

Table S1. Caregivers' treatment seeking actions and sequence from point of initial symptoms^a

Cases →	Positive Outcome: Child Recovered			Negative Outcome: Child Survived but with Deficits			Negative Outcome: Child Died	
	CS 06	CS 07	CS 08	CS 01	CS 02	CS 03	CS 04	CS 05
1st Action	<p>Time: 12 am Setting: Home Trigger: "Difficulty breathing", "wheezing", "congested", "weak", "not playing", "crying", "sneezing", "cough" Blood Test: No Treatment: None Outcome: Breathing worse & thick mucus</p>	<p>Time: 9 am Setting: Home Trigger: "Shivering", "sweating", "heat", stomach "bubbling", "eyes were red", "vomiting" Blood Test: No Treatment: Panadol® Outcome: Shivering ↓, no other improvement</p>	<p>Time: 7 am Setting: Home Trigger: "Not eating", "not playing", "crying", "hot body", "rash", "mucus", "cough" Blood Test: No Treatment: Wet cloth, mululusa, Coartem®, Panadol® Outcome: Worse</p>	<p>Time: 10 pm Setting: Home Trigger: "Fever", "convulsing", "not breastfeeding/eating" Blood Test: No Treatment: Wet cloth, Coartem®, Panadol® Outcome: Fever not relieved</p>	<p>Time: 4 am Setting: Home Trigger: "Fever", "eyes became red", "stayed there in such a state", "convulsing", "weak" Blood Test: No Treatment: Smearred pounded onions on body, quinine syrup Outcome: Fever ↓, on-going convulsions</p>	<p>Time: 5 pm Setting: Home Trigger: "Vomit", "hot body", "eyes staring and convulsed", "stomach swollen" Blood Test: No Treatment: Smearred pounded onions Outcome: Eyes back to normal but still looked like a dead person</p>	<p>Time: 4 pm Setting: Home Trigger: "Weak", "retching", "hot body", refused to eat, "breathless" Blood Test: No Treatment: Wet cloth, Panadol®, Septrin® Outcome: Could not stand & had a weak neck</p>	<p>Time: 5pm Setting: Home Trigger: "Cough", "diarrhea", "vomit", "hot body" Blood Test: No Treatment: Wet cloth Outcome: Fever ↓, then visited HC</p>
2nd Action	<p>Time: Next day (am) Setting: Drug shop Trigger: Previous symptoms + "fever" Blood test: No Treatment: Junior Aspirin® from drug shop x 3 days, no money to buy more medicine Outcome: Fever resolved in 2 weeks</p>	<p>Time: Same day (evening) & next day (morning & evening) Setting: Drug shop Trigger: No improvement Blood Test: Yes Treatment: Quinine injection, quinine & Panadol® tablets Outcome: Improved gradually</p>	<p>Time: Next day (10 am) Setting: Muhuyu HC II Trigger: Worsened Blood Test: No Treatment: Some kind of injection, Coartem®, Panadol®, Rene Coldease® Outcome: No fever, cured in 3-4 days</p>	<p>Time: Next day (am) Setting: Kangalaba HC III Trigger: Previous symptoms + "fever" Blood Test: No Treatment: None, referred to Busiu hospital in Mbale for blood test. Told to feed milk & porridge Outcome: Referred to Mbale hospital</p>	<p>Time: Same day (10 am) Setting: Busaba HC III Trigger: "Fever", "coughing", "convulsions" Blood Test: Yes Treatment: Septrin®, quinine tablets, Panadol® tablets, and told to buy quinine syrup Outcome: Told has cerebral malaria (with convulsions), convulsions ↑ to 8-15 x day</p>	<p>Time: Next day (10 am) & following day (10 am) Setting: Drug shop Trigger: "Vomit", "convulsions", "hot body", "blank stare", "swollen stomach" Blood Test: No Treatment: Told has cerebral malaria. Injections x 2 days, tablets: ibuprofen, 4 green, 6 white, 8 Panadol® Outcome: Cured in 2 weeks. Still has swollen stomach & convulsions</p>	<p>Time: Next day (7 am) Setting: Nabiganda HC II Trigger: Worsened Blood Test: No Treatment: None, told could not treat before receiving blood transfusion. Referred to Mbale hospital Outcome: Travelled to Mbale</p>	<p>Time: Same day (6 pm) Setting: Nakwasi HC III Trigger: "Cough", "diarrhea", "vomit" Blood Test: No Treatment: Coartem®. Told to buy quinine syrup from drug shop Outcome: Symptoms not improve, body started to swell & condition worsened</p>
3rd Action	X	X	X	<p>Time: Same day Setting: Admitted in Mbale x 3 days Trigger: Referred Blood Test: Yes Treatment: Blood transfusion. Told to buy water for drip, 6 quinine injections, paracetamol, quinine syrup x 2 weeks, plus other pills Outcome: Improved but sight affected, left hand became lame, on-going convulsions</p>	<p>Time: 2 weeks later Setting: Drug shop & Busaba HC III Trigger: Daily convulsions 8-15 x day Blood Test: No Treatment: Quinine syrup daily x 1 year from drug shop & Busaba HC Outcome: Child stopped talking after 1 year</p>	X	<p>Time: Same day (~2 ½ hours later at 11 am) Setting: Mbale hospital Trigger: Referred Blood Test: Yes Treatment: None started for 2 hours while at the hospital Outcome: Waited for 2 hours for treatment - child died</p>	<p>Time: 2 weeks later Setting: Nakwasi HC III Trigger: Worse, body started to swell Blood Test: No Treatment: Coartem® plus quinine syrup from drug shop Outcome: No improvement</p>
4th Action	X	X	X	<p>Managing Negative Outcome Time: 2 days later Setting: Tororo hospital Trigger: Decreased vision Blood Test: No Treatment: None Outcome: Told quinine caused child to become lame & affected eyesight</p>	<p>Time: 1 year later Setting: Home Trigger: Child not talking Blood Test: No Treatment: Stopped quinine, started mululusa & tomato leaves baths x 1 month, then gave up Outcome: Month later visited Budumba HC III when a friend told her convulsion drugs available there</p>	X	X	<p>Time: 1 month later Setting: Nakwasi HC III Trigger: No improvement Blood Test: No Treatment: Coartem®. Told to buy quinine syrup & other medicines from drug shop Outcome: Improved, but then fell ill again ~3 months later</p>
5th Action	X	X	X	<p>Managing Negative Outcome Time: 1 month later Setting: Mbale hospital Blood Test: No Trigger: Examine eyes/lame hand Treatment: None Outcome: Told nothing could be done: look after child, feed passion fruits & milk</p>	<p>Time: 5 months later Setting: Busolwe hospital Trigger: Referred from Budumba HC III Blood Test: No Treatment: Quinine injection, convulsion tablets refilled weekly Outcome: On-going convulsions but less frequent</p>	X	X	<p>Time: ~3 months later Setting: Drug shop Trigger: Sick again & Nakwasi HC III closed Blood Test: No Treatment: For worms Outcome: Thought was improving but later that day vomited blood & died</p>

^aAbbreviation Health Centre (HC).