### Eligibility Checklist

<table>
<thead>
<tr>
<th>Condition</th>
<th>Y</th>
<th>N - ineligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age between 2 months and before 2(^{nd}) birthday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being admitted to hospital because of acute illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent or guardian able and available to consent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Able to feed orally in usual state of health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known congenital syndrome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleft palate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known congenital cardiac disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known terminal illness e.g. cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission for surgery, or likely to require surgery within 6m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission for trauma?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling enrolled in study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously enrolled</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Part 1

#### Admission to Hospital and Study Enrolment

<table>
<thead>
<tr>
<th>DATE arrived at the hospital</th>
<th>TIME arrived at the hospital</th>
<th>□ Arrival time unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ __ / __ __ / __ __ __ __</td>
<td>__ __: __ __ 24h Clock</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE of enrolment i.e. date consented and seen by research team</th>
<th>TIME of enrolment</th>
<th>□ True</th>
<th>□ Estimated*</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ __ / __ __ / __ __ __ __</td>
<td>__ __: __ __ 24h Clock</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOB</th>
<th>Is the DOB:</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ __ / __ __ / __ __ __ __</td>
<td>True</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brought into hospital by: Select all that apply</th>
<th>Sex</th>
<th>Child’s Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Mother</td>
<td>□ Male</td>
<td>___ ___ ___</td>
</tr>
<tr>
<td>□ Father</td>
<td>□ Female</td>
<td></td>
</tr>
<tr>
<td>□ Grandparent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Aunt/Uncle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Sibling &lt;18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Sibling &gt;18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Carer (care home)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Other_________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*if DOB is estimated, and the day is uncertain, write ‘15’ for DD

### Presenting Complaints

<table>
<thead>
<tr>
<th>Complaint</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Fever / Hotness of body</td>
<td></td>
<td>□ Vomiting</td>
</tr>
<tr>
<td>□ Difficulty breathing</td>
<td></td>
<td>□ Diarrhoea &lt;14 days</td>
</tr>
<tr>
<td>□ Cough&lt;14 days</td>
<td></td>
<td>□ Diarrhoea &gt;14 days</td>
</tr>
<tr>
<td>□ Cough&gt;14days</td>
<td></td>
<td>□ Blood in stool</td>
</tr>
<tr>
<td>□ Poor feeding/ Weight loss</td>
<td></td>
<td>□ Developmental delay</td>
</tr>
<tr>
<td>□ Body swelling / limb swelling/ Oedema</td>
<td></td>
<td>□ Lethargy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Convulsions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Altered consciousness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Not feeding</td>
</tr>
</tbody>
</table>

CHAIN ENROLLMENT CRF 30\(^{th}\) August 2017 Version 1.63
### Initial Observations
(to be taken at time of examination by research team)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axillary temperature</td>
<td>____ ____ . ____°C</td>
</tr>
<tr>
<td>Heart rate</td>
<td>Count for 1 minute</td>
</tr>
<tr>
<td></td>
<td>____ ____ /minute</td>
</tr>
<tr>
<td>Respiratory rate</td>
<td>Count for 1 minute</td>
</tr>
<tr>
<td></td>
<td>____ ____ ____/minute</td>
</tr>
<tr>
<td>SaO2</td>
<td>To be taken from finger or toe using pulse oximeter</td>
</tr>
<tr>
<td></td>
<td>____ ____ ____%</td>
</tr>
<tr>
<td></td>
<td>□ Measured in</td>
</tr>
<tr>
<td></td>
<td>□ Measured in</td>
</tr>
<tr>
<td></td>
<td>□ Unrecordable</td>
</tr>
<tr>
<td></td>
<td>Leave blank if unrecordable</td>
</tr>
</tbody>
</table>

### Anthropometry

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>____ ____ . ____kg</td>
</tr>
<tr>
<td>Length</td>
<td>to be taken using SECA 416 infantometer provided for CHAIN study</td>
</tr>
<tr>
<td></td>
<td>Measurer 1 ____ ____ . ____cm</td>
</tr>
<tr>
<td></td>
<td>Measurer 2 ____ ____ . ____cm</td>
</tr>
<tr>
<td>MUAC</td>
<td>To be taken using MUAC tape for CHAIN study</td>
</tr>
<tr>
<td></td>
<td>Measurer 1 ____ ____ . ____cm</td>
</tr>
<tr>
<td></td>
<td>Measurer 2 ____ ____ . ____cm</td>
</tr>
<tr>
<td>Head circumference</td>
<td>To be taken using CHAIN measuring tape</td>
</tr>
<tr>
<td></td>
<td>Measurer 1 ____ ____ . ____cm</td>
</tr>
<tr>
<td></td>
<td>Measurer 2 ____ ____ . ____cm</td>
</tr>
<tr>
<td>Oedema</td>
<td>□ □ + □ ++ □ +++ None</td>
</tr>
<tr>
<td></td>
<td>Initials Measurer 1 ____ ____ Measurer 2 ____ ____</td>
</tr>
</tbody>
</table>

**NB:** If the child is unwell the Length and Head Circumference can be taken at a later time.

### Current Health

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously admitted to hospital.</td>
<td>□ No □ &lt; 1 week ago □ 1 weeks-1month ago □ &gt;1month ago</td>
</tr>
<tr>
<td>Any medication last 7 days.</td>
<td>□ No medication □ Antibiotic □ Antimalarial □ Traditional</td>
</tr>
<tr>
<td></td>
<td>□ Deworming □ Vitamin □ Paracetamol or Ibuprofen</td>
</tr>
<tr>
<td></td>
<td>□ Yes, but unknown □ Other</td>
</tr>
</tbody>
</table>
### Urine volume in last 24hrs?

<table>
<thead>
<tr>
<th>Select 1</th>
<th>Not passing</th>
<th>Less than normal</th>
<th>Normal</th>
<th>Unknown</th>
</tr>
</thead>
</table>

### Examination

Examination should be performed by CHAIN study clinician trained in clinical examination of children, and able to formulate a diagnosis based on clinical history and findings. Refer to Clinical Examination SOP.

#### Airway

- Select one:
  - Clear
  - Needs active support
  - Obstructed/Stridor

#### Breathing

- Select all that apply:
  - Normal – no concerns, (move to circulation)
  - Central cyanosis
  - Nasal flaring
  - Reduced air-entry
  - Wheeze
  - Acidotic Breathing
  - Grunting
  - Lower chest wall indrawing
  - Crackles
  - Dull to percussion
  - Head nodding

#### Airway (select one)

- Clear
- Needs active support
- Obstructed/Stridor

#### Breathing (select all that apply)

- Normal – no concerns, (move to circulation)
- Central cyanosis
- Nasal flaring
- Reduced air-entry
- Wheeze
- Acidotic Breathing
- Grunting
- Lower chest wall indrawing
- Crackles
- Dull to percussion
- Head nodding

#### Circulation:

- Cap Refill (select one)
  - >3s
  - 2-3s
  - <2s

- Cold Peripheries (select one)
  - Shoulder
  - Elbow
  - Hand
  - Warm peripheries

#### Discoloration:

- Conscious level (select one)
  - Alert
  - Voice
  - Pain
  - Unresponsive

- Fontanelle (select one)
  - Normal
  - Bulging
  - Sunken
  - Not present

- Tone (select one)
  - Normal
  - Hypertonic
  - Hypotonic

- Posture (select one)
  - Normal
  - Decorticate
  - Decerebrate

- Activity (select one)
  - Normal
  - Irritable/Agitated
  - Lethargic

#### Dehydration:

- Sunken eyes? Skin pinch (select one)
  - Y
  - N
  - >2 seconds
  - <2 seconds
  - Immediate

- Drinking/Breastfeeding (select one)
  - Normal
  - Poorly
  - Not drinking
  - Eager / Thirsty

#### Abdomen

- Select any that apply:
  - Normal – no concerns
  - Distension
  - Hepatomegaly
  - Tenderness
  - Splenomegaly
  - Other abdominal mass

#### Signs of Rickets

- Wrist
- Rachitic
- Swollen
- Bow
- Frontal widening
- Rosary
- Knees
- Legs
- Bossing

#### Jaundice (Select one)

- Not jaundiced
- +
- ++
- +++
### ENT/Oral/Eyes (select any that apply)
- Mouth Normal
- Ears Normal
- Eyes Normal
- Oral ulceration
- Pus from ear
- Conjunctivitis
- Oral candidiasis
- Tender swelling behind ear (mastoiditis)
- Eye discharge
- Stomatitis
- Lymphadenopathy
- Visual impairment

### Skin (select any that apply)
- Normal
- Hyperpigmentation
- Depigmentation
- Broken skin
- Dermatitis
- ‘Flaky paint’
- Cellulitis
- Impetigo
- Pustules
- Vesicles
- Desquamation
- Macular or papular

### Site of skin lesions. (select any that apply)
- Not applicable
- Trunk (No rash)
- Face / scalp
- Legs
- Palms / soles
- Buttocks
- Arms
- Perineum

### Suspected Chronic Conditions

<table>
<thead>
<tr>
<th>Select confirmed, suspected or none for all conditions:</th>
<th>Confirmed (diagnosed previously/recorded)</th>
<th>Suspected (clinician’s impression)</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerebral palsy/neurological problem/ epilepsy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sickle Cell disease family history, crisis</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Thalassaemia</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visual problem / Blindness Not fixing and following</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Losing weight or not gaining weight</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### TB Screening

<table>
<thead>
<tr>
<th>Known TB (on treatment)</th>
<th>Child has cough &gt;14 days</th>
<th>Household contact has TB, or cough &gt;14 days</th>
<th>Child has suspected extra-pulmonary TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

### Feeding

<table>
<thead>
<tr>
<th>Currently in outpatient nutrition program? Select one.</th>
<th>Supplementary (corn soy blend, RUSF, khichuri, halwa)</th>
<th>Therapeutic (RUTF, Plumpy-nut)</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the child eaten these nutrition products in the last 3 days?</td>
<td>☐ Supplementary</td>
<td>☐ Therapeutic</td>
<td>☐ None</td>
</tr>
</tbody>
</table>
Currently Breastfeeding?  
- ☐ Y  ☐ N  
If NO breastfeeding at all, age stopped in months? (select one)  
- 0-3m  ☐ 4-6m  ☐ 7-12m  ☐ >12m  ☐ Unknown  ☐ N/A  
What did the child receive other than breast milk in the first 3 days of life? Select all that apply. Do not include medications e.g. ARV.  
- ☐ Sweetened/sugar water  ☐ Formula/powder milk  ☐ Animal milk  
- ☐ Fruit Juice  ☐ Tea  ☐ Other  
- ☐ Gutthi / Water  ☐ Porridge/pulp  ☐ gripe water  
- ☐ Pure Honey  ☐ Glycerine  ☐ Nothing

<table>
<thead>
<tr>
<th>Vaccinations – Ask carer or check book/card if available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BCG scar</strong></td>
</tr>
<tr>
<td><strong>Rotavirus</strong></td>
</tr>
<tr>
<td><strong>Pneumococcus</strong></td>
</tr>
<tr>
<td><strong>DTP/Penta</strong></td>
</tr>
<tr>
<td><strong>Polio</strong></td>
</tr>
</tbody>
</table>

**Clinic Impression of Risk**  
How likely does the clinical team think this child is to die during this admission? Select one  
- ☐ Almost certainly not  
- ☐ Very unlikely  
- ☐ Quite unlikely  
- ☐ Unsure  
- ☐ Quite likely  
- ☐ Very likely  
- ☐ Almost certainly

**Immediate Clinical Investigations and HIV status**  
- Malaria RDT circle result
- Positive  
- Negative  
- Not done

<table>
<thead>
<tr>
<th>Blood glucose</th>
<th>_____ . _____ mmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time glucose measured</td>
<td><em><strong><strong>:</strong></strong></em></td>
</tr>
<tr>
<td>24h clock</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Urine Dipstick (can be done at any time during admission)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Urine sample stored?</th>
<th>☐ Y</th>
<th>☐ N</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Not done  ☐ Bag  ☐ Clean catch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>None</th>
<th>Pos Neg</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>+</td>
<td>++</td>
</tr>
</tbody>
</table>
HIV status known?
- □ Yes, known exposed, known PCR negative (children
- □ Yes, known □ Yes, antibody positive, under 18m with PCR result SEEN BY RESEARCH TEAM. If
  unknown PCR status not seen select
  below and perform HIV RDT
- □ No, known to be HIV exposed, but child untested □ No, child not tested, not known to be exposed

If child known HIV positive or exposed
- □ On any ART?
  - □ Y □ N □ Unknown

If on treatment,
- ARV 1
- ARV 2
- ARV 3

If on prophylaxis
- □ Nevirapine prophylaxis only
- □ AZT + NVP prophylaxis
- □ Caregiver unsure

Co-trimoxazole
- □ On prophylactic dose co-trimoxazole
- □ Not on co-trimoxazole
- □ Caregiver unsure

If not known positive
- □ HIV RDT now
  - □ Reactive / positive
  - □ Non-Reactive / Negative
  - □ Declined

PCR sent:
- □ Y □ N

HIV test offered to caregiver?
- □ Yes, □ Yes, □ Yes, but □ No, □ Yes, but No, □ No, □ Missed

Reactive Non-reactive Declined Caregiver is known positive Caregiver is known positive in care home

Did the mother have interventions or medication during delivery to prevent transmission of HIV to baby?
- □ Yes
- □ No
- □ Unknown

INITIAL TREATMENT

Admitted to: select one
- □ Admission to ward
- □ Admission to HDU
- □ Admission to ICU

Date and time First antibiotics given
- _ _ _ _ / _ _ _ _ / _ _ _ _
  □ Not given

24h clock
### Intravenous Antibiotics Given?
- Not given

- Benzylpenicillin
- Gentamicin
- Ceftriaxone / Cefotaxime
- Co-amoxiclav/
- Flu/Cloxacillin
- Chloramphenicol
- Augmentin
- Ampicillin
- Amikacin
- Meropenem / Imipenem
- Levofloxacin
- Vancomycin
- Metronidazole
- Ceftazidime
- Pivmecillinam
- Other_________________________________________________________

### Oral Antibiotics Given?
- Not given

- Amoxicillin
- Erythromycin
- Azithromycin
- Co-trimoxazole
- Metronidazole
- Ciprofloxacin
- Co-amoxiclav /
- Cefalexin / cefaclor
- Nalidixic acid
- Augmentin
- Penicillin
- Flucloxacin
- Levofloxacin
- Other ______________

### Initial treatment given
First 6 hours. Select any that apply.
For IV fluid bolus, and IV fluids specify type and volume in ml, and duration

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IV Fluid Bolus</td>
<td>IV Maintenance Fluids</td>
<td></td>
</tr>
<tr>
<td>Oxygen</td>
<td>CPAP</td>
<td></td>
</tr>
<tr>
<td>IV Glucose</td>
<td>Oral Glucose</td>
<td>Warmth (heater, warmed fluids)</td>
</tr>
<tr>
<td>Blood transfusion</td>
<td>Commercial F75</td>
<td></td>
</tr>
<tr>
<td>Phenobarbitone</td>
<td>Commercial F100</td>
<td></td>
</tr>
<tr>
<td>Diazepam</td>
<td>Locally prepared F75/ milk suji</td>
<td></td>
</tr>
<tr>
<td>Paracetamol</td>
<td>Local prepared F100 / milk suji 100</td>
<td></td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>Expressed breast milk</td>
<td></td>
</tr>
<tr>
<td>Diclofenac</td>
<td>Dilute F100/ dilute milk or formula</td>
<td></td>
</tr>
<tr>
<td>Salbutamol / atrovent / other bronchodilator</td>
<td>Other milk/ formula/ feed</td>
<td></td>
</tr>
<tr>
<td>Prednisolone/ dexamethasone/ hydrocortisone</td>
<td>Nasogastric tube</td>
<td></td>
</tr>
<tr>
<td>Adrenaline</td>
<td>Multivitamin</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>Micronutrients</td>
<td></td>
</tr>
<tr>
<td>Folic acid</td>
<td>Vitamin A</td>
<td></td>
</tr>
<tr>
<td>Antimalarial (any)</td>
<td>Albendazole / deworming</td>
<td></td>
</tr>
<tr>
<td>ReSoMal</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>ORS</td>
<td>______________________</td>
<td></td>
</tr>
</tbody>
</table>

### Suspected Initial Diagnoses:
Clinical diagnosis should be based on examination and investigation findings. Tick the three most likely diagnoses.

<table>
<thead>
<tr>
<th>Respiratory</th>
<th>Infection</th>
<th>CNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRTI/pneumonia</td>
<td>Gastroenteritis</td>
<td>Febrile convulsions</td>
</tr>
<tr>
<td>Bronchiolitis</td>
<td>Sepsis</td>
<td>Epilepsy</td>
</tr>
<tr>
<td>URTI</td>
<td>Malaria</td>
<td>Probable meningitis</td>
</tr>
</tbody>
</table>
### Admission Core Cohort Investigations and Sample Collection

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Before ABX</th>
<th>After ABX</th>
<th>Unable to take blood samples, why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC taken</td>
<td>Y</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>Clinical chemistry taken</td>
<td>Y</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>EDTA 2ml blood taken</td>
<td>Y</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>EDTA 0.5ml blood taken</td>
<td>Y</td>
<td>N</td>
<td>-</td>
</tr>
<tr>
<td>Plain Blood (serum) Blood spot taken</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Blood culture taken (if available at site)</td>
<td>Y BEFORE ABX</td>
<td>Y AFTER ABX</td>
<td>Y BEFORE ABX</td>
</tr>
<tr>
<td>Blood gas taken (if available at site)</td>
<td>Capillary</td>
<td>Venous</td>
<td>N</td>
</tr>
<tr>
<td>Rectal swabs taken</td>
<td>Y BEFORE ABX</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stool sample</td>
<td>Y</td>
<td>N</td>
<td>-</td>
</tr>
</tbody>
</table>
| Chest x-ray indicated
(Respiratory signs symptoms)        | Y, yes, but too unwell | Y, yes, done | Indicated but not done, unclear | Not indicated |
| Lumbar puncture indicated
(Signs of meningitis documented)    | Y, yes, but too unwell | y, yes, done | -                                 | Not indicated |
| Blood Samples taken by (initials)  |            |            | -                                 |
| Rectal Swabs taken by (initials)   |            |            | -                                 |

**Other suspected diagnosis:**
- Other
- Unknown
- Failed appetite test only

**Other suspected diagnosis:**
- Other
- Unknown
- Failed appetite test only

**Other suspected diagnosis:**
- Other
- Unknown
- Failed appetite test only
CHAIN Enrolment CRF v1.63
CHAIN Number [6][0][0][0][1] [ ][ ][ ]

CRF Completed by (Initials) – to be signed when complete. 
Do not sign if any fields are empty

Date
___/___/____
D D/ M M/ Y Y Y Y

Time
___:___

PART 2
CHAIN ADMISSION CRF: SOCIAL INFORMATION.

To be completed within 48h of admission when child is stable. This should ideally be done in a conversational and unhurried way, with the interviewer sitting with the caregiver.

Initials of person interviewing caregiver and completing part 2

___ ___ ___

Date
___/___/___
D D/ M M/ Y Y Y Y

Time
___:___

Who is being interviewed?

☐ Primary ☐ Care ☐ Primary caregiver ☐ One person who is not the primary caregiver ☐ More than one person who is not the primary caregiver

☐ Caregiver home staff ☐ Primary caregiver and one other person ☐ One person who is not the primary caregiver and more than one other person

Care-seeking Behaviour

Was the child in generally good health before this illness?

☐ Y ☐ N ☐ Unknown

If No, how long has the child had this problem of generally bad health?

___ ___ weeks ☐ N/A

Does the child have health insurance?

☐ Y ☐ N ☐ Unknown

What was the main reason for bringing the child to this hospital today? Reasons given, select one

☐ Referred by health care ☐ Caregiver concern of child’s condition ☐ Received money for transport to hospital worker (e.g. from family, neighbour, paid work)?

☐ Relative / neighbour concern ☐ Primary caregiver returned home e.g. if ☐ Other of child’s condition working away

How did you travel to the hospital? Select all that apply

☐ Car / Taxi ☐ Ambulance ☐ Bus ☐ Motorbike ☐ Tuk-tuk / CNG ☐ Cycle rickshaw ☐ Train ☐ Walking ☐ Other

How long did it take you to travel to hospital?

☐ <1h ☐ 1-< 2h ☐ 2-4h ☐ >4h ☐ >1 day

How much did it cost the family to travel to hospital today (in local currency)?

Estimate amount. If walked or free ambulance write 0

____ _____ _____
**Have you sought treatment for this illness prior to coming to hospital? Select all that apply**

- [ ] No treatment sought
- [ ] Shop
- [ ] Government hospital
- [ ] Government dispensary
- [ ] Traditional Healer
- [ ] Pharmacy
- [ ] Private Medical Facility/ NGO
- [ ] Herbalist
- [ ] Homeopathist
- [ ] Other

**Have you sought treatment for this illness prior to coming to hospital? Select all that apply**

- [ ] No treatment sought
- [ ] Shop
- [ ] Government hospital
- [ ] Government dispensary
- [ ] Traditional Healer
- [ ] Pharmacy
- [ ] Private Medical Facility/ NGO
- [ ] Herbalist
- [ ] Homeopathist
- [ ] Other

**Received treatment from traditional healer, homeopathist or herbalist in last 4 weeks?**

- [ ] Y
- [ ] N

**Child’s Health Status Before Admission**

**Before this illness, how did this child’s health compare to other children of similar age in your neighbourhood? Select one**

- [ ] Similar
- [ ] Better
- [ ] Worse
- [ ] Don’t know

**Before this illness, how did this child’s health compare to his/her siblings at a similar age? Select one**

- [ ] Similar
- [ ] Better
- [ ] Worse
- [ ] Don’t know
- [ ] N/A only child

**Birth History**

**Source of information**

- [ ] Maternal/caregiver recall
- [ ] Book/medical records

**Birth weight**

- [ ] ___ .___ ___kg
- [ ] Unknown

**Birth details Select any that apply**

- [ ] Premature
- [ ] Born small <2.5kg
- [ ] Twin/multiple birth
- [ ] Born at term
- [ ] Unknown

**Delivery location Select one**

- [ ] Born in hospital
- [ ] Community facility/clinic with midwife/nurse midwife/doctor
- [ ] Home without
- [ ] Home with
  - traditional
- [ ] Home with midwife/nurse birth attendant (untrained)
- [ ] Other
- [ ] Unknown

**Delivery details Select all that apply**

- [ ] Normal, spontaneous vaginal
- [ ] Assisted delivery (forceps, ventouse)
- [ ] Caesarean section delivery
- [ ] Mother admitted to
- [ ] Admitted neonatal unit
- [ ] Unknown hospital >48h

**Mother’s age at first pregnancy**

- [ ] ___ ___ years
- [ ] unknown

**Participant birth order**

- [ ] ___ ___ of ___ ___ total live births
  - (e.g. if youngest of 3 children 3 of 3, if oldest of 3 children 1 of 3)

**Are the biological parents of this child consanguineous?**

- [ ] Yes
- [ ] No
- [ ] Unknown

**Primary Caregiver Information**

*This is the person who has responsibility for day to day care of the child, but is not a substitute carer such as childminder or grandparent who cares for child whilst, for example, mother is at work.*
### Who is the Primary Caregiver?
- **Select one**
  - Biological Parent
  - Grandparent
  - Sibling
  - Aunt / Uncle / Cousin
  - Stepmother / father
  - Care home / orphanage
  - Other / Unclear

### Is the child’s biological father alive?
- **Select one**
  - Y
  - N
  - Unknown

### Is the child’s biological mother alive?
- **Select one**
  - Y
  - N
  - Unknown

### Primary Care Giver Age
- **Select one**
  - <18 years
  - >=18 years
  - >50 years
  - N/A (care home or unclear)

### Primary Care Giver Sex
- **Select one**
  - Male
  - Female
  - N/A

### Primary caregiver present at admission?
- **Select one**
  - Y
  - N

### Has the primary caregiver lived in the same household as the child for the last 2 months?
- **Select one**
  - Y
  - N
  - N/A (care home)

### Marital status of primary caregiver
- **Select one**
  - Married
  - Married
  - Single
  - Separated / divorced
  - Widowed
  - N/A
  - Monogamous
  - Polygamous

### If not present at admission, where is the primary caregiver?
- **Select one**
  - Home
  - Work
  - School
  - Unknown
  - Other
  - N/A

### If the primary caregiver is present, caregiver anthropometry:
- Use locally available adult scales and stadiometer, and adult MUAC tapes provided by CHAIN.

- **Primary caregiver not present during admission, or care home**
  - Weight: ___ ___ ___ kg
  - MUAC: ___ ___ ___ cm
  - Height: ___ ___ ___ cm

### Education: Select highest level of education achieved
- None
- Primary
- Secondary
- Above secondary
- Un
  - N/A
  - Care home

### Able to read?
- Y
- N
  - Unknown

### Is the primary caregiver primarily responsible for financial support and providing for the child?
- Y
- N
  - Unknown

### Primary caregiver HIV status in last 6 months
- **Select one**
  - Tested Positive
  - Tested Negative
  - Not tested or unknown

### Have there been ANY changes to the child’s social situation in the last 2 MONTHS?
- **Select any that apply**
  - Child moved to a different household
  - Mother sick
  - Father sick
  - Other primary caregiver sick
  - Primary caregiver changed
  - Primary caregiver started employment / returned to school
  - Primary caregiver divorced / separated from partner
  - Other primary caregiver died
  - Child went into care home
  - Person providing for the child has lost income
  - Primary caregiver in new relationship

---

CHAIN ENROLLMENT CRF 30th August 2017 Version 1.63
### Mother is pregnant

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

### Other primary caregiver pregnant?

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
</table>

### Mother gave birth

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

### Other primary caregiver gave birth

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
</table>

### If primary caregiver has changed in the last 2 months, who was the child’s previous primary caregiver? *Select one*

- Biologic Mother
- Biologic Father
- Sibling ≥18 years old
- Sibling <18 years old
- Grandparent
- Aunt/Uncle/Cousin
- Other
- N/A

### Primary caregiver earns an income now? *Ask the person accompanying the child and select one*

- Employed full time by someone else
- Employed part time by someone else
- Works for self
- No work income
- Works casually/irregularly for someone
- Don’t know
- N/A

#### How many days worked a week? *Select one*

<table>
<thead>
<tr>
<th>Days worked a week</th>
<th>Select one</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3</td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>N/A, does not work</td>
<td></td>
</tr>
<tr>
<td>&gt;5 for income</td>
<td></td>
</tr>
</tbody>
</table>

### If the primary caregiver earns, main source of income? *Select one*

- Farmer
- Business/trader
- Labourer
- Domestic work
- Other private sector employment
- Public sector employment
- Retired with pension income
- Begging
- N/A

### If the primary caregiver works (earning or non-earning), main place of work? *Select one*

- In/around home (where child lives)
- Away for <4 hours per day
- Away >4 hours but comes home daily
- Away >8h a day but returns home daily
- Away >1 day, comes home weekly
- Away comes home, less than weekly
- Primary caregiver lives and works away
- Don’t know
- N/A

### The person primarily providing financial support to this child is this child’s: *Select one*

- Biologic Mother
- Biologic Father
- Stepfather
- Stepmother
- Grandparent
- Sibling ≥18 years old
- Sibling <18 years old
- Aunt/Uncle/Cousin
- More than one person responsible
- Unsupported / care home
- Other
- Specify
- Unclear

### Person responsible for providing financial support to child, place of usual residence? *Select one*

- Always sleeps at home
- Sleeps away but returns weekly
- Sleeps away for > two months per year
- Works and lives abroad, contact with child once a year or less
- Sleeps away but return monthly or less often
- Don’t know
- Other
- N/A (e.g. care home, unsupported)

### What is the Father or person responsible for providing financial support to child source of income? *Select one*

- Farmer
- Business/trader
- Labourer
- Domestic work
- Other private sector employment
- Public sector employment
- Retired with pension income
- Begging
- None
- Unknown
- Other
- N/A
### Substitute Care:

**Who usually looks after child when primary caretaker is working or away? Select all that apply**

- [ ] Not applicable, caregiver looks after child full time
- [ ] Not applicable, child accompanies caregiver to work
- [ ] No substitute care, child left alone
- [ ] No substitute care / unclear
- [ ] Child in care home
- [ ] Biological Mother
- [ ] Biological Father
- [ ] Sibling <18 years old
- [ ] Sibling ≥18 years old
- [ ] Grandparent
- [ ] Aunt/Uncle/Cousin
- [ ] Childcare facility outside home
- [ ] Childminder/ day care at home

### How many days a week is the child in day care?

- [ ] N/A
- [ ] 1-2
- [ ] 3-4
- [ ] 5-6
- [ ] >6

### How many hours per day is the child in day care?

- [ ] N/A
- [ ] 1-4h
- [ ] 5-8h
- [ ] 9-12h
- [ ] >12h

### How many children are looked after at this day care?

- [ ] <3
- [ ] 4-6
- [ ] 7-10
- [ ] >10
- [ ] Unknown
- [ ] N/A

### How many of these are under 2y?

- [ ] <3
- [ ] 4-6
- [ ] 7-10
- [ ] >10
- [ ] Unknown
- [ ] N/A

### How many adults look after these children?

- [ ] 1
- [ ] 2-4
- [ ] 5-10
- [ ] >10
- [ ] N/A

### Do you feel the day care is good?

- [ ] Y
- [ ] N
- [ ] N/A

### Who provides food for the child at day care? Select one

- [ ] Caregiver provides
- [ ] Day care provides
- [ ] Someone else provides
- [ ] Don’t know
- [ ] N/A food for the child

### Is feeding supervised / assisted at day care?

- [ ] Y
- [ ] N
- [ ] Unknown
- [ ] N/A

### Household Food Security

(if child in care home include children in the care home only)

#### During the past 7 DAYS

Has ANY member of the household missed a meal due to food shortage?

- [ ] Y
- [ ] N
- [ ] Unknown

#### During the past 4 WEEKS

Did you worry that your household would not have enough food?

- [ ] Y
- [ ] N
- [ ] Unknown

Were any of your household unable to eat the kinds of food preferred because of a lack of resources?

- [ ] Y
- [ ] N
- [ ] Unknown

Have any of your household had to eat a limited variety of food due to lack of resources?

- [ ] Y
- [ ] N
- [ ] Unknown

Have any of your household eaten some foods that you really didn’t want to eat because of lack of resources?

- [ ] Y
- [ ] N
- [ ] Unknown

Have any of your household eaten fewer meals in a day because there was not enough food?

- [ ] Y
- [ ] N
- [ ] Unknown

Did household members go to sleep at night hungry because there was not enough food?

- [ ] Y
- [ ] N
- [ ] Unknown

Did you or your household members go a whole day and night without eating anything because there was not enough food?

- [ ] Y
- [ ] N
- [ ] Unknown
### Child Dietary Diversity

**What does the child eat on a typical day?**
- Ask this as an open question and select all that the caregiver mentions.
- Do not present the caregiver with this list.
- You may prompt the caregiver with open questions, e.g. What does your child usually eat for breakfast.

- ☐️ **Milk and Milk Products**: Fresh/fermented milk, cheese, yogurt, or other milk products
- ☐️ **Breast milk**
- ☐️ **Cereals and Cereal Products**: Maize, rice, pasta, porridge, bread, biscuits, millet, sorghum, wheat, locally available grains
- ☐️ **Fish and Sea Foods**: fresh or dried fish or shellfish
- ☐️ **Roots and Tubers**: potatoes, sweet potatoes, yams, cassava, or foods made from roots or wild roots and tubers
- ☐️ **Vegetables**: Cabbages, carrots, spinach, and any other locally available vegetables including wild vegetables
- ☐️ **Fruits**: Oranges, bananas, mangoes, avocados, apples, grapes etc
- ☐️ **Meats and Poultry**: Camel, beef, lamb, goat, rabbit, wild game, chicken or other birds, liver, kidney, heart or other organ meats or blood-based foods
- ☐️ **Eggs**: Hen or other bird eggs
- ☐️ **Pulses / Legumes / Nuts and Seeds**: Beans, peas, lentils, nuts, seeds or foods made from these
- ☐️ **Fats and Oils**: Oil, fats, ghee, margarine or butter added to food or used for cooking
- ☐️ **Sugars / Honey and Commercial Juices**: Sugar in tea, honey, sweetened soda, juices, chocolates, sweets or candies
- ☐️ **Miscellaneous**: Spices, unsweetened beverages
- ☐️ **UNKNOWN**

### Feeding practices

**How is food USUALLY given to the child? Select one**

- ☐️ Fed by adult
- ☐️ Child feeds self, unsupervised
- ☐️ Child feeds self, supervised by adult
- ☐️ Fed from common plate or bowl
- ☐️ Child feeds self, supervised by older children
- ☐️ Child exclusively breastfed
- ☐️ Unknown
- ☐️ Other
<table>
<thead>
<tr>
<th>Assessment of household wealth (DHS 7 questionnaire. Please answer all questions, for all participants, including children in care homes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is the main source of drinking water for members of your household?</strong> <em>Choose one</em></td>
</tr>
<tr>
<td>[ ] Piped water to dwelling</td>
</tr>
<tr>
<td>[ ] Piped water to yard / plot</td>
</tr>
<tr>
<td>[ ] Piped to neighbour</td>
</tr>
<tr>
<td>[ ] Public tap/ Standpipe</td>
</tr>
<tr>
<td>[ ] Protected well / borehole</td>
</tr>
<tr>
<td>[ ] Unprotected well</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>What is the MAIN source of water used by your household for other purposes such as cooking and handwashing?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SELECT ONE ONLY</strong></td>
</tr>
<tr>
<td>[ ] Piped water to dwelling</td>
</tr>
<tr>
<td>[ ] Piped water to yard / plot</td>
</tr>
<tr>
<td>[ ] Piped to neighbour</td>
</tr>
<tr>
<td>[ ] Public tap/ Standpipe</td>
</tr>
<tr>
<td>[ ] Protected well / borehole</td>
</tr>
<tr>
<td>[ ] Unprotected well</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How long does it take to get DRINKING water and come back?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(State 0 if water supplied within home or compound)</td>
</tr>
<tr>
<td>[ ]  __ __ __minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>In the past 2 weeks was the water from this source not available for at least one full day?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Do you usually do anything to the water to make it safer to drink?</strong> <em>Select all that apply</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] None</td>
</tr>
<tr>
<td>[ ] Use water filter</td>
</tr>
</tbody>
</table>

(ceramic/sand/composite etc)

<table>
<thead>
<tr>
<th><strong>What kind of toilet facility do members of your household usually use?</strong> <em>Select one</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Flush or pour flush toilet to piped sewer</td>
</tr>
<tr>
<td>[ ] Flush to pit latrine</td>
</tr>
<tr>
<td>[ ] Flush don’t know where</td>
</tr>
<tr>
<td>[ ] Pit latrine with slab</td>
</tr>
<tr>
<td>[ ] Unknown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Do you share this toilet facility with other households?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Y</td>
</tr>
</tbody>
</table>
If Yes, including your own household, how many households use this toilet facility?  

- □ >10  
- □ Unknown  
- □ N/A  
- □ Number if <10 households  
  - □ In own dwelling  
  - □ In own yard / plot  
  - □ Elsewhere  

Where is this toilet facility located?  

- □ In own dwelling  
- □ In own yard / plot  
- □ Elsewhere  

How many rooms are there in the household for SLEEPING?  

- □ 1  
- □ 2  
- □ >2  

What is the MAIN FLOOR material of the rooms in this household? *Select one only*  

- □ Cement  
- □ Earth/sand  
- □ Wood  
- □ Dung  
- □ Lives on boat  
- □ Tiles  
- □ Carpet  
- □ Other (specify) __________________  
- □ Unknown  

What is the MAIN WALL material of the rooms in this household? *Select one only*  

- □ Grass/straw/makuti  
- □ Stone  
- □ Wood  
- □ Unknown  
- □ Corrugated iron sheet/ Tin  
- □ Mud/wood  
- □ Brick/block  
- □ Planks/shingles  
- □ No wall  
- □ Other (specify) __________________  

What is the MAIN ROOF material of the house in this household? *Select one only*  

- □ Grass/Thatch  
- □ Tiles/Asbestos sheets  
- □ Corrugated iron/ Tins  
- □ Mud  
- □ Nylon papers/clothes  
- □ Concrete  
- □ Other (specify) __________________  
- □ Unknown  

What is the MAIN cooking fuel used in this household? *Select one only*  

- □ Electricity  
- □ LPG /Natural gas/Biogas  
- □ Paraffin  
- □ Coal / Lignite  
- □ Charcoal  
- □ Firewood  
- □ Straw/shrubs/grass  
- □ Agricultural crop  
- □ Animal Dung  
- □ No food cooked in household  
- □ Other (specify) __________________  
- □ Unknown  

Do you have a separate room which is used as a kitchen?  

- □ Y  
- □ N  
- □ Unknown  

Where is this household’s cooking area located?  

- □ In the house  
- □ Outdoors  
- □ In a separate building  
- □ Other ______________  
- □ Unknown  

Does this household own any livestock, herds, other farm animals or poultry?  

- □ Y  
- □ N  
- □ Unknown  

If yes, how many of the following animals does this household own?  

<table>
<thead>
<tr>
<th>Animal Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows/bulls</td>
<td>__</td>
</tr>
<tr>
<td>Horses/Donkeys/Mules</td>
<td>__</td>
</tr>
<tr>
<td>Chickens or Ducks</td>
<td>__</td>
</tr>
<tr>
<td>Sheep</td>
<td>__</td>
</tr>
<tr>
<td>Goats</td>
<td>__</td>
</tr>
<tr>
<td>Other _______________ number __</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

Does any member of this household own land?  

- □ Y  
- □ N  
- □ Unknown  

If “Yes” How many acres of land does this household own?  

- □ Acres  
- □ Unknown  
- □ N/A  

Does this household have a bank account?  

- □ Y  
- □ N  
- □ Unknown
| **Does this household have electricity** | ☐ Y | ☐ N | ☐ Unknown |
| **Does this household own a radio?** | ☐ Y | ☐ N | ☐ Unknown |
| **Does this household own a television?** | ☐ Y | ☐ N | ☐ Unknown |
| **Does this household own a computer?** | ☐ Y | ☐ N | ☐ Unknown |
| **Does this household own a refrigerator?** | ☐ Y | ☐ N | ☐ Unknown |

| **Does any member of this household own:** |
| **A watch** | ☐ Y | ☐ N | ☐ Unknown |
| **A mobile phone?** | ☐ Y | ☐ N | ☐ Unknown |
| **Standard phone** | ☐ Y | ☐ N | ☐ Unknown |
| **smartphone** | ☐ Y | ☐ N | ☐ Unknown |
| **An animal-drawn cart?** | ☐ Y | ☐ N | ☐ Unknown |
| **A bicycle?** | ☐ Y | ☐ N | ☐ Unknown |
| **A motorcycle / scooter?** | ☐ Y | ☐ N | ☐ Unknown |
| **A car or truck?** | ☐ Y | ☐ N | ☐ Unknown |
| **A boat with a motor?** | ☐ Y | ☐ N | ☐ Unknown |

CRF Completed by (Initials) – to be signed when complete. 
*Do not sign if any fields are empty*

```
| ☐ ☐ ☐ | Date | Time |
| ☐ ☐ ☐ | ___ / ___ / ___ ___ | ___ : ___ |
```

END