**Methods**

Data for analysis were obtained from the CTC 2 database and include all children aged 0-15 years enrolled in the HIV Care and Treatment Program between January 1st 2011 and December 31st 2014. The data used have been extracted from XXX health facilities who reported to NACP between January 1st 2011 and December 31st 2014. The data analysis was conducted using R Statistical Package.

Children characteristics at the time of enrolment into CTC care were described using cross-tabulation by year of enrolment into care. It was assumed that children presenting to one of the XXX clinics in this analysis not on ART at (before) their first visit were enrolling for the first time (i.e. were not transferring from another clinic which did not capture data electronically). We excluded children who presented already on ART. For characteristics at enrolment, we looked for the first result up to XXX days after the date of enrolment for the time depending variables, taking the minimum visit per patient as the date of enrolment.

We assessed the eligibility of children for ART at the time of enrolment into CTC care and at consecutive visits. These results are restricted to 2009 and 2012 onwards, since the national guidelines changed during these years. We evaluated the time from clinic enrolment to ART initiation using Kaplan-Meir Method (Cox proportional hazards regression Model) by selected baseline characteristics (sex, age category, cd4, WHO, year enrolled, facility level, facility ownership, referred from, cotrimoxazole use, malnourished and positive for TB). We described the characteristics of children at the time of ART initiation. We allowed a window of XXX to XXX days relative to the date of ART start to capture characteristics at ART start (choosing that closest measurement to ART start).

We estimated time to ART initiation using Kaplan-Meier methods, from date of enrolment to HIV services through ART start date. We defined children as lost to follow up (LTFU) if they were not seen within the 6 months before the end of December 2014; these children were censored at their last visit date. Children who had not died and were not defined as LTFU were considered to be in follow up through to the analysis censoring date of 31 December 2014 and were censored at that time. We assessed the overall probability of ART initiation and by different characteristics of interest.

In order to describe access to care and treatment among children, the analysis was conducted using two age categories to allow for comparison in line with national guidelines and child health programs as well as global monitoring of the HIV response. Category I comprises the following age groups in years <1; 1-4; 5-9; 10-14 while category II includes <2; 2-5; 6-9, 10-14 year age groups.

**RESULTS:**

**Baseline characteristics during clinic enrolment**

|  |  | **2011** | **2012** | **2013** | **2014** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| **Total (row %)** |  |  |  |  |  |  |
| **Sex** | **Male** |  |  |  |  |  |
|  | **Female** |  |  |  |  |  |
| **Age category I, years** | **<1** |  |  |  |  |  |
|  | **1-4** |  |  |  |  |  |
|  | **5-9** |  |  |  |  |  |
|  | **10-14** |  |  |  |  |  |
| **Age category II, years** | **<2** |  |  |  |  |  |
|  | **2-5** |  |  |  |  |  |
|  | **6-9** |  |  |  |  |  |
|  | **10-14** |  |  |  |  |  |
| **WHO stage** | **Stage I** |  |  |  |  |  |
|  | **Stage II** |  |  |  |  |  |
|  | **Stage III** |  |  |  |  |  |
|  | **Stage IV** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **Weight, kg** | **<10** |  |  |  |  |  |
|  | **10-<20** |  |  |  |  |  |
|  | **20-<30** |  |  |  |  |  |
|  | **>=30** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **CD4 cell count, cells/mm3** | **<50** |  |  |  |  |  |
|  | **50-199** |  |  |  |  |  |
|  | **>=200** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **CD4 percentage, %** | **<25** |  |  |  |  |  |
|  | **>=25** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **Measurement of CD4 count or percent** | **Have at least one** |  |  |  |  |  |
|  | **Missing both** |  |  |  |  |  |
| **Facility type** | **Dispensary** |  |  |  |  |  |
|  | **Health centre** |  |  |  |  |  |
|  | **Hospital** |  |  |  |  |  |
|  | **Other** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **Referred from** | **HBC** |  |  |  |  |  |
|  | **PITC** |  |  |  |  |  |
|  | **PMTCT** |  |  |  |  |  |
|  | **VCT** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **Positive for TB** | **No** |  |  |  |  |  |
|  | **Yes** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |
| **Cotrimoxazole** | **No** |  |  |  |  |  |
|  | **Yes** |  |  |  |  |  |
| **Malnourished** | **No** |  |  |  |  |  |
|  | **Mild** |  |  |  |  |  |
|  | **Moderate** |  |  |  |  |  |
|  | **Severe** |  |  |  |  |  |
|  | **Missing** |  |  |  |  |  |

Stacked bar chart for where children were referred from by enrolment year

Stacked bar charts for children age categories by sex

Stacked bar chart for weight of children during enrolment by age categories

Stacked bar chart for childrens’ WHO stages by age categories at enrolment

Including the histograms that we have already

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Age category , years** | **<2** | **2-5** | **6-9** | **10-14** | **Total** |
| **Eligible** |  |  |  |  |  |
| **Not eligible** |  |  |  |  |  |
| **Unknown eligibility** |  |  |  |  |  |
| **Total** |  |  |  |  |  |

ART Eligibility table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **<2** | **2-5** | **6-9** | **10-14** | **Total** |
| **Enrolment** |  |  |  |  |  |
| **Within 1 month** |  |  |  |  |  |
| **Within 2 months** |  |  |  |  |  |
| **Within 3 months** |  |  |  |  |  |
| **Within 6 months** |  |  |  |  |  |
| **Within 12 months** |  |  |  |  |  |
| **>12 months** |  |  |  |  |  |
| **Not yet started\*** |  |  |  |  |  |
| **Total** |  |  |  |  |  |

Time from enrolment to ART

Or the one we have already on year initiated on ART by enrolment year

SURVIVAL ANALYSIS RESULTS (COX PROPORTIONAL HAZARDS model)