### Readmission to Hospital

<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 seen by research team</th>
<th>TIME seen by research team</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>__ / __ / __ __ __ __</td>
<td>__ :__: ___ 24h Clock</td>
<td></td>
</tr>
</tbody>
</table>

### Initial Observations

**Axillary temperature**
- __ __ __ __ °C

**Respiratory rate**
- Count for 1 minute
  - __ __ __ __/minute

**Heart rate**
- Count for 1 minute
  - __ __ __ __/minute

**SaO2**
- To be taken from finger or toe using pulse oximeter
  - __ __ __ __ %
  - □ Measured in
  - □ Measured in
  - □ Unrecordable

*Leave blank if unrecordable Oxygen Room Air*

### 1. Presenting Complaints

- □ Fever / Hotness of body
- □ Vomiting
- □ Lethargy
- □ Difficulty breathing
- □ Diarrhoea <14 days
- □ Diarrhoea >14 days
- □ Convulsions
- □ Cough <14 days
- □ Cough >14 days
- □ Altered consciousness
- □ Blood in stool
- □ Not feeding
- □ Poor feeding / Weight loss
- □ Developmental delay
- □ Body swelling / limb swelling / Oedema
- □ Rash / skin lesion
  - □ Neonatal jaundice
  - □ Umbilical infection
- □ Other (only one complaint, if not covered by above options)

### Anthropometry and Nutrition

#### Weight
- To be taken using SECA scales for CHAIN
  - __ __ __ __kg

#### MUAC
- To be taken using MUAC tape for CHAIN
  - Measurer 1 __ __ __ __ cm
  - Measurer 2 __ __ __ __ cm

#### Length
- To be taken using SECA 416 infantometer provided for CHAIN
  - Measurer 1 __ __ __ __ cm
  - Measurer 2 __ __ __ __ cm

#### Head circumference
- To be taken using CHAIN measuring tape
  - Measurer 1 __ __ __ __ cm
  - Measurer 2 __ __ __ __ cm
### Oedema

- none
- +
- ++
- +++

<table>
<thead>
<tr>
<th>Initials</th>
<th>Measurer 1</th>
<th>Measurer 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1. Current Health

**Previously admitted to hospital.**
*Include other hospitals / health centres. Select 1*

- No
- < 1 week ago
- 1 week - 1 month ago
- >1 month ago

**Any medication last 7 days.**
*Select all that apply*

- No medication
- Antibiotic
- Deworming
- Vitamin
- Yes, but unknown
- Other

**Urine volume in last 24hrs?**
*Select 1*

- Not passing
- Less than normal
- Normal
- or greater
- Unknown

### Feeding

**Currently in outpatient nutrition program?**
*Select one.*

- Supplementary (corn soy blend, RUSF, khichuri, halwa)
- Therapeutic (RUTF, Plumpy-nut)
- None

**Has the child eaten these nutrition products in the last 3 days?**

**Currently Breastfeeding?**

- Y
- N

**If NO breastfeeding at all, age stopped in months?**
*(select one)*

- 0-3m
- 4-6m
- 7-12m
- >12m
- Unknown

### 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
### Circulation
- **Cap Refill** (select one)
  - □ >3s
  - □ 2-3s
  - □ <2s

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

### Disability
- **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
- **Abdomen** (select any that apply)
  - □ Normal
  - □ Poorly
  - □ Not drinking
  - □ Eager / Thirsty
  - □ Distension
  - □ Hepatomegaly
  - □ Tenderness
  - □ Splenomegaly
  - □ Other abdominal mass

### Signs of Rickets
- **Wrist**
  - □ Swollen
  - □ Bow
  - □ Frontal widening

- **None**
  - □ Rachitic rosary

- **knees**
  - □

- **legs**
  - □

- **bossing**
  - □

### Jaundice
- □ Not jaundiced
  - □ +
  - □ ++
  - □ +++

### ENT/Oral/Eyes
- **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
- □ Normal
- □ Hyperpigmentation
- □ Depigmentation
- □ Broken skin
- □ Dermatitis
  - □ ‘Flaky paint’
- □ Cellulitis
- □ Impetigo
- □ Pustules
- □ Vesicles
- □ Desquamation
- □ Macular/ papular

### Site of skin lesions.
- □ Not applicable
- □ Trunk
- □ Face / scalp
- □ Legs
  - □ (No rash)
  - □ Palms / Soles
  - □ Buttocks
  - □ Arms
  - □ Perineum

### 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 extrapulmonary TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
Immediate Clinical Investigations

<table>
<thead>
<tr>
<th>Malaria RDT circle result</th>
<th>Positive</th>
<th>Negative</th>
<th>Not done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___ : ___ mmol /L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time glucose measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___ : ___ 24h clock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine Dipstick</td>
<td>Protein</td>
<td>Nitrites</td>
<td>Leucocytes</td>
</tr>
<tr>
<td>(can be done at any time during admission)</td>
<td>+ ++ +++</td>
<td>Pos Neg</td>
<td>+ ++ +++</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
<td>Gastroenteritis</td>
<td>Sepsis</td>
<td>Malaria</td>
</tr>
<tr>
<td>LRTI/pneumonia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronchiolitis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URTI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary TB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otitis media</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>Anaemia</td>
<td>Sickle Cell Disease</td>
<td>Thalassaemia</td>
</tr>
<tr>
<td>Renal impairment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nephrotic syndrome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nephritis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver dysfunction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ileus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congenital cardiac disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemolytic disease newborn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal jaundice</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Respiratory
- LRTI/pneumonia
- Bronchiolitis
- URTI
- Pulmonary TB
- Otitis media
- Asthma

General
- Anaemia
- Sickle Cell Disease
- Thalassaemia
- Renal impairment
- Nephrotic syndrome
- Nephritis
- Liver dysfunction
- Ileus
- Congenital cardiac disease
- Haemolytic disease newborn
- Neonatal jaundice

Infection
- Gastroenteritis
- Sepsis
- Malaria
- Extra pulmonary TB
- Soft tissue infection
- UTI
- HIV related illness
- Measles
- Varicella
- Osteomyelitis
- Febrile illness unspecified
- Enteric fever
- Infected umbilicus

CNS
- Febrile convulsions
- Epilepsy
- Probable meningitis
- Other encephalopathy
- Hydrocephalus
- Developmental delay
- Cerebral palsy

Other suspected diagnosis:
- Other
- Unknown
- Failed appetite test only
- Breast-feeding difficulty

11. Initial Treatment

Admitted to: select one
- Admission to ward
- Admission to HDU
- Admission to ICU
- Admission to neonatal unit
<table>
<thead>
<tr>
<th>Date and time</th>
<th>First antibiotics given</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>__ / __ / ___</td>
<td>__ / __ / __ : ___</td>
<td>Not given</td>
</tr>
</tbody>
</table>

### 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
  - Flucloxacillin
  - Levofloxacin
  - Other

### Initial treatment given
*First 6 hours. Select any that apply.*
- IV Fluid Bolus
- IV Maintenance Fluids
- Oxygen
- CPAP
- IV Glucose
- Oral Glucose
- Warmth (heater, warmed fluids)
- Blood transfusion
- Commercial F75
- Phenobarbitone
- Commercial F100
- Diazepam
- Locally prepared F75/ milk suji
- Paracetamol
- Local prepared F100 / milk suji 100
- Ibuprofen
- Expressed breast milk
- Diclofenac
- Dilute F100/ dilute milk or formula
- Salbutamol / atrovent / other bronchodilator
- Other milk/ formula/ feed
- RUTF
- Prednisolone/ dexamethasone/ hydrocortisone
- Nasogastric tube
- Adrenaline
- Multivitamin
- Zinc
- Micronutrients
- Folic acid
- Vitamin A
- Antimalarial (any)
- Albendazole / deworming
- ReSoMal
- Other
- ORS
### Clinicians 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

### Readmission Sample Collection

<table>
<thead>
<tr>
<th>Test</th>
<th>Taken Y</th>
<th>Taken N</th>
<th>Date Taken</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>Clinical chemistry</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>EDTA 2ml blood</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>EDTA 0.5ml blood</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>Plain Blood (serum)</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>Blood spot taken</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>Blood culture taken</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>Blood gas taken</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
</tbody>
</table>

### Unable to take blood samples, why?

- [ ] Difficult venepuncture
- [ ] Child uncooperative
- [ ] Parent refused
- [ ] Other

<table>
<thead>
<tr>
<th>Rectal swabs taken</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Y BEFORE ABX</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] Y AFTER ABX</td>
<td>[ ] : [ ]</td>
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</table>

<table>
<thead>
<tr>
<th>Stool sample</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Y</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] N</td>
<td>[ ] : [ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chest x-ray indicated</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Yes, but too unwell</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] Yes, done</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] Not indicated</td>
<td>[ ] : [ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lumbar puncture indicated</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Yes, but too unwell</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] Yes, done</td>
<td>[ ] : [ ]</td>
</tr>
<tr>
<td>[ ] Not indicated</td>
<td>[ ] : [ ]</td>
</tr>
</tbody>
</table>

### CRF Completed by (Initials) – to be signed when complete.

Do not sign if any fields are empty

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] / [ ] / [ ] / [ ]</td>
<td>[ ] : [ ]</td>
</tr>
</tbody>
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**Readmission CRF v1.62**

3rd October 2018

**CHAIN Number**

[1][0][0][0][1][ ][ ][ ]