

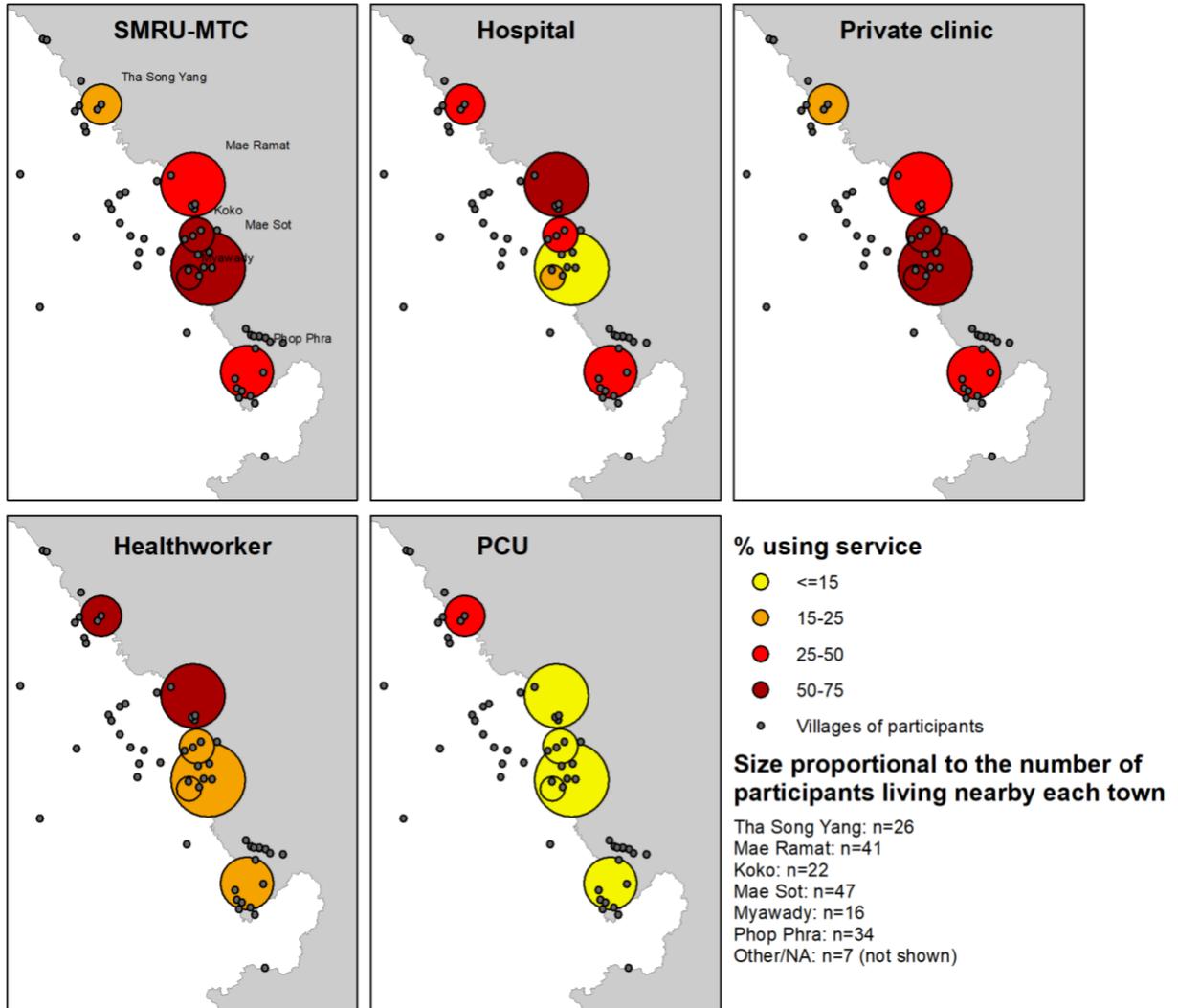
**Fever and health-seeking behaviour among migrants alongside the Thai-Myanmar border:  
a mixed methods study**

*Supplementary material*

**Figure 1.** Diversity of terms referring to “fever”



**Figure 2.** Geographic distribution of attendance to each type of health service, by nearest town from participant's house

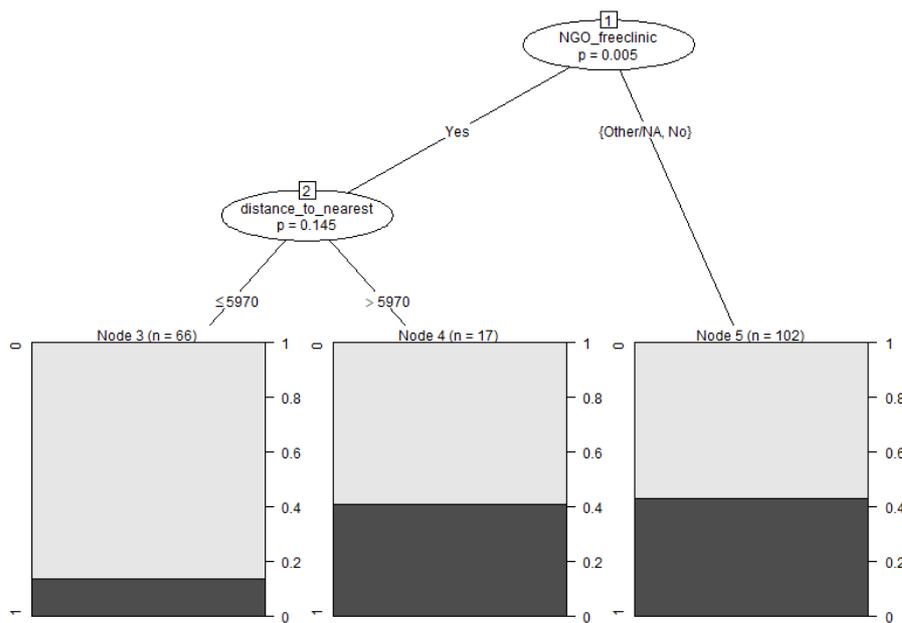


**Figure 3.** CART model evaluating demographic and socio-economic determinants for seeking health in case of fever persistence on the Thai-Myanmar border.

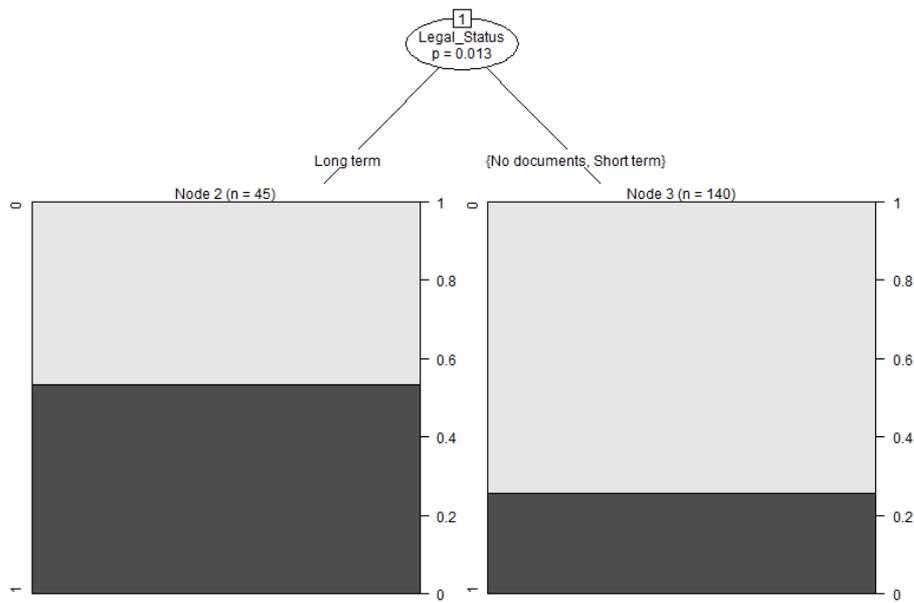
*Geographic variables: distance to nearest town, presence of a cost-free clinic (non-governmental organization [NGO]) in the nearest town or hospital only, and country of residence.*

*Socio-demographic and economic variables: sex, ethnicity, income, legal status, main activity, religion, age, education and number of household members.*

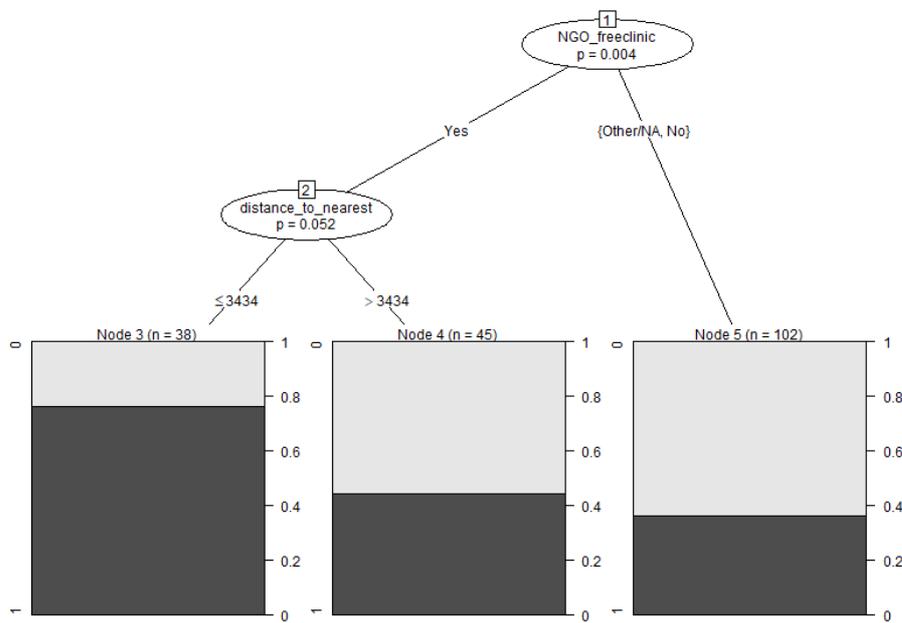
*NB: no demographic nor socio-economic variables were identified for private clinics and primary care units (PCUs).*



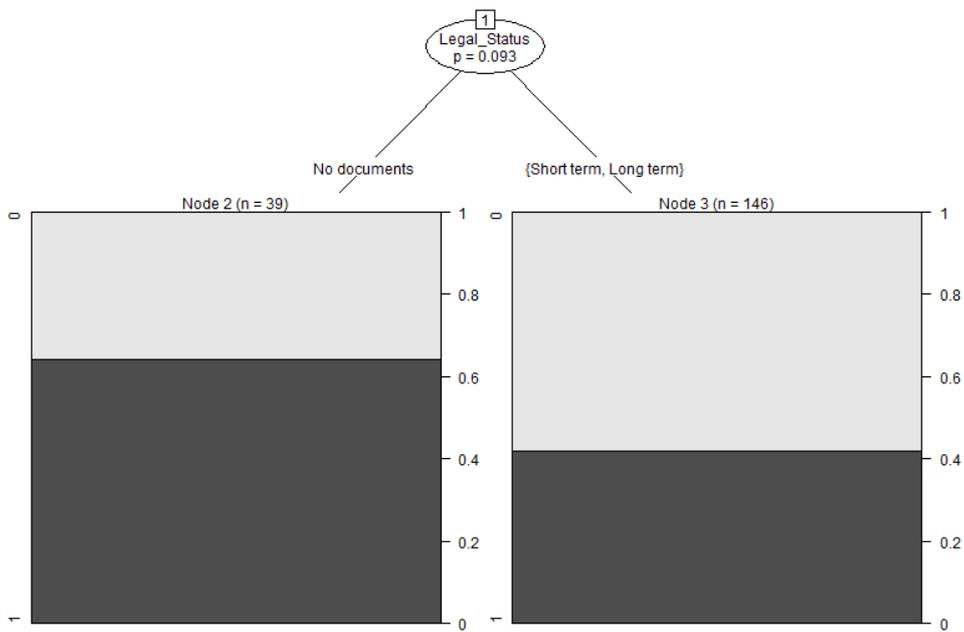
A: Hospital, geographic variables.



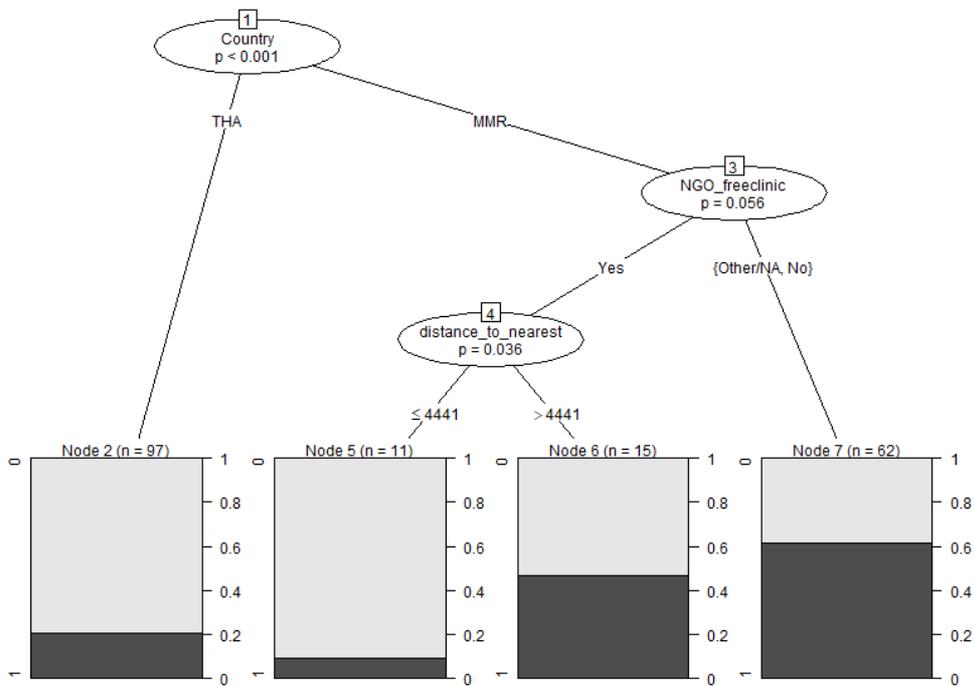
B: Hospital, socio-demographic and economic variables



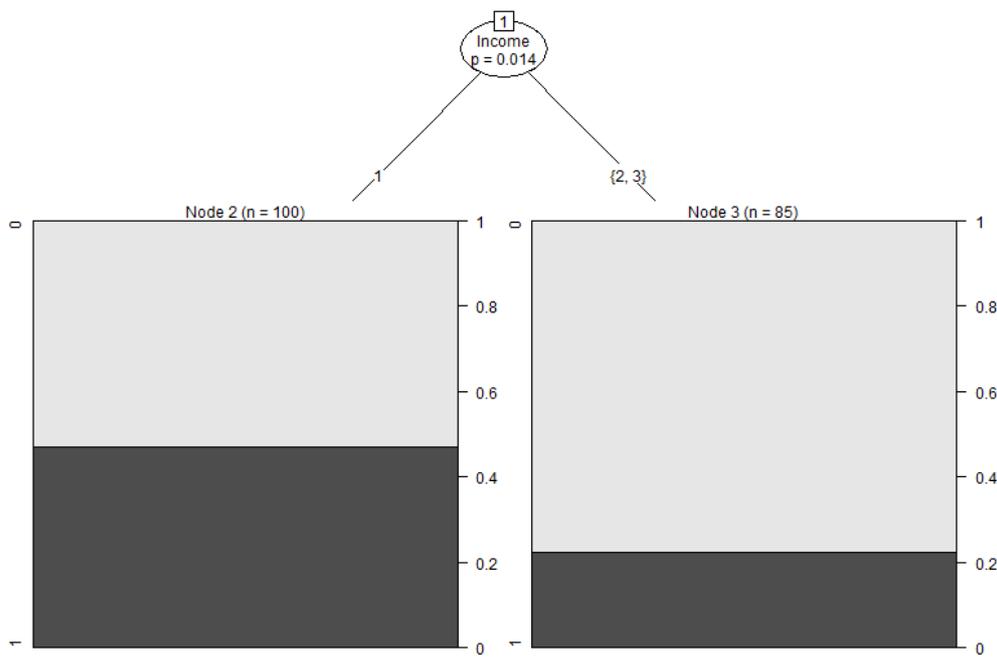
C: NGO free clinic, geographic variables



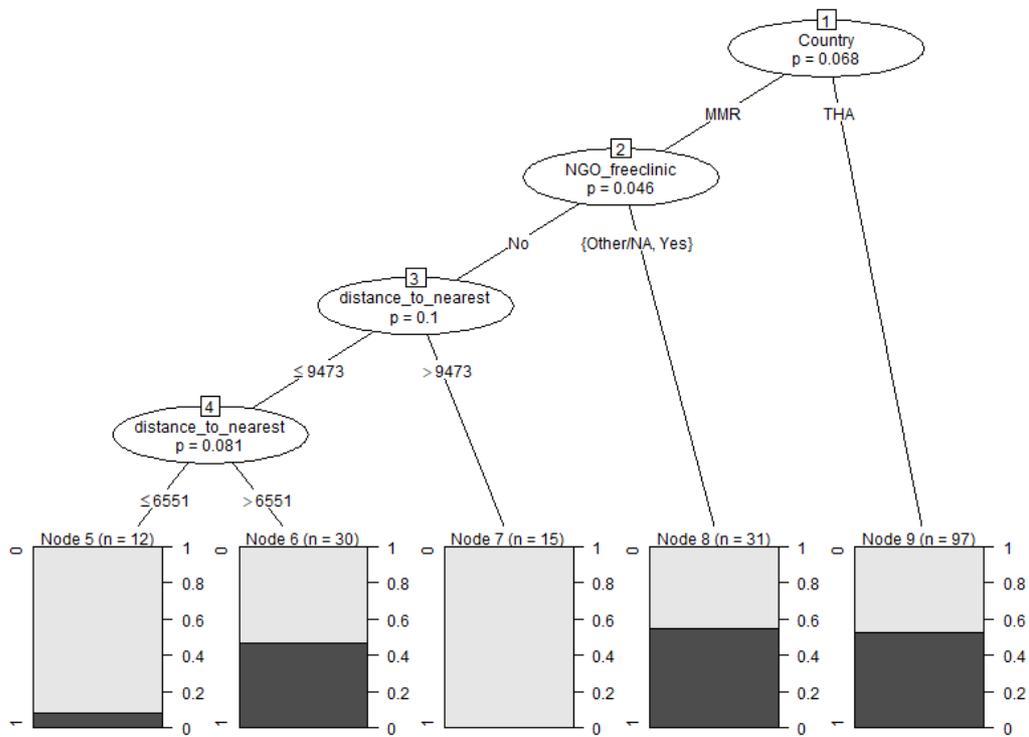
D: NGO free clinic, socio-demographic and economic variables



E: Health post, geographic variables.



F: Health post, socio-demographic and economic variables



G: Private clinic, geographic variables.

**Table 1.** Recruitment detail of Phases I and II by group of migrants on the Thai-Myanmar border

Participant group	Phase I			Phase II
	In-depth interviews (in person)	Focus group discussion (in group)	Participatory visual activity (in group)	Electronic questionnaire (in person)
<b>Group 1</b> Community members	24	-	-	202
<b>Group 2</b> Community healthcare workers, primary care staff	7	2	-	-
<b>Group 3</b> Key informants, T-CAB members, PCU staff	-	1	8	-
<b>Total</b>	<b>31</b>	<b>3 (15 persons)</b>	<b>8</b>	<b>202</b>

T-CAB – Tak-Province Community Advisory Board  
PCU – Primary care unit

**Table 2.** Fever terminology among Karen and non-Karen participants on the Thai-Myanmar border

<b>Fever terminology</b>	<b>Non- Karen* (n=68)</b>	<b>Karen (n=134)</b>	<b>p-value</b>
“Fever”	40 (58.8)	53 (39.6)	0.009
Ta Nya Ghoe	0	28 (20.9)	<0.001
Dengue	4 (5.9)	11 (8.2)	0.551
Malaria	2 (2.9)	4 (3.0)	0.986
Oh Ta Sut	1 (1.5)	3 (2.2)	0.711
“Sick”	21 (30.9)	48 (35.8)	0.484
Name depends on the symptoms	8 (11.8)	9 (6.7)	0.222
Other	1 (1.5)	6 (4.5)	0.270
At least two terms referring to fever	9 (13.2)	30 (22.4)	0.119
Three terms referring to fever	0	4 (3.0)	0.150

\* Non-Karen ethnicity included Burmese (n=51), Pa-Oh (n=12), Mon (n=2), Shan (n=1), Chin (n=1), and one participant from Rakhine state (ethnicity unknown)

**Table 3.** Health-seeking behaviour at fever onset according to all determinants from Phase II participants on the Thai-Myanmar border

	Wait & See	Self-medication	Unregulated healthcare	Regulated healthcare
<i>Demographic &amp; Geographical determinants</i>				
Age (in years)	35 (28-41)	32 (25-43)	34 (29-44)	29 (25-36)
Female (n=127)	10 (7.9)	78 (61.4)	17 (13.4)	22 (17.3)
Married (n=186)	14 (7.53)	113 (60.8)	29 (15.6)	30 (16.1)
Religion				
- Buddhist (n=172)	13 (7.6)	109 (63.4)	24 (14.0)	25 (15.1)
- Christian (n=26)	4 (15.4)	13 (50.0)	5 (19.2)	4 (15.4)
- Other* (n=2)	0	1 (50.0)	0	0
Ethnicity				
- Karen (n=132)	16 (12.1)	80 (60.6)	15 (11.4)	21 (15.9)
- Burmese (n=51)	1 (2.0)	32 (62.8)	10 (19.6)	8 (15.7)
- Other** (n=17)	0	11 (64.7)	4 (23.5)	2 (11.8)
Education level				
- None/Informal (n=66)	6 (9.1)	42 (63.6)	7 (10.6)	11 (16.7)
- Primary (n=67)	5 (7.5)	38 (65.7)	13 (19.4)	11 (16.4)
- Secondary or above (n=67)	6 (9.0)	43 (64.2)	9 (13.4)	9 (13.4)
Country				
- Thailand (n=96)	7 (7.3)	58 (60.4)	19 (19.8)	12 (12.5)
- Myanmar (n=102)	9 (8.8)	64 (62.8)	10 (9.8)	19 (18.6)
Cost-free clinic nearby***				
- None (n=76)	9 (11.8)	48 (63.2)	9 (11.8)	10 (13.2)
- Presence (n=117)	6 (5.1)	71 (60.7)	19 (16.2)	21 (18.0)
Distance to nearest town (in km)	8.4 (7.2-8.7)	6.9 (2.6-9.5)	7.4 (2.1-13.3)	6.6 (2.6-17.7)

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*Socio-economic determinants*

Number of people in the household	4 (3-5)	4 (3-5)	3 (3-5)	5 (3-6)
Legal status****				
- None (n=40)	2 (5.0)	25 (62.5)	4 (10.0)	9 (22.5)
- Unstable (n=114)	10 (8.8)	68 (59.7)	17 (14.9)	19 (16.7)
- Stable (n=46)	5 (10.9)	30 (65.2)	8 (17.4)	3 (6.5)
Principal activity				
- Daily labour (n=74)	6 (8.1)	41 (55.4)	15 (20.3)	12 (16.2)
- Farmer (n=68)	4 (5.9)	46 (67.7)	9 (13.2)	9 (13.2)
- Teacher/Health worker (n=12)	2 (16.7)	7 (58.3)	2 (6.3)	6 (18.8)
- None/Domestic (n=46)	5 (10.9)	29 (63.0)	4 (8.7)	8 (17.4)
Monthly income (in USD)				
- Under 90 (n=108)	11 (10.2)	67 (62.0)	15 (13.9)	15 (13.9)
- Between 90-180 (n=69)	3 (4.4)	46 (66.7)	7 (10.1)	13 (18.8)
- Over 180 (n=23)	3 (13.0)	10 (43.5)	7 (30.4)	3 (13.0)

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Data are number (%) or median (IQR)

\*Other religion included Islam (n=1) and agnostic (n=1)

\*\*Other ethnicity included Pa-oh (n=12), Chin (n=1), Hmong (n=2), Shan (n=1) and from Rakhine state (n=1)

\*\*\* Presence of a cost-free clinic nearby the participant's household, including Shoklo Malaria Research Unit (SMRU) clinics and Mae Tao Clinic.

\*\*\*\* Legal status was classified as "unstable" for participants owning documents preventing them from healthcare entitlement and freedom of movement. These documents included Myanmar identification card, or a community card, or a hospital card or commuting card. Legal status was classified as "stable" for participants owning documents allowing them to healthcare entitlement and freedom of movement. These documents included work permit, certificate of identity (CI) card, ten-year resident card, Thai identification card, birth certificate.

**Table 4.** Health-seeking behaviour in case of fever persistence according to all determinants from Phase II participants on the Thai-Myanmar border

	Health post	Private clinic	Primary care unit	Cost-free clinic	Hospital
<i>Demographic &amp; Geographic determinants</i>					
Age (in years)	30 (25-42)	32 (26-45)	33 (27-41)	30 (25-38)	30 (25-37)
Female (n=129)	41 (31.8)	63 (48.8)	20 (15.5)	60 (46.5)	39 (30.2)
Married (n=188)	64 (34.0)	82 (43.6)	28 (14.9)	89 (47.3)	63 (33.5)
Religion					
- Buddhist (n=174)	60 (34.5)	78 (44.8)	25 (14.4)	80 (46.0)	57 (32.8)
- Christian (n=26)	12 (46.2)	8 (30.8)	5 (19.2)	11 (42.3)	10 (38.5)
- Other* (n=2)	1 (50.0)	1 (50.0)	0	1 (50.0)	1 (50.0)
Ethnicity					
- Karen (n=134)	59 (44.0)	50 (37.3)	22 (16.4)	61 (45.5)	50 (37.3)
- Burmese (n=51)	10 (19.6)	26 (51.0)	6 (11.8)	22 (43.1)	11 (21.6)
- Other** (n=17)	4 (23.5)	11 (64.7)	2 (11.8)	9 (52.9)	7 (41.2)
Education level					
- None/Informal (n=67)	23 (34.3)	25 (37.3)	9 (13.4)	28 (41.8)	19 (28.4)
- Primary (n=68)	18 (26.5)	32 (47.1)	11 (16.2)	35 (51.5)	22 (32.4)
- Secondary or above (n=67)	32 (47.8)	30 (44.8)	10 (14.9)	29 (43.3)	27 (40.3)
Country					
- Thailand (n=97)	20 (20.6)	51 (52.6)	15 (15.5)	47 (48.5)	26 (26.8)
- Myanmar (n=103)	53 (51.5)	35 (34.0)	15 (14.6)	44 (42.7)	40 (38.8)
Cost-free clinic nearby***					
- None (n=76)	42 (55.3)	26 (34.2)	14 (18.4)	23 (30.3)	38 (50.0)
- Presence (n=119)	28 (23.5)	57 (47.9)	16 (13.5)	68 (57.1)	26 (21.9)
Distance to nearest town (in km)	8.4 (5.7-13.2)	6.8 (2.6-9.4)	6.3 (2.6-8.4)	6.0 (1.5-8.4)	8.4 (6.8-11.3)

<i>Socio-economic determinants</i>					
Number of people in the household	4 (3-5)	4 (3-5)	4 (3-6)	4 (3-5)	4 (3-6)
Legal status****					
- None (n=41)	14 (34.2)	12 (29.3)	5 (12.2)	25 (61.0)	8 (19.5)
- Unstable (n=115)	45 (39.1)	51 (44.4)	16 (13.9)	53 (46.1)	36 (31.3)
- Stable (n=46)	14 (30.4)	24 (52.2)	9 (19.6)	14 (30.4)	24 (52.2)
Principal activity					
- Daily labour (n=75)	19 (25.3)	31 (41.3)	11 (14.7)	30 (40.0)	18 (24.0)
- Farmer (n=68)	27 (39.7)	28 (41.2)	8 (11.8)	30 (44.1)	32 (47.1)
- Teacher/Health worker (n=12)	7 (45.5)	5 (35.7)	2 (16.7)	7 (58.3)	4 (33.3)
- None/Domestic (n=47)	20 (42.6)	24 (51.1)	9 (19.1)	25 (53.2)	14 (29.8)
Monthly income (in USD)					
- Under 90 (n=109)	52 (47.7)	45 (41.3)	16 (14.7)	44 (40.4)	40 (36.7)
- Between 90-180 (n=70)	17 (24.3)	31 (44.3)	11 (15.7)	39 (55.7)	21 (30.0)
- Over 180 (n=23)	4 (17.4)	11 (46.8)	3 (13.0)	9 (39.1)	7 (30.4)

Data are number (%) or median (IQR)

\*Other religion included Islam (n=1) and agnostic (n=1)

\*\*Other ethnicity included Pa-oh (n=12), Chin (n=1), Hmong (n=2), Shan (n=1) and from Rakhine state (n=1)

\*\*\* Presence of a cost-free clinic nearby the participant's household, including Shoklo Malaria Research Unit (SMRU) clinics and Mae Tao Clinic.

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**Table 5.** Declared criteria for health service preference in case of fever persistence among Phase II participants on the Thai-Myanmar border

	<b>Health worker (n=73)</b>	<b>Private clinic (n=87)</b>	<b>PCU (n=30)</b>	<b>Cost-free clinic (n=92)</b>	<b>Hospital (n=68)</b>
<b>Reasons for attending</b>					
Access	54 (74.0)	41 (52.9)	22 (73.3)	48 (52.2)	30 (44.1)
Cost	41 (56.2)	2 (2.3)	21 (70.0)	67 (72.8)	10 (14.7)
Quality of care	12 (16.4)	55 (63.2)	2 (6.7)	67 (72.8)	46 (67.7)
Force of habit	42 (57.5)	31 (35.6)	11 (36.7)	45 (48.9)	12 (17.7)
Word of mouth	20 (27.4)	8 (9.2)	3 (10.0)	37 (40.2)	7 (10.3)
Respectful management	32 (43.8)	37 (42.5)	11 (36.7)	65 (70.7)	26 (38.2)

Data are number (%)

PCU – Primary care unit

Cost-free clinic –Shoklo Malaria Research Unit (SMRU) clinics and Mae Tao Clinic