

USER MANUAL FOR THE SIP WEB



PERINATAL
INFORMATION
SYSTEM

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

CLAP

Latin American Center for Perinatology,
Women and Reproductive Health

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USER MANUAL FOR THE SIP WEB - ONE-CLICK ETMI PLUS

Since 2010, Pan American Health Organization (PAHO) Member States have committed to the elimination of mother-to-child transmission (EMTCT) of HIV and syphilis infection in the Region. These commitments were renewed and expanded in 2016 through the approval of the Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections (2016-2021), an action aimed at ensuring that AIDS and Sexually Transmitted Infections (STIs) cease to constitute public health problems in the Region of the Americas (resolution CD55.R5)¹. The plan of action expands the EMTCT, leveraging the maternal and child health (MCH) platform to include the elimination of other preventable communicable diseases in the Americas, such as hepatitis B and Chagas disease (the latter in endemic countries). The ETMI Plus initiative aims to achieve and sustain the elimination of mother-to-child transmission of HIV, syphilis, Chagas and perinatal hepatitis B virus (HBV) as public health issues. The Plan embraces the principles and lines of action of the Strategy for Universal Access to Health and Universal Health Coverage² and builds on the lessons learned from the PAHO 2010 Strategy and Plan of Action for the Elimination of Maternal and Child HIV and Congenital Syphilis.

In July 2017, PAHO launched the document ETMI Plus: Framework for Elimination of Mother-to-Child Transmission of HIV, Syphilis, Hepatitis B, and Chagas³.

The ETMI Plus initiative spans the global strategies and regional action plans and targets below:

- *Sustainable Development Goals (SDG)*, in particular Goal 3 (SDG 3): to ensure the health and well-being for all, particularly in terms of reproductive and maternal and child health, communicable and non-communicable diseases, universal health coverage, and access for all to quality, effective and safe medicines and vaccines at an affordable price. Goal 3 comprises three relevant targets that must be met by 2030, namely: a) ending epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and promoting control of hepatitis, waterborne diseases and other communicable diseases; b) ensuring universal access to sexual and

reproductive health care services, including services related to family planning, information and education, as well as integrating reproductive health into national strategies and programs, and c) reducing the global maternal mortality rate to less than 70 deaths per 100 000 live births, also by 2030⁴.

- *The Global Strategy for the Health of Women, Children and Adolescents (2016-2030)* envisions a world where all women, children and adolescents in all settings realize their rights to physical and mental health and well-being, enjoy social and economic opportunities and are able to fully participate in shaping sustainable and prosperous societies. This global strategy supports the three targets of SDG 3⁵.
- The World Health Organization (WHO) *Global Health Sector Strategies on HIV, Sexually Transmitted Diseases and Viral Hepatitis 2016-2021* outline the way towards ending AIDS and eliminating sexually transmitted infections and viral hepatitis as major public health threats by 2030. The strategies define impact and service coverage targets for 2020 and 2030, including elimination of mother-to-child transmission of HIV, hepatitis B, and syphilis, to be achieved through recommended actions undertaken by WHO and its Member States⁶⁻⁸.
- *The PAHO Plan of Action for the Prevention and Control of Viral Hepatitis (2015)*, focuses on developing and implementing coordinated public health policies and interventions aimed at eliminating hepatitis B and C in PAHO Member States by 2030. This plan of action includes the expansion of hepatitis B vaccine coverage, such as the timely birth doses and third doses for infants, and “catch-up” vaccinations for adults and youth at higher risk of infection. As of 2015, 8 out of 35 Member States (26%) had set the goal of eliminating hepatitis B⁹.
- *The PAHO Plan of Action for the Elimination of Neglected Infectious Diseases and Post-Elimination Actions (2016-2022)* addresses the elimination of 13 diseases in the Americas, including Chagas¹⁰. In addition, the PAHO *Strategy and Plan of Action for the Chagas Disease Prevention, Control and Care (2010)*, includes the specific objective of supporting the implementation of secondary prevention of congenital Chagas disease. It recognizes that reducing mother-to-child transmission of this disease requires screening for *T. cruzi* infection in pregnant women as part of universal prenatal care, together with the monitoring, diagnosis and treatment of all newborns of infected mothers¹¹.

- *The Plan of Action on Immunization (2016-2020)* recommends that all countries in the Region introduce hepatitis B vaccination in children under 1 year of age and seek at least a 95% coverage. This plan of action is consistent with the most recent (2009) WHO Position Paper on hepatitis B vaccines, in which all countries are encouraged to include a birth dose of the hepatitis B vaccine, applicable to all newborns within their first 24 hours. By the end of 2016, 22 countries and territories in the Region had done so¹²⁻¹⁴.

Vision, Goal and Targets of the ETMI Plus initiative:

The vision of the ETMI Plus initiative is to ensure a generation free of HIV, congenital syphilis, hepatitis B and Chagas disease. The ultimate goal of the regional initiative is to eliminate mother-to-child transmission of HIV, syphilis, Chagas disease and perinatal hepatitis B by 2020 from the Americas. The elimination targets are to:

- reduce the rate of HIV mother-to-child transmission to 2% or less;
- reduce the incidence of congenital syphilis (including stillbirths) to 0.5 cases or less per 1000 live births;
- reduce the prevalence of HBsAg in children from 4 to 6 years of age to 0.1% or less;
- ensure that at least 90% of children with Chagas disease get cured and their serology turns negative after treatment.

To achieve and sustain these objectives, it is essential to achieve and maintain the following programmatic targets:

Sexual and Reproductive Health/Mother-Child Health:

- Reduce unmet family planning needs to 10% or less among women aged 15 to 49 years.
- Increase coverage of antenatal care and hospital deliveries by 95% or more.

HIV and Syphilis:

- Increase coverage of HIV infection and syphilis screening among pregnant women by 95% or more.
- Increase coverage of adequate treatment of HIV infection and syphilis among pregnant women to 95% or more.

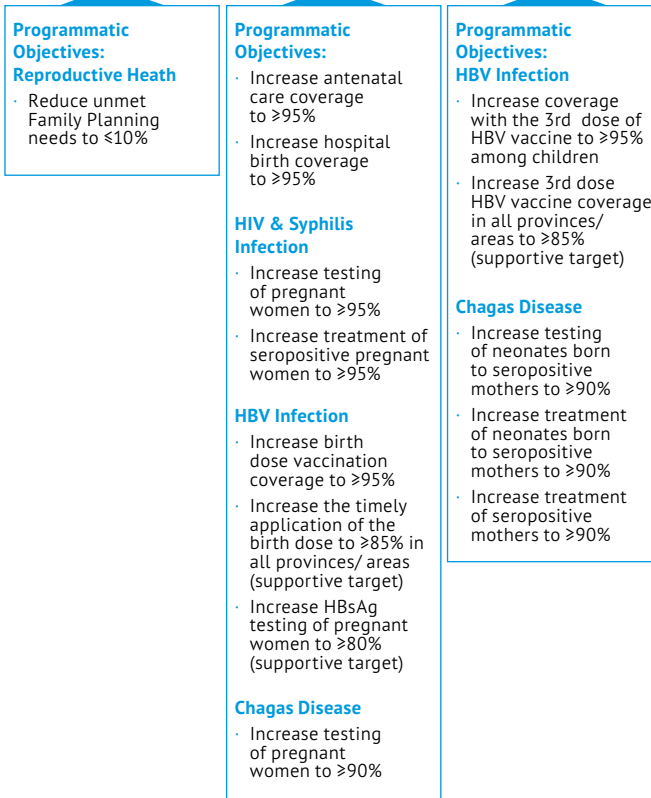
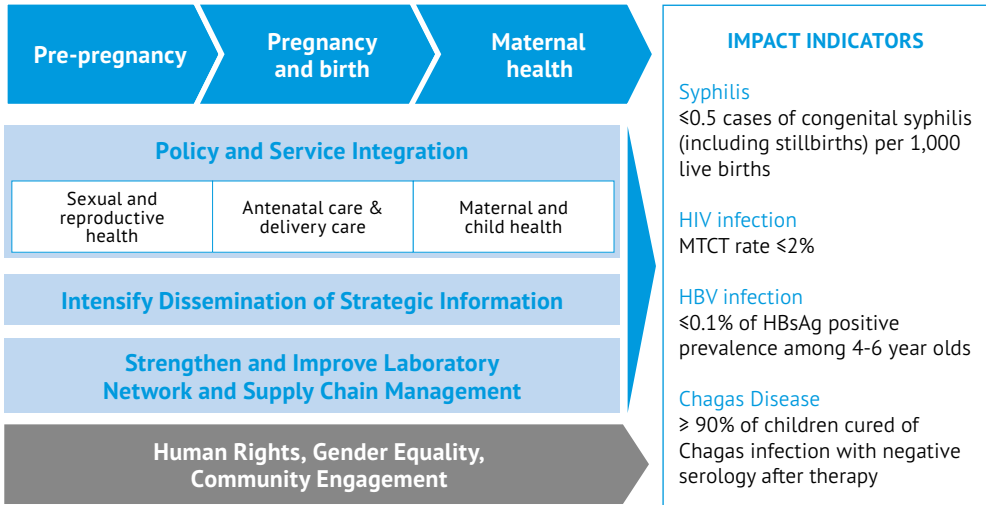
Hepatitis B:

- Increase the coverage of timely birth dose of the hepatitis B vaccine by 95% or more (within the newborns' first 24 hours).
- Increase coverage with the third dose of hepatitis B vaccine in childhood to 95% or more.
- Increase coverage of timely birth-dose and third-dose vaccination for hepatitis B in all provinces or territorial areas to more than 85% (supporting target)
- Increase HBsAg testing coverage among pregnant women to 80% or more (supporting target).
- Increase the provision of HBV-specific immunoglobulin to 80% or more newborns of mothers infected with HBV (supporting target).

Chagas:

- Increase the screening of pregnant women by 90% or more.
- Increase the screening of newborns of seropositive mothers to 90% or more.
- Increase the treatment of seropositive mothers by 90% or more.

The ETMI Plus Conceptual Framework



Using the SIP Web to monitor ETMI Plus

The Perinatal Information System (SIP) is widely used in the Latin American and Caribbean region to monitor antenatal and childbirth care. As a result, using the SIP to obtain the ETMI Plus targets on an on-going basis offers many advantages. The on-line implementation of the SIP Web or SIP made it possible to develop a one-click tool to calculate some of these indicators automatically using the SIP databases available in the countries of the region. This tool aims to provide the countries with the on-demand provision of the indicators required for EMTCT. It is important to note, however, that even with the tools available, the timely entry of data and quality control of the data continue to be relevant.

ETMI Plus indicators available in the SIP WEB tool one-click ETMI Plus:

1) ETMI PLUS IMPACT INDICATORS:

- a) **Annual rate of reported cases of congenital syphilis as per WHO definition for every 1,000 live births:** Numerator - number of reported cases of congenital syphilis in a given year/Denominator - total number of live births that same year.

OBS: The construction of this indicator requires defining the numerator as cases of congenital syphilis in children born to mothers with a positive test for syphilis (non treponemic syphilis test <20 weeks/ syphilis AND/OR non treponemic syphilis test \geq 20 weeks AND/OR treponemic syphilis test <20 weeks AND/OR treponemic syphilis test \geq 20 weeks AND/OR labor-syphilis test) and penicillin naïve (syphilis treatment <20 weeks AND/OR syphilis treatment \geq 20 weeks).

2) INDICATORS RELATED WITH PRIMARY PREVENTION AND SEXUAL AND REPRODUCTIVE HEALTH:

- a) **Percentage of pregnancy planning:** Numerator - number of pregnancies planned in a given year/Denominator - total number of pregnant women that same year (including abortions and stillbirths).
- b) **Failure of contraceptive method:** out of the overall number of births in a given year, this indicator describes the number of women who did not use any method, or who used a barrier method, IUD, hormonal contraception, emergency contraception and/or natural methods.
- c) **Contraceptive method failure among pregnant women with unplanned pregnancies:** considering the births to women with unplanned pregnancies in one year, this indicator describes the number of women who used no methods, a barrier method, IUD, hormonal contraception, emergency contraception and natural methods.
- d) **Percentage of pregnant/puerperal adolescents:** this indicator breaks down the percentage of pregnant women by age group (<15, 15-19, 20-34, 35-44, 45-49, > 49) considering the total number of pregnancies one given year (including abortions and stillbirths).
- e) **Percentage of pregnant women receiving care from qualified health care professionals during the antenatal period - at least one visit:** Numerator - number of pregnant women that attended at least one antenatal visit with qualified health care professionals in a given year/Denominator: number of live births that same year.
- f) **Percentage of pregnant women receiving care from qualified health care professionals during the antenatal period - 4 or more visits:** Numerator - number of pregnant women that attended at least four antenatal care visits with qualified health care professionals in a given year/Denominator: number of live births that same year.
- g) **Percentage of pregnant women whose first antenatal care visit occurs within a gestational age <20 weeks:** Numerator - number of pregnant women who attended their first antenatal care visit with qualified health care professionals at a gestational age < 20 weeks in a given year/Denominator: number of live births that same year.
- h) **Percentage of HIV positivity among pregnant women:** Numerator - total number of pregnant/delivering/puerperal women with positive HIV tests in a given year/Denominator - number of pregnant women undergoing HIV testing that same year.

- i) **Percentage of HIV positivity among young pregnant women (15-24):** Numerator - number of young pregnant women (15-24) with positive HIV test in a given year/Denominator - number of pregnant women aged 15-24 years tested for HIV that same year.
- j) **Percentage of HIV positivity among pregnant adolescents (15-19):** Numerator - number of pregnant adolescents (15-19) with positive HIV tests in a given year/Denominator - number of pregnant women aged 15-19 years tested for HIV that same year.
- k) **Percentage of positivity for syphilis among pregnant women:** Numerator - number of pregnant women with positive syphilis testing in a given year/Denominator - number of pregnant women tested for syphilis that same year.
- l) **Percentage of positivity for syphilis among pregnant young women (15-24):** Numerator - number of pregnant young women (15-24) with positive syphilis testing in a given year/Denominator - number of pregnant women aged 15-24 years undergoing syphilis testing that same year.
- m) **Percentage of positivity for syphilis in pregnant adolescents (15-19):** Numerator - number of pregnant adolescents (15-19) with positive syphilis tests in a given year/Denominator - number of pregnant women aged 15-19 years that were tested for syphilis that same year.

3) INDICATORS RELATED TO DIAGNOSIS, TREATMENT AND MONITORING:

- a) **Percentage of pregnant women tested for syphilis during pregnancy:** Numerator - number of pregnant women tested for syphilis during pregnancy in a given year (should refer only to the first test performed)/Denominator - total number of pregnancies that same year.
- b) **Percentage of pregnant women tested for syphilis during pregnancy before 20 weeks of pregnancy:** Numerator - number of pregnant women tested for syphilis during pregnancy before 20 weeks in a given year (should refer only to the first test performed)/Denominator - total number of pregnancies that same year.
- c) **Percentage of pregnant women with positive serology for syphilis, whose sexual partners receive adequate treatment:** Numerator - number of pregnant women with positive tests for syphilis during pregnancy whose sexual partners were identified and treated in a given year/Denominator - number of pregnant women with positive tests for syphilis during pregnancy that same year.

- d) **Percentage of pregnant women with positive serology for syphilis receiving adequate treatment** (at least 2.4 million units of intramuscular benzathine penicillin in a single dose, at least 30 days before delivery): Numerator - number of pregnant women with positive tests for syphilis during pregnancy and who received adequate treatment in a given year/Denominator - number of pregnant women with positive tests for syphilis during pregnancy that same year.
- e) **Percentage of pregnant women who were tested for HIV and who received their results during pregnancy, childbirth or the puerperal period (<72 hours), including those with HIV-positive serology known in advance:** Numerator - number of pregnant women with known HIV status, who were tested for HIV and received their results during pregnancy, at childbirth or immediately postpartum (<72 hours postpartum), including those previously tested positive for HIV, in a given year/Denominator - Total number of pregnancies that same year.
- f) **Programmatic percentage of pregnant women infected with HIV who received antiretroviral agents to reduce the risk of mother-to-child transmission of HIV** (one single dose of nevirapine is not considered a valid scheme to prevent mother-to-child transmission of HIV): Numerator - number of pregnant women infected with HIV that received antiretrovirals (ARV) during pregnancy or at childbirth to reduce the risk of mother-to-child transmission of HIV in a given year/Denominator - number of pregnant women infected with HIV that same year.
- g) **Percentage of children born to HIV-infected mothers receiving antiretrovirals to prevent mother-to-child transmission of HIV:** Numerator - number of children born to HIV-infected mothers in a given year that started ARV prophylaxis to reduce the risk of HIV mother-to-child transmission in a given year/Denominator: Number of pregnant women infected with HIV that gave child that same year.
- h) **Percentage of children born to HIV-infected mothers by feeding at discharge from hospital:** considering the total number of children born to HIV-infected mothers in a given year, this indicator states the type of feeding (exclusive breastfeeding, partial breastfeeding or formula).
- i) **Percentage of stillbirths attributable to maternal syphilis:** Numerator - number of stillbirths born to seropositive mothers for untreated or inadequately treated syphilis in a given year/Denominator - Number of stillbirths (definition: birth of fetus showing no vital signs with a gestational age ≥ 20 weeks or with a fetal weight ≥ 500 grams) that same year.
- j) **Percentage of children with congenital syphilis receiving adequate treatment:** Numerator - number of children positive for congenital syphilis who received penicillin therapy/Denominator: live births classified as congenital syphilis cases

- k) **Percentage of pregnant women screened for Chagas disease during pregnancy:** Numerator - number of pregnant women tested for Chagas during antenatal care in a given year/Denominator - number of pregnant women seen in antenatal services that same year.
- l) **Percentage of Chagas disease (positive *T. cruzi*) among pregnant women:** Numerator - total number of pregnant women with positive test for Chagas in a given year/Denominator - number of pregnant women tested for Chagas that same year.
- m) **Percentage of Chagas disease (positive *T. cruzi*) among pregnant women aged 15-24 years:** Numerator - total number of pregnant women aged 15-24 years with positive test for Chagas in a given year/Denominator - number of pregnant women aged 15- 24 years tested for Chagas that same year.
- n) **Percentage of Chagas disease (positive *T. cruzi*) in pregnant women over 24 years old:** Numerator - total number of pregnant women over 24 years of age with positive Chagas test in a given year/Denominator - number of pregnant women over 24 years tested for Chagas that same year (overall and by age groups).
- o) **Percentage of newborns tested for Chagas disease:** Numerator - number of newborns undergoing parasitology testing for Chagas at birth in a given year/Denominator - total number of newborns of mothers diagnosed with Chagas that same year.
- p) **Percentage of newborns with a positive Chagas test:** Numerator - number of newborns with a positive parasitology test for Chagas disease in a given year/ Denominator - number of newborns of mothers diagnosed with Chagas that same year.
- q) **Percentage of pregnant women immunized for Hepatitis B:** Numerator - number of pregnant women immunized for Hepatitis B before or during pregnancy in a given year/Denominator - number of pregnant women seen in antenatal services that same year.
- r) **Percentage of pregnant women tested to diagnose Hepatitis B (HBsAg) during pregnancy:** Numerator - number of pregnant women tested for Hepatitis B during antenatal care in a given year/Denominator - number of pregnant women seen in antenatal services that same year.
- s) **Proportion of newborns benefiting from the timely dose of hepatitis B vaccine (within the first 24 hours of life):** Numerator - total number of infants that received the first dose of Hepatitis B vaccine within their first 24 hours in a given year/Denominator - number of live births that same year.

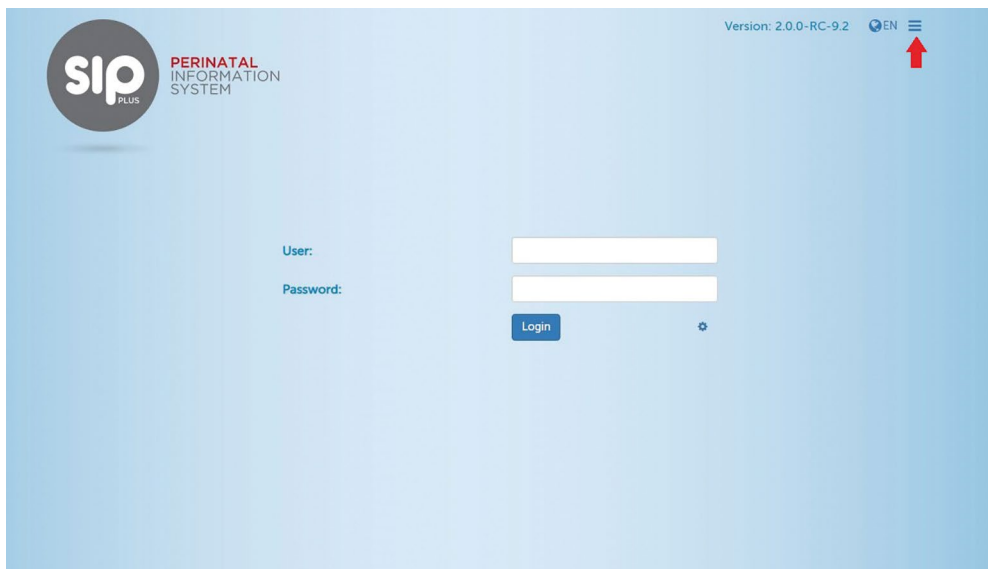
Step-by-Step Instructions for the Use of SIP Web's one-click ETMI Plus:

Instructions for obtaining the etmi plus indicators

These instructions detail the steps to follow with the SIPPLUS software to access the indicators report

Start by loading the software into the computer, entering the URL in which it was installed. This depends on each installation; here we will use the one installed in the CLAP servers.

As you enter ***www.siplus.org:9000***, the screen below will appear:

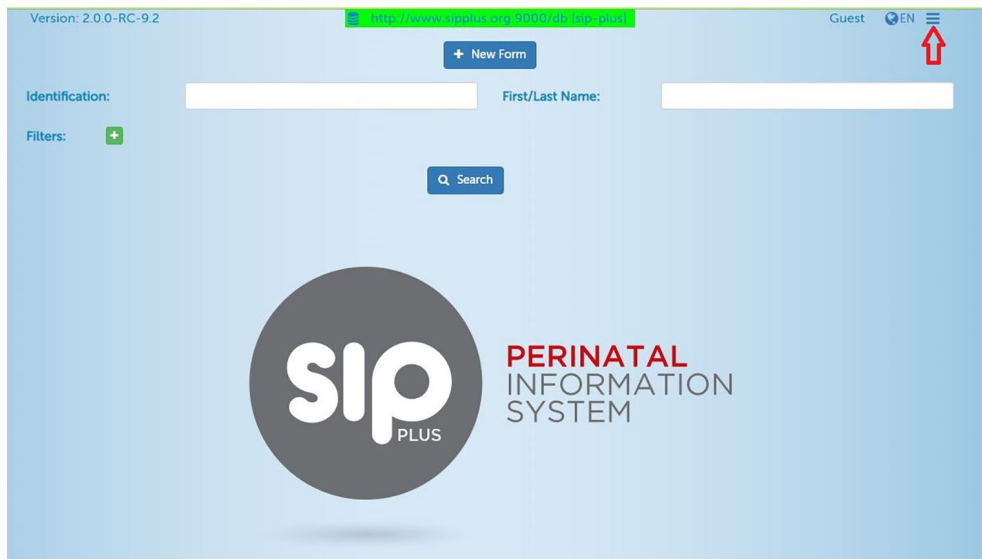


At top right side, change language to EN.

Users need to log in to the system the first time. Users and passwords - along with their specific roles - are defined within the system. We already have defined users for this test site:

Usuario: guest, **contraseña:** sipguest

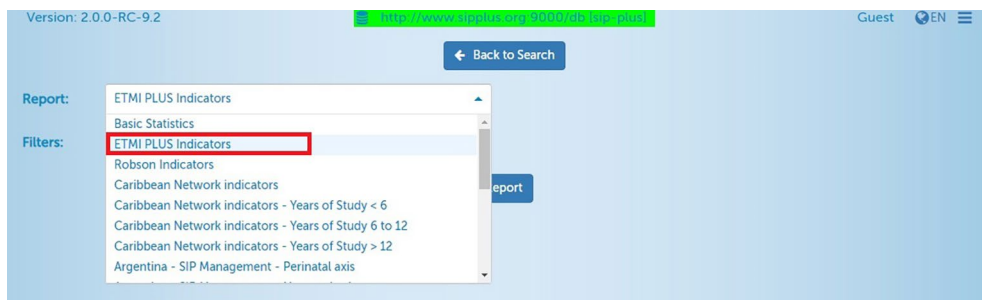
Once inside the system, activate the menu on the right upper corner:



Select the option “Reports” in the menu



Finally, select “ETMI PLUS Indicators” from the report menu. The system quickly processes the data and issues the report on the same screen.



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