



A Fellowship of Evidence in Clinical Practice: Adapting Foreign Guidelines for Middle Africa

Dr Okwen Patrick¹, Inez Van Overschelde², Prof Robert Vander Stichele³

1. eBASE Africa 2. iScientia Belgium 3. University of Ghent



@ebase_africa



ebmafrica.net

... One Evidence Portal to guide them all ...

Nigerian national guideline for Treatment of uncomplicated malaria at the community level

National guideline for Nigeria
General practitioner, Nurse

20/05/2015



First line treatment of Tuberculosis

WHO guideline
General practitioner, Nurse

30/07/2019



Guide pratique du Diagnostic du Paludisme au Cameroun

National guideline for Cameroon
Médecin généraliste, Infirmier

18/07/2019



Background

- Current Practice is informed by (mostly outdated) textbooks from Europe
- Limited national guidelines, often not up to date
- Limited number of WHO Guidelines, relevant for Sub-Saharan Africa
- International point of care evidence summaries (e.g. DUODECIM EBM-GUIDELINES) not contextualized to Sub-Saharan Africa
- Internet connections not always reliable rural areas



... Best Evidence for Best Practice Decision Making ...



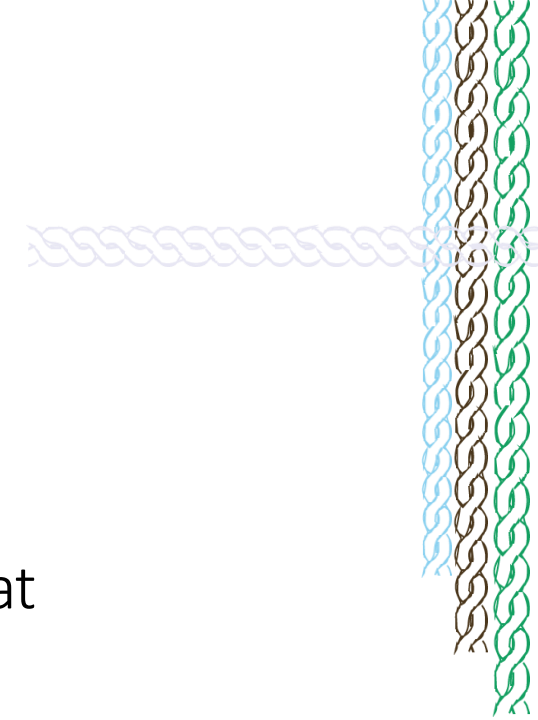
Problem Statement

- Paper-based health records: Health paper records given to patients, with risk of loss
- Silo Practice: Lack of flow of information within health systems on available health technologies





Challenges With Service Delivery



- Service Providers Barriers
 - Lack of access to research evidence to guide practice
 - Lack of financial means to purchase equipment and medication at primary care
 - Workforce
- Service Users
 - Lack finance to pay for bills especially at district and referral hospitals
 - Lack of information on genuine medicines
 - High rates of counterfeit medicines
 - Weak insurance platforms
 - Lack of health records

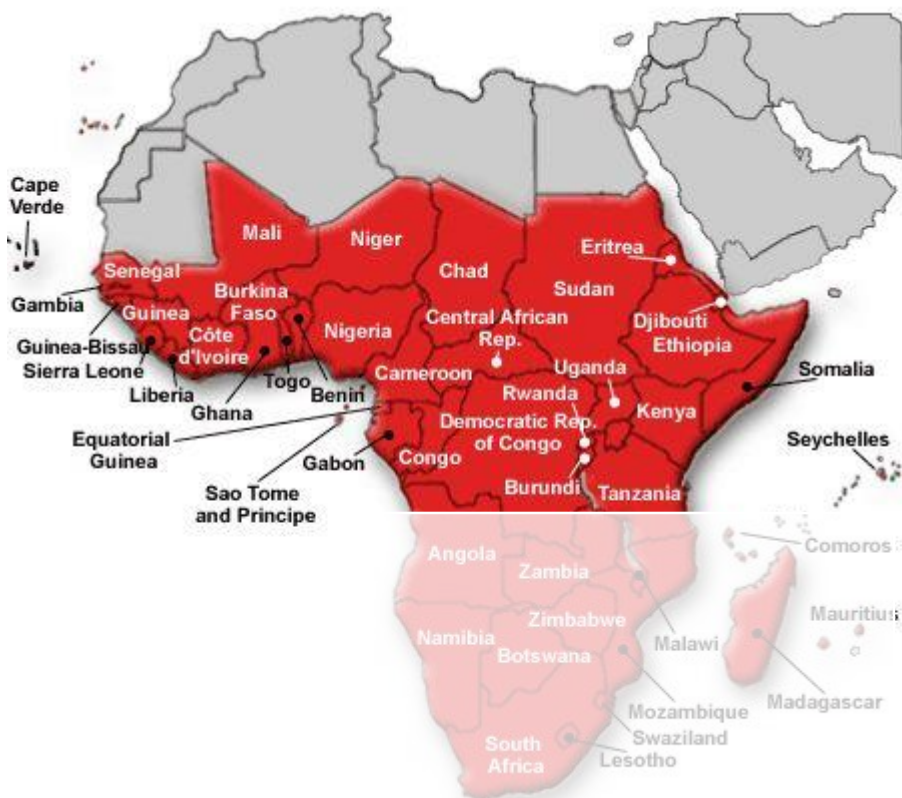


Opportunities

- Internationally developed comprehensive suites of guidelines
 - Finnish, Belgian and French experiences with EBM-GUIDELINES
 - WHO Guidelines built for Africa for Malaria, HIV, TB and Soil-transmitted Helminths
 - JBI clinical fellowship evidence based practice criteria
 - Tools to develop SSA specific recommendations (MAGICApp's RapidRecs)
- Enablers in Africa
 - Close collaboration of WHO with ministries of health
 - Africa Evidence Network EIDM programs
 - Increased donor interest in Africa
- Availability of internet connections on 4G



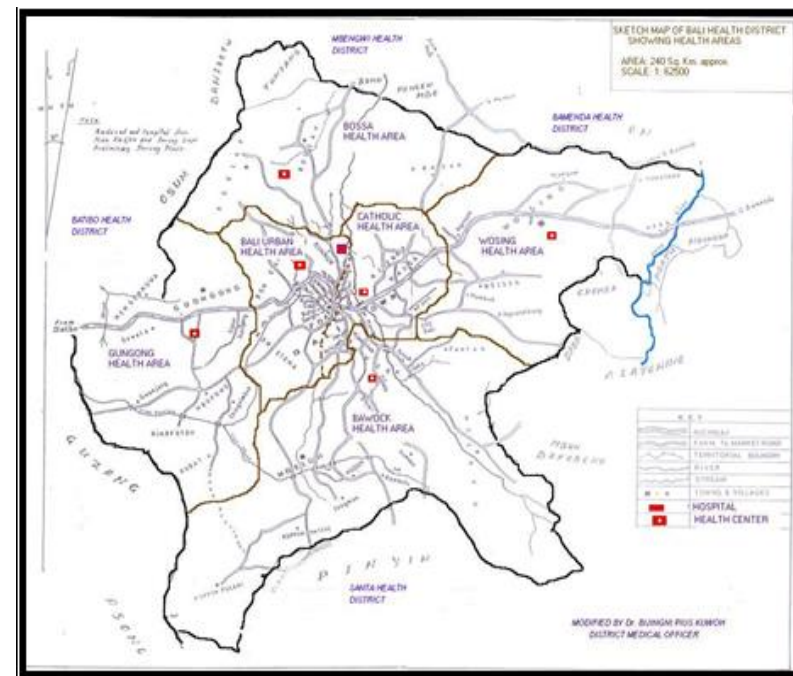
Setting



Cameroon in Middle Africa



NW Region in Cameroon

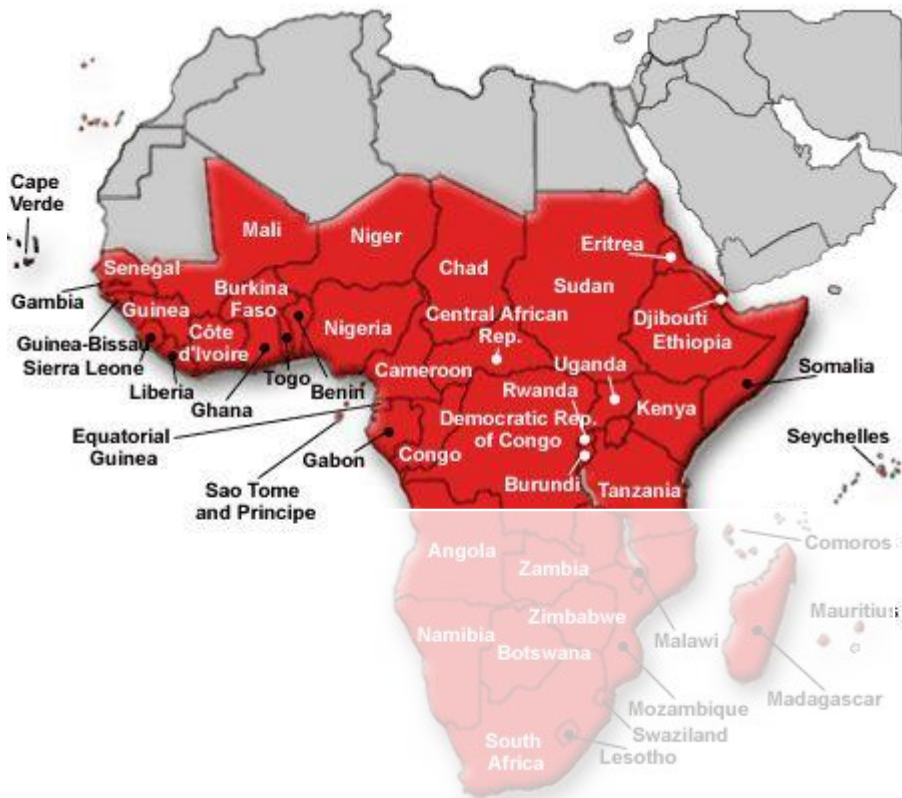


Bali District in NW Region

... Best Evidence for Best Practice Decision Making ...



Setting



Nigeria in Middle Africa



Cross River State

Cross River State in Nigeria



Calabar district in Cross River State

... Best Evidence for Best Practice Decision Making ...



Air travel distance : 144 miles

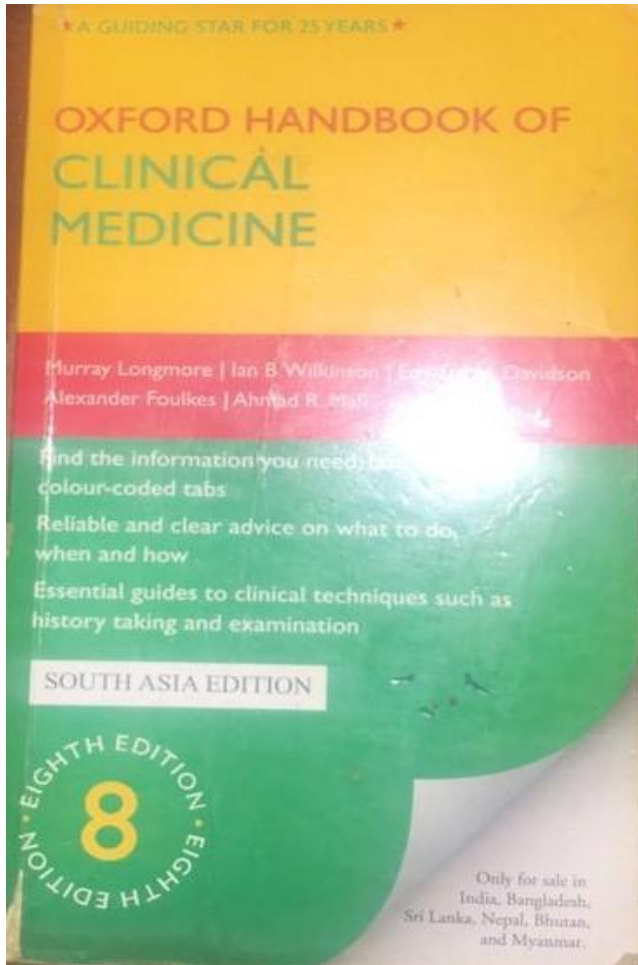
Road distance: 335 km (5,5 hours)

Best Evidence for Best Practice Decision Making

Objective

- To design an point of care clinical decision support system to guide clinical practice in middle Africa

What Clinicians use now



Choices we propose

REPUBLIC OF CAMEROON
Paix - Travail - Progrès
MINISTÈRE DE LA SANTÉ PUBLIQUE
SECRETARIAT TECHNIQUE DU BÉNÉFICIAIRE PRINCIPAL
PROGRAMME NATIONAL DE LUTTE CONTRE LE PALUDISME
SECRETARIAT PERMANENT

REPUBLIC OF CAMEROON
Paix - Work - Fairness
MINISTRY OF PUBLIC HEALTH
TECHNICAL SECRETARIAT OF PRINCIPAL RECIPIENT
NATIONAL MALARIA CONTROL PROGRAMME
PERMANENT SECRETARIAT

GUIDE DE PRISE EN CHARGE DU PALUDISME AU CAMEROUN
A L'USAGE DU PERSONNEL DE SANTÉ

Yasouli/RS/2013

Recommendation 1

TDF + FTC-based therapy
Treatment backbone: TDF + FTC
Combined with one of:
LPV/r, DRV/r, ATZ/r, RAL, EFV, RPV

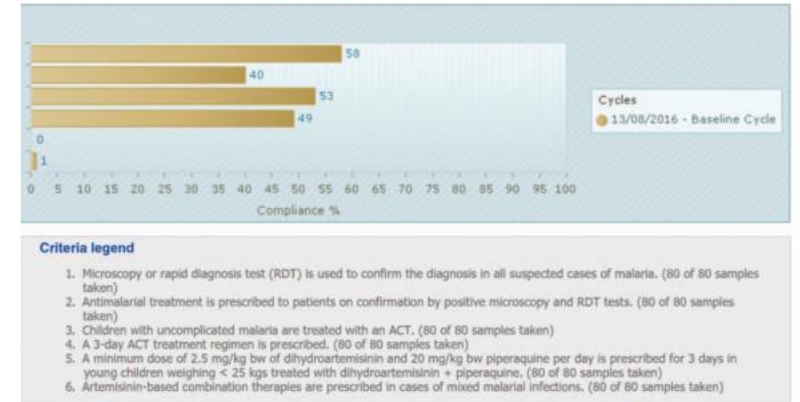
AZT + 3TC-based therapy
Treatment backbone: AZT + 3TC
Combined with one of:
LPV/r, DRV/r, ATZ/r, RAL, EFV, RPV, ABC

Favours TDF + FTC cART Favours AZT + 3TC cART

Applies to: All

We suggest a zidovudine and lamivudine-based antiretroviral regimen over one that includes tenofovir and emtricitabine

... Best Evidence for Best Practice Decision Making ...
consultation decision aids for use in your practice



Prise en charge du paludisme
GUIDE DU PARTICIPANT

MODULE DE FORMATION À LA LUTTE CONTRE LE PALUDISME

Organisation mondiale de la Santé
WHO guideline
CPG for Uncomplicated Malaria

https://www.ebmafrica.net/en/Pages/default.aspx

Imported From File... Alexander von Hum... French Online Chec...

Clinical Practice Guidelines for Uncomplicated Malaria

National guideline
General practitioner, Nurse
1/05/2015

Filarases
Foreign guideline
General practitioner, Pharmacist
28/02/2017

Introduction to intestinal helminthiasis
Foreign guideline
General practitioner, Pharmacist
14/11/2017

Lymphomas
Foreign guideline adopted to regional context
General practitioner
6/02/2019

Strongyloidiasis
Foreign guideline
General practitioner, Pharmacist
28/02/2017

Trichuriasis
Foreign guideline
General practitioner, Pharmacist
28/02/2017

CPG for Uncomplicated Malaria
WHO guideline
General practitioner, Nurse
1/04/2015

effective basic services

EBMAfricaNet

- PoC clinical decision support system
- Evidence portal
- Editorial team made of 7 African clinicians including members of 4 GIN Africa community and 2 JBI clinical fellows
- Nigeria, Cameroon, and Rwanda
- Bilingual
- Use of existing guidance:
 - National guidelines
 - WHO guidelines
 - Duodecim
- Developed by eBASE Africa, iScientia Belgium, and GIN Africa community
www.ebmafrica.net

EBMAFRICA.NET

Welcome!

The current website ebmafrica.net consists of 1000 EBM Guidelines from Duodecim, more than 4000 evidence summaries and links to thousands of articles on PubMed & Cochrane.

African productions will gradually enrich the knowledge base!

This presentation shows you how to add national or international information to the existing database.

- You learn how to add an existing guide line from the WHO or other EBM producer.
- We explain how you can add local information to an existing guideline.

This site is coordinated by eBASE Africa, in collaboration with iScientia International.



Welkom bij ebpracticenet
 ebpracticenet is het referentieplatform voor Evidence Based Practice voor alle Belgische zorgverleners. Hier vindt u alle richtlijnen en andere EBP-informatie gevalideerd door het EBP-programma.

Dutch

Search...

Mijn zoekhistoriek | Geavanceerd zoeken | Zoektoe...

Kies een beroep voor meer specifieke informatie

Huisarts, Verpleegkundige, Ergotherapeut, Tandarts, Diëtist, Apotheker, Kinesitherapeut, Logopedist, Voedvrouw, Podoloog

Nieuws

French

Retour aux résultats de recherche

Table des matières

- Agent infectieux
- Répartition géographique
- Mode de transmission
- Symptômes
- Diagnostic
- Traitement et pronostic
- Prévention
- Ressources complémentaires
- Résumé de revues systématiques

Chinese

Cryptosporidiose

Guide de pratique clinique étranger

16/02/2017

Agent infectieux

- Le cryptosporidium est un parasite protozoaire appartenant à l'ordre des Sporozoaies. Lun d'entre eux parasite humain. Certaines autres espèces peuvent non seulement parasiter les animaux, mais égalem...
- L'importance mondiale a augmenté en raison d'épidémies de diarrhées liées au SIDA, difficiles à gérer e nutritionnelles chez les enfants.
- Deux autres protozoaires, Cyclospora cayentanensis et Cyclospora belli (anciennement Isospora belli) infections ressemblant au Cryptosporidium.

Répartition géographique

- Cosmopolite. Le C. parvum, responsable de la diarrhée chez le veau peut infecter l'homme.

Mode de transmission

- La transmission se produit par inoestion de kystes dans des aliments ou des boissons contaminés par

Chinese

HIV感染

Buitenlandse richtlijn
Huisarts, Apotheker

13/02/2017

Back to search results

Table of contents

要点

流行病学
HIV感染的自然过程
HIV检测的适应症
诊断
初级保健的调查和患者教育
治疗
艾滋病和金科医生
艾滋病病毒携带者的工作能力
医疗保健专业人员指南
相关资源

流行病学

- 确定艾滋病毒感染者至关重要。
- 因临床原因怀疑感染艾滋病毒
 - 在无保护性行为或通过注射接触HIV感染的患者
 - 有高风险行为史且出现症状表明原发性HIV感染的患者
 - 对于原因不明的免疫抑制或反复发作的不明原因发热，无意识的体重减轻，痴呆，食管念珠菌病，血小板减少症或贫血而无明确病因的患者。
- 在感染感染后1至3个月，HIV检测将变为阳性。为了排除HIV感染的可能性，应该跟踪抗体的发展，直到3个月过去。传播后2至6周可能出现主要症状。
- 在确诊后，应立即根据当地指南将感染艾滋病毒的人员转介到专门医疗机构。
- 艾滋病毒感染无法治愈，但联合治疗（HAART - 高效抗逆转录病毒疗法）大大改善了患者的前景。

French

Retour aux résultats de recherche

Table des matières

À retenir
Définition et épidémiologie
Symptômes
Diagnostic
Traitement d'une crise de migraine
Traitement préventif
Pronostic
Ressources complémentaires

Migraine

Guide de pratique clinique étranger
Médecin généraliste, Kinésithérapeute, Ergothérapeute

11/04/2019

Lien vers le guide belge couvrant le même sujet.

Message clé

Guide de pratique clinique belge : Prise en charge de la migraine

Plus d'informations...

À retenir

- Le traitement de la migraine légère se compose de paracétamol, d'aspirine ou d'autres AINS seuls ou combinés avec le métoclopramide.
- En cas de crises graves ou invalidantes, il convient de prescrire un triptan en traitement primaire, mais en pas après la prise d'un AINS qui s'est avérée inefficace au début de la crise.
- En cas de crise difficile à traiter, il convient d'administrer un triptan en combinaison avec un AINS à action longue dès le début de la crise. Parmi les critères, il faut que les crises soit peu fréquentes et qu'il n'y ait donc aucun risque de développer une céphalée d'origine médicamenteuse.

Românesc

Back to search results

Table of contents

Infecția cu HIV

Buitenlandse richtlijn
Huisarts, Apotheker

13/02/2017

Essentials

- Identificarea persoanelor infectate cu HIV este esențială.
- Suspectă infecția HIV pe motive clinice
 - la pacienții expuși la infecția HIV în sex neprotejat sau prin injecții
 - la pacienții cu antecedente de comportament cu risc ridicat și care prezintă și sugerează infecția HIV primară
 - la pacienții cu imunosupresie inexplicabilă sau cu recurențe de febră de origine scădere neintenționată în greutate, demență, candidoză esofagiană, trombo anemie fără o cauză clară.
- Un test HIV va deveni pozitiv după 1 până la 3 luni de la contractarea infecției. Pentru posibilitatea infecției cu HIV, dezvoltarea anticorpilor trebuie urmată până la expirarea simptomelor primare pot apărea la 2 până la 6 săptămâni după transmisie.
- Persoanele infectate cu HIV trebuie să fie îndreptate către asistență specializată în co

Español

Back to search results

Table of contents

Información básica
Epidemiología
Curso natural de la infección por el VIH
Indicaciones para una prueba de VIH
Diagnóstico
Investigaciones y educación del paciente en atención primaria
Tratamiento
El VIH y el médico de cabecera
La capacidad de trabajo de los portadores del VIH
Guías para los profesionales de la salud
Fuentes relacionadas

Noticias | Formaciones y eventos | Sobre nosotros | Productos | CMR | Contact

Definición et épidémiologie

Definición et épidémiologie

Definición et épidémiologie

English

Welcome to ebmafrica.net

The ebmafrica.net site is intended for clinicians including doctors and nurses. You will find clinical practice guidelines for primary care and other validated evidence-based information to support consultation decision-making. Most of the documents are from the WHO evidence-based guidelines, the national evidence-based guidelines collection verified and validated by the regional Cochrane center, and the Finnish EBm Guidelines collection. African productions will gradually enrich the knowledge base! This site is coordinated by eBASE Africa, in collaboration with iScientia International.

The site is currently in the final testing phase, some features have been voluntarily disabled but this does not hinder the search for information. For any questions or information do not hesitate to contact us!

Search...

Show search history | Advanced search | Search assistant

Powered by iscientia

French

Back to search results

Table of contents

Infecția cu HIV

Buitenlandse richtlijn
Huisarts, Apotheker

13/02/2017

Essentials

- Identificarea persoanelor infectate cu HIV este esențială.
- Suspectă infecția HIV pe motive clinice
 - la pacienții expuși la infecția HIV în sex neprotejat sau prin injecții
 - la pacienții cu antecedente de comportament cu risc ridicat și care prezintă și sugerează infecția HIV primară
 - la pacienții cu imunosupresie inexplicabilă sau cu recurențe de febră de origine scădere neintenționată în greutate, demență, candidoză esofagiană, trombo anemie fără o cauză clară.
- Un test HIV va deveni pozitiv după 1 până la 3 luni de la contractarea infecției. Pentru posibilitatea infecției cu HIV, dezvoltarea anticorpilor trebuie urmată până la expirarea simptomelor primare pot apărea la 2 până la 6 săptămâni după transmisie.
- Persoanele infectate cu HIV trebuie să fie îndreptate către asistență specializată în co

English

Back to search results

Table of contents

Información básica
Epidemiología
Curso natural de la infección por el VIH
Indicaciones para una prueba de VIH
Diagnóstico
Investigaciones y educación del paciente en atención primaria
Tratamiento
El VIH y el médico de cabecera
La capacidad de trabajo de los portadores del VIH
Guías para los profesionales de la salud
Fuentes relacionadas

Noticias | Formaciones y eventos | Sobre nosotros | Productos | CMR | Contact

Definición et épidémiologie

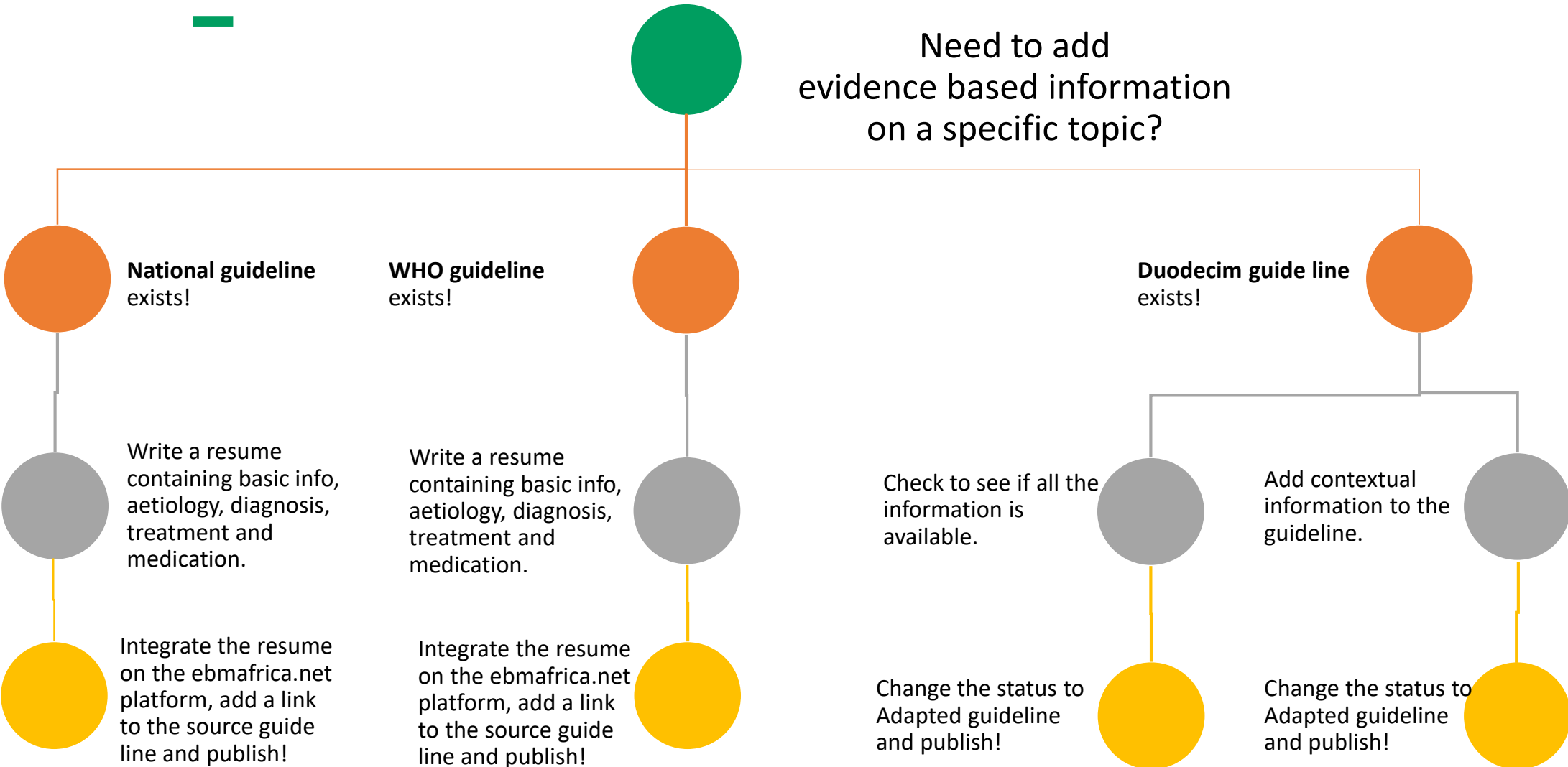
Definición et épidémiologie

Definición et épidémiologie

MANY FORMS and Languages

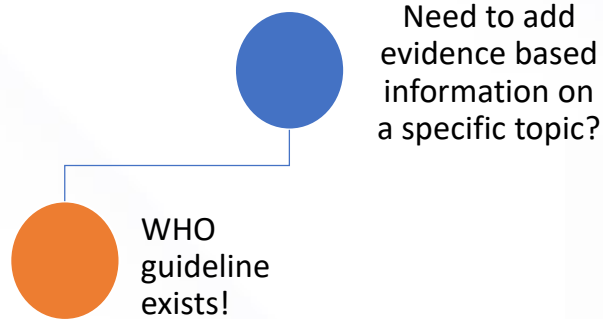
Decision tree

Need to add evidence based information on a specific topic?

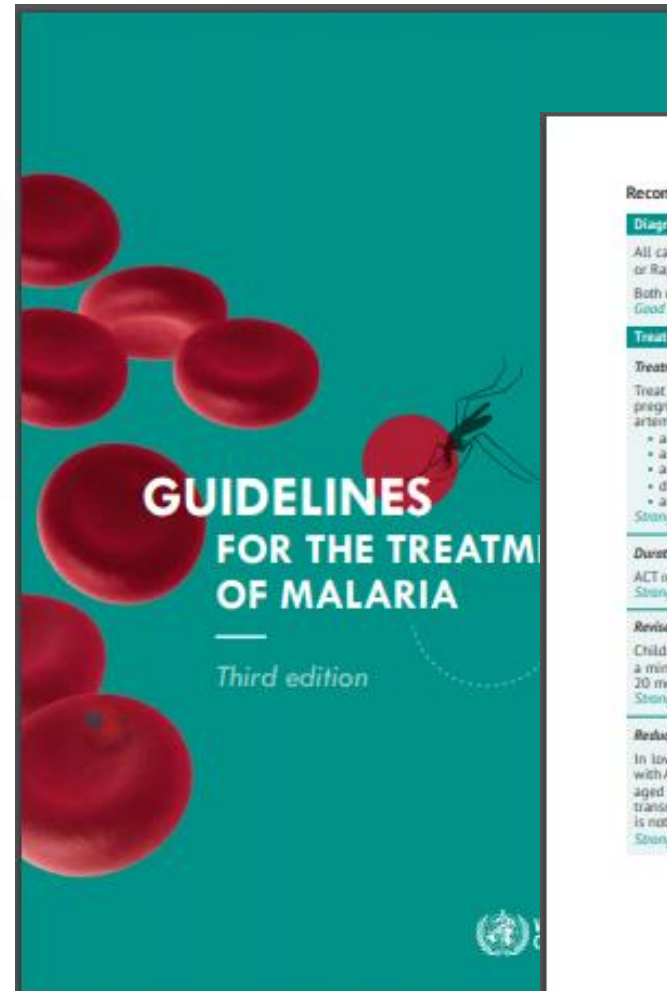


How to integrate an existing guideline

line



An existing guideline from the WHO can be integrated on the ebmafrica.net platform, by means of a resume or summary and a link to the original guideline!



11.1 | INTERMITTENT PREVENTIVE TREATMENT OF MALARIA IN PREGNANCY SULFADOXINE-PYRIMETHAMINE

treatment in pregnancy (IPTp)

In Africa, provide SP-IPTp to all women in their first or antenatal care. Dosing should start in the second trimester and be given at least 1 month apart, with the objective of ensuring that at least 3 doses are received. *High-quality evidence*

In seven trials involving direct comparison of two or three doses monthly were evaluated. The trials were conducted in Kenya, Malawi, Mali and Zambia between 1996 and 2008. The trials included 10,000 women and 10,000 children. The results showed that women who received three or more doses of SP, three or more doses: had a mean birth weight by about 56 g (95% CI, 29–83; seven trials, high-quality evidence); had a mean low-birth-weight infants by about 20% (RR, 0.80; 95% CI, 0.51–1.15; 2190 participants, high-quality evidence); had a mean anaemia by about 50% (RR, 0.51; 95% CI, 0.38–0.68; 2190 participants, high-quality evidence); and had a mean anaemia by about 33% (RR, 0.68; 95% CI, 0.52–0.89; 2190 participants, high-quality evidence).

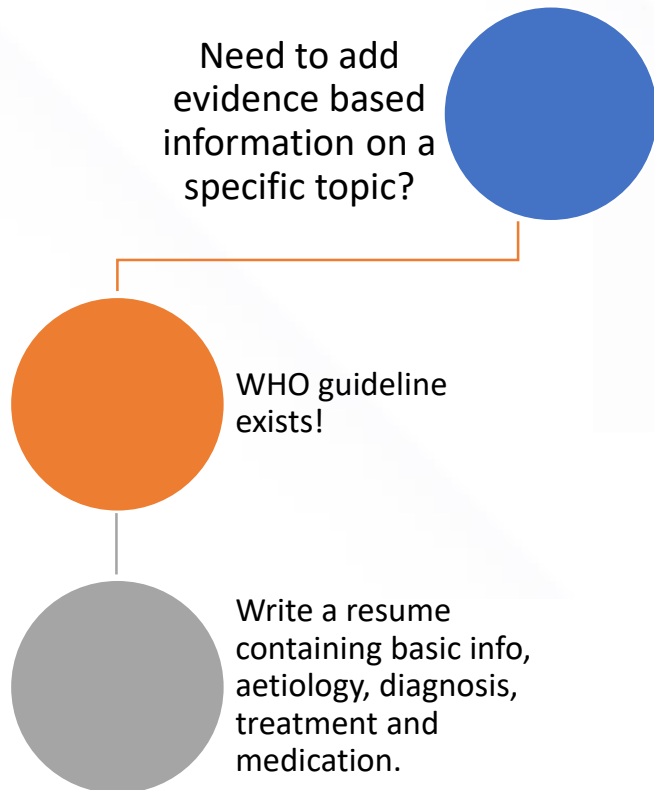
The trials have not been large enough to detect or exclude carriage, stillbirth or neonatal mortality (very low-quality evidence).

The WHO expert group noted that the beneficial effects were obvious in second pregnancies. There was less information available for first pregnancies, but the available information was consistent with the findings for second pregnancies.

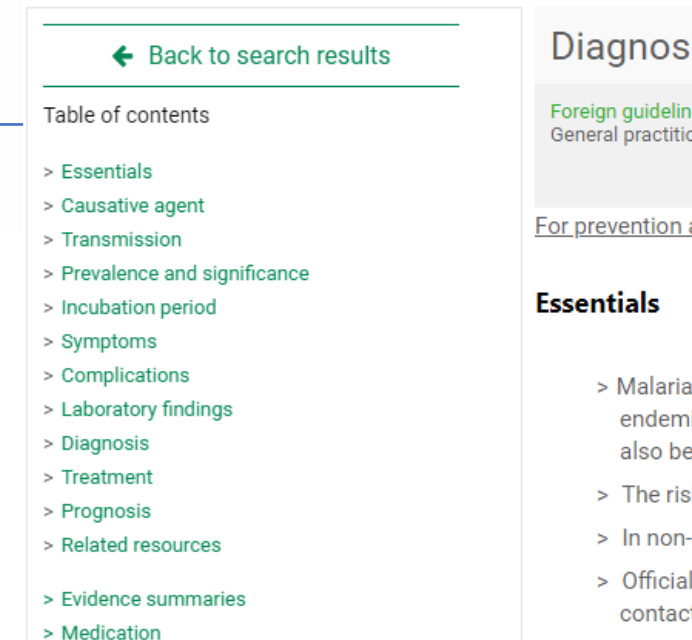
Boo L, Roper C, Malokazi A, et al. Intermittent preventive therapy with 3 or more doses of sulfadoxine-pyrimethamine and risk of stillbirth and neonatal mortality: a systematic review and meta-analysis. *Lancet Infect Dis* 2013;13:994–1004.

11 | Chemoprevention in special risk groups 181

How to integrate an existing guideline



1. Every guideline on the ebmafrica.net offers default the following type of information:
 - Basic information in Essentials
 - Aetiology, causes, transmission
 - Diagnosis
 - Treatment
 - Medication
 - Link to the source document
2. Therefore, we ask to write a resume or summary based on the existing guideline with this type of information.
3. This is then incorporated in the platform, which is in HTML-format, using an HTML text editor (Xopus)
4. You can add images, tables, videos and other information like questionnaires or patient information as well.
5. After a quality check to see if everything looks fine, the guideline can be published.



← Back to search results

Table of contents

- > Essentials
- > Causative agent
- > Transmission
- > Prevalence and significance
- > Incubation period
- > Symptoms
- > Complications
- > Laboratory findings
- > Diagnosis
- > Treatment
- > Prognosis
- > Related resources
- > Evidence summaries
- > Medication

Diagnosis

Foreign guidelines
General practitioner

For prevention and control

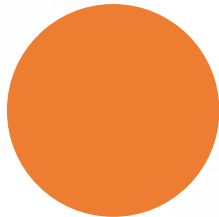
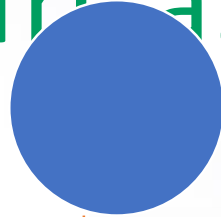
Essentials

- > Malaria endemic areas also be
- > The risk of malaria in non-endemic areas
- > Official contact information
- > Malaria official website
- > Travel t

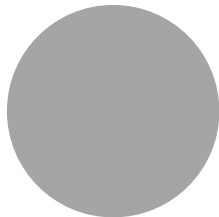
How to integrate your resume in

ebmafrica.net

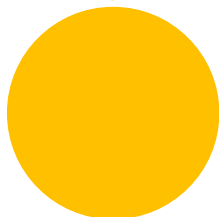
Need to add evidence based information on a specific topic?



WHO guideline exists!

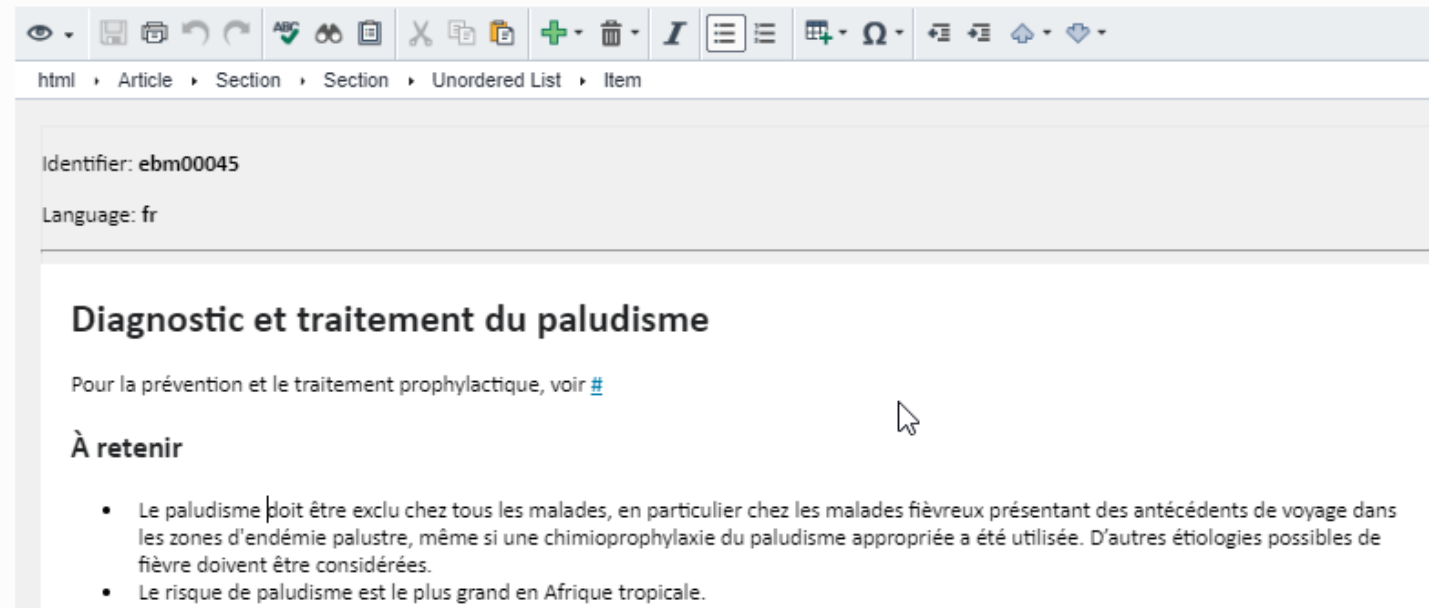


Write a resume containing basic info, aetiology, diagnosis, treatment and medication.



Integrate the resume on the ebmafrica.net platform, add a link to the source guide line and publish!

1. You write the resume based on the original guide line, in any format you want e.g. Word
2. This resume then needs to be converted to HTML using a text editor.



html » Article » Section » Section » Unordered List » Item

Identifiant: ebm00045
Language: fr

Diagnostic et traitement du paludisme

Pour la prévention et le traitement prophylactique, voir #

À retenir

- Le paludisme doit être exclu chez tous les malades, en particulier chez les malades fiévreux présentant des antécédents de voyage dans les zones d'endémie palustre, même si une chimioprophylaxie du paludisme appropriée a été utilisée. D'autres étiologies possibles de fièvre doivent être considérées.
- Le risque de paludisme est le plus grand en Afrique tropicale.

...and publish

Once the resume is converted to the html format, we add the necessary search terms, ICPC and ICD coding, and we publish the guideline onto ebmafrica.net

You can do the same for French or any other language...

[← Retour aux résultats de recherche](#)

Table des matières

- > [Diagnostic du Paludisme](#)
- > [Traitement du paludisme non compliqué à P. falciparum](#)
- > [Durée du traitement par ACT](#)
- > [Réduire la transmissibilité des infections traitées à P. falciparum](#)
- > [Document Source:](#)

Le paludisme simple

WHO guideline
Médecin généraliste, Infirmier

1/04/2015



Diagnostic du Paludisme

Tous les cas suspects de paludisme doivent faire l'objet d'un test parasitologique (microscopie ou test de diagnostic rapide (TDR)) pour confirmer le diagnostic. La microscopie et les TDR devraient être appuyés par un programme d'assurance qualité.

Déclaration de bonne pratique

Traitement du paludisme non compliqué à P. falciparum

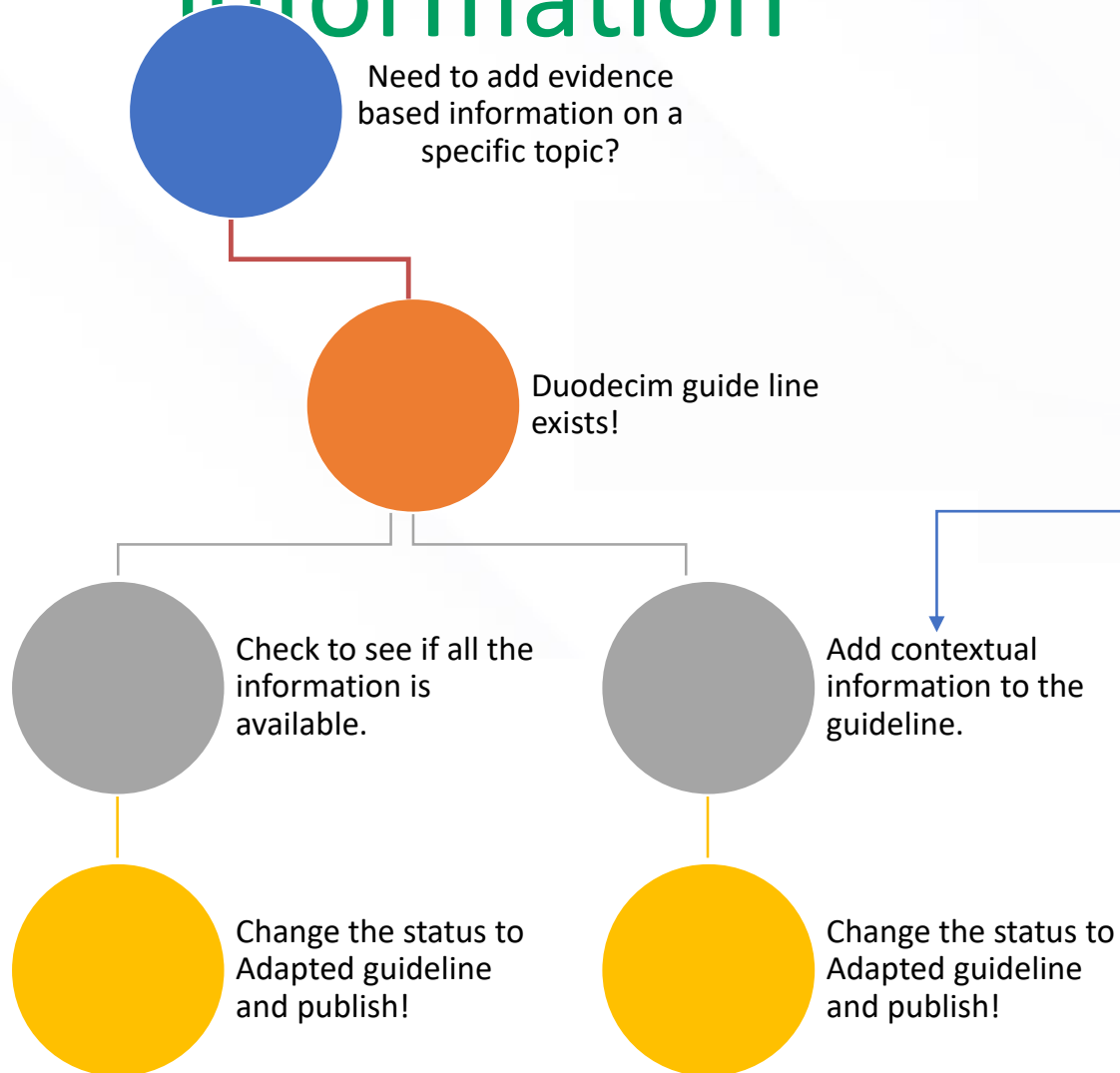
Traitez les enfants et les adultes atteints de paludisme non compliqué à P. falciparum (à l'exception des femmes enceintes au cours du premier trimestre) avec l'un des traitements d'association à base d'artémisinine (ACT) recommandés suivants :

- > artéméter + luméfantrine
- > artésunate + amodiaquine
- > artésunate + méfloquine
- > dihydroartémisinine + pipéraquline
- > artésunate + sulfadoxine – pyriméthamine (SP)

Forte recommandation, preuves de haute qualité

Durée du traitement par ACT

Adapt an existing guideline to local information



Follow-up

Note

Main message

This is the key message of a local adaptation

Note Explanation...

You can add extra information on the key message, with more explanation about the local context.

References

Add a link to the specific information e.g. [WHO Malaria](#)

Authors

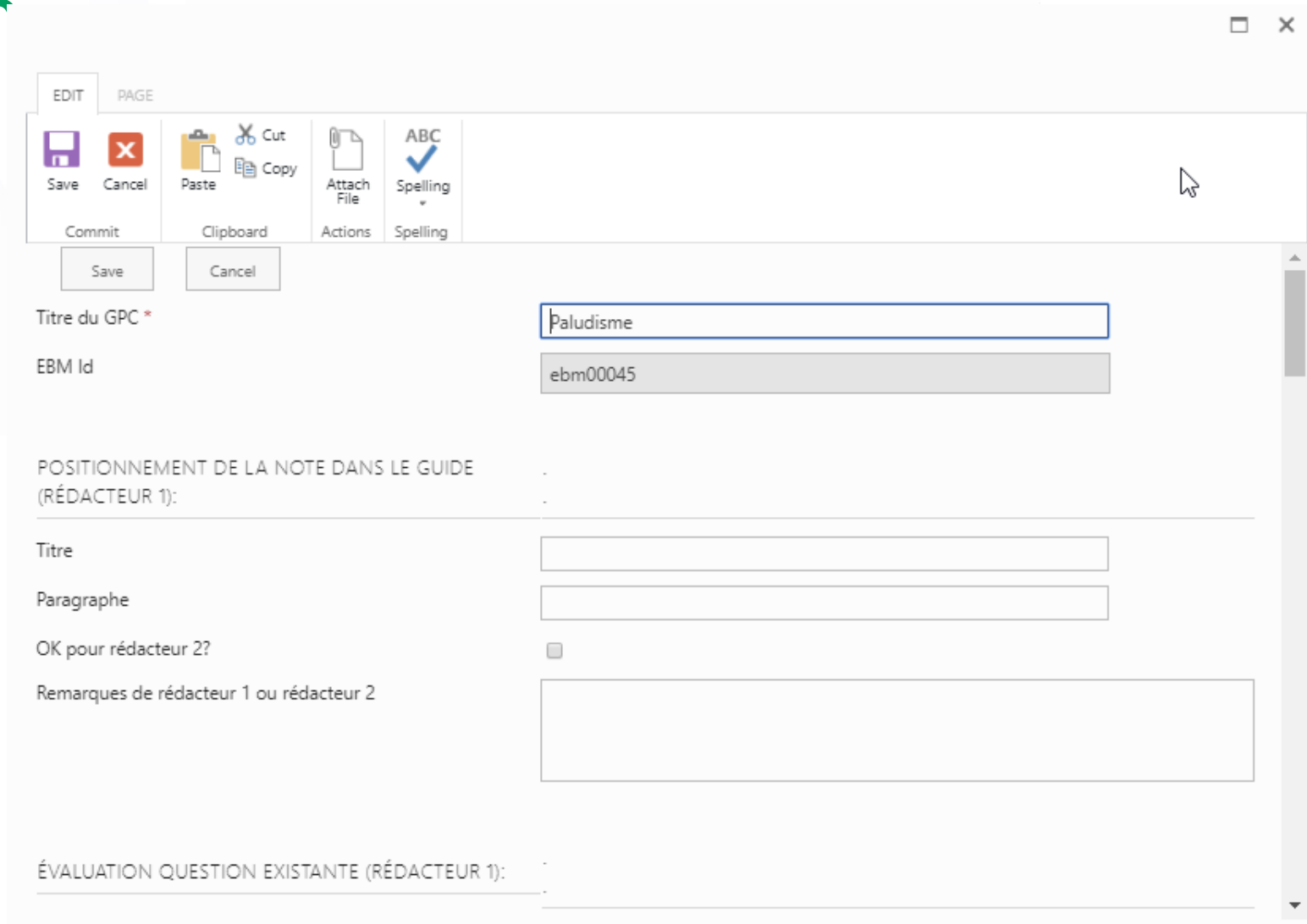
Okwen, Patrick

- > Follow-up is necessary if the patient's occupation is associated with a higher than normal risk of disease spread or the occupation is such that the consequences of an infection would be more serious than usual.
 - > Employees in the food industry, who handle foodstuffs destined for the general public with bare hands
 - > Employees in water supply plants in contact with water destined for general distribution
 - > Employees involved in the care of neonates either in nursing or childcare duties
- > An employee in any of the above groups who develops gastroenteritis/diarrhoea must not return to his/her duties (regardless of the causative agent).

Adapt an existing guideline to local information

The doctors can create an adaptation and discuss with his colleague about the key message, more information and links to source documents via ebmafrica.net

The note is dynamically created on the platform so they can see how the note will be presented in the guide line.



The screenshot shows a web application interface for creating a guideline note. At the top, there are two tabs: "EDIT" and "PAGE". Below the tabs is a toolbar with icons for Save, Cancel, Paste, Copy, Attach File, and Spelling. Below the toolbar are two buttons: "Commit" and "Save". The form contains several fields:

- Titre du GPC ***: A text input field containing "Paludisme".
- EBM Id**: A text input field containing "ebm00045".
- POSITIONNEMENT DE LA NOTE DANS LE GUIDE (RÉDACTEUR 1):**
 - Titre**: A text input field.
 - Paragraphe**: A text input field.
 - OK pour rédacteur 2?**: A checkbox.
 - Remarques de rédacteur 1 ou rédacteur 2**: A large text area.
- ÉVALUATION QUESTION EXISTANTE (RÉDACTEUR 1):**: A text input field.

...and publish

Once the local adaptation is validated by two doctors, it will be published to the public.

You can do the same for French or any other language...

[← Retour aux résultats de recherche](#)

Table des matières

- À retenir
- Agent causal
- Mode de transmission
- Prévalence et importance
- Période d'incubation
- Symptômes
- Complications
- Résultats d'analyses biologiques
- Diagnostic
- Traitement
- Pronostic
- Ressources complémentaires

> Résumé de revues systématiques

> Médicaments







A retenir

- Le paludisme doit être exclu chez tous les malades, en particulier chez les malades fiévreux présentant des antécédents de voyage dans les zones d'endémie palustre, même si une chimioprophylaxie du paludisme appropriée a été utilisée. D'autres étiologies possibles de fièvre doivent être considérées.
- Le risque de paludisme est le plus grand en Afrique tropicale.
- Dans les zones non endémiques le diagnostic du paludisme est une urgence médicale. Initier le traitement en urgence.
- Respecter les directives dans tous les cas suspects de paludisme et prendre conseil d'un infectiologue. Le personnel de laboratoire local donne des conseils concernant les prélèvements nécessaires.
- Le paludisme est une maladie infectieuse à déclaration obligatoire et le médecin traitant est tenu de signaler les cas conformément aux directives et les pratiques locales. [N](#)

Note concernant la déclaration des maladies en Belgique.

Message clé

En Wallonie et à Bruxelles, seules les cas confirmés de malaria dit autochtone ou domestique (c'est-à-dire transmise par un moustique infecté sur le sol belge) sont à déclarer obligatoirement.

En Flandre, seules les cas de malaria dont on suspecte que l'infection a eu lieu sur le continent européen doivent être déclarés.

[Information complémentaire...](#)

- Un voyage dans les zones endémiques nécessite le recours à la chimioprophylaxie du paludisme et à la protection contre les piqûres de moustiques.

Results

- 🌐 www.ebmafrica.net went live in July 2019
- 🌐 9 clinical guidance developed and contextualized for 2 out of 3 countries
 - 🌐 Malaria, HIV, TB, and Soil Transmitted Helaminths
- 🌐 Access to 1000+ DUODECIM Guidelines
- 🌐 60 clinicians recruited to test

Challenges

- ① Use of site by clinicians still low due to need for training and sensitization
- ① Funding: project has been based on volunteer time by eBASE and iScientia staff
- ① Technology challenge for clinicians
- ① Capacity of editorial team in evidence based recommendations



**Thank
you for
your kind
Attention**