



Statement of Work: HealthQual Report Development on OpenMRS Platform

Background

The International Training and Education Center for Health (I-TECH) is a center in the University of Washington's Department of Global Health. I-TECH has projects in more than 20 countries, and its worldwide staff work with local ministries of health, universities, non-governmental organizations, medical facilities, and other partners to support efficient, well-ordered health care systems that provide high quality care to all citizens.

Project Description

The International Training and Education Center for Health (I-TECH) seeks a highly-qualified software developer to build the HealthQual Report in the new OpenMRS-based EMR in Haiti, iSantéPlus. The targeted software release date is September 29, 2017. The report must be developed and incorporated into the core application by that date. The current version of the software, known as iSanté, is deployed in 132 sites in Haiti and is considered the national EMR.

The consultant will work with the Health Information Systems Manager based in Haiti as well as other technical staff located at I-TECH's HQ in Seattle at the University of Washington. It is expected the consultant will be able to communicate with the team remotely and collaborate with the team to meet overall project goals. Specific deliverables are outlined below.

Required Qualifications

- Proven experience with OpenMRS module development (specifically reference application)
- Solid grasp of web technologies HTML, CSS, JavaScript, JSP/JSTL, AngularJS

Desired Qualifications:

- Advanced knowledge of object oriented programming with Java
- Demonstrated experience with OpenMRS core (Spring, Hibernate)
- Demonstrated experience with PHP, SQL
- Demonstrated experience with Linux
- Excellent problem solving and debugging skills
- French language proficiency a plus

Proposed Activities and Deliverables

1. Review code for existing HealthQual report in iSanté
Deliverable: Presentation of contractor's approach to the iSantéPlus report
2. Produce a mock-up version of the report UI
Deliverable: HealthQual Report UI mock-up
3. Develop a test candidate of the report as outlined in the specification document (Attachment 1)
Deliverable: HealthQual report test candidate
4. Integrate HealthQual report into core iSantéPlus reporting module
Deliverable: HealthQual report available in core application that successfully passes testing
5. Consultant or contractor must adhere to the following expectations while executing the work:
 - All source code will be made available as open source on the iSantéPlus GitHub page.
 - Availability for weekly virtual meetings with the UW team in Haiti and Seattle.
 - Developer(s) routinely create, monitor and resolve tickets in the development tracking system.
 - Maintain regular communication with the UW team in Haiti and Seattle via remote phone calls and email.

Request for Quotes

The contract will be executed between August 1, 2017 and September 29, 2017 and will require a time commitment of approximately 300 person hours. Interested applicants should provide 1) a summary of relevant past performance and 2) a cost proposal or quote to Dr. Nathaelf Hyppolite, I-TECH/Haiti Health Management Information Systems (HMIS) Director (nathaelfhyppolite@itech-haiti.org) and Joanna Diallo, I-TECH Senior Program Manager (jdiallo@uw.edu) by July 28, 2017 at 5:00pm PST. At a minimum, the cost proposal should include number of individuals proposed to complete the work, hourly rates, and total estimated hours to complete the job by the proposed deadline of September 29, 2017.

Post Date: July 17, 2017

Attachment 1: iSantéPlus HealthQual Report Specifications

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Patient Definitions

HIV+ Patient

All patients who have at least one of the following forms completed and saved:

- 1ere Visite VIH (First HIV Visit)
- Visite VIH de Suivi (Follow-up HIV Visit)

Exception for children who have had a negative PCR test result.

HIV+ Pediatric Patient

All patients who are between the ages of 0 and 14 years old who have at least one of the following forms completed and saved:

- 1ere Visite VIH Pédiatrique (First Pediatric HIV Visit)
- Visite VIH de Suivi Pédiatrique (Follow-up Pediatric HIV Visit)

Exception for children who have had a negative PCR test result between 0 and 18 months of age.

HIV+ Patient on Antiretroviral Therapy (ART)

A patient on ART is an HIV+ patient who has received at least one ARV drug in treatment. See Figures 1 and 2.

Ordonnance	
(-) INTIs	Any can be checked
Abacavir(ABC):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy
Combivir(AZT+3TC):	<input type="radio"/> Rx <input type="radio"/> Prophy
Didanosine(ddI):	<input type="radio"/> Rx <input type="radio"/> Prophy
Emtricitabine(FTC):	<input type="radio"/> Rx <input type="radio"/> Prophy
Lamivudine(3TC):	<input type="radio"/> Rx <input type="radio"/> Prophy
Stavudine(d4T):	<input type="radio"/> Rx <input type="radio"/> Prophy
Tenofovir(TNF):	<input type="radio"/> Rx <input type="radio"/> Prophy
Trizivir(ABC+AZT+3TC):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy
Zidovudine(AZT):	<input type="radio"/> Rx <input type="radio"/> Prophy

Figure 1: Prescription Form has any of the INTIs checked.

(-) INNTIs		Any can be checked
Efavirenz(EFV):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
Nevirapine(NVP):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
(-) IPs		
Atazanavir(ATZN):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
Atazanavir+BostRTV:	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
Indinavir(IDV):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
Lopinavir + BostRTV(Kaletra):	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
Darunavir:	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	
(-) II		
Raltegravir:	<input checked="" type="radio"/> Rx <input type="radio"/> Prophy	

Figure 2: Prescription Form has any of the INNTIs, IPs, or II checked.

Patient Status: Deceased

Any patient with a Discontinuation Form completed with *décès* checked (Deceased). See Figure 3.

The screenshot shows a web form titled "RAPPORT D'ARRÊT DU PROGRAMME DE SOINS ET DE TRAITEMENT VIH/SIDA". The "Date visite:" field contains "04/20/2017". A "Save" button is visible in the top right. The form asks if the patient has definitively stopped participating in the program, with radio buttons for "Oui" (selected) and "Non". It then asks for the date of program discontinuation and the date of last contact with the patient. Further questions include whether the patient was receiving ARV treatment and if they definitively stopped taking ARV. The "Raison d'arrêt, précisez:" section has a checked radio button for "Perte de contact avec le patient depuis plus de trois mois". Below this, it asks if the stop was due to loss of contact, with radio buttons for "Oui" (selected), "Non", and "Inconnu". The "Transfert vers un autre établissement" section has an unchecked radio button. The "Décès" section has a checked radio button, with a "Cause présumée du décès:" field and a "Date:" field. The date field contains "(mm/dd/yyyy)".

Figure 3: Discontinuation form with “décès” checked

Patient Status: Transferred

Any patient with a Discontinuation Form completed with “transfert vers un autre établissement” checked. See Figure 4

The screenshot shows the same web form as Figure 3. The "Date visite:" field contains "04/20/2017". The "Raison d'arrêt, précisez:" section has a checked radio button for "Transfert vers un autre établissement". Below this, it asks for the patient's preference (radio buttons for "Préférence du patient" and "Référence du médecin") and the name of the facility. The "Décès" section has an unchecked radio button. The date field at the bottom contains "(mm/dd/yyyy)".

Figure 4: Discontinuation Form with *transfert vers un autre établissement* checked.

Patient Status: Discontinued/Suspended Treatment

Any patient with a discontinuation form completed and saved with “yes” in response to the question “Has the patient definitively stopped his/her participation in the HIV/AIDS care and treatment program?” See Figure 5.

RAPPORT D'ARRÊT DU PROGRAMME DE SOINS ET DE TRAITEMENT VIH/SIDA

Date visite: 04/23/2017 (mm/dd/yyyy)

Est-ce que le patient a arrêté définitif de la participation au programme de soins et traitement VIH/SIDA?
 Oui- préciser la Raison ci-dessous Non

Date d'arrêt du programme des soins et traitement VIH/SIDA

Date du dernier contact avec le patient

Figure 5: “Oui” is checked.

Pregnancy

An HIV+ patient is considered pregnant if:

Condition 1: The patient has a diagnosis of pregnant in the chart. See Figures 6-9.

ÉLIGIBILITÉ MÉDICALE AUX ARV

Stade OMS actuel
Sélectionner le stade le plus avancé selon les symptômes et le diagnostic
 Stade I (Asymptomatique) Stade II (Symptomatique) Stade III (Symptomatique) Stade IV (SIDA)

Éligibilité médicale aux ARV
 Oui - préciser la raison Non - pas d'éligibilité médicale aujourd'hui À déterminer

Raison d'éligibilité médicale aux ARV
Cocher le ou les cas ci-dessous

CD4 inférieur au seuil (500)
 OMS Stade III+CD4 inférieur au seuil(500)
 OMS Stade IV
 PTME
 Éligibilité médicale établie à la visite antérieure
 ARV trithérapie antérieure
 Prophylaxie post-exposition (PEP)
Date de l'exposition
(mm/dd/yyyy)
 Coïnfection TB/HIV
 Coïnfection HBV/HIV
 Couple sérodiscordant
 Femme enceinte (Grossesse) **Checked**
 Femme allaitante
 Patient avec âge > 50 ans
 Néphropathie à VIH
 Protocole Test et Traitement

Figure 6: Checked reason for ART Eligibility is “Pregnant Woman”

Fiche de Première Consultation OB-GYN

Date visite: 08/16/2016 (mm/dd/yyyy) Save

INFORMATION GÉNÉRALE **checked**

Age: 18 Groupe sanguin : A+ A- B+ B- O+ O- AB+ AB- Inconnu

Patiente vue pour Consultation : Gynécologique Prénatale Postnatale Planification familiale

Source de référence : Hôpital Clinique Externe Centres CDV intégrés Programmes communautaires

Niveau d'étude : Primaire Secondaire Universitaire Alphabétisée Non Alphabétisée

Figure 7: Checked “Prenatal” for Consultation Type

Fiche de Première Consultation OB-GYN		
Date visite:	08/16/2016 (mm/dd/yyyy)	
ANTECEDENTS PERSONNELS/HABITUDES		
ANTECEDENTS OBSTETRICO-GYNECOLOGIQUES		
Age des Ménarches	Age des premières relations sexuelles	Nombre cumulé de partenaires sexuels
<input type="text"/>	<input type="text"/>	<input type="text"/>
Durée des Règles jours	Durée des Cycles jours	DDR <input type="text"/> (mm/dd/yyyy) DPA in reporting period (mm/dd/yyyy)
Dysménorrhée : <input type="checkbox"/>	Si oui, <input type="radio"/> Primaire OU <input type="radio"/> Secondaire	Infertilité : <input type="checkbox"/>
G <input type="text"/>		
P <input type="text"/>		
A <input type="text"/>		

Figure 8: DPA (Due Date) field's date falls in the reporting period.

Fiche de Première Consultation OB-GYN		
Date visite:	08/16/2016 (mm/dd/yyyy)	
Any checked		
<input type="checkbox"/> Cancer de l'endomètre [C54.1]	<input checked="" type="radio"/> Grossesse ectopique [O0.00], précisez : <input type="text"/>	<input checked="" type="radio"/> Pré éclampsie [O14.90], précisez : <input type="text"/>
<input type="checkbox"/> Cancer de l'ovaire [C56.9]	<input checked="" type="radio"/> Grossesse intra utérine [Z33.1]	<input checked="" type="radio"/> Retard croissance Intrautérin [P05.9]
<input type="checkbox"/> Cancer de sein [C50.919], précisez : <input type="text"/>	<input checked="" type="radio"/> HTA + grossesse [O16.9] précisez : <input type="text"/>	<input checked="" type="radio"/> Rupture prématurée des membranes [O42.00]
<input type="checkbox"/> Cardiopathie [I51.9], précisez : <input type="text"/>	<input checked="" type="radio"/> Hémorragie troisième trimestre [O46.90], précisez : <input type="text"/>	<input checked="" type="radio"/> Saignement utérin anormal [N93.8]
<input type="checkbox"/> Chorioamnionite [O41.129]	<input type="checkbox"/> Hyperémèse gravidique [O21.0]	<input type="checkbox"/> Syphilis [A53.9]
<input checked="" type="radio"/> Diabète + grossesse [O99.810], précisez : <input type="text"/>	<input type="checkbox"/> Infection génito-urinaire (IGU) [N73.9]	<input type="checkbox"/> Thrombopénie [D69.6]
<input type="checkbox"/> Distorsion cervicale [N93.8], précisez : <input type="text"/>	<input type="checkbox"/> IST, précisez : <input type="text"/>	<input type="checkbox"/> Thromboses
		<input type="checkbox"/> Tuberculose [A15.0] remplir la section Tuberculose ci-dessous
		<input type="checkbox"/> MDR TB remplir la section Tuberculose ci-dessous [Z16.24]
		<input type="checkbox"/> Travail Latent

Figure 9: Any of the following are checked in the OB-GYN consultation form: Gestational Diabetes, Ectopic Pregnancy, intrauterine pregnancy, 3rd trimester hemorrhaging, pre-eclampsia, intrauterine growth restriction, premature rupture of membranes (PROM), or abnormal uterine bleeding.

Pregnancy cont...

Condition 2: the patient has a positive pregnancy test. See Figures 10 and 11.

Analyses de la

Date visite:
(mm/dd/yyyy)

Hematologie | Biochimie | Cytobacteriologie | Bacteriologie | ECBU | Parasitologie | Immuno-Virologie | Mycobacteriologie

B-HCG
RÉSULTAT ET DATE

←

Date

(mm/dd/yyyy)

Commentaire

FSH
 LH

Figure 10: B-HCG result is positive and date of positive result falls in the reporting period.

Hematologie | Biochimie | Cytobacteriologie | Bacteriologie | ECBU | Parasitologie | Immuno-Virologie | Mycobacteriologie

T3
 T4
 Test de Grossesse
RÉSULTAT ET DATE

←

Date

(mm/dd/yyyy)

Commentaire

TSH

Figure 11: Pregnancy Test Result is positive and date of positive result falls in the reporting period

Condition 3: The patient has a labor & delivery form completed. In this case, the gestation period begins 40 weeks approximately before the date that the form was completed and saved.

Adult Indicators

1. Retention of patients on antiretroviral treatment (ART)

Numerator : Cumulative number of HIV+ patients on ART who are still on treatment after X months following ART initiation.

*Calculation Method: HIV+ Patient who initiated treatment at X months **AND** who has a date of next drug dispense greater than or equal to the current date.*

Denominator: Cumulative number of HIV+ patients already placed on ART excluding deceased and transfers.

*Calculation Method: HIV+ Patient on ART who has initiated ART at X months **excluding** deceased and transfers.*

Disaggregation: 6,12,24,48,60 months

(current date -3months) ≤ X ≤ current date

(current date-6months) ≤ X ≤ current date

(current date-12months) ≤ X ≤ current date

(current date-24months) ≤ X ≤ current date

(current date-48months) ≤ X ≤ current date

(current date-60months) ≤ X ≤ current date

2. CD4 Assessment at Enrolment (Proportion of HIV+ patients who have had a CD4 count completed at enrolment)

Numerator: Number of HIV+ patients enrolled during the selected period who have had at least one CD4 count completed during the first 60 days of their enrolment, excluding deceased, discontinued and transfers.

Calculation Method:

Numerator:

***Condition 1:** HIV+ patients with a HIV First Visit form for which the completion date falls within the selected period, excluding deceased, discontinued and transfers.*

***Condition 2:** CD4 result within 60 days of the completed date of the First Visit form. See Figure 12.*

The screenshot shows a software interface with a menu at the top containing various medical specialties: Hematologie, Biochimie, Cytobacteriologie, Bacteriologie, ECBU, Parasitologie, Immuno-Virologie, Mycobacteriologie, Endocrinologie, Liquides Biologique, and Ser. On the left, a list of tests is shown with checkboxes: P : CD4 (checked), P : Coagulation, P : Groupe Sanguin, P : Hemogramme - Auto, P : Hemogramme - Manual, P : TS / TC, Anti-Thrombine III (Activite), Anti-Thrombine III (Dosage), and Rasonhiles. On the right, the details for the selected CD4 test are shown: 'CD4 Compte Absolu' and 'RÉSULTAT ET DATE'. A green box contains the text 'Not Null'. Below this, a 'Date' field is highlighted with a red box and contains the text '60 days interval after 1st visit date'. There are also fields for '(mm/dd/yyyy)' and 'Commentaire'.

Figure 12

Denominator: Number of HIV+ patients enrolled during the selected period excluding deceased, discontinued and transfers.

*Calculation Method: HIV+ patients with a First Visit form for which the completion date falls within the selected period, **excluding** deceased, discontinued and transfers.*

3. ARV Enrolment (Proportion of eligible HIV+ patients placed on ARVs during the selected period)

Numerator: Number of HIV+ patients enrolled during the selected period.

*Calculation method: [HIV+ patients on ART](#) with a HIV First Visit form for which the completion date falls in the selected period, **excluding** deceased, discontinued and transfers.*

Denominator: Number of patients who tested HIV+ during the selected period excluding deceased, discontinued and transfers.

*Calculation method: HIV+ patients with a HIV First Visit form for which the completion date falls in the selected period, **excluding** deceased, discontinued and transfers.*

4. Proportion of adult persons living with HIV (PLHIV) who have received cotrimoxazole prophylaxis during the selected period

Numerator: Number of HIV+ patients who have received cotrimoxazole prophylaxis during the selected period.

Calculation method: See Figure 13.

The screenshot shows a drug order form for Cotrimoxazole. The label 'Cotrimoxazole:' is on the left. In the center, there are two radio buttons: 'Rx' and 'Prophy'. The 'Prophy' radio button is selected and circled in red. Above the 'Prophy' radio button, the word 'Checked' is written in red. To the right, there are two empty text boxes. Below them, there is a checkbox labeled 'Oui' and a date field highlighted with a red box containing the text 'in the reporting period'. Below the date field, the text '(mm/dd/yyyy)' is visible.

Figure 13 Drug order form shows Cotrimoxazole “prophy” checked with a date that falls in the selected period.

Denominator: Number of HIV+ patients who had at least one medical consultation during the selected period excluding deceased, discontinued and transfers.

*Calculation method: HIV+ patients on ART who have had at least one medical consultation (First Visit, Follow-up visit or Prescription) during the selected period, **excluding** deceased, discontinued and transfers.*

5. Proportion of HIV+ patients on ARVs who have had an adherence evaluation during the last 3 months.

Numerator : Number of HIV+ patients on ARVs who have had a pill count or completed questionnaire in the last 3 months.

Calculation Method: See Figure 14.

FICHE D'ADHÉRENCE	
Date visite:	04/20/2017 in reporting period (mm/dd/yyyy)
Evaluation faite par:	
<input type="checkbox"/> Médecin	<input type="checkbox"/> Travailleur social/Psychologue
<input type="checkbox"/> Pharmacien/Dispensateur	<input type="checkbox"/> Agent de santé communautaire/accompagnateur
<input type="checkbox"/> Infirmière	<input type="checkbox"/> Autre, préciser:
ADHÉRENCE	
Adhère: Durant les 4 derniers jours, combien de doses du médicament le patient a-t-il manqué? 0 1 2 3 >3	
Quel pourcentage de doses le patient a-t-il pris le mois dernier ?	
<input checked="" type="radio"/> 0% <input type="radio"/> 10% <input type="radio"/> 20% <input type="radio"/> 30% <input type="radio"/> 40% <input type="radio"/> 50% <input type="radio"/> 60% <input type="radio"/> 70% <input type="radio"/> 80% <input type="radio"/> 90% <input type="radio"/> 100% one checked	
Demander au patient une estimation visuelle de la prise de ses médicaments ARV. 0% représente aucune prise de médicaments, 50% représente une prise de médicaments la moitié du temps.	

Figure 14: On the Adherence Form, at least one of the percentages is checked.

Denominator: Number of HIV+ patients who had at least one medical consultation during the last 3 months, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patients on ART who had at least one medical consultation (First Visit, Follow-up visit or Prescription) during the last 3 months, excluding deceased, discontinued and transfers.

6. Proportion of HIV+ patients on ART who are adherent to treatment during the selected period

Numerator : Cumulative number of HIV+ patients enrolled in ART for 3 months or more who have an adherence level $\geq 95\%$.

Calculation method: HIV+ patients on ART who have an adherence form completed in the last 3 months with an adherence level of 90% or 100%, excluding deceased, discontinued and transfers. See Figure 15.

FICHE D'ADHÉRENCE	
Date visite:	04/20/2017 in reporting period (mm/dd/yyyy)
Evaluation faite par:	
<input type="checkbox"/> Médecin	<input type="checkbox"/> Travailleur social/Psychologue
<input type="checkbox"/> Pharmacien/Dispensateur	<input type="checkbox"/> Agent de santé communautaire/accompagnateur
<input type="checkbox"/> Infirmière	<input type="checkbox"/> Autre, préciser:
ADHÉRENCE	
Adhère: Durant les 4 derniers jours, combien de doses du médicament le patient a-t-il manqué? 0 1 2 3 >3	
Quel pourcentage de doses le patient a-t-il pris le mois dernier ?	
<input type="radio"/> 0% <input type="radio"/> 10% <input type="radio"/> 20% <input type="radio"/> 30% <input type="radio"/> 40% <input type="radio"/> 50% <input type="radio"/> 60% <input type="radio"/> 70% <input type="radio"/> 80% <input checked="" type="radio"/> 90% <input checked="" type="radio"/> 100% either checked	
Demander au patient une estimation visuelle de la prise de ses médicaments ARV. 0% représente aucune prise de médicaments, 50% représente une prise de médicaments la moitié du temps.	

Figure 15: Adherence form has either 90% or 100% checked for the patient.

Denominator: Cumulative number of HIV+ patients enrolled in ART for more than 3 months who have had an adherence evaluation during the last 3 months, excluding deceased, discontinued and transfers.

Calculation method: See Figure 14.

7. Proportion of PLHIV tested for TB at enrolment during the selected period

Numerator: Number of HIV+ patients assessed for TB at enrollment during the selected period.

Calculation method: HIV+ patients with a HIV First Visit form for which the completion date falls in the selected period, excluding deceased, discontinued and transfers, with an evaluation of TB that is not null. See Figure 16.

The image shows a form titled 'ÉVALUATION TB'. It contains several fields:

- A: Présence de cicatrice BCG (checked)
- B: Récent PPD négatif (checked)
- C: Statut PPD inconnu (checked)
- D: Prophylaxie à l'INH (checked)
- E: Suspicion de TB selon les symptômes (checked)
- F: Aucun signe ou symptôme indicatif de TB (checked)
- G: Date de début de l'INH (mm/dd/yyyy) (empty)
- H: Date d'arrêt de l'INH (mm/dd/yyyy) (empty)

 A red note on the right side of the form states: 'A or B or C or D or E or F checked or G or H not null'.

Figure 16: Evaluation of TB has A, B, C, D, E, or F checked and G or H not null.

Denominator: Number of HIV+ patients enrolled in care during the selected period, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patients with a HIV First Visit form completed for which the completion date falls in the selected period, excluding deceased, discontinued and transfers.

8. Proportion of PLHIV who received INH chemoprophylaxis during the selected period

Numerator: Number of HIV+ patients who received INH prophylaxis during the selected period.

Calculation method: HIV+ patients with a HIV First Visit form completed for which the completion date falls in the selected period, excluding deceased, discontinued and transfers, who have received INH prophylaxis. See Figure 17.

The image shows a section of a drug order form for 'Isoniazide'. It includes a 'checked' label, a radio button for 'Rx' which is selected, and a radio button for 'Prophy'. A date field is present with the text 'in reporting period' overlaid on it.

Figure 17: On drug order form, isoniazide “prophy” is checked and the date falls within the selected period.

Denominator: Number of new HIV+ patients enrolled during the selected period who have had at least one medical consultation, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patients with a HIV First Visit form completed for which the completion date falls in the selected period, excluding deceased, discontinued and transfers.

9. Proportion of HIV+ patients who have had a nutritional assessment during the selected period.

Numerator: Number of HIV+ patients who have the necessary data to calculate their BMI in their chart during the selected period.

Calculation method: HIV+ patients who had at least one medical consultation (First Visit, Follow-up visit) during the selected period, excluding deceased, discontinued and transfers,

who have data to calculate BMI (height, weight). See Figure 18.

SIGNES VITAUX			
Temp	<input type="text"/>		
	Celcius		
TA	<input type="text"/>		
	/		
	<input type="text"/>		
	mmHg		
Pouls	<input type="text"/>	Poids	<input type="text" value="Not Null"/>
			kg
FR	<input type="text"/>		
Taille	<input type="text" value="Not null"/>		
	cm		

Figure 18: Under vital signs, height and weight are *not null*.

Denominator: Number of HIV+ patients who have had at least one medical consultation during the selected period, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patients who have had at least one medical consultation (First Visit, Follow-up visit) during the selected period, excluding deceased, discontinued and transfers.

10. Proportion of HIV+ patients identified as severely undernourished during the selected period.

Numerator: Number of HIV+ patients who have a BMI less than or equal to (\leq) 16.

Calculation method: HIV+ patients who have had at least one medical consultation (First Visit, Follow-up visit) during the selected period, excluding deceased, discontinued and transfers, who have a BMI \leq 16.

Denominator: Number of HIV+ patients who have had their BMI evaluated during the selected period, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patients who had at least one medical consultation (First Visit, Follow-up visit) during the selected period, excluding deceased, discontinued and transfers, who have data to calculate BMI (height, weight). See Figure 18.

11. Proportion of HIV+ women who use a family planning method during the selected period.

Numerator: Number of HIV+ women of reproductive age who are using a family planning method during the selected period.

Calculation method: HIV+ patient, sex female, aged 10 to 49, excluding deceased, discontinued and transfers, who have had at least one medical consultation (First Visit, Follow-up visit) during the selected period and use a family planning method. See Figure 19.

PLANNING FAMILIAL	
<input checked="" type="checkbox"/> A Oui	<input checked="" type="checkbox"/> E Ligature des trompes
<input type="checkbox"/> Méthode PF	A or B or C or D or E
<input type="checkbox"/> B Préservatif	Autres, préciser : <input checked="" type="text" value="F"/>
<input type="checkbox"/> C DMPA	checked or F not blank
<input type="checkbox"/> D Pilluls	<input type="text"/>

Figure 19: Under Family Planning, "Oui" is checked, and method is selected (B,C,D, or E) or F is completed.

Denominator: Number of HIV+ women of reproductive age who have had at least one visit during the selected period, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patient, sex female, aged 10 to 49, **excluding** deceased, discontinued and transfers, who have had at least one medical consultation (First Visit, Follow-up visit) during the selected period.

12. Proportion of HIV+ pregnant women who received triple-drug therapy (HAART) during the selected period

Numerator: Number of pregnant women who are HIV+ (newly tested or known HIV+) who received triple-drug therapy (HAART) during the selected period.

Calculation method: HIV+ patient on ART **and** pregnant during the selected period, **excluding** deceased, discontinued and transfers, who is on HAART.

Denominator: Number of HIV+ pregnant women during the selected period, excluding deceased, discontinued and transfers.

Calculation method: HIV+ patient **and** pregnant during the selected period, **excluding** deceased, discontinued and transfers.

Note: The denominator and numerator must include women who are HIV+ and on ART who become pregnant during the selected period.

13. Proportion of pregnant women in prenatal care or labor and delivery (L&D) who received an HIV test during the selected period.

Numerator: Number of women seen in prenatal care or L&D and who received an HIV test during the selected period.

Calculation method: Pregnant **and** HIV test completed during the selected period. See Figure 20.

Analyses de laboratoire										
Date visite:										04/23/2017 (mm/dd/yyyy)
Henatologie	Biochimie	Cytobacteriologie	Bacteriologie	ECBU	Parasitologie	Immuno-Virologie	Mycobacteriologie	Endocrinologie	Liquides Biol	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dengue						Hépatite B Ag				
						Hépatite C IgM				
						VIH Elisa	Any checked			
						VIH test rapide				

Figure 20: Laboratory Tests have HIV Elisa or HIV Rapid Test checked.

Denominator: Number of pregnant women seen in prenatal care or L&D during the selected period.

Calculation method: Patients with pregnancy identified during the selected period.

14. Proportion of HIV+ patients on ART who received a viral load test at 6 months after the initiation of treatment.

Numerator: Number of patients on ART who received a viral load test at 6 months after the initiation of treatment during the selected period.

Calculation method: HIV+ patient on ART **for at least 6 months** who have been seen in clinic (First Visit, Follow-up Visit, Lab or Rx) during the selected period **and** have had a viral load test completed, **excluding** deceased, discontinued and transfers. See Figures 21 and 22.

Hematologie	Biochimie	Cytobacteriologie	Bacteriologie	ECBU	Parasitologie	Immuno-Virologie	Mycobacteriologie	Endocrinologie
-------------	-----------	-------------------	---------------	------	---------------	------------------	-------------------	----------------

Charge virale qualitative
RÉSULTAT ET DATE

Not Null

Date

In reporting period

(mm/dd/yyyy)
Commentaire

Figure 21: Laboratory Tests has “qualitative viral load” checked, result is not null and the date falls in the selected period.

Hematologie	Biochimie	Cytobacteriologie	Bacteriologie	ECBU	Parasitologie	Immuno-Virologie	Mycobacteriologie	Endocrinologie
-------------	-----------	-------------------	---------------	------	---------------	------------------	-------------------	----------------

Charge virale qualitative
 Charge virale quantitative
RÉSULTAT ET DATE

Not Null

Date

in reporting period

(mm/dd/yyyy)
Commentaire

Figure 22: Laboratory Tests has “quantitative viral load” checked, result is not null and the date falls in the selected period.

Denominator: Number of patients on ART for 6 months who have been seen in clinic during the selected period.

*Calculation method: HIV+ patients on ART for at least 6 months who have been seen in clinic during the selected period, **excluding** deceased, discontinued and transfers.*

15. Proportion of HIV+ patients on ART who received a viral load test at 18 months after the initiation of treatment.

Numerator: Number of patients on ART who received a viral load test at 18 months after the initiation of treatment during the selected period.

Calculation method: HIV+ patient on ART for at least 18 months who have been seen in clinic during the selected period and who have a viral load test completed. See figures 21 and 22.

Denominator: Number of patients on ART for 18 months who have been seen in clinic during the selected period.

*Calculation method: HIV+ patient on ART for at least 18 months who has been seen in clinic during the selected period, **excluding** deceased, discontinued and transfers.*


16. Proportion of HIV+ patients on ART for more than 6 months who have an undetectable viral load

Numerator: Number of patients on ART for more than 6 months who have an undetectable viral load during the selected period.

*Calculation method: HIV+ patients on ART for at least 6 months, who have been seen in clinic, **excluding** deceased, discontinued and transfers, who have an undetectable viral load result during the selected period. See Figure 23.*

Hematologie	Biochimie	Cytobacteriologie	Bacteriologie	ECBU	Parasitologie	Immunologie
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Charge virale qualitative
RÉSULTAT ET DATE

Indéetectable ▼ 

Date
in reporting period
(mm/dd/yyyy)

Commentaire

Figure 23: Laboratory Tests has “qualitative viral load” check and result is “undetectable” and the date falls within the selected period.

Denominator: Number of patients on ART for more than 6 months who received a viral load test during the selected period.

*Calculation method: HIV+ patients on ART for at least 6 months who have been seen in clinic during the selected period, **excluding** deceased, discontinued and transfers, who have had a viral load test completed.*

Pediatric Indicators

1. Proportion of children regularly followed on ART

Numerator: Cumulative number of children on ART who have had at least one visit during the last 3 months.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the last **X** months.*

Disaggregation: **X** = 6 or 12 or 24 or 48 or 60 months

Denominator: Cumulative number of children on ART, excluding deceased and transfers and those who had a negative PCR result.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, transfers and those who had a negative PCR result.*

Disaggregation: 6, 12, 24, 48, 60 months

2. Proportion of children tested positive for HIV and placed on ART during the selected period.

Numerator: Number of HIV+ children placed on ART during the selected period.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

Denominator: Number of children who were diagnosed with HIV and seen in the clinic during the selected period, excluding those who have suspended treatment, those who had a negative PCR result, transfers and deceased.

*Calculation method: Pediatric HIV+ patients **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

3. Proportion of children exposed to or infected with HIV who received cotrimoxazole prophylaxis during the selected period.

Numerator: Number of children exposed to and infected with HIV followed in clinic who are eligible for cotrimoxazole prophylaxis and received it during the reporting period.

*Calculation method: Pediatric HIV+ patients (4 or more weeks old) **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result after 18 months of age, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period **and** who have received cotrimoxazole prophylaxis. See Figure 13 in the Adult section.*

Denominator: Number of children exposed to and infected with HIV older than 4 weeks of age followed in clinic during the selected period, excluding discontinued cases and those who have had a negative PCR after 18 months of age.

*Calculation method: Pediatric HIV+ patients (older than 4 weeks of age) **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result after 18 months of age, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or*

Pediatric Rx) during the selected period.

4. Proportion of HIV+ children on ART who have had an adherence evaluation during the last 3 months.

Numerator : Number of HIV+ children on ART who have had an adherence evaluation (a pill count or completed questionnaire saved to their chart) in the last 3 months.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the last three months **and** who benefited from an adherence evaluation. See Figure 14 in the Adult section.*

Denominator: Number of children on ART who had at least one medical consultation during the last 3 months, excluding discontinued cases and those who have had a negative PCR.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the last three months.*

5. Proportion of HIV+ children on ART who are considered adherent

Numerator: Cumulative number of pediatric patients enrolled in ART for more than 3 months who have an adherence level $\geq 95\%$.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the last three months **and** have an adherence level $\geq 95\%$. See Figure 15 in the Adult section.*

Denominator: Cumulative number of pediatric patients enrolled in ART for more than 3 months who have had an adherence evaluation in the last 3 months, excluding discontinued cases and those who have had a negative PCR.

*Calculation method: Pediatric HIV+ patients on ART **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the last three months.*

6. Proportion of HIV+ children tested for TB at enrolment during the selected period

Numerator: Number of children 6 months of age and older who are assessed for TB at enrollment during the selected period.

*Calculation method: Pediatric HIV+ patients older than 6 months of age **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had an HIV First Pediatric Visit **with** the TB section completed indicating a non-null result during the selected period. See Figure 24.*

ÉVALUATION TB		
Antécédent de TB <input type="checkbox"/> Pas d'antécédent de TB		Any checked
Statut TB actuel		
Traitement TB <input type="radio"/> Oui <input type="radio"/> Non <input type="radio"/> Inconnu		Traitement TB en cours <input type="radio"/> Oui <input type="radio"/> Non <input type="radio"/> Inconnu
Date de début (mm/dd/yyyy)	Date d'arrêt (mm/dd/yyyy)	
<input type="checkbox"/> Prophylaxie TB à l'INH		Prophylaxie à l'INH en cours
Date de début (mm/dd/yyyy)	Date d'arrêt (mm/dd/yyyy)	
<input type="checkbox"/> Notion de contact TB		<input type="checkbox"/> Suspicion de TB selon les symptômes
<input type="checkbox"/> Présence de cicatrice BCG		<input type="checkbox"/> Aucun signe ou symptôme indicatif de TB
Récents PPD <input type="radio"/> Oui <input type="radio"/> Non <input type="radio"/> Inconnu		Si Oui, Résultat et Date (mm/dd/yyyy) mm

Figure 24: TB Evaluation form has any of the TB history options checked.

Denominator: Number of HIV-infected children age 6-months and older who are enrolled in care during the selected period, excluding discontinued cases and those who have had a negative PCR.

*Calculation method: Pediatric HIV+ patients older than 6 months of age **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had an HIV First Pediatric Visit during the selected period.*

7. Proportion of eligible (TB-negative) HIV+ children older than 1 year of age who received INH chemoprophylaxis during the selected period.

Numerator: Number of HIV+ children older than 1 year of age enrolled at the clinic during the selected period who received INH prophylaxis.

*Calculation method: Pediatric HIV+ patients older than 1 year of age **excluding** deceased, those who discontinued treatment, transfers, those who had a negative PCR result, and those who have active TB (See Figure 25) who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period **and** who received INH prophylaxis. See Figure 17 in the Adult section.*

Denominator: Number of HIV+ children older than 1 year of age enrolled at the clinic during the selected period, excluding discontinued cases and those who have active TB.

*Calculation method: Pediatric HIV+ patients older than 1 year of age **excluding** deceased, those who discontinued treatment, transfers, those who had a negative PCR result, and those who have active TB (See Figure 25) who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

Statut TB		A or B or C not checked	
<input type="checkbox"/> TB récente <input type="checkbox"/> TB active (avec crachats positifs)	<input type="checkbox"/> A	<input type="checkbox"/> Si TB active, traitement TB en cours <input type="checkbox"/> Date de début de traitement	<input type="checkbox"/> B Oui <input type="checkbox"/> C Non <input type="checkbox"/> (dd/mm/yyyy)

Figure 25: TB status does **not** have "active TB" or "TB treatment" options checked.

8. Proportion of HIV-exposed or infected children younger than 1 year of age who received INH chemoprophylaxis during the selected period.

Numerator: Number of HIV-exposed or infected children younger than 1 year of age who had contact with active TB and were placed on INH prophylaxis.

*Calculation method: Pediatric HIV+ patients less than 1 year of age **excluding** deceased, those who discontinued treatment, transfers, and those who have active TB (See Figure 25)*

who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period **and** who received INH prophylaxis. See Figure 17 in the Adult section.

Denominator: Number of HIV-exposed or infected children younger than 1 year of age who had contact with active TB, excluding all discontinued cases and deceased.

*Calculation method: Pediatric HIV+ patients less than 1 year of age **excluding** deceased, those who discontinued treatment, transfers, and those who have active TB (See Figure 25) who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period*

9. Proportion of children who have had a nutritional assessment during the selected period.

Numerator: Number of HIV-exposed or infected children who have the necessary data to evaluate their nutritional status (weight and height or MUAC and head circumference) saved in their chart during the selected period.

*Calculation method: Pediatric HIV+ patients **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) **and** who have had a nutritional assessment completed during the selected period. See Figure 26.*

SIGNES VITAUX ET ANTHROPOMÉTRIE ACTUELS	
Température A or B or C or D not null	Pouls
TA	FR
/	
mmHg	
Poids A	Taille D
kg	cm
	P/T2 kg
Périmètre crânien (PC) B	PB/PC % (Si enfant âgé de 1 mois - 5 ans)
cm (Si enfant âgé de moins de 3 ans)	
Périmètre brachial (PB) C	Saturation en oxygène
cm (Si enfant âgé de 1 mois - 5 ans)	%

Reporter ces paramètres sur les courbes de croissance se trouvant au verso du dossier.

Figure 26: Vital Signs and Measurements has weight and height, or head circumference or MUAC completed.

Denominator: Number of HIV-exposed or infected who have had at least one medical consultation during the selected period, excluding discontinued cases and those who have had a negative PCR.

*Calculation method: Pediatric HIV+ patients **excluding** deceased, those who discontinued treatment, transfers and those who had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

10. Proportion of HIV-exposed or infected children who have correctly followed the Expanded Program on Immunization and the ministry standards for pediatric vaccinations according to their age.

Numerator: Number of HIV-exposed or infected children less than 1 years old followed in the clinic who have correctly received the appropriate immunizations for their age during the selected period.

*Calculation Method: HIV+ Pediatric patient of age X, **excluding** those who suspended*

treatment, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) **and** have received the appropriate immunizations for their age **X** by the time of the selected period.

Denominator: Number of HIV-exposed or infected children less than 1 years old followed in the clinic during the selected period, excluding discontinued cases.

*Calculation method: HIV+ Pediatric patient of age X, **excluding** those who have suspended treatment, deceased, transfers and those who have had a negative PCR result, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

Disaggregation: X (age) = 45 days, 75 days, 105 days or 270 days.

If $0 \leq X \leq 45$ days, then immunizations should meet the conditions shown in Figures 27 or 28.

If $45 < X \leq 75$ days, then immunizations should meet the conditions shown in Figures 29 or 30.

If $75 < X \leq 105$ days, then immunizations should meet the conditions shown in Figures 31 or 32.

If $105 < X \leq 270$ days, then immunizations should meet the conditions shown in Figures 33 or 34.

Vaccinations 45 Days Scenario				
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3
Hépatite B		<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
Polio (OPV/IPV)	<input type="text" value="22/01/2016"/> (dd/mm/yyyy)	Not null <input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
DiTePer		<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
HIB		<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
Pentavalent		Not null <input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
Pneumocoque		<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>
Rotavirus		Not null <input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	
ROR		<input type="text" value="(dd/mm/yyyy)"/>	<input type="text" value="(dd/mm/yyyy)"/>	
RR		<input type="text" value="(dd/mm/yyyy)"/>		

Figure 27: If child's age is less than or equal to 45 days old, Dose 1 of Polio, Pentavalent and Rotavirus should not be null.

Vaccinations 45 days scenario B					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
DITePer		Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
HIB		Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	(dd/mm/yyyy)		
ROR		(dd/mm/yyyy)	(dd/mm/yyyy)		
RR		(dd/mm/yyyy)			

Figure 28: Or, if child's age is less than or equal to 45 days old, Dose 1 of Hep B, Polio, DTP, HiB and Rotavirus should not be null.

Vaccinations 75 days scenario					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
DITePer		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
HIB		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		(dd/mm/yyyy)	(dd/mm/yyyy)		
RR		(dd/mm/yyyy)			

Figure 29: If child's age is greater than 45 days and less than or equal to 75 days old, Dose 1 and 2 of Polio, Pentavalent and Rotavirus should not be null.

Vaccinations 75 days scenario B					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
DTePer		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
HIB		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		(dd/mm/yyyy)	(dd/mm/yyyy)		
RR		(dd/mm/yyyy)			

Figure 30: Or, if child's age is greater than 45 days and less than or equal to 75 days old, Dose 1 and 2 of Hep B, Polio, DTP, Hib and Rotavirus should not be null.

Vaccinations 105 days scenario					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
DTePer		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
HIB		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		(dd/mm/yyyy)	(dd/mm/yyyy)		
RR		(dd/mm/yyyy)			

Figure 31: If child's age is greater than 75 days and less than or equal to 105 days old, Dose 1, 2 and 3 of Polio and Pentavalent and Dose 1 and 2 of Rotavirus should not be null.

Vaccinations 105 Days scenario B					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
DITePer		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
HIB		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		(dd/mm/yyyy)	(dd/mm/yyyy)		
RR		(dd/mm/yyyy)			

Figure 32: Or, if child's age is greater than 75 days and less than or equal to 105 days old, Dose 1, 2 and 3 of Hep B, Polio, DTP, and HiB and Dose 1 and 2 Rotavirus should not be null.

Vaccinations 270 Days scenario					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
DITePer		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
HIB		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		Not null (dd/mm/yyyy)	Or Not null (dd/mm/yyyy)		
Or RR		Not null (dd/mm/yyyy)			

Figure 33: If child's age is greater than 105 days and less than or equal to 270 days old, Dose 1, 2 and 3 of Polio and Pentavalent, Dose 1 and 2 of Rotavirus, and Dose 1 and 2 of MMR or Dose 1 of MR should not be null.

Vaccinations 270 Days scenario B					
Vaccin	Dose 0	Dose 1	Dose 2	Dose 3	Rappel (Dose 4)
Hépatite B		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	
Polio (OPV/IPV)	22/01/2016 (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
DiTePer		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
HiB		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)	(dd/mm/yyyy)
Pentavalent		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Pneumocoque		(dd/mm/yyyy)	(dd/mm/yyyy)	(dd/mm/yyyy)	
Rotavirus		Not null (dd/mm/yyyy)	Not null (dd/mm/yyyy)		
ROR		Not null (dd/mm/yyyy)	Or Not null (dd/mm/yyyy)		
Or RR		Not null (dd/mm/yyyy)			

Figure 34: Or, if child's age is greater than 105 days and less than or equal to 270 days old, Dose 1, 2 and 3 of Hep B, Polio, DTP, HiB, Dose 1 and 2 of Rotavirus, and Dose 1 and 2 of MMR or Dose 1 of MR should not be null.

11. Proportion of HIV-exposed infants who received ART prophylaxis during the selected period.

Numerator: Number of HIV-exposed infants between 0 and 18 months old put on ART prophylaxis during the selected period.

*Calculation method: HIV+ Pediatric patients between 0 and 18 months **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) and were placed on ART prophylaxis during the selected period. See Figures 35 and 36.*

Denominator: Number of HIV-exposed newborns seen in the clinic during the selected period.

*Calculation method: HIV+ Pediatric patients between 0 and 18 months **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

Ordonnance			
		Posologie journalière	Posologie journalière alternative, préciser
(-) INTIs			
Abacavir(ABC):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg BID	<input type="text"/>
Combivir(AZT+3TC):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg/150mg BID	<input type="text"/>
Didanosine(ddI):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> EC 400mg qd	<input type="text"/>
Emtricitabine(FTC):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 200mg qd	<input type="text"/>
Lamivudine(3TC):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 150mg BID	<input type="text"/>
Stavudine(d4T):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 40mg BID	<input type="text"/>
Tenofovir(TNF):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg qd	<input type="text"/>
Trizivir(ABC+AZT+3TC):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg/300mg/150mg BID	<input type="text"/>
Zidovudine(AZT):	<input type="radio"/> Rx <input type="radio"/> Prophy	<input type="radio"/> 300mg BID	<input type="text"/>

Figure 35: On the prescription form, "prophy" is checked for any of the INTIs.

(-) INNTIs		
Efavirenz(EFV):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 600mg qd
Nevirapine(NVP):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 200mg BID
(-) IPs		
Atazanavir(ATZN):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 400mg qd
Atazanavir+BostRTV:	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg/ 100mg qd
Indinavir(IDV):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 800mg TID
Lopinavir + BostRTV(Kaletra):	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 400mg/ 100mg BID
Darunavir:	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 300mg 2co BID
(-) II		
Raltegravir:	<input type="radio"/> Rx <input checked="" type="radio"/> Prophy	<input type="radio"/> 400mg 1co BID

Figure 36: On the prescription form, "prophy" is checked for any of the INNTIs, IPs, and II.

12. Proportion of HIV-exposed infants between 4 weeks old and 12 months old who have received a PCR test during the selected period

Numerator: Number of HIV-exposed infants between 4 weeks old and 12 months old who have received a PCR test at the clinic during the selected period.

*Calculation method: HIV+ Pediatric patients between 4 weeks old and 12 months old **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) and who had a PCR test done during the selected period. See Figure 37.*

Hematologie	Biochimie	Cytobacteriologie	Bacteriologie	ECBU	Parasitologie	Immuno-Virologie	Mycobacteriologie	Endocrinologie
-------------	-----------	-------------------	---------------	------	---------------	------------------	-------------------	----------------

Charge virale qualitative
 Charge virale quantitative
 PCR
 RÉSULTAT ET DATE

Not null

 Date

in reporting period

(dd/mm/yyyy)
 Commentaire

Figure 37: Laboratory form has a non-null result for PCR, the date for which falls in the reporting period.

Denominator: Number of HIV-exposed infants between 4 weeks old and 12 months old who were seen at the clinic during the selected period.

*Calculation method: HIV+ Pediatric patients between 4 weeks old and 12 months old **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

13. Proportion of HIV-exposed infants who had a negative PCR test result during the selected period.

Numerator: Number of HIV-exposed infants between 4 weeks and 18 months old who had a negative PCR test result.

*Calculation method: HIV+ Pediatric patients between 4 weeks old and 18 months old **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) and who had a PCR test done during the selected period. See Figure 38.*

Denominator: Number of HIV-exposed infants between 4 weeks and 18 months old who were seen at the clinic and had a PCR test completed during the selected period.

*Calculation method: HIV+ Pediatric patients between 4 weeks old and 18 months old **excluding** discontinued cases, deceased, and transfers, who have had at least one visit (HIV First Pediatric Visit or Pediatric Follow-up or Pediatric Rx) during the selected period.*

Figure 38: Laboratory form with PCR result as “undetectable” for which the date falls in the selected period.

Display Options

Table 1 describes the indicators for which the user can select a start date and end date or a single date. The table also specifies which indicators include selection options for the user.

Table 1: Display Options

	Start & End Date	Single Date	Selection Option	Notes
Adulte				
Retention of patients on ARV treatment	No	Yes	Yes	End user can pick a date and a period (6,12,24,48, or 60 months)
CD4 at enrollment	Yes	No	No	
Enrollment in ART	Yes	No	No	
Proportion of adult PLHIV who have received cotrimoxazole prophylaxis during the selected period	Yes	No	No	
Proportion of HIV+ patients on ARVs who have had an adherence evaluation during the last 3 months	No	Yes	No	
Proportion of HIV+ patients on ART who are adherent to treatment during the selected period	No	Yes	No	
Proportion of PLHIV tested for TB at enrolment during the selected period	Yes	No	No	
Proportion of PLHIV who received INH	Yes	No	No	

chemoprophylaxis during the selected period				
Proportion of HIV+ patients who have had a nutritional assessment during the selected period	Yes	No	No	
Proportion of HIV+ patients identified as severely undernourished during the selected period	Yes	No	No	
Proportion of HIV+ women who use a family planning method during the selected period	Yes	No	No	
Proportion of HIV+ pregnant women who received triple-drug therapy (HAART) during the selected period	Yes	No	No	
Proportion of pregnant women in prenatal care or L&D who received an HIV test during the selected period	Yes	No	No	
Proportion of HIV+ patients on ART who received a viral load test at 6 months after the initiation of treatment	Yes	No	No	
Proportion of HIV+ patients on ART who received a viral load test at 18 months after the initiation of treatment	Yes	No	No	
Proportion of HIV+ patients on ART for more than 6 months who have an undetectable viral load	Yes	No	No	
Pédiatrique				
Proportion of children regularly followed on ART	No	Yes	Yes	End user picks a date and a period (6,12,24,48, or 60 months)
Proportion of children tested positive for HIV and placed on ART during the selected period	Yes	No	No	
Proportion d'enfants exposés et infectés au VIH ayant reçu la prophylaxie au cotrimoxazole durant la période d'analyse	Yes	No	No	
Proportion d'enfants VIH sous ARV ayant bénéficié d'une évaluation sur l'adhérence au cours des 3 derniers mois.	No	Yes	No	
Proportion d'enfants VIH+ sous ARV considérés comme adhérents	No	Yes	No	
Proportion d'enfants VIH+ dépistés pour la tuberculose à l'enrôlement au cours de la période d'analyse	Yes	No	No	
Pourcentage d'enfants VIH positifs âgés de plus d'un an éligible ayant reçu la	Yes	No	No	

prophylaxie a l'INH durant la période d'analyse				
Pourcentage d'enfants exposes ou infectes au VIH âgés de moins d'un an ayant reçu la prophylaxie a l'INH durant la période d'analyse	Yes	No	No	
Proportion d'enfants ayant bénéficié d'une évaluation nutritionnelle au cours de la période d'analyse	Yes	No	No	
Proportion d'enfants exposés ou infectés au VIH ayant reçu les vaccins adéquats pour leur âge selon le PEV.	Yes	No	Yes	end user pick a start and end date and an age interval 45,75,105,270 days)
Proportion d'enfants exposés au VIH ayant bénéficié de la prophylaxie aux ARV au cours de la période d'analyse.	Yes	No	No	
Proportion d'enfants exposés au VIH âgés de 4 semaines à 12 mois ayant bénéficié d'un test PCR diagnostic au cours de la période d'analyse.	Yes	No	No	
Proportion d'enfants exposés au VIH ayant un test PCR négatif au cours de la période d'analyse.	Yes	No	No	

For the indicators that need only a single date, the start date should be used. The selection of indicators is done by the user as described in Table 2. A combobox is used for the indicators with options.

Table 2

Indicateur	Option	Selection
Adulte		<input type="checkbox"/>
Rétention des patients en prise en charge ARV	ComboBox	<input checked="" type="checkbox"/>
CD4 à l'enrôlement		<input checked="" type="checkbox"/>
Enrôlement ARV		<input checked="" type="checkbox"/>
Pédiatrique		<input type="checkbox"/>
Proportion d'enfants régulièrement suivis sous ARV	ComboBox	<input type="checkbox"/>
Proportion d'enfants testés VIH positifs placés sous ARV durant la période		<input checked="" type="checkbox"/>

Date de debut: / /

Date de fin: / /

Soumettre

The display of the report should be as shown in Table 3 and 4. Table 4 is an enlargement of the first section of table 3.

Table 3

Rapport HEALTHQUAL
31/07/16 - 31/01/17

Dépt.	Clinique	Type	Patients en cours									Nom de l'indicateur																							
			Num.			Dén.			%			Num.			Dén.			%																	
			H	F	Tot	H	F	Tot	H	F	Tot	H	F	Tot	H	F	Tot	H	F	Tot															
Ouest	Sanatorium de Siqueneau	Adulte	570	674	1244	302	353	655	451	534	985	67	661	665	1	9	10	119	140	259	8	64	39	0	0	0	0	279	307	566	0	0	0		
		Péd.	1	3	4	1	0	1	1	1	2	100	0	50	0	0	0	0	0	0	2	2	0	0	0	0	0	0	1	0	1	0	0	0	0
		Total	571	677	1248	303	353	656	452	535	987	67	66	66.5	1	9	10	119	142	261	0.8	6.3	3.8	0	0	0	0	280	307	567	0	0	0		

Table 4

Dépt.	Clinique	Type	Patients en cours									Nom de l'indicateur								
			Num.			Dén.			%			Num.			Dén.			%		
			H	F	Tot	H	F	Tot	H	F	Tot	H	F	Tot	H	F	Tot			
Ouest	Sanatorium de Siqueneau	Adulte	570	674	1244	302	353	655	451	534	985	67	661	665						
		Péd.	1	3	4	1	0	1	1	1	2	100	0	50						
		Total	571	677	1248	303	353	656	452	535	987	67	66	66.5						