Kingdom of Cambodia

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Ministry of Health

Standard Operating Procedure for Clinical Mentoring for Quality Improvement within Pre-ART and ART Services for Adults and Children in Cambodia

November 2014

National Center for HIV/AIDS Dermatology and STD

Forward

In 2011, the National Centre for HIV/AIDS, Dermatology and STD (NCHADS) and partners joined together to develop a first Standard Operating Procedure (SOP) for Clinical Mentoring at Pediatric AIDS Care (PAC) sites in Cambodia. The SOP was launched in June 2012 and implemented during an initial period of one year during which all pediatric sites received a visit from a clinical mentor and sites with special needs received additional support from mentors to manage complex pediatric cases. As mentoring among pediatricians moves into a second phase of more intensive follow-up, relationship building and reporting, NCHADS has expanded clinical mentoring to adult sites as well.

The aim of this updated SOP for clinical mentoring is to strengthen the quality of care and treatment of Pre-ART/ART and PAC sites and shift the approach from an individual mentee focus to site-level performance focus. In recent months new Standard Operating Procedures have been developed for Treatment as Prevention (TasP), Boosted Linked Response to Eliminate New Pediatric HIV Infections and Congenital Syphilis, and Active Case Management under the Cambodia 3.0 initiative. Mentoring should support the implementation of these new SOPs and other care and treatment initiatives as well as provide support to new and performing sites.

The Ministry of Health supports this mentoring initiative that will provide invaluable skill for clinicians responsible for pediatric and adult PLHIV patients at ART facilities in Cambodia and create a path for NCHADS and partners to ensure improved quality of patient care for the entire national ART cohort.

Phnom Penh, November 2014

Dr. MAM BUNHENG
MINISTER OF HEALTH

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Phnom Penh, 4 November 2014

Director of National Center for HIV/AIDS

Dermatology and STDs

Dr. MEAN-CHHI VUN

List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral drug
CBO	Community-based organization
CD4	T-CD4+ Lymphocyte
CHAI	Clinton Health Access Initiative
CoC	Continuum of Care
CQI	Continuous Quality Improvement
D4T	Stavudine
EWI	Early Warning Indicators
Hb	Hemoglobin
HEI	HIV-Exposed Infant
LR	Linked Response
MCH	Maternal and Child Health
NCHADS	National Centre for HIV/AIDS, Dermatology and STDs
NMCHC	National Maternal and Child Health Centre
NPH	National Pediatric Hospital
NGO	Non-Governmental Organization
OD	Operational District
OI	Opportunistic Infection
PAC	Pediatric AIDS Care
PASP	Provincial AIDS and STI Program
PLHIV	People living with HIV
SRH	Sexual and Reproductive Health
TWG	Technical Working Group
TB	Tuberculosis
UNICEF	United Nations Children's Fund
VL	Viral Load
WHO	World Health Organization

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1. Introduction and background

1.1 HIV Program Context

As the HIV treatment cohort in Cambodia matures, the national priority has evolved from scale-up of AIDS Care services to improving the quality of care and treatment. HIV care and treatment services, especially providing ARV have rapidly expanded during the last seven years with treatment coverage over 80% of those patients in need of treatment. There are currently 62 Adult pre-ART/ART (pre-ART/ART) sites and 35 Pediatric AIDS Care (PAC) sites in Cambodia, providing ART and pre-ART care to more than 56,079 PLHIV across the country, among them more than 3,902 pediatric PLHIV by Q2 2014. The rapid expansion of ART services occurred from 2004 to 2010, leading to a large cohort of patients on ART for five to ten years who require assessment for treatment failure. Some treatment sites are well-established with experienced clinicians and high patient numbers. Other sites are newly established or have lower patient numbers and clinicians with less practical experience. Furthermore, the national program recently shortened the duration of the didactic component of its HIV clinical care training program.

The clinical mentoring approach will support the capacity development of newly established sites and targeted sites while fostering professional support relationships and referral networks between experts and sites. The approach will also support referrals between pre-ART/ART and PAC sites to ensure treatment and care for patients transferring to adult care. The approach will align with the Cambodian 3.0 initiative for achieving the elimination goals of zero new HIV infections, zero AIDS-related deaths, and zero HIV-related stigma and.

1.2 Clinical Mentoring in the context of HIV care quality improvement approach

In Cambodia, there are a number of national activities and approaches which support quality improvement. These approaches include Supportive Supervision to address program management issues, Continuous Quality Improvement (CQI) to monitor and improve quality of care indicators, and training and network meetings to build clinical competency. Clinical Mentoring is distinct from these approaches in that it focuses on on-site, applied clinical competency. As new initiatives, approaches and guidelines are established, there is a need to provide ongoing support to pre-ART/ART and PAC teams to promote clinical skills development and high quality implementation of national treatment protocols and programmatic approaches. The Clinical Mentoring SOP will complement other existing strategies to strengthen the quality of care. Table 1 presents the roles, functions and frequency of the quality improvement mechanisms within the HIV program.

Table 1. National quality improvement activities in Cambodia's HIV Program

	Activity	Purpose	Frequency	Format	Facilitator/ Recipient
1	Supervision	To address management challenges, clinical competency and adherence to guidelines	Every 6 months	Site visit	National program staff to pre-ART/ART or PAC sites
2	CQI	To address and improve performance at the COC level	Every 6 months	Workshop	OD level / COC teams and inviting the National Program
3	Clinical Training	Build knowledge of health staff	Once at the start of work	Didactic and practical training	National to pre-ART/ART and PAC teams
4	Clinical Refresher Training	Deliver updates on key information and reinforce key messages usage	Periodic	Didactic training	National to pre-ART/ART and PAC teams
5	Counselor and Clinician Network Meetings	To provide clinical updates through peer case review format and national program presentations	Semi-annually	Large group meeting	Nationally facilitated regional meeting for pre-ART/ART teams; Nationally facilitated meeting for PAC teams
6	Clinical Mentoring	To develop on-site clinical competency of PRE-ART/ART and PAC teams	Intensive six month mentoring to targeted sites	Mentor to Site (including clinicians, nurse counsellors)	Nationally to pre-ART/ART or PAC sites

2. Objectives of clinical mentoring approach

Clinical mentoring will be used to strengthen the clinical competency of pre-ART/ART and PAC teams and improve the quality of care provided to patients. The objectives of the clinical mentoring strategy are:

- To improve competency of staff and quality of care in pre-ART/ART and PAC services over an intensive six-month mentoring period to targeted sites
- To reinforce training provided by NCHADS to health staff working in pre-ART/ART and PAC services
- To strengthen the implementation of and adherence to clinical guidelines and SOPs
- To support clinical referrals between pre-ART/ART and PAC sites
- To develop a national cadre of clinical mentors and to build the skills of mentors

- To assess site performance periodically (semi-annually) in order to review progress and prioritize low-performing sites
- To review and improve data/report management and utilization.

3. Clinical Mentoring Approach

3.1 Mentoring Structure and Activities

The National Clinical Mentoring Coordinators will select experienced clinical mentors from established sites with large cohorts and NGOs to provide mentoring to pre-ART/ART and PAC sites within their own provinces or outside their provinces with the accompaniment of NCHADS as needed. Mentors who are assigned to a site that is outside of their province will require a letter of support from NCHADS to facilitate their clinical mentoring visits.

At the OD or provincial level two mentoring modalities are proposed:

1. Mentors will visit the Mentee Site[1]
2. Members from the Mentee Site may also visit more established sites for on the job clinical training. In this case, the mentor would nominate a clinician to visit the mentor's site, and the nomination would be approved by the National Mentoring Coordinators. The Social Health Clinic, Calmette Hospital, Khmer-Soviet Friendship Hospital and National Pediatric Hospital will be the central clinics for on the job training for select members of Mentee Sites.

Mentoring visits will last two days. The first day of the mentoring will be for observation, interviews, and evaluation of the site. The second day of the mentoring will be for training, coaching, and recommendations to the site. Mentors will visit the site every two months for the first six months and then reassess the site.

Mentoring Visit Structure

Mentoring visits should be flexible based on site needs and concerns. Mentoring visits can range from one to two days. During the visit, mentors should assess quality of care provided at the site following the Mentor Checklist (see Annex II) through:

1. Open discussion with HIV Team members, including clinicians, nurse counselors, pharmacists, PLHIV volunteers and hospital directors (during first visit, if possible)
2. Observations of patient appointments, patient medical record, and registers
3. Discussion of individual patient cases with the team to understand the key issues
4. At end of the visit, mentors should discuss specific areas for improvement with the HIV Team Leader and HIV team in a feedback meeting

[1] Mentor will provide a training for the HIV team on service provision.

Site Visit Schedule

Every two months for the first six months and then reassess sites.

3.2 Clinical Mentoring Linkages, Referral Networks and Coordination

3.2.1 Mentoring and Referral Networks

Mentors will also be available to consult with mentees by phone. To facilitate this arrangement, NCHADS will create a contact list and provide budget support to encourage phone calls between mentors and sites. When clinicians are faced with challenging, unfamiliar or complex cases, they will be encouraged to contact a mentor and receive remote support by telephone. Mentors should also encourage sites to use the guidelines, textbooks, job-aid posters, phone-based case discussions, and internet-based sources to solve complex cases. When appropriate care for complex cases cannot be delivered at a mentee site, patients will receive an assisted referral to a mentor site for diagnosis and treatment. (For example, patients in need of lumbar puncture could be referred to sites that have the capacity to deliver this service.) At some sites, home-based care teams and other community-based organizations (CBO) will support the transportation component of the referral. At sites without HBC or CBO, the mentor will work the site for other possible sources of funding (i.e., Health Equity Fund). Facility links and clinical referrals between pre-ART/ART and PAC facilities will also be strengthened through the clinical mentoring approach.

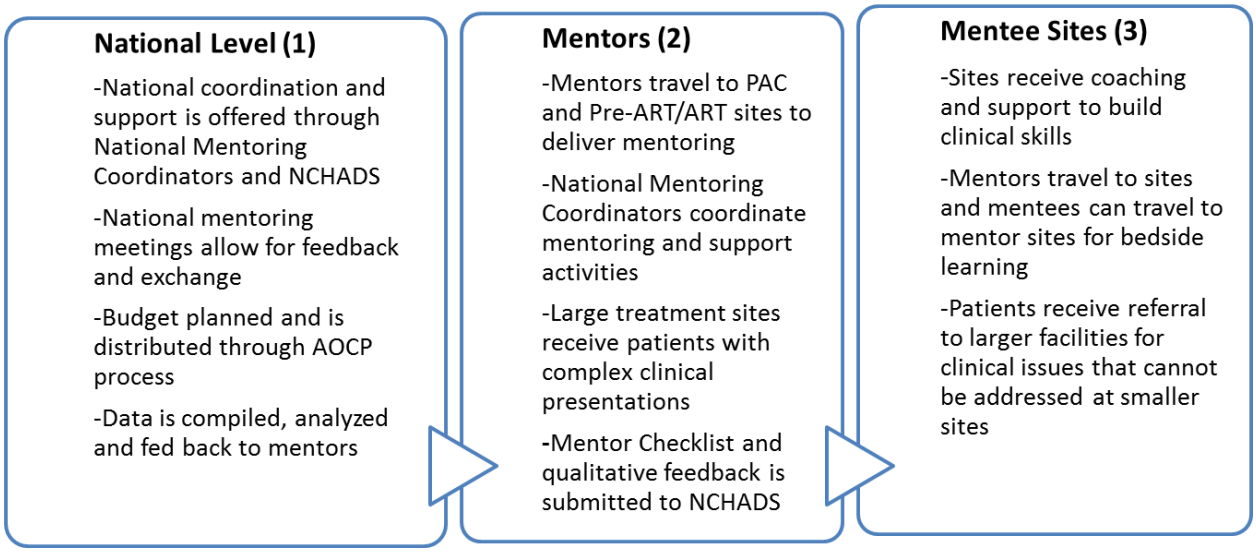
3.2.2 Coordination

Clinical Mentoring activities will be coordinated in part through *National Clinician Network Meetings,* which have been operational since 2006 and take place semi-annually. To facilitate the exchange of information and learning across sites, clinical mentoring activities will be linked to these existing network meetings. National Technical Working Group on Continuum of Care (CoC) will provide an opportunity for mentors to compile data, exchange ideas about challenges and gaps and to propose solutions for consideration by the national program. NCHADS will organize periodic national network and mentorship meetings and ensure mentor participation in Core Group on ART Mentoring (Core Mentor) at least every six months, including prioritizing sites and

reviewing feedback. The mentor should work with sites to identify and develop clinical case studies to present in the Clinician Network Meeting.

The national program will play a coordinating and supportive role. The national program will identify mentoring priorities, both geographic and clinical, and communicate with mentors to focus clinical mentorship around defined national priorities and site-level challenges. NCHADS will periodically analyze site level service delivery reports (Early Warning Indicators (EWI), CQI, Pre-ART/ ART Facility Reports, support supervision reports) to identify low-performing sites that will be prioritized for mentoring. NCHADS will provide to mentors a quarterly schedule of mentoring activities and site visits according to the identified priorities.

Figure 2: Mentor and Site Linkages



3.3 Integration of Clinical Mentoring in the National Program

The clinical mentoring strategy will be aligned with National Program priorities and activities. The clinical mentorship strategy will:

- Complement other quality improvement activities including supportive supervision, CQI, clinical trainings, orientations, workshops, and network meetings;
- Ensure that sites are updated on emerging national guidance, including clinical guidelines, memorandum, and standard operating procedures.
- Build on existing national network meetings whenever possible;

- Be delivered in a manner which is well coordinated at the national, provincial and district levels

To ensure coordination, clinical mentors will:

- Participate in relevant, regularly scheduled national technical working groups (ART TWG, PAC TWG);
- Ensure mentoring reinforces clinical care priorities aligned with the national program;
- Participate in the leadership and preparation of network meetings;
- Liaise with the National Clinical Mentorship Coordinators;
- Attend National Mentor Feedback meetings;
- Act as trainers;
- Participate in occasional trainings to improve clinical knowledge and capacity.

In order to improve the quality of care along the HIV cascade, National priorities for clinical mentorship in 2014 include:

Adult Care:

- Improve early ART initiation among eligible PLHIV
- Phase out of stavudine (d4T) based ART regimens and provide accurate first line ART regimen in adults
- Implementation of Option B+ for PMTCT and Treatment as Prevention (TasP) in serodiscordant couples
- Reduction of poor appointment keeping and loss to follow-up
- Reduction of poor adherence
- Diagnosis of treatment failure through appropriate use of viral load testing
- Optimization of Active Case Management with Case management coordinator (proper identification of cases from pre-ART/ART sites to be managed)
- Implementation of positive prevention and provision birth spacing services at pre-ART/ART sites
- Data management: Data reporting to improve service delivery.

Pediatric Care:

- Increasing ARV prophylaxis for HIV-exposed infants
- Increasing immediate initiation on ART and Cotrimoxazole for HIV-infected children
- Increasing Early Infant Diagnosis of HIV exposed infants by two months of age
- Phase out of d4T-based ART regimens in children

- Diagnosis of treatment failure through appropriate use of viral load testing
- Reduction of poor appointment keeping and loss to follow-up
- Increasing severe acute malnutrition (SAM) screening and refer for treatment
- Promote exclusive breastfeeding for the first six months for HIV-exposed infants with 6 weeks Nevirapine for the infant and life-long ART for mother (Option B+)
- Reduction of poor adherence and improvement of care giver capacity and knowledge
- Review uses of data to improve service delivery.

3.4 Roles and Responsibilities

The National Mentoring Coordinators will select clinical mentors from mature pre-ART/ART and PAC sites as well as from partner organizations. Mentors will be assigned to specific site(s). Expansion to multiple sites will be considered after the relationship with the first site is well established. Mentors and sites should have a clear understanding of their roles and responsibilities. Mentors should opt-in and be fully committed to their important role.

Box 1: Clinical Mentoring Roles and Responsibilities

Sites

- HIV Team should participate in Mentor Checklist and establish of joint priorities for work with the mentor
- Be willing to work with a mentor
- Be willing to diligently and accurately complete patient file forms

Mentor Role

- Conduct site assessment and establish joint priorities for work with the site
- Evaluate competency of the site
- Provide practical training at "home" sites or high volume sites during study tours
- Provide on-the-job support for selected prioritized sites for an intensive six-month period
- Record experience and progress of mentee sites
- Provide systematic feedback to the team after each mentoring visit
- Deliver necessary follow-up, in person or over the phone to sites
- Participate in mentor trainings organized periodically by NCHADS
- Assist with accurate data collection and entry / medical note taking
- Provide regular mentoring report to National mentor coordinators

National Coordinator Role

- Coordinate mentoring activities
- Select Clinical Mentors

- Select targeted sites based on site-level analysis, CQI and EWI reports
- Track mentoring visits through the National Mentoring Report (See Annex III)
- Communicate plans and priorities with mentors
- Ensure that mentors have access to pre-ART/ART and PAC report of the sites they are supporting
- Ensure that mentors traveling from other regions are funded and accompanied by NCHADS as needed
- Support mentor attendance at National Technical Working Group for CoC, mentor trainings
- Maintain and disseminate a database of mentors with up-to-date contact information
- Maintain an electronic library of reference material for mentors

4. Practical Implementation of Clinical Mentoring

4.1 National Launching of Clinical Mentoring

The National Clinical Mentoring Program was launched in 2012 based on a regional structure. The revised SOP uses a new approach:

1. The Mentoring Program will target sites based on two criteria: newly established sites and sites that need improvement. Adult and Pediatric Pre-ART/ART sites will be assessed through analysis of site-level data by NCHADS. Those determined most in need of support will receive priority status and intensive mentoring. (Mentoring assignments are listed in Annex 1.)
2. Mentors will be selected through the following criteria. Mentors and Mentor sites will:
    a) Have experienced clinicians who are available and willing to participate in mentoring;
    b) Be located in the province and/or accessible to mentee sites;
    c) Have higher patient volumes to ensure exposure to more complex clinical presentations.
3. Mentors will receive orientation to ensure they understand their roles and responsibilities.
4. Clinical mentor sites will be paired with nearby mentee sites when possible.
5. Clinical mentoring activities will be included in the Annual Operational Planning process.
6. Annual Mentoring Plans will be developed with support from the national program. Budget for these plans will be included in the Annual Operational Planning process.
7. As needed, national and international clinical experts will be requested to participate. NCHADS may request this support from multilateral, bilateral, and NGO partners.

4.2 Practical Implementation of Clinical Mentoring at the pre-ART/ART and PAC Site Level

Clinical mentors will be paired with a limited number of mentee sites. Mentors must be able to maintain their clinical responsibilities while providing support to others. Initially, it is suggested that mentors begin with one or two mentee sites. Box 2 presents the practical steps each mentor will take as he or she supports mentees. Clinical mentors will use the Clinical Mentorship Tools described in section 5.2 to support and document their work.

Box 2. Practical Implementation of Clinical Mentoring

1. **Timeframe** - The second phase of the Mentoring Program will begin with an intensive six month period with 2-3 visits by mentors to the sites. Mentoring visits will focus on key national priorities and challenge areas for each site. After six months, sites will be held accountable for improvements in key indicators. Certificates will be issued to improved sites and mentors at the end of six months
2. **Site Selection** –Sites that need improvement will be selected for the next phase of the Clinical Mentoring Program based on site-level data from routine quarterly monitoring and Early Warning Indicators Report. Sites were selected from those sites that need improvement for key indicators, including lost to follow-up and death in pre-ART and ART.
3. **Preparation** – NCHADS will provide mentors with pre-ART/ART and PAC facility reports and also specific challenge areas based on site-level analysis to focus mentoring. See Annex III, *Practical Advice for Beginning Mentoring*.
4. **Mentor Assessment of the Site** - Mentors will assess the sites' clinical capabilities, site preparedness and highlight key areas of improvement using the Mentoring Checklist. The national program will assist mentors in identifying and filling medical supply gaps at sites. Needed items might include drugs, diagnostics, or clinical instruments like scales, stethoscopes and orthoscopes.
5. **Mentoring Visits** - Mentors will visit mentee sites, and members of the HIV Team at the sites will also be able to visit mentor sites. Mentoring may also occur by telephone or email during the mentorship. Mentors will use the Mentoring Checklist to document the sites' skill building progress and competency. Mentors will document their travel and communication for the purpose of program reporting and reimbursement.
6. **National Technical Working Group on Continuum of Care**–Mentors will join the National Sub Technical Working Group on Continuum of Care. These meetings will address common gaps and weaknesses identified by mentors in the field.
7. **Network Meetings and Trainings** –The content to of these meetings will address common gaps and weaknesses identified by mentors in the field. Mentees will routinely participate in the network meetings. Trainings will periodically be held by experts to address key areas in the National Program.
8. **Evaluation**–After the period of six months, sites will be evaluated using key indicators and *Mentor Checklist* records, which have been maintained by the National Mentoring Coordinators. The mentees, mentors and NCHADS AIDS Care Unit will jointly determine whether mentoring should continue at the same frequency, be reduced, or conclude.
9. **Certificates** –Certificates will be presented at the end of the six-month period to mentors acknowledging their effort and most improved mentees.
10. At the end of the cycle, a set of new target sites will be selected for mentoring.

4.3 Support and Motivation for Clinical Mentorship

Mentors and sites will be supported in the following manner:

- **Mentors** will be compensated for their travel for telephone and electronic communications costs.
- **Mentors** and mentee sites will be recognized with certificates for performance.
- **Mentors** will receive opportunities for professional development through two modalities:
  1. NCHADS will invite international experts to share knowledge and experiences in clinical training workshops;
  2. Select mentors may be supported to attend local trainings or international conferences.
- **Mentors** will have access to an electronic library of information which is maintained by the national program. This "drop-box" will contain guidelines, SOPs, recent relevant papers from the international literature, and job aids.
- **Mentors** will have the opportunity to receive in-service training at national and international training venues.
- Travel of HIV Team at mentee sites will be compensated for their travel and communication costs.
- Sites will receive awards of recognition for successful *completion* of the mentoring program.

5. Monitoring and Evaluation

5.1 Monitoring and Evaluation Approach

The Clinical Mentoring strategy will be monitored through the routine review of selected existing HIV program indicators as well as collection and review of clinical mentoring specific process indicators. Monitoring and evaluation will include:

- Clinical mentoring data will be collected through the "Mentoring Checklist" by the mentors and reported to the National Mentoring Coordinators.
- Clinical mentoring data will be used to assess coverage and performance as well as to identify gaps service at the site level. Data will be submitted to the national mentoring coordinators who will synthesize data and report back to the ART and PAC TWGs.
- Mentors will meet periodically to exchange feedback, share ideas, and refine the strategy. The national program will participate in feedback meetings.
- CQI/ EWI reports will also be used by the national program, mentors, and mentee sites to review quality of care at baseline and after clinical mentoring.

5.2 Clinical Mentoring Tools

A series of paper based tools will be used by National Mentoring Coordinators and mentors to document and report on mentoring activities. Mentors will give one copy of the Mentoring Checklist to the site, keep one copy, and submit one copy to NCHADS on a quarterly basis. Table 2 outlines the tools' content and purpose.

Table 2. Overview of Clinical Mentoring Tools

Tool Name	Description	Purpose
Clinical Mentoring Checklist	A guide to assess the site and implementation of the guidelines	To guide the mentoring visit
Clinical Mentoring Process Report	Reporting form to support financial disbursement and program coordination.	To outline and account for site visits and determine which sites need the most support
Monitoring Report	(see Monitoring Indicators)	

5.3 Monitoring Indicators

This strategy will be monitored in part through the routine collection and review of specific indicators. The following indicators will be collected through the Clinical Mentoring Report by the National Clinical Mentoring Coordinators through the sources listed below. The report will be compiled every six months and presented to the Core Group on ART Mentoring (Core Mentor). These indicators will also be used as a baseline to assess site performance and target mentoring activities.

Process Indicators (Six month period)

1. Number of sites receiving mentorship	
Adult **Numerator:** Number of adult sites receiving mentorship	**Pediatric** **Numerator:** Number of pediatric sites receiving mentorship
Data source: Clinical Mentoring Process Report Reference: Standard Operating Procedure for Clinical Mentoring for Quality Improvement within Pre-Art and ART services for Adults and Children in Cambodia, 2014	

2. Number of clinical mentors mentoring sites	
Adult **Numerator:** Number of mentors mentoring adult sites	**Pediatric** **Numerator:** Number of mentors mentoring pediatric sites
Data source: Clinical Mentoring Process Report Reference: Standard Operating Procedure for Clinical Mentoring for Quality Improvement within Pre-Art and ART services for Adults and Children in Cambodia, 2014	

3. Number of mentorship visits conducted	
Adult **Numerator:** Number of adult mentoring visits	**Pediatric** **Numerator:** Number of pediatric mentoring visits
Data source: Clinical Mentoring Process Report Reference: Standard Operating Procedure for Clinical Mentoring for Quality Improvement within Pre-Art and ART services for Adults and Children in Cambodia, 2014	

Service Access Indicators (six month period)

4. Number and percentage of adults and children newly enrolled in HIV care who were screened for TB at the first visit	
Adult **Numerator:** Number of adults newly enrolled in HIV care who were recorded as screened for TB at the first visit (Documented 3 symptom screening) **Denominator:** Number of adults newly enrolled in HIV care at site	**Pediatric** **Numerator:** Number of pediatric patients newly enrolled in HIV care who were recorded as screened for TB at the first visit (Documented 3 symptom screening) **Denominator:** Number of peds newly enrolled in HIV care at site

Data source: Pre-ART Facility Report (Adult and Pediatric Database) Reference: Standard Operating Procedures for Implementing the Three I's in Continuum of Care Settings, April 2010

5. Number and percentage of HIV+ pregnant women who received ART (Option B+)	
Adult **Numerator:** Number of HIV+ PW at site received ART prior to this pregnancy + Number of HIV+ PW at site started ART during this pregnancy + Number of HIV+ PW at site started ART at labour and delivery **Denominator:** Number of HIV+ pregnant women identified at site in six month period of assessment	**Pediatric**
Data source: Pre-ART and ART Facility Report (Adult Database) Reference: National Guidelines for the Prevention of Mother-to-Child Transmission of HIV, 2011	

6. Number and percentage of pediatric and adult patients who are lost to follow-up during Pre-ART and ART	
Adult **Numerator:** Number of adults who are lost to follow-up at site in six month period of assessment **Denominator:** Number of adults in Pre-ART and ART at site in six month period of assessment	**Pediatric** **Numerator:** Number of peds who are lost to follow-up at site in six month period of assessment **Denominator:** Number of peds in Pre-ART and ART at site in six month period of assessment
Data source: Pre-ART + ART Facility Report (Adult and Pediatric Database) Reference: National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents, 2012	

7. Number and percentage of pediatric and adult patients who died	
Adult **Numerator:** Number of adults who died at site in six month period of assessment **Denominator:** Number of adults in Pre-ART and ART at site in six month period of assessment	**Pediatric** **Numerator:** Number of peds who died at site in six month period of assessment **Denominator:** Number of peds in Pre-ART and ART at site in six month period of assessment
Data source: Pre-ART + ART Facility Report (Adult and Pediatric Database) Reference: National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents, 2012	

8. Number and percentage of infants born to HIV-infected women who received ARV prophylaxis to reduce the risk of mother-to-child transmission	
Adult	**Pediatric** **Numerator:** Number of infants born to HIV-infected women receiving ARV prophylaxis at site **Denominator:** Number of identified HIV-infected women at site
Data source: Exposed Infant Report (Exposed Infant Database) Reference: Standard Operating Procedure for Implementation of New Pediatric HIV Infections and Congenital Syphilis in Cambodia, 2012	

9. Number and percentage of infants born to HIV-infected women started on cotrimoxazole (CTX) prophylaxis within two months of birth	
Adult	**Pediatric** **Numerator:** Number of infants born to HIV-infected women started CTX prophylaxis within two months of birth at site during 6 month assessment period **Denominator:** Number of identified HIV-exposed infants at site in six month period of assessment

Data source: Exposed Infant Report (Exposed Infant Database) Reference: Standard Operating Procedure for Implementation of New Pediatric HIV Infections and Congenital Syphilis in Cambodia, 2012

10. Number and percentage of infants born to HIV-infected women received DNA-PCR 1 test within two months of birth	
Adult	**Pediatric** **Numerator:** Number of infants born to HIV+ women who received DNA-PCR 1 test within two months of birth in six month period of assessment **Denominator:** Number of identified HIV exposed infants at site in six month period of assessment
Data source: Exposed Infant Report (Exposed Infant Database) Reference: Standard Operating Procedure for Implementation of New Pediatric HIV Infections and Congenital Syphilis in Cambodia, 2012	

11. Number and percentage of HIV-exposed infants received ART within 2 weeks after receiving HIV testing results from lab	
Adult	**Pediatric** **Numerator:** Number of infants born to HIV+ women who received DNA-PCR 1 test within two months of birth in six month period of assessment **Denominator:** Number of identified infant with DNA-PCR test positive at site in six month period of assessment
Data source: Exposed Infant Report (Infant Database) Reference: Standard Operating Procedure for Implementation of New Pediatric HIV Infections and Congenital Syphilis in Cambodia, 2012	

12. Number and percentage of pediatric and adult patients with CD4 < 200 receiving cotrimoxazole (CTX) prophylaxis

Adult	Pediatric
Numerator: Number of adults received CTX in six month period of assessment **Denominator:** Total number of adults with CD4 <200 at site in six month period of assessment	**Numerator:** Number of peds received CTX in six month period of assessment **Denominator:** Total number of peds with CD4 <200 at site in six month period of assessment

Data source: Pediatric and Adult Databases

Reference: Standard Operating Procedure for Implementation of New Pediatric HIV Infections and Congenital Syphilis in Cambodia, 2012

13. Number and percentage of pediatric and adult patients with CD4 <100 receiving fluconazole prophylaxis

Adult	Pediatric
Numerator: Number of adults received fluconazole in six month period of assessment at site **Denominator:** Total number of adults with CD4 <100 at site in six month period of assessment	**Numerator:** Number of peds received fluconazole in six month period of assessment at site **Denominator:** Total number of peds with CD4 <100 at site in six month period of assessment

Data source: Pediatric and Adult Databases

Reference: National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents, 2012

14. Number and percentage of adults and pediatric patients on ART more than 1 year receiving at least 1 VL testing in the past 6 months

Adult	Pediatric
Numerator: Number of adults received at least 1 VL testing at site in six month period of assessment **Denominator:** Total number of adults at site in six month period of assessment	**Numerator:** Number of peds received at least 1 VL testing at site in six month period of assessment **Denominator:** Total number of peds at site in six month period of assessment

Data source: ART Facility Report (Adult and Pediatric Database) Reference: National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents, 2012

15. Number and percentage of PLHIV receiving Positive Prevention Services	
Adult **Pediatric** **Numerator:** Number of PLHIV received Positive Prevention Counseling (at least 3 of the following): 1) Advice and counseling on condom use; 2) Counseling on ART Adherence; 3) Advice on birth spacing and safe abortion services; 4) TB infection control services; 5) STI prevention and case management **Denominator:** Number of PLHIV identified at site in six month period of assessment	
Data source: ART Facility Report (Adult Database) Reference: Guide for implementation of Positive Prevention among PLHIV in Cambodia, 2010	

16. Number and percentage of HIV+ patients receiving IPT	
Adult **Numerator:** Number of adult PLHIV screened TB- received isoniazid (INH) at site in six month period of assessment **Denominator:** Number of adult PLHIV screened TB- at site in six month period of assessment	**Pediatric** **Numerator:** Number of pediatric PLHIV screened TB- received INH at site in six month period of assessment **Denominator:** Number of pediatric PLHIV screened TB- at site in six month period of assessment
Data source: ART Facility Report (Adult Database) Reference: Standard Operating Procedures for Implementing the Three I's in Continuum of Care Settings, 2010	

Annex I: Preparing for Mentoring Visits

National Coordinators

Four National Coordinators will be based at NCHADS and will lead the national Mentoring Program. Two National Coordinators will focus on pediatric Pre-ART/ART care and two will focus on Adult Pre-ART/ART care.

National Level Coordination

1. National Coordinators will select mentoring sites based on site-level data (six month cycle)
2. National Coordinators will select mentors from experienced physicians based at national hospitals, larger OI/ART sites, and NGOs. Adult and Pediatric Mentors may change based on need and availability.
3. National Coordinators will assign Mentors to selected sites
4. Mentors will work with sites (and National Coordinators if necessary) to set date for mentoring visit
5. National Coordinators will compile and share site data with Mentors to focus mentoring visits on key issues for that site
6. Mentors conduct visit, complete checklist and to return one copy of Mentoring Checklist to NCHADS, keep one copy, and leave one copy at the site (can be scanned and emailed to site and NCHADS)

Onsite Clinical Mentoring Visit Process

Mentoring checklist to be completed and scanned copies sent to NCHADS and the site electronically or in paper form.

Fix the date and schedule to meet all relevant key persons at the mentored site well before the visit:

- Team Leader
- Clinicians
- Nurse Counsellors
- Register
- Data entry clerk
- Pharmacy staff in charge of ARVs
- Maternity and ANC staff for PMTCT and HIV-exposed infants (who may receive NVP sp at maternity or PAC)
- Pediatric clinician in charge of HEI at 6weeks received DNA-PCR and cotrim
- TB staff in charge of screening, tracking suspect patients, and recording results
- Laboratory staff for CD4, VL and other biochemistry testing, and receiving results.
- MMM coordinators

- PLHIV volunteer

Meet and introduce the Mentoring Program to:

- PHD Director, or
- Provincial AIDS Supervisor Program, or
- Hospital Director, or
- HIV/AIDS Team Leader

Meet with data entry clerk to:

- Produce a patient list with CD4< 350 for ART eligibility
- Produce a patient list with stage 3 and 4 for ART eligibility
- Produce a patient list with CD4< 200 for Cotrimoxazole
- Produce a patient list with CD4< 100 for Fluconazole
- Produce a patient list of HIV+ pregnant women
- HIV-exposed infant record of NVP sp, DNA-PCR and Cotrim prophylaxis
- Interview the data clerk on procedures for creating an appointment list, tracking tools for those who missed appointments, lost to follow-up patient

Meet with the following members to complete Mentoring Checklist and provide feedback to sites:

- Pediatrician/ Adult Clinician
- Pharmacists
- Laboratory
- Maternity
- Counselors
- TB staff
- Register, MMM coordinator and PLHIV volunteers

Finally, meet with Pre-ART/ART Team leader:

- Summarize the findings for each service
- Discuss the key challenges and proposed list of follow-up actions
- Suggest next steps and responsibilities for both the site and NCHADS
- Propose the date of next mentoring visit

Annex II: Clinical Mentoring Tools

Tool I. Clinical Mentoring Process Report

To be completed by: National Mentoring Coordinators
Submitted to: NCHADS AIDS Care Unit; ART and PAC TWG
Frequency: Monthly
Purpose: To outline and account for site visits and determine which sites need the most support

Clinical Mentoring Process Report	
Adult Sites	**Total Score for Site:** (Mentoring Checklist)
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	

Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Pediatric Sites	**Total Score for Site:** (Mentoring Checklist)
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	

Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	
Mentor:	
Site Name:	
Date: Site Visit 1:	
Date: Site Visit 2:	
Date: Site Visit 3:	
Date: Site Visit 4:	

Tool II. Mentoring Checklist
To be completed by: Mentors
Frequency: New checklist to be completed at *each* mentoring visit
Submitted to: NCHADS National Mentoring Coordinators and Mentoring Sites
Purpose: To provide a structure for the mentoring visit, report on challenges, plans and progress. Also, used as a basis for future mentoring visits.

Mentoring Checklist

Visit Type (circle one): First visit / Follow-up visit Visit Date (MM/DD/YYYY): ____ /____/_____

Site Name: _____

Site ID: _____ Region/Province:_____

Mentor Name: _____ District:_____

Number of total member of the Team	Site Staff present (Name, Title, Phone, Email)
- Physicians (1, 2, etc.) - Team Leader - Nurse Counselors - Registers - Data Entry Officers - MMM Coordinators - Peer Educators	

Which services are provided at the site?

☐Pediatric Care and Treatment ☐VCCT
☐ Adult Care and Treatment ☐PMTCT
☐Pharmacy ☐TB/HIV

Gather Charts/Registers

This checklist will be used to assess the quality of care provided at sites and used a basis for follow-up visits to the sites.

Mentors will randomly select charts based on the sections below to assess the implementation and recording of key services at the site.

Site / Supplies Assessment

	Adult Site	Pediatric Site	Follow-up
Othoscope			
Stethoscope			
Blood Pressure Meter (sphygmomanometer)			
Scales (infant and pediatric)			
Growth chart	----------		
Job aides (ART Guidelines, clinical management) kept at hospital			
Tape measure			
Height board	----------		
Refrigerator			
Gloves			
Sharp disposal			
Filing system			
Other:			

Scoring key: Fill in the number in the grid below that best represents how services are being implemented:
(Note that these measure how services are *actually* being implemented and recorded --- NOT clinical confidence of mentee)

1=Not implemented	**2=Poorly implemented**	**3=Partly implemented**	**4=Well implemented**
Listed in 0 charts	*Listed in 1-5 charts*	*Listed in 5-8 charts*	*Listed in 9-10 charts*

1. Adult Care & Treatment	**1**	**2**	**3**	**4**	**Comments**
1.1 National Guidelines for adult treatment are stored in the clinic and easily accessible **Observe clinic** **(Scoring: 1 if Guidelines NOT in clinic; 4 if Guidelines are in clinic)**					
1.2 Protocols are in place for staff roles and responsibilities for patient flow for: - New patients - Returning patients - TB patients - Seriously ill patients **Interview with counsellors and physicians** **(Scoring**: 1 if no clear patient flow; 2 if staff is clear on procedure for 2 of 4 patient types 3 if staff is clear on procedure for 3 of 4 patient types					

4 if all staff know their responsibilities for all patient types)					
1.3 All patients are initiated on ART regimen according to National Guidelines. Pre-ART patients are eligible to initiate ART if: 1. WHO Stage 3 or 4					
2. CD4 count <350 Ask Data Management Officer to produce a list of patients who: - List of patients Stage 3 and 4 - List of patients CD4 <350 **Check 10 pre-ART charts for Stage 3 and 4 for ART initiation** **Check 10 pre-ART charts for CD4 <350 for ART initiation**					
1.4 All HIV-positive patients received the following services: 1. Risk reduction counseling 2. Condom provision 3. Adherence counseling 4. Partner HIV testing and counseling 5. STI testing/treatment 6. Contraception/ safer pregnancy counseling and provision of positive prevention counseling, including the adolescent cohort **Check 5 pre-ART charts and 5 ART charts**					
1.5 Adherence support: The site offers standard adherence support for: 1. Adherence counseling prior to ART initiation 2. Routine adherence assessments during ARV therapy 3. Counseling interventions for patients with poor adherence **Check 10 ART charts; discuss with counselors; look at 10 Adherence Questionnaires**					
1.6 Eligible patients receiving Fluconazole prophylaxis according to the National Guidelines Ask Data Management Officer to produce a list of patients who: -CD4 < 100 and check if all patients were prescribed Fluconazole **Check 10 charts**					
1.7 Eligible patients receiving Cotrimoxazole prophylaxis, according to the National Guidelines Ask Data Management Officer to produce a list of patients who: -CD4 < 200 and check if all patients were prescribed Cotrimoxazole **Check 10 charts**					
1.8 Sites are giving CD4 testing according to the National Guidelines Performs CD4 every six months **Check 10 charts**					
1.9 Sites are assessing suspected Clinical or Immunological failure through viral load, according to the National Guidelines					

Performs Viral Load testing yearly **Check 10 ART charts**					
1.10 Site is testing and tracing partners of PLHIV **Check 10 charts**					
1.11 Site is providing ART to sero-discordant couples, according to Treatment as Prevention protocol **Check PNTT form, following Guidelines**					
1.12 Site is tracking those who missed appointments and someone is assigned to follow-up patients missing appointments **(Data collection**: Ask register or MMM volunteer if data management officer prints the appointment list each week, -Check log of missed appointments, -Discuss system to track and follow-up patients with HIV Team) **(Scoring:** 1. If No list of appointments is created each week 2. If the list of appointments is created each week; missed appointment log is updated 3. If the list of appointments is created each week, missed appointment log is updated; follow-up call is made to patient 4. If the appointment list is created, log updated, follow-up completed, and the patient returns to clinic)					
Total Section Score =					
Key challenges:					
Follow-up Action:					

2. Pediatric Care & Treatment	**1**	**2**	**3**	**4**	**Comments**
2.1 National Guidelines for pediatric treatment are easily accessible for reference in the clinic **Observe clinic** **(Scoring: 1 if Guidelines NOT in clinic; 4 if Guidelines are in clinic)**	1	2	3	4	
2.2. Eligible pediatric patients are on ART: - All infants and children <24 months of age with confirmed HIV infection					

- Infants <18 months of age with presumptive severe HIV disease where PCR testing is not readily available - Children ≥ 24 months of age with confirmed HIV infection and : -WHO Pediatric Clinical Stage 3 or 4 -Age 24-59 months and CD4+ <25% or <750 cells/mm^3 Or -Age ≥ 5 years and CD4 count <350 cells/mm^3 **Check 10 pediatric charts**					
○ **Treatment failure:** Site assesses children on ART for treatment failure and children in care for the need for ART according to the National Guidelines **-Patients receive viral load following National Guidelines** **Check 10 pediatric charts**					
2.3 Protocols are in place for staff roles and responsibilities for patient flow for: - Newly diagnosed infants - New pediatric patients - Returning patients - TB patients - Seriously ill patients **Interview with counselors and physicians** **(Scoring:** 1 if no clear patient flow; 2 if staff is clear on the procedure for 2 of 4 patient types 3 if staff is clear on the procedure for 3 of 4 patient types 4 if all staff know their responsibilities for all patient types) **Interview with clinicians**					
2.4 Adherence support: The site offers standard adherence support for providing and documenting: 1. Adherence counseling prior to ART initiation with care givers and patients 2. Routine adherence assessments during ARV therapy 3. Counseling interventions for patients with poor adherence **Check 10 charts, check 10 Adherence Questionnaires**					
2.5 Growth Monitoring and Nutritional Assessment: Site should monitor the growth of children and adolescents at every visit using one of the following: -BMI -Height and weight -Mid-upper arm circumference (MUAC) -Growth curve plot And, site has procedures for interpreting level of malnutrition and referrals for (SAM) severe acute malnutrition treatment					

Check 10 pediatric charts					
Total Section Score =					
Key challenges:					
Follow-up Action:					

3. PMTCT for Mother and HIV- Exposed Infants **(Charts for this section can be found at maternity, pediatric ward or adult pre-ART/ART site)**	**1**	**2**	**3**	**4**	**Comments**
3.1 Lifelong ART regardless of CD4 count is provided for all HIV-infected women (OPTION B+), according to National Guidelines **Check 10 charts**					
Complete below if there is PAC at site					
3.2 HIV-exposed infants (HEIs) receive ARVs on time for PMTCT during follow-up, according to National Guidelines **Check 10 charts**					
3.3 All HEIs receive DNA-PCR testing by 6-8 weeks of age, according to National Guidelines **Check 10 charts**					
3.4 All HEIs initiate Cotrimoxazole by 8 weeks of age, according to National Guidelines **Check 10 charts**					
Total Section Score =					
Key challenges:					
Follow-up Action:					

4. Pharmacy	1	2	3	4	Comments
4.1 No expired ART observed in pharmacy **Observe pharmacy**	1	2	3	4	
4.2 No stock out of adult or pediatric ART, cotrimoxazole, fluconazole, Vitamin B6, and isoniazid in the previous quarter **Check inventory list**					
4.3 Pharmacy has an inventory protocol for ARVs, OI drugs and other commodities **Check pharmacy inventory records, interview with pharmacist**					
Total Section Score =					
Key challenges:					
Follow-up Action:					

5. Monitoring	1	2	3	4	Comments
5.1 Site has working database and patient registers for each program area (pre-ART, ART, PMTCT) that are updated regularly **Check registry, interview data entry clerk**	1	2	3	4	
5.2 Site has procedure for updating medical records and a standard filing system **Check filing system, interview data entry clerk**					
Total Section Score =					
Key challenges:					
Follow-up Action:					

6. TB/HIV	1	2	3	4	Comments
Complete below for Ped and Adult patients					
6.1 The site has a system for documenting and screening for TB in all patients **Check 10 charts**	1	2	3	4	
6.2 TB screening includes symptoms for cough, fever, night sweats, weight loss **Check 10 charts**					
6.3 Infection Control: The site is using a TB control protocol to minimize risk of infecting patients and staff (window, fan, waiting room, open window, separation of known/suspected TB patients, fast tracking of TB patients, TB IEC materials used for education) **Interview with clinician, nurse counselors, observe clinic**					
6.4 Is there is a referral system to refer suspected TB/HIV patients to TB services? (linked by phone, assigned staff or referral card) **Interview with clinician**					
6.5 The site provides one of the following types of TB diagnostics? (sputum microscopy, X-ray, Gene X-pert) -**Sputum microscopy** (if yes, what is the turn-around time, if no is sputum specimen or patient referred somewhere else?) -**X-ray** (if yes, what is the turn-around time; if no, is sputum specimen or patient referred somewhere else?) -**Gene X-pert** (if yes, what is the turn-around time, if no is sputum specimen or patient referred somewhere else?) **Check 10 charts**					
For Adult Sites					
6.6 IPT was provided to eligible patients according to 3 I's SOP and recorded in charts **Check 10 charts**					
Total Section Score =					
Key challenges:					
Follow-up Action:					

Total Score for All Sections:

_____

Feedback Sessions with Hospital Staff and Team Leader

Next steps and responsibilities:

Date of next mentoring visit: _____

One copy to be left at the site, one copy to be submitted to NCHADS, and one to remain with mentor.

Clinical Mentor's signature: _____ Date: _____

Team Leader signature: _____ Date: _____