

## ANNEX 17. FINDINGS RELATED TO THE WHO GENERIC LIST OF IMCI PRIORITY INDICATORS (P) AND SUPPLEMENTAL MEASURES (S) AT HEALTH FACILITY LEVEL

*A validated classification is a classification made by the surveyor after re-examining the child.  
The indicators listed below refer to children two months up to five years of age*

### CASE MANAGEMENT

#### ❖ ASSESSMENT

**P1. Child checked for three general danger signs: 46.1%** (C.I. 34.1 - 58.0) *of children were checked for the three general danger signs.*

**Numerator:** Number of sick children age 2 months up to five years seen who are checked for all the three danger signs (child able to drink or breastfeed, child vomits everything, child had convulsions)

**Denominator:** Number of sick children age 2 months up to five years seen

**S11. Child not visibly awake checked for lethargy: All (100%)** *the ten children who were not visibly awake were checked for lethargy.*

**Numerator:** Number of sick children not visibly awake when assessed by the health provider (who look sleepy, are not playing, smiling, or crying with energy) who are checked for lethargy.

**Denominator:** Number of sick children not visibly awake seen.

**P2. Child checked for the presence of the three main symptoms of cough, diarrhoea and fever: 82.9%** (C.I. 75.6 - 90.1) *of children were checked for the presence of cough, diarrhoea and fever.*

**Numerator:** Number of sick children seen whose caretakers were asked about the presence of cough, diarrhoea and fever

**Denominator:** Number of sick children seen

**P3. Child weight checked against a growth chart: 66.8%** *of children were weighed the same day and had their weight checked against a recommended growth chart.*

**Numerator:** Number of sick children seen who have been weighed the same day and have their weight checked against a recommended growth chart

**Denominator:** Number of sick children seen

**P4. Child vaccination status checked: 74.8%** (C.I. 67.1 - 82.5) *of children had their vaccination status checked.*

**Numerator:** Number of sick children seen who have their vaccination card or vaccination history checked.

**Denominator:** Number of sick children seen

**P5. WHO Index of integrated assessment: mean of 7.7 (C.I. 7.1 - 8.3) assessment tasks performed out of 10 tasks per sick child assessed**

**Definition:** Arithmetic mean of 10 assessment tasks performed for each child (checked for three danger signs, checked for the three main symptoms, child weighted and weight checked against a growth chart, checked for palmar pallor, and checked for vaccination status).

**Calculation:**

- checked for 'ability to drink or breastfeed', 'vomits everything', and 'convulsions': 1 point each
- checked for presence of 'cough and fast/difficult breathing', 'diarrhoea', and 'fever': 1 point each
- child weighed the same day and child's weight used against a recommended growth chart: 1 point each
- child checked for palmar pallor: 1 point
- child vaccination status checked (card or history): 1 point

**P6. Child under two years of age assessed for feeding practices: Caretakers of 58.0% (C.I. 47.5 - 68.5) of children under two years of age were asked about breastfeeding, complementary foods and feeding practices during this episode of illness.**

**Numerator:** Number of sick children under two years of age whose caretakers are asked if they breastfeed this child, whether the child takes any other food or fluids other than breastmilk, and if during this illness the child's feeding has changed.

**Denominator:** Number of sick children under two years of age seen

**S3. Child with low weight and/or anaemia and/or persistent diarrhoea assessed for feeding problems (\*adapted definition to include also children with persistent diarrhoea): 42.2% of sick children with low weight and/or anaemia and/or persistent diarrhoea were assessed for feeding problems.**

**Numerator:** Number of sick children with a validated classification of low weight and/or anaemia and/or persistent diarrhoea and no severe classification whose caretakers are asked if the mother breastfeeds the child, if the child takes food or fluids other than breastmilk, and if during this illness the child's feeding has changed.

**Denominator:** Number of sick children with a validated classification of low weight and/or anaemia and/or persistent diarrhoea not referred by the provider

**S1. Child checked for other problems: 74.8% (C.I. 67.5 - 82.1) of children brought to the facility were checked for 'other problems'.**

**Numerator:** Number of children brought to the facility for one or more of the symptoms covered by the IMCI guidelines (e.g. cough/fast/difficult breathing, diarrhoea, fever, ear problem, sore throat) or for another problem, whose caretaker were asked to describe this other problem.

**Denominator:** Number of children brought to the facility for one or more of the symptoms covered by the IMCI guidelines (e.g. cough/fast/difficult breathing, diarrhoea, fever, ear problem, sore throat) or for another problem.

❖ **CLASSIFICATION**

**S4. Child with low weight correctly classified: 23.5% of children with low weight were correctly classified.**

**Numerator:** Number of children with a validated classification of low weight who are classified as low weight.

**Denominator:** Number of children with a validated classification of low weight.

**S5. Child correctly classified: 76.6%** (C.I. 72.0 - 81.1) *of children were correctly classified by the health provider for the conditions related to the main symptoms (cough or difficult breathing, diarrhoea and fever).*

**Numerator:** Number of children whose validated positive classifications<sup>#</sup> for the main conditions (very severe disease or severe pneumonia or pneumonia, diarrhoea with severe dehydration or some dehydration, severe persistent diarrhoea or persistent diarrhoea, dysentery, very severe febrile disease or fever-possible bacterial infection, measles with or without complications) match the classifications given by the health provider.

**Denominator:** Number of children seen

<sup>#</sup> 'Positive classifications' refer to the classifications included in the 'pink-coded' and 'yellow-coded' classification areas of the IMCI chart and the 'green-coded' classification of measles without complications. It is widely recognized that more skills are required to correctly classify a condition when present ('positive classification') than when it is not present and, i.e. when a good guess would then often be sufficient.

#### ❖ TREATMENT AND ADVICE

**S12. Child with severe illness correctly treated: (\*adapted definition to refer only to those children with severe illness whose caretakers accepted referral) One of the 6 children with severe classifications needing urgent referral and whose caretakers accepted referral received correct pre-referral treatment and referral.**

**Numerator:** Number of children with validated classifications of severe disease needing urgent referral (very severe disease or severe pneumonia, severe dehydration, severe persistent diarrhoea, very severe febrile disease, mastoiditis, severe malnutrition or severe anaemia) whose caretakers accept referral and who receive correct pre-referral dose of the recommended antibiotic and/or ORS and/or vitamin A and referral

**Denominator:** Number of children with validated classifications of severe disease needing urgent referral

**P7. Child needing an oral antibiotic prescribed the drug correctly: (\*adapted definition to refer only to children requiring antibiotics for IMCI conditions, as the IMCI guidelines on treatment can be used as a standard reference only for those conditions) 30.9% of children who did not need urgent referral and who needed an oral antibiotic for an IMCI condition were prescribed a recommended oral antibiotic correctly.**

**Numerator:** Number of sick children with validated classifications, who do not need urgent referral, who need an oral antibiotic for an IMCI condition (pneumonia, dysentery, acute ear infection, streptococcal sore throat) who are correctly prescribed an antibiotic recommended by the IMCI guidelines, including dose, number of times per day, and number of days.

**Denominator:** Number of sick children with validated classifications not needing urgent referral who need an oral antibiotic for an IMCI condition.

**S6. Child with pneumonia correctly treated: (\*adapted definition to refer to the use of an appropriate antibiotic as recommended by the IMCI guidelines) 21.9% of children with pneumonia were prescribed recommended antibiotic treatment correctly.**

**Numerator:** Number of children with a validated classification of pneumonia and no severe classification who are given/prescribed treatment with an appropriate antibiotic according to the IMCI guidelines (including correct amount, times per day, and number of days).

**Denominator:** Number of children with a validated classification of pneumonia and no severe classification.

- S7. Child with dehydration correctly treated: Both (100%) the two children with diarrhoea and some dehydration received ORS at the facility.**
- Numerator:** Number of children with a validated classification of diarrhoea with some dehydration and no severe classification who receive ORS at the facility.
- Denominator:** Number of children with a validated classification of diarrhoea with some dehydration and no severe classification.
- S9. Child with anaemia correctly treated: (\*adapted definition to refer only to children not needing urgent referral) 27.6% of children with anaemia were prescribed iron treatment.**
- Numerator:** Number of children with a validated classification of anaemia and no severe classification who are given/prescribed iron treatment.
- Denominator:** Number of children with a validated classification of anaemia and no severe classification.
- S10. Child receives first dose of oral treatment at facility: (\*adapted definition to refer only to recommended antibiotics required for IMCI conditions) One (1.6%) of the children not needing urgent referral who needed an oral antibiotic for an IMCI condition received the first dose at the facility.**
- Numerator:** Number of children with validated classifications, who do not need urgent referral, who need an oral antibiotic for an IMCI condition (pneumonia, dysentery, streptococcal sore throat, acute ear infection) who receive the first dose at the health facility.
- Denominator:** Number of children with validated classifications, who do not need urgent referral, who need an oral antibiotic for an IMCI condition.
- P8. Child not needing antibiotic leaves the facility without antibiotic: 76.4% (C.I. 69.3 - 83.5) of children who did not need urgent referral and who did not need an antibiotic left the facility without having received or having been prescribed antibiotics unnecessarily.**
- Numerator:** Number of children with validated classification who do not need urgent referral and do not need an antibiotic for one or more IMCI classifications or other problems (no pneumonia: cough or cold, diarrhoea with or without dehydration, persistent diarrhoea, fever-bacterial infection unlikely, measles, chronic ear infection, no ear infection, anaemia or no anaemia, low weight or no low weight, and/or other problems) who leave the facility without receiving antibiotics or a prescription for antibiotics for those validated classifications.
- Denominator:** Number of children seen who do not need urgent referral and who do not need an antibiotic for one or more IMCI classifications or other problems.
- S13. Child prescribed oral medication whose caretaker is advised on how to administer the treatment: (\*adapted definition to refer to recommended antibiotics required for IMCI conditions) 26.4% of children not needing urgent referral and who received or were prescribed an antibiotic for an IMCI condition and/or ORS, received at least two treatment counselling messages.**
- Numerator:** Number of children with validated classifications not needing urgent referral and who receive or are prescribed an antibiotic for an IMCI condition and/or an ORS, who receive at least two treatment counselling messages (explanation on how to administer treatment, demonstration on how to administer treatment, open-ended question to check caretaker understanding).
- Denominator:** Number of children with validated classifications not needing urgent referral, who receive or are prescribed an antibiotic for an IMCI condition and/or ORS.

**P10. Child needing vaccinations leaves facility with all needed vaccinations:** (*\*adapted definition* to include also children advised on when to come back for a scheduled vaccination session)# **88.6%** (C.I. 74.7 - 102.5) *of children needing vaccinations (based on vaccination card or history) left the health facility with all needed vaccinations or advice to come back for vaccination on the scheduled vaccination day.*

**Numerator:** Number of children who need vaccinations (based on vaccination card or history) and are not referred by provider who leave the health facility with all needed vaccinations or advice to come back on the scheduled vaccination day

**Denominator:** Number of children seen who need vaccinations (based on vaccination card or history) and are not referred by provider

# **65.9%** *of children needing vaccination and not referred by the provider left the facility with all needed vaccination* (original global indicator). The adapted indicator includes also those children who were properly advised on when to come back for a scheduled vaccination session, acknowledging that not all facilities provide vaccines on a daily basis.

#### ❖ **ADVICE ON HOME CARE**

**P9. Caretaker of sick child is advised to give extra fluids and continue feeding:** *the caretakers of 44.0%* (C.I. 33.6 - 54.6) *of sick children were advised to give extra fluid and continue feeding.*

**Numerator:** Number of sick children with validated classifications, who do not need urgent referral, whose caretakers are advised to give extra fluid and continue feeding

**Denominator:** Number of sick children with validated classifications, who do not need urgent referral

**S15. Child less than two years old or with low weight or anaemia or persistent diarrhoea whose caretaker received correct age-appropriate feeding counselling:** (*\*adapted definition*) *The caretakers of 25.5% of children less than two years old or with low weight and/or anaemia and/or persistent diarrhoea were provided with age-appropriate feeding messages#.*

**Numerator:** Number of children less than two years old or with a validated classification of very low weight and/or anaemia and/or persistent diarrhoea, who do not need urgent referral, whose caretakers are provided with age-appropriate feeding messages#.

**Denominator:** Number of children less than two years old or with a validated classification of low weight and/or anaemia and/or persistent diarrhoea, who do not need urgent referral.

# For definition of age-appropriate feeding advice used in this survey see note under Table A24.

#### ❖ **REFERRAL**

**P12. Child needing referral is referred:** *Two (33.3%) of the 6 children needing referral were referred by the health providers.*

**Numerator:** Number of sick children with a validated classification of severe disease needing referral (very severe disease, severe pneumonia, diarrhoea with severe dehydration and any other severe classification, severe persistent diarrhoea, very severe febrile disease, mastoiditis, severe malnutrition and/or severe anaemia) who are referred by the health provider.

**Denominator:** Number of sick children with a validated classification of severe disease needing referral.

## HEALTH SYSTEM SUPPORT

- P13. Health facility received at least one supervisory visit that included observation of case management during the previous six months: 6.7% (C.I. -0.8 - 14.2) of health facilities received at least one visit of routine supervision that included the observation of case management during the previous six months.**
- Numerator:** Number of health facilities that received during the previous six months at least one visit of routine supervision (excluding the follow-up visits to health providers shortly after their training that are part of IMCI training) that included the observation of case management.
- Denominator:** Number of health facilities surveyed
- P14. Index of availability of essential oral treatments: a mean of 3.3 out of 4 essential oral drugs for home treatment of sick children were present on the day of visit.**
- Definition:** Arithmetic mean of essential oral drugs recommended for home treatment of diarrhoea, dysentery, pneumonia and anaemia available at each facility the day of visit.
- Calculation:**
- ORS, 1 point
  - recommended antibiotic for pneumonia and dysentery, 1 point
  - vitamin A, 1 point
  - iron, 1 point
- P15. Index of availability of injectable drugs for pre-referral treatment: a mean of 1.7 out of 3 injectable antibiotics for pre-referral treatment of sick children and young infants were available in each facility on the day of visit.**
- Definition:** Arithmetic mean of recommended injectable pre-referral treatment for children and young infant with severe classification needing immediate referral.
- Calculation:**
- thiamphenicol (or ampicillin), 1 point
  - gentamicin, 1 point
  - benzylpenicillin (or ampicillin), 1 point
- P16. Health facility has the equipment and supplies to support full vaccination services: (\*adapted definition) 75.6% (C.I. 62.9 - 88.4) health facilities providing immunisation services had the equipment and supplies to provide full vaccination services on the day of survey.**
- Numerator:** Number of health facilities providing immunisation that have the equipment and supplies to support full vaccination services (functioning refrigerator with correct temperature inside or cold box with ice packs frozen, and needles/syringes for vaccination) available on the day of survey (vaccines not included)
- Denominator:** Number of health facilities surveyed
- P17. Index of availability of vaccines: (\*adapted definition to include 7 antigens) A mean of 6.8 out of 7 antigens were available at each facility the day of visit.**
- Definition:** Arithmetic mean of seven recommended antigens available at each facility the day of visit.
- Calculation:**
- BCG, 1 point
  - OPV, 1 point
  - DPT, 1 point
  - Measles, 1 point
  - Hib, 1 point
  - Hepatitis B, 1 point
  - Tetanus toxoid, 1 point

**S17. Health facility has essential equipment and materials: 40.0%** (C.I. 25.4 - 54.7) *of health facilities had basic equipment and materials available on the day of the survey.*

**Numerator:** Number of health facilities with all needed basic equipment and materials (working weighing scales for adults and children, timing device, thermometer, spoons, cups and jugs to mix and administer ORS) available on the day of the survey

**Denominator:** Number of health facilities surveyed

**P18. Health facilities with at least 60% of providers managing children trained in IMCI: (\*adapted definition to refer to doctors as providers) 73.3%** (C.I. 61.4 - 85.9) *of first-level health facilities had at least 60% of doctors managing children trained in IMCI.*

**Numerator:** Number of health facilities with at least 60% of doctors managing children who are trained in IMCI.

**Denominator:** Number of health facilities surveyed.