Complaint category	DIAGNOSIS	ePOCT+ DYN TZ Algo	Excluded by	Referral	TREATMENTS	Follow-up (always includes reasons to return to clinic)	Management	Difference with ePOCT 2014 algorithm (New, Adapted, Same)	Modifications in respect to TZ guidelines: Standard Treatment Guidelines and Essential Medicines List for Children and Adolescents 2018 (STGC 2018), or IMCI 2014 (TZ IMCI 2020), or IMAI 2009	In line with Tanzania guideline and/or IMCI? (YES, Adpated (from TZ	TZ or IMCI/IMAI Guidelines	Additional references
Universal assessment - malnutrition	**Complicated severe acute malnutrition**	WFA z-score ≤-3 (2-5m) OR MUAC <11.5cm (6 - 59m) OR MUAC for age z-score≤-3 (5-14y) OR WFH ≤-3 z-score (2-59m) AND Medical complication OR (NO Medical complication AND Fail appetite test) OR Child deemed too sick for appetite test by provider OR (Appetite test unavailable AND Caregiver reports not feeding well) Medical complication = Danger signs OR Hypoglycaemia <3 mmol/L OR Respiratory distress OR chest indrawing pneumonia -OR Suspected foreign body in airway OR Severe dehydration OR Severe persistent diarrhoea OR Suspected meningitis OR Severe malaria OR Complicated prolonged fever OR Severe anaemia OR Measles OR Chickenpox OR severe abdominal condition OR mastoiditis OR severe eye disease OR complicated abscess OR complicated cellulitis OR osteomyelitis/septic arthritis	NA	Yes - urgent	**Pre-referral:** IV/IM Ampicillin 200mg/Kg/day divided in 4 doses for 1 days [50mg/kg/dose four times a day x 1d] IV/IM Gentamicin 7mg/Kg/day divided into 1 dose for 1 days [7mg/kg/dose daily x 1d] (If Amp & Gent not available) IV Ceftriaxone 50mg/kg/day divided into 1 dose for 1 days [50mg/kg/dose daily x 1d] Prevent low blood sugar If confirmed hypoglycaemia and unable to drink/feed: Dextrose IV bolus	NA	Refer urgently for inpatient management Keep the child warm Prevent low blood sugar	Adapted	**- Anthropometric measurements: MUAC and WFH in line with IMCI. Weight for age z-score (WAZ) added in line with IMCI Tanzania** but restricted to children 2-5m since MUAC is not measured in children under 6 months. - **Clinical signs (bilateral pedal oedema / visible wasting) removed** - **"Complicated" criteria:** presence of any "IMCI medical complication", i.e. danger sign, severe pneumonia, severe dehydration, severe persistent diarrhoea,severe complicated measles, etc. Given the additional granularity of diagnoses in ePoct+, all other severe diagnoses are also included (suspected meningitis, severe malaria, complicated prolonged fever, severe croup, suspected foreign body in airway). **Identification of severe malnutrition/undernutrition in children 5-14 years:** WHO proposes BMI (de Inis et al., 2007). Without height, BMI can not be calculated. MUAC-for-age reference growth curves that accord with WHO standards were developed, and found to be as effective as the WHO BMI-for-age cut-offs for assessing undernutrition as a risk factor for mortality, validated in cohorts from Kenya, Zimbabwe, and Uganda (Mramba et al., 2017). In Tanzanian adolescents, MUAC was also found to correlate well with BMI, and thus a good method for screening for malnutrition when BMI is not possible (Lillie, Lema, Kaaya, Steinberg, & Baumgartner, 2019).	Adapted	IMCI 2014; IMCI TZ 2020; STGC 2018 p. 81	**Clinical signs:** found to be rare and inaccurate, missing approximately half or more of children with severe malnutrition (Hamer, Kvatum, Jeffries, & Allen, 2004; Mogeni et al., 2011, Tan et al. 2020).
	Uncomplicated Severe acute malnutrition	WFA z-score ≤-3 (2-5m) OR MUAC <11.5cm (6 - 59m) OR MUAC for age z-score≤-3 (5-14y) OR WFH ≤-3 z-score (2-59m) AND NO complicated SAM criteria AND Pass appetite test OR (Appetite test unavailable AND mother reports eating well)	Complicated SAM	Yes - to nutrition programme (for above 5y only if MUAC <13.5cm if 5-9y, and <16cm if 10-14y)	PO Amoxicillin 50mg/Kg/day divided in 2 doses for 5 days [25mg/Kg/dose two times a day x 5d] (if Amox not available) PO Co-trimoxazole 8mg TMP/kg/day divided into 2 doses for 5 days (dosage based on TMP) [4mg/kg/dose two times a day x 5d]		Feeding counselling (by age) Tuberculosis asssessment / investigations available in this health facility? (Refer for specialized outpatient investigations: TB assessment) & (Tuberculosis assessment at health facility) Refer to nearest nutrition/malnutrition program for malnutrition management Guidance for oral antibiotic treatment at home.	Adapted	As above	Adapted	IMCI 2014	NA
	Very low weight for age	WFA z-score ≤ -3 (age 6 - 10y)	Complicated / uncomplicated SAM	Yes - to nutrition programme	**If fever and 2-59m:** PO Amoxicillin 50mg/Kg/day divided in 2 doses for 5 days [25mg/Kg/dose two times a day x 5d] (if Amox not available) PO Co-trimoxazole 8mg TMP/kg/day divided into 2 doses for 5 days (dosage based on TMP) [4mg/kg/dose two times a day x 5d]	NA	Feeding counselling (by age) Refer to nearest nutrition/malnutrition program for malnutrition management. Guidance for oral antibiotic treatment at home.	Adapted	Very low weight for age (WFA) is included as a diagnosis to reflect children with WAZ < -3 but MUAC ≥11.5cm (those age 6 - 59 months with <11.5cm = SAM). This aligns with IMCI Tanzania, and Tanzania Standard Treatment Guideline case definition. While this population has a lower 6 month mortality than children with MUAC <11.5cm, they still require nutritional support (Mark Myatt, Khara, Dolan, Garenne, & Briend, 2019), and benefit from antibiotics if febrile (Berkley et al., 2005; Sachdeva et al. 2016; Tan et al. 2020).	Adapted	IMCI 2014, IMCI TZ 2020	NA
	Moderate malnutrition	WFA z-score -2 to -3 (2-59m) OR MUAC 11.5 - 12.5cm (6 - 59m) OR MUAC for age z-score -2 to -3 (5-14y) OR WFH z-score -2 to -3 (2-59m)	Complicated / uncomplicated SAM	No	NA	30/7 If feeding problem 7/7	Feeding counselling (by age) Assess the child's feeding No inpatient referral needed: Return to clinic in 30 days for follow up (Refer for specialized outpatient investigations: TB assessment) or (Tuberculosis assessment at health facility)	Adapted	Anthropometric measurements - as above	Adapted	IMCI 2014, IMCI TZ 2020	NA

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Universal assessment - anaemia	**Severe anemia**	Hb <6g/dL OR Severe (palmar OR conjunctival) pallor AND NO Hb Hb measured in children with: Any pallor, Measured fever (only criteria for children <5y), Jaundice, SAM, MAM, Very low WFA, Danger sign, Respiratory distress, diarrhoea >= 14 days, HIV, Sickle cell disease, or at health worker discretion (i.e proposed by health worker not by algorithm)	NA	Yes - urgent	NA	NA	Refer urgently for inpatient management	Adapted	**<u>Conjunctival pallor:</u>** added to increase sensitivity of detection of anaemia and for research purposes. **<u>Haemoglobin (Hb) measurement</u>**: proposed for all children with pallor and syndromes / diagnoses in which anaemia more common, or would affect classification or management - malnutrition (MUAC <12.5cm, WFH and WFA z-score < - 2), fever, jaundice, known HIV or sickle cell disease, danger signs, respiratory distress **<u>Hb cut-offs</u>**: Based on WHO 2011 classification and agreed by expert panel	Adapted	STGC 2018 p. 114; WHO Haemoglobin concentrations for the diagnosis of anaemia and asssessment of severity 2011	**<u>Epidemiology:</u>** - High global burden of anaemia (32.9%), with East / Southern Africa & children <5 having highest burden (Kassebaum et al., 2014; Ngasala et al 2019) - Severe anemia important risk factor for death / severe outcome from infection (Balarajan et al 2011; Brabin et al 2001; Calis et al., 2008; Lozano et al., 2012) **<u>Rationale for Hb measurement:</u>** - Clinical signs perform poorly (Aggarwal et al 2014; Chalco et al 2005; Olupot-Olupot et al., 2018) - ePOCT data: systematic Hb testing among febrile children under 5 resulted in 4 fold increase in detection of severe anemia using Hb vs clinical signs (K. Keitel et al., 2017). **<u>Children at highest risk of anemia and severe outcomes:</u>** - Moderate and severe malnutrition (Engidaye et al., 2019; Melku et al., 2018), younger children (Engidaye et al., 2019; Melku et al., 2018; Moschovis et al., 2018; Ngesa & Mwambi, 2014), malaria (WHO) (Calis, Phiri, et al., 2008; Gonçalves et al., 2014; Ngesa & Mwambi, 2014), HIV (Calis, Phiri, et al., 2008; Calis, van Hensbroek, et al., 2008; Volberding et al., 2004), and fever (Moschovis et al., 2018; Ntenda et al 2018). **<u>Referral / transfusion threshold:</u>** - WHO restricts transfusion for stable children to Hb less than 4 -6 g/dL (WHO, 2013a). Tanzanian STGs define severe anemia as <7g/dL, and transfusion thresholds at Hb < 4g/dL, or < 7 g/dL if signs of cardiac failure (MoH, 2018). - No difference in 6 month clinical outcomes between immediate vs deferred transfusion for children Hb <6 g/dL, but half of the deferred group received transfusion due to clinical severity or drop of Hb <4 g/dL, which justifies clinical surveillance in children with Hb<6g/dL (Maitland et al., 2019).
	Mild/Moderate anemia	Hb 6 to <10g/dL (2 to 5m) or Hb 6 to <11g/dL (6 to 59m) or Hb 6-11.5 g/dL (5-11y) or 6-11.9 g/dL (12-14y) OR Some (palmar or conjunctival) pallor AND NO Hb	Severe anaemia	Yes - to consider if already on iron supplementation for ≥2 months	**IF not Sickle Cell Disease, and not currently taking RUTF:** PO Iron 3mg/Kg/day in 1 dose for 14 days [3mg/Kg/dose daily x14d] **If age>12mth and no dose in last 6 months** PO Mebendazole (prevention) (Age >=1yr) 500mg daily for 1 days	14 days	Mild/moderate anemia counseling No referral. Return for follow up in 14 days Consider outpatient referral if already on iron treatment for more than two month	Adapted	idem	Adapted	idem	**<u>Do not withold iron supplement until end of febrile episode</u>** (Gera 2002)
Universal assessment - danger signs & fever	**Central Nervous System Danger Signs**	Convulsing now OR Unconscious/Lethargic OR ≥2Convulsions in present illness OR ≥1 Convulsions in present illness AND (Age <12m or ≥6y OR Convulsion ≥15min OR HIV OR Severe malnutrition OR Malaria OR Fever ≥ 7 days OR NO Fever)	Severe malaria / Very severe febrile disease	Yes - urgent	**Pre-referral:** **If convulsing now:** PR Diazepam age-based fixed dose (2-6mth = 2.5mg / 6-12mth = 5mg / 13-36mth = 7.5mg / >36mth = 10mg) (if Diazepam not available) IM phenobarbital 20 mg/Kg/dose divided into 1 doses for 1 days [20 mg/Kg/dose x daily x 1 dose] **Pre-referral:** **If "CNS danger sign":** IM/IV Ceftriaxone HD 80-100mg/kg/day divided into 1 dose for 1 days (80-100mg/kg/dose daily x 1 dose) (if Cef not available) IM/IV Ampicillin HD 400mg/Kg/day divided in 4 doses for 1 days (100mg/kg/dose four times a day x 1 dose) & (if Cef not available) IM/IV gentamicin 7mg/Kg/day divided into 1 dose for 1 days (7mg/kg/dose daily x 1 dose) Prevent low blood sugar If confirmed hypoglycaemia and unable to drink/feed: Dextrose IV bolus	NA	Prevent low blood sugar Refer urgently for inpatient management	Adapted	**Convulsion criteria:** Adapted to account for simple febrile convulsions (see rationale related to diagnosis below). Number and duration of convulsions only asked to those with history of convulsions in this illness and who are not unconscious, lethargic, and are ≥ 12m or <6y of age. Detailed convulsion questions only asked to those that do not meet other danger sign criteria Unable to drink/breastfeed / vomiting everything: includes a quick check with sip fluid / breastfeeding provided not unconscious/lethargic/convulsing as per IMCI (in training guidelines, not chartbooklet), integrated in algorithms for severe dehydration and very severe febrile disease. Antibiotics for those with "CNS danger signs": are included to ensure that children without fever but at risk of meningitis / sepsis are treated with antibiotics. CNS danger signs = all criteria other than vomiting everything / unable to drink / breastfeed (these children will receive antibiotics if fever (see 'very severe febrile disease)	Adapted	IMCI 2014, STGC 2018 p. 74	- Unconscious / Lethargic good predictors of severe disease (Aramburo et al., 2018; Conroy et al., 2015; Mtove et al., 2011; Scott, Donoghue, Gaieski, Marchese, & Mistry, 2014; van Nassau et al., 2018)
	Very severe febrile disease	Fever AND Age 12-59m AND Stiff neck OR Danger sign (Convulsing now OR Unconscious/Lethargic OR ≥2 Convulsions in present illness OR 1 Convulsion AND [Age <12m or ≥6y OR NO fever OR Severe malnutrition OR Convulsion ≥15min OR HIV OR fever ≥7d OR malaria test positive) OR Vomiting everything (<5y) OR Unable to drink / breastfeed) AND Unable to tolerate oral fluid or to perform the test)	Severe pneumonia	Yes - urgent	**Pre-referral:** **If convulsing now:** PR Diazepam age-based fixed dose (2-6mth = 2.5mg / 6-12mth = 5mg / 13-36mth = 7.5mg / >36mth = 10mg) (if Diazepam not available) IM phenobarbitol 20 mg/Kg/dose divided into 1 doses for 1 days [20 mg/Kg/dose x daily x 1 dose] **Pre-referral:** IM/IV Ceftriaxone HD 80-100mg/kg/day divided into 1 dose for 1 days (80-100mg/kg/dose daily x 1 dose) (if Cef not available) IM/IV Ampicillin HD 400mg/Kg/day divided in 4 doses for 1 days (100mg/kg/dose four times a day x 1 dose) & (if Cef not available) IM/IV gentamicin 7mg/Kg/day divided into 1 dose for 1 days (7mg/kg/dose daily x 1 dose) Prevent low blood sugar If confirmed hypoglycaemia and unable to drink/feed: Dextrose IV bolus	**NA**	Prevent low blood sugar Refer urgently for inpatient management	Adapted	**<u>Fever and any danger sign</u>**: in line with IMCI **<u>Stiff neck:</u>** Only checked if no danger sign present, and not checked in children <12 months as uncommon even in presence of meningitis (note all children with any CNS danger sign are covered for meningitis under diagnosis 'very severe disease' or 'CNS Danger sign'.) **<u>Other criteria in STGs for suspected meningitis</u>** not all included (also not in IMCI) as either poor sensitivity, specificity or poorly assessed at primary care level (bulging fontanelle, weak cry, irritability) **<u>Convulsion criteria:</u>** Adapted to account for simple febrile convulsions (see rationale related to diagnosis below). Number and duration of convulsions only asked to those with history of convulsions in this illness and who are not unconscious, lethargic, and are ≥ 12m or <6y of age. Detailed convulsion questions only asked to those that do not meet other danger sign criteria Unable to drink/breastfeed / vomiting everything: includes a quick check with sip fluid / breastfeeding provided not unconscious/lethargic/convulsing as per IMCI (in training guidelines, not chartbooklet), integrated in algorithms for severe dehydration and very severe febrile disease.	Yes	STGC 2018 p. 74, IMCI 2014, IMCI TZ 2020	NA
	Very severe disease	Unable to drink of breastfeed AND NO Unconscious/lethargic AND NO Convulsing now AND NO severe dehydration AND Failed oral fluid test* *Oral fluid challenge: Provide water to drink and see if able to drink without vomiting (only performed in those not convulsing now, and not unconscious/lethargic). If oral fluid challenge not possible at clinic, ask mother about last feed/drink.	CNS Danger signs, Severe malaria, Anaphylaxis, Severe complicated measles, Severe pneumonia, Complicated SAM, Severe persistent diarhea, Severe dehydration, Very severe febrile disease	Yes - urgent	NA	**NA**	Prevent low blood sugar Keep the child warm. Refer urgently for inpatient management		NA	YES	IMCI 2014, IMCI TZ 2020	NA

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	Simple febrile convulsion	Fever ≤7 days AND Single convulsion <15 min AND Age ≥12m and <6 years AND NO danger signs AND NO stiff neck AND NO HIV AND Malaria test negative or unknown	Suspicion of tuberculosis	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 3 days [10-20mg/kg/dose four times a day x 3d]	Conditional	Simple febrile convulsion counselling No inpatient referral needed: Reasons to return to clinic	New	**Inclusion of simple febrible convulsion diagnosis:** relatively common and benign condition, inclusion therefore reduces unnecessary referrals to hospital. IMCI & Tanzanian guidelines refer to convulsions plural as a criteria for meningitis - single convulsion therefore used as the starting point for diagnosis of simple febrile convulsion, but higher risk categories excluded (age <12m or ≥6y, prolonged convulsion, HIV, convulsion without fever, fever ≥7d, severe acute malnutrition, malaria). Criteria such as duration <15 min integrated, age adapted by expert panel to 12m to <6y.	Adapted	STGC 2018 p.132	History of convulsion in current illness is a moderate predictor of severe disease (Aramburo et al., 2018; Conroy et al., 2015) IMCI / TZ STGs refer to convulsions (plural) - multiple convulsions may indicate more severe disease Only 0.2% of children with apparent simple febrile seizure had bacterial meningitis in a systematic review (Najaf-Zadeh et al., 2013). Haemophilus influenza type B (HiB) and pneumococcal conjugate vaccines (PCV) have reduced overall risk of meningitis Inpatient studies from Togo and Tanzania found mortality rates as high as 4 and 9.7% (Assogba, et al 2015; Winkler et al 2013); proportion of complex acute seizures twice that of rest of the world (Kariuki et al2017) Under 12 month criteria - signs of bacterial meningitis generally more difficult to detect in infants than older children, often have more complex course / adverse outcomes and often need further investigations (Bast & Carmant, 2013; Offringa et al., 1994; Subcommittee on Febrile & American Academy of, 2011; Wilmshurst et al., 2015).
	Severe malaria	Malaria test positive AND GI Danger signs OR Unconscious/Lethargic OR Convulsions (Now/In present illness) OR Respiratory distress OR Severe anaemia (IMCI or Hb <6g/dL) OR Jaundice Malaria test performed in: Fever OR Unconscious /lethargic OR Convulsing now OR Convulsions in this illness	NA	Yes - urgent	**Pre-referral** IM Artesunate 2.4mg/kg/day divided into 1 dose for 1 days [2.4mg/kg/dose daily x 1 dose] (If Artesunate not available) IM Quinine (loading dose) 20 mg/Kg/day in 1 dose for 1 days [20 mg/Kg/dose daily x 1 dose] IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose for 1 days [50mg/kg/dose daily x 1d] (if Cef not available) IM/IV Ampicillin 200mg/Kg/day divided in 4 doses for 1 days [50mg/kg/dose four times a day x 1 dose] (if Cef not available) IM/IV Gentamicin 7mg/Kg/day divided into 1 dose for 1 days [7mg/kg/dose daily x 1 dose] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 1 days [10-20mg/kg/dose four times a day x 1d]	NA	Keep the child warm Prevent low blood sugar Refer urgently for inpatient management	Adapted	**Severity criteria:** danger signs as per IMCI 2014, and additional criteria from WHO / STG malaria guidelines which are feasible to assess in primary care, and good predictors of severe outcome - signs of respiratory distress, severe anaemia, jaundice (WHO, 2015; TZ MOH 2018; Sypniewska et al. 2017) **Neck stiffness** is not included as cerebral malaria is not associated with marked neck stiffness - note this is assessed and treated under 'suspected meningitis' above	YES	STGC 2018 p. 71, IMCI 2014, IMCI TZ 2020	NA
	Suspected severe malaria	Fever AND Malaria test unavailable AND GI Danger signs OR Unconscious/Lethargic OR Convulsions (Now/In present illness) OR Respiratory distress OR Severe anaemia (IMCI or Hb <6g/dL) OR Jaundice	NA	Yes - urgent	**Pre-referral** IM Artesunate 2.4mg/kg/day divided into 1 dose for 1 days [2.4mg/kg/dose daily x 1 dose] (If Artesunate not available) IM Quinine 20 mg/Kg/day in 1 dose for 1 days [20 mg/Kg/dose daily x 1 dose] IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose for 1 days [50mg/kg/dose daily x 1d] (if Cef not available) IM/IV Ampicillin 200mg/Kg/day divided in 4 doses for 1 days [50mg/kg/dose four times a day x 1 dose] (if Cef not available) IM/IV Gentamicin 7mg/Kg/day divided into 1 dose for 1 days [7mg/kg/dose daily x 1 dose] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d].	NA	Keep the child warm Refer urgently for inpatient management Prevent low blood sugar	New	idem	YES	idem	NA
	Uncomplicated malaria	Fever AND malaria test positive OR Additional test "Malaria" (not proposed by the alogrithm) positive	Severe malaria	No	PO Artemether-lumefantrine two times a day for 3 days (Fixed doses: 5to<15kg = 20/120mg / 15to<25kg = 40/240mg / 25to<35kg = 60/360mg / >35kg = 80/480mg) (If AL not available) PO Dihydroartemisinin-piperaquine daily for 3 days (Doses: <25mg = 20-32mg/kg/dose / =>25kg = 16-27mg/kg/dose) PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 2-5 days [10-20mg/kg/dose four times a day x 2-5d]	Conditional	Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic	Same	As per IMCI / STG guidelines / WHO malaria guidelines	YES	STGC 2018 p. 73, IMCI 2014, IMCI TZ 2020	NA
	Malaria test non available	Fever AND malaria test not available	Severe suspected malaria, Severe malaria	Yes - to clinic with malaria test if possible to do in <2hrs AND no other severe diagnosis *Consider OP referral if already received treatment	**If unable to test elsewhere in <2hrs OR other severe diagnosis:** PO Artemether-lumefantrine two times a day for 3 days (Fixed doses: 5to<15kg = 20/120mg / 15to<25kg = 40/240mg / 25to<35kg = 60/360mg / >35kg = 80/480mg) (If AL not available OR if persisting fever after completion of 1st line treatment) PO Dihydroartemisinin-piperaquine daily for 3 days (Doses: <25mg = 20-32mg/kg/dose / =>25kg = 16-27mg/kg/dose) PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x ? duration [10-20mg/kg/dose four times a day x ? duration].	Conditional	**If unable to test elsewhere in <2hrs OR other severe diagnosis:** Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic If follow-up visit (consider referral) **If able to test elsewhere in <2hrs OR other severe diagnosis:** Refer for malaria testing	New	**Referral for malaria test in another clinic:** if feasible within 2 hours, and no other severe diagnosis, in order to reduce inappropriate prescription of antimalarials	NEW		NA
	Complicated prolonged fever	Fever ≥2 weeks OR Fever ≥1 week AND severe comorbidity (SAM, very low WFA, HIV, sickle cell disease, cerebral palsy, severe anaemia, congenital heart disease)	NA	Yes - urgent	PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses, 1 dose prereferral [10-20mg/kg/day x 7d] (if Cipro not available) PO Azithromycin 10mg/kg/day in 1 dose prereferral [10mg/kg/dose daily x 7d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days[10-20mg/kg/dose four times a day x 2-5d]		Refer urgently for inpatient management Withold antibiotics before TB assessment if possible	New	Criteria for diagnosis and treatment of children with prolonged fever: 7 days is used as a criteria for prolonged fever in line with IMCI. ePoct+ differentiates those who require immediate further assessment / referral vs trial of antibiotic treatment (to cover typhoid fever, but in addition also covers UTI and pneumonia). This is determined by either severe comorbidity, or a fever duration of ≥2 weeks. This differs from IMCI which advises 'if fever is present every day for more than 7 days, refer for assessment', but also states 'give an appropriate antibiotic treatment for an identified bacterial source of infection'. Any child with danger signs / other severe classification would be urgently referred, therefore this approach reduces potentially unecessary referral.	Adapted	IMCI 2014, IMCI TZ 2020	Coverage for several bacterial infections, notably enteric fever, occult urinary tract infections (UTI) and pneumonia. Oral ciprofloxacin is one of the recommended treatments according the TZ STG for both enteric fever and UTI (p77 & 204), macrolide is the drug of choice for children > 5 years with pneumonia (p45). All identified UTI pathogens were sensitive to ciprofloxacin in a recent Tanzanian study (Ryakitimbo et al., 2018). Salmonella typhi isolates were 100% susceptible to ciprofloxacin in a study from rural Tanzania (Mahende et al., 2015). Molecular analysis of S. typhi throughout Sub-Saharan Africa did not show reduced susceptibility to ciprofloxacin, with the exception of Kenya (Al-Emran et al., 2016).
	Prolonged Fever	Fever ≥7 days AND Fever <2 weeks AND NO severe comorbidity AND Malaria negative OR Unavailable	Complicated prolonged fever; FWS	If attended health facility in last 14/7 - consider referral	PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses for 7 days [10-20mg/kg/day x 7d] (if Cipro not available) PO Azithromycin 10mg/kg/day in 1 dose for 7 days [10mg/kg/dose daily x 7d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days[10-20mg/kg/dose four times a day x 2-5d]	Conditional	No inpatient referral needed: Reasons to return to clinic **If followup visit:** Consider referral	Same	See above	Adapted	IMCI 2014, IMCI TZ 2020	See above

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	Suspicion of Tuberculosis	Cough ≥ 2weeks OR Fever ≥ 2weeks OR Significant haemoptysis OR TB contact (if 2-59m) OR Fever OR Cough OR Difficulty breathing AND TB contact (if >5y) OR Significant weight loss (only asked in those >5y)	NA	Yes - TB services (if not available at facility)		NA	Withold antibiotics before TB assessment if possible Tuberculosis assessment at health facility Refer for specialized outpatient investigations: TB assessment	Adapted	**Diagnostic criteria:** Based on TZ / international guidelines. Include all diagnostic criteria proposed in TZ Standard treatment guideline except for "excessive night sweats" and "infection not responding to conventional antibiotics" taken out as diagnostic criteria for fear of misunderstanding and over-referral. "Significant weight loss" added upon suggestion by the Tanzanian expert committee.	Adapted	STGC 2018 p.50	- Children, especially infants and those under 2 years of age, have less symptoms but are at much higher risk of progression from infection to serious disease compared to older children over 10 years of age and adults (Beyers et al., 1997; B. J. Marais et al., 2004). - The risk of progression to disease is high in young children who are exposed to household members with TB (van Zyl et al., 2006) - Pulmonary Tuberculosis is a common cause of hemoptysis (Simon et al, 2017)
	Fever without source	Fever AND NO cough AND NO Difficulty breathing AND NO Runny nose AND NO diarrhoea AND NO preseptal or orbital cellulitis, AND NO abscess, AND NO cellulitis, AND NO chickenpox, AND NO measles, AND NO scarlet fever, AND NO Impetigo AND NO mumps, AND NO ear pain or discharge, AND NO dental abscess, AND NO sore throat or neck mass, AND NO localized joint or bony abnormality), AND NO pain or difficulty passing urine (2y-15y), AND NO pelvic inflammatory disease) AND Malaria test negative	Other infectious diagnoses - malaria, pharyngitis, ear infection, complicated wound, extensive folliculitis, mastoiditis cellulitis, impetigo, abscess,mumps, measles, chicken pox, septic arthritis/oesteomyelitis, prolonged fever, complicated neck mass, pelvic inflammatory disease, urinary tract infections, preseptal/orbital cellulitis, severe abdominal condition, and scarlet fever, suspicion of meningitis, typhoid fever	IF unexplained bleeding - urgent referral, otherwise No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d]	Conditional	Ensure adequate fluid and calory intake. If no unexplained bleeding: No inpatient referral needed: Reasons to return to clinic If unexplained bleeding: Refer urgently for inpatient management	Adapted	IMCI only proposes antibiotics in children for which a bacterial source is identified.	YES	IMCI 2014, IMCI TZ 2020, TZ Std Med Lab Equipment Guidelines 2018	NA
Universal assessment: respiratory problem	**Severe pneumonia**	Cough OR difficulty breathing AND Very fast breathing (RR 2-11m ≥60/min, 12-59m ≥50/min, 5-12y ≥40/min, 13-14y ≥30/min) AND (chest indrawing OR Patient unable to finish sentence due to difficult breathing (children 5-14 years)) OR Grunting OR SpO2 <90% OR Severe difficulty breathing requiring referral OR Danger sign OR Stridor in a calm child	NA	Yes - urgent	**Pre-referral:** IM/IV Ampicillin HD 400mg/Kg/day divided in 4 doses, 1 dose prereferral [100mg/kg/dose four times a day x 1 d] & IM/IV Gentamicin 7mg/Kg/day divided into 1 dose prereferral [7mg/kg/dose daily x 1d] (If Amp & Gent not available) IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose, 1 dose prereferral [50mg/kg/dose daily x 1 d] Oxygen therapy if SpO2 <90% Prevent low blood sugar If Fever: PO Paracetamol 40-80mg/Kg/day divided into 4 doses, 1 dose prereferral [10-20mg/kg/dose four times a day x 1 d] If wheeze: bronchodilator pre-referral / on way	NA	Refer urgently for inpatient management	Adapted	**Tanzania Standard Treatment Guidelines:** All criteria except for lower chest indrawing alone was included as criteria for diagnosis. The omission of lower chest indrawing alone was done to aline with IMCI 2014. In the DYNAMIC study, respiratory rate 10 above the IMCI RR cut-off and chest indrawing or unable to complete sentence, added as found useful in the ePOCT 2014 study when using respiratory rate percentiles (Keitel et al. 2019). Combining chest indrawing with very fast breathing was used to increase specificity (McCollum et al., 2015; Williams et al., 2016) as was "unable to complete sentence" in children above 5 years. **IMCI:** Cough / difficulty breathing with danger sign or SpO2 <90% as per IMCI.	Adapted	IMCI 2014, IMCI TZ 2020, STGC 2018 p.43	**Additional predictors:** Grunting and hypoxemia <90% SaO2, are well established predictors for severe pneumonia and severe outcome (among children with severe pneumonia) maintained in ePOCT+ and also included in the Tanzanian national guidelines (Benet et al., 2017; Bradley et al., 2011; Harris et al., 2011; Rambaud-Althaus, Althaus, Genton, & D'Acremont, 2015; World Health Organization, 2013a; Dean, 2018; Muro, 2020). "Severe difficult breathing" was included as proposed by the British Thoracic Society (Harris et al., 2011). This is to improve sensitivity by allowing clinicians to use their intuition, often found to be better than individual predictors (Blacklock, Mayon-White, Coad, & Thompson, 2011; Merdith et al. 2019; Van den Bruel, Thompson, Buntinx & Mant, 2012). Deep breathing, nasal flaring, tracheal tug, and central cyanosis are included in the description of the composite variable of "Severe difficult breathing needing referral" also found to be good predictors of radiological pneumonia, hypoxemia and of severe outcome (Rambaud-Althaus, Althaus, Genton, & D'Acremont, 2015; Chandna, 2021; Shah, 2017; Kuti; 2013;)
	Bacterial Pneumonia	Cough OR Difficulty breathing AND Chest indrawing OR (Fast breathing* AND (Severe comorbidity** OR Fever***)) *Fast breathing: RR 2-11m ≥50/min, 12-59m ≥40/min, 5-12y ≥30/min, 13-14y ≥20/min **Severe comorbidity: SAM, very low WFA, HIV, sickle cell disease, cerebral palsy, severe anaemia, congenital heart disease *** Fever: history of fever OR axillary temperature 37.5°C	Severe pneumonia	Yes - if no improvement (persisting fast breathing or chest indrawing if HIV positive or age 2-12m despite 3 days of antibotic treatment)	PO Amoxicillin HD 75-100mg/Kg/day divided in 2 doses for 5 days [37.5-50mg/Kg/dose two times a day x 5d] (If Amox not available) PO Co-trimoxazole 8mg/kg/day (dosing based on TMP) two times a day for 5 days [4mg/kg/dose daily x 5d] PO Paracetamol 40-80mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d] if fever	Conditional	Adequate fluid & calorie intake. Counselling to prevent the spread of respiratory illness. URTI symptomatic care Reasons to return to clinic immediately. Guidance for oral antibiotic treatment at home.	Adapted	Fever criteria: IMCI defines pneumonia as cough or difficulty breathing, with chest indrawing or fast breathing, regardless of fever (present or absent). As afebrile pneumonia is uncommon in immunocompent children and found to be highly sensitive for the diagnosis of pneumonia (Rambaud-Althaus, 2015; Mathews, 2009), fever was excluded as an absolute criteria for bacterial pneumonia in order to reduce antibiotic prescription except those with severe comorbidities. Additionally chest indrawing was found to be a relatively good predictor of tratement failure, as such for chilldren with chest indrawing, fever is not a requirement for the diagnosis of pneumonia (McCollum et al. 2015).	Adapted	STGC 2018 p. 43, IMCI 2014, IMCI TZ 2020, IMAI 2009	Tachypnea and other clinical signs have been found to be poor predictors of bacterial or radiological pneumonia (McIntosh, 2002; Rambaud-Althaus et al., 2015; Shah, Bachur, Simel, & Neuman, 2017; Rees, 2020).
	Viral Pneumonia	Cough OR difficulty breathing AND No Danger sign AND Fast breathing (RR 2-11m ≥50/min, 12-59m ≥40/min, 5-12y ≥30/min, 13-14y ≥20/min) AND NO Fever or NO Severe comorbidity	Bacterial pneumonia Severe pneumonia	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d] (if febrile)	Conditional	URTI symptomatic care advice Adequate fluid & calorie intake Advice on why not to give antibiotics Reasons to return to clinic immediately Counselling to prevent the spread of respiratory illness.	Adapted	As above	Adapted	STGC 2018 p. 43, IMCI 2014, IMCI TZ 2020, IMAI 2009	NA

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	Common cold (URTI)	Cough OR difficulty breathing OR Runny nose	Severe pneumonia / Bacterial/Viral pneumonia / Severe and non-severe measles/ Inhalation injury / Complicated chicken pox / Uncomplicated chickenpox / Suspicion of foreign object / Significant hemoptysis / Reactive airway disease	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d] (if febrile)	Conditional	URTI Symptomatic care Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic Explain why oral antibiotics are not useful for this patient Counselling to prevent the spread of respiratory illness.	Same	In line with Tanzania STG.	Yes	STGC 2018 p. 46 and 60	NA
	Reactive Airway Disease	Age ≥1 year AND Cough OR Difficulty breathing AND Chest indrawing OR fast breathing (RR 2-11m ≥50/min, 12-59m ≥40/min, 5-12y ≥30/min, 13-14y ≥20/min) AND Wheezing AND NO respiratory distress AND Improvement with trial of bronchodilators	NA	Yes - Consider outpatient assessment if recurrent episodes	INH Salbutamol 200mcg four times a day for 14 days (if Salbutemol not available) INH Budesonide 200mcg two times a day-four times a day for 14 days	Conditional	Advice on inhaler use Adequate fluid & calorie intake Advice on why not to give antibiotics No inpatient referral needed: Reasons to return to clinic Consider outpatient referral for asthma assessment if recurrent asthma.	Adapted	In line with STG guidelines for bronchial asthma, limiting to non-severe symptoms (severe symptoms captured within severe pneumonia). Management of wheezing similar to that described in IMCI.	YES	STGA 2018 p.99, STGC 2018 p.63, IMCI 2014, IMCI TZ 2020	NA
	Suspicion of foreign object in airways	Cough or Difficult breathing AND Fast breathing OR Chest indrawing Wheezing or Stridor AND Possibility of foreign object in airways	NA	Yes - urgent	NA	NA	Refer urgently for inpatient management.	New	To simplify algorithm only use possibility of inhalation of foreign object in children with difficulty breathing.	Yes	STGC 2018 p. 249	NA
	Significant hemoptysis	Cough OR Difficulty breathing AND Significant haemoptysis (> 1 episode)	NA	Yes - for investigation	NA		Referral for specialized outpatient investigations	New	Added this algorithm, based on recommendation by TZ expert panel.	Adapted	STGC 2018 p.43	NA
Gastrointestinal / abdominal (diarrhoea / dehydration in universal assessment)	**Severe Dehydration**	≥3 loose/liquid stools in 24 hrs OR Vomiting OR Vomiting everything OR Unable to drink or breastfeed AND Two of the following signs: - Lethargic or unconscious - Sunken eyes - Failed oral fluid test* - Skin pinch goes back very slowly (<2s) *Oral fluid test: Provide water to drink and see if able to drink without vomiting (only performed in those not convulsing now, and not unconscious/lethargic). If oral fluid challenge not possible at clinic, ask mother about last feed/drink.	NA	Yes - urgent IF other danger signs OR inability to give IV fluid immediately	**IF other severe classification:** pre-referral / en route fluid management (ORS if able to tolerate oral) **IF no other severe classification:** WHO rehydration plan C **IF improves with Plan C --> Plan B and then A, including if diarrhoea:** PO Zinc Sulfate 10mg daily for 10 days		Switch oral antibiotics or antimalarials to IM antibiotics or antimalarials.	Adapted	Oral fluid challenge proposed to wide subset to distinguish between severe and some dehydration, as this will distinguish those that need to be referred, and those that can be treated at home.	YES	STGC p. 53, IMCI 2014, IMCI TZ 2020	**Adaptation of WHO Dehydration scale:** Laboratory tests, urine analysis, ultrasound, or isolated clinical findings are not reliable for detecting dehydration in the pediatric population (Freedman, Vandermeer, Milne, & Hartling, 2015; Steiner, DeWalt, & Byerley, 2004). A combination of clinical features are used in several scales such as the WHO Scale, the Gorelick Score and the Clinical Dehydration Scale (CDS), to estimate the percentage of dehydration in childhood gastroenteritis. However none of these scales provide accurate assessment of the dehydration status in resource-limited and high income-settings and most studies were conducted among patients with gastroenteritis in the inpatient setting (Falszewska, Szajewska, & Dziechciarz, 2018; Jauregui et al., 2014; Pringle et al., 2011). To help distinguish some versus severe dehydration, ePOCT+ utilizes a pragmatic oral fluid test to guide management that can be done at home or needs to be performed in the health facility, among this low pre-test probability population. Oral fluid test can decrease the rates of intravenous fluid (IVF) use in favor of oral rehydration therapy (ORT) (Umana et al., 2018). ORT is as effective as IVF for mild to moderately dehydrated children (Spandorfer et al., 2005) Further statistical analysis will be used to improve this algorithm at later stages.
	Some Dehydration	≥3 loose/liquid stools in 24 hrs OR Vomiting OR Vomiting everything OR Unable to drink or breastfeed AND Two of the following signs: - Restless, irritable - Sunken eyes - Srinks eargerly, thirsty* - Skin pinch goes back slowly (1-2s) *Oral fluid test: Provide water to drink and see if able to drink without vomiting (only performed in those not convulsing now, and not unconscious/lethargic). If oral fluid challenge not possible at clinic, ask mother about last feed/drink.	Severe dehydration; severe persistent diarrhoea	No	If child referred for another reason: ORS on way to hospital If child not referred for another reason: WHO rehydration Plan B in clinic If improves with Plan B: Plan A - ORS Home rehydration IF diarrhoea: PO Zinc Sulfate 10mg daily for 10 days	Conditional	Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic	Adapted	As above	YES	STGC p. 53, IMCI 2014, IMCI TZ 2020	As above
	Severe persistent diarrhoea	≥ 3 loose / liquid stools in 24 hrs AND Diarrhoea duration ≥14 days AND Drinks eagerly, thirsty	Severe dehydration	Yes		NA	Refer for inpatient management	New	In line with IMCI 2014 and IMCI TZ 2020	Yes	IMCI 2014, IMCI TZ 2020	NA

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	Persistent diarrhea	≥ 3 loose/liquid stools in 24 hrs AND Diarrhoea duration ≥14 days AND NO Unconscious/Lethargic OR Restless/Irritable	Severe dehydration; severe persistent diarrhoea	Yes - if no improvement after 5 days of zinc and feeding counselling, or if HIV+	PO Zinc sulfate 10mg daily for 10 days **If no Vitamin A in the past month, or already on Read To Use Therapeutic Food:** PO Vitamin A daily for 1 days (fixed dose per age: 6-12mth = 100,000IU / =>1yr = 200,000IU) Plan A - ORS Home rehydration	Conditional	Feeding counselling (age based) Explain why oral antibiotics are not useful for this patient No inpatient referral needed: Reasons to return to clinic IF follow-up visit & already treated with Zinc >5days: Refer urgently for inpatient management If HIV: Refer for outpatient evaluation: HIV care and treatment center	New	In line with STGC (limited work-up acceptable for primary care health facilities) and IMCI, however use of low dose Zinc.	Adapted	STGC p. 58, IMCI 2014, IMCI TZ 2020	- Use of low dose Zinc (Dhingra et al. NEJM, 2020)
	Acute diarrhea	≥ 3 loose / liquid stools in 24 hrs AND Diarrhoea duration <14 days AND NO Unconscious/Lethargic OR Restless/Irritable	Severe dehydration;some dehydration; dysentery	No	PO Zinc sulfate 10mg daily for 10 days Plan A - ORS Home rehydration	Conditional	Ensure adequate fluid and calorie intake Explain why oral antibiotics are not useful for this patient No inpatient referral needed: Reasons to return to clinic	Same	In line with STGC (limited work-up acceptable for primary care health facilities) and IMCI, however use of low dose Zinc.	Adapted	STGC p. 58, IMCI 2014, IMCI TZ 2020	- Use of low dose Zinc (Dhingra et al. NEJM, 2020)
	Persisting dysentery	Loose or liquid stools AND follow-up consultation AND Return visit for dysentery after 3 days of treatment with ciprofloxacin AND Symptoms worse or the same: Number of stools, amount of blood in stools, fever, abdominal pain or eating	NA	Yes - if no improvement after 3 days or HIV+, age <12 months, has severe malnutrition, or measles.	PO Azithromycin 10mg/kg/day in 1 dose for 5 days [10mg/kg/dose daily x 5d] **If>2mth:** PO Zinc sulfate 10mg daily for 10 days Plan A - ORS Home rehydration	Conditional	**IF severe acute malnutrition, measles rash, HIV or 2-12mth:** Refer urgently for inpatient management No inpatient referral needed: Reasons to return to clinic	Adapted	In line with IMCI 2014 for follow-up management, except does not integrate status of dehydration from first visit.	Adapted	STGC p. 60, IMCI 2014, IMCI TZ 2020	
	Dysentery	Loose or liquid stools AND Blood in stool	Persisting dysentery / Severe abdominal condition	No	**>5: If fever OR Known HIV OR Age 2-59m OR >5y AND MUAC for age z-score < -3** : PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses for 5 days [10-20mg/kg/day x 5d] PO Zinc sulfate 10mg daily for 10 days	Conditional	No inpatient referral needed: Reasons to return to clinic Guidance for oral antibiotic treatment at home	Same	In line with IMCI 2014 and IMCI TZ 2020, however selective antibiotic treatment in children above 5 years, and use of low dose Zinc.	Adapted	STGC p. 60, IMCI 2014, IMCI TZ 2020	- Use of low dose Zinc (Dhingra et al. NEJM, 2020) - Need for antibiotic stewardship in children above 5 years given increasing antibiotic resistance (Ranjbar et al., 2019) based on population with highest risk factors for mortality: HIV infection, malnutrition, and young age (Tickell et al., 2017).
	Severe Abdominal Condition	Vomiting OR Blood in stool OR Abdominal pain AND Suspicion of severe GI bleeding OR Bilious vomiting OR Abdominal hernia obstructed / incarcerated (irreducible / coloured / tender) OR (>2yrs) Severe abdominal palpation	NA	Yes - urgent	**Pre-referral** IF Fever: PO Metronidazole 20mg/kg/day divided into 2 doses, 1 dose prereferral [10mg/kg/dose two times a day x 1 dose] IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose, 1 dose prereferral (50mg/kg/dose daily x 1 dose) (If Cef not available) PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses, 1 dose prereferral [10-20mg/kg/day x 1d] PO Paracetamol 40-100 mg/Kg/day divided into 4 doses, 1 dose prereferral [10-20mg/kg/dose four times a day x 1d] (if febrile or abdominal pain)		Refer urgently for inpatient management	New	Combining many signs of severe gastro-intestinal conditions including appendicitis, intestinal obstruction, and intussusception. Equivalent to Severe or Surgical abdominal problem in IMAI 2009	Adapted	STGC p. 233, IMAI 2009 p. 25	**Epidemiology:** In sub-Saharan Africa, pediatric surgery patients are responsible for 6-12% of all pediatric admissions (Bickler et al., WHO 2002). **Billious vomiting**: "Bilious vomiting" suggests a post-ampullary source linked to a possible bowel obstruction (Singhi, Shah, Bansal, & Jayashree, 2013). In one cohort of children, bilious vomiting and lethargy were the best clinical predictors to identify children with intussusception (Weihmiller, Buonomo, & Bachur, 2011). **Tender colored abdominal bulge:** A tender/colored abdominal bulge was also included to detect incarcerated hernias and intussusception, palpable in approximately 60% of cases of intussusception (Marsicovetere, Ivatury, White, & Holubar, 2017). **Severe abdominal palpation needing referral:** Given the complexity in diagnosing appendicitis and peritonitis, "severe abdominal palpation needing referral" was used as a single predictor to incorporate a number of clinical signs and symptoms that have been found to be strongly associated with acute appendicitis. These include rebound tenderness, mid-abdominal pain migrating to the right lower quadrant, and abdominal pain when coughing and hopping (Benabbas, Hanna, Shah, & Sinert, 2017; Bundy et al., 2007). This type of subjective predictor also allows clinicians to use their overall clinical assessment and gut-feeling, often found to be better than individual predictors (Merdith et al. 2019; Van den Bruel, Thompson, Buntinx & Mant, 2012).
	Non-Severe Abdominal Condition	Vomiting OR <3 loose/liquid stools / 24 hrs OR Abdominal pain OR Constipation (less frequent and hard stool)	Severe abdominal condition / severe or some dehydration / acute diarrhea / persistent diarrhea / CNS Danger signs / Dysmenorrhea / Persisting dysentery	No	**IF abdominal pain:** PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d]. PLAN A: ORS Home rehydration	Conditional	If abdominal pain: Feeding counselling (age based). IF <6mth: guidance on colic If Constipation: Constipation counselling If vomiting: Ensure adequate fluid and calorie intake. No inpatient referral needed: Reasons to return to clinic Explain why oral antibiotics are not useful for this patient	New	Categorizing non-severe gastrointestinal conditions that are not characterized by acute diarrhea, dysentery, severe abdominal condition, dehydration, or other gastrointestinal conditions. Similar to Gastroenteritis or other GI problem in IMAI 2009. This diagnosis allows the opportunity to provide guidance on feeding and why antibiotics are not necessary.	Adapted	IMAI 2009 p. 27	*see ref. for severe abdominal condition*

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	Oxyuriasis	Age 1 - 14 years AND Anal itching OR worms in stool	NA	No	**If =>12mth:** PO Mebendazole (treatment) (Age >=1yr) 100mg daily for 1 days & repeat after 14 days (if Mebendazole not available) PO Albendazole (treatment) (age-based dose) daily for 1 days & repeat in 14 days (fixed dose: Age =>1yr to <2yr = 200mg / Age: =>2yr to =<5yr = 400mg)	Conditional	No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW		**Epidemiology:** Worm infections including oxyuriasis are important global health conditions in both high- and LMIC, affecting growth and cognitive development (Weatherhead et al., 2015). More than one billion people are infected with pinworm globally (Wendt et al. 2019) with up to 28% of infected children globally (Bethony et al., 2006). **Diagnosis and treatment:** - Treatment choice and diagnosis (Leder K & Weller P, 2020) - Success rates after treatment with Mebendazole or Albendazole range between 90-100% (Wendt et al., 2019)
	Loss of appetite	Eating a lot less than usual (<5 years)	All other GI diagnoses, all infections	No	NA	Conditional	Feeding counselling No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW		- Frequent chief complaint in ePOCT study (Keitel et al. 2017)
Universal Assessment : Diagnoses from additional tests not proposed by algorithm	**Intestinal parasitic infection: Nematode**	Additional test not proposed by algorithm AND Stool microscopy: Ova	NA	No	**If =>12mth:** PO Mebendazole (prevention) (Age >=1yr) 500mg daily for 1 days (if Mebendazole not available) PO Albendazole (prevention) (age >=2yr) 400mg daily for 1 days	Conditional	No inpatient referral needed: Reasons to return to clinic	New	In line with STGC	Same	STGC p. 66	NA
	Intestinal parasitic infection: Protozoa	Additional test not proposed by algorithm AND Stool microscopy: Trophozoites / Cysts	NA	No	PO Metronidazole 20mg/kg/day divided into 2 doses for 7 days [10mg/kg/dose two times a day x 7d]	Conditional	No inpatient referral needed: Reasons to return to clinic	New	In line with STGC	Same	STGC p.65	NA
	Typhoid Fever	Additional test not proposed by algorithm AND Widal test: positive	NA	No	PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses for 10 days [10-20mg/kg/day x 10d] (if Cipro not available) PO Azithromycin 10mg/kg/day in 1 dose for 7 days [10mg/kg/dose daily x 7d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d] if fever	Conditional	No inpatient referral needed: Reasons to return to clinic Guidance for oral antibiotic treatment at home	New	In line with STGC	Same	STGC p. 77	Widal test not proposed by ePOCT+: - Widal test not proposed within ePOCT+ algorithms other than clinician initiated tests given the low sensitivity and specificity of the test (Mawazo et al., 2019; Andualem et al. 2014; Mengist et al. 2017)
	Hyperglycemia	Additional test not proposed by algorithm AND Glucose test ≥ 7 mmol/l AND Fasting OR Glucose test ≥ 11.1 mmol/l	NA	Outpatient consultation for diabetes	NA	No	Outpatient referral: Diabetes clinic	New	Adapted fasting blood glucose threshold from STGC at 6.1 mmol/L to ≥7 mmol/L as proposed by the WHO (Definition and Diagnosis of Diabetes Mellitus and intermediate hyperglycaemia, 2006), and the International Diabetes Federation + International Society of Pediatric and Adolecent Diabetes (Pocketbook for management of diabetes in childhood and adolecence in under-resourced countries, 1st edition, 2017)	Adapted	STGC p.139	Threshold for diagnosis of diabetes: - WHO, Definition and Diagnosis of Diabetes Mellitus and intermediate hyperglycaemia, 2006 - IDF and ISPAD, Pocketbook for management of diabetes in childhood and adolecence in under-resourced countries, 1st edition, 2017
	Hypoglycemia	Additional test not proposed by algorithm AND Glucose test < 2.5 mmol/L (or <3 mmol/l if SAM or VLWFA: MUAC <11.5cm or WFA or WFH z-score <-3 or MUAC for age z-score <-3)	Complicated SAM, CNS Danger signs/ Very severe febrile disease	Yes - urgent	If unable to drink/feed, or vomiting everything: Dextrose IV bolus	No	Refer urgently for inpatient management.	New	In line with STGC	Same	STGC p. 14	Hypoglycemia a good predictor of severe disease: - While hypoglycemia was identified as a good predictor of severe disease, this was in children with advanced disease often at higher level care or among hospitalized children (Chandna et al. 2021), the predictive value at the primary care level is not clear.
Urine / Genital	**Persisting pyelonephritis**	Age ≥24 months AND Pain or difficulty passing urine AND (Fever or Costovertebral tenderness (if ≥10 years)) AND Follow-up consultation AND Completed three day antibiotic treatment for urinary tract infection or pyelonephritis	NA	Yes	NA	No	Continue treatment and medication prescription as previously prescribed Refer for inpatient management	New	Added referral in case there is no improvement after three days of antibiotic treatment following proposal from Tanzanian expert panel.	Addition	STGC 2018 p. 204	NA
	Pyelonephritis/Febrile urinary tract infection	Age ≥24 months AND Pain or difficulty passing urine AND (Fever or Costovertebral tenderness (if ≥10 years)) AND Pathological urinalysis OR Urine not available OR Additional test not proposed by algorithm AND Urinary analysis Pathologic AND Fever	Persisting pyelonephritis	IF not able to eat / drink - urgent referral	PO Ciprofloxacin 20-40mg/kg/day divided into 2 doses for 10 days [10-20mg/kg/day x 10d] (if Cipro not available) PO Co-Amoxicillin/Clavulanic acid 80-100mg/kg/day divided into 2 doses for 10 days [40-50mg/kg/dose two times a day x 10d]	Conditional	Reasons to return to clinic immediately. Guidance for oral antibiotic treatment at home.	New	Distinction between lower UTI and pyelonephritis, modification in antibiotic treatment due resistance to amoxicillin in urinary tract infection pathogens, maintained ciprofloxacine from STGC. Minimal age threshold of 24 months to identify UTI or pyelonephritis via urinary symptoms (dysuria).	Adapted	STGC 2018 p. 204	- TZ STG recommends amoxicillin or ciprofloxacin for febrile UTI. Amoxicillin shows increasing resistance against UTI isolates (Seifu et al., 2018, Leung et al., 2019). Therefore, ciprofloxacin has been chosen as 1st line. - Amoxiclav as 2nd line treatment (Montini et al. 2007) - Identification of UTI or pyelonephritis based on symptoms of dysuria starting at age 2 years (Raszka et al. 2005)
	Lower urinary tract infection	Age ≥24 months AND Pain or difficulty passing urine AND (NO Fever or Costovertebral tenderness (≥10 years)) AND No penile/vaginal discharge (asked in boys≥12y and girls≥8 years) AND Pathological urinalysis OR Urine not available OR Additional test not proposed by algorithm AND Urinary analysis Pathologic AND NO Fever	Pyelonephritis	No	PO Co-trimoxazole 8mg TMP/kg/day divided into 2 doses for 3 days (dosage based on TMP) [4mg/kg/dose two times a day x 3d] (if Co-trimoxazole not available) PO Amoxicillin 50mg/Kg/day divided in 2 doses for 35 days [25mg/Kg/dose two times a day x 5d]	Conditional	No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home.	New	Distinction between lower UTI and pyelonephritis. Minimal age threshold of 24 months to identify UTI or pyelonephritis via urinary symptoms (dysuria).	Adapted	STGC 2018 p. 204	Lower UTI (cystitis) can be safely treated with a shorter course and a less broad spectrum antibiotic compared to upper UTI (Tullus et al., 2020) Identification of UTI or pyelonephritis based on symptoms of dysuria starting at age 2 years (Raszka et al. 2005)
	Dysmenorrhea	Female sex AND Age ≥8y AND Menarche AND Menstruating Now AND Very painful menstruation	Pelvic Inflammatory Disease	No	Ibuprofen PO 30mg/kg/ day divided into 3 doses as long as pain, max 3 days	Conditional	No inpatient referral needed: Reasons to return to clinic.	New	NA	Same	STGA 2018 P. 145	NA
	Suspicion of pregnancy	Female sex AND Age ≥12y AND History of sexual contact AND Menarche AND Suspicion of pregnancy AND Pregnancy test Positive	NA	Yes (outpatient antenatal follow-up)	NA	NA	Pregnancy counselling Refer or advise to seek obstetric clinic.	New	NA	Same	IMAI 2009 p.43	NA
	Negative pregnancy test	Female sex AND Age ≥12y AND History of sexual contact AND Menarche AND Suspicion of pregnancy AND Pregnancy test Negative	NA	No	NA	Conditional	Safe sex counselling If unprotected sex within 2 weeks, consider repeating pregnancy test in 2 weeks.	New	NA	Same	IMAI 2009 p.43	NA

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	Balanitis	Male sex AND Penile redness / swelling OR Genital irritation / pain AND Penile redness / swelling on examination	NA	No	Balanitis symptomatic care	Conditional	Balanitis symptomatic care No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW		Common but benign conditions with a prevalence up to 20% and can be treated symptomatically by gentle cleaning and hygiene counseling (Perkins et al., 2020) Other references (The Royal Children's Hospital, 2018; Tews & Singer, 2020)
	Pelvic Inflammatory Disease	Female sex AND Age ≥12y AND History of sexual contact AND Lower abdominal pain AND Abnormal vaginal discharge AND Lower abdominal tenderness on examination	NA	Yes (if febrile)	IM Ceftriaxone 500mg/dose ; single dose PO Doxycycline 200mg/day divided into 2 doses x 14 days PO Metronidazole 800mg/day divided into 2 doses x 14 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 5 days [10-20mg/kg/dose four times a day x 5d]		~~Safe sex counselling~~ Guidance for oral antibiotic treatment at home. If fever: refer urgently for inpatient management. If NO Fever: reasons to return to clinic immediately, safe sex counselling	New	Ceftriaxone only for one dose, for outpatient treatment, prolonged treatment if referred.	Adapted	STGC 2018 p. 302, STGA 2018 p. 156	PID is a clinical diagnosis and patients can commonly be managed as outpatients, with the goal to prevent or reduce risk of subsequent infertility, pelvic scarring, chronic pain or ectopic pregnancy (Bugg et al., 2016). Treatment recommendation include i.m. cephalosporin, doxycycline and metronidazole (Curry et al., 2019) CDC [St Cyr 2020]
	Presumed Primary Syphilis	Genital lesion AND Age ≥12y AND History of sexual contact AND Primary syphilis lesion AND Syphilis rapid test unavailable	NA	No	IM Benzathine Penicillin 2.4MUI/dose ; single dose (If Benzathine Penicillin not available) PO Doxycycline 200mg/day divided into 2 doses x 14 days	Conditional	Safe sex counselling Reasons to return to clinic immediately Partner management.	New	NA	Same	STGA 2018 p. 164	Treatment (CDC[Workowski 2015])
	Primary syphilis	Genital lesion AND Age ≥12y AND History of sexual contact AND Primary syphilis lesion AND Syphilis rapid test positive OR Additional test not proposed by algorithm AND Syphilis test positive	NA	No	IM Benzathine Penicillin 2.4MUI/dose ; single dose (If Benzathine Penicillin not available) PO Doxycycline 200mg/day divided into 2 doses x 14 days	Conditional	Safe sex counselling Reasons to return to clinic immediately Partner management.	New	Added Syphilis rapid test if available	Adapted	STGA 2018 p. 164	Treatment (CDC[Workowski 2015])
	Genital herpes	Genital lesion AND Age ≥12y AND Genital HSV lesion	NA	No	PO Acyclovir 80mg/kg/day (max daily dose 1200mg) divided in 3 doses	Conditional	Safe sex counselling Reasons to return to clinic immediately Partner management.	New	NA	Same	STGC 2018 P. 308	NA
	Inguinal Bubo (LGV/Chancroid)	Age ≥12y AND History of sexual contact AND Inguinal Bubo	NA	No	PO Doxycycline 200mg/day divided into 2 doses x 14 days PO Azithromycin 1g/dose, single dose	Conditional	Safe sex counselling Reasons to return to clinic immediately Guidance for oral antibiotic treatment at home.	New	NA	Same	STGC 2018 P. 310 / STGA 2018 p.162	NA
	Urethral Discharge syndrome	Male sex AND Age ≥12y AND History of sexual contact AND Urethral discharge	NA	No	IM Ceftriaxone 500mg/dose ; single dose PO Doxycycline 200mg/day divided into 2 doses x 14 days	Conditional	Safe sex counselling Reasons to return to clinic immediately Partner management. Guidance for oral antibiotic treatment at home.	New	Switched Cefixime for ceftriaxone (cefixime rarely available in primary health facilities)	Adapted	STGC 2018 P. 297 / STGA 2018 p.155	Treatment (CDC [St Cyr 2020], CDC [Workowski 2015])
	Vaginal Discharge syndrome	Female sex AND Age ≥12y AND History of sexual contact AND Abnormal vaginal discharge AND NO Fever AND NO Cottage-cheese-like/curdlike discharge	Pelvic Inflammatory Disease	No	IM Ceftriaxone 500mg/dose ; single dose PO Doxycycline 200mg/day divided into 2 doses x 14 days PO Metronidazole 800mg/day divided into 2 doses x 14 days	Conditional	Safe sex counselling Ask for sexual abuse (only if resources are available to help) Partner management. Guidance for oral antibiotic treatment at home.	New	Switched Cefixime for ceftriaxone (cefixime rarely available in primary health facilities)	Adapted	STGC 2018 P. 297 / STGA 2018 p.155	Treatment (CDC [St Cyr 2020], CDC [Workowski 2015])
	Vaginal Candidiasis	Female sex AND Age ≥8y AND Abnormal vaginal discharge AND Cottage-cheese-like/curdlike discharge AND NO Fever	NA	No	Clotrimazole cream 1% (genital) (If clotrimazole cream not available) PO Fluconazole 150 mg/dose, single dose	Conditional	Reasons to return to clinic immediately	New	None	Same	STGA 2018 P. 173	NA
	Vulvovaginitis	Female sex AND Age ≥24m AND No History of sexual contact asked if ≥12 years) AND Genital itching / burning OR Abnormal vaginal discharge OR Dysuria AND NO Fever AND Non-pathological urine analysis (performed in those with dysuria)	Vaginal candidiasis	No	**If no improvement after hygiene counselling:** PO Metronidazole 20mg/kg/day divided into 2 doses for 7 days [10mg/kg/dose two times a day x 7d]	Conditional	Vulvovaginitis care No inpatient referral needed: Reasons to return to clinic	New	Part of vaginal discharge syndrome in Tanzania Standard Treatment guidelines P. 298, however this diagnosis separates conditions that are not due to STIs. Most cases of bacterial vaginitis resolve spontaneously with hygiene counseling, treatment therefore witheld to only those with persisting symptoms despite modification to hygiene.	Adapted	STGC 2018 p. 298	Joishy et al. BMJ 2005; Eckert, Linda. NEJM, 2006
	Inguinal hernia	Male sex AND Painful swelling of groin (symptom) AND Inguinal / groin tenderness on examination	NA	IF severe pain / reduction not possible - urgent; otherwise - specialist outpatient (surgical)	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 2-5 days [10-20mg/kg/dose four times a day x 2-5d] Manual reduction of hernia	Conditional	**IF severe pain or reduction of hernia not possible**: Refer urgently for inpatient management **IF severe pain or reduction of hernia possible:** Refer for specialized outpatient management: Surgical	New	In line with STGC	Same	STGC 2018 p. 236	Manual reduction of hernia is safe and effective as initial management (East et al., 2020)

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	Suspected Testicular Torsion	Male sex AND Genital problem AND Scrotal pain AND Testicular tenderness on examination	NA	Yes - urgent	**Pre-referral** PO Paracetamol 40-80 mg/Kg/day divided into 4 doses x 5 days [10-20mg/kg/dose four times a day x 5d] Manual detorsion of testis	NA	Refer urgently for inpatient management	New	In line with IMAI 2009	Same	IMAI 2009 p.27	Urological history and physical examination including identification of unilateral painful and hard/swelling testis is highly accurate for diagnosis of suspected torsion for non-urological provider (Sheth et al., 2016) and preoperative manual detorsion can improve surgical salvage therapy (Cabral Dias Filho et al., 2017)
Ear/Nose/Mouth/Throat	**Mastoiditis**	Ear problem AND Ear discharge (any duration) OR Ear Pain AND Tender swelling behind ear OR Protrusion of auricula	NA	Yes - urgent	**Pre-referral:** IV Ampicillin 200mg/Kg/day divided in 4 doses, 1 dose prereferral [50mg/kg/dose four times a day x 1d] AND IV Gentamicin 7mg/Kg/day divided into 1 dose, 1 dose prereferral [7mg/kg/dose daily x 1d] (if Amp & Gent not available) IV Ceftriaxone 50mg/kg/day divided into 1 dose for 1 days [50mg/kg/dose daily x 1d] Otic Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 10 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 3 days [10-20mg/kg/dose four times a day x 3d] if pain or fever	NA	Refer urgently for inpatient management	New	None	Same	In line with STGA 2018 p.218, and IMCI 2014, and IMCI TZ 2020	NA
	Complicated Acute Ear Infection	Ear problem AND (Ear discharge <14 days OR Ear Pain AND (Bilateral ear pain AND age <24m) OR severe comorbidity* OR measles rash) *SAM, very low WFA, HIV, sickle cell disease, cerebral palsy, severe anaemia, congenital heart disease	Mastoiditis	No	PO Amoxicillin HD 75-100mg/Kg/day divided in 2 doses for 5 days [37.5-50mg/Kg/dose two times a day x 5d] (if Amoxicillin not available) PO Azithromycin 10mg/kg/day in 1 dose for 3 days [10mg/kg/dose daily x 3d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if pain or fever	Conditional	Dry the ear by wicking (if ear discharge present) No inpatient referral needed: Reasons Guidance for oral antibiotic treatment at home.	New	Antibiotics only to selected patients with complicated acute otitis media	Adapted	STGA 2018 p. 217 / STGC 2018 p. 242	Cochrane review identified 13 RCTs (3401 children and 3938 acute otitis media episodes) from high income countries, and found that antibiotics often have little benefit (Venekamp, Sanders, Glasziou, Del Mar, & Rovers, 2015). Many guidelines recommend to restrain antibiotic prescription to limited circumstances (National Institute for Health and Care Excellence, 2018; Lieberthal et al., AAP, 2013)
	Uncomplicated Acute Ear Infection	Ear problem AND Ear Pain	Mastoiditis / complicated acute ear infection / Mumps / Dental abscess/ Viral/bacterial acute pharyngitis	No	Otic Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 10 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	No inpatient referral needed: Reasons to return to clinic Explain why oral antibiotics are not useful for this patient	New	As above	Adapted	STGA 2018 p. 217 / STGC 2018 p. 242	As above
	Complicated Chronic Ear Infection	Ear problem AND Ear discharge ≥14 days AND Hearing loss OR Ear foreign body	Mastoiditis	Yes - to ear specialist	Otic Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 14 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if pain or fever	Conditional	Refer for specialized outpatient management: Ear, nose, and throat	New	Added based on expert panel to identify those that need outpatient specialized management	Adapted	STGA 2018 P. 218 / STGC 2018 P. 256 / IMCI 2014	NA
	Chronic Ear Infection	Ear problem AND Ear discharge >14 days AND NO hearing loss AND NO Suspicion of foreign object in ear	Mastoiditis / complicated chronic ear infection		Otic Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 14 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if pain or fever	Conditional	No inpatient referral needed: Reasons to return to clinic Dry the ear by wicking Explain why oral antibiotics are not useful for this patient	New	Only topical antibiotics in line with IMCI 2014	Same	STGA 2018 P. 218 / STGC 2018 P. 256 / IMCI 2014	NA
	Foreign body in ear	Ear problem AND Suspicion of foreign body in ear AND Foreign body seen/suspected in ear	NA	IF unable to remove object OR object not visible	Removal of object if possible **If lesion seen:** Otic Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 10 days	Conditional	If unable to remove oject: Refer for specialized outpatient management: Ear, nose, and throat If able to remove object: No inpatient referral needed: Reasons to return to clinic	New	In line with STGC 2018	Same	STGC 2018 p.249	NA
	Dental Abscess	Mouth or Tooth problem AND Tooth pain AND Dental abscess seen	NA	Yes - to dentist	**IF Fever:** PO Amoxicillin/Clavulanic acid 80-100mg/kg/day divided into 2 doses for 10 days [40-50mg/kg/dose two times a day x 10d] (if AmoxClav not available) PO Amoxicillin 50mg/Kg/day divided in 2 doses for 10 days [25mg/Kg/dose two times a day x 10d] (if AmoxClav not available) PO Metronidazole 20mg/kg/day divided into 2 doses for 10 days [10mg/kg/dose two times a day x 10d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x5d] Dental abscess incision & drainage	Conditional	Dental abscess drainage and incision Refer for specialized outpatient management: Dentist Guidance for oral antibiotic treatment at home.	Adapted	Amoxicillin given without metronidazole in non severe cases	Adapted	STGC p. 206	Chow, 2020
	Tooth pain	Mouth or Tooth problem AND NO Dental abscess AND Tooth pain	Dental abscess	Yes - non-urgent to dentist	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 3 days [10-20mg/kg/dose four times a day x3d]	Conditional	Refer for specialized outpatient management: Dentist	New	Generic diagnosis for multiple diagnoses except abscess needing referral for dental care (Dental caries, dental trauma)	Same	STGC 2018 p.182 and 185	NA
	Oral aphthous ulcers	Mouth pain OR Eating less than usual (if 2-59m) OR Sore throat AND Mouth ulcers (painful, shallow) OR Herpangina (vesicles in mouth)	NA	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 2-5 days [10-20mg/kg/dose four times a day x 2-5d] Topical Gentian Violet (half strenth - 0.25%) two times a day for 5 days	Conditional	Oral aphtous ulcer advice No inpatient referral needed: Reasons to return to clinic	New	In line with IMCI 2014 guidance for oral aphtous ulcers	Same	In line with IMCI 2014	NA

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	Oral Candidiasis (Oral thrush)	Mouth / tooth problem OR Eating / breastfeeding a lot less than usual (2-59m, asked within CC General) AND White plaques in the mouth	NA	No	PO Nystatin 100,000IU four times a day for 14 days (susp) 14/7 (if Nystatin not available) PO Miconazole 2% 5ml twice a day for 14 days IF HIV; moderate or severe malnutrition; failed nystatin Tx: PO Fluconazole 6-10mg/Kg/day in 1 dose for 7 days [6-12mg/kg/dose daily x7d]	Conditional	No inpatient referral needed: Reasons to return to clinic Oral thrush/candidiasis counselling if mother is breastfeeding the child	New	In line with STGA 2018	Same	STGA 2018 P. 237	NA
	Bacterial Acute Pharyngitis	Age ≥3 y AND Sore throat AND Cape Town Clinical Decision Rule score ≥3 points (Tonsillar swelling = 2 [mandatory]/ Tonsillar exudate = 1 / No cough = 1 / No runny nose = 1)	NA	No	PO Amoxicillin 50mg/Kg/day divided in 2 doses for 5 days [25mg/Kg/dose two times a day x 5d] (if Amox not available) PO Penicillin V 25-50mg/kg/day divided in 2 doses for 5 days [25mg/kg/dose two times a day x5d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 2-5 days [10-20mg/kg/dose four times a day x 2-5d]	Conditional	No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home.	New	Use of Cape Town Clinical decision rule as selected by TZ expert panel to decide who should receive antibiotics	Adapted	STGC 2018 P. 248	Cape Town Clinical Decision Rule (Engel et al., 2017)
	Viral Acute Pharyngitis	Age ≥3 y AND Sore throat AND Cape Town Clinical Decision Rule score <3 points (Tonsillar swelling = 2 / Tonsillar exudate = 1 / No cough = 1 / No runny nose = 1)	NA	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Common cold or upper respiratory tract infection: Symptomatic care No inpatient referral needed: Reasons to return to clinic Explain why oral antibiotics are not useful for this patient	New	As above	Adapted	STGC 2018 P. 248	NA
	Complicated Neck mass	Neck mass ≥3cm OR Neck mass ≥4 weeks	NA	Yes - specialist outpatient (including TB investigation)	PO Ampiclox 50-150mg/kg/day divided in 3 doses, 1 dose prereferral [17-50mg/kg/dose three times a day x 1d] (if Ampiclox not available) PO Azithromycin 10mg/kg/day in 1 dose, 1 dose prereferral [10mg/kg/dose daily x 1d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 3 days [10-20mg/kg/dose four times a day x 5d] if fever		Withold antibiotics before TB assessment if possible Refer for specialized outpatient investigation: neck mass	Adapted	Added. Not in IMCI or Tanzanian guidelines; however in IMCI TZ 2020 looking for lymph nodes is part of the screening process for tuberculosis	Adapted	IMCI TZ 2020	Meier et al. Am Fam Physician 2014
	Uncomplicated infectious lymphadenitis	Neck mass <3cm AND Neck mass <4 weeks AND Local tenderness	Bacterial or viral acute pharyngitis, complicated neck mass	No	**IF Fever:** PO Ampiclox 50-150mg/kg/day divided in 3 doses for 10 days [17-50mg/kg/dose three times a day x 10d] (if Ampiclox not available) PO Azithromycin 10mg/kg/day in 1 dose for 10 days [10mg/kg/dose daily x 10d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	No inpatient referral needed: Reasons to return to clinic Guidance for oral antibiotic treatment at home.	Adapted	Added. Not in IMCI or Tanzanian guidelines	NEW	Added. Not in IMCI or Tanzanian guidelines	Meier et al. Am Fam Physician 2014
	Uncomplicated lymphadenopathy	Neck mass <3cm AND Neck mass <4 weeks AND NO Local tenderness	Bacterial or viral acute pharyngitis, complicated neck mass	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if fever	Conditional	No inpatient referral needed: Reasons to return to clinic	Adapted	Added. Not in IMCI or Tanzanian guidelines	New	Added. Not in IMCI or Tanzanian guidelines	Meier et al. Am Fam Physician 2014
	Mumps	Swollen salivary glands (Suspicion of mumps)	NA	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if pain or fever	Conditional	Common cold or upper respiratory tract infection: Symptomatic care Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic	New	Added based on suggestion by TZ clinical expert panel	New	Not in IMCI or Tanzanian guidelines	Albrecht, 2020
Eye	**Bacterial Conjunctivitis**	Sticky eye / purulent discharge from eye	Measles, severe eye disease	Yes - if no improvement despite 5 days of antibiotic eye drops	Occular Chloramphenicol 0.5% eye drops, 1 drop every 3 hours for 5 days (if Cholamphenicol not available) Occular Ciprofloxacin 0.3% ear drops x 3 drops, twice a day for 5 days	Conditional	If follow-up visit and already 5days of antibiotics completed: Refer for specialized outpatient management: Ophtalmology No inpatient referral needed: Reasons to return to clinic	New		Same	STGC 2018 P. 178	- Glued-eye / Stick eye good predictor of bacterial conjunctivitis (van Weert, Tellegen & ter Riet, 2013) - Systematic review for diagnosis and treatment for red eye (Azari & Barney, 2013) - acute bacterial conjunctivitis is frequently self limiting, however the use of antibiotic eye drops is associated with modestly improved rates of clinical and microbiological remission in comparison to placebo (Sheikh, Hurwitz, van Schayck, McLean, & Nurmatov, 2012).
	Viral Conjunctivitis	Red eye AND NO Sticky eye / purulent discharge from eye AND NO itchy eye(only ≥5 years)	Bacterial conjunctivitis, measles, severe eye disease	No	Conjunctivitis guidance	Conditional	Conjunctivitis guidance No inpatient referral needed: Reasons to return to clinic	New	Adapted diagnostic criteria from STGC 2018, excluding sticky eye and mucopurulent discharge from eye	Adapted	STGC 2018 P. 178	- Systematic review for diagnosis and treatment for red eye (Azari & Barney, 2013) - Up to 80% of all cases of conjunctivitis in the acute setting are due to viral infections and are highly contagious, highlighting the importance of hygiene measures (Azari et al., 2013)
	Allergic Conjunctivitis	Age ≥5 years AND Red eye AND NO Sticky eye / purulent discharge from eye AND itchy eye	Bacterial/Viral conjunctivitis, Measles, severe eye disease	No	Sodium chromoglycate 2-4% eye drops 1 drop q6h for 30 days	Conditional		New	No split lamp examination as proposed in STGC.	Adapted	STGC 2018 p. 177	- Systematic review for diagnosis and treatment for red eye (Azari & Barney, 2013) - Allergic conjunctivitis is an increasing condition, affecting up to 40% of the population in US, and redness with itching are the most consisten symptoms (Azari et al., 2013). A community-based study in Ghana reported a prevalence of 39.9% and thus identified AC as an endemic ocular disease (Kumah et al., 2015). Although it is rarely a severe condition, timely identification and treatment of AC is crucial as it has a considerable effect on quality of life (Palmares et al., 2010)
	Orbital Cellulitis	Warm tender swelling around eye / eyelid AND Fever OR Eye pain	NA	Yes - urgent	**Pre-referral:** PO Ampiclox 50-150mg/kg/day divided in 3 doses, 1 dose prereferral [17-50mg/kg/dose three times a day x 1d] (if ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses, 1 dose prereferral [17mg/kg/dose three times a day x1d]	NA	Refer urgently for inpatient management	New	Adapted from STGC 2018 to identify preseptal versus orbital cellulitis.	Adapted	STGC 2018 P. 179	- Predictors to distinguish preseptal from orbital cellulitis ((Ekhlassi & Becker, 2017; Sciarretta et al., 2017) -Acute sinusitis is a common childhood disorder, but can progress into complicated conditions with orbital complications accounting for up to 85% of all acute sinusitis complications (Suhaili et al., 2010). - Prompt recognition of both preseptal and orbital cellulitis is required to avoid potential serious sequelae such as blindness, intracranial infection and even death (Suhaili et al., 2010). - Orbital cellulitis constituted 6.2% of all ocular emergency admissions in a retrospective Nigerian study in 2012 (Balogun et al., 2012)

Complaint category	DIAGNOSIS	ePOCT+ DYN TZ Algo	Excluded by	Referral	TREATMENTS	Follow-up (always includes reasons to return to clinic)	Management	Difference with ePOCT 2014 algorithm (New, Adapted, Same)	Modifications in respect to TZ guidelines: Standard Treatment Guidelines and Essential Medicines List for Children and Adolescents 2018 (STGC 2018), or IMCI 2014 (TZ IMCI 2020), or IMAI 2009	In line with Tanzania guideline and/or IMCI? (YES, Adpated (from TZ	TZ or IMCI/IMAI Guidelines	Additional references
	Preseptal Cellulitis	Oedema of eyelid OR Redness / swelling around eye AND NO Fever AND NO Eye pain	Orbital cellulitis	Refer urgently if <12 months old	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 10 days [17-50mg/kg/dose three times a day x 10d] (if ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 10 days [17mg/kg/dose three times a day x10d]	Conditional	If <12mth: Refer urgently for inpatient management If ≥12mth: No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home.	New	As above	Adapted	STGC 2018 P. 179	Preseptal cellulitis is more common and less severe than orbital cellulitis, and the absence of eye pain on extraocular movement can help to distinguish preseptal cellulitis from orbital cellulitis (Ekhlassi et al., 2017)
	Severe Eye Disease	Clouding of cornea OR Severe eye pain OR bleeding of eye OR red eye≥ 2 weeks OR in-turned eyelashes OR Loss of vision OR History of injury of eye region OR Foreign body in eye	NA	Yes - IF severe eye pain = urgent / IF NOT severe eye pain OR Foreign body in eye = specialist outpatient referral	Occular Chloramphenicol eye drops x1 drop, every 3 hours for 5 days (if Chloramphenical not available) Occular Ciprofloxacin 0.3% EYE drops x 3 drops, twice a day for 5 days **If clouding of cornea and measles in last 3 months and no Vitamin A in past month (or not currently on RUTF):** PO Vitamin A 3 doses Day 0,1,14 - (Fixed dose: Age <6mth = 50,000IU / 6-<12mth = 100,000IU / ≥12mth = 200,000IU) **If foreign body in eye:** Foreign body removal **Pre-referral** **IF severe eye pain:** PO Paracetamol 40-100 mg/Kg/day divided into 4 doses, 1 dose prereferral [10-20mg/kg/dose four times a day x 1d]		**IF severe eye pain:** Refer urgently for inpatient management **If pain OR Foreign body in eye:** Refer for specialized outpatient management: Ophtalmology **If foreign body in eye:** reasons to return to clinic immediately	New	Generic diagnosis for severe eye diseases requiring referral for further expert assessment including trachoma, retinoblastoma, eye injury, congenital glucoma, uveitis, and foreign body. IMCI TZ 2020: Also includes eye injury which is integrated in corneal abrasion, abnormal appearing eye which is integrated in orbital and preseptal cellulitis with the eyelid edema. Strabism is included in IMCI TZ 2020 but not included here. Adapted from Corneal ulcer in STGC 2018 without the use of slit lamp examination, and IMCI TZ 2020 (eye injury)	Adapted	STGC 2018 P.164, 165, 170, 172, 175; IMCI TZ 2020	The diagnosis of the entity grouped as "severe eye disease" aims to detect and refer severe conditions including Trachoma, Glaucoma, severe ocular infection, trauma or inflammation. In a study from Bangladesh, the prevalence of ocular morbidity and childhood blindness was 5.63% (Hussain et al., 2019) - Corneal abrasion and specifically corneal and conjunctival injury from a foreign body are common ocular injury (Jolly et al., 2018; Zimmerman et al., 2019). - Trachoma is highly prevalent in Sub-Saharan Africa (Taylor et al. Lancet 2014)
Skin	**Complicated abscess**	Localized skin problem AND Pain (if ≥ 12m) AND Abscess seen AND NOT (<12m old AND Perianal abscess) AND Fever OR Abscess size ≥5cm OR Facial abscess OR Large area of warm, pink and tender skin around abscess	NA	IF unable to drain at health facility	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 10d] (if ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 7 days [17mg/kg/dose three times a day x7d] PO Paracetamol 40-100 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	**IF able to drain at health facility:** Abcess Care No inpatient referral needed: Reasons to return to clinic **IF unable to drain at health facility:** Refer for specialized outpatient management: Surgical Ensure adequate fluid and calorie intake. Guidance for oral antibiotic treatment at home.	Adapted	In line with STGC	Adapted	STGC p. 238	NA
	Simple abscess	Localized skin problem AND Pain (if ≥ 12m) AND Abscess seen AND <12m old AND Perianal abscess OR (NO Fever AND Abscess size <5cm AND NO Facial abscess AND NO Large area of warm, pink and tender skin around abscess)	Complicated abscess	No	**IF unable to drain at health facility:** PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 7d] (if Ampiclox not available) PO Co-Amoxicillin/Clavulanic acid 80-100mg/kg/day divided into 2 doses for 7 days [40-50mg/kg/dose two times a day x 7d] PO Paracetamol 40-100 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	**IF able to drain at health facility:** Abcess Care No inpatient referral needed: Reasons to return to clinic Ensure adequate fluid and calorie intake. Guidance for oral antibiotic treatment at home.	Adapted	Only antibiotics for complicated abscess or those for which drainage is not possible.	Adapted	STGC p. 238	Antibiotics in those with fever or when drainage is not possible. Other signs of SIRS would be captured through other algorithms (Stevens et al. CID, 2014)
	Complicated cellulitis	Localized skin problem AND Pain (if ≥ 12m) AND Cellulitis seen AND Facial cellulitis OR Severe pain around OR Size ≥2x child's palm OR Danger sign OR No improvement after 72hrs of antibiotics	NA	Yes - for evaluation for parenteral antibiotics	**Pre-referral** PO Ampiclox 50-150mg/kg/day divided in 3 doses for 10 days [17-50mg/kg/dose three times a day x 1d] (if Ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 10 days [17mg/kg/dose three times a day x 1d] PO Paracetamol 40-100 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	NA	Ensure adequate fluid and calorie intake Refer for evaluation for parenteral antibiotic TT	Adapted	NA	Yes	STGC p. 251	NA
	Uncomplicated Cellulitis	Localized skin problem AND Pain (if ≥ 12m) AND Cellulitis seen AND NO Danger sign AND NO Facial location AND NO Severe pain around skin lesion AND Size < 2x patient's palm	Complicated cellulitis	No	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 10 days [17-50mg/kg/dose three times a day x 10d] (if Ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 10 days [17mg/kg/dose three times a day x 10d] PO Paracetamol 40-100 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 2-5d] if fever	Conditional	Ensure adequate fluid and calorie intake Follow up in 7 days Guidance for oral antibiotic treatment at home.	Adapted	IV antibiotics only for severe/complicated cases, the rest would be treated with PO antibiotics.	Adapted	STGC p. 251	Oral antibiotics appropriate for uncomplicated cellulitis (Stevens et al. CID, 2014)
	Severe complicated measles	Generalized skin problem AND Fever AND Measles rash seen AND Danger signs OR Respiratory distress OR Deep/extensive mouth ulcers OR Clouding of the cornea OR Severe acute malnutrition OR Very low WFA OR Chest indrawing pneumonia OR HIV OR Cerebral palsy OR Sickle cell disesase OR Congenital heart disease	NA	Yes AND Report (notifiable disease)	IM/IV Ampicillin 200mg/Kg/day divided in 4 doses, 1 dose prereferral [50mg/kg/dose four times a day x 1d] IM/IV Gentamicin 7mg/Kg/day divided into 1 dose, 1 dose prereferral [7mg/kg/dose daily x 1d] (if Amp & Gent not available) IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose, 1 dose prereferral [50mg/kg/dose daily x 1d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if fever **IF mouth ulcers:** Topical Gentian Violet (half strength - 0.25%) for inside mouth two times a day for 5 days **IF pus from eye and clouding of cornea:** Occular Tetracycline eye drops x1 drop, every 6 hours for 14 days **IF no Vit A in last month, and not already on:** PO Vitamin A (treatment) 2-3 doses Day 0 & 1 & (if cornea cloudIng) 14 - (Fixed dose: Age <6mth = 50,000IU / 6-<12mth = 100,000IU / ≥12mth = 200,000IU)	NA	Report for surveillance data Refer urgently for inpatient management	Adapted	In line with IMCI 2014, IMCI TZ 2020	Yes	STGC p. 324, IMCI 2014, IMCI TZ 2020	NA

Complaint category	DIAGNOSIS	ePOCT+ DYN TZ Algo	Excluded by	Referral	TREATMENTS	Follow-up (always includes reasons to return to clinic)	Management	Difference with ePOCT 2014 algorithm (New, Adapted, Same)	Modifications in respect to TZ guidelines: Standard Treatment Guidelines and Essential Medicines List for Children and Adolescents 2018 (STGC 2018), or IMCI 2014 (TZ IMCI 2020), or IMAI 2009	In line with Tanzania guideline and/or IMCI? (YES, Adpated (from TZ	TZ or IMCI/IMAI Guidelines	Additional references
	Non-severe measles	Generalized skin problem AND Fever AND Measles rash seen AND NO Danger signs AND NO Respiratory distress AND NO Deep/extensive mouth ulcers AND NO Clouding of the cornea AND NO Severe acute malnutrition AND NO Very low WFA AND NO Chest indrawing pneumonia AND NO HIV AND NO Cerebral palsy AND NO Sickle cell disesase AND NO Congenital heart disease	Severe complicated measles	No Report (notifiable disease)	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 2-5 days [10-20mg/kg/dose four times a day x 2-5d] if fever **IF no Vit A in last month, and not already on RUTF:** PO Vitamin A (treatment) 2 doses - Day 1 & 2 - (Fixed dose: Age <6mth = 50,000IU / 6-<12mth = 100,000IU /≥12mth = 200,000IU) **IF pus from eye and clouding of cornea:** Occular Tetracycline eye drops x1 drop, every 6 hours for 14 days **IF mouth ulcers:** Topical Gentian Violet (half strength - 0.25%) for inside mouth two times a day for 5 days	Conditional	Explain why oral antibiotics are not useful for this patient Report for surveillance data Ensure adequate fluid and calorie intake.	Same	In line with IMCI 2014, IMCI TZ 2020, and STGC	YES	STGC p. 324, IMCI 2014, IMCI TZ 2020	NA
	Complicated chicken pox	Generalized skin problem AND Fever AND Chickenpox lesions AND HIV OR Very low WFA OR Severe malnutrition ~~OR Cellulitis~~ OR Respiratory distress ~~Severe pneumonia~~ OR chest indrawing pneumonia	NA	Yes - urgent	PO Acyclovir (chicken pox) 60-80mg/kg/day divided into 3 doses for 5 days [27mg/kg/dose three times a day x 5d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] Topical Calamine lotion application x1, daily for 5 days		Refer urgently for inpatient management	Adapted	Identified particular patients that could benefit from acyclovir treatment	Adapted	STGC p. 259	NA
	Uncomplicated chicken pox	Generalized skin problem AND Fever AND Chicken pox lesions AND NO HIV AND NO Very low WFA AND NO Severe malnutrition AND NO Cellulitis AND NO Respiratory distress AND NO chest indrawing pneumonia	Complicated chicken pox	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if fever Topical Calamine lotion application x1, daily for 5 days	Conditional	Explain why oral antibiotics are not useful for this patient Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic Skin hygiene precautions	Same	In line with STGC	YES	STGC p. 259	NA
	Non specific viral rash	Generalized skin problem AND Non-specific viral rash seen	NA	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Ensure adequate fluid and calorie intake Non specific viral rash guidance	New	Added. Not in IMCI or Tanzanian guidelines	NEW		Non-specific viral rash in childhood is common, mostly harmless and self limiting (Knöpfel et al., 2019). In a study reviewing 347 pediatric dermatology consultations in the pediatric emergency department, the most common condition was associated with an infectious disease (Moon et al., 2016,
	Scarlet Fever	Generalized skin problem AND Fever AND Age ≥12m AND Scarlet fever rash seen	NA	No	PO Amoxicillin 50mg/Kg/day divided in 2 doses for 5 days [25mg/Kg/dose two times a day x 5d] (if Amox not available) PO Pencillin V 25-50mg/kg/day divided in 2 doses for 5 days [25mg/kg/dose two times a day x5d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	No inpatient referral needed: Reasons to return to clinic Ensure adequate fluid and calorie intake. Guidance for oral antibiotic treatment at home.	New	Added. Not in IMCI or Tanzanian guidelines	NEW		The burden of Group A Streptococci (GAS) sequelae including rheumatic fever and rheumatic heart disease is high in Sub-Saharan Africa (DeWyer et al., 2020). A prospective Tanzanian study demonstrated that GAS infections were among the most common bacterial infections diagnosed in children with uncomplicated fever (Elfving et al., 2016)
	Anaphylaxis	Itchy lesions (if ≥12m) AND Urticarial lesions seen AND Danger signs OR Respiratory distress OR Anaphylaxis	NA	Yes	**Pre-referral** IM Epinephrine 0.01mg/Kg x 1 dose pre-referral **If ≥6mth:** PO Cetirizine PO daily, 1 prereferral dose(Fixed dose: 6mth-2yr = 2.5mg / 2-5yr = 5mg) (if Cetirizine not available & Age >=2yr) PO Chlorpheniramine 2mg, 1 prereferral dose	NA	Refer urgently for inpatient management	New	Adapted to STGA and STGC	Adapted	STGA p. 179	Specified diagnostic criteria based on the Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network symposium (Sampson et al. 2006).
	Urticaria	Itchy lesions (if ≥12m) AND Urticarial lesions seen AND NO Danger signs AND NO Respiratory distress AND NO Anaphylaxis	NA	No	**IF ≥6 months:** PO Cetirizine PO daily for 5 days (Fixed dose: 6mth-2yr = 2.5mg / 2-5yr = 5mg/≥5y=10mg) (if Cetirizine not available & Age >=2yr) PO Chlorpheniramine for 5 days (Fixed dose: 2-6yr = 2mg twice a day / 6-12yr = 2mg 3 times a day/12-14y=2mg 4 times a day)	Conditional	No inpatient referral needed: Reasons to return to clinic	Same	In line with STGC	YES	STGC p. 266	NA
	Eczema (Atopic dermatitis)	Itchy lesions (if ≥12m) AND Eczematous lesions seen	NA	No	**IF ≥3 months:** Topical Hydrocortisone 0.5-1% twice a day for 14 days (If Hydrocortisone not available) Topical Betamethason 0.1% twice a day for 14 days	Conditional	Eczema guidance No inpatient referral needed: Reasons to return to clinic	Same	Same as Tanzanian standard treatment guideline but no anti-histamine.	YES	STGC p. 265	No anti-histamine based on cochrane review (Matterne et al. 2019)
	Heat rash (Milliaria crystallina/rubra)	Heat rash seen	NA	No	NA	Conditional	Heat rash guidance No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW	NA	Militaria are self limiting or require symptomatic therapy and are caused by sweat retention (Zuniga et al., 2013)
	Diaper rash	Localized skin problem AND Diaper rash	NA		Topical Potassium Permanganate 1:4000 (0.025%) 50ml twice a day for 7 days (if Potassium permanganate not available) Topical Clotrimazole 1% every 6 hours for 7 days	Conditional	No inpatient referral needed: Reasons to return to clinic Diaper rash guidance	New	No particular treatment, as there is no evidence based on 2005 cochrane review.	Adapted	STGC p. 254	No study that supported the treatment of diaper rash in 2005 cochrane review (Davies et al. 2005)
	Complicated Impetigo	Localized skin problem AND Impetigo AND Fever OR Lesion size >1x patient's palm	NA	No	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 5d] (if Ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 7 days [17mg/kg/dose three times a day x5d] IF ≥2mth: Topical Potassium Permanganate 1:4000 (0.025%) 50ml twice a day for 7 days (if Potassium Perm not available) Topical Mupirocin 2% twice a day for 7 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic Skin hygiene precautions. Guidance for oral antibiotic treatment at home.	New	Limit investigations as appropriate to primary care (no culture, FBP or CRP), management globally in line with STGC.	Adapted	STGC p. 252	Criteria for oral antibiotic treatment (Stevens et al. 2014, Raff et al. 2016)
	Uncomplicated Impetigo	Localized skin problem AND Impetigo AND NO Fever AND Lesion size <1x patient's palm	Complicated impetigo	No	IF≥2m: Topical Potassium Permanganate 1:4000 (0.025%) 50ml twice a day for 5 days (if Potassium Perm not available) Topical Mupirocin 2% twice a day for 5 days PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 2-5 days [10-20mg/kg/dose four times a day x 2-5d]	Conditional	No inpatient referral needed: Reasons to return to clinic Skin hygiene precautions	Adapted	Limit investigations as appropriate to primary care (no culture, FBP or CRP), management globally in line with STGC.	Adapted	STGC p. 252	See above

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	Extensive folliculitis	Folliculitis seen AND Extensive skin disease	NA	No	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 7d] (if Ampiclox not available) PO Erythromycin 50mg/kg/day divided into 3 doses for 7 days [17mg/kg/dose three times a day x7d] Topical Gentian Violet (full strength - 0.5%) twice a day for 5 days (if Gentian Violet not available) Topical Silver Sulfadiazine 1% to affected area twice a day for 5 days	Conditional	No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home.	New	No gram stain, culture and sensitivity in line with routine care at primary care. Differentiation between those needing antibiotics and those not.	Adapted	STGC p. 253	Uncomplicated folliculitis can be treated topically, extensive foliclitis or furuncles with oral antibiotics (Stulberg et al., 2002). Treatment of choice are beta-lactams, which are beneficial even in regions where community- acquired MRSA is endemic (Elliott et al., 2009)
general / Universal Assessment	**Folliculitis**	Folliculitis seen AND NO Extensive skin disease	NA	No	Topical Potassium Permanganate 1:4000 (0.025%) 50ml twice a day for 4 days Topical Gentian Violet (full strength - 0.5%) twice a day for 5 days (if Gentian Violet not available) Topical Silver Sulfadiazine 1% to affected area twice a day for 5 days	Conditional	No inpatient referral needed: Reasons to return to clinic	Adapted	No gram stain, culture and sensitivity in line with routine care at primary care. Differentiation between those needing antibiotics and those not.	Adapted	STGC p. 253	*See above*
	Molluscum contagiosum	Molluscum contagiosum seen	NA	No	NA	Conditional	Molluscum contagiosum guidance	New	In line with STGC	YES	STGC p. 261	Treatment. (van der Wouden et al. 2017)
	Herpes simplex - Oral Lesions (Herpes labialis)	Localized skin problem AND Oral herpes simplex seen	NA	No	IF HIV / severe acute malnutrition: PO Acyclovir (HSV) 80mg/kg/day divided into 3 doses for 5 days [27mg/kg/dose three times a day x 5d]	Conditional	Ensure adequate fluid and calorie intake No inpatient referral needed: Reasons to return to clinic Skin hygiene precautions	Adapted	Identified particular patients that could benefit from acyclovir treatment	Adapted	STGC p. 259	Topical acyclovir, penciclovir or docosanol not effective for herpes simplex labialis (Hammer et al. 2018)
	Generalized (extensive) Tinea corporis	Tinea corporis lesions seen AND Extensive skin disease	NA	No	PO Griseofulvin 20mg/Kg/day in 1 dose for 42 days [20mg/Kg/dose daily x42d] (if Griseofulvin not available) PO Fluconazole 6mg/Kg/day in 1 dose for 42 days [6mg/Kg/dose daily x 42d]	Conditional	No inpatient referral needed: Reasons to return to clinic	New	If extensive and generalized, treat with po antifungal instead of topical.	Adapted	STGC p. 256	Treatment of tinea corporis (Sahoo et al. 2016)
	Tinea corporis	Tinea corporis lesions seen AND NO Extensive skin disease	Generalized tinea corporis	No	Topical Clotrimazole 1% every 6 hours for 28 days (If Clotrimazole not available) Topical Benzoic Acid 3-6% twice a day for 28 days	Conditional	None	Same	In line with STGC	YES	STGC p. 256	Treatment of tinea corporis (Sahoo et al. 2016)
	Tinea Capitis	Tinea capitis lesions seen	NA	No	PO Griseofulvin 20mg/Kg/day in 1 dose for 42 days [20mg/Kg/dose daily x42d] (if Griseofulvin not available) PO Fluconazole 6mg/Kg/day in 1 dose for 42 days [6mg/Kg/dose daily x 42d]	Conditional	No inpatient referral needed: Reasons to return to clinic	Same	In line with STGC	YES	STGC p. 257	Treatment of tinea capitis (Chen et al. 2016)
	Scabies	Itchy lesions (if ≥12m) AND Scabies rash seen	NA	No	Topical Benzyl benzoate 25% once, then repeat in 1 week (if benzyl benzoate not available) Topical Malathion 0.5% (50ml) in one dose and wash off after 8 to 12 hours. Perform another application after two weeks in children with HIV	Conditional	No inpatient referral needed: Reasons to return to clinic Scabies and lice household management advice	Same	In line with STGC	YES	STGC p. 262	Diagnosis and treatment of scabies (Thompson et al. 2017; Sunderkotter et al. 2016; Engelmann et al. 2020)
	Pytiriasis versicolor	NO Pain (if ≥12m) AND Pityriasis versicolor rash seen	NA	No	Topical Clotrimazole 1% every 6 hours for 28 days (If Clotrimazole not available) Topical Benzoic Acid 3-6% twice a day for 28 days	Conditional	No inpatient referral needed: Reasons to return to clinic Pityriasis versicolor guidance.		In line with STGC	YES	STGC p. 257	NA
	Pediculosis (Head lice)	Head lice seen	NA	No	Topical Benzyl benzoate 25% to dry hair for 10-minutes and then rinse off. Repeat second application 1 week apart. (if benzyl benzoate not available) Topical Malathion 0.5% (20ml) to dry hair for 8 to 12 hours before washing off. Repeat second application 1 week apart.	Conditional	No inpatient referral needed: Reasons to return to clinic Scabies and lice household management advice	New	In line with STGC	YES	STGC p. 263	NA
Trauma / Accident / Burns / Wounds / Fire exposure / Pain	**Osteomyelitis/septic arthritis**	Musculo-skeletal pain or swelling (bone or joint pain/swelling) OR limping OR unable to use extremity AND Fever AND Warm, tender or swollen joint or bone (physical exam)	Uncomplicated/Severe malaria	Yes - urgent	**Pre-referral:** IM/IV Ceftriaxone 50mg/kg/day divided into 1 dose, 1 dose prereferral [50mg/kg/dose daily x 1d] (if Cef not available) IV Amoxicillin / Clavulanic acid 100mg/kg/day divided in 2 doses, 1 dose prereferral [50mg/kg/dose two times a day x1d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses, 1 dose prereferral [10-20mg/kg/dose four times a day x 1d]		Refer urgently for inpatient management	Adapted	Different TT adapted to peripheral health facilities. (STGC 2018)	Adapted	STGC p. 78	
	Chronic limp or joint pain	Musculo-skeletal pain or swelling (bone or joint pain/swelling) OR limping OR unable to use extremity AND NO Fever AND NO History of trauma AND Joint pain / Limp ≥2 weeks	NA	Yes - specialist outpatient	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] if pain or swelling	Conditional	Refer for specialized outpatient consultation: Orthopedics	New	Added. Not in IMCI or Tanzanian guidelines	NEW		Cut-off time for acute vs. chronic limp 2 weeks (Peltola et al., NEJM 2014). Chronic limp DD include Juvenile Idiopathic Arthritis with an incidence rate varying between 1.6 to 23 and prevalence from 3.8 to 400/100,000 (Thierry et al., 2014) and represents the most common rheumatic illness in childhood (Syed et al. 2016). Other virus-associated chronic joint paints should be referred for assessment and treatment to reduce morbidity and quality of life (Hossain et al., 2018, Sharma et al., 2018)
	Acute limp or joint pain	Musculo-skeletal pain or swelling (bone or joint pain/swelling) OR limping OR unable to use extremity AND NO Fever AND NO History of trauma AND Joint pain / Limp <2 weeks	NA	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 2-5d]	Conditional	No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW		Acute limp in children is a common complaint with an incidence of 1.8 per 1000, and transient synovitis, which requires symptomatic therapy only, is the main cause (Fischer et al., 1999) after exclusion of high inflammatory marker and/or fever (Kim et al., 2002)

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	Complicated deep wound	Deep wound AND Bite wound OR Wound infection OR Fever OR Uncontrolled bleeding	NA	If rabies risk: specialist OP (rabies) If >5% TBSA, motor deficit, signs severe infection , or persisting fever or no improvement despite antibiotics - refer for urgent inpatient management	**Pre-referral:** PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 7d] (if Ampiclox not avail) PO Erythromycin 50mg/kg/day divided into 3 doses for 1 days [17mg/kg/dose three times a day x 1d] PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Wound care Tetanus vaccine if incomplete **If NO risk of rabies, complicated deep wound needing referral, or persisting fever/no improvement of wound after >72hr antibiotics:** No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home. If risk of rabies: Refer for specialized outpatient consultation: Rabies **If complicated deep wound needing referral, or persisting fever/no improvement of wound after >72hr antibiotics:** Refer urgently for inpatient management	New	Adapted from General Management of Trauma in STGA	Adapted	STGA p.255	Wound management (Black et al. 2015; World Health Organization, 2010)
	Uncomplicated deep wound	Deep wound AND NO Bite wound AND NO Sign of wound infection AND NO Fever AND NO Uncontrolled bleeding	Complicated deep wound	If suturing needed and not possible - refer specialist OP	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Wound care Tetanus vaccine if incomplete No inpatient referral needed: Reasons to return to clinic. If suturing needed (clean <24hrs, dirty <6hrs) and suturing possible: suture	New	Adapted from General Management of Trauma in STGA	Adapted	STGA p.255	Wound management (Black et al. 2015; World Health Organization, 2010)
	Complicated superifical wound	Superficial wound AND Bite wound OR Sign of wound infection OR Fever	NA	If rabies risk: specialist OP (rabies) If persistent fever, no improvement of wound and surrounding skin after >72 hrs antibiotics -urgent IP referral	PO Ampiclox 50-150mg/kg/day divided in 3 doses for 10 days [17-50mg/kg/dose three times a day x 10d] (if Ampiclox not avail) PO Erythromycin 50mg/kg/day divided into 3 doses for 10 days [17mg/kg/dose three times a day x 70d]	Conditional	Wound care Tetanus vaccine if incomplete **If NO risk of rabies, or persisting fever/no improvement of wound after >72hr antibiotics:** No inpatient referral needed: Reasons to return to clinic. Guidance for oral antibiotic treatment at home. **If risk of rabies:** Refer for specialized outpatient consultation: Rabies **If persisting fever/no improvement of wound after >72hr antibiotics:** Refer urgently for inpatient management	New	Adapted from General Management of Trauma in STGA	Adapted	STGA p.255	Wound management (Black et al. 2015; World Health Organization, 2010)
	Uncomplicated superficial wound	Superficial wound AND NO Bite wound AND NO Wound infection AND NO Fever	Complicated superficial wound	No	NA	Conditional	Wound care Tetanus vaccine if incomplete No inpatient referral needed: Reasons to return to clinic	New	Adapted from General Management of Trauma in STGA	Adapted	STGA p.255	Wound management (Black et al. 2015; World Health Organization, 2010)
	Confirmed fracture	Fall / trauma AND Musculoskeletal pain / swelling AND Suspicion of fracture / dislocation AND Xray confirmed fracture	NA	If open fracture, severe pain or deformation: urgent; if not, specialist OP	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] **If open fracture: (pre-referral)** IM/IV Ampicillin 200mg/Kg/day divided in 4 doses, 1 dose prereferral [50mg/kg/dose four times a day x 1d] AND IM/IV Gentamicin 7mg/Kg/day divided into 1 dose , 1 dose prereferral [7mg/kg/dose daily x 1d] (If Amp & Gent not available) IM/IV Ceftriaxone HD 80-100mg/kg/day divided into 1 dose, 1 dose prereferral [50mg/kg/dose daily x 1d]	Conditional	Immobilise IF Severe pain, deformation, loss of motricity/feeling or open fracture: Refer urgently for inpatient management IF NO Severe pain, deformation, loss of motricity/feeling or open fracture: Refer for specialized outpatient consultation: Orthopedics	New	In line with Extremity Fractures in STGA	YES	STGA p.261	NA
	Confirmed dislocation	Fall / trauma AND Musculoskeletal pain / swelling AND Suspicion of fracture / dislocation AND Xray confirmed dislocation	NA	If unable to manage dislocation: Specialist OP surgical	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x5d]	Conditional	Dislocation management If unable to manage dislocation: Refer for specialized outpatient consultation: Orthopedics	New	In line with Sprains and strains in STGA	YES	STGA p.260	NA

Complaint category	DIAGNOSIS	ePOCT+ DYN TZ Algo	Excluded by	Referral	TREATMENTS	Follow-up (always includes reasons to return to clinic)	Management	Difference with ePOCT 2014 algorithm (New, Adapted, Same)	Modifications in respect to TZ guidelines: Standard Treatment Guidelines and Essential Medicines List for Children and Adolescents 2018 (STGC 2018), or IMCI 2014 (TZ IMCI 2020), or IMAI 2009	In line with Tanzania guideline and/or IMCI? (YES, Adpated (from TZ	TZ or IMCI/IMAI Guidelines	Additional references
	Suspicion of fracture/dislocation	Fall / trauma AND Musculoskeletal pain / swelling AND Suspicion of fracture / dislocation AND Xray unavailable	NA	If open fracture, severe pain or deformation: urgent; if not, specialist OP	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d] **If open fracture (pre-referral):** IM/IV Ampicillin 200mg/Kg/day divided in 4 doses, 1 dose prereferral [50mg/kg/dose four times a day x 1d] AND IM/IV Gentamicin 7mg/Kg/day divided into 1 dose, 1 dose prereferral[7mg/kg/dose daily x 1d] (If Amp & Gent not available) IM/IV Ceftriaxone HD 100mg/kg/day divided into 1 dose, 1 dose prereferral [100mg/kg/dose daily x 1d]	Conditional	Immobilise IF Severe pain, deformation, loss of motricity/feeling or open fracture: Refer urgently for inpatient management IF NO Severe pain, deformation, loss of motricity/feeling or open fracture: Refer for specialized outpatient consultation: Orthopedics	New	In line with Extremity Fractures in STGA	YES	STGA p.261	NA
	Confirmed clavicular fracture	Fall / trauma AND Musculoskeletal pain / swelling AND Suspicion of fracture / dislocation AND Xray confirmed clavicular fracture	NA	No (but in management gives conditions e.g. open)	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Clavicular fracture management No inpatient referral needed: Reasons to return to clinic	New	Adapted from Extremity Fractures in STGA	Adapted	STGA p.261	NA
	Contusion	Fall/trauma AND Musculoskeletal pain/swelling AND (NO Suspicion of bone fracture or dislocation OR Suspicion of fracture/dislocation AND Xray confirmed no abnormality)	Major trauma	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	IF Contusion with severe deformity, unable to weightbear, or loss of motricity/feeling: Refer for specialized outpatient consultation: Orthopedics IF NO Contusion with severe deformity, unable to weightbear, or loss of motricity/feeling: No inpatient referral needed: Reasons to return to clinic	New	Added. Not in IMCI or Tanzanian guidelines	NEW		Sensitivity and specificity of X-ray for diagnosis of fractures in children is high (93.2 and 99.5%) and can therefore reliably exclude fractures (Moritz et al., 2008)
	Major head injury	Head trauma AND Danger sign OR Open skull fracture OR ((History of loss of consciousness OR severe headache OR major trauma OR vomiting) AND Altered mental status OR signs basilar skull fracture)	NA	Yes - urgent	NA	NA	Refer urgently for inpatient management	New	Added different categorization of head injuries adapted from PECARN rule	Adapted	STGC p. 230	No traumatic brain injury clinical practice guidelines identified in a systematic review that was developed in Sub-Saharan Africa, only one was not from a high-income country (Brazil) (Appenteng et al. PLoS One. 2018) PECARN clinical prediction rule criteria adapted for LMIC (Schonfeld et al. 2014; Easter et al. 2014; Kuppermann et al. 2009)
	Moderate Head Injury	Head trauma AND NO open skull fracture AND History of loss of consciousness OR severe headache OR major trauma OR vomiting AND NO Danger sign AND NO altered mental status AND NO signs basilar skull fracture	Major head injury; major trauma	If worsening in clinic in 4 hrs	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	4 hour surveillance for head injury Head injury guidance	New	Added different categorization of head injuries adapted from PECARN rule	Adapted	STGC p. 230	As above
	Minor Head Injury	Head trauma AND NO open skull fracture AND NO History of loss of consciousness AND NO severe headache AND NO major trauma AND NO vomiting AND NO Danger sign AND NO altered mental status AND NO signs basilar skull fracture	Major and moderate head injury; major trauma	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 5 days [10-20mg/kg/dose four times a day x 5d]	Conditional	Head injury guidance	New	Added different categorization of head injuries adapted from PECARN rule	Adapted	STGC p. 230	As above
	Major Burn	Burn AND Full-thickness (third-degree) burn OR Circumferential burn OR ≥5% TBSA OR location over major joint OR feet OR genital area OR hands OR face OR Suspicion of bone fracture or dislocation OR Major trauma	NA	Yes - urgent	Topical Mupirocin 2% twice a day, 1 dose prereferral (if Mupirocin not available) Topical Silver Sulfadiazine 1% to affected area twice a day, 1 dose prereferral Tetanus vaccine if incomplete If skin warm or swollen or with pus: PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 10d]		Major burn care Refer urgently for inpatient management	New	Adapted work-up and management for primary care health facilities	Adapted	STGC p. 228	Management of burns (Karbelowsky et al. 2007; Outwater et al. 2020; Stander et al. 2011; Sheridan, 2018; Young et al. 2017)
	Minor Burn	Burn AND NO Major burn criteria	Major burn	No	Topical Mupirocin 2% twice a day for 14 days (if Mupirocin not available) Topical Silver Sulfadiazine 1% to affected area twice a day for 14 days Tetanus vaccine if incomplete **If skin warm or swollen or with pus:** PO Ampiclox 50-150mg/kg/day divided in 3 doses for 7 days [17-50mg/kg/dose three times a day x 10d] Return every 24 - 48 hrs to clean and dress wound Consider child abuse if burn from object (refer to social worker) PO Paracetamol 40-80 mg/Kg/day divided into 4 doses for 3 days [10-20mg/kg/dose four times a day x 3d]	Conditional	Burn care Return every 24-48 hours to clean and dress wound Consider child abuse if burn from object (Refer to social worker). Guidance for oral antibiotic treatment at home.	New	Adapted work-up and management for primary care health facilities	Adapted	STGC p. 228	Management of burns (Karbelowsky et al. 2007; Outwater et al. 2020; Stander et al. 2011; Sheridan, 2018; Young et al. 2017)
	Inhalation injury	Significant exposure to fire or smoke AND Cough OR Difficulty breathing AND Fast breathing OR chest indrawing OR Respiratory distress	NA	Yes - urgent	**If wheezing:** INH Salbutamol 200mcg four times a day, 1 dose prereferral (if Salbutamol not available) INH Budesonide 200mcg two times a day, 1 dose prereferral Oxygen therapy (if available)	NA	Refer urgently for inpatient management	New	Oxygen therapy if fast breathing or chest indrawing, and not only in those with respiratory distress	Adapted	STGC p. 314	NA

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	Carbon monoxide poisoning	Significant exposure to fire or smoke AND Danger sign OR ≥24months: (Dizziness OR altered mental status OR headache) OR <24 months: severe irritability	NA	Yes - urgent	Oxygen therapy (if available)	NA	Refer urgently for inpatient management	New	No arterial blood gas and serum electrolyte measurement since not usually available at primary care	Adapted	STGC p. 317	Diagnosis and management (Hampson et al. 2012)
	Suspicion of poisoning	Accidental ingestion potentially harmful entity AND Single convulsion OR Danger Sign OR ≥24 months: (Headache OR dizziness OR altered mental status) OR < 24 months	NA	Yes - urgent	NA	NA	Refer urgently for inpatient management	New	Identification of those needing referral, and those that can be observed	Adapted	STGC p. 232	Diagnosis and management of poisoning in children (Velez et al. 2020)
	Uncomplicated Suspicion of poisoning	Accidental ingestion potentially harmful entity AND NO Headache AND NO dizziness AND NO danger sign AND NO altered mental status AND NO < 24 months AND NO Convulsion	Suspicion of poisoning	No	NA	Conditional	Uncomplicated poisoning guidance	New	Identification of those needing referral, and those that can be observed	Adapted	STGC p. 232	Diagnosis and management of poisoning in children (Velez et al. 2020)
	Major trauma	Major trauma (car accident, major fall, suspicion of multiple fractures, major bleeding)	NA	Yes - urgent	NA		Control bleeding Stabilize neck Refer urgently for inpatient management	New	Added. Not in IMCI or Tanzanian guidelines	NEW		The most common mechanisms of severe trauma in children are road traffic accidents and falls, with a mortality of about 1% in low-/middle income countries (Bradshaw et al., 2018)
Headache and stiff neck	**Non-severe headache**	Age ≥3y AND Headache AND NO Head trauma and NO Danger signs	Suspicion of poisoning, major trauma, Major/moderate/minor head injury, Carbon monoxide poisoning, Inhalation injury, suspicion of poisoning, Osteomyelitis/septic arthritis, anaphylaxis, complicated chicken pox, severe complicated measles, non specific viral rash, Severe eye disease, orbital cellulitis, mastoiditis, complicated acute ear infection, pelvic inflammatory disease, pyelonephritis, severe dehydration, moderate dehydration, severe abdominal condition, complicated prolonged fever, uncomplicated malaria, severe suspected malaria, severe malaria, suspected meningitis, very severe febrile	No	PO Paracetamol 40-80 mg/Kg/day divided into 4 doses [10-20mg/kg/dose four times a day]	Conditional	No inpatient referral needed: Reasons to return to clinic Headache guidance	New	In line with Tension headaches in IMAI	Yes	IMAI 2009	NA
	Suspected meningitis	Fever AND NO Danger sign AND Age >5y AND Headache or Neck pain or stiffness AND Stiff neck	NA	Yes - urgent	**Pre-referral:** IM/IV Ceftriaxone HD 80-100mg/kg/day divided into 1 dose, 1 dose prereferral (80-100mg/kg/dose daily x 1 dose) (if Cef not available) IM/IV Ampicillin HD 400mg/Kg/day divided in 4 doses, 1 dose prereferral (100mg/kg/dose four times a day x 1 dose) & (if Cef not available) IM/IV gentamicin 7mg/Kg/day divided into 1 dose, 1 dose prereferral (7mg/kg/dose daily x 1 dose) Prevent low blood sugar		Prevent low blood sugar Refer urgently for inpatient management	Adapted	**Stiff neck:** Only checked if no danger sign present, and not checked in children <12 months as uncommon even in presence of meningitis (note all children with any CNS danger sign are covered for meningitis under diagnosis 'very severe disease' or 'CNS Danger sign'. "Difficulty moving head" added as a question prior to examination for "stiff neck" to improve specificity of this sign and reduce the amount of children who need to be examined for stiff neck (as fever without danger signs is common, and difficulty moving head can be quickly observed) **Other criteria in STGs for suspected meningitis** not all included (also not in IMCI) as either poor sensitivity, specificity or poorly assessed at primary care level (bulging fontanelle, weak cry, irritability)	Adapted	IMCI 2014, IMCI TZ 2020	NA
Prevention / Screening	**Possible HIV**	Age ≥18 months - 12 years AND Mother HIV+ or unknown/refuse AND HIV status of child is unknown/negative AND Indication to perform test yes/unknown AND HIV rapid test positive OR Age ≥12 years AND HIV status unknown/negative AND Indication to perform test yes/unknown AND HIV rapid test positive OR Additional test not proposed by algorithm AND HIV rapid test positive	NA	Yes - to relevant clinic	NA		Possible HIV guidance	Adapted	In line with Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	YES	Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	NA

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	HIV exposed	Age 2m-9m AND Mother HIV+ AND NO PCR Confirmed HIV in infant OR Age 9 - 18m AND Mother HIV+/refuse/unknown AND AND HIV Ab test +ve OR Age ≥18m AND Mother HIV+ AND HIV Ab test unavailable	NA	Yes - for HIV PCR test	NA		Refer for outpatient evaluation: HIV care and treatment center HIV exposure counselling & testing		In line with Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017		Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	NA
	HIV Positive Mother	Age <12y AND HIV status of mother unknown AND Indication and consent to test mother for HIV AND HIV rapid test for mother positve OR HIV status of mother positive	NA		NA		Counselling to HIV Positive Mother		In line with Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017		Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	NA
	HIV screening unavailable	HIV rapid test unavailable AND Mother not HIV +	HIV exposed		NA		HIV screening counselling	Adapted	In line with Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	YES	Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	NA
	Negative HIV test	HIV rapid test negative	NA		NA		Negative HIV test - Post test counselling if child is being breastfed	Adapted	In line with Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	YES	Tanzanian National Guidelines for the management of HIV and AIDS 2015 and 2017	NA
General / Universal Assessment	**Prevention and Screening**	All children without a severe diagnosis: 1. Ask if vaccinations are complete for age 2. Received vit A in last 6 months (if 6-59m) 3. Ask if received deworming in the last 6 months (1-15y)	All severe diagnoses requiring a referral		**IF no deworming in last 6 months:** PO Mebendazole (prevention) (Age >=1yr) 500mg daily for 1 days (if Mebendazole not available) PO Albendazole (prevention) : age 1-2yr 200mg daily for 1 day ; age >=2yr: 400mg daily for 1 day **IF no Vitamin A in last 6 months:** PO Vitamin A (prevention) 1 dose - (Fixed dose: Age 6-<12mth = 100,000IU / =>12mth = 200,000IU)		IF Vaccinations not complete: Refer to RCH clinic to complete vaccination If ≥6mth: Advise to repeat vitamin A supplementation every 6 months If >12mth: Advise to repeat deworming every 6	Same	In line with STGC, and IMCI	YES	STGC p. 22	NA
	Known HIV	Known positive HIV status	NA		NA		Considerations when treating an HIV+ patient	New	n/a			NA
	Known sickle cell disease	Known sickle cell disease	NA		NA	Lead up question of chronic conditions added to reduce the number of	Considerations in managing a patient with sickle cell disease	New	Considerations for patients with sickle cell disease in regards to antibiotic treatment and inpatient admission in line with the Sickle cell disease clinical management guidelines (Tanzania 2020)		Tanzanian Sickle cell disease clinical management guidelines (2020)	NA
	Known Cerebral palsy	Known cerebral palsy	NA		NA	Lead up question of chronic conditions added to reduce the number of	Considerations in treating a patient with cerebral palsy	New	n/a			NA
	Known Congenital heart disease	Known congenital heart disease	NA		NA	Lead up question of chronic conditions added to reduce the number of	Considerations when treating a patient with congenital heart disease	New	n/a			NA
	Follow-up consultation	Consulted a health facility for an acute illness in the past 14 days AND coming for a follow-up consultation	NA	Consider referral if the patient is considerably worse than the previous consultation	NA		If child's condition is worse that last consultation: Consider Referral Continue treatment and medication prescription as previously prescribed	New	n/a			