With the support from Flagship through FHI-360 and KHANA, NCHADS in collaboration with Siem Reap Provincial Health Department organized an orientation workshop on switching protocol for phasing out the use of d4T among HIV infected patients on ART in Cambodia, which was taken place in Angkor Mondial Hotel in Siem Reap on December 4, 2013.

Objectives:
1. To provide guidance on phasing out the use of d4T-based first line ART regimen among HIV infected patients on ART in Cambodia
2. To plan for smooth transition from d4T based first line regimen to TDF-based first line regimen for adults or to AZT-based first line regimen for children
3. To discuss the management of ART toxicity and treatment failure

Participants:
The total number of participants was 72 people including ART pharmacists, ART clinicians and pediatricians, ART counselors, ART team leaders, and PASP manager, from Siem Reap, Odor Meanchey and Preah Vihear and the 6 ART sites in the provinces.

Opening:
The opening of the workshop was presided over by Dr. Mean Chhi Vun, Director of NCHADS with the participation of Dr. Kros Sarath, the Director of Siem Reap Provincial Health Department, and Dr. Kaoeun Chetra, the representative from Flagship.

After the welcome remark by Dr. Sarath and the remark by Dr. Chetra, Dr. Mean Chhi Vun highlighted the success of Cambodia in bringing down HIV prevalence and incidence and universally providing ART to Cambodian HIV infected patients in need for the treatment. However, he added, Cambodia was still one of the countries that use d4T as the preferred first line ART regimen although WHO recommended countries to phase out the use of this drug since 2010.

Because of the long-term toxicity of d4T and the clear guidance of WHO on demotion of d4T, said Dr. Mean Chhi Vun, the Cambodia Ministry of Health developed and endorsed the switching protocol on phasing out the use of d4T among HIV infected patients on ART in Cambodia. He stressed that the protocol would provide guidance to ART team to smoothly switch patients on d4T-based first line regimen to TDF-based first line regimen for adults and AZT-based first line regimen for children.

Dr. Vun also appreciated and thanked the TWG on Care and treatment and all involved partners for their dedication, contribution and support in the development and implementation of the protocol. Finally he encouraged all participants to ask questions and to have a fruitful discussion during this one-day orientation workshop.
**Content of the Workshop:**
This one-day orientation workshop covered all content stated in the protocol for phasing out the use of d4T based first line regimen in Cambodia including:

- Why to phase out d4T-based regimen: irreversible long term toxicity of d4T was the main reason for the d4T demotion
- Implementation of switching from d4T in adult patients and in children: who to switch, how to switch, when to switch, and what to monitor. What clinicians should do before switching, when switching, and after switching from d4T-based regimen to TDF or AZT based regimen was discussed in the workshop. Other alternative first line regimen was also discussed.
- Plan for the switch and drug supply to prevent stock out: it was suggested to start the TDF or AZT based first line regimen in all new patients and to start from January 2014 switching 20% of existing patients on d4T based regimen to TDF or AZT based regimen every month until 100% of the patients was switched from d4T based regimen. ART sites were suggested to request for ARVs as they used to, but Logistic Unit of NCHADS would adjust the ARV supply based on this 20% monthly d4T demotion plan.

The workshop also discussed the management of drug toxicity and drug interaction related to TDF and AZT.

In addition, management of ARV treatment failure in both adults and children was discussed. This included the criteria used to detect treatment failure including virological failure, immunological failure, and clinical failure. Experiences on how to prevent, how to detect and how to manage treatment failure were also shared among participants and facilitators during the workshop.

**Conclusion**
The workshop was successfully completed with active discussion, contribution and interaction from participants. Some participants raised concerns over the stock out of ARV supply during the transition of d4T based first line regimen to TDF or AZT based regimen. To avoid this stock out issue, NCHADS suggested ART pharmacists of all ART sites to work closely with other ART team members, especially clinicians, to monitor their stock and monthly reported the consumption of ARVs to LMU of NCHADS. Special ARV request to NCHADS could be done if there was stock out issue.