

Supplementary Material for

Community patient follow-up as a part of *P. vivax* case management in Cambodia: a mixed methods study

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Appendix 1: GRAMMS Checklist for mixed methods studies

Good Reporting of a Mixed Methods Study (GRAMMS) Checklist

Guideline	Page Information
1. Describe the justification for using a mixed methods approach to the research question	Page 6, 7
2. Describe the design in terms of the purpose, priority and sequence of methods	Pages 5, 6, and 9
3. Describe each method in terms of sampling, data collection and analysis	Pages 12-15
4. Describe where integration has occurred, how it has occurred and who has participated in it	Pages 5 and 6, 9
5. Describe any limitation of one method associated with the present of the other method	Not applicable
6. Describe any insights gained from mixing or integrating methods	Pages 17,19, 21, and 23

Reference: O’cathain A, Murphy E, Nicholl J. The Quality of Mixed Methods Studies in Health Services Research. J Health Serv Res Policy. 2008 Apr;13(2):92–8.

Appendix 2: VMW job aid for the implementation of VMW follow-up from Cambodia's 2022 National Malaria Treatment Guidelines ¹



Job Aid – VMW's Checklist for adherence and side effect monitoring for P. Vivax Radical Cure



- 1 **When arriving at patient house,**
 - a) Check the patient adherence follow-up form (7-day PQ for G6PD normal and 8-week PQ for G6PD intermediate and deficient) and verify the amount of remaining medication
 - b) Ask patients if there was any history of side effects after taking the medicine.
 - c) If the patient has not completed the medication yet, ask the patients what are the reasons
- 2 Ask the patient about any history of side effects or signs and symptoms of acute hemolytic anemia (AHA), since the day of taking the medicine, or since the previous visit by VMW on day 3 and day 7 (7-day PQ), or the previous week (8-week PQ).




Urine with blood

*Examine patient's urine in a bottle, and compare with the urine color chart



Pallor (pale skin or yellow eyes, nails or lips)

*Examine patient skin, eyelids, nails and lips



Shortness of breath

*Ask and observe the patients



Back pain

*Ask and observe the patients



Increased heart rate

*Ask and observe the patients

3 VMWs must report the data to MIS via phone

If VMW finds any dangerous sign among above 5 symptoms with the patient, please:



1 – Call the HC staff to consult if the patient needs to be referred, or, refer the patients to HCs (without consult)



2 – Record the actions taken in MIS app

Version: March 2023

Appendix 3: *P. vivax* Patient treatment follow-up card from Cambodia's 2022 National Malaria Treatment Guidelines ¹

Patient Treatment and Information Form for Patient to Track their Treatment Course																																																			
For <i>P. falciparum</i>, <i>P. knowlesi</i> and <i>P. malariae</i> malaria patients																																																			
- Complete the 3-day full treatment dose based on the instruction provided by your health provider. - A treatment provider or village malaria worker (VMW) will support you to complete your medication. He/she will visit your house to follow up on your medication on Day 3 after you get the treatment.																																																			
For <i>P. vivax</i>, <i>P. ovale</i> and mixed malaria patients																																																			
- In addition to the 3-day full treatment dose of ACT, radical cure is provided for all <i>P. vivax</i>, <i>P. ovale</i> and mixed malaria patients. G6PD normal patients complete 7-day Primaquine, and G6PD intermediate or deficient patients complete 8-week Primaquine. - For 7-day Primaquine, a treatment provider or village malaria worker (VMW) will support you to complete your medication. He/she will call or visit your house to follow up on your medication on Day 3 and Day 7 after you get the treatment. - For 8-week Primaquine, patients are required to travel back to HC on Day 3 and Day 7 for checking the hemoglobin level before receiving the next dose. From Week 3, the completion of the medication will be supervised by HC or VMW via phone call or visits. - What do I do if I miss a dose? Continue taking your medication according to your schedule. Do not take 2 doses at the same time.																																																			
If you take the full dose of medication, you reduce the chance of relapse and prevent transmission of malaria to your household and colleagues																																																			
If you experience any of these signs and symptoms below, stop taking primaquine and (1) go to visit the original health provider (health centers or hospitals) immediately (2) go to the nearest hospital immediately, if the health center is closed or you have traveled to other areas URINE WITH BLOOD Pallor, yellow skin and eyes Shortness of breath, rapid breathing Back pain Increased heart rate, palpitations, tachycardia																																																			
For all patients - How can you protect yourself from malaria?																																																			
 1 Sleep under bed nets at all times	 2 Wear long sleeved clothes Particularly in the evening and in the forest																																																		
 3 If you or a family member has a fever, go for malaria testing at nearest health facilities or VMW/MMW																																																			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Patient Name: </td> <td style="width: 10%;">Sex: M / F</td> <td style="width: 15%;">Weight (kg): </td> <td style="width: 15%;">Current Village: </td> <td style="width: 40%;">Species: <i>Pf</i> / <i>Pv</i> / mix / <i>Pk</i> / <i>Po</i> / <i>Pm</i></td> </tr> <tr> <td>Date of G6PD test: </td> <td>G6PD value: </td> <td>Hemoglobin (SD Biosensor): g/dL</td> <td>Hemoglobin level (Hemocue): g/dL</td> <td>Day0 g/dL Day3 g/dL Day7 g/dL</td> </tr> <tr> <td>HF Name: </td> <td>HF Phone No.: </td> <td>Assigned Hospital Name: </td> <td colspan="2">Assigned Hospital Phone No.: </td> </tr> </table>		Patient Name:	Sex: M / F	Weight (kg):	Current Village:	Species: <i>Pf</i> / <i>Pv</i> / mix / <i>Pk</i> / <i>Po</i> / <i>Pm</i>	Date of G6PD test:	G6PD value:	Hemoglobin (SD Biosensor): g/dL	Hemoglobin level (Hemocue): g/dL	Day0 g/dL Day3 g/dL Day7 g/dL	HF Name:	HF Phone No.:	Assigned Hospital Name:	Assigned Hospital Phone No.:																																				
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Please take the medications with food to reduce stomach irritation. Please take this card with you all the time!																																																			

Appendix 4: Example discussion guide for interviews and focus group discussions with village malaria workers. VMW follow-up was one of three topics covered during these sessions.

Question	Description
1. Can you describe the process of what you do to diagnose and treat vivax malaria patients?	Process of diagnosing vivax and treating it. A detailed description of what VMWs do to diagnosis and treat vivax malaria.
2. Can you tell me more about what happens after the patient receives treatment? a. If they do not describe in person follow-up: Why have you been or not been conducting follow-up?	Completion of follow-up. Whether or not VMWs are conducting follow-up and if not why.
3. Do you know why you have to follow-up patients who have vivax malaria?	Reason for conducting VMW follow-up. → what is the need for VMW follow-up, should be to ensure adherence and safety, and hopefully prevent relapse as a result.
4. What has vivax patient follow-up been like? a. How have patients responded?	VMW follow-up experience. Good, bad, annoyed, easy, challenging, fruitful, reaction of patients having the VMW come on check on them. Do they mind it, are they annoyed, happy. Start but cannot finish follow-up.
5. Describe what is done once you leave to make the follow-up visits until the visit is finished. a. Do you need to do anything before you leave to go to the patient's house or after you finish the visit?	VMW follow-up process. Describe the different activities that have to be done when conducting VMW follow-up. From leaving the house to the end of the visit. Things they need to do before they leave and after they finish the visit.

6. Do you go through this process for all your patients? a. If not, why not? b. If they do not mention follow on day 3, 7, 14: Why do you not follow-up patients on day 3, 7, 14?	Consistent completion of VMW follow-up. Do they follow-up all vivax patients in their village. And if they do not, why.
7. How would you describe the role of the patient in the follow-up process?	Role of the patient in VMW follow-up. What does the patient need to do a part of the supervision and monitoring process. <i>E.g.</i> monitor their urine color, or pay attention to any other side effects; fill in their patient follow-up form.
8. Are there any obstacles faced when conducting follow-up? a. If yes, what is difficult about the process and what could make it easier?	Barriers to VMW follow up. Things that make it difficult to do or stop it from being done. What they are and if there is any way to solve the problems described.
9. Do you think the follow-up has helped or will help vivax malaria treatment and treatment outcomes? a. In what ways might it have or have not helped?	Effectiveness of VMW follow-up. Has VMWs visiting patients made a difference in whether the patients take their medication and whether they relapse. Reasons behind their answers.
10. Do you have any questions/ concerns or things that you would like us to know?	Anything else the respondent might want to say that they have not done so yet.
11. People we should be discussing with/learn from?	Any other person the respondent thinks we should talk to.

Appendix 5: COREQ checklist for qualitative research

COREQ (Consolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
<i>Personal characteristics</i>			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	13
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	N/A
Occupation	3	What was their occupation at the time of the study?	N/A
Gender	4	Was the researcher male or female?	N/A
Experience and training	5	What experience or training did the researcher have?	N/A
<i>Relationship with participants</i>			
Relationship established	6	Was a relationship established prior to study commencement?	N/A
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	N/A
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	N/A
Domain 2: Study design			
<i>Theoretical framework</i>			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	6,7,8
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	12,13
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	12,13
Sample size	12	How many participants were in the study?	16
Non-participation	13	How many people refused to participate or dropped out? Reasons?	N/A
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	12,13
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	12,13
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	Apdx 6
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	13, Apdx 4
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	Apdx 6
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	12,13
Field notes	20	Were field notes made during and/or after the interview or focus group?	12,14
Duration	21	What was the duration of the interviews or focus group?	N/A
Data saturation	22	Was data saturation discussed?	N/A
Transcripts returned	23	Were transcripts returned to participants for comment and/or	N/A

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
<i>Data analysis</i>			
Number of data coders	24	How many data coders coded the data?	14
Description of the coding tree	25	Did authors provide a description of the coding tree?	N/A
Derivation of themes	26	Were themes identified in advance or derived from the data?	14
Software	27	What software, if applicable, was used to manage the data?	14
Participant checking	28	Did participants provide feedback on the findings?	N/A
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	15-29
Data and findings consistent	30	Was there consistency between the data presented and the findings?	15-30
Clarity of major themes	31	Were major themes clearly presented in the findings?	15-29
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	15-29

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Appendix 6: Completeness of health center records and availability of VMW follow-up forms for patient-specific data analysis

Data completeness of health center forms, availability of all VMW follow-up forms, and both forms not reporting follow-up completion status (VMWs and health center workers often only filling in the questions about follow-up if it was completed) affected the analysis, informing follow-up adoption and effectiveness. Based on data collected from health centre forms, the breakdown in terms of VMW follow-up form availability is provided in the table below.

Table 1 Appendix 6: **VMW Follow-up Forms Available**

Total Routine to receive PQ	477
Total Routine HC follow up	113
Total Routine VMW follow up	328
Total Forms Available	248
Total Routine FU Forms Available	244
Percentage of available forms	67.03%

Appendix 7: Demographic characteristics of interviews and focus group discussion participants

Participant Number	Discussion Type	Discussion Number	Respondent Number (FGD)	Manuscript Code	Age	Gender	Occupation	Follow-up
1	Interview	1	Interview	pp1	57	Male	EFFORT Patient - Teacher	No
2	Interview	2	Interview	pp2	27	Male	EFFORT Patient - Farmer	No
3	Focus Group Discussion	1	R1	chw1	51	Male	VMW (Farmer)	No
4	Focus Group Discussion	1	R2	chw2	39	Female	VMW (Groceries seller)	No
5	Focus Group Discussion	1	R3	chw3	50	Female	VMW (Farmer)	No
6	Focus Group Discussion	1	R4	chw4	24	Male	VMW (Farmer)	No
7	Focus Group Discussion	1	R5	chw5	41	Female	VMW (Farmer)	No
8	Focus Group Discussion	1	R6	chw6	49	Female	VMW (Farmer)	No
9	Focus Group Discussion	1	R7	chw7	56	Female	VMW (Farmer)	No
10	Focus Group Discussion	2	R1	rh1	29	Female	Referral Hospital Nurse	Yes
11	Focus Group Discussion	2	R2	rh2	27	Female	Referral Hospital Nurse	Yes
12	Focus Group Discussion	2	R3	rh3	29	Male	Referral Hospital Nurse	Yes
13	Focus Group Discussion	2	R4	rh4	26	Female	Referral Hospital Nurse	No
14	Focus Group Discussion	2	R5	rh5	30	Male	Referral Hospital Nurse	No
15	Interview	3	Interview	pp3	30	Female	Farmer (former VMW)	No
16	Interview	4	Interview	pp4	22	Male	Farmer	No
17	Focus Group Discussion	3	R1	chw8	35	Female	VMW (Housewife)	Yes
18	Focus Group Discussion	3	R2	chw9	63	Male	VMW (Farmer)	No
19	Focus Group Discussion	3	R3	chw10	33	Male	VMW (Farmer)	No

20	Focus Group Discussion	3	R4	chw11	61	Male	VMW (Farmer)	Yes
21	Focus Group Discussion	3	R5	chw12	41	Female	VMW (Groceries seller)	Yes
22	Focus Group Discussion	3	R6	chw13	62	Female	VMW (Groceries seller)	Yes
23	Interview	5	Interview	hc1	45	Male	Health Centre Nurse	Yes
24	Interview	6	Interview	do1	50	Male	Operational District Malaria Supervisor	No
25	Interview	7	Interview	et11	27	Female	EFFORT Lab Staff	Yes
26	Interview	8	Interview	et1	34	Male	EFFORT Assistant	No
27	Interview	9	Interview	etd1	34	Female	Referral Hospital Doctor and EFFORT Doctor	Yes
28	Interview	10	Interview	pp5	47	Male	EFFORT Patient - Environment officer	No
29	Interview	11	Interview	pp6	18	Male	EFFORT Patient - Farmer	No
30	Focus Group Discussion	4	R1	et2	34	Male	EFFORT staff	No
31	Focus Group Discussion	4	R2	et3	31	Male	Referral Hospital Nurse and EFFORT Nurse	No
32	Focus Group Discussion	4	R3	et4	28	Female	Referral Hospital Nurse and EFFORT Nurse	No
33	Focus Group Discussion	4	R4	et5	24	Female	Referral Hospital Nurse and EFFORT Nurse	No
34	Focus Group Discussion	4	R5	etl2	29	Female	EFFORT Lab Staff	No
35	Focus Group Discussion	4	R6	etl3	27	Male	EFFORT Lab Staff	Yes
36	Interview	12	Interview	pp7	31	Male	EFFORT Patient - Construction worker	No
37	Interview	13	Interview	pp8	50	Male	EFFORT Patient - Farmer	No
38	Interview	14	Interview	pp9	18	Male	EFFORT Patient - Labor worker	No
39	Interview	15	Interview	cnm1		Male	National Malaria Program/CNM Official	No
40	Interview	15a	R1	pp10	37	Male	EFFORT Patient - Farmer	No
41	Interview	15a	R2	pp11	18	Male	EFFORT Patient - Farmer	No
42	Interview	16	Interview	pp12	18	Male	EFFORT Patient - Farmer	No

43	Interview	17	Interview	etd2	30	Female	Referral Hospital Doctor and EFFORT Doctor	Yes
44	Interview	18	Interview	pp13	25	Female	EFFORT Patient - Farmer	No
45	Interview	19	Interview	chw14	25	Female	VMW (Online Seller)	No
46	Interview	20	Interview	pp14	18	Male	EFFORT Patient - Farmer	No
47	Interview	21	Interview	pp15	34	Male	EFFORT Patient - Farmer	No
48	Interview	22	Interview	pp16	36	Male	EFFORT Patient - Labor Worker	No
49	Interview	23	Interview	pp17	18	Male	EFFORT Patient - Farmer	No
50	Interview	24	Interview	pp18	47	Female	EFFORT Patient - Farmer	No
51	Interview	25	Interview	po1	50	Male	Provincial Health Department Official	No
52	Interview	26	Interview	pp19	39	Female	EFFORT Patient - Farmer	No
53	Interview	27	Interview	cnmp1	50	Male	CNM Partner (URC staff)	No
54	Interview	28	Interview	etd3	36	Male	Referral Hospital Doctor and EFFORT Doctor	Yes
55	Interview	29	Interview	po2	50	Female	Provincial Malaria Supervisor	No
56	Interview	30C	Interview	hc2	55	Male	Health Centre Clerk	No
57	Interview	31C	Interview	hc3		Female	Health Centre Nurse	Yes
58	Focus Group Discussion	5C	R1	chw15	51	Female	VMW (Farmer)	No
59	Focus Group Discussion	5C	R2	chw16	54	Female	VMW (Farmer)	No
60	Focus Group Discussion	5C	R3	chw17	65	Male	VMW (Farmer)	No
61	Focus Group Discussion	5C	R4	chw18	63	Male	VMW (Farmer)	No
62	Focus Group Discussion	5C	R5	chw19	43	Male	VMW (Farmer)	No
63	Focus Group Discussion	5C	R6	chw20	66	Male	VMW (Farmer)	No
64	Focus Group Discussion	5C	R7	chw21	52	Male	VMW (Farmer)	No
65	Focus Group Discussion	6C	R1	chw22	52	Male	VMW (Farmer)	No
66	Focus Group Discussion	6C	R2	chw23	58	Male	VMW (Farmer)	No
67	Focus Group Discussion	6C	R3	chw24	58	Male	VMW (Farmer)	No

68	Focus Group Discussion	6C	R4	chw25	55	Male	VMW (Farmer)	No
69	Focus Group Discussion	6C	R5	chw26	45	Female	VMW (Farmer)	No
70	Interview	32C	Interview	hc4	26	Female	Midwife	No
71	Interview	33C	Interview	pp20	54	Male	Routine patient - School Director	No
72	Interview	34C	Interview	pp21	18	Male	Routine patient - Find Forest Products	No
73	Interview	35C	Interview	hc5	33	Male	Health Center Director's Assistant - Malaria Controller	No
74	Interview	36C	Interview	pp22	33	Male	Routine patient - Wild Aid staff	No
75	Interview	37C	Interview	po3	50	Male	Provincial Health Department Official	No
76	Interview	38C	Interview	pp23	29	Female	Routine patient - Corn vender (Farmer)	No
77	Interview	39C	Interview	pp24	24	Female	Routine patient - Find forest products	No
78	Interview	40C	Interview	chw27	54	Male	VMW (Farmer)	No
79	Interview	41C	Interview	po4	28	Female	Provincial Malaria Supervisor	Yes
80	Interview	42C	Interview	cnmp2	34	Male	Operational District Partner	No
81	Focus Group Discussion	7C	R1	do2	33	Male	Operational District Official	No
82	Focus Group Discussion	7C	R2	rh6	50	Female	Referral Hospital Assistant	No
83	Focus Group Discussion	7C	R3	do3	29	Male	Operational District Malaria Supervisor	No
84	Focus Group Discussion	7C	R4	rh7	57	Male	Referral Hospital Director	No
85	Focus Group Discussion	7C	R5	rhd1	55	Male	Referral Hospital Doctor	No
86	Focus Group Discussion	7C	R6	rhl1	30	Male	Referral Hospital Lab Staff	No
87	Interview	43K	Interview	do4	70	Male	Operational District Official	No
88	Interview	44K	Interview	do5	31	Male	Operational District Malaria Supervisor	No
89	Focus Group Discussion	8	R1	rhl2	54	Male	Referral Hospital Lab Staff	No
90	Focus Group Discussion	8	R2	rh8	32	Male	Referral Hospital Nurse	No
91	Focus Group Discussion	8	R3	rh9	34	Female	Referral Hospital Nurse	No

92	Interview	45K	Interview	hc6	54	Female	Lab Staff + Private Clinic Owner	Yes
93	Interview	46K	Interview	hc7	53	Male	Consultations Doctor + Private Clinic Owner	Yes
94	Interview	47K	Interview	hc8	36	Female	Midwife + Private Clinic Owner	Yes
95	Interview	48K	Interview	ps1	20	Female	Routine patient spouse- Farmer	No
96	Interview	48K	Interview	pp25	25	Male	Routine patient - Find Forest Products	No
97	Interview	49K	Interview	pp26	27	Male	Routine patient - Find Forest Products	No
98	Interview	49k	Interview	ps2	36	Female	Routine patient spouse - Groceries Seller	No
99	Focus Group Discussion	9	R1	chw28	64	Male	VMW (Farmer)	No
100	Focus Group Discussion	9	R2	chw29	37	Female	VMW (Farmer)	No
101	Focus Group Discussion	9	R3	chw30	61	Male	VMW (Farmer)	No
102	Focus Group Discussion	9	R4	chw31	43	Male	VMW (Farmer)	No
103	Focus Group Discussion	9	R5	chw32	44	Male	VMW (Farmer)	No
104	Focus Group Discussion	9	R6	chw33	57	Male	VMW (Farmer)	No
105	Focus Group Discussion	9	R7	chw34	28	Female	VMW (Farmer)	No
106	Interview	50K	Interview	pp27	36	Male	Routine patient - Find Forest Products	No
107	Interview	50K	Interview	ps3	39	Female	Routine patient spouse -Farmer	No
108	Focus Group Discussion	10	R1	chw35	42	Female	MMW (Farmer)	No
109	Focus Group Discussion	10	R2	chw36	55	Female	MMW (Farmer)	No
110	Focus Group Discussion	10	R3	chw37	29	Female	MMW (Groceries Seller)	No
111	Focus Group Discussion	10	R4	chw38	30	Female	MMW (Farmer)	No
112	Interview	51K	Interview	pp28	30	Male	Routine patient -Find Forest Product (Farmer)	No
113	Interview	51K	Interview	ps4	27	Female	Routine patient spouse - Groceries Seller	No
114	Interview	52K	Interview	pp29	19	Male	Routine patient - Find Forest Products	No

115	Interview	53K	Interview	hc9	55	Male	Health Centre Nurse - Malaria Controller	Yes
116	Interview	54k	Interview	pp30	45	Male	Routine patient - Forestry Administrations	No
117	Interview	55K	Interview	pp31	68	Male	Routine patient - Forestry Administrations	No
118	Interview	56SP	Interview	etd4	57	Male	EFFORT Doctor	No
119	Focus Group Discussion	11SP	R1	et6	51	Female	Coordinator (Nurse)	No
120	Focus Group Discussion	11SP	R2	et7	31	Female	EFFORT Nurse	No
121	Focus Group Discussion	11SP	R3	etl4	30	Male	EFFORT Lab Staff	No
122	Interview	57	Interview	cnm2		Male	National Malaria Program/CNM Official	Yes
123	Interview	58	Interview	cnm3		Male	National Malaria Program/CNM Official	Yes
124	Interview	59	Interview	cnmp3		Male	CHAI Central Level Official	Yes
125	Focus Group Discussion	D3E1 - 13	R1	chw39	71	Male	VMW (Farmer)	No
126	Focus Group Discussion	D3E1 - 13	R2	chw40	31	Female	VMW (Farmer)	No
127	Focus Group Discussion	D3E1 - 13	R3	chw41	40	Female	VMW (Farmer)	No
128	Focus Group Discussion	D3E1 - 13	R4	chw42	41	Female	VMW (Farmer)	No
129	Focus Group Discussion	D3E1 - 13	R5	chw43	26	Female	VMW (Farmer)	No
130	Focus Group Discussion	D3E1 - 13	R6	chw44	61	Female	VMW (Farmer)	No
131	Focus Group Discussion	D3E1 - 13	R7	chw45	56	Female	VMW (Farmer)	No
132	Focus Group Discussion	D3E1 - 13	R8	chw46	44	Female	VMW (Farmer)	No
133	Interview	D3E2 - 60	Interview	pp32	45	Male	Routine patient - Farmer	No
134	Focus Group Discussion	D3E3 - 14	R1	hc10	45	Male	Health Centre Lab Staff	No
135	Focus Group Discussion	D3E3 - 14	R3	hc11	50	Male	Health Centre Nurse - Malaria Controller	No

136	Focus Group Discussion	D3E5 - 16	R2	chw47	34	Female	VMW (Farmer)	No
137	Focus Group Discussion	D3E5 - 16	R3	chw48	56	Female	VMW (VHSG)	No
138	Focus Group Discussion	D3E5 - 16	R7	chw49	23	Female	VMW (Farmer)	No
139	Focus Group Discussion	D3E6- 17	R1	hc12	29	Male	Health Centre Lab Staff	No
140	Focus Group Discussion	D3E7 - 18	R1	pp33	32	Male	Farmer	No
141	Focus Group Discussion	D3E7 - 18	R2	pp34	27	Male	Farmer	No
142	Focus Group Discussion	D3E7 - 18	R3	pp35	20	Male	Farmer	No

Appendix 8: Number and proportion of *P. vivax* cases who received radical cure and were followed up on day 3, 7, and 14, stratified by follow-up type, province, and year (2021 and 2022)

Year	Province	Day 3			Day 7			Day 14			<i>P. vivax</i> cases that received radical cure
		VMW	HC	Total (% of cases)	VMW	HC	Total (% of cases)	VMW	HC	Total (% of cases)	
2021	Banteay Meanchey	0	0	0/0 (N/A)	0	0	0/0 (N/A)	0	0	0/0 (N/A)	0
	Battambang	6	7	13/20 (65.0)	6	4	10/20 (50.0)	5	4	9/20 (45.0)	20
	Kampong Chhnang	29	9	38/88 (43.2)	28	9	37/88 (42.1)	28	9	37/88 (42.1)	88
	Kampong Speu	87	37	124/233 (53.2)	85	34	119/233 (51.2)	78	34	112/233 (48.1)	233
	Kampong Thom	1	2	3/14 (21.4)	0	1	1/14 (7.1)	0	1	1/14 (7.1)	14
	Kampot	3	3	6/25 (24.0)	3	3	6/25 (24.0)	3	3	6/25 (24.0)	25
	Kep	0	0	0/0 (N/A)	0	0	0/0 (N/A)	0	0	0 (N/A)	0
	Koh Kong	0	5	5/7 (71.4)	0	5	5/7 (71.4)	0	5	5/7 (71.4)	7
	Kratie	20	9	29/56 (51.8)	20	8	28/56 (50.0)	14	7	21/56 (37.5)	56
	Mondul Kiri	26	9	35/67 (52.2)	25	9	34/67 (50.8)	26	9	35/67 (52.2)	67
	Pailin	0	0	0/2 (0.0)	0	0	0/2 (0.0)	0	0	0/2 (0.0)	2
	Preah Vihear	5	2	7/25 (28.0)	5	2	7/25 (28.0)	5	2	7/25 (28.0)	25
	Pursat	34	9	43/203 (21.2)	34	9	43/203 (21.2)	33	5	38/203 (18.7)	203
	Ratanakiri	19	9	28/67 (41.8)	19	12	31/67 (46.3%)	17	10	27/67 (40.3)	67
	Siem Reap	0	0	0/2 (0.0)	0	0	0/2 (0.0)	0	0	0/2 (0.0)	2
	Steung Traeng	10	7	17/43 (39.5)	10	6	16/43 (37.2)	10	6	16/43 (37.2)	43
	Total	240	108	348/852 (40.9)	235	102	337/852 (39.6)	219	95	314/852 (36.9)	852
2022	Banteay Meanchey	0	2	2/2 (100.0)	0	2	2/2 (100.0)	0	2	2/2 (100.0)	2
	Battambang	0	4	4/4 (100.0)	0	4	4/4 (100.0)	0	4	4/4 (100.0)	4
	Kampong Chhnang	60	39	99/100 (99.0)	57	37	94/100 (94.0)	49	32	81/100 (81.0)	100
	Kampong Speu	158	92	250/274 (91.3)	150	85	235/274 (85.8)	131	79	210/274 (76.6)	274
	Kampong Thom	17	14	31/31 (100.0)	14	14	28/31 (90.3)	13	12	25/31 (80.7)	31
	Kampot	9	12	21/21 (100.0)	9	12	21/21 (100.0)	4	10	14/21 (66.7)	21
	Kep	0	1	1/1 (100.0)	0	1	1/1 (100.0)	0	1	1/1 (100.0)	1
	Koh Kong	7	13	20/20 (100.0)	7	10	17/20 (85.0)	7	12	19/20 (95.0)	20
	Kratie	97	62	159/170 (93.5)	88	52	140/170 (82.4)	66	37	103/170 (60.6)	170
	Mondul Kiri	71	25	96/126 (76.2)	71	25	96/126 (76.2)	71	24	95/126 (75.4)	126
	Pailin	3	0	3/3 (100.0)	2	0	2/3 (66.7)	2	0	2/3 (66.7)	3
	Preah Vihear	45	45	90/93 (96.8)	47	44	91/93 (97.9)	39	43	82/93 (88.2)	93

Pursat	115	28	143/146 (98.0)	110	27	137/146 (93.8)	82	20	102/146 (69.9)	146
Ratanakiri	81	26	107/107 (100.0)	81	26	107/107 (100.0)	77	26	103/107 (96.3)	107
Siem Reap	0	9	9/9 (100.0)	0	6	6/9 (66.7)	0	3	3/9 (33.3)	9
Steung Traeng	86	93	179/179 (100.0)	85	90	175/179 (97.8%)	83	92	175/179 (97.8)	179
Total	749	465	1214/1286 (94.4)	721	435	1156/1286 (89.9%)	624	397	1021/1286 (79.4)	1286

Appendix 9: Number and proportion of *P. vivax* cases who received radical cure and were followed up on day 3, 7, and 14, stratified by follow-up type, province, and year (2021 and 2022) in locations where follow-up was rolled out

Year	Province	Day 3			Day 7			Day 14			<i>P. vivax</i> cases that received radical cure
		VMW	HC	Total (% of cases)	VMW	HC	Total (% of cases)	VMW	HC	Total (% of cases)	
2021	Banteay Meanchey	0	0	0 (N/A)	0	0	0 (N/A)	0	0	0 (N/A)	0
	Battambang	6	4	10/10 (100.0)	6	4	10/10 (100.0)	5	4	9/10 (90.0)	10
	Kampong Chhnang	29	9	38/39 (97.4)	28	9	37/39 (94.9)	28	9	37/39 (94.9)	39
	Kampong Speu	87	37	124/126 (98.4)	85	34	119/126 (94.4)	78	34	112/126 (88.9)	126
	Kampong Thom	1	2	3/4 (75.0)	0	1	1/4 (25.0)	0	1	1/4 (25.0)	4
	Kampot	3	3	6/6 (100.0)	3	3	6/6 (100.0)	3	3	6/6 (100.0)	6
	Kep	0	0	0 (N/A)	0	0	0 (N/A)	0	0	0 (N/A)	0
	Koh Kong	0	5	5/5 (100.0)	0	5	5/5 (100.0)	0	5	5/5 (100.0)	5
	Kratie	20	9	29/31 (93.5)	20	8	28/31 (90.3)	14	7	21/31 (67.7)	31
	Mondul Kiri	26	9	35/41 (85.4)	25	9	34/41 (82.9)	26	9	35/41 (85.4)	41
	Pailin	0	0	0 (N/A)	0	0	0 (N/A)	0	0	0 (N/A)	0
	Preah Vihear	5	2	7/14 (50.0)	5	2	7/14 (50.0)	5	2	7/14 (50.0)	14
	Pursat	34	9	43/44 (97.7)	34	9	43/44 (97.7)	33	5	38/44 (86.4)	44
	Ratanakiri	19	9	28/33 (84.8)	19	12	31/33 (93.9)	17	10	27/33 (81.8)	33
	Siem Reap	0	0	0 (N/A)	0	0	0/0 (N/A)	0	0	0/0 (N/A)	0
	Steung Traeng	10	7	17/24 (70.8)	10	6	16/24 (66.7)	10	6	16/24 (66.7)	24
	Total	240	105	345/377 (91.5)	235	102	337/377 (89.4)	219	95	314/377 (83.3)	377
2022	Banteay Meanchey	0	2	2/2 (100.0)	0	2	2/2 (100.0)	0	2	2/2 (100.0)	2
	Battambang	0	4	4/4 (100.0)	0	4	4/4 (100.0)	0	4	4/4 (100.0)	4
	Kampong Chhnang	60	39	99/100 (99.0)	57	37	94/100 (94.0)	49	32	81/100 (81.0)	100
	Kampong Speu	158	92	250/274 (91.2)	150	85	235/274 (85.8)	131	79	210/274 (76.6)	274
	Kampong Thom	17	14	31/31 (100.0)	14	14	28/31 (90.3)	13	12	25/31 (80.6)	31
	Kampot	9	12	21/21 (100.0)	9	12	21/21 (100.0)	4	10	14/21 (66.7)	21
	Kep	0	1	1/1 (100.0)	0	1	1/1 (100.0)	0	1	1/1 (100.0)	1
	Koh Kong	7	13	20/20 (100.0)	7	10	17/20 (85.0)	7	12	19/20 (95.0)	20
	Kratie	97	62	159/170 (93.5)	88	52	140/170 (82.4)	66	37	103/170 (60.6)	170
	Mondul Kiri	71	25	96/126 (76.2)	71	25	96/126 (76.2)	71	24	95/126 (75.4)	126
	Pailin	3	0	3/3 (100.0)	2	0	2/3 (66.7)	2	0	2/3 (66.7)	3
	Preah Vihear	45	45	90/93 (96.8)	47	44	91/93 (97.8)	39	43	82/93 (88.2)	93

Pursat	115	28	143/146 (98.0)	110	27	137/146 (93.8)	82	20	102/146 (69.9)	146
Ratanakiri	81	26	107/107 (100.0)	81	26	107/107 (100.0)	77	26	103/107 (96.3)	107
Siem Reap	0	9	9/9 (100.0)	0	6	6/9 (66.7)	0	3	3/9 (33.3)	9
Steung Traeng	86	93	179/179 (100.0)	85	90	175/179 (97.8%)	83	92	175/179 (97.8)	179
Total	749	465	1214/1286 (94.4)	721	435	1156/1286 (89.9%)	624	397	1021/1286 (79.4)	1286

References

- 1 National Center for Parasitology, Entomology and Malaria Control (CNM). National Treatment Guidelines for Malaria in Cambodia. 2022; published online June.