diagnosis with microscopy or rapid diagnostic tests should precede treatment. Vivax malaria can cause severe morbidity and should also be diagnosed and treated. Treatment of both falciparum and vivax malaria should follow the current Cambodian National Treatment Guidelines for Malaria. Also for malaria case management, agreed upon standards of paediatric hospital care of at least CPA 1 level must be met.

4.1.6. Vitamin A

For the reduction of child mortality the most important micronutrient supplementation is Vitamin A, given 4-6 monthly from 6-59 months. Vitamin A supplementation is one of the most cost effective ways to improve child survival. In Cambodia, Vitamin A capsules are distributed routinely to children 6-59 months twice a year during the distribution months March and November, 100 000 IU for children 6-11 months and 200 000 IU for children 12-59 months. In addition, every patient contact should be used to verify a child’s vitamin A supplementation status. The recommendation for children in the National Vitamin A policy is under revision and will include changing the distribution months to May and November (from March and November) to have a 6 month interval and giving 200 000 IU to women once within 6 weeks of delivery (previously within 8 weeks of delivery). Providing Vitamin A to post-partum women increases Vitamin A levels in breast milk and subsequent reduces the likelihood of child mortality.

4.1.7. Measles vaccine and tetanus toxoid

Immunising children with measles, tetanus, diphtheria, pertussis, polio, BCG and hepatitis B vaccine is part of the routine Expanded Programme on Immunization (EPI) schedule in Cambodia. Measles infection is associated with high mortality in children particularly in the malnourished. The MOH is
working towards measles elimination. In Cambodia, the first dose of measles vaccine is provided at 9 months of age and the second dose by SIA. To protect the newborn against tetanus, two doses of tetanus toxoid vaccine for the mother during her first pregnancy with five doses in her lifetime provide the best assurance. If resources become available, consideration should be given to the introduction of new or underused vaccines including *Haemophilus influenzae* type B, conjugate pneumococcal, rotavirus and Japanese encephalitis vaccines.

### 4.1.8. Skilled birth attendance

Important child survival interventions are provided through skilled birth attendance during pregnancy, delivery and the immediate postpartum. Appropriate care for the mother during pregnancy and clean delivery may prevent problems in the newborn including neonatal infections, prematurity and low birth weight in addition to the maternal benefits. The National Strategy for Reproductive Health in Cambodia 2006-2010\(^2\) describes the necessary maternal interventions impacting on child survival. Newborn interventions promoted in the CCSS are described in section 4.2 and modes of delivery for these interventions are described in sections 6.5.1 and 6.5.5.3.

### 4.2. Newborn Interventions

As U5MR decreases, the contribution of neonatal mortality to U5MR is likely to increase and improving newborn health will be required to impact on U5MR. Newborn interventions must be initiated immediately after birth and often in the community as many women deliver at home in Cambodia. A package of evidence-based neonatal interventions\(^2\) appropriate to the Cambodian context should be implemented at one or more of 3 levels including:

1. Community/home a) by midwife b) by TBA
2. MPA/health centre
3. CPA/referral hospital level

Some newborn interventions can be implemented at each level whereas others require specific health worker skills, supplies and equipment and may only be provided at health centre or hospital level. Table 2 shows the newborn interventions and at the level where each should be provided.

### Table 2: Newborn Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean delivery</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Clean cord care</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Newborn resuscitation</td>
<td>2, 3</td>
</tr>
<tr>
<td>Newborn temperature management</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Initiation of breastfeeding within one hour of delivery</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Weighing the baby to assess for low birth-weight</td>
<td>2, 3</td>
</tr>
<tr>
<td>Kangaroo mother care for low birth-weight babies</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Detection and referral of neonatal infections</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Management of neonatal infections</td>
<td>2, 3</td>
</tr>
<tr>
<td>Hepatitis B within 24 hours</td>
<td>1a, 2, 3</td>
</tr>
<tr>
<td>Antibiotics for premature rupture of membranes</td>
<td>3</td>
</tr>
<tr>
<td>Corticosteroids for preterm labour</td>
<td>3</td>
</tr>
</tbody>
</table>
4.3. Other Policies and Strategies relevant to Child Survival

Several other policies and strategies relevant to child survival in Cambodia include:

Guidelines for developing operational districts 1997
National Policy and Strategies on Safe Motherhood 1997
Maternal and Neonatal Tetanus Elimination Policy 2001
National Vitamin A Policy (revised) 2001
National Safe Motherhood Action Plan 2001-2005
National Policy on Infant and Young Child Feeding 2002
Cambodia Nutrition Investment Plan 2003-2007
IMCI Case Management Guidelines and Feeding Recommendations (MPA 3 module)
Nutrition Module (MPA 10 module)
Health Sector Strategic Plan 2003-2007
Policy on Community Participation in the Development of Health Centre 2003
National Treatment Guideline for Malaria 2004
Guidelines for Outreach Services from Health Centre 3rd edition May 2005
Sub-decree on Marketing of Products for Infant and Young Child Feeding, 2005
Draft guidelines for referral systems in Cambodia August 2005
National Strategic Development Plan 2006-2010
National Strategy for Reproductive and Sexual Health in Cambodia 2006-2010

4.3.1. Prevention of mother to child transmission of HIV/AIDS

Prevention of mother to child transmission (PMTCT) of HIV/AIDS should be fully integrated into care for women and children at all levels of health facilities as agreed in the joint statement prepared by NCHADS and NCMCH for strengthening the PMTCT of HIV/AIDS. PMTCT in Cambodia is described in the Guidelines for Prevention of Mother to Child Transmission of HIV (2005). A qualified paediatrician or medical doctor should follow up the infant of a mother that is HIV-infected. National guidelines for the use of paediatric ARV were published in 2004 including guidelines on prophylaxis for opportunistic infections. In addition to opportunistic infections, HIV-infected children are at risk from common childhood illnesses and should receive the scorecard interventions the same as for other children.
4.4. Guiding Principles

4.4.1. Convention on the Rights of the Child

The CRC and its monitoring body the United Nations Committee on the Rights of the Child provides a valuable framework for child survival. Cambodia ratified the CRC in 1992. Article 6 of the Convention specifically states the inherent right to life of every child and Article 24 the rights to health and health care.

4.4.2. Equity

To reduce inequities in Cambodia, the scorecard interventions must reach the poorest and most marginalized households. This includes those marginalized by geographical, social, political, economic, and ethnic and gender factors. As most Cambodian households have a low income, achieving universal coverage of the essential package of scorecard interventions will reduce inequities in child survival. Overall coverage levels are low, but the poorest have the lowest coverage and so should be specifically targeted in all interventions.

4.4.3. Building on scientific evidence and international consensus

This strategy is built on sound scientific evidence\(^4,21\) that has led to international consensus confirmed regionally at the 56\(^{th}\) WHO Regional Committee Meeting for the Western Pacific, when Member States endorsed the WHO/UNICEF Regional Child Survival Strategy (RCSS). The WHO/UNICEF RCSS document calls Member States to ensure that an essential package of high-impact child survival interventions is brought to every child.

4.4.4. Building on existing national policies

Determinants of child survival that are beyond the scope of the health sector, in particular water sanitation and the environment, physical access to services, gender equity, female empowerment, female education and birth spacing are adequately addressed through other national policies and strategies. This strategy is built on existing national policies and strategies in particular those addressing maternal health and nutrition.

4.4.5. Integrated Approach

The child survival scorecard interventions should be viewed as being implemented together not as individual elements. The interventions are mutually beneficial and inextricably linked to the common goal of reducing child mortality. Health service delivery must be organised in a way to use synergies at every delivery point and to reduce transaction costs.

4.4.6. Sustainability, effective and efficiency

Delivery of scorecard interventions should be sustainable, effective and efficient. Financial sustainability is related to national ability to continue to deliver child survival interventions beyond donor funding cycles and must take into consideration public subsidy or charging user fees for those that can afford them. Institutional, technical and social dimensions of sustainability are also important. Effectiveness is the degree to which the integrated interventions meet the objective of impacting on child mortality in Cambodia. Efficiency is the output per unit of resources inputted including human resources, finances and commodities.
5. Strategy Overview

The Cambodia Child Survival Strategy (CCSS) will address goals of the HSP 2003-2007 of the Ministry of Health including reducing infant and child mortality rate and improving the nutritional status among children. The CCSS also follows the key priority areas of work to achieve the goals in the HSP 2003-2007 including health service delivery, behavioural change, quality improvement, human resource development, health financing and institutional development. It will be the guiding document for the HSP 2007-2010.

5.1. Vision

Implementing the Cambodia Child Survival Strategy will achieve universal coverage of an essential limited package of child survival interventions for all children in Cambodia regardless of gender, geographical, socio-economic and ethnic differences that is “few for all rather than more for few”.

5.2. Mission Statement

The Royal Government of Cambodia will create an enabling environment in which all players of the health sector contribute to their full potential to the national goal of reducing child mortality.

5.2. Goal

To reduce, by 2015, under-five and infant mortality rate from 124 and 95 per 1000 live births to 65 and 50 per 1000 live births, respectively.

5.3. Objectives

1. To achieve universal coverage of the essential package of high-impact child survival interventions included in the Cambodian scorecard
2. To secure adequate financing for child survival
3. To reduce inequities in coverage of scorecard interventions
6. Strategic Components for Child Survival

Strategic action for child survival in Cambodia necessitates immediate and medium term actions. There is an immediate need to increase coverage of high-impact child survival interventions, promote community demand for health services and ensure resource allocation.

In the medium term actions need to continue to sustain effective service delivery of high-impact child survival interventions through the public health sector and to foster options for public private mix to deliver these interventions more consistently. There should be exploration of other interventions improving access to health care for the poor.

### Strategic Components for Child Survival

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Improving coordination, planning and policy formulation</td>
</tr>
<tr>
<td>2.</td>
<td>Strengthening human resources and capacity building</td>
</tr>
<tr>
<td>3.</td>
<td>Promoting community action for child survival</td>
</tr>
<tr>
<td>4.</td>
<td>Ensuring health care financing for child survival</td>
</tr>
<tr>
<td>5.</td>
<td>Improving efficiency and quality of health service delivery</td>
</tr>
<tr>
<td>6.</td>
<td>Strengthening monitoring and evaluation</td>
</tr>
</tbody>
</table>

6.1. Improving coordination, planning and policy formulation

6.1.1. Coordination

Strengthening leadership and management structures within MOH for child survival is required to accelerate progress. The RGC is committed to child survival and as such Child Survival Coordination and Management Structures (CSCMS) have been set up under the ministerial directive of the MOH. The CSCMS has a steering committee (CSSC), management committee (CSMC) and an executive secretariat. The aim of the CSCMS is to have one coordinating mechanism for child survival. The CSMC membership includes high-level officers from all departments, centres and programmes delivering child survival interventions and stakeholders from partner agencies and NGOs involved in child survival activities in Cambodia.

Provincial Child Survival Management Committees (PCSMC) will be set up at provincial levels similar to that at central level. The Provincial Health Department (PHD) director will be appointed as chief of the steering committee for child survival at provincial level and planning for introducing or scaling up coverage of scorecard interventions at provincial level should be coordinated by the Provincial CSMC.

Each government body has responsibility to deliver scorecard interventions in their designated area of work and to coordinate with other departments to ensure optimal delivery of all scorecard interventions in an integrated manner. It is particularly important that government bodies responsible for maternal and child health interventions work synergistically to achieve goals common to both, that is improving neonatal health. IMCI is essential for delivering the scorecard interventions and should be at the core of
the Child Survival Strategy. The IMCI working group and secretariat should have appropriate delegated responsibility, authority and resources to implement IMCI to scale.

6.1.2. Planning

The child survival scorecard should be included as one of the health sector priorities for the planning process. The Health Sector Strategic Plan (HSP) 2007-2010 should include all necessary actions to achieve universal coverage of the child survival scorecard. The scorecard has a build in monitoring structure that may readily be included in a sector wide approach (SWAp). Partners that have reached consensus on the scorecard interventions should be encouraged to support a SWAp when child survival is included as a priority.

Joint planning should be undertaken with PHDs, national health programmes, operational districts (ODs) and associated health centres and referral hospitals. Existing coverage of scorecard interventions should be determined from information available and targets for integrated scaling up agreed through consensus with all stakeholders. Scaling up of scorecard interventions should be documented in budgeted annual operational plans and include aspects of resource and training needs and management and supervision. Synergies for reducing transaction costs for training and supervision should be exploited.

6.1.3. Policy formulation

Implementing the scorecard interventions to scale dictates the need for policy formulation in several areas including:

- National standards setting
- Regulatory mechanisms for service providers
- Human resources
- Health financing

6.1.3.1. National Standards setting

National standards appropriate to the level of care are defined in the Minimum Package of Activities (MPA) and Complementary Package of Activities (CPA) for public health facilities. These standards are also relevant for the formal private sector. Evidence based standards of care are available for children and MPA/CPA guidelines when revised should reflect these standards. The IMCI case management guidelines provide best clinical practice for first level health facilities. Standards of hospital care for children are available in line with the WHO guidelines2425 and community level standards are defined by the IMCI key family and community practices26. There is a need to develop and institutionalise an approach for setting and enforcing quality standards for children and newborns and determining where this function is placed within the MOH.
6.1.3.2. Regulatory mechanisms

6.1.3.2.1. Formal health service providers and services

The central MOH has the responsibility to create and enforce regulatory mechanisms to ensure that standards of care for children are appropriate. Service providers including medical doctors, medical assistants, nurses, and midwives in the public and private sector should be licensed to practice. In addition, there are plans to establish an accreditation mechanism for health care facilities. License and accreditation should be subject to the provision of a minimum standard of care that is related to the level of service provision, and includes reporting and surveillance tasks.

6.1.3.2.2. Pharmacists and drug sellers

All drugs imported into the country must be legally registered so that there is control on the quality of drugs available to the community. Regulation of pharmacies and drug sellers should be achieved through consensus on a list of those drugs that can be provided over the counter (for example ORS, zinc supplements, antipyretics, multi-vitamin and mineral mix), drugs with facilitated access (e.g. pre-packaged ACT/Malarine®) and those that require a formal prescription. Prescription requirements for drugs for children under-five and pregnant women should be enforced. Drug sellers should be trained at community level, district level or at regional training centres, to sell drugs safely.

Necessary policy decisions for human resources and health financing are described in sections 6.2 and 6.4 respectively.

6.2. Strengthening human resources and capacity building for child survival

Human resources for child survival operations at all levels must be ensured. Health workers need be appropriately trained, distributed, remunerated, supervised and authorized to deliver child survival scorecard interventions. Increased recruitment and training of midwives and appointment to areas of need, particularly rural areas, is necessary to ensure care for pregnant women and infants. Recruiting staff from local areas and strengthening local training centres may facilitate increasing numbers of trained health personnel in rural areas. Job descriptions are required and adequate training (MPA or CPA) should be provided for staff to conduct the job for which they have been recruited. A Paediatric training committee under the MOH Human Resources Department should be developed to coordinate CPA training. Incentives in the form of opportunities for professional development and performance based payment or peer recognition for provision of quality care would assist in addressing human resource constraints particularly in rural and remote areas. Pre-service and in-service education and training for health workers providing care in health facilities, hospitals and performing outreach must be redirected to foster the delivery of all scorecard interventions at all service delivery contact points in an integrated fashion. This will require revision of existing training curricula. Existing health workers have to be reoriented to provide care where and when it is required. In areas with limited access to trained personnel, VHV, VHW, VMW and TBAs could provide selected child survival interventions.
6.3. Promoting community action for child survival

Most of the care of childhood illness occurs in the home. Appropriate practices of mothers and caretakers of children under-five will be promoted based on the IMCI key family practices. The table 3 below shows the scorecard interventions with the corresponding Key Community-IMCI (C-IMCI) Family Practices. Hygiene promotion is also shown.

<table>
<thead>
<tr>
<th>interventions</th>
<th>Key Community IMCI Family Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved infant and young child feeding</td>
<td>Breastfeed infants exclusively for six months From six months of age, give children good quality complementary foods, while continuing to breastfeed up to two years or longer.</td>
</tr>
<tr>
<td>Oral rehydration therapy for diarrhoea</td>
<td>Continue to feed and offer more fluids, including breast milk to children when they are sick. Give sick children appropriate home treatment for infections.</td>
</tr>
<tr>
<td>Antibiotics for pneumonia</td>
<td>Recognize when sick children need treatment outside the home and seek care from appropriate providers. Follow the health worker’s advice about treatment, follow-up, and referral.</td>
</tr>
<tr>
<td>Insecticide treated nets</td>
<td>Protect children in malaria-endemic areas by ensuring that they sleep under insecticide treated bednets</td>
</tr>
<tr>
<td>Malaria treatment</td>
<td>Recognize when sick children need treatment outside the home and seek care from appropriate providers.</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Ensure that children receive adequate amounts of micronutrients such as Vitamin A, iron and zinc in their diet or through supplementation</td>
</tr>
<tr>
<td>Measles vaccine and tetanus toxoid</td>
<td>Ensure that every pregnant woman has adequate antenatal care, and seeks care at the time of delivery and afterwards. Take children to complete full course of immunizations before their first birthday</td>
</tr>
<tr>
<td>Skilled birth attendance</td>
<td>Ensure that every pregnant woman has adequate antenatal care, and seeks care at the time of delivery and afterwards.</td>
</tr>
<tr>
<td>Hygiene promotion</td>
<td>Dispose of all faeces safely, wash hands after defecation, before preparing meals and before feeding children</td>
</tr>
</tbody>
</table>

Community action for child survival is dependent on a demand and a supply component. Families should be empowered to demand appropriate health interventions and appropriate quality of care for their children through a behaviour change communication (BCC) strategy. Many families do not know what standard care to expect from health service providers for their sick child and what practices are unnecessary or harmful. The National Communication Strategy for the promotion of IYCF indicates IYCF behaviours for targeted emphasis. The BCC strategy will be extended to include appropriate care seeking from a professional provider for the sick child and appropriate home care for the sick and well child. The BCC strategy should use different channels, including mass media and inter-personal communication, have clearly defined target audiences, provide training and capacity building and ensure partner coordination and information sharing.
Health facilities, through outreach activities and fostering community involvement in the planning, implementation and monitoring of health promotion and health care activities will lead to sustainable change in family practices. Health workers should identify and use the range of existing structures and individuals in the community to participate in the planning and delivery of community child health interventions. The National Policy on Primary Health Care 2000 and associated implementation guidelines (2002) and the Policy on Community Participation in the Development of Health Centre 2003 provide guidance on community participation and explain mechanisms for implementing primary health care at grassroots level.

The roles and responsibilities of community health volunteers should be clearly defined and Government and partners should support the training of community health volunteers (CHV) in improved knowledge and communication skills for child health. The CHV curriculum clearly identifies the Key C-IMCI Family Practices and other community practices to be promoted and how to achieve this. The baby friendly hospital initiative (BFHI) and baby friendly community initiative (BFCI) that focus on IYCF activities should also be supported as skills in promoting IYCF at community level may similarly be used to improve other family and community practices. Women in the community either in the context of the BFHI or other activities, can be trained to provide peer support for young mothers in relation to IYCF activities and distribute certain commodities such as contraceptives, soap, ORS, diarrhoea treatment kits and ITN. Approaches should build on existing programmes such as the Community Birth-Spacing Facility Distribution (CBD) approach of the National Reproductive Health Programme. A sub-decree on marketing of products for infant and young child feeding was issued in 2005 and should be enforced so that harmful commercial pressure on families is limited.

Well-supervised Village Health Workers may represent a feasible coping strategy to overcome barriers to basic curative care in remote communities where access to formal health care services is limited because of distance and sometimes, cultural barriers for ethnic minorities. The Village Malaria Workers may serve as a model for a more comprehensive programme that could include early differential diagnosis and treatment (EDDAT) for ARI and pneumonia, diarrhoea without severe dehydration and malaria in children with referral of severe cases. Community surveillance for birth and death registration and pregnancy should be introduced and reports transmitted to district level.
6.4. Ensuring health care financing for child survival

Based on this strategy, one consolidated and budgeted plan for child survival will be developed and external support through grants, loans or technical assistance from financing institutions, multilateral and bilateral agencies and NGOs should be realigned according to the consolidated plan. Attempts should be made to pool resources to ensure delivery of the scorecard interventions together as a package. Some of the interventions including immunisation and malaria receive more funding than others, but it should be made clear to partners that funds will be used to deliver scorecard interventions as a package for maximum impact.

The potential of programme-based budgeting for delivering the child survival scorecard interventions should be optimised. Funds should be made available, by each relevant programme extracting funds from their respective programme budgets to ensure adequate resources for implementation of scorecard interventions.

Increased government and external funding for high-impact interventions and health care financing schemes that do not pose an obstacle to health care for children under five particularly the poor are required. There should be increased government and external resource allocation for high-impact interventions including ARI treatment, ORT, and breastfeeding while maintaining current support for NIP and NNP. IMCI, which delivers the majority of the scorecard interventions, must receive more funding through a consolidated mechanism. Specified child health components are necessary in the Women and Child Health and Basic Health Services of the Public Investment Programmes.

Health Equity Funds (EF) aim to increase access to hospital care for poor households through avoiding catastrophic hospital expenses that push them into extreme poverty. EFs are being piloted in several operational districts and cover all family members. EF identify poor households in the community and pay hospitals for inpatient health care services provided to beneficiaries and reimburse additional costs such as transport and food directly to beneficiaries. Additionally EFs provide strong incentives to improve the quality of care by supplementing salaries of all health workers in a particular facility contingent on the provision of meeting a set of quality care targets. IMCI and the existing standards for paediatric hospital care should serve as reference to assess quality of care.

NGOs are being contracted to deliver appropriate health care in 11 pilot operational districts particularly in poorer and remote areas to reach the vulnerable sections of the population. These NGOs must deliver all scorecard interventions. High-impact interventions should be compulsory in all contracting arrangements and EF.

Child survival preventive interventions provided free of charge by the MOH to the population include immunizations, the distribution of vitamin A capsule twice a year and insecticide-treated materials and their re-impregnation. Consideration should be given to including all the scorecard interventions in user fee exemption mechanisms for children under five and women.
As well as EFs, Community Based Health Insurance (CBHI) schemes should be expanded to target the near-poor population that can afford to pay a modest monthly premium in exchange for free health care at the time of delivery. There are currently two pilots in Cambodia which cover primary in addition to referral care. For CBHI schemes the same criteria for quality of care should apply as for EFs.

Externally funded charitable paediatric hospitals provide a large contribution to making preventive and curative care available to children free of charge in Cambodia. These institutions should be fully engaged in the effort for achieving universal coverage of the scorecard interventions and adhere to the same minimum standards of care defined by the Ministry of Health (see Section 6.5.5.1).

There is a need to increase efficiency of current funding through timely disbursement to district level so that funds can be used for planned activities. More information is needed to track government and external resources for the child survival scorecard interventions and to improve the efficiency of the current funding. Defining criteria and/or indicators documenting the impact of health financing schemes (including EF and CBHI) on utilisation rates by children under five would help in tracking progress.

6.5. Improving efficiency and quality of health service delivery

6.5.1. Public Health Sector

Increase utilization of preventive and curative services by children under five will accelerate child survival. Each of the scorecard child survival interventions should be promoted and delivered through integrated approaches at public health facilities. IMCI provides such an approach and the updated IMCI guidelines (2006) now include the neonatal extension (to include the first week of life) of the IMCI algorithm which incorporates newborn survival interventions.

At health facility level, staff assigned to national programmes including the NIP, NNP, NMCP, NCHADS, NRHP and the IMCI trained health workers should coordinate to ensure that the scorecard interventions are mainstreamed.

Immunisation at all target age groups through the high number of public health contacts it creates provides opportunities for mothers and children for a range of health interventions. Currently most immunisations are delivered through outreach. Fixed-site immunisation would provide an economic and logistic advantage in delivering more preventive and curative services to children and their mothers in an integrated way. Well-child visits in conjunction with the immunization sessions and up to 24 months (Table 4) should be gradually institutionalised. Trained midwives should conduct community visits to provide care for the mother and baby during pregnancy, delivery and the postpartum period. Post-natal home visits to mothers and infants by community midwives or those providing outreach should be scheduled within 3 days of delivery and at 6 weeks post-partum as this would provide additional opportunities for contact of mothers and babies with child survival interventions. Policies should be developed for
these purposes and guidelines developed on integrated care for mothers and infants during post-natal visits. Health centres should provide outreach on a monthly basis and integrated outreach should be strengthened. Public health facilities can also improve utilisation through improved quality of care (see section 6.5.4) and removing barriers to care such as cost, transport and clinic hours.

Table 4 shows points of contact with children with the health centre/outreach and integrated interventions that could be provided at these contact points. Existing policies cover contact for immunisations up to and including 9 months of age only.

**Table 4: Integrated interventions at contact points**

<table>
<thead>
<tr>
<th>Contact point</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| Antenatal care         | Antenatal care of mother: tetanus toxoid and other maternal interventions\(^{21}\)  
Antibiotics for premature rupture of membranes  
Corticosteroids for preterm labour  
IYCF: focusing early initiation and exclusive breastfeeding  
PMTCT  
In malarious areas: distribute long-lasting impregnated mosquito nets (LLIMN) |
| Delivery               | Skilled birth attendant  
Clean delivery  
*As part of essential newborn care:*  
Clean cord care  
Newborn resuscitation  
Newborn temperature management  
Initiation of breastfeeding within one hour of delivery  
Weighing the baby to assess for low birth-weight  
Kangaroo mother care for low birth-weight babies  
Detection and referral of neonatal problems  
Hepatitis B within 24 hours  
BCG  
PMTCT of HIV/AIDS |
| Post-natal visit       | Clean cord care  
Newborn temperature management  
IYCF: focusing on exclusive breastfeeding  
ITN and hygiene promotion  
Appropriate care seeking  
Appropriate home care for the sick and well infant  
Maternal health and nutrition and danger signs  
Detection and referral of neonatal infections  
Post-partum Vitamin A  
Hepatitis B (24 hours up to 1 week)  
PMTCT of HIV/AIDS  
In malarious areas: assess availability of impregnated mosquito nets |
<table>
<thead>
<tr>
<th>Stage</th>
<th>Procedures</th>
</tr>
</thead>
</table>
| Post-natal visit (6 weeks) | Clean cord care  
  Polio, DTP, Hepatitis B  
  Detection of the sick child  
  IYCF  
  Appropriate care seeking  
  Appropriate home care for the sick and well child  
  ITN and hygiene promotion  
  Growth monitoring  
  In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate |
| 10 weeks  | Polio, DTP, Hepatitis B  
  Detection of the sick child  
  IYCF  
  Appropriate care seeking  
  Appropriate home care for the sick and well child  
  ITN and hygiene promotion  
  Growth monitoring  
  In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate |
| 14 weeks  | Polio, DTP, Hepatitis B  
  Detection of the sick child  
  IYCF  
  Appropriate care seeking  
  Appropriate home care for the sick and well child  
  ITN and hygiene promotion  
  Growth monitoring  
  In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate |
| 6 months  | Detection of the sick child  
  Vitamin A supplementation  
  IYCF: focusing on complementary feeding  
  Appropriate care seeking  
  Appropriate home care for the sick and well child  
  ITN and hygiene promotion  
  Growth monitoring  
  In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate |
| 9 months  | Detection of the sick child  
  Measles and check for other vaccines, give missing ones  
  IYCF: focusing on complementary feeding  
  Appropriate care seeking  
  Appropriate home care for the sick and well child  
  ITN and hygiene promotion  
  Vitamin A supplementation  
  Growth monitoring |
## Cambodia Child Survival Strategy: Few for all rather than more for few

<table>
<thead>
<tr>
<th>Age (Months)</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months</td>
<td>Detection of the sick child, Immunization check and give missing vaccines, IYCF: focussing on complementary feeding and continued breastfeeding, Appropriate care seeking, Appropriate home care for the sick and well child, ITN and hygiene promotion, Vitamin A supplementation, Deworming, Growth monitoring, In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate</td>
</tr>
<tr>
<td>18 months</td>
<td>Detection of the sick child, Immunization check and give missing vaccines, IYCF: focussing on complementary feeding and continued breastfeeding, Appropriate care seeking, Appropriate home care for the sick and well child, ITN and hygiene promotion, Vitamin A supplementation, Deworming, Growth monitoring, In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate</td>
</tr>
<tr>
<td>24 months</td>
<td>Detection of the sick child, Immunization check and give missing vaccines, Nutrition counselling, Appropriate care seeking, Appropriate home care for the sick and well child, ITN and hygiene promotion, Vitamin A supplementation, Deworming, Growth monitoring, In malarious areas: assess availability of impregnated mosquito net and provide, if appropriate</td>
</tr>
</tbody>
</table>

At referral level, where pregnant women are delivering in hospital, there should be close collaboration between staff providing care for the mother (or obstetrician) and those providing care for the infant (or paediatrician) particularly for high-risk deliveries. Where possible a paediatrician should attend all high-risk hospital deliveries to provide care for the infant. At referral level, other CPA interventions impacting on child survival may be provided, including Vitamin K for the newborn.
6.5.2. Training of Health Professional and Continuous Education

Curricula for all health professionals likely to provide preventive and curative health services to children must contain training on the rational for the essential package of scorecard interventions, and of the national policies and guidelines for delivering them. These concern medical, nursing and midwifery schools curricula. Future health professionals must be given the necessary skills for delivering those services before graduation. The same standards for official approval of curricula must apply to private as to public training institutions. Adequate in-service training and continuous education programmes must be implemented for the existing work force to provide up-to-date knowledge and skills. Training for staff caring for infants to recognise danger signs is required through the neonatal extension of IMCI or other neonatal training materials. The need for full-fledged in-service training (e.g. MPA and CPA training) should progressively decrease over the coming years.

6.5.3. Supervision

Encouraging supervision with immediate feedback and appropriate follow-up improves performance in the short term and if correctly done can assist in professional development, job satisfaction and increasing motivation of health workers. Supportive supervision through a team approach may be the best way to conduct supervision of health worker performance particularly in rural areas so that health workers receive continuous support and feedback and sustainability is promoted. If feasible regular facility visits by external supervisors will assist in self-monitoring of the facility and health worker individual performance.

6.5.4. Quality improvement

Quality improvement approaches will lead to improved quality of care in paediatric health care. Essential drugs and equipment lists are available for MPA and CPA at health facilities. It should be ensured that these supplies are available at all times at all levels of facility. Health facilities must have the logistical capability including functioning communication, transport and referral mechanisms in place to ensure optimal service delivery. Improving quality of care for children should be based on attaining national defined standards of care. Health workers should be trained in the use of evidence based standard treatment guidelines for children and adhere to these guidelines at all levels of health facilities. Good quality hospital care for children is required to increase the impact of appropriate primary care interventions on child survival. This will become more important as improvements in neonatal care at primary level will result in more referred young infants. There is a need for agreed upon minimum and optimum quality standards for child health services in the private for-profit sector.
6.5.5. Private sector

The private sector includes the formal and informal health care providers and registered pharmacies, pharmacy depots and drug-sellers. The formal sector includes registered charitable and for-profit hospitals and health facilities and for-profit practitioners. Strong community demand for an acceptable standard of care for children and appropriate drug treatment for common childhood illnesses through BCC may encourage the private sector to improve their practices.

6.5.5.1. Charitable facilities:

There are two NGOs with considerable expertise in Cambodia providing private hospital services free of charge to Cambodian children. Efforts should be made to engage these NGOs in the CSMCS so that they are aware of the national approach to child survival and can assist in the delivery of hospital interventions in standardised manner. As these institutions also serve as teaching hospitals for future health professionals they need to be fostered to provide hospital training for pre-service and in-service health workers. All NGOs providing services at health centres should also deliver scorecard interventions.

6.5.5.2. Private practitioners

Private services for children by trained providers including private medical practitioners, midwives and nurses should have the same standards as the public sector. Trained private practitioners should be able to provide all the scorecard interventions and be involved in reporting and surveillance activities particularly for deaths. Skilled birth attendants working privately in the community should provide care for the mother and infant at delivery and through post-natal visits. Strengthening of regulation will be necessary to ensure adequate care by private practitioners.

6.5.5.3. Informal health-care providers

As a transitional strategy, until Cambodia can ensure that a skilled birth attendant attends every birth, community health volunteers and traditional birth attendants need to be fully engaged in delivering the basic interventions for saving newborn lives. Such an approach will necessitate significant policy changes and provision of training, supervision and resources. Where trained personnel are not available, TBAs should be trained to:

- Recognise danger signs in the mother and infants and refer to a public health facility
- Practice clean delivery using a delivery kit
- Practice immediate newborn care and give advice on keeping the baby warm, skin-to-skin contact and early initiation of breastfeeding

The TBAs should be closely linked with trained staff at health centres to ensure support and prompt referral. TBAs can also facilitate post-natal visits to mothers and infants where trained personnel are not available. In remote communities with no access to
formal health care services, community health workers (CHW) could provide selected scorecard interventions under close supervision including preventive and curative care for malaria, management of simple pneumonia and diarrhoea without severe dehydration.

6.6. Strengthening monitoring and evaluation

The child survival monitoring and evaluation framework is based on the scorecard interventions. The common set of indicators from the scorecard should be used for monitoring and evaluation of all health service delivery:
   a. Planning process including Annual Operational Plans
   b. Health Sector Strategic Plan
   c. Joint Annual Health Sector Review
   d. Programme Evaluations
   e. Health Management Agreements
   f. Contracting arrangements
   g. Equity Funds and Community Health Insurance Schemes
   h. NGO Project Evaluations
   i. Annual Child Survival Progress Report

All health measurements should report data for children under five separately, preferably disaggregated for age (neonatal, post-neonatal and child) and gender. Currently coverage of scorecard interventions such as Vitamin A, measles and tetanus toxoid immunisations surrounding health centre catchment areas are collected through the NIP. The National Health Information System in Cambodia collects data from health facilities under the direct MOH responsibility and few charitable hospitals only, but not from the private for-profit sector. Additionally, the quality of the data collected should be strengthened. On a yearly basis, between the large-scale nationally representative surveys, small-scale representative surveys of scorecard interventions should be conducted at sentinel sites for monitoring purposes. Community health volunteers and individuals from other community based communication and management structures could be trained to achieve this.

In order to assess equity in the context of child survival, intervention coverage needs to be measured by socio-economic groups (usually quintiles). Data from large surveys such as DHS or MICS can be used for this purpose. This approach would present strong advocacy for delivering child survival interventions to those most in need. Equity monitoring will require repeated large surveys every 4-5 years.

The CSCMS has the final responsibility for reporting on coverage of the child survival scorecard interventions to determine progress. Information obtained from monitoring and evaluation should be communicated to all stakeholders involved in child survival actions and also to the community. The child survival monitoring framework is shown in Table 5.
### Table 5: Child Survival Monitoring Framework

<table>
<thead>
<tr>
<th>Coverage Outcomes</th>
<th>Indicators</th>
<th>Current National Coverage</th>
<th></th>
<th></th>
<th>2010</th>
<th>2015*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CDHS 2000</td>
<td>CDHS 2005</td>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiation of breastfeeding</td>
<td>Proportion of infants with breastfeeding initiated within one hour of birth</td>
<td>11%</td>
<td>35%</td>
<td>35%</td>
<td>60%</td>
<td>62%</td>
</tr>
<tr>
<td>Exclusive Breastfeeding</td>
<td>Proportion of infants under 6 months exclusively breastfed</td>
<td>11%</td>
<td>60%</td>
<td>25%</td>
<td>80%</td>
<td>40%</td>
</tr>
<tr>
<td>Complementary Feeding</td>
<td>Proportion of breastfed infants 6-9 months receiving semi-solid food</td>
<td>76%</td>
<td>82%</td>
<td>95%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Oral Rehydration Therapy (ORT)</td>
<td>Proportion of children with diarrhoea in the last 2 weeks who received ORT *</td>
<td>74%</td>
<td>58%</td>
<td>80%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of expected diarrhoea cases managed in reporting (public) health facilities</td>
<td>1.8%</td>
<td>3%</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2004)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotic therapy for Pneumonia</td>
<td>Proportion of children with cough and fast or difficult breathing in the last 2 weeks who received medical care</td>
<td>37%</td>
<td>48%</td>
<td>50%</td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>ARI case management need met by the (reporting public) health facilities</td>
<td>16%</td>
<td>50%</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2004)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insecticide Treated Nets Use</td>
<td>Proportion of children who slept under ITN previous night</td>
<td>9%</td>
<td>4.2% (11-37%)##</td>
<td>80%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>Malaria Treatment</td>
<td>Proportion of children living in malarious areas with fever in the last 2 weeks who received antimalarial</td>
<td>62% (2%)</td>
<td>0.2% (0.3-3.3%)#</td>
<td>85%</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of children living in malarious areas who are brought to a trained provider within 48 hrs of developing a fever</td>
<td>-</td>
<td>31%17 (2004)</td>
<td>85%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cambodia Child Survival Strategy: Few for all rather than more for few

<table>
<thead>
<tr>
<th>Intervention</th>
<th>2004</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria case management need met by the (reporting) health facilities</td>
<td>16%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Vitamin A supplementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of children 6 to 59 months receiving one dose Vit A in the past 6 months</td>
<td>31%</td>
<td>35%</td>
<td>85%</td>
</tr>
<tr>
<td>Vitamin A supplementation (to mothers post-partum)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of women who received one dose of Vitamin A within 8 weeks of delivery</td>
<td>11%</td>
<td>27%</td>
<td>80%</td>
</tr>
<tr>
<td>Measles vaccine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of infants receiving dose of measles vaccine</td>
<td>55%</td>
<td>77%</td>
<td>80%</td>
</tr>
<tr>
<td>Tetanus toxoid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of women who received at least two TT doses during pregnancy</td>
<td>30%</td>
<td>54%</td>
<td>70%</td>
</tr>
<tr>
<td>Skilled birth attendance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of deliveries attended by skilled birth attendant</td>
<td>32%</td>
<td>44%</td>
<td>60%</td>
</tr>
</tbody>
</table>

* Defined as ORS, recommended home fluids, rice water or increased fluids
# 0.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the proportion of children who received anti-malarial treatment varied from 0.3-3.3%
## 4.2% is the national average; in the provinces with high malaria transmission – Preah Vihear/Stoung Treng, Mondulkiri/Ratanakiri, Oddar Mean Chey, Kratie, Koh Kong – the use varied from 11-37%

2010: Targets for 2010 figures were developed by the programs as part of their scorecard intervention action planning set during the CS Costings Exercise December 2006

7. Roles and responsibilities

The Child Survival Implementation Matrix shows the programmes responsible for delivery, the main delivery points and the implementation units of the key child survival interventions. The matrix shows that significant coordination must be initiated and sustained between various programmes and communication is required between the implementing units within which these programmes operate. Roles and responsibilities of relevant stakeholders are then described in more detail.
## Table: interventions and responsible programmes

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Responsible Programmes</th>
<th>Main delivery points</th>
<th>Implementation units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>National Nutrition Programme</td>
<td>Community</td>
<td>Provincial health departments</td>
</tr>
<tr>
<td>Exclusive breastfeeding</td>
<td>National Immunization Programme</td>
<td>Outreach</td>
<td>Operational health districts</td>
</tr>
<tr>
<td>Complementary feeding</td>
<td>National Malaria Centre</td>
<td>Health centres</td>
<td>Health centre catchment areas</td>
</tr>
<tr>
<td>Vitamin A supplementation</td>
<td>National MCH Centre</td>
<td>Referral hospitals</td>
<td></td>
</tr>
<tr>
<td>Immunizations</td>
<td>Communicable Disease</td>
<td>Private sector</td>
<td></td>
</tr>
<tr>
<td>Tetanus toxoid</td>
<td>Control Department (IMCI)</td>
<td>Health centre</td>
<td></td>
</tr>
<tr>
<td>Measles vaccine</td>
<td>National Centre for Health Promotion</td>
<td>Referral hospital</td>
<td></td>
</tr>
<tr>
<td>Prevention of congenital infections</td>
<td>Integrated curative care</td>
<td>Private sector</td>
<td></td>
</tr>
<tr>
<td>Insecticide-treated Materials</td>
<td>OPD consultations</td>
<td>Mass media</td>
<td></td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Oral rehydration therapy</td>
<td>Provincial health departments</td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td>Antibiotics for pneumonia</td>
<td>Operational health districts</td>
<td></td>
</tr>
<tr>
<td>Respiratory failure</td>
<td>Antibiotics for diarrhea</td>
<td>Health centre catchment areas</td>
<td></td>
</tr>
<tr>
<td>Insecticide treatment</td>
<td>Vitamin A (curative)</td>
<td>Provincial health departments</td>
<td></td>
</tr>
<tr>
<td>Non-communicable diseases</td>
<td>Newborn health interventions</td>
<td>Provincial health departments</td>
<td></td>
</tr>
</tbody>
</table>

- **Main delivery points**
  - Community
  - Outreach
  - Health centres
  - Referral hospitals
  - Private sector
  - Mass media

- **Implementation units**
  - Provincial health departments
  - Operational health districts
  - Health centre catchment areas

- **Symbols**
  - ●: Main activity / responsibility
  - ○: Secondary activity / responsibility
7.1. Multi-sectoral level

- The Cambodia National Council for children (CNCC) and its Early Child Development Sub-Commission are responsible for Child Survival coordination across sectors
- RGC and child survival (CS) partners in Cambodia will work with all levels of Government, local and international NGOs, and civil society to achieve universal coverage for the core set of child survival interventions
- RGC and CS partners commit to review regularly progress with increasing resources for and coverage of the core set of interventions
- Inter-ministerial links between MOH and Ministry of Planning, MEF, Ministry of Education, Youth and Sports and MRD and other ministries responsible for water and sanitation will be ensured
- The Global Partnership for Maternal, Newborn and Child Health assures its sustained support to Cambodia in its effort to reduce child mortality

7.2. Central level MOH

- Hosting the CSCMS
- Ensuring that CSSC, CSMC and CS Executive Secretariat undertakes its function particularly with clear lines of authority, responsibility, information management, reporting and monitoring with assistance of CS partners
- Ensuring that all programmes that manage child survival interventions implement tasks in a coordinated manner to achieve integration as much as possible
- Communication with: sub-national level including provincial and operational health districts, Technical agencies: WHO, UNICEF, MPA executing bodies at health centres, MPA executing bodies providing outreach, CPA executing bodies: National Paediatric Hospital, Private sector: Medical, Nursing and Pharmacy associations, Academic institutions: Universities, Medical and Nursing Schools, Multilateral and bilateral agencies and NGOs
- Policy formulation: national standards setting, regulatory mechanisms for service providers, human resources and health financing
- Ensuring legal procedures: enforcement of the regulation on the marketing of products for IYCF, regulation of health care providers

7.3. National Programmes

- Implement components of the scorecard interventions in an integrated manner at community level, through outreach services, first and referral level facilities, and national hospitals,
- Provide training and supervision role in implementing interventions
- Surveillance, monitoring and evaluation of interventions
- Coordinate with other programmes to combine interventions
7.4. IMCI Strategy

- The IMCI Working Group and its Secretariat implements IMCI
- Coordinate with all other programmes to ensure maximum delivery of all scorecard interventions at one contact point

7.5. National Paediatric Hospital and other Teaching Hospitals

- Main referral centres for sick children in the country
- Pre-service and in-service training
- Standard setting for paediatric care
- Pool of technical experts (paediatricians) as trainers in national training programmes, adaptation of guidelines
- Supervisory role for provincial hospitals
- Collection of national hospital statistics

7.6. Provincial Health Departments

- Supervision and management of operational districts
- Assist operational districts in planning and resource allocation for planning process
- Liaison with central level and national programmes

7.6.1. Operational districts

- Management and administrative function for referral hospitals and health centres
- Assist health centres in planning and resource allocation for planning process
- Liaison with provincial health departments and national programmes

7.6.2. Referral hospitals

- Give priority attention to paediatric wards
- Manage sick children using standard treatment guidelines (CPA)
- Ensure adequate hospital policies, material resources, drugs and commodities for care of children
- Give priority to staff training for care of children
- Supervision
- Monitoring and evaluation
- Community liaison

7.6.3. Health centre level

- Implement IMCI/MPA 3 and other scorecard interventions at health centre
- Provide outreach
- Community liaison

7.7. Academic institutions

- Provision of pre-service and in-service child health education
7.8. Technical expertise and expert opinions on new programmes, projects and standards setting

7.8. Private sector

7.8.1. Non for profit

- Manage sick children using Cambodian standard treatment guidelines: IMCI/MPA 3 and other scorecard interventions at first level and CPA at referral level
- Involvement in child health education and standards setting
- Provision of health promotion and preventive interventions to the community
- Refer children with danger signs to appropriate referral level facility

7.8.2. For profit sector

7.8.2.1. Trained private practitioners

- Manage sick children using Cambodian standard treatment guidelines: IMCI/MPA 3 and other scorecard interventions at first level
- Provision of health promotion and preventive interventions to the community
- Refer children with danger signs to appropriate referral level facility

7.8.2.2. Drug outlets

- Pharmacies dispense non-prescription and prescription registered drugs and provide educational materials and basic counselling on scorecard interventions
- Pharmacy depots dispense non-prescription and a restricted list of prescription registered drugs and provide educational materials and basic counselling on scorecard interventions
- Informal drug sellers and general commodity shops dispense non-prescription (over the counter) registered drugs for self-medication and provide educational materials and basic counselling on scorecard interventions
- Refer children with danger signs to public health facility

7.8.2.3. Traditional birth attendants, traditional healers and Community Health Workers

- Practice clean delivery using delivery kit
- Practice immediate newborn care
- Refer infants, children and mothers with danger signs to public health facility
- Give advice on keeping the baby warm, skin-to-skin contact and early initiation of breastfeeding
- Dispense non-prescription commodities, e.g. soap, ORS, diarrhoea treatment kits, ITN
- In remote communities with no access to formal health care services, Community Health workers (CHW) provide selected scorecard interventions under close supervision
7.9. UN agency, Bilateral agency and NGOs programmes

- Technical and funding support to all child survival activities
- Coordination to deliver and promote scorecard interventions
- Ensure that child survival scorecard interventions are implemented and monitored using the accepted framework.
- Refer children with danger signs to appropriate referral level facility
- Liaison with MOH at all levels
Cambodia Child Survival Strategy: Few for all rather than more for few

1 Cambodia Millennium Development Goals Report 2003
2 Health Sector Strategic Plan 2003-2007 Ministry of Health of Royal Government of Cambodia
3 National Strategic Development Plan 2006-2010
5 Cambodia Demographic and Health Survey 2000
6 Analysis of slow progress in child mortality reduction: Benchmark Report for the Consultative Group Cambodia
7 UN Millennium Summit: Goals of the Millennium Declaration. September 2000
8 UNICEF The State of the World’s Children 2006
9 Cambodia Demographic and Health Survey 2005
10 Cambodia Inter-Censual Population Survey 2004
11 WHO/EIP Estimates
12 Cambodia Country Profile for Child Survival
13 Western Pacific Regional Office of World Health Organisation Country Health Information Profiles (Cambodia) 2005
15 Data from National Immunisation Programme, Ministry of Health, Cambodia.
16 Cambodia National Micronutrient Survey 2000, Helen Keller International
18 The Joint Annual Performance Review report (draft) 2006

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21 National Strategy for Reproductive Health in Cambodia 2006-2010 (draft)

22 Newborn health: a key to child survival. *Lancet* 2005

23 Child Survival Coordination and Management Structures Proposed Modus Operandi, Ministry of Health

24 Management of the child with a serious infection or severe malnutrition Geneva, World Health Organization 2000


