



Delivery strategies to promote SMC adherence: experiences from Cameroon and Mali



EDCTP

This project is part of the EDCTP2 programme supported by the European Union

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University of Dschang, Cameroon, on behalf of the National Malaria Control Programmes in Cameroon and Mali

Multilateral Initiative on Malaria- MIM Society 8th Pan African Malaria Conference
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Background

- ✦ **Seasonal Malaria Chemoprevention (SMC):** the monthly administration of antimalarial sulfadoxine-pyrimethamine plus amodiaquine (SP+AQ) usually for 3-4-5 months during the rainy season where malaria is highly seasonal
- ✦ Perception that there may be poor adherence to the 2nd and 3rd dose of amodiaquine
- ✦ But there is little objective evidence of problems with adherence
- ✦ Nevertheless, 3-day DOT* is becoming more widely used due to concerns about adherence
- ✦ This strategy is costly, and it is not clear if it improves coverage or adherence
 - ✦ Does 3-day DOT improve adherence?
 - ✦ Are there alternative strategies which are less costly and as or more effective?

*DOT – SMC delivered by drug distributors on all 3 days

Objectives



- ✦ Can SMC coverage and adherence be improved by **using locally recruited community volunteers** to follow up on 2nd and 3rd doses uptake?



- ✦ Is this strategy **as effective and less costly** than 3 days of DOT?



- ✦ Specific objectives:

- ✦ **Assess feasibility and cost** of the new approach, and its impact on SMC coverage and adherence compared to 3-day DOT and standard SMC
- ✦ **Understand community perceptions** about adherence and attitudes to the interventions

Methods: Three Delivery approaches

1

Standard SMC

Drug distributors comes on 1st day and leaves dose 2 and dose 3 to be given by the caregivers

2



DOT on all 3 days by drug distributors

SMC team visits households on all 3 days to supervise all 3 doses

3



Sensitisation by Community volunteers (cSMC)

Same as Standard BUT but also community visiting households to remind the caregivers to give SMC on day 2 and day 3

Description Community SMC (cSMC)

Cameroon

Selection

- ✦ **Neighbourhood leaders** selected by local head of the centre and community health workers
- ✦ Respected men and women living in the community, willing to visit 5-6 houses around their home

Training

- ✦ One session, lasting two hours, before the SMC campaign

During the SMC campaign

- ✦ Explain SMC
- ✦ Tips on administration, including frequency and how to manage cases of vomiting during day 2 and 3.
- ✦ Reminder to keep SMC cards and used blister packs

Payment

- ✦ Voluntary activity and **NOT paid**, emphasis was to minimise NL's time doing the reminders

Mali

Selection

- ✦ **Volunteers** were selected by the health association of the village, with the head of the health centre

Training

- ✦ Organised by the head of the health centre before the first SMC cycle in July

During the SMC campaign

- ✦ Explain SMC
- ✦ Explain how to write on the SMC card if the child received the daily dose;
- ✦ Check the blister pack
- ✦ If the AQ dose has not been used then assists the caregiver to administer and to complete the SMC card.

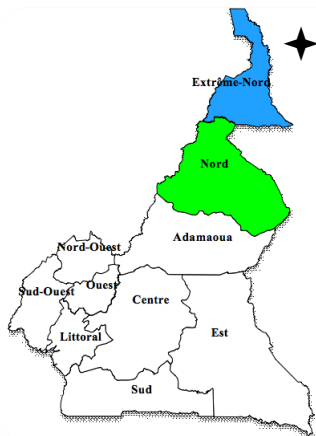
Payment

- ✦ An **incentive of \$10 USD** per month per volunteer is paid to the association

Study design

Cameroon

Study site



- ✦ Kaele Health Districts in the Far north region, with 3 health areas (area around 1 health centre):

Garey (Standard **SMC**)
Kaele (**DOT**)
Mapoussere: Neighbourhood leaders (**cSMC**)

Malaria season

High transmission period is between July and October

Target Population

SMC eligible Child aged 3-59 months and their parents

Target size: 7,011

Study site

- ✦ Dioila health district (included 44 health areas, and 1 district hospital). 6 health areas selected for this study that had a high incidence in children under 5s between 2019-2022 areas:

2 areas: **SMC** (standard SMC)
2 areas: **DOTs** (SMC team visits on 3 days to supervise all 3 doses)
2 areas: **cSMC** (Community approach, local volunteers visit to assist with doses 2 and 3)

Malaria season

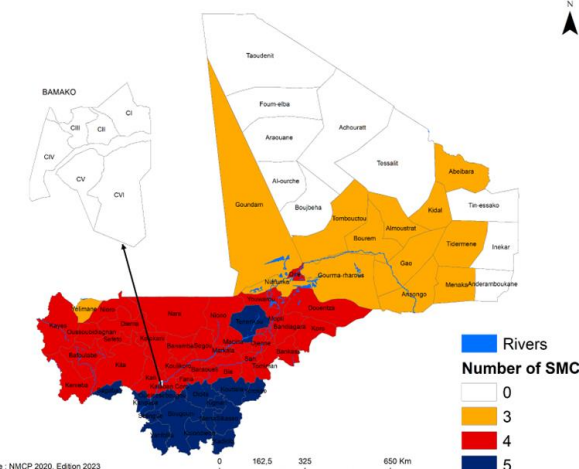
high transmission period is between July and November

Target Population

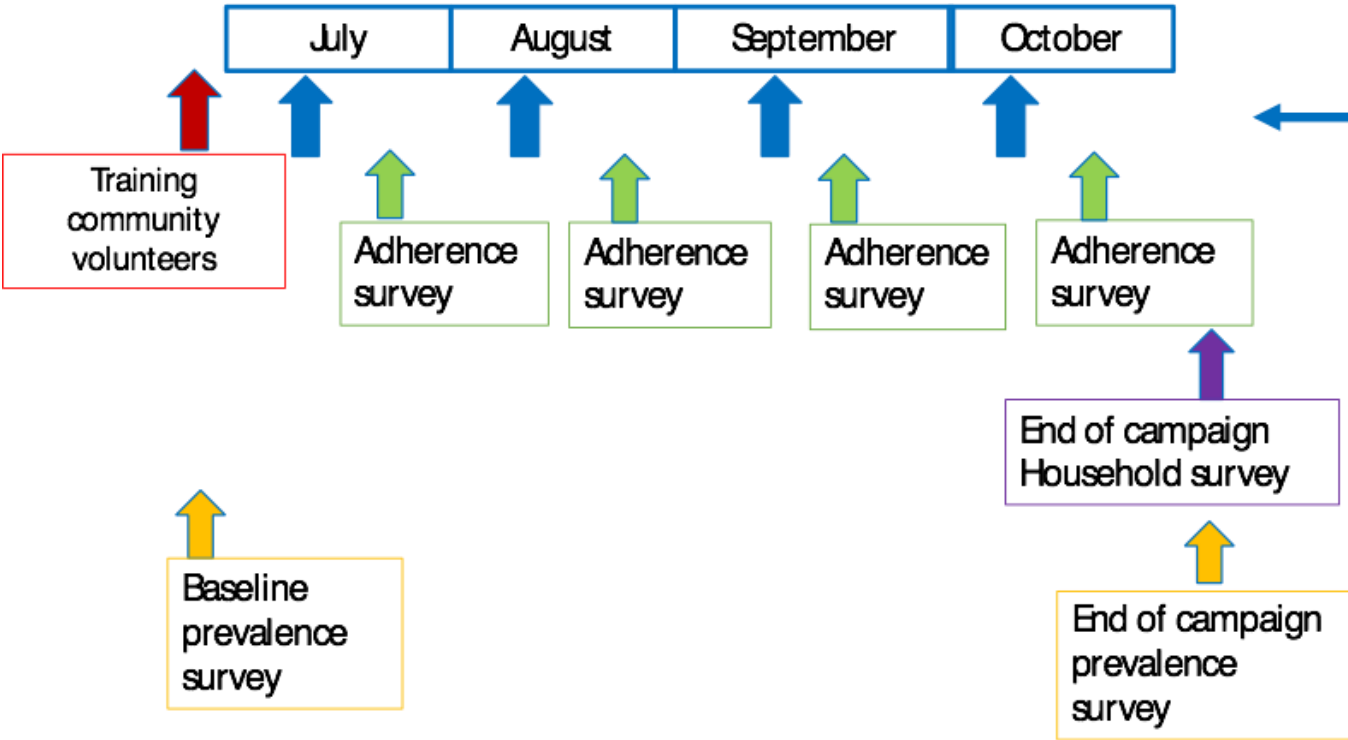
child aged 3-59 months and their parents health providers

Target size: 17,084

Mali



Study timelines and data collection



SMC cycles

← Cameroon only

← Cameroon and Mali

← Cameroon only

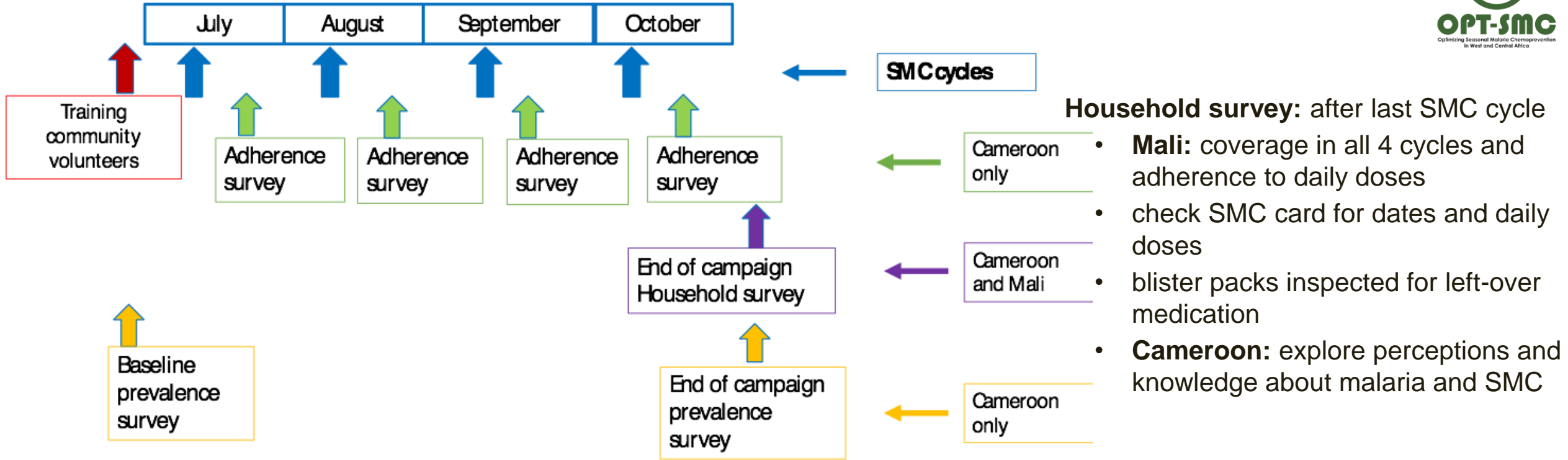
Household survey: after last SMC cycle

- **Mali:** coverage in all 4 cycles and adherence to daily doses
- check SMC card for dates and daily doses
- blister packs inspected for left-over medication
- **Cameroon:** explore perceptions and knowledge about malaria and SMC

Cameroon only:

- ✦ **Household Adherence survey:** 1-2 days after 3rd dose at each cycle
- ✦ asked about treatment adherence and blister packs inspected
- ✦ **Malaria prevalence and end of round survey:**
 - Baseline survey: 3 days before campaign
 - End of round survey: >1 month after the 4th cycles, children up to 14 years of age

Study timelines and data collection



Mali: malaria surveillance: individual patient records from clinic registers 2019-2022

Mali only:

Malaria surveillance: Individual patient records from clinic registers 2019-2022

Costs: Approximate additional costs estimated,

Qualitative data collection: 16 interviews and 3 focus groups with health providers, distribution agents, Community leaders, and key informants.

Cameroon only:

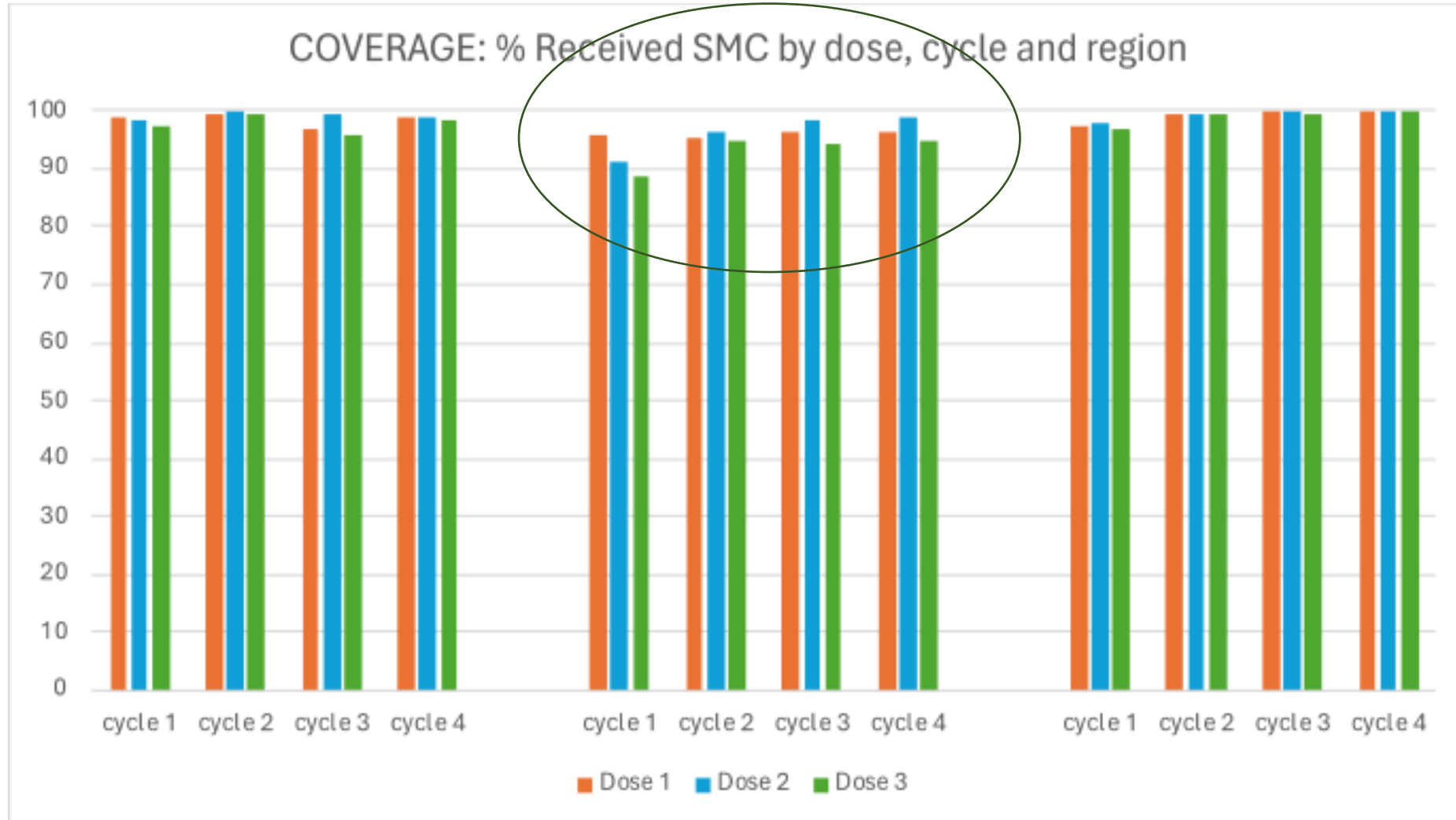
- ✦ **Household Adherence survey:** 1-2 days after 3rd dose at each cycle
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 - Baseline survey: 3 days before campaign
 - End of round survey: >1 month after the 4th cycles, children up to 14 years of age

Cameroon results: Coverage

Standard SMC

3-day DOT

cSMC



- High **coverage** in all three regions
- Lower coverage in the 3-day DOTs region

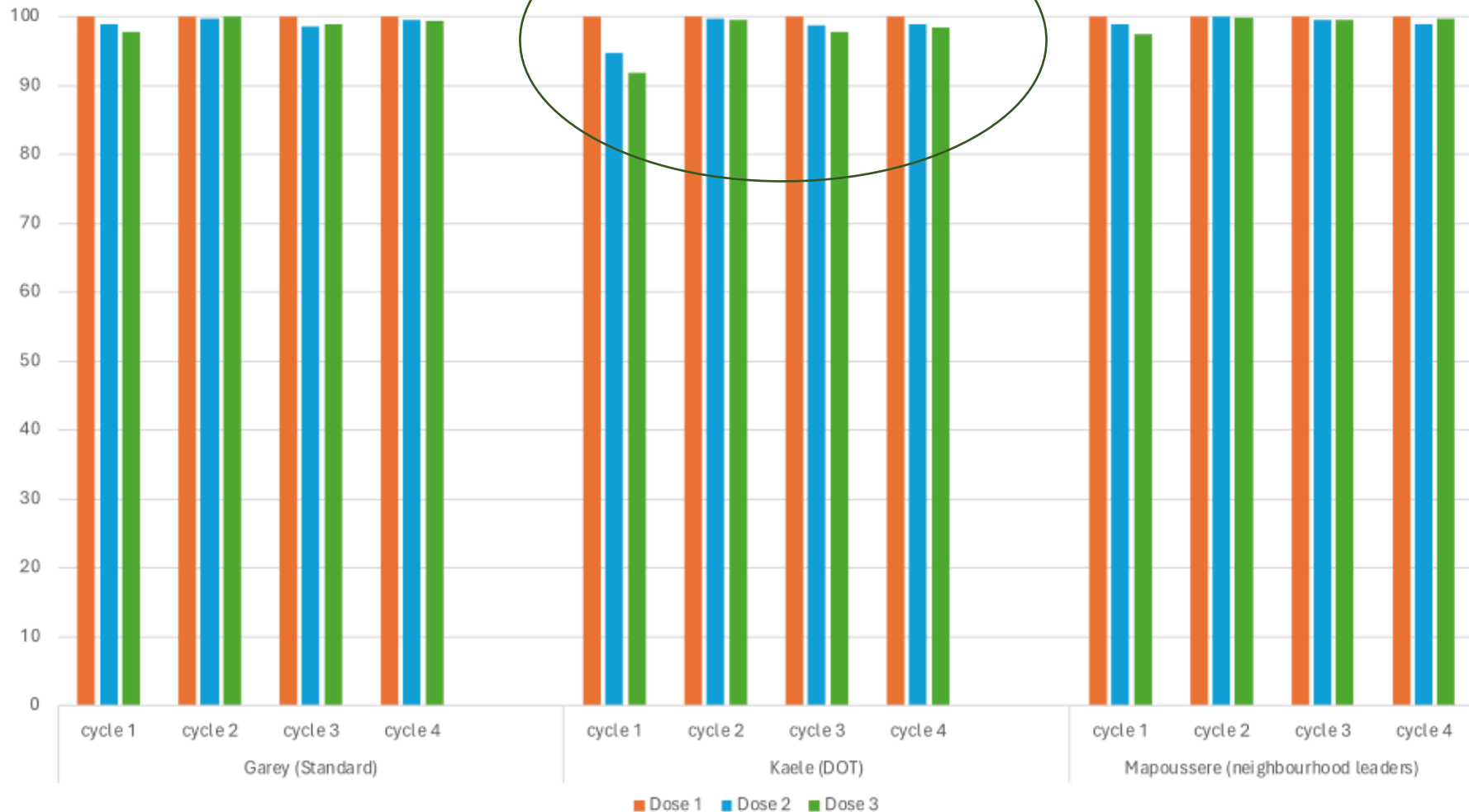
Cameroon results: Adherence by cycle

Standard SMC

3-day DOT

cSMC

ADHERENCE: % received dose 2 or dose 3 if received dose 1 by cycle and region



- **Adherence** high in all three strategies
- Slightly higher in the Neighbourhood leaders compared to standard and DOT
- 3-day DOTs area has the lowest adherence
- Adherence improves over cycles

Mali Results: Coverage, adherence and cost

Strategy	No. children surveyed	No. with SMC card (%)	% received 4 cycles (card or blister)	Adherence in the 4th cycle in children who received SMC blister		
				Day 1	Day 2	Day 3
Standard SMC	281	260 (92.5%)	85.1%	97.5%	96.1%	96.1%
DOTs	329	306 (93.0%)	89.1%	99.1%	99.1%	98.5%
cSMC	306	304 (99.3%)	99.0%	99.7%	99.7%	99.7%

- **Very high adherence** (according to SMC card, blister pack inspection, and parents recall) in all three strategies
- **High coverage of 4 cycles** in all three strategies

	Standard	cSMC	3-day DOTs
Cost per child per cycle (CFA)	2 246 CFA (3.65 USD)	2 845 CFA (4.63 USD)	3 071 CFA (5.00 USD)

- 3 day DOTs cost per child dosed is **37% higher than for standard SMC**
- cSMC cost per child dosed is **27% higher than for standard SMC**

Cameroon: SMC perceptions and knowledge

✦ Knowledge and satisfaction

- ✦ All caregivers knew SMC was for protection against malaria
- ✦ High satisfaction with SMC (>99% for all three regions)
- ✦ Of those who were not satisfied, main reasons were: side effects, did not see an impact of SMC on child's health, SMC did not help already sick children

✦ Reasons for participation

- ✦ Participated last year and thought it was good, knowledge that children are often sick with malaria and the health workers are asked them to participate

✦ What they liked

- ✦ Free, easy to receive at home and health workers know their jobs

✦ What they disliked

- ✦ Occurs when they should be out farming; and side effects of the drugs (reported mainly in DOT area)

✦ Perception on using neighbourhood leaders

- ✦ 95% in the NL region liked a neighbour coming to remind them about SMC (vs 73% in standard region)
- ✦ 96% Would be willing to do the same to other neighbours (vs 76% in standard region)

Mali: Qualitative findings: adherence

- ✦ With **standard SMC**, not all children who received the first dose received all the second and third doses:

"There is too much wastage in the standard SMC strategy, because the drugs are given to other people, they don't give them to their children, then their children will not be protected against malaria." EIA-LEAD-H-CSCO

"If you try to see, there are a lot of parents of children who don't give these other two doses that have been given to them." FGD-FEMMES-CSCOM-Falakono-Participant 2

- ✦ After the campaign, packets of SMC pills were seen on garbage dumps in some families, indicating that those doses weren't administered.

Mali: Qualitative findings: DOTs and cSMC

✦ DOTs:

"We think it's a good strategy as P2 just said, there were women who threw away the rest of the drugs instead of giving those other two doses to their children." FGD-FEMMES-CSCOM-WACORO-P3. M-CENTRAL-DIOILA

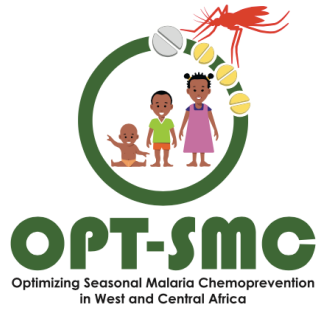
✦ cSMC:

"For me, they have to continue with the strategy with community monitoring because mothers of children are not the same. There are some who give all the doses correctly but others do not give the other doses entrusted to them at all." EIA-LEAD-H-CSCOM-SANANKORO-TEGUERE.

"If you see that the volunteer have been asked to visit the families to see if the doses are being administered, all this is for the success of the SMC. When you spend money on a job, you'll have to follow up to see if it's done right. For me, follow-up is very important in this work." FGD-MEN-CSCOM-SANANKORO-TEGUERE-P9.

Strategies to promote adherence: Conclusions

- ✦ Studies were planned to evaluate two alternative delivery strategies to address concerns about adherence.
- ✦ Reported adherence in surveys was high with all strategies, but focus groups in Mali noted concerns about adherence.
- ✦ There were positive attitudes to the community strategy, and it was less costly than 3-day DOTs.
- ✦ Using local volunteers improves adherence and is more cost-effective than 3day DOTs.



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MMV 
Medicines for Malaria Venture



EDCTP

NMCP: Benin,
Burkina Faso,
Cameroon, Chad,
Ghana, Gambia,
Guinea, Guinea
Bissau, Mali, Niger,
Nigeria, Senegal,
Togo and
Mauritania

THANK YOU !!!!



Optimizing Seasonal Malaria Chemoprevention
in West and Central Africa



EDCTP

This project is part of the EDCTP2 programme
supported by the European Union

Optimizing the impact of SMC in Senegal: choosing the optimal number and timing of cycles

Jean Louis A Ndiaye
University Iba Der Thiam of Thiès, Senegal

8th MIM – PAM Conference
23rd April 2024 Kigali, Rwanda

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SMC zones and 2021 targeted children in Senegal

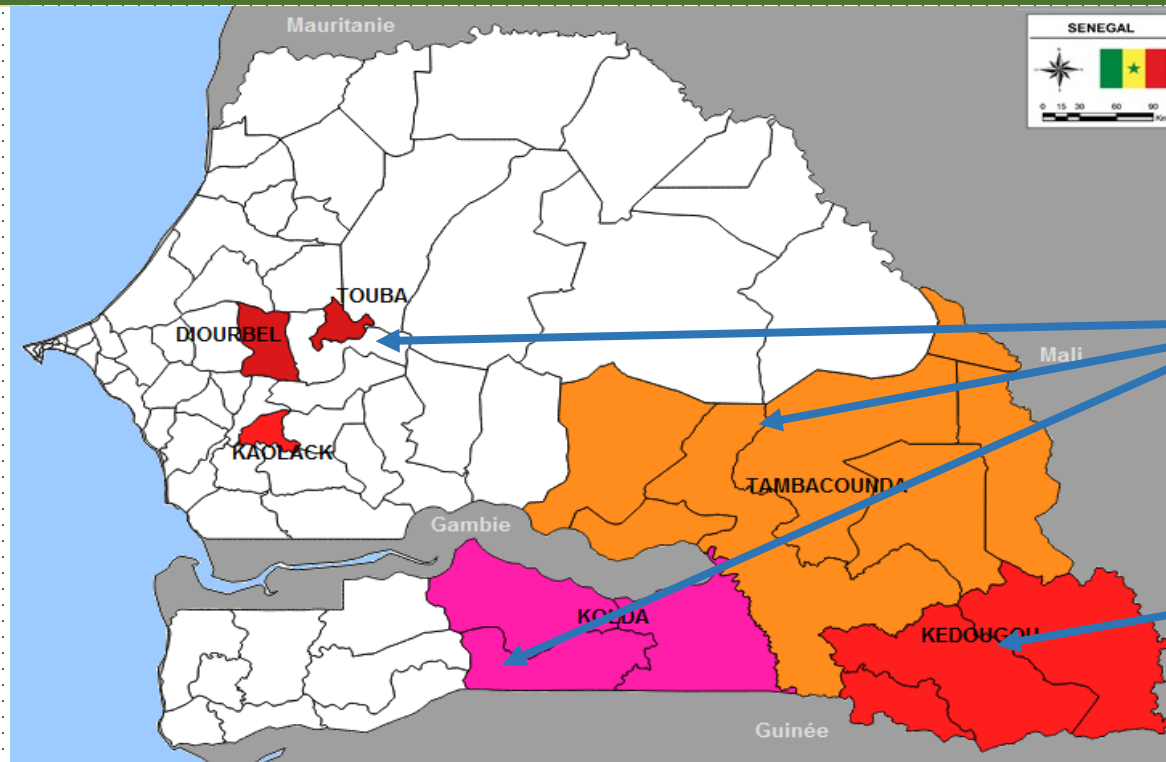
Target 3-120 mois

869 993 children

5 regions

16 Districts

361 HP



3 SMC cycles

4 SMC cycles

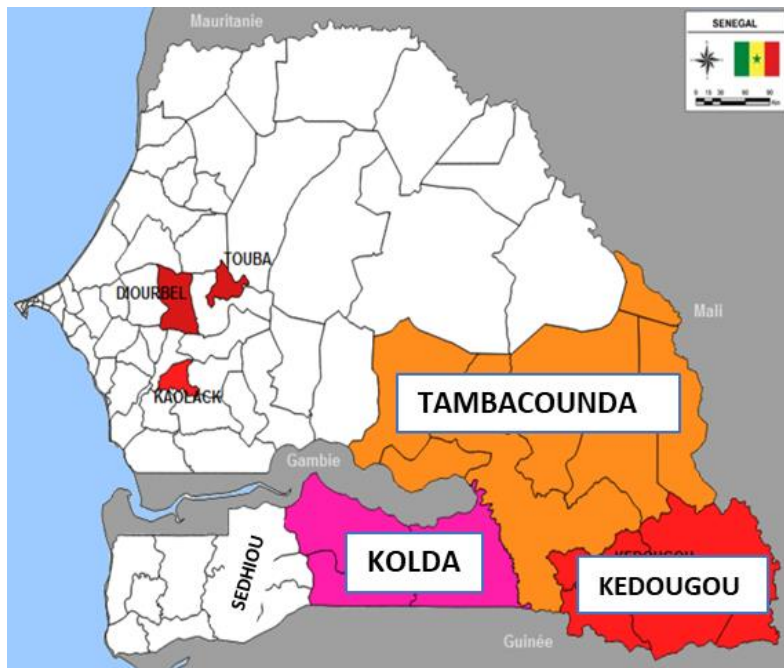
Senegal NMCP research questions :

What could be the optimal start dates and number of cycles in the different SMC regions?

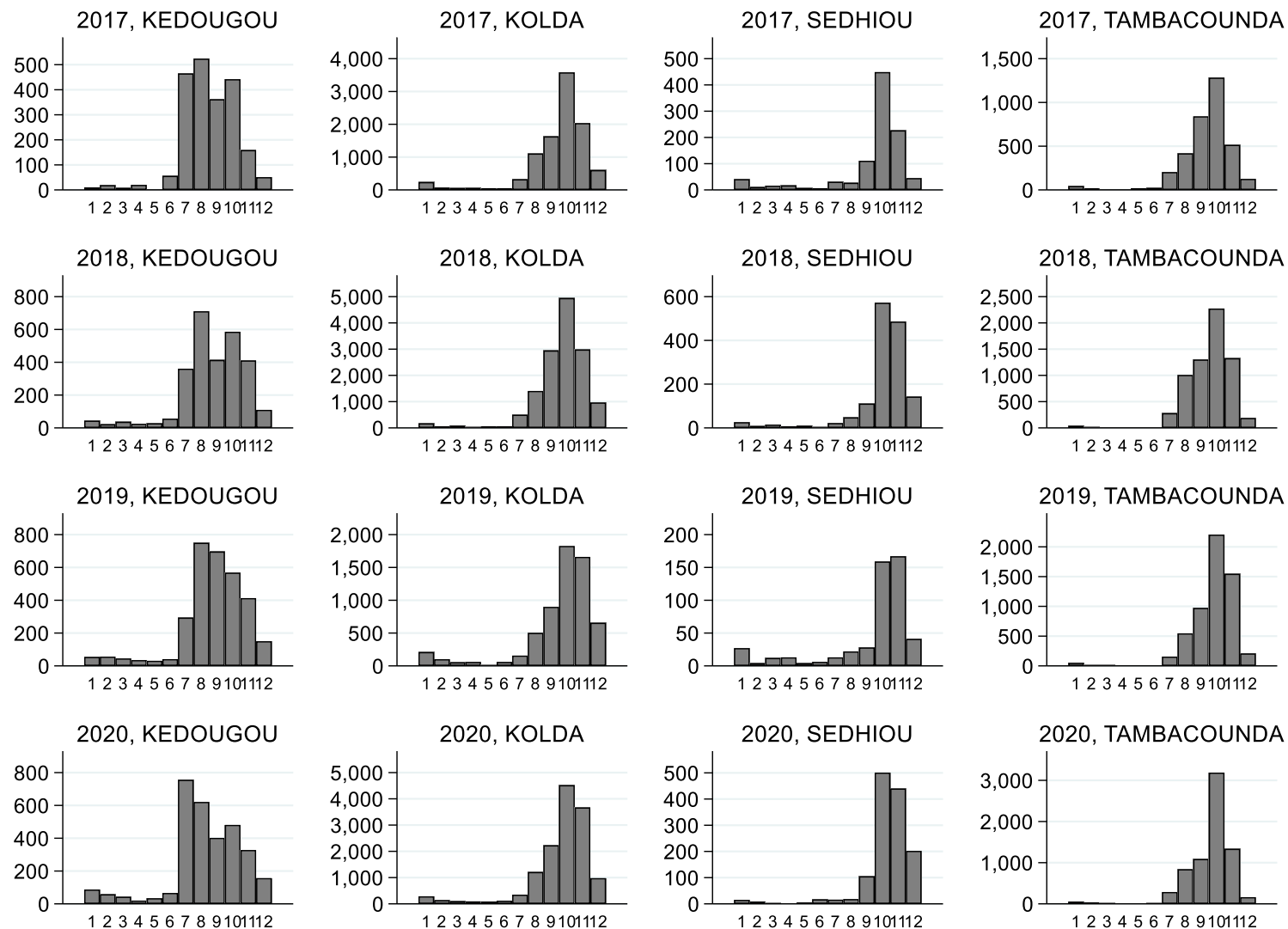
What is the impact of temporarily stopping SMC in 2018 and definitively in Sedhiou region?



Seasonality 2017-2020, in ages 10yrs and above, Southern Senegal

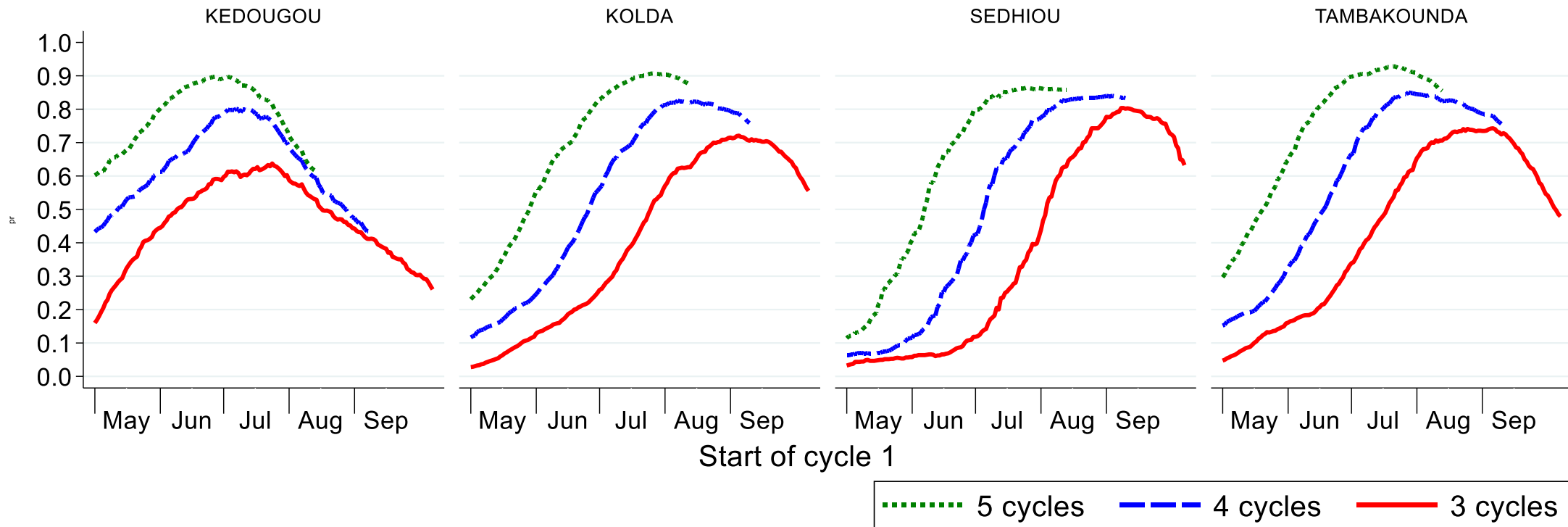


RDT-confirmed outpatient malaria cases >10yrs



Optimal start dates

Proportion of cases during SMC period



Using data for age groups above 5 (or for years without SMC):

For each possible start date for cycle 1, calculate the proportion of annual cases that fall in the following

5x28=140 days, for 5 cycles

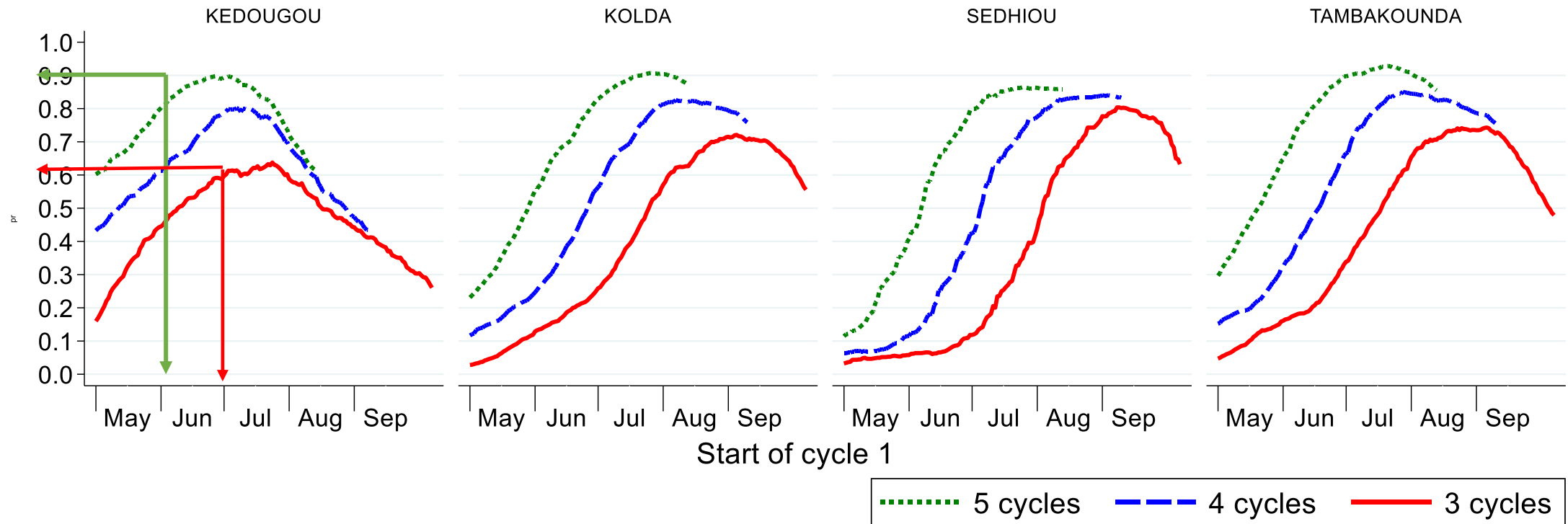
4x28=112 days, for 4 cycles

3x28=84 days, for 3 cycles



Optimal start dates

Proportion of cases during SMC period



Using data for age groups above 5 (or for years without SMC):

For each possible start date for cycle 1, calculate the proportion of annual cases that fall in the following

$5 \times 28 = 140$ days, for 5 cycles

$4 \times 28 = 112$ says, for 4 cycles

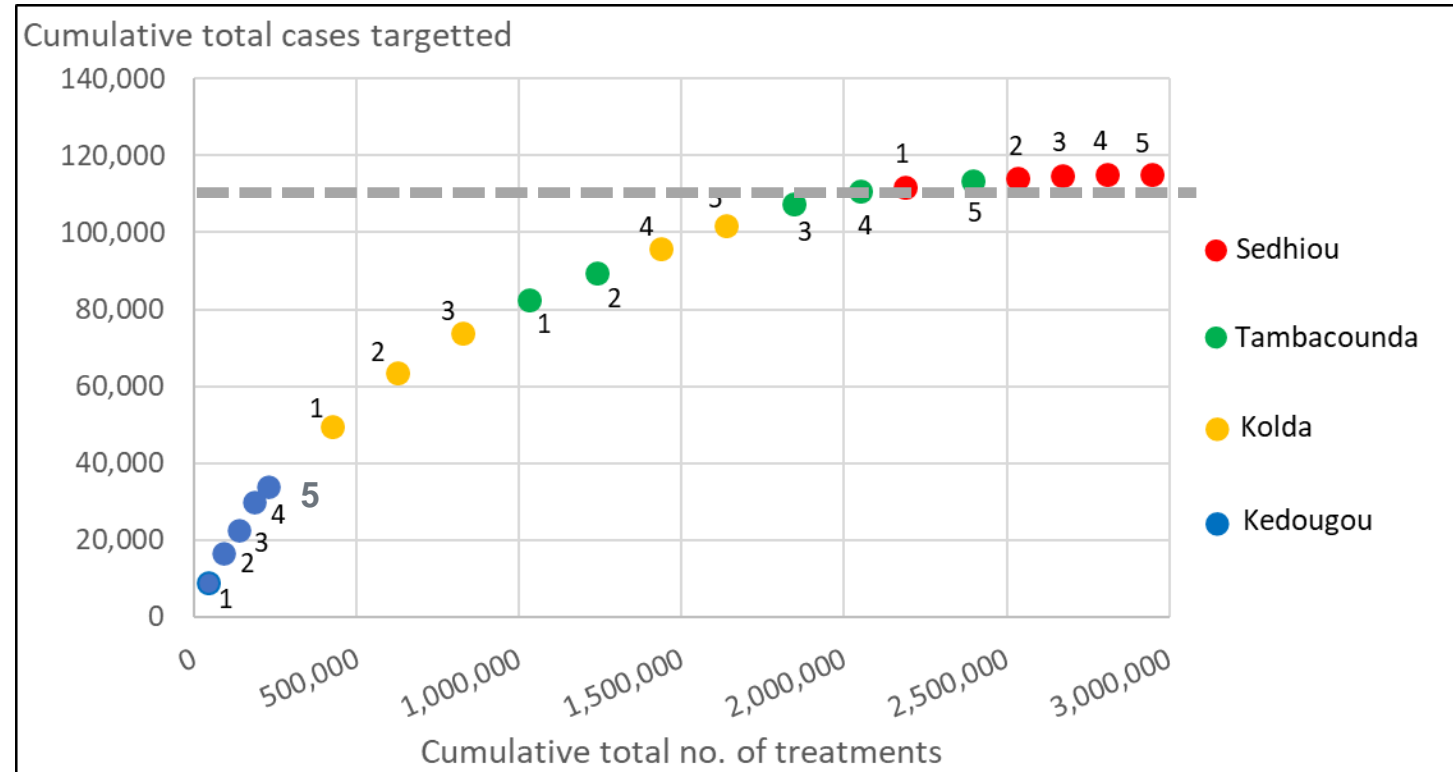
$3 \times 28 = 84$ days, for 3 cycles

- **Optimal start earlier in Kedougou, later in Kolda and Sedhiou**
- **Year to year optimal start dates 2017-2020 varied by up to 2 weeks**



Optimal number of cycles per region

1. Define optimal timing of cycles if there are 3,4 or 5 cycles, in each region
2. Estimate number of cases, in absence of SMC, in target age group, per 1000 population, in each optimal 28-day period, in each region
3. Rank the 28-day periods in order of malaria incidence
4. Plot the cumulative total number of cases against the cumulative total treatments needed, in this order



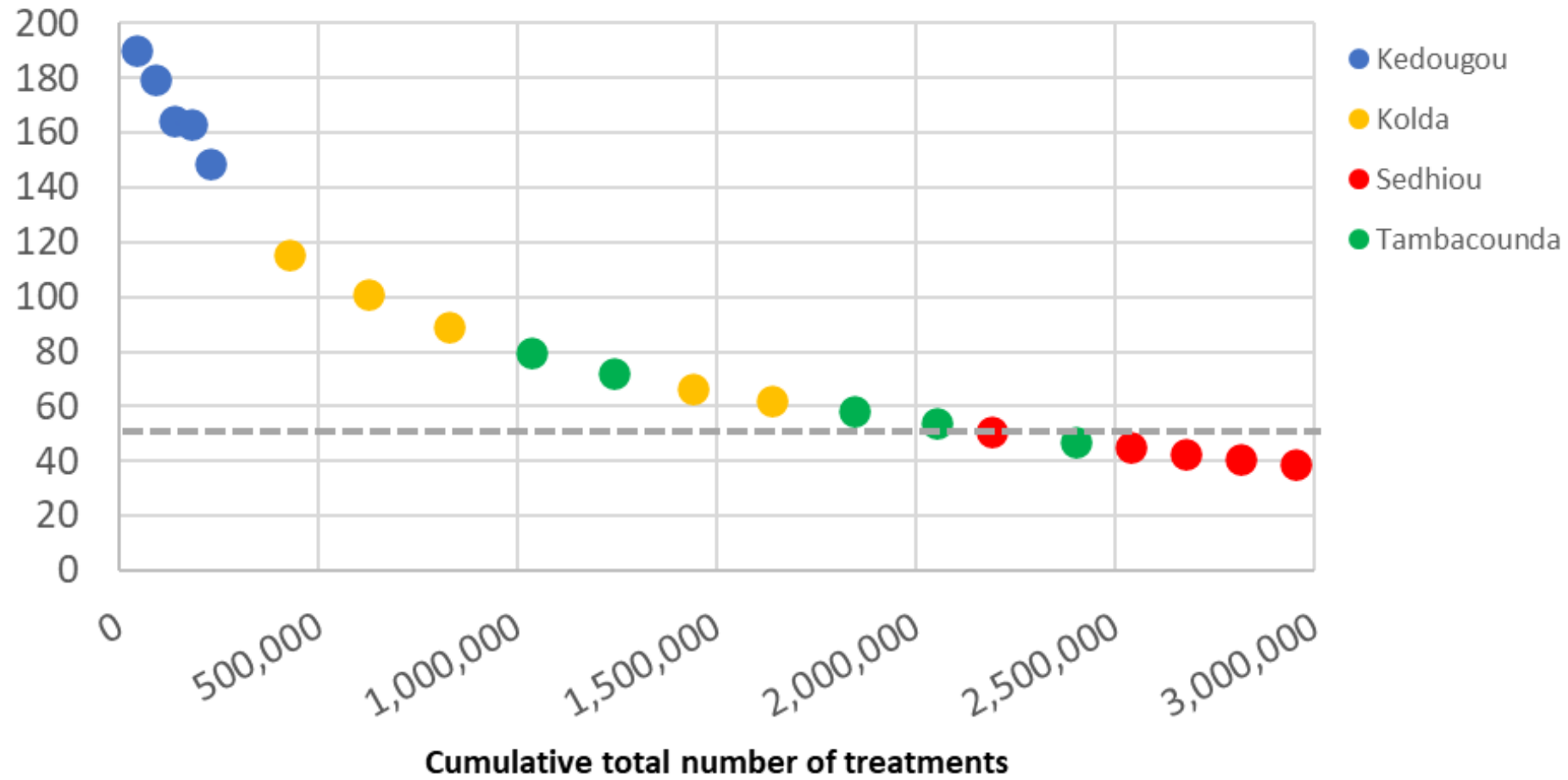
Priority order:

1. 5 cycles in Kedougou
2. 5 cycles Kedougou, 3 cycles Kolda
3. 5 cycles Kedougou, 5 cycles Kolda, 3 cycles Tambacounda



Optimal number of cycles per region

Cases targetted per 1000 treatments



Threshold for cost-effectiveness??

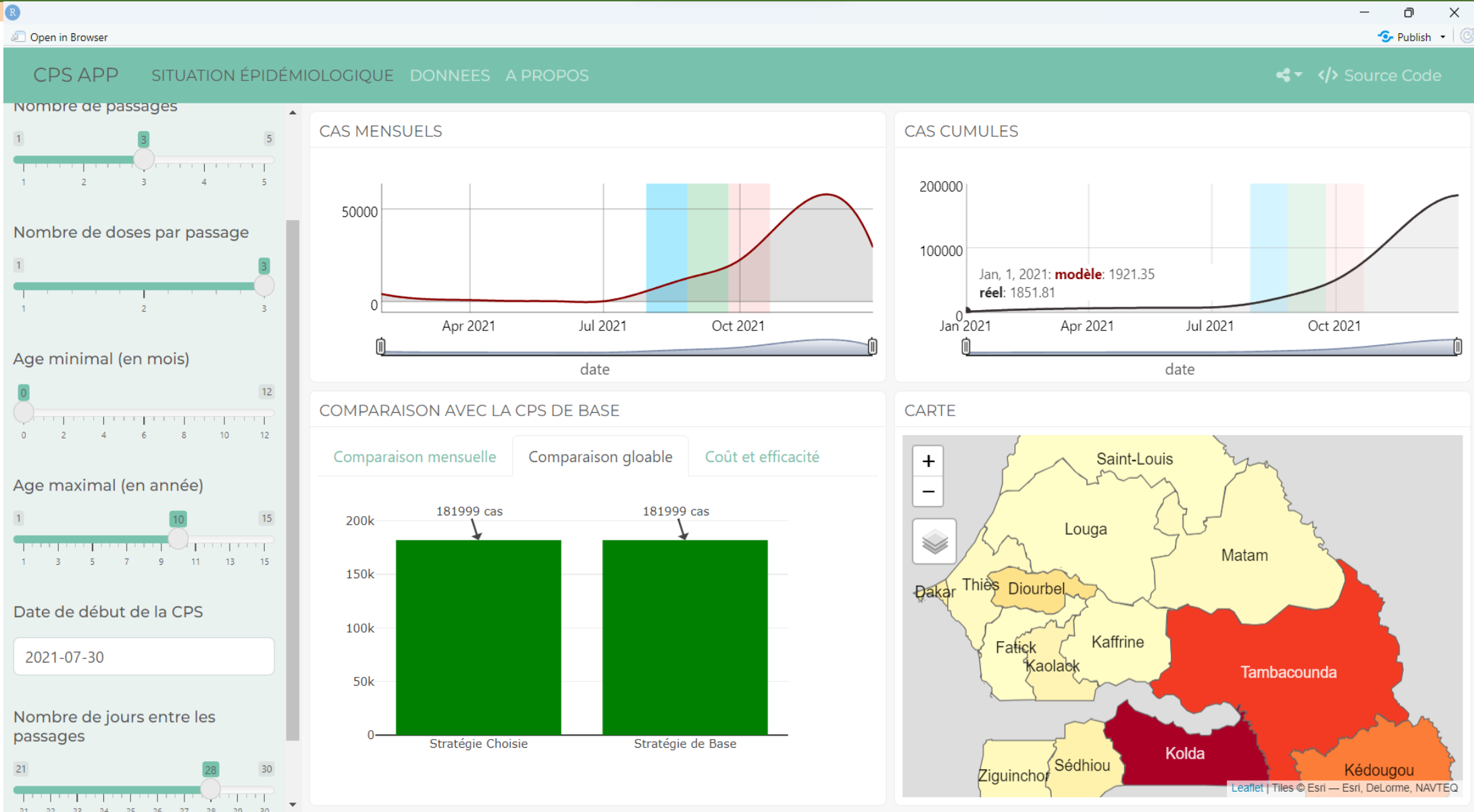


Web Application

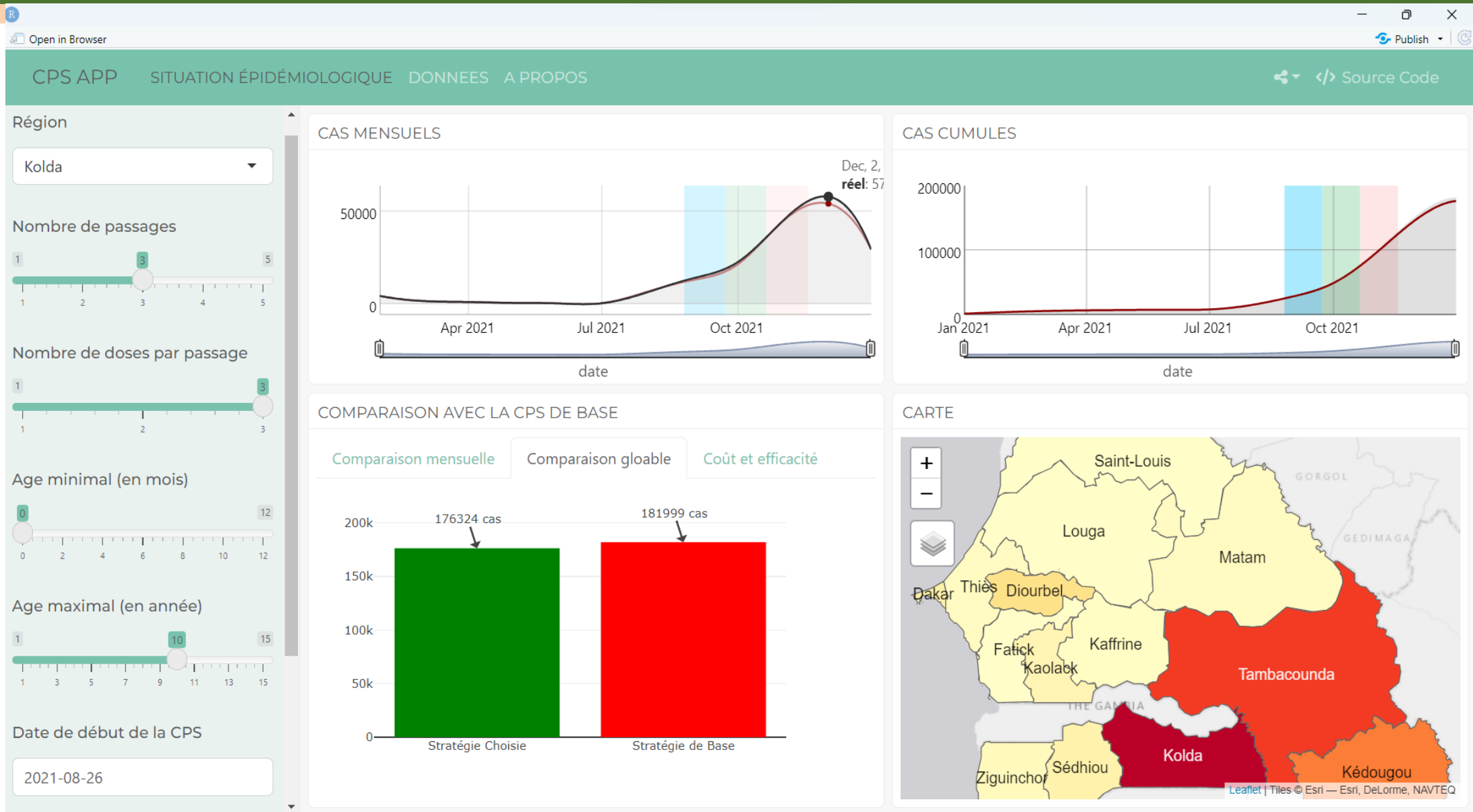
- R software (free, <https://www.r-project.org/>)
- Main Packages : Shiny, Flexdashboard, Rmarkdown, Leaflet, tmap, dygraphs, etc ...
- Data
 - The population of Senegal by age and region (2021) (source ANSD)
 - Monthly malaria cases by region between 2017 and 2021 (source PNLDP)
 - Annual birth rate (1960-2021) (source ANSD)
 - Average rainfall in the southeastern zones between 2017 and 2021



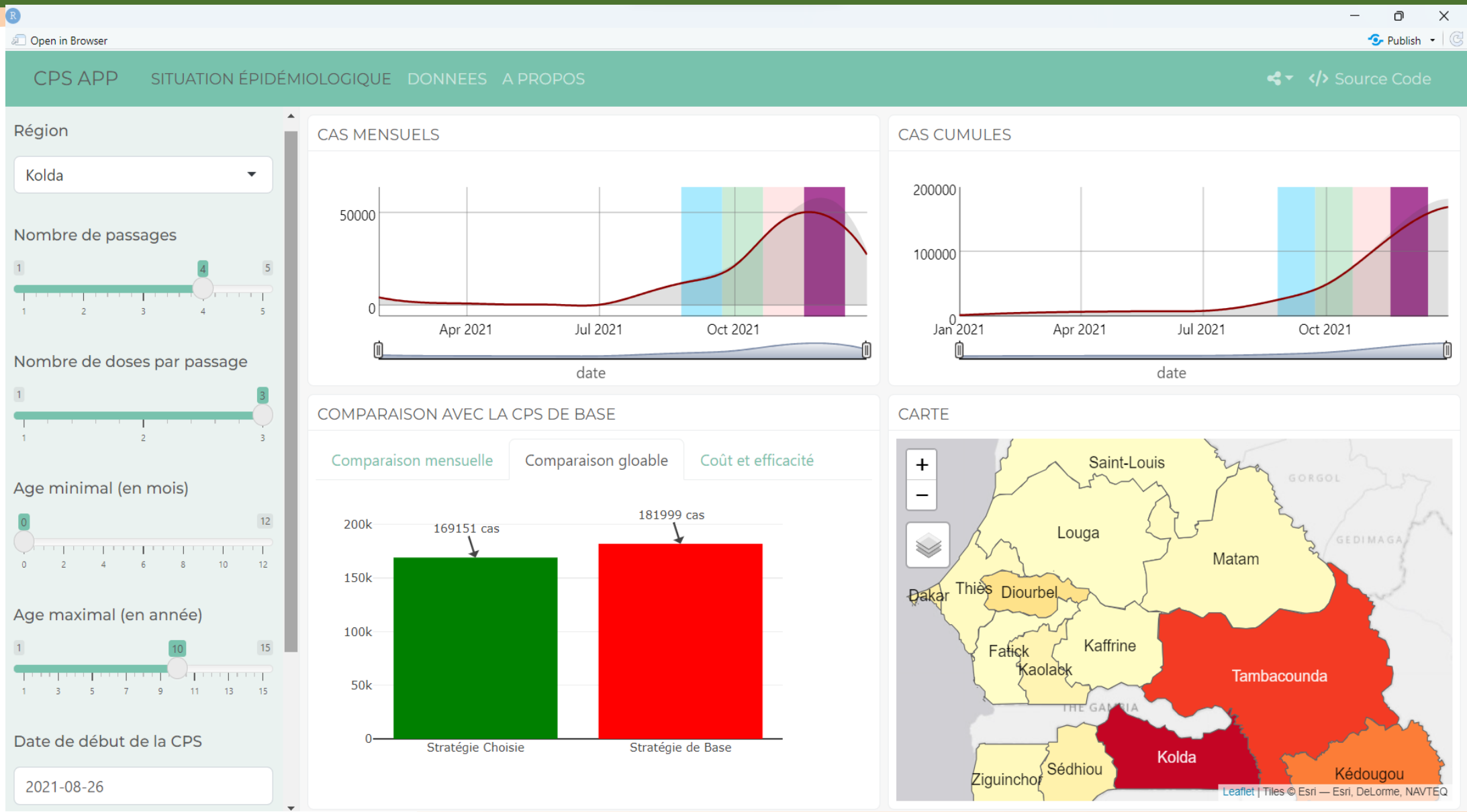
Kolda region : 2021 Strategy (3 cycles)



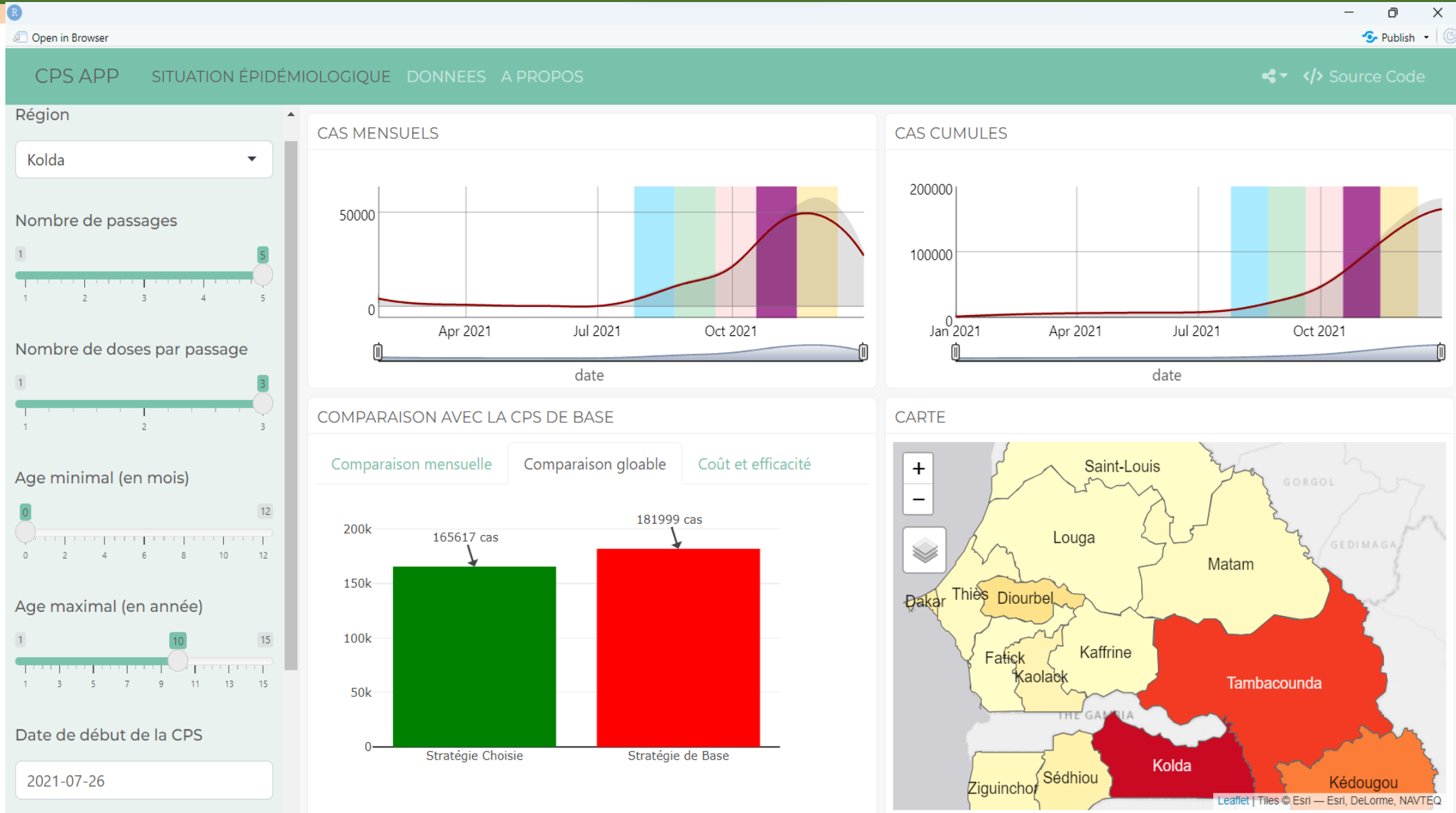
Kolda : optimal strategy with 3 cycles



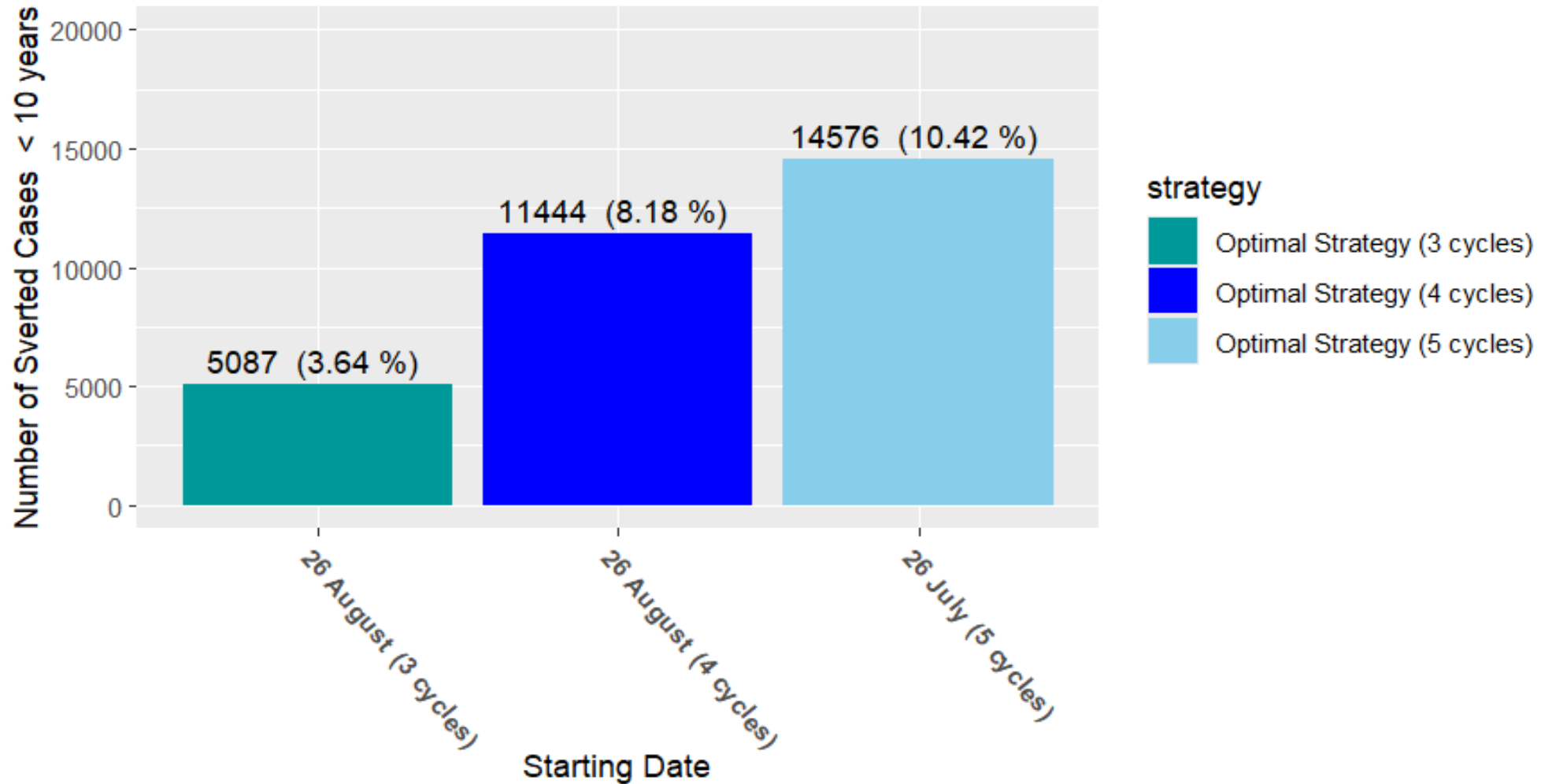
Kolda region : optimal strategy with 4 cycles



Kolda region : optimal strategy with 4 cycles



Kolda region : Averted cases in children <10 years compared to the former strategy



Key points

- NMCPs are able now to optimize the impact of SMC in the context of seasonal variations and climates changes :
 - Ensure optimal timing of cycles : start of cycle 1 and optimal allocation of number of cycles per districts
 - 5 cycles in Kedougou and 4 cycles in Kolda & Tambacounda
 - Preferable to keep interval between cycles to 28 days and increase number of cycles rather than increase the interval between cycles
- It was acceptable to stop SMC in Sedhiou in 2019
- This cross-platform web application will be deployed and made available to the OPT - SMC NMCPs. This will support them in simulating their own scenarios by entering the desired parameters



Cost and cost-effectiveness of extending SMC to a fifth monthly cycle in Guinea, Niger and Mali

Dr Halimatou Diawara
David Bath



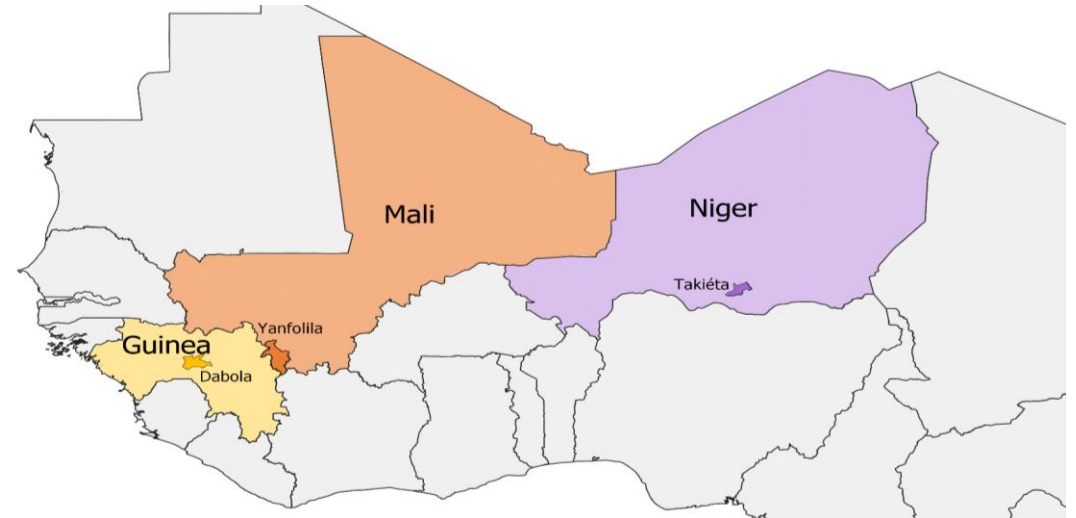
Why consider adding a 5th SMC cycle?

- In many areas where SMC is used:
 - peak malaria season is >4 months
 - high burden is just outside 4-month window
- Adding a 5th cycle could avert substantial severe cases & deaths
- Updated WHO guidelines no longer limit SMC to 4 cycles
- Several countries are extending SMC to 5 cycles in some areas
- But guidance needed on where adding 5th cycle would be cost-effective



The SMC-IMPACT project

- NMPs in Guinea, Mali and Niger piloted extensions to SMC in 4 districts (2021-2022):
 - Adding 5th cycle in children under 5 (3 districts)
 - Adding 5th cycle in children under 10(Niger)
- SMC-IMPACT project evaluated the costs, effectiveness, & cost-effectiveness compared with current practice (4 cycles)

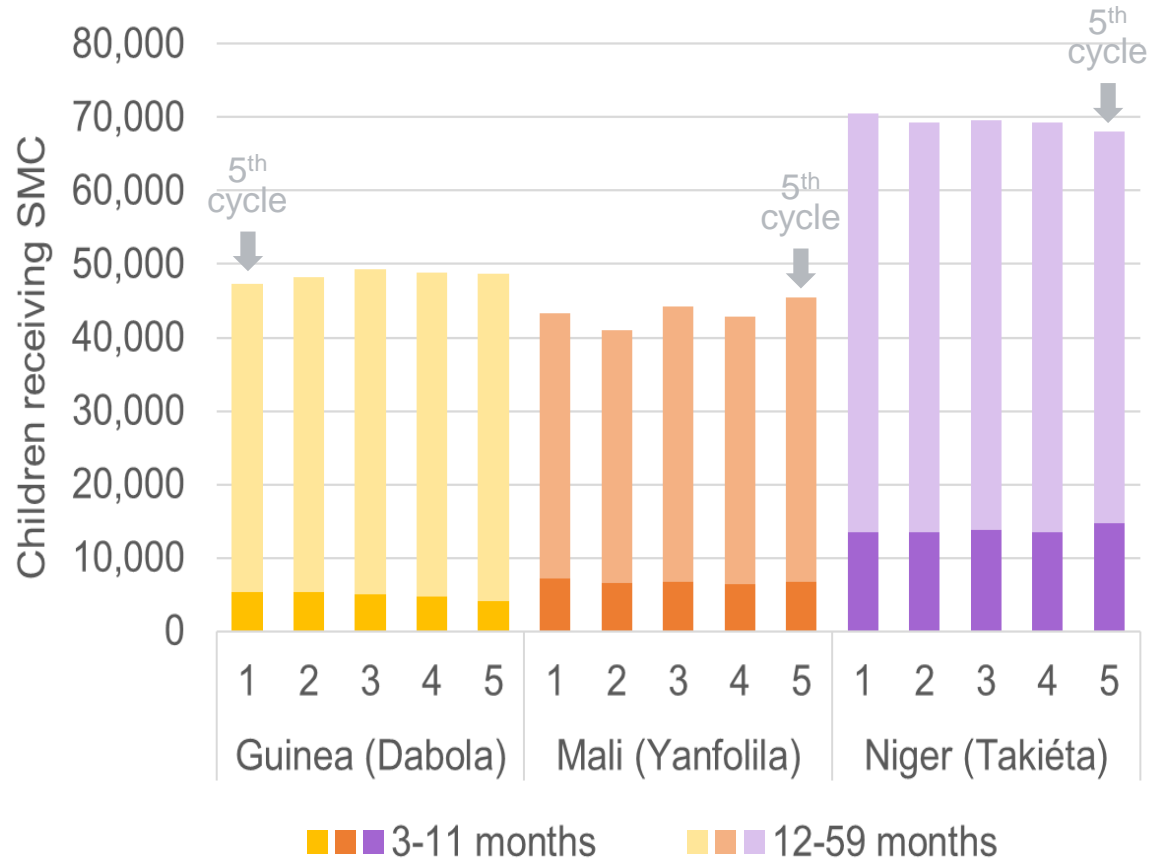


- **This presentation:** extending to 5th cycle in children under 5
- Aims to inform decision-making regarding the optimal timing & number of cycles in longer malaria season



The SMC-IMPACT project

Number of children covered per cycle



- 4 cycles delivered July-Oct in previous years
- 5th cycle added:
 - Guinea (Dabola): **in June**
 - Mali (Yanfolila) & Niger (Takieta): **in Nov**
- ~ 90% of children receiving SMC aged 12-59 m



Costing of SMC strategies

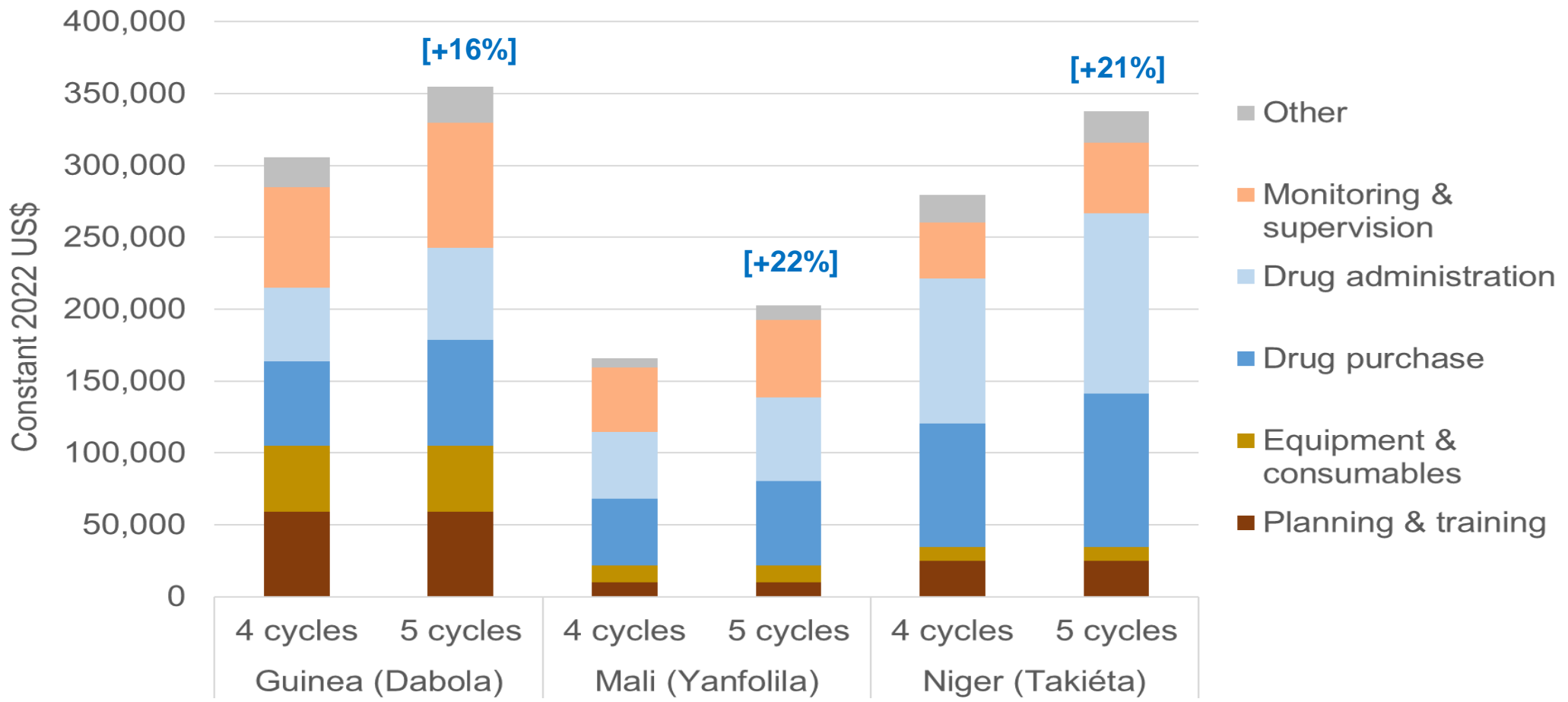
- Detailed activity-based costing of resources associated with 5 cycles of SMC
- Costing done prospectively in each district (in 2022 season)
- Consultation with NMCP staff (Mali) to identify SMC activities
 - Resources identified at national / district / health facility levels
 - Financial & economic costs
- Estimated cost of 4 cycle SMC strategy based on resources identified in 5 cycle costing
- Estimated diagnosis & treatment cost savings of malaria cases averted based on *secondary data

* WHO CHOICE



Annual cost of SMC strategies

Total economic cost of 4 & 5 cycles

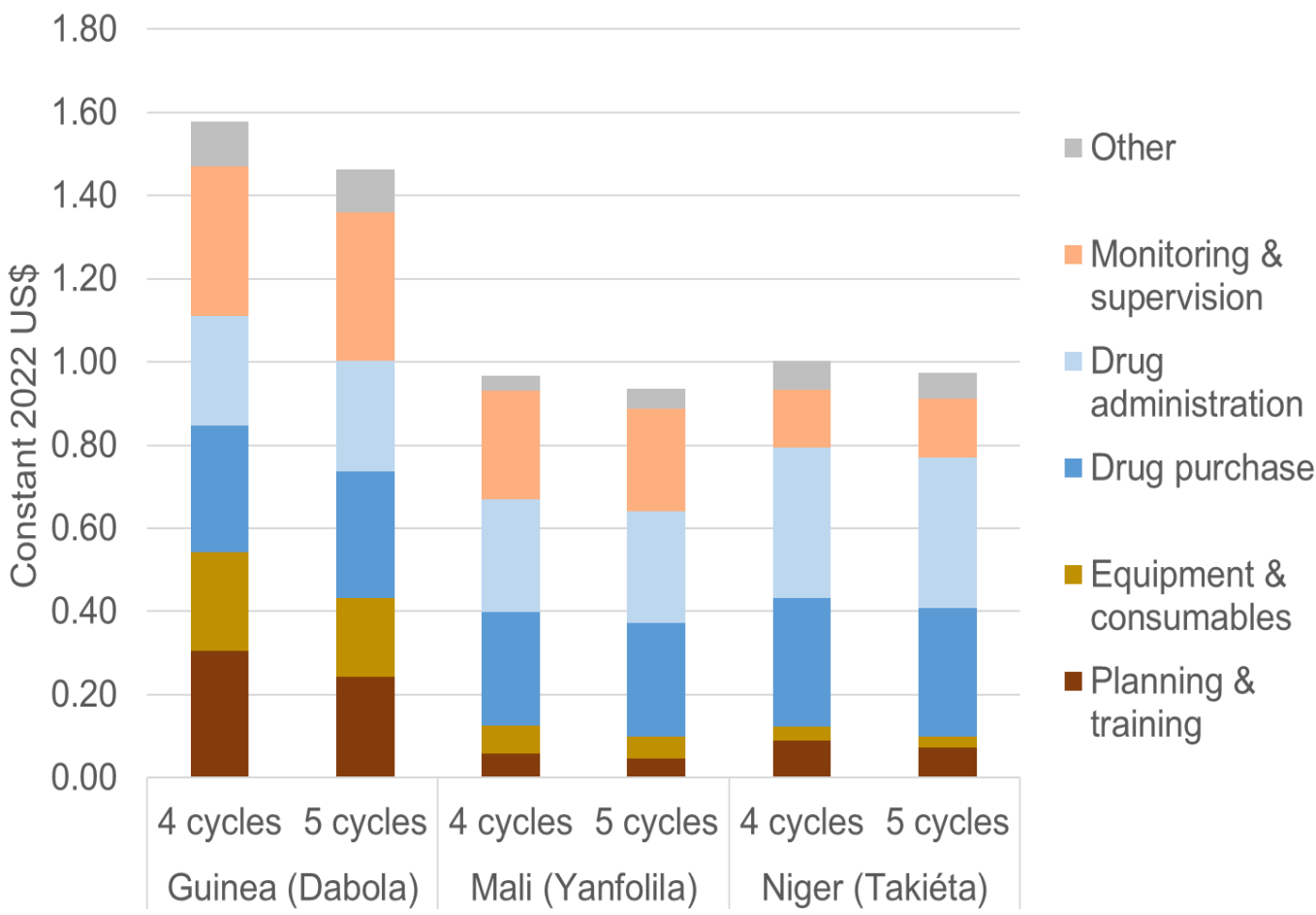


SMC programme costs only; excludes diagnosis & treatment costs

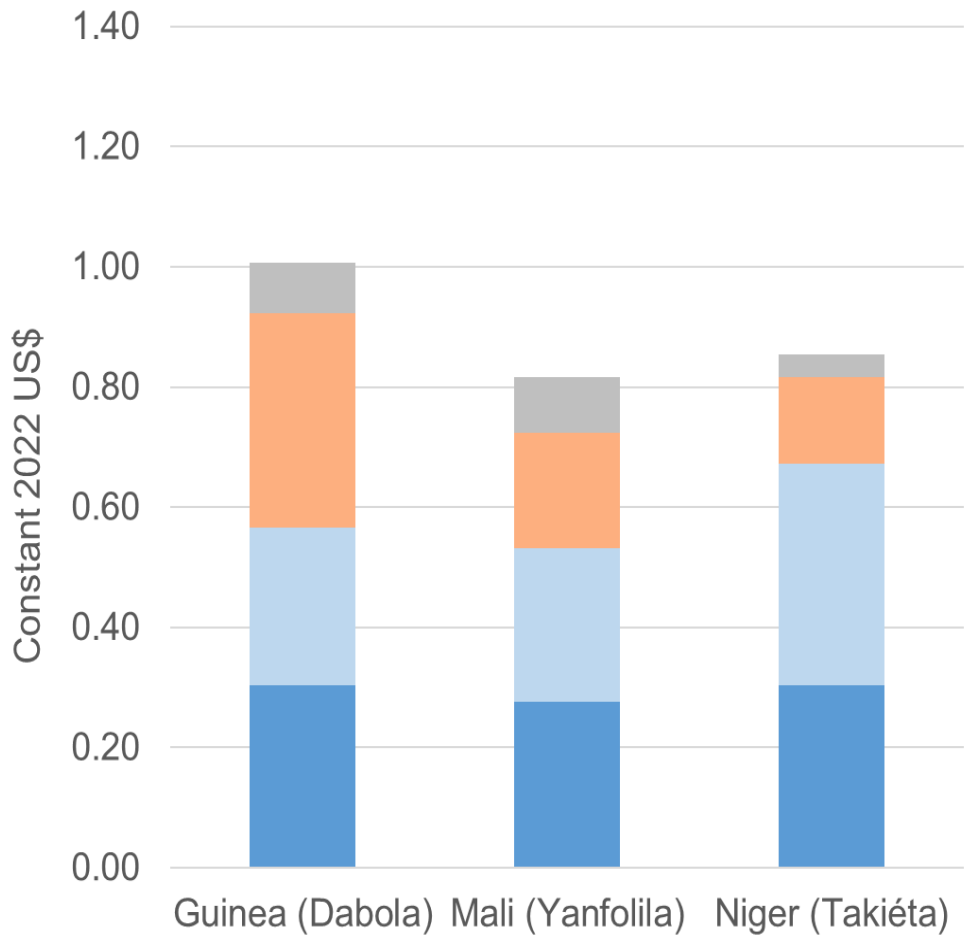


Cost per child & incremental cost of 5th cycle

Economic cost per child per cycle



Incremental cost of 5th cycle per child



SMC programme costs only; excludes diagnosis & treatment costs



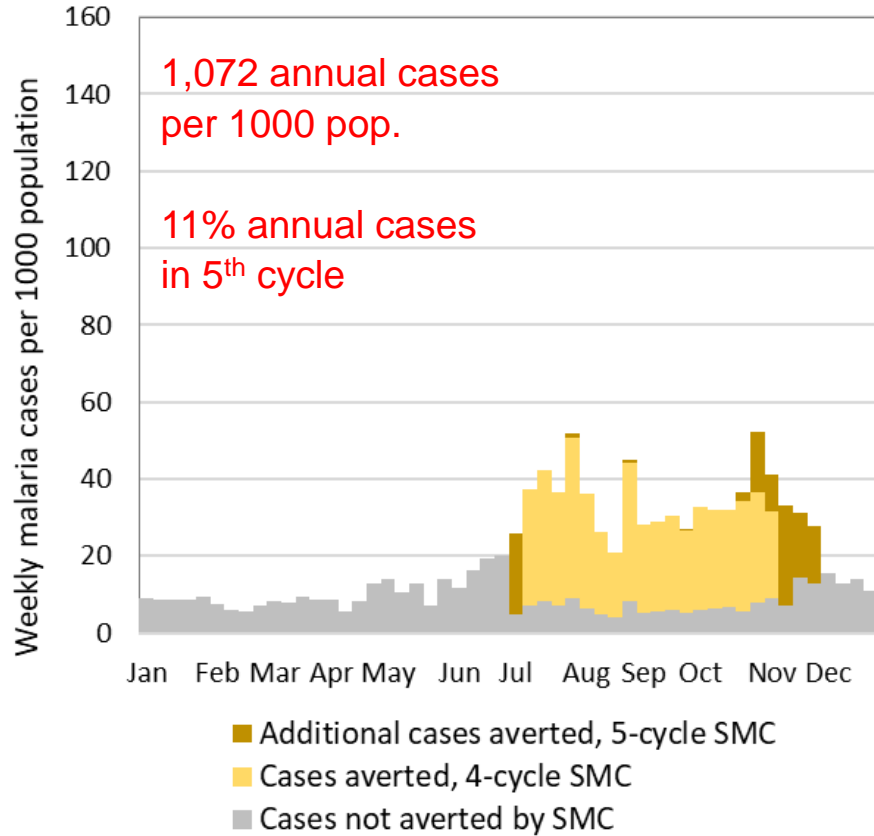
Effectiveness of SMC strategies

- Estimated malaria cases averted by SMC (compared with no SMC) for each strategy (4 & 5 cycles) in each district, based on:
 - number of children receiving SMC per cycle
 - SMC effectiveness (0-28 days; 29-42 days)
 - probability that SMC recipient had malaria *
- Estimated disability-adjusted life-years (DALYs) based on:
 - cases averted by SMC strategy
 - secondary data (progression to severe disease and death, life expectancy, disability weights)
- Optimised start dates for 4 & 5 cycle strategies to maximize effectiveness of each strategy.

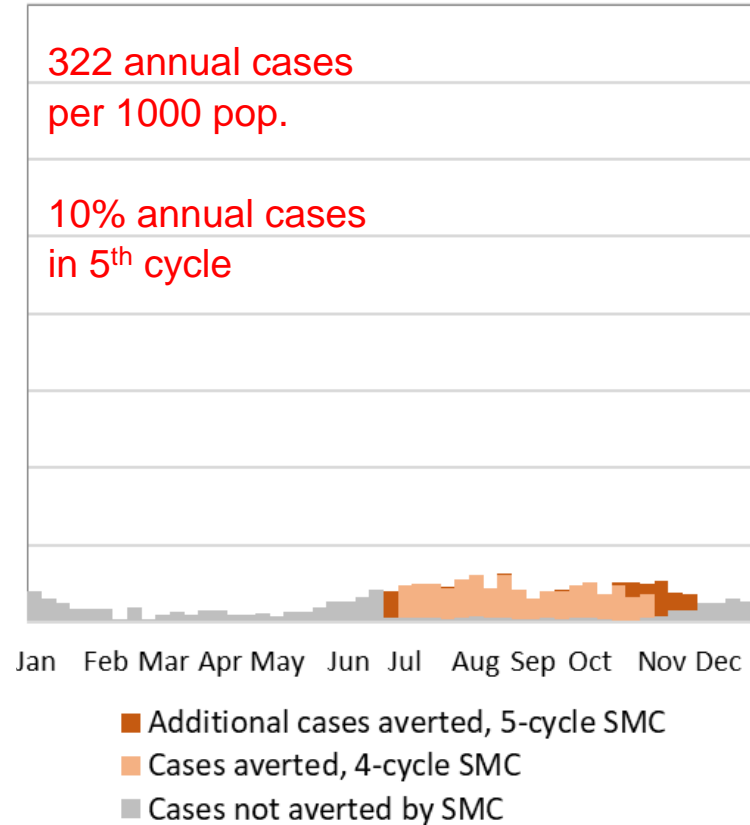


Malaria cases averted by 4 & 5 cycles (by week)

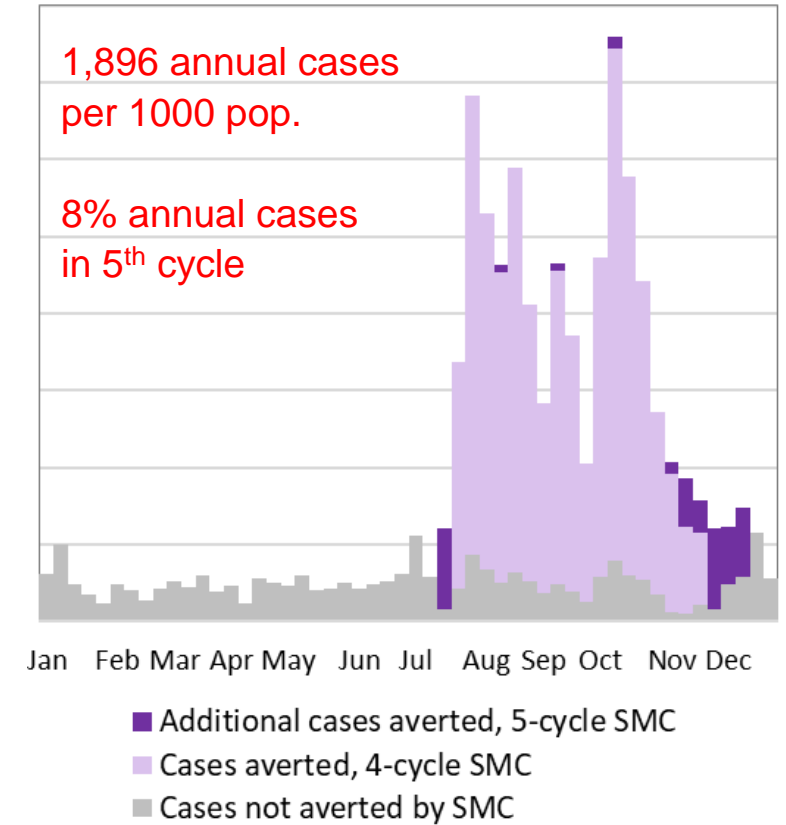
Guinea (Dabola)



Mali (Yanfolila)



Niger (Takiéta)

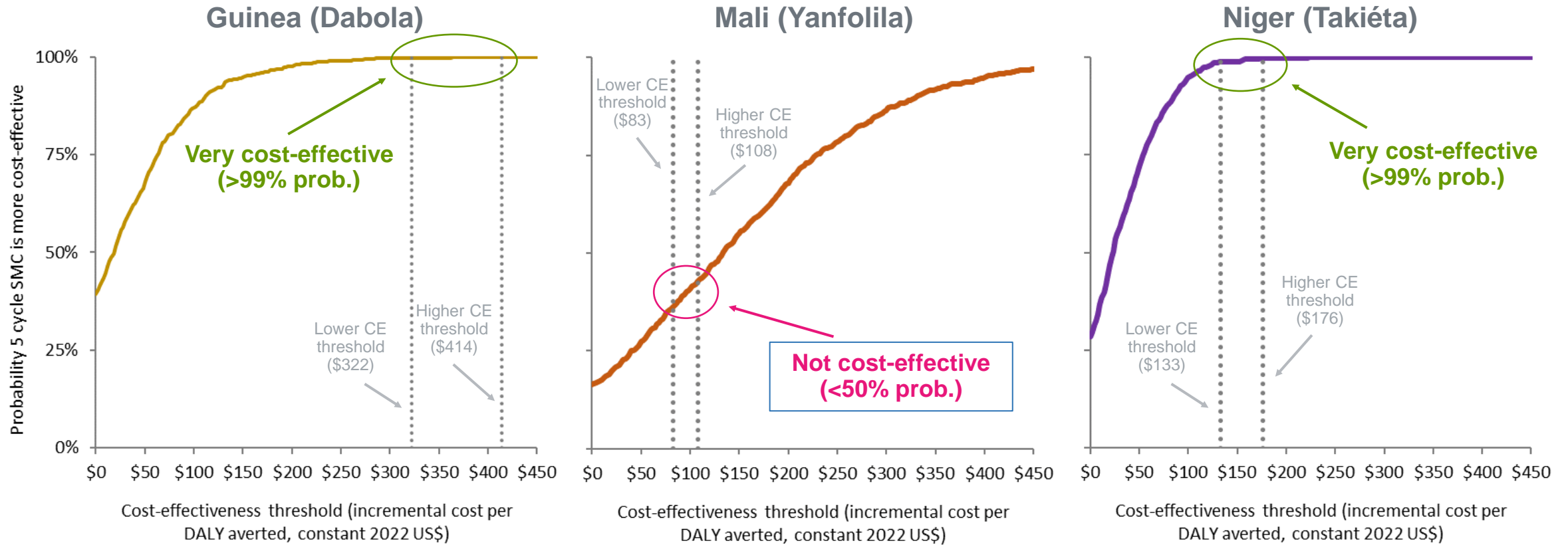


Cost-effectiveness of adding a 5th cycle

- Incremental cost-effectiveness ratio (ICER):
 - the additional cost of switching from 4 cycle to 5 cycle SMC strategy
 - expressed as: incremental cost per DALY averted
- Cost-effectiveness evaluated by comparing ICERs against country-specific cost-effectiveness thresholds that reflect benefits foregone in withdrawing resources from other areas of health system
- Deterministic and probabilistic sensitivity analyses done to determine impact of individual & combined parameter uncertainty



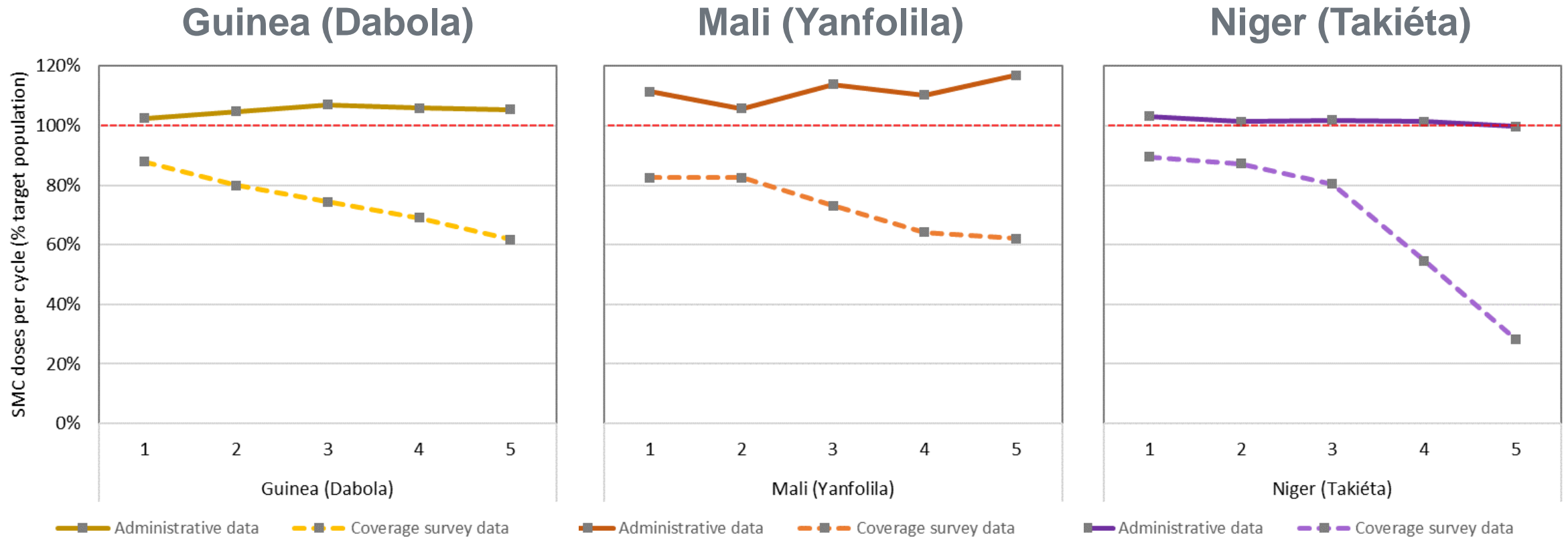
Cost-effectiveness of adding a 5th cycle



- Preliminary results: 5 cycle SMC appears cost-effective in the 2 higher incidence districts
- BUT! Sensitive to uncertainty in parameters, including levels of SMC coverage



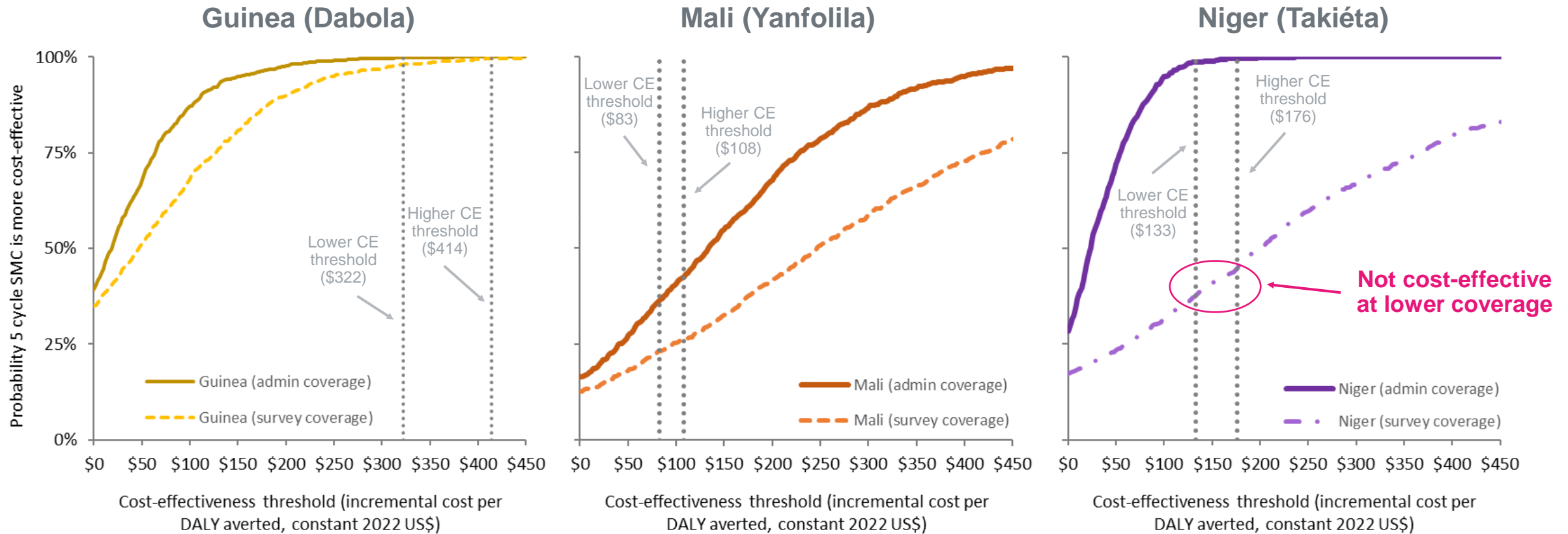
Administrative data vs. coverage surveys



- Administrative data on SMC doses: coverage >100% (as % target population)
- Coverage surveys show lower coverage, which impacts cost-effectiveness of adding 5th cycle



Cost-effectiveness of adding a 5th cycle



- Based on coverage survey data, adding a 5th SMC cycle no longer appears cost-effective in Niger (Takiéta)



Conclusions

- Adding a 5th cycle increased total costs of delivering SMC by 16% - 22%: incremental costs of a 5th cycle were less than the average cost of a 4 cycle.
- Adding 5th cycle of SMC appears to be cost-effective in areas of higher incidence seems greater seasonality
- Sensitive to coverage levels – particularly coverage in 5th cycle
- Reliable estimates of coverage and incidence are (and other parameters) very important
- Analysis is generalizable to other settings – to enable decision-makers to evaluate:
 - where additional cycles of SMC represent the best use of scarce resources
 - the optimal timing of cycles to maximise health impact



Malaria Research & Training Center, University of Bamako, Mali

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London School of Hygiene & Tropical Medicine, UK

David Bath, Catherine Pitt, Paul Milligan, Paul Snell

Maferenyah Research Institute, Guinea

Bienvenu Camara

Universite Gamal Abdel Nasser, Guinea

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Mahaman Moustapha Lamine

Programme National de Lutte contre le Paludisme, Niger

Hadiza Jackou

CRS, Senegal & USA

Chrestien Yemeni, Suzanne Van Hulle

Medicines for Malaria Venture, Switzerland

Germaine Ekoyol, Andre Marie Tchouatchieu



KOREA





Partnership for implementation research: OPT-SMC Project

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EDCTP

This project is part of the EDCTP2 programme supported by the European Union

8th MIM – PAM Conference
21-27 April 2024 Kigali, Rwanda



Objectives of OPT-SMC

Strengthening the capacities of the NMPs implementing SMC:

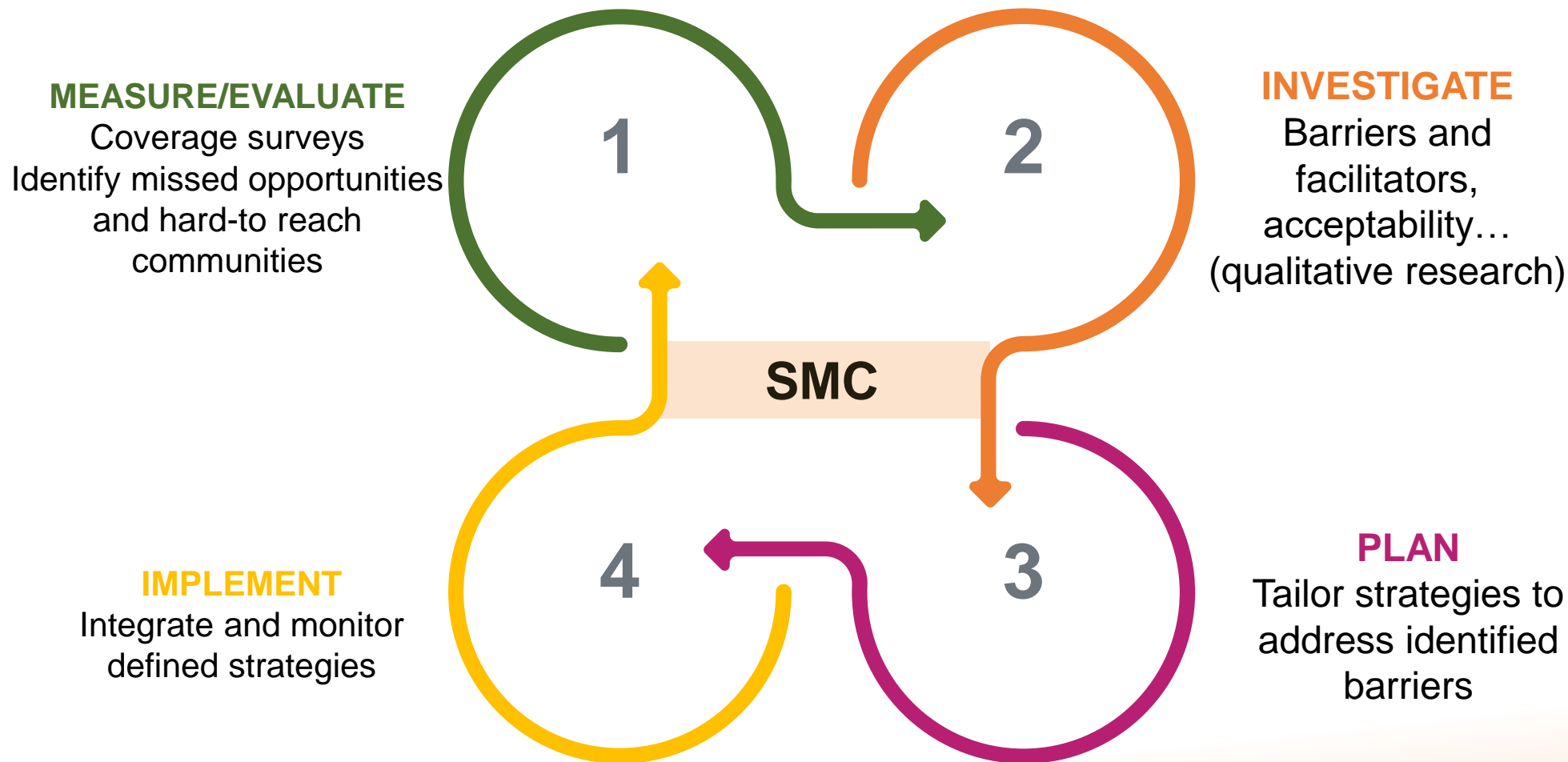
- To define research priorities for **optimizing SMC effectiveness**
- To **conduct IR/OR projects** for improving SMC effectiveness
- To interpret and make use of malaria surveillance data
- To target effectively (high-risk populations and periods of the year)
- To monitor delivery, uptake and effectiveness

Promote inter-country collaboration, sharing of information and expertise



Optimizing Seasonal Malaria Chemoprevention

Cycle of monitoring and evaluation for learning and improvement



Projects developed / NMPs

1



MONITOR AND EVALUATE

BENIN – GAMBIA –
GHANA – GUINEE
BISSAU –
SENEGAL

2



BARRIERS TO UPTAKE

BURKINA FASO –
GUINEA – NIGERIA

3



DEVELOPING AND EVALUATING NEW STRATEGIES :

BURKINA FASO –
CAMEROUN – GUINEA –
MALI – SENEGAL

4



ADAPTING TARGET GROUPS :

NIGER – TOGO

Achievements

➤ 13 countries:

- 7 – complete (B.Faso, Cameroon, Guinea, Ghana, Mali, Nigeria, Senegal)
- 3 – data collection complete, analysis stage
- 1 – data collection ongoing
- 1 – ethics approval, will start this year
- 1 – still to confirm a project

➤ Conferences:

- ASTMH 2021 (Ghana, COVID work and video job-aids) and 2022 (Guinea and Nigeria)
- SMC Alliance meeting 2023 (Mali, Nigeria, Cameroon)
- EDCTP forum – Nov 23, Paris (Guinea, Nigeria, Mali and Burkina Faso)

Ogbulafor et al. *Malaria Journal* (2023) 22:120
<https://doi.org/10.1186/s12936-023-04547-w> Malaria Journal

RESEARCH **Open Access**

Facilitators and barriers to seasonal malaria chemoprevention (SMC) uptake in Nigeria: a qualitative approach 

Nnenna Ogbulafor^{1*}, Perpetua Uhomobhi¹, Emmanuel Shekarau¹, Jamilu Nikau¹, Chukwu Okoronkwo¹, Nadia M. L. Fanou², Ibrahima Marietou Mbaye³, Jean-Louis Ndiaye³, Andre-Marie Tchouatieu⁴, Abena Poku-Awuku⁴, Corinne Merle⁵, Susana Scott⁶, Paul Milligan⁶, Aminu Ali⁷, Hauwa'u Evelyn Yusuf⁸, Stephen Oguche⁹ and Tukur Dahiru¹⁰

1545

IMPROVING DELIVERY OF SEASONAL MALARIA CHEMOPREVENTION IN MINING AREAS IN GUINEA: FINDINGS OF IMPLEMENTATION RESEARCH

Bienvenu Camara¹, Eugene K. Lama², Moriba Haba³, Nouhan Diop⁴, Fatoumata Mara⁵, Abdoul K. Camara⁶, Ibrahima MBaye⁷, Jean Louis NDiaye⁷, Susana Scott⁸, Abena Poku-Awuku⁹, Andre-Marie Tchouatieu⁹, Corinne Merle¹⁰, Paul John Milligan¹¹, Kovana M. Loua¹², Yaya Barry²

1145

ASSESSING COVERAGE OF SEASONAL MALARIA CHEMOPREVENTION IN GHANA IN 2020

George Adu¹, Nana Peprah¹, Boakye-Yiadom Adomako¹, Mohammed Wahjib¹, Sammy Oppong¹, Abubakari Ihsan¹, Ibrahima MBaye², Abena Poku-Awuku³, Andre-Marie Tchouatieu³, Corinne Merle⁴, Paul Milligan⁵, Susana Scott⁵, Jean Louis NDiaye², Keziah I. Malm¹

Achievements

Add on studies to support the project

PLOS DIGITAL HEALTH

RESEARCH ARTICLE

The use of video job-aids to improve the quality of seasonal malaria chemoprevention delivery

Susana Scott^{1*}, Bienvenu Salim Camara², Michael Hill³, Eugène Kaman Lama⁴, Lansana Barry⁵, Aurore Ogouyemi-Hounto⁵, William Houndjo⁴, Gauthier Tougri⁶, Nombre Yacouba⁶, Dorothy Achu⁷, Marcellin Ateba⁷, Mahamat Saleh Issakha Diar⁸, Keziah L. Malm⁹, Kofi Adomako⁹, Paolo Djata¹⁰, Wica Da Silva¹⁰, Idrissa Cissé¹¹, Vincent Sanogo¹¹, Hadiza Jackou¹², Nnenna Ogbulafor¹³, Bala M. Adu¹³, Jamilu Nikau¹³, Seynabou Gaye¹⁴, Alioune Badara Gueye¹⁴, Balla Kandeh¹⁵, Olimatou Kolley¹⁵, Tinah Atcha-Oubou¹⁶, Tchassama Tchadjobo¹⁶, Kovana Marcel Loua¹⁷, Andre-Marie Tchouatieu¹⁸, Ibrahima Mbaye¹⁹, Maria-Angeles Lima-Parra²⁰, Abena Poku-Awuku¹⁸, Jean Louis Ndiaye¹⁹, Corinne Merle²¹, Liz Thomas²², Paul Milligan¹



0209

IMPACT OF COVID-19 PANDEMIC ON SEASONAL MALARIA CHEMOPREVENTION 2020 CAMPAIGN IN WEST AND CENTRAL AFRICA

Maria Angelines Lima Parra¹, Ibrahima Mbaye², Eugene Kaman Lama³, Aurore Hounto⁴, William Houndjo⁴, Gauthier Tougri⁵, Nombre Yacouba⁵, Dorothy Achu⁶, Ateba Marcellin⁶, Mahamat Saleh Diar⁷, Keziah L. Malm⁸, Adomako Kofi⁸, Paolo Djata⁹, Wica Victorina Da Silva⁹, Idrissa Cisse¹⁰, Vincent Sanogo¹⁰, Hadiza Jackou¹¹, Nnenna Ogbulafor¹², Jamilu Nikau¹³, Audu Bala Mohamed¹³, Seynabou Gaye¹⁴, Alioune Badara Gueye¹⁴, Balla Kandeh¹⁵, Olimatou Kolley¹⁵, Tinah Atcha Oubou¹⁶, Tchassama Tchadjobo¹⁶, Andre Marie Tchouatieu¹⁷, Abena Poku-Awuku¹⁷, Jean Louis Ndiaye², Susana Scott¹⁸, Paul Milligan¹⁸, **Corinne Simone Colette Merle**¹⁹

RTSS-SMC working group

Malaria Journal (2023) 22:242
<https://doi.org/10.1186/s12936-023-04657-5>

Malaria Journal

MEETING REPORT

Open Access



Implementation strategies for the introduction of the RTS,S/AS01 (RTS,S) malaria vaccine in countries with areas of highly seasonal transmission: workshop meeting report

Corinne S. Merle^{1*} and RTSS-SMC working group

- Standardised protocols for implementation research (WHO funded)
- WHO/GMP: collaboration to add SMC module onto the DHIS2 and train countries on how to use it to better interpret their data
- Workshops, webinars

Strengths

1 Network of 13 countries sharing progress and lessons learnt

2 NMPs leading the research: Identifying priority questions /
Conducting research and putting the findings into practice

3 Providing technical support and strengthening capacity in implementation
research methods

4 Facilitating collaboration between NMPs and local research institutions / partners

5 Frequent communications with each NMP and bringing all partners together
through regular webinars and in-person meetings

6 Multi-lingual project – strong emphasis to be inclusive to all

7 Collaboration with other consortium (Impact-SMC, SMC Alliance, Malaria
Consortium...)

Lessons learnt

1

Importance of mixed methods with qualitative research to understand community perspectives and then take these into account when planning SMC delivery

2

Mistrust : drugs provided free, not effective communication, distributors not from local community

3

Challenges of delivery in areas with security problems

4

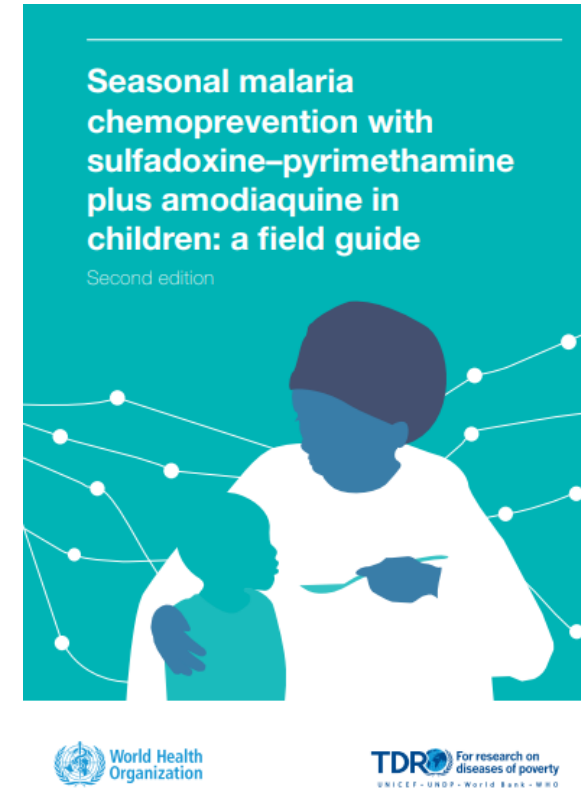
Need to adapt delivery to local factors / Community engagement +++

5

Implementing the recommendations from the various research might involve some additional cost

Perspectives for the control of seasonal malaria

- →→→→→→ Optimizing SMC
- SMC implementation field guide
- WHO 2022 guidelines on malaria (Sub-national tailoring)
 - Where should we do SMC?
 - When to start? How many cycles? When to stop?
 - Age range? (High risk of severe disease)
- Need for improved surveillance data for severe disease and greater granularity



Perspectives for the control of seasonal malaria

- Malaria vaccine
 - Similar implementation challenges to ensure that all children are reached
 - Potential future interventions
 - Monoclonal antibodies?
 - Long Acting Injectable antimalarials ?
- ➔ Partnership for implementation research +++**





EDCTP



Medicines for Malaria Venture



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LOCAL SOLUTIONS FOR GLOBAL IMPACT



OPT-SMC

Optimizing Seasonal Malaria Chemoprevention
in West and Central Africa



LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



NMP: Benin, Burkina Faso,
Cameroon, Chad, Ghana,
Gambia, Guinea, Guinea
Bissau, Mali, Niger, Nigeria,
Senegal, Togo and
Mauritania

IMPACT-SMC

THANK YOU !!!!

