8. Child health

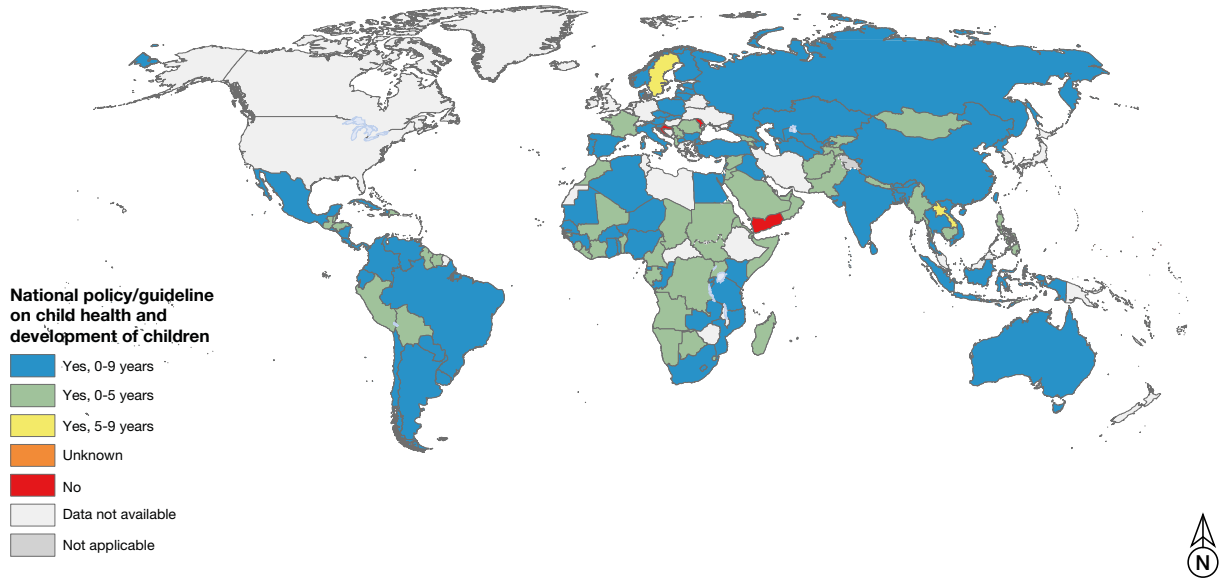
Globally, child mortality remains high, with an estimated 5.6 million children dying each year before their fifth birthday, largely from preventable conditions *(19)*. Many cost-effective interventions exist that can prevent or treat childhood illnesses and mitigate child death. The integrated management of childhood illnesses (IMCI) was introduced by WHO and UNICEF to reach all children with such interventions. IMCI has been further complemented with integrated community case management (iCCM), which serves to increase access to care in underserved populations by using health workers to diagnose and manage common illnesses *(19)*. To address child health, policies are required that provide recommendations on the prevention and management of childhood illnesses such as pneumonia, diarrhoea, malaria and malnutrition. Further, comprehensive policies are required on the management of hospitalized children, including which medicines are necessary to manage childhood illnesses. (Data on immunization policies were not collected in this policy survey, as detailed information on immunization schedules is available through the WHO vaccine and preventable diseases monitoring system: http://www.who.int/immunization/monitoring_surveillance/data/en/.).

8.1. Availability of national policy/ guideline on child health and development

Globally, 93% of countries have a national policy/ guideline on child health and development of children: 55% for children aged 0–9 years and 37% for ages 0–5 years only (Fig. 47).

There is high availability of national policies/ guidelines on child health and development of children in all regions (>90%). Countries in the European Region and South-East Asia Region are most likely to have a national policy for children aged 0–9 years (72% and 73%, respectively). Countries in the Eastern Mediterranean Region do not typically have a policy encompassing all ages 0–9 years (20%), opting more frequently for a policy for ages 0–5 years only. There is little variation by World Bank income group in terms of the availability of national policies/guidelines on child health and development of children (91–98% of countries). In low-income and lower-middle-income countries, policies are more likely to address ages 0–5 years only (50% and 46%, respectively), while in upper-middle-income and high-income countries policies more often include the broader age range 0–9 years (61% and 74%, respectively) (Table A.2.35, Fig. 48).

Figure 47. Map of countries where national policy/guideline on child health and development of children is available

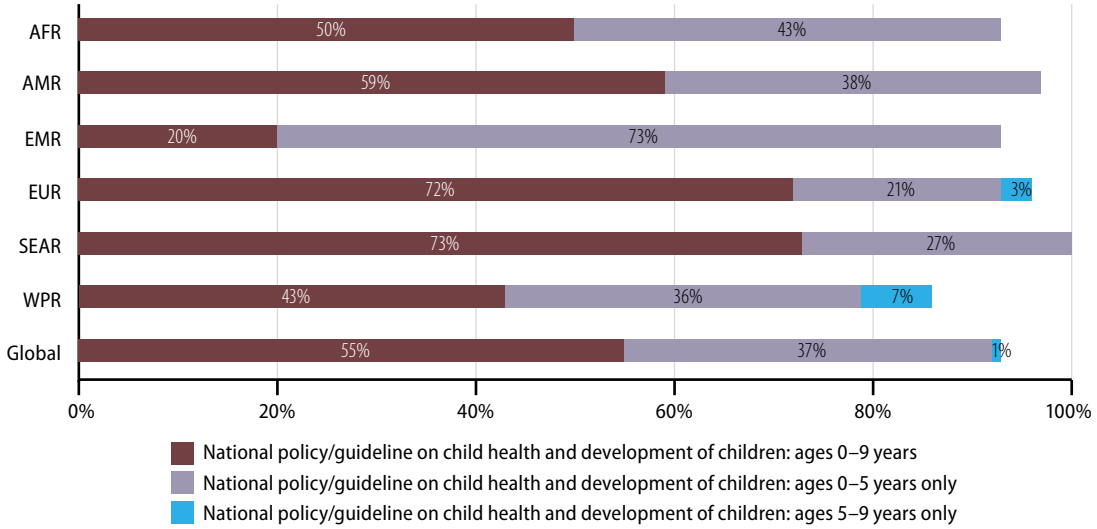


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Maternal, Newborn, Child, and Adolescent Health Policy Survey, 2018
Map Production: Department of Maternal, Newborn, Child, and Adolescent Health
World Health Organization

World Health Organization

Figure 48. Availability of national policies/guidelines on child health and development of children, by WHO region



8.2. Availability of national policy/guideline on competency framework for child health care

Seventy-five per cent of countries globally have a national policy/guideline that sets forth a competency framework for child health care. Regionally, all countries in the South-East Asia Region, 86% of those in the Region of the Americas and 82% in the European Region have such a policy. Half of all countries in the Western Pacific Region also have a national policy/guideline that sets forth a competency framework for child health care. Seventy-five per cent of countries globally also have a continuous professional education system in place for primary health care clinicians and/or nurses to receive child-specific training. Regionally, countries in the European Region and South-East Asia Region are the most likely to have a continuous professional education system in place for primary health care clinicians and/or nurses to receive child-specific training (82% in both regions) (Table A.2.36, Fig. 49).

8.3. Availability and components of national policy/guideline on management of childhood pneumonia

8.3.a. Availability of national policy on management of childhood pneumonia

Globally, 80% of all countries have a national policy/guideline on the management of childhood pneumonia: 41% for children aged 0–5 years only and 38% for ages 0–9 years.

Availability of national policies/guidelines on the management of childhood pneumonia is high across regions, with the exception of countries in the European Region and Western Pacific Region (59% and 57%, respectively). Countries in the European Region and the Region of the Americas are more likely to address a broader age range from 0–9 years (49% and 45%, respectively), compared to countries in the Western Pacific Region and Eastern Mediterranean Region (21% and 13%, respectively). Low-income and lower-middle-income countries are more likely to have a national policy/guideline for the management of childhood pneumonia (97% and 92%, respectively) compared to high-income countries (58%). Low-income countries are also more likely to have a policy for children ages 0–5 years (66%) compared to high-income countries (13%) (Table A.2.37, Fig. 50).

Figure 49. Availability of national policy/guideline setting forth a competency framework for child health care, and availability of a continuous professional education system for primary health care clinicians and/or nurses to receive child-specific training, by WHO region

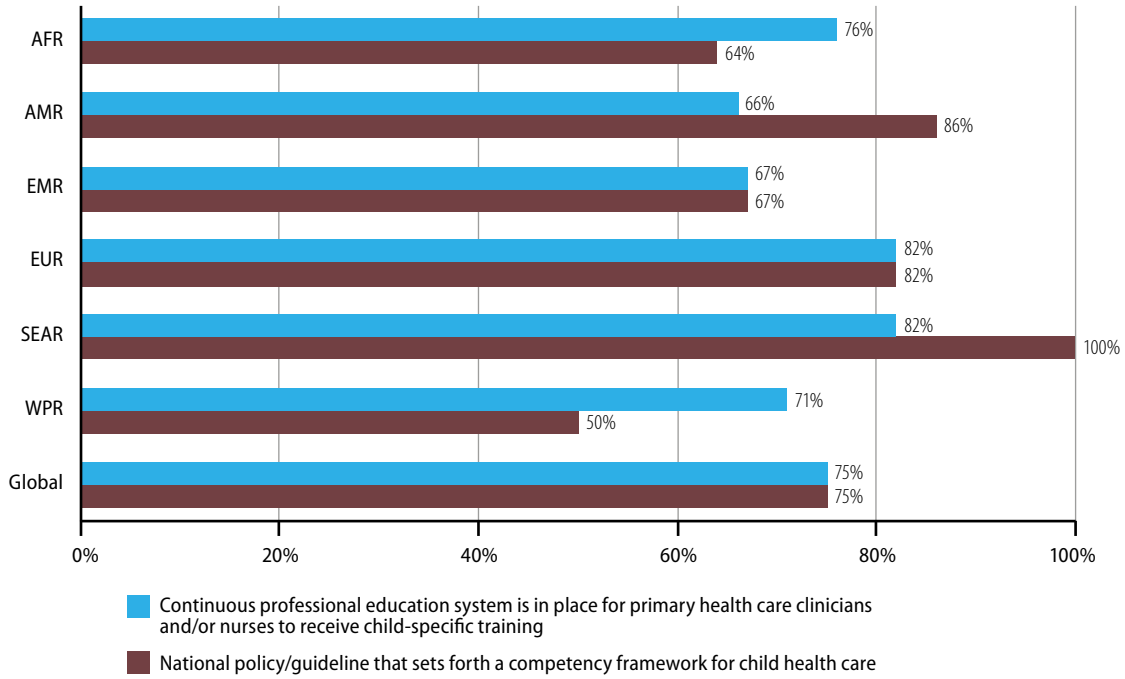
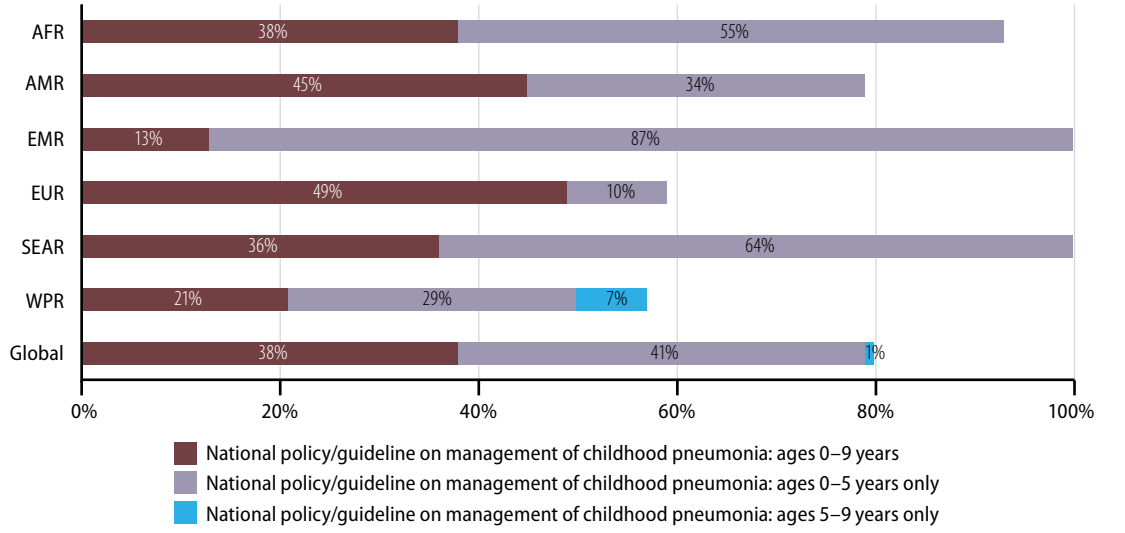


Figure 50. Availability of national policies/guidelines on management of childhood pneumonia, by WHO region



8.3.b. Components of national policy on management of childhood pneumonia

Globally, 30% of countries have a national policy/guideline on the management of childhood pneumonia that specifies that pneumonia with chest indrawing should be treated at first-level facilities, compared to 41% of countries that specify treatment at referral facilities. Regionally, countries in the South-East Asia Region are more likely to recommend treatment at first-level facilities (45%) compared to countries in the European Region (23%) and Western Pacific Region (21%). In the Eastern Mediterranean Region, countries typically recommend pneumonia with chest indrawing be treated at referral facilities (67%). By World Bank income group, it is more common for low-income and upper-middle-income countries to recommend pneumonia with chest indrawing be treated at referral facilities, while the recommendation in high-income and lower-middle-income countries is equally distributed (high-income countries: 26% recommend first-level facilities, while a further 26% recommend referral-level facilities; lower-middle-income countries: 41% recommend first-level facilities, while a further 41% recommend referral-level facilities) (Table A.2.38, Fig. 51).

Globally, 59% of countries recommend amoxicillin as the first line of treatment for pneumonia with fast breathing. Regionally, there is variability in the recommendation of amoxicillin as the first line of treatment for pneumonia with fast breathing (African Region: 86%, Eastern Mediterranean Region: 47%, European Region: 38%, Region of the Americas: 59%, South-East Asia Region: 73%, Western Pacific Region: 43%). In comparison, very few countries (5%) recommend co-trimoxazole as the first line of treatment for pneumonia with fast breathing. Globally, 42% of countries recommend five days of treatment for pneumonia with fast breathing, compared to 7% of countries that recommend three days. In all regions, the recommendation for five days of treatment is made more often than three days. Countries in the Eastern Mediterranean Region and South-East Asia Region are most likely to specify five days of treatment (73% and 64%, respectively).

Sixty-five per cent of countries globally recommend amoxicillin as the first line of treatment for pneumonia with chest indrawing. This recommendation is most common in countries in the African Region (86%) and South-East Asia Region (82%). Five per cent of countries globally recommend co-trimoxazole as the first line of treatment for pneumonia with chest indrawing. The recommendation for co-trimoxazole for pneumonia with chest indrawing is most often made in countries in the European Region (27%) (Table A.2.39, Fig. 52).

Figure 51. National policy/guideline on management of childhood pneumonia specifies facility level at which pneumonia with chest indrawing can be treated, by WHO region

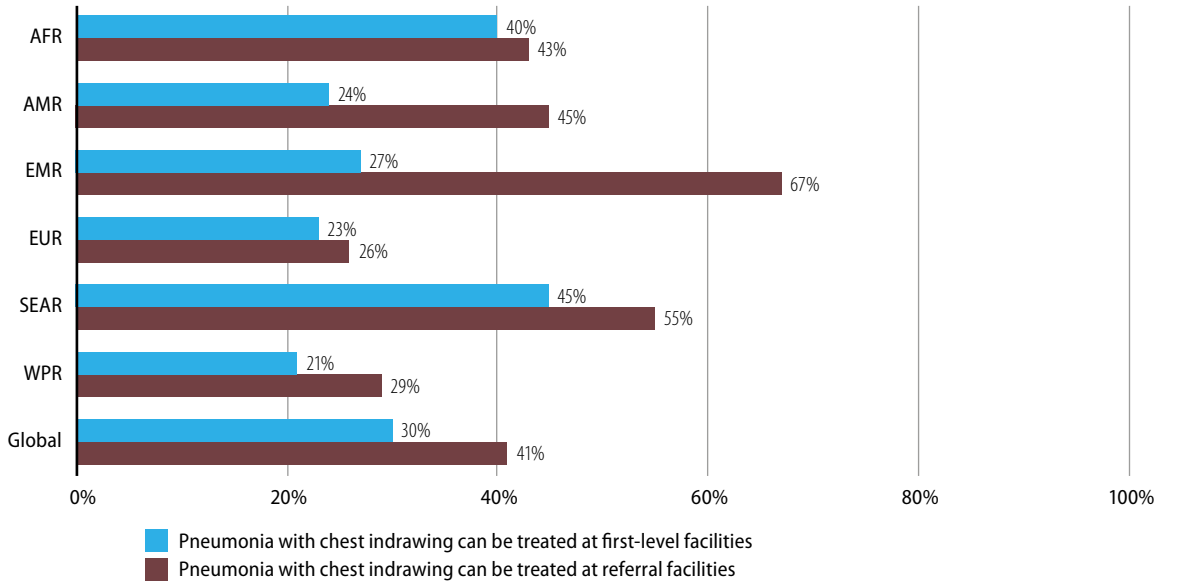
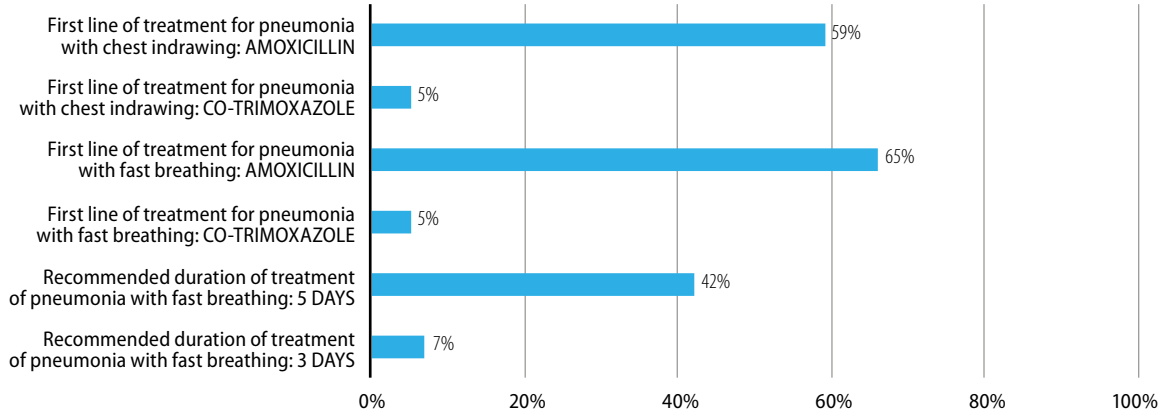


Figure 52. National policy/guideline on management of childhood pneumonia specifies first line of treatment for pneumonia with chest indrawing or fast breathing, globally

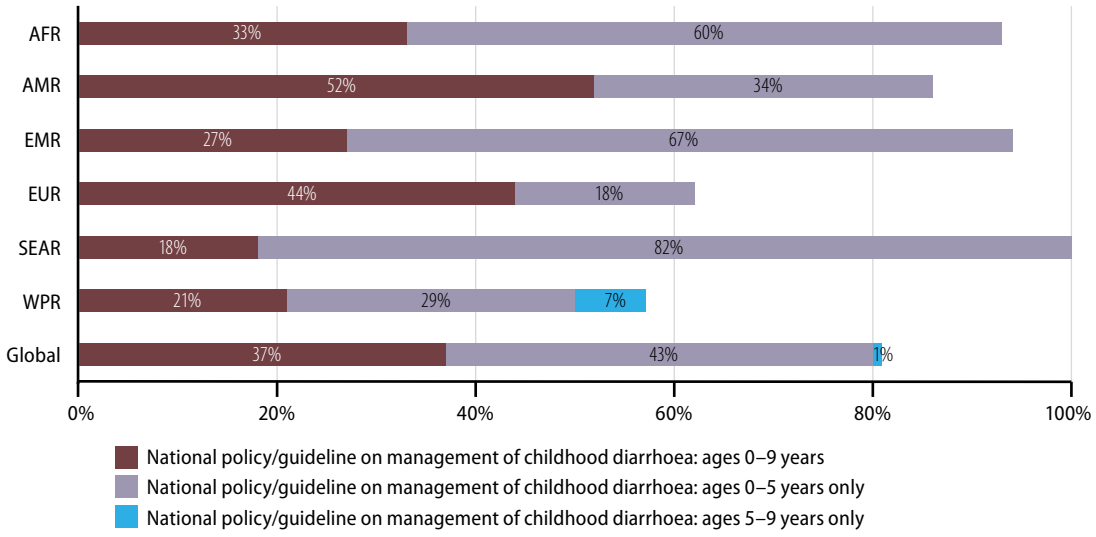


8.4. Availability and components of national policy/guideline on management of childhood diarrhoea

8.4.a. Availability of national policy on management of childhood diarrhoea

Globally, 81% of countries have a national policy/guideline on the management of diarrhoea in children: 37% for ages 0–9 years and 43% for ages 0–5 years only. Regionally, 100% of countries in the South-East Asia Region, 94% of those in the Eastern Mediterranean Region, 93% in the African Region, 86% in the Region of the Americas, 62% in the European Region and 57% in the Western Pacific Region have a policy/guideline on childhood diarrhoea. Countries in the European Region and the Region of the Americas are more likely to cover the broader age range of 0–9 years (44% and 52%, respectively). Countries in the African Region, Eastern Mediterranean Region and South-East Asia Region are more likely to cover the younger age range of 0–5 years (African Region: 60%, Eastern Mediterranean Region: 67%, South-East Asia Region: 82%). High-income countries are less likely to narrow the policy on childhood diarrhoea to ages 0–5 years (5%), opting more frequently for the broader age range of 0–9 years (47%). Low-income countries, on the other hand, more often have a policy for children ages 0–5 years (63%) compared to 0–9 years (31%). This pattern is repeated for lower-middle-income and upper-middle-income countries (Table A.2.40, Fig. 53).

Figure 53. Availability of national policies/guidelines on management of childhood diarrhoea, by WHO region



8.4.b. Components of national policy on management of childhood diarrhoea

Globally, 73% of countries have a national policy/guideline that recommends the treatment of childhood diarrhoea with dehydration using either oral rehydration solution, zinc or fluids. Regionally, countries in the African Region, Eastern Mediterranean Region and South-East Asia Region are the most likely to recommend the treatment of childhood diarrhoea with dehydration using either oral rehydration solution, zinc or fluid (>90%). In contrast, only 57% of countries in the Western Pacific Region and 46% in the European Region make a recommendation on the treatment of diarrhoea with dehydration. By World Bank income group, high-income and upper-middle-income countries are less likely to have national policies/guidelines that make a recommendation on the treatment of childhood diarrhoea with dehydration (39% and 68%, respectively) compared to lower-middle-income and low-income countries (95% and 94%, respectively) (Table A.2.41, Fig. 54).

8.5. Availability and components of national policy/guideline on management of malaria with appropriate recommendations for children

8.5.a. Availability of national policy/guideline on management of malaria with appropriate recommendations for children

Eighty-two per cent of countries globally have a national policy/guideline on the management of malaria with appropriate recommendations for children: 53% for ages 0–9 years, 26% for ages 0–5 years only and 3% for ages 5–9 years only. Countries in the European Region and some of those in the Region of the Americas did not report on the availability of a national policy/guideline on the management of malaria because the region is free from malaria (Table A.2.42, Fig. 55).

Regionally, all countries in the Region of the Americas that report on malaria, 93% of countries in the African Region, 91% of those in the South-East Asia Region, 81% in the Eastern Mediterranean Region and 21% in the Western Pacific Region have a national guideline on the management of malaria with appropriate recommendations for children. Countries in the Region of the Americas are the most likely to make a recommendation for the broader age range of 0–9 years (85%). About half of all countries in the Eastern Mediterranean Region (47%), African Region (55%) and South-East Asia Region (55%) also cover the broader age range of 0–9 years. Some countries in the African Region (38%), Eastern Mediterranean Region (27%) and South-East Asia Region (37%) have a policy limited to children ages 0–5 years only. Few countries in any region make a recommendation for children ages 5–9 only (Eastern Mediterranean Region: 7%, Region of the Americas: 5%, Western Pacific Region: 7%) (Table A.2.42, Fig. 55).

8.5.b. Components of national policy/guideline on management of malaria with appropriate recommendations for children

Globally, 80% of countries have a national policy/guideline that recommends parasitological

Figure 54. Recommended treatment for diarrhoea with dehydration specified in national policy/guideline, by WHO region

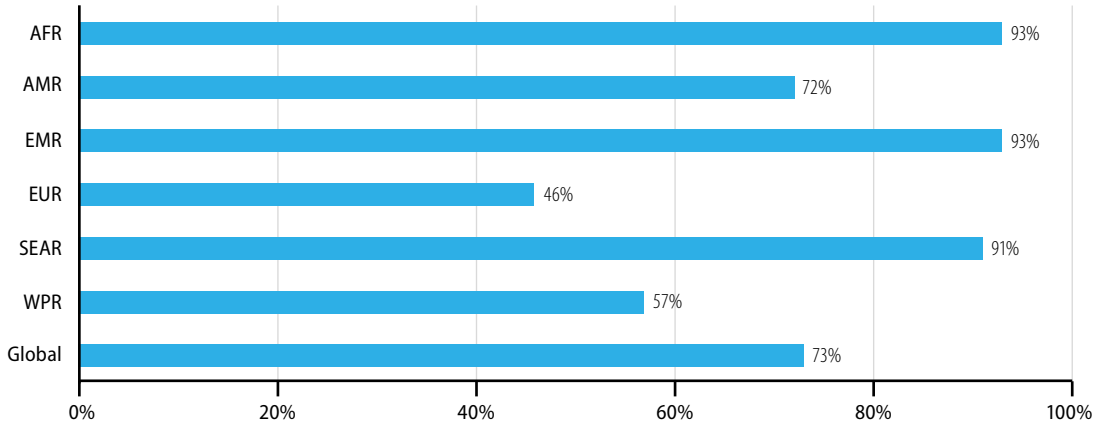
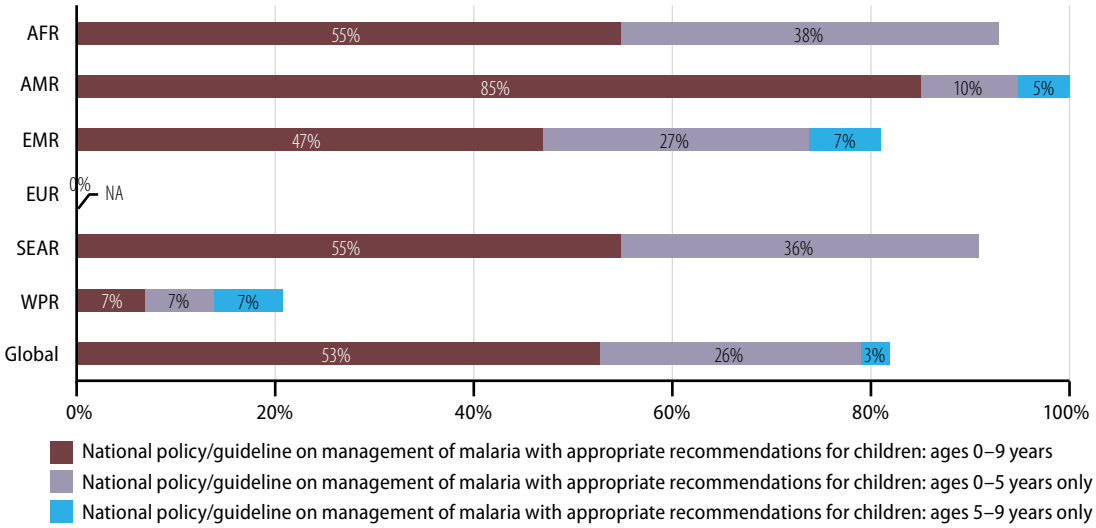


Figure 55. Availability of national policies/guidelines on management of malaria with appropriate recommendations for children, by WHO region[a)]



a) *Note:* Excludes all countries in the European Region and the following countries in the Region of the Americas: Antigua and Barbuda, Argentina, Barbados, Cuba, Dominica, Grenada, Paraguay, Saint Kitts and Nevis, Uruguay.

confirmation of malaria before treatment. All countries in the Region of the Americas that report on malaria, 93% of countries in the African Region, 91% of those in the South-East Asia Region and 73% in the Eastern Mediterranean Region have a national policy/guideline that recommends parasitological confirmation of malaria before treatment. Only 14% of countries in the Western Pacific Region have such a policy. Globally, use of a rapid diagnostic test (RDT) is the method for confirmation most often specified in national policies/guidelines (46%), while microscopy is specified by 28% of countries (Table A.2.43, Fig. 56).

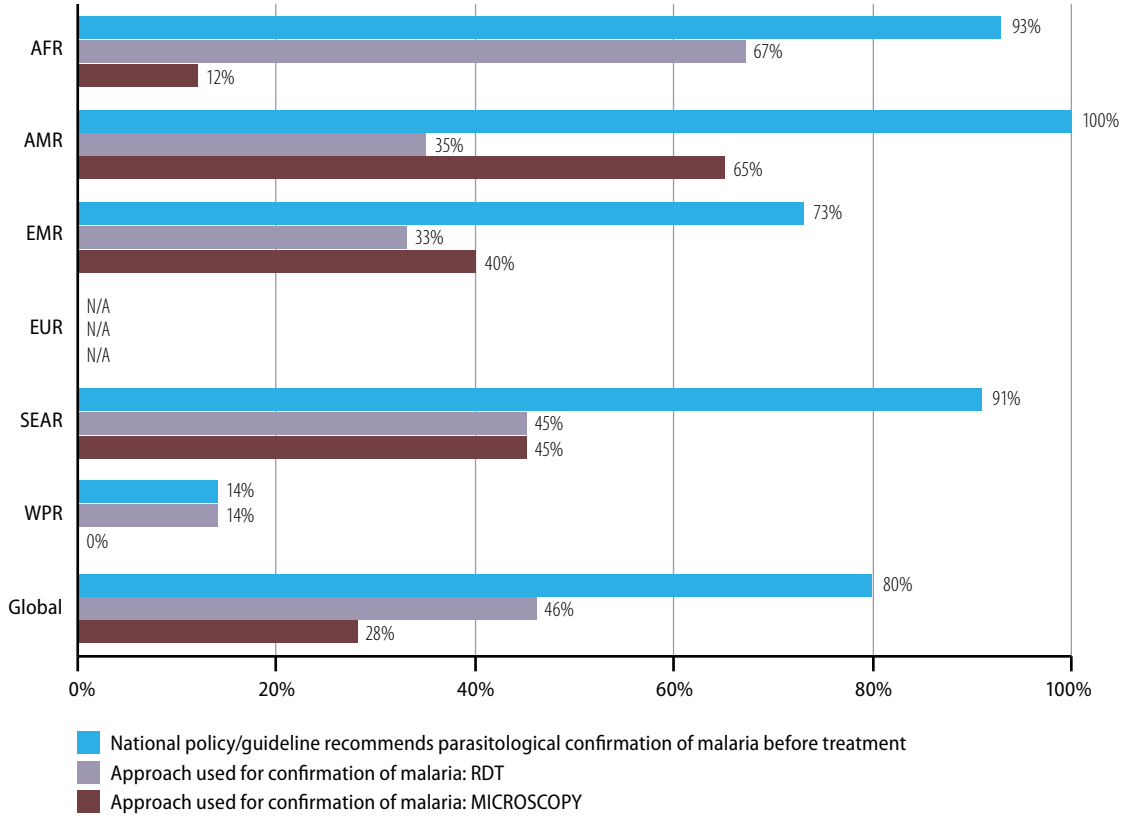
Regionally, use of an RDT is specified in national policies/guidelines more often than microscopy in countries in the African Region (RDT: 67%, microscopy: 12%) and Western Pacific Region (RDT: 14%, microscopy: 0%). Confirmation of malaria with microscopy is specified in national policies/guidelines more frequently than the use of an RDT in the Region of the Americas (RDT: 35%, microscopy: 65%) and Eastern Mediterranean Region (RDT: 33%, microscopy: 40%). The two modes are equally specified across countries in the South-East Asia Region (RDT: 45%, microscopy: 45%). RDT confirmation is recommended more frequently in low-income (61%) and lower-middle-income (57%) countries, with no high-income countries recommending RDTs. Microscopy confirmation is recommended most commonly in high-income (60%) and upper-middle-income (46%) countries, compared to low-income (16%) and lower-middle-income (17%) countries (Table A.2.43, Fig. 56).

8.6. Availability of national policy/guideline on management of acute malnutrition in children

Globally, 75% of countries have a national policy/guideline on the management of acute malnutrition in children: 37% for ages 0–9 years, 37% for ages 0–5 years only and 1% (all countries in the Western Pacific Region) for ages 5–9 years only (Table A.2.44, Fig. 57).

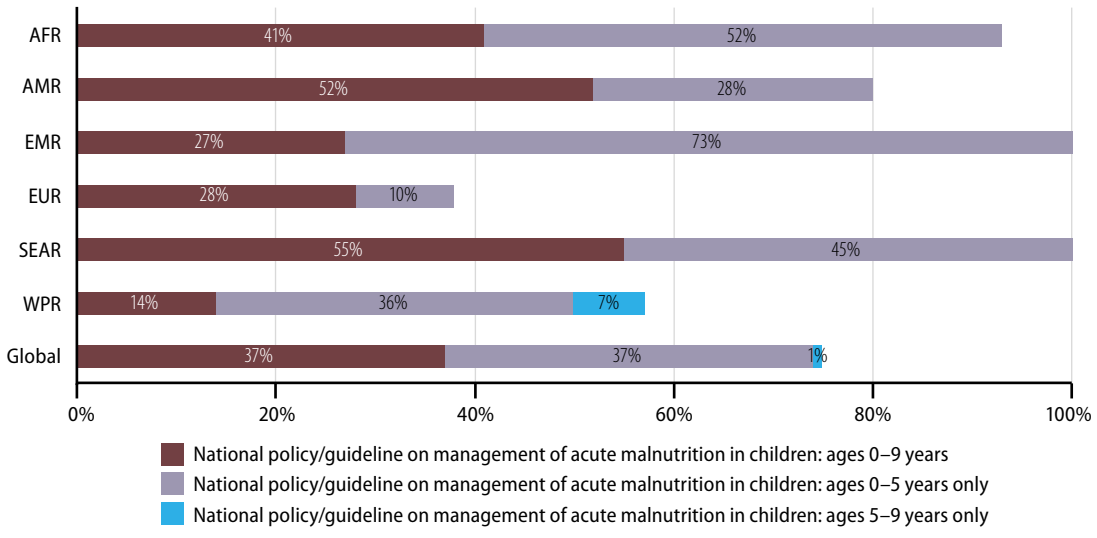
Regionally, 100% of countries in the Eastern Mediterranean Region and South-East Asia Region have a national policy/guideline on the management of acute malnutrition in children, as do 93% of countries in the African Region. In other regions, availability of a policy on the management of acute malnutrition in children varies: European Region (38%), Region of the Americas (80%), Western Pacific Region (57%). More than half of all countries in the Region of the Americas (52%) and the South-East Asia Region (55%) have a national policy/guideline for children ages 0–9 years. The availability of a policy for children ages 0–5 years only is more

Figure 56. National policy/guideline on management of malaria with appropriate recommendations for children specifies recommended parasitological confirmation (microscopy or RDT) of malaria before treatment, by WHO region[a)]



a) *Note:* Excludes all countries in the European Region and the following countries in the Region of the Americas: Antigua and Barbuda, Argentina, Barbados, Cuba, Dominica, Grenada, Paraguay, Saint Kitts and Nevis, Uruguay.

Figure 57. Availability of national policies/guidelines on management of acute malnutrition in children, by WHO region



common than for ages 0–9 years in countries in the African Region (0–5 years: 52%, 0–9 years: 41%), Eastern Mediterranean Region (0–5 years: 73%, 0–9 years: 27%) and Western Pacific Region (0–5 years: 36%, 0–9 years: 14%) (Table A.2.44, Fig. 57).

The availability of a national policy/guideline on the management of acute malnutrition in children seems to decline as income increases (low-income countries: 97%, lower-middle-income countries: 90%, upper-middle-income countries: 75%, high-income countries: 37%). Policies for ages 0–5 years only are more common in low-income countries (59%) and lower-middle-income countries (54%) compared to high-income countries (8%) (Table A.2.44).

8.7. Availability of national policy/ guideline on routine assessment of children for overweight or obesity in health facilities

Fifty-nine per cent of all countries globally have a national policy/guideline for the routine assessment of children for overweight or obesity in health facilities: 37% for ages 0–9 years, 21% for ages 0–5 years only, 1% (all in the European Region) for ages 5–9 years only (Table A.2.45, Fig. 58).

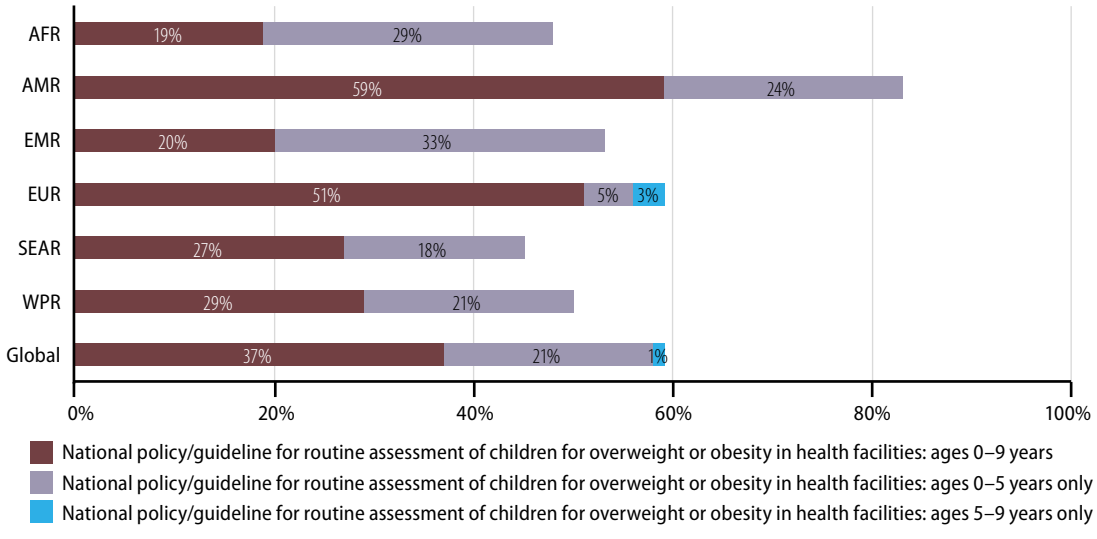
Regionally, less than 60% of countries in each region have a national policy/guideline for the routine assessment of children for overweight or obesity in health facilities, with the exception of countries in the Region of the Americas (83%). In the European Region and the Region of the Americas more than half of all countries that have a national policy on the routine assessment of children for overweight or obesity in health facilities cover the age range 0–9 years. In the South-East Asia Region and Western Pacific Region, national policies/guidelines are split between ages 0–9 years (27% and 29% of countries, respectively) and ages 0–5 years only (18% and 21% of countries, respectively). National policies/ guidelines for the routine assessment of children for overweight or obesity in health facilities for ages 0–9 years are more common in high-income countries (58%) compared to low-income countries (16%). National policies for children aged 0–5 years only are more likely in low-income (25%) and lower-middle-income countries (28%) than high-income countries (8%) (Table A.2.45, Fig. 58).

8.8. Availability and components of national policy/guideline on paediatric hospital care for sick children

8.8.a. Availability of national policy on paediatric hospital care for sick children

Globally, 61% of countries have a national policy/ guideline on the management of hospitalized children (1 month to 9 years of age). The availability of a national policy/guideline on the management of hospitalized children (1 month to 9 years of age) is

Figure 58. Availability of national policies/guidelines on routine assessment of children for overweight or obesity in health facilities, by WHO region



moderate across most regions (African Region: 69% of countries, Eastern Mediterranean Region: 53%, European Region: 56%, Region of the Americas: 66%, South-East Asia Region: 73%). In comparison, only 36% of countries in the Western Pacific Region have such a policy. The availability of national policies/guidelines on the management of hospitalized children (1 month to 9 years of age) is more common in low-income (72%) and lower-middle-income (74%) countries compared to high-income countries (45%) (Table A.2.46, Fig. 59).

Sixty-four per cent of countries globally have national clinical standards for the management of children with severe illness in hospitals. The availability of these national clinical standards is moderate across most regions (African Region: 74% of countries, Eastern Mediterranean Region: 67%, European Region: 62%, Region of the Americas: 62%, South-East Asia Region: 64%). In comparison, only 43% of countries in the Western Pacific Region have national clinical standards for the management of children with severe illness in hospitals (Table A.2.46, Fig. 59).

8.8.b. Components of national policy on paediatric hospital care for sick children

Globally, medicines indicated for the management of childhood illness most commonly included in national essential drugs lists are: ceftriaxone (88%), oral rehydration salts (87%), salbutamol inhaler (86%), amoxicillin syrup (125 mg per 5 ml) (85%), gentamicin injectable (2 ml vial containing 80 mg) (83%), ciprofloxacin tablets (250 mg or 500 mg) (83%) and cotrimoxazole syrup (40 mg trimethoprim + 200 mg sulfamethoxazole) (82%). A number of medicines are moderately common in national essential drugs lists: ampicillin injectable (250 mg) (77%), aqueous benzyl penicillin (100 000–150 000 U) (73%), amoxicillin dispersible tablet (250 mg) (71%), child-friendly TB formulations (RHZ,[2] RH[3]) and isoniazid (70%), and gentamicin injectable (2 ml vial containing 20 mg) (70%). Some medicines are not common included in national essential drugs lists: for example, cotrimoxazole paediatric tablet (20 mg trimethoprim + 100 mg sulfamethoxazole) (59%) and rectal artesunate (50 mg or 100 mg) (37%) (Table A.2.47, Fig. 60).

2 RHZ = rifampicin + isoniazid + pyrazinamide
3 RH = rifampicin + isoniazid

Figure 59. Availability of national policies/guidelines on management of hospitalized children (aged 1 month to 9 years) and availability of national clinical standards

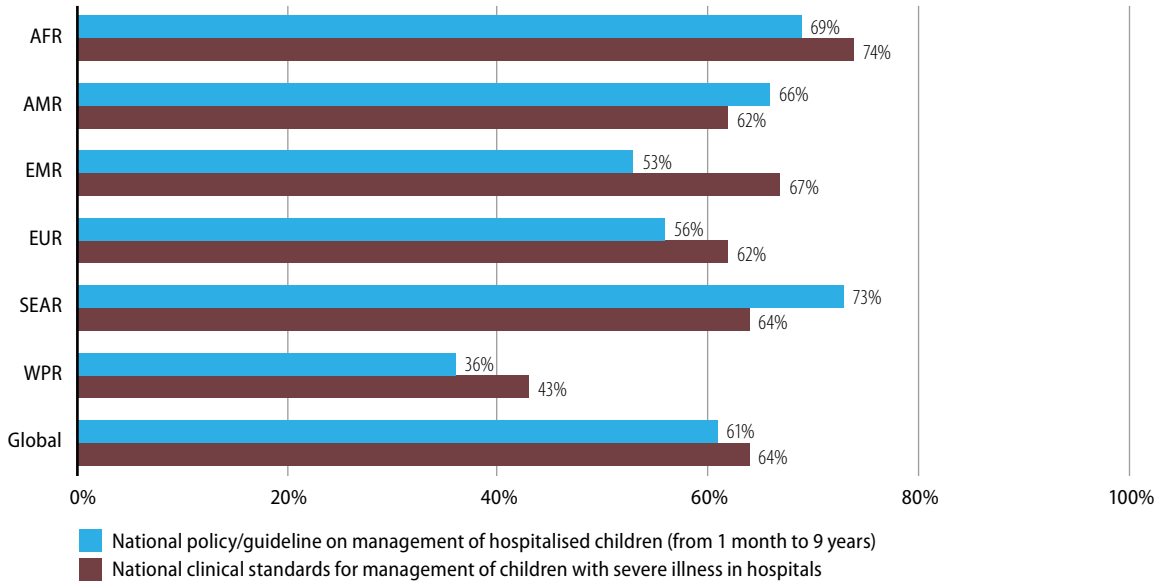
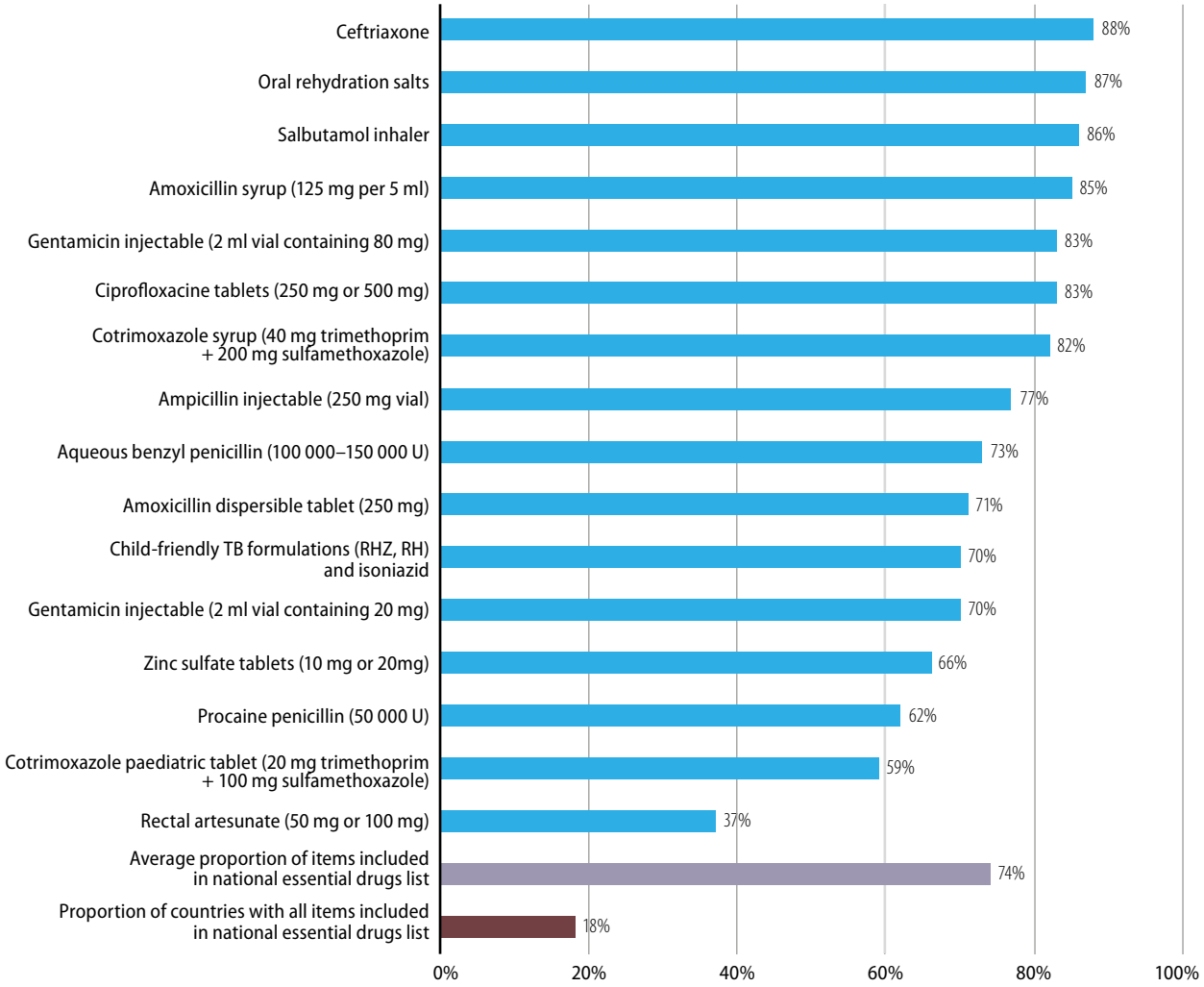


Figure 60. Medicines indicated for management of childhood illness included in national essential drugs list, globally



In line with WHO recommendations, a national essential drugs list should include the following medicines indicated for the management of childhood illness:

- amoxicillin dispersible tablet (250 mg)
- amoxicillin syrup (125 mg per 5 ml)
- cotrimoxazole paediatric tablet (20 mg trimethoprim + 100 mg sulfamethoxazole)
- cotrimoxazole syrup (40 mg trimethoprim + 200 mg sulfamethoxazole)
- ciprofloxacin tablet (250 mg or 500 mg)
- oral rehydration salts
- zinc sulfate tablet (10 mg or 20 mg)
- rectal artesunate (50 mg or 100 mg)
- salbutamol inhaler
- ampicillin injectable (250 mg vial)
- gentamicin injectable (2 ml vial containing 80 mg)
- gentamicin injectable (2 ml vial containing 20 mg)
- ceftriaxone
- procaine penicillin (50 000 U)
- aqueous benzyl penicillin (100 000–150 000 U)
- child-friendly TB formulations (RHZ, RH) and isoniazid.

Globally, countries include on average 74% of all medicines indicated for the management of childhood illness in their national essential drugs list. Regionally, countries in the African Region, Eastern Mediterranean Region and South-East Asia Region include the highest proportion of items on average (African Region: 88% of all medicines, Eastern Mediterranean Region: 82%, South-East Asia Region: 85%). Globally, only 18% of countries include all medicines indicated for the management of childhood illness in their national essential drugs list. Regionally, the African Region has the highest proportion of countries that include all medicines in their national essential drugs list (41%), while no countries in the Western Pacific Region and only 5% of countries in the European Region include all items. Countries in the South-East Asia Region include on average the highest proportion of medicines indicated for the management of childhood illness in their national essential drugs lists (Table A.2.47, Fig. 61).

8.9. Availability of national policy/ guideline on early childhood development (ECD)

Globally, 77% of countries have a national policy/ guideline on ECD. This policy is widely available in countries in the European Region (87%), Region of the Americas (83%) and South-East Asia Region (82%), and moderately available in countries in the Eastern Mediterranean Region (60%). Countries in the Western Pacific Region and African Region are less likely to have a national policy/guideline on ECD (57% and 69%, respectively). There is little variation (74–84%) in the availability of national policies/ guidelines on ECD across World Bank income groups (Table A.2.48, Fig. 62).

Figure 61. Average proportion of medicines and proportion of countries with all medicines indicated for management of childhood illness included in national essential drugs list, by WHO region

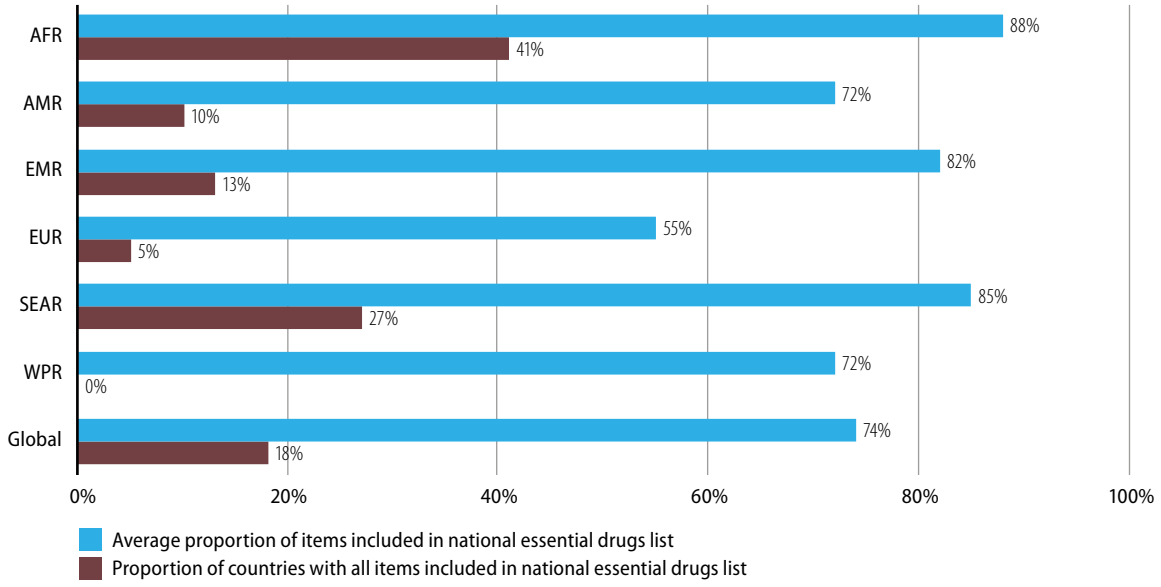
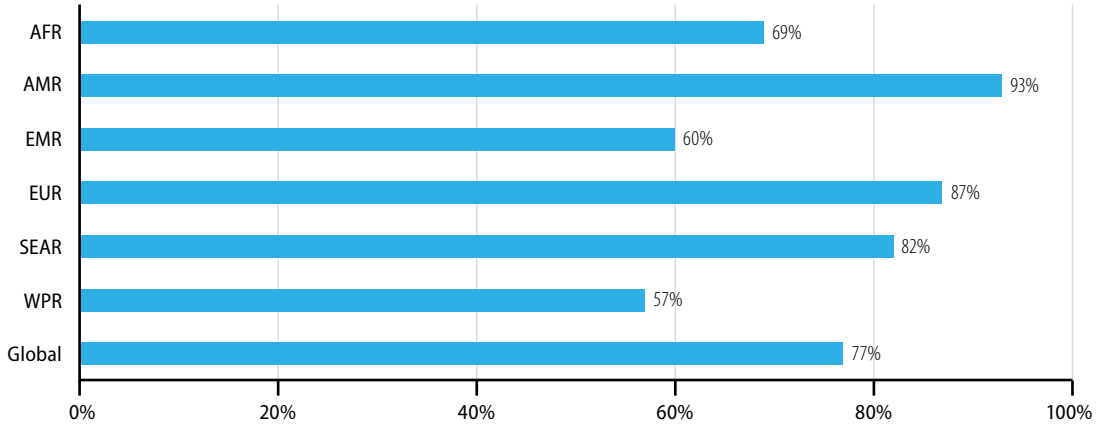


Figure 62. Availability of national policies/guidelines on ECD, by WHO region



8.10. Availability and components of national policy/guideline on Integrated Management of Childhood Illness (IMCI)

8.10.a. Availability of national policy on IMCI

Seventy per cent of countries globally have a national policy/guideline on IMCI. Regionally, all countries in the South-East Asia Region and 95% of countries in the African Region have a national policy/guideline on IMCI. In the Eastern Mediterranean Region and the Region of the Americas the availability of such a policy/guideline is less common but still high (87% and 69%, respectively). In comparison, only 57% of countries in the Western Pacific Region and 51% of those in the European Region have a policy/guideline on IMCI. The availability of a national policy on IMCI is almost universal across low-income (97%) and lower-middle-income (92%) countries. In comparison, only 39% of high-income countries have such a policy/guideline (Table A.2.49, Fig. 63).

8.10.b. Components of national policy on IMCI

Globally, around two thirds of all countries address the following service areas in their national policy/guideline on IMCI: pneumonia (75%), diarrhoea (72%), malaria (71%), acute malnutrition (67%) and essential newborn care (65%). Regional variation in the inclusion of these policy components is high. Countries in the African Region typically include almost all service areas (>90%). Similarly, national IMCI policies in countries in the South-East Asia Region cover almost all components (>90%) with the exception of essential newborn care (82%). Countries in the European Region and Western Pacific Region typically have national policies/guidelines that include fewer service areas (<55%) (Table A.2.50, Fig. 64).

Figure 63. Availability of national policies/guidelines on IMCI, by WHO region

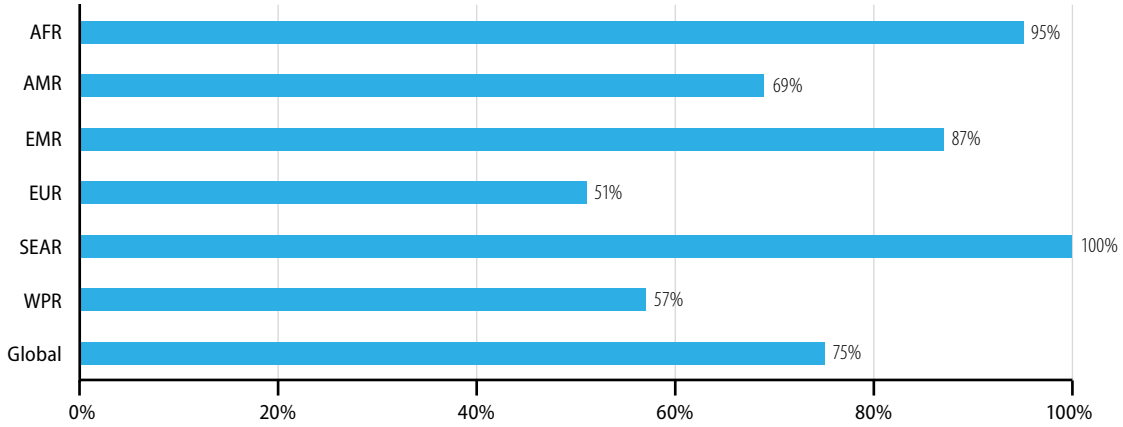
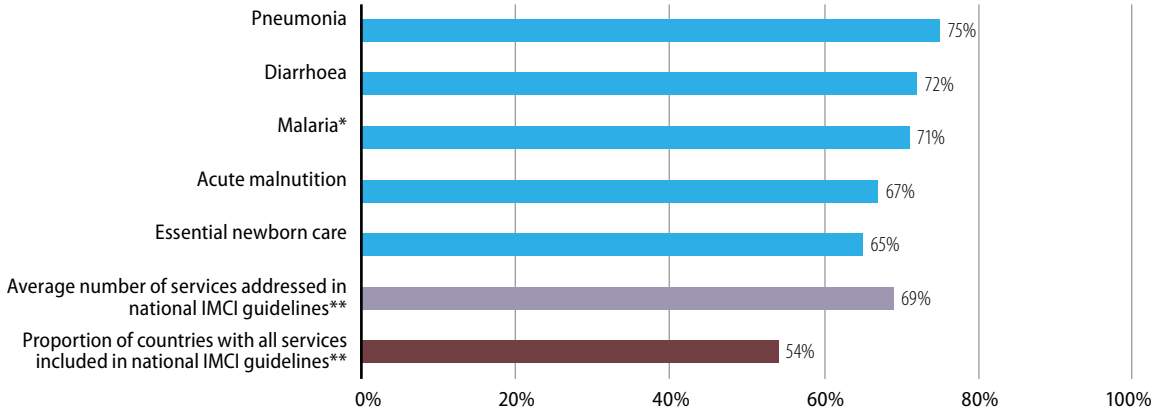


Figure 64. Components included in national policy/guideline on IMCI, globally



Note:

* For malaria, see malaria-specific denominator that excludes countries in the European Region.

** Average items and all items scores do not include malaria for countries in the European Region.

To align with WHO recommendations, national policies/guidelines on IMCI should address the following service areas/components:

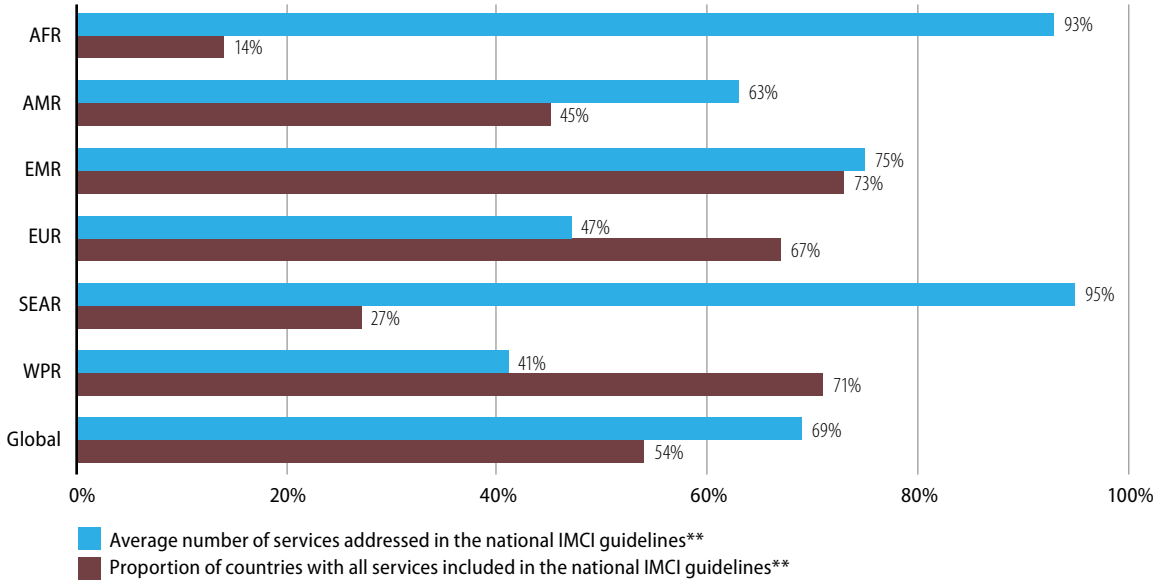
- diarrhoea
- pneumonia
- malaria
- acute malnutrition
- essential newborn care.

Globally, countries include on average 69% of recommended service areas in their national policy/guideline on IMCI. Regionally, countries in the African Region and South-East Asia Region have the highest average proportion of policy components (93% and 95%, respectively). In comparison, some countries in the European Region and the Western Pacific Region include less than half of all recommended service areas (47% and 41%, respectively). Fifty-four per cent of countries globally include all recommended components in their national IMCI guidelines. Regionally, 73% of countries in the Eastern Mediterranean Region, 71% in the Western Pacific Region and 67% in the European Region include all policy components. Fewer countries in the African Region, the Region of the Americas and the South-East Asia Region have all recommended items in their national IMCI guidelines (14%, 45% and 27%, respectively) (Table A.2.50, Fig. 65).

8.11. Availability of national policy/ guideline on treatment of young infants with PSBI

Approximately half of all countries globally have a national policy/guideline for the treatment of young infants with PSBI at primary health care facilities when referral is not feasible (51%). Regionally, most countries (82%) in the South-East Asia Region have such a policy/guideline, as do a moderate proportion of countries in the African Region (62%), Eastern Mediterranean Region (53%) and Region of the Americas (52%). In contrast, fewer countries in the Western Pacific Region and European Region have a national policy/guideline for the treatment of young infants with PSBI at a primary health care facility when referral is not feasible (29% and 36%, respectively). Approximately two thirds of low-income and lower-middle-income countries have such a national policy/guideline, in comparison to only 24% of high-income countries (Table A.2.51, Fig. 66).

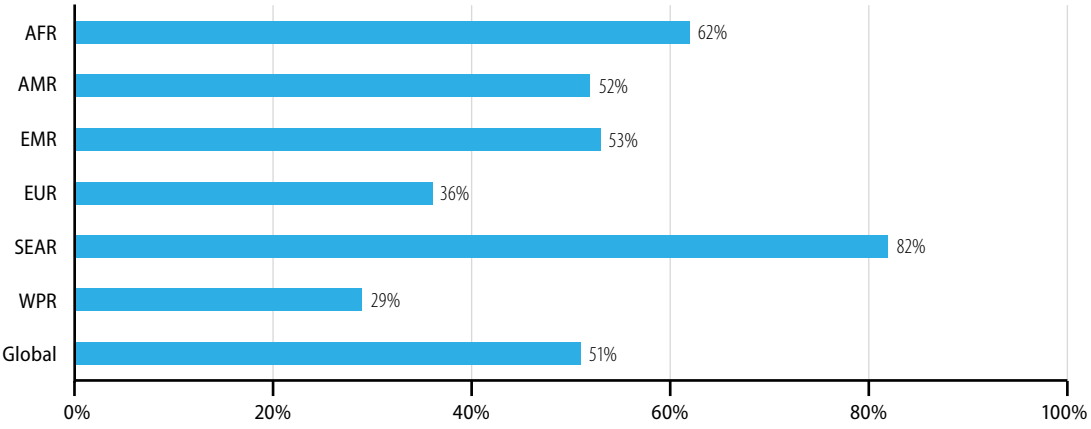
Figure 65. Average proportion of policy components and proportion of countries with all components included in national IMCI guidelines, by WHO region



Note:

** Average items and all items scores do not include malaria for countries in the European Region.

Figure 66. Availability of national policies/guidelines for treatment of young infants with PSBI at primary health care facility when referral is not feasible, by WHO region

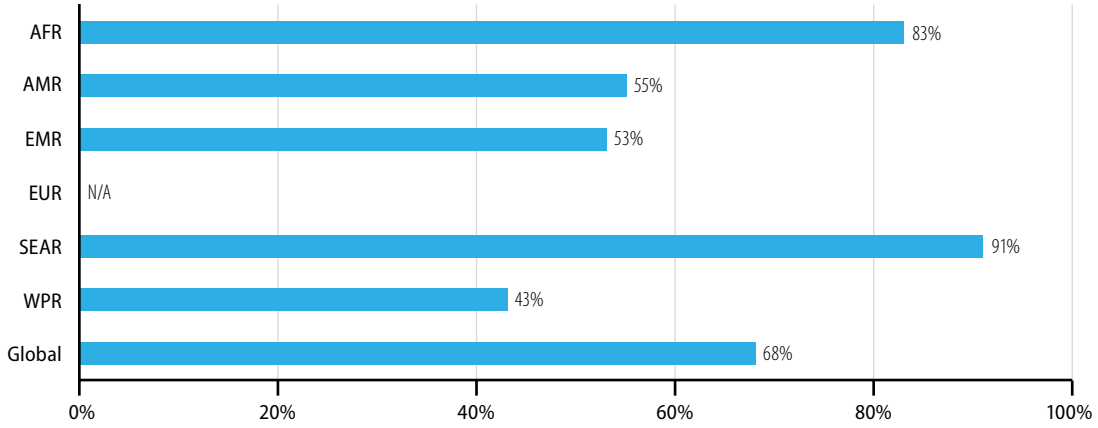


8.12. Availability and components of national policy/guideline on management of childhood illness by trained community health workers

8.12.a. Availability of national policy/guideline on management of childhood illness by trained community health workers

Globally, 68% of countries have a national policy/guideline for the management of childhood illness by trained community health workers. Such a policy is available in most countries (83%) in the African Region and South-East Asia Region (91%). About half of all countries in the Region of the Americas (55%), Eastern Mediterranean Region (53%) and Western Pacific Region (43%) have such a national policy/guideline. Countries in the European Region are excluded from this analysis, as there is no community health worker cadre there. High-income countries are less likely (20%) to have a national policy/guideline for the management of childhood illness by trained community health workers compared to low-income countries (97%) (Table A.2.52, Fig. 67).

Figure 67. Availability of national policies/guidelines for management of childhood illness by trained community health workers, by WHO region



Note: Excludes countries in the European Region.

8.12.b. Components of national policy/ guideline on management of childhood illness by trained community health workers

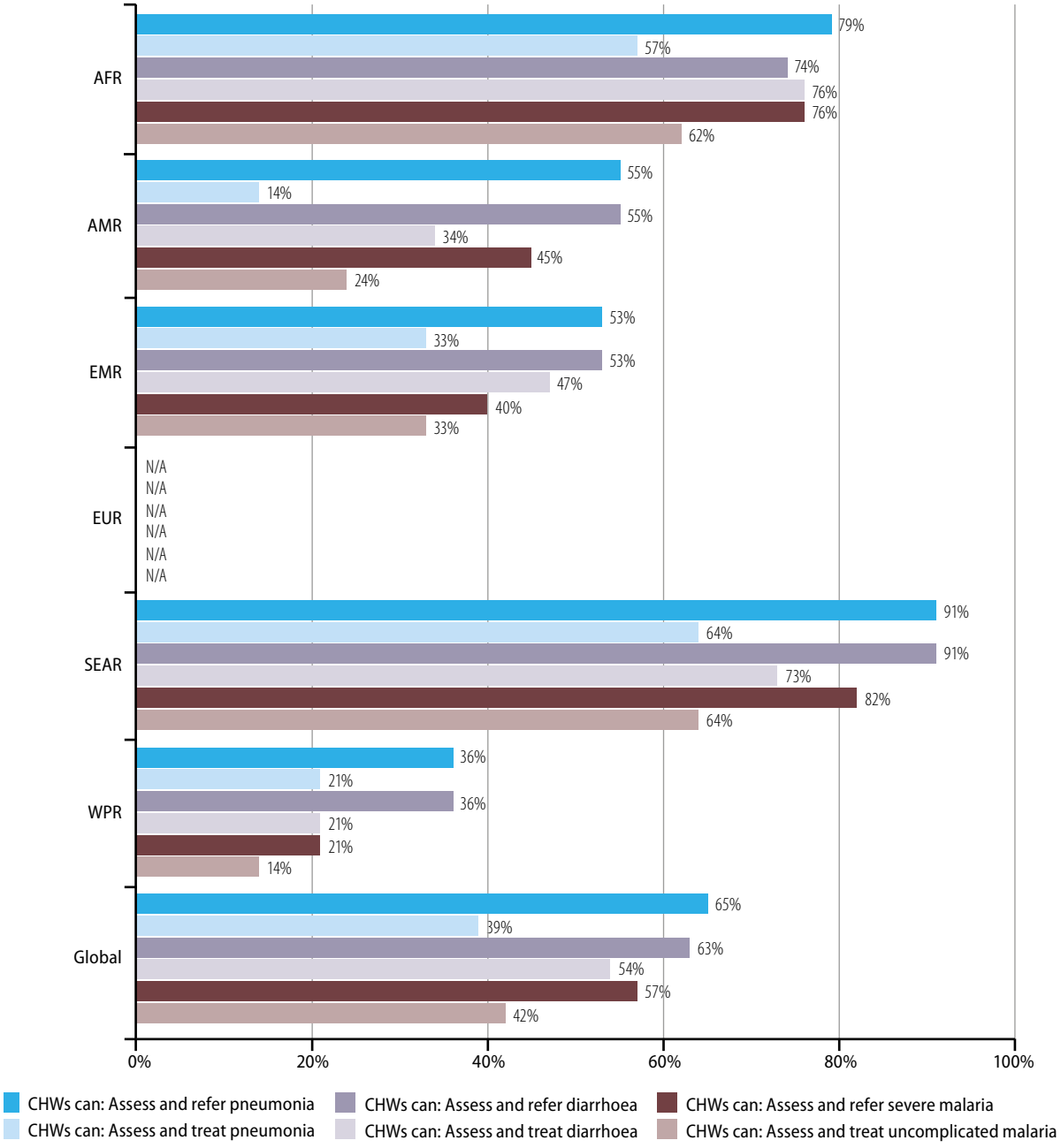
Globally, community health workers are most often permitted to "assess and make referrals" for patients with pneumonia (65%) and diarrhoea (63%). Additionally, in 57% of countries globally community health workers are allowed to "assess and refer" severe malaria. Community health workers are less often permitted to "assess and treat" illnesses, with only 39% of countries globally allowing them to assess and treat pneumonia, 42% allowing them to assess and treat uncomplicated malaria, and 54% allowing them to assess and treat diarrhoea (Table A.2.53, Fig. 68).

Most countries in the South-East Asia Region have national policies/guidelines on the management of childhood illness by trained community health workers that allow them to assess and refer for most illnesses (pneumonia: 91%, diarrhoea: 91%, severe malaria: 82%). Countries in the Western Pacific Region are the least likely to allow community health workers to assess and refer for any illness (pneumonia: 21%, diarrhoea: 21%, severe malaria: 21%). About half of all countries in the Eastern Mediterranean Region and the Region of the Americas allow community health workers to assess and refer for pneumonia or diarrhoea (53% and 55%, respectively) (Table A.2.53, Fig.68).

Community health workers are most often allowed to assess and treat pneumonia in countries in the African Region (57%) and South-East Asia Region (64%) compared to countries in the Region of the Americas (14%) and Western Pacific Region (21%). Similarly, countries in the African Region and South-East Asia Region are most likely to allow community health workers to assess and treat diarrhoea (76% and 73%, respectively) and malaria (62% and 64%, respectively) compared to other regions. Only 14% of countries in the Western Pacific Region allow community health workers to assess and treat severe malaria (Table A.2.53, Fig. 68).

By World Bank income group, low-income countries are more likely to allow community health workers to perform different activities compared to high-income countries (assess and refer pneumonia: 90% versus 20%, assess and treat diarrhoea: 90% versus 7%) (Table A.2.53, Fig. 68).

Figure 68. National policy/guideline on management of childhood illness by trained community health workers (CHWs) specifies which activities can be performed, by WHO region

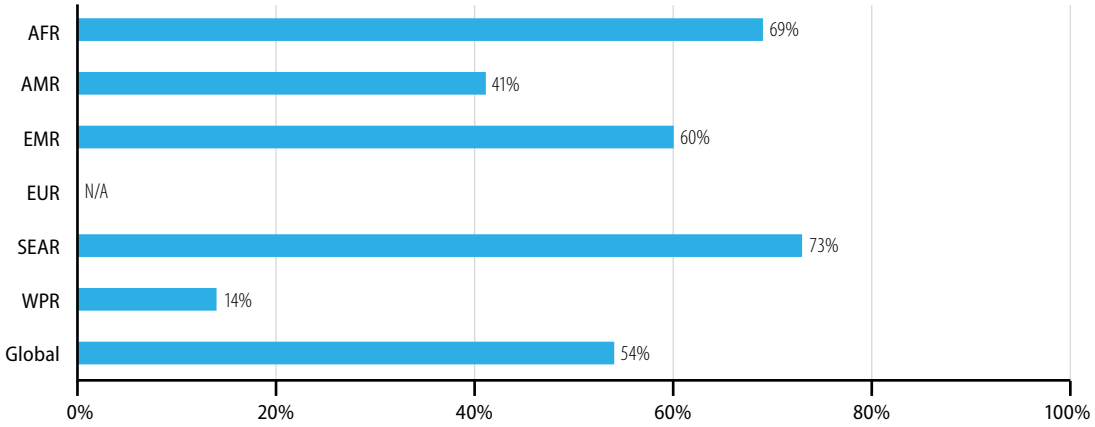


Note: Excludes countries in the European Region.

8.13. Availability of national policy/ guideline on integrated community case management (iCCM)

Globally, 54% of countries have a national policy/ guideline on iCCM. Regionally, 69% of countries in the African Region, 60% in the Eastern Mediterranean Region, 41% in the Region of the Americas and 73% in the South-East Asia Region have such a policy. Countries in the Western Pacific Region are much less likely to have a national policy/ guideline on iCCM (14%). The European Region is excluded from this analysis, as most countries there do not have community health workers or related iCCM strategies. By World Bank income group, low-income countries have national policies/guidelines on iCCM more often than high-income countries (84% and 20%, respectively) (Table A.2.54, Fig. 69).

Figure 69. Availability of national policies/guidelines on iCCM, by WHO region



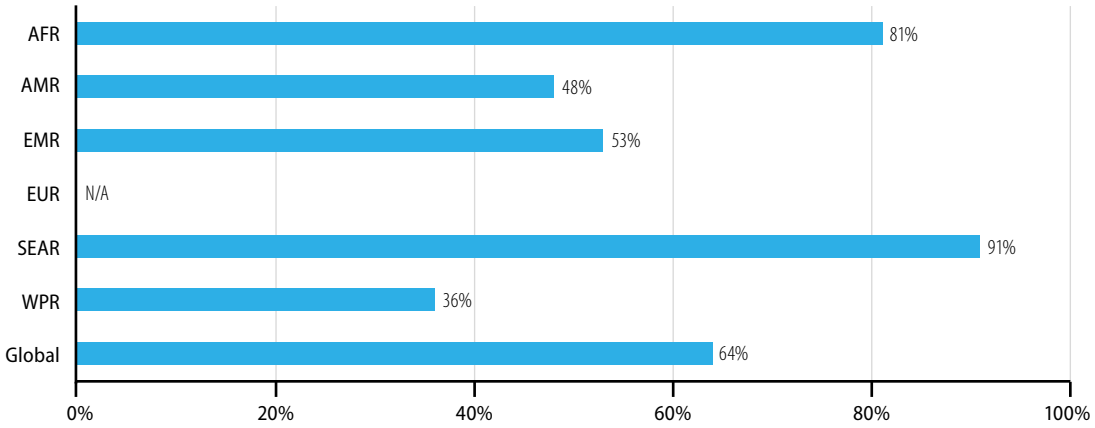
Note: Excludes countries in the European Region.

8.14. Availability and components of national policy/guideline on home-care practices by trained community health workers

8.14.a. Availability of national policy/guideline on home-care practices by trained community health workers

Globally, 64% of all countries have a national policy/guideline on supporting home-care practices by trained community health workers. The availability of such a national policy/guideline is high in countries in the African Region (81%) and South-East Asia Region (91%). A moderate proportion of countries in the Eastern Mediterranean Region (53%) and the Region of the Americas (48%) have a policy on supporting home-care practices by trained community health workers, whereas only 36% of countries in the Western Pacific Region have such a policy. The European Region is excluded from this analysis because most countries there do not have a community health worker cadre. The availability of a national policy/guideline on supporting home-care practices by trained community health workers is higher in low-income countries (94%) than high-income countries (27%) (Table A.2.55, Fig. 70).

Figure 70. Availability of national policies/guidelines on supporting home-care practices by trained community health workers, by WHO region



Note: Excludes countries in the European Region.

8.14.b. Components of national policy/ guideline on home-care practices by trained community health workers

Globally, about half of all countries have a national policy/guideline on supporting home-care practices by trained community health workers that includes prevention of childhood illness (60%), infant and young child nutrition (60%), and essential newborn care (57%). Within regions, the availability of these different policy components does not vary; however, there is variation between regions. In the South-East Asia Region, 91% of countries include all three policy components. In the African Region, countries are also likely to include all policy components (prevention of childhood illness: 79%, infant and young child nutrition: 67%, essential newborn care: 67%). About half of all countries in the Eastern Mediterranean Region and the Region of the Americas include all policy components, whereas only 20–30% of countries in the Western Pacific Region do (Table A.2.56, Fig. 71).

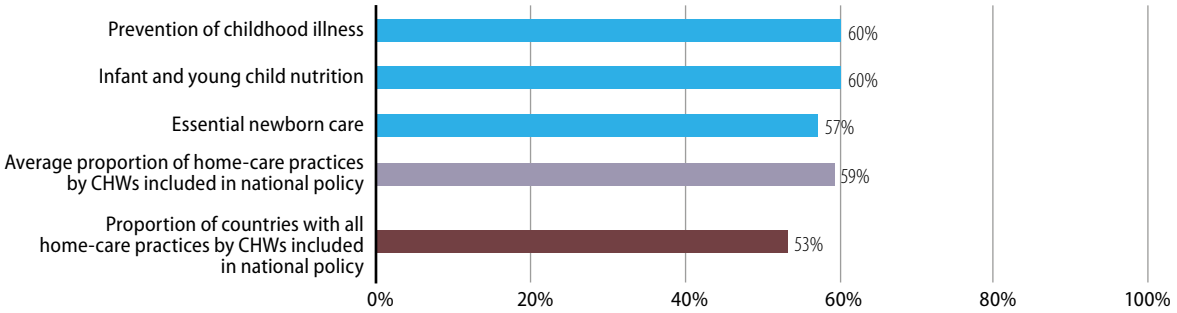
In line with WHO recommendations, national policies/guidelines on supporting home-care practices by trained community health workers should include:

- essential newborn care
- infant and young child nutrition
- prevention of childhood illness.

Globally, countries include on average 58% of these components in their national policy/guideline on supporting home-care practices by trained community health workers. Regionally, there is considerable variation in the average proportion of components included in national policies/guidelines: South-East Asia Region: 91%, African Region: 74%, Eastern Mediterranean Region: 51%, Region of the Americas: 46%, Western Pacific Region: 24% (Table A.2.56, Fig. 72).

Globally, 53% of countries include all components in their national policy/guideline on supporting home-care practices by trained community health workers. Regionally, countries in the South-East Asia Region are the most likely (91%) to have all policy components included. Sixty-four per cent of countries in the African Region, 47% in the Eastern Mediterranean Region and 41% in the Region of the Americas also include all components in their national policies/guidelines on supporting home-care practices by trained community health workers. In comparison, only 21% of countries in the Western Pacific Region do. By World Bank income group, low-income countries (77%) and lower-middle-income countries (60%) are more likely to have all recommended components in their national policies/guidelines on supporting home-care practices by trained community health workers, than high-income countries (13%) (Table A.2.56, Fig. 72).

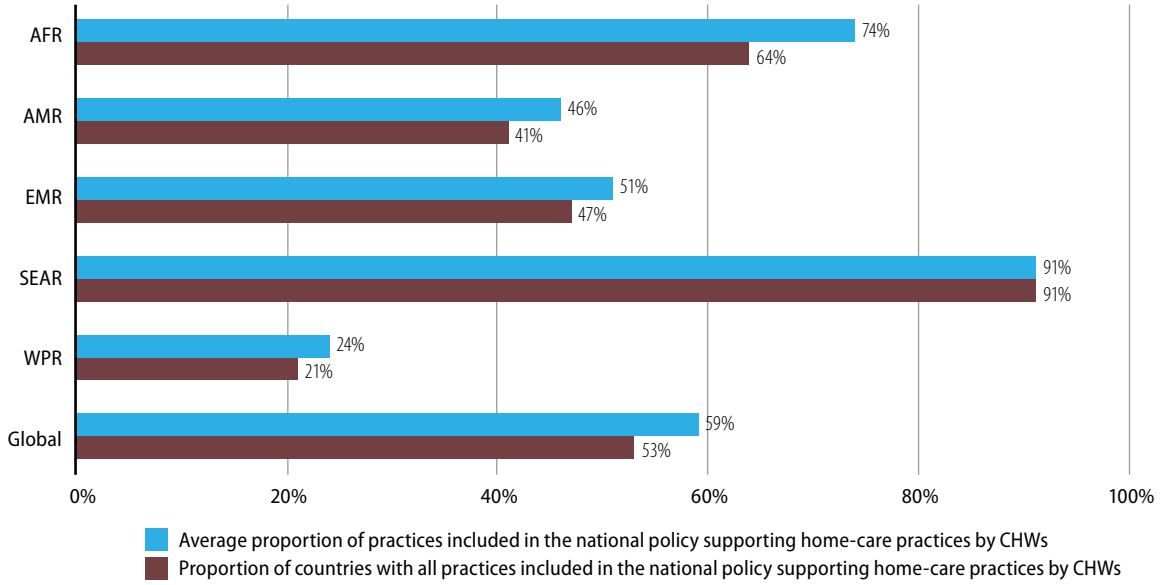
Figure 71. Components included in national policy/guideline on supporting home-care practices by trained community health workers, globally



CHW = Community health worker.

Note: Excludes countries in the European Region.

Figure 72. Average proportion of components and proportion of countries with all components included in national policy supporting home-care practices by trained community health workers, by WHO region



CHW = Community health worker.

Note: Excludes countries in the European Region.

9. Adolescent health

Adolescents are defined by WHO as those people between 10 and 19 years of age *(20)*. Adolescence is a formative phase of life, and investments in adolescent health will enable adolescents to become healthy adults who are equipped to contribute positively to society. Many adolescent diseases, as well as those that occur later in life, are treatable or preventable but are often neglected. Globally, more than 1.1 million adolescents lost their lives in 2016, with the leading causes of death including road injury, suicide, interpersonal violence, HIV/AIDS and diarrhoeal diseases. Leading causes of the nonfatal disease burden in adolescence include iron-deficiency anaemia, skin diseases as well as mental disorders such as childhood behavioural disorders, anxiety disorders and depressive disorders *(1)*. Addressing the health of adolescents requires specific policies and strategies that take into consideration the unique characteristics of this population.

9.1. Availability of national policy/guideline on adolescent health

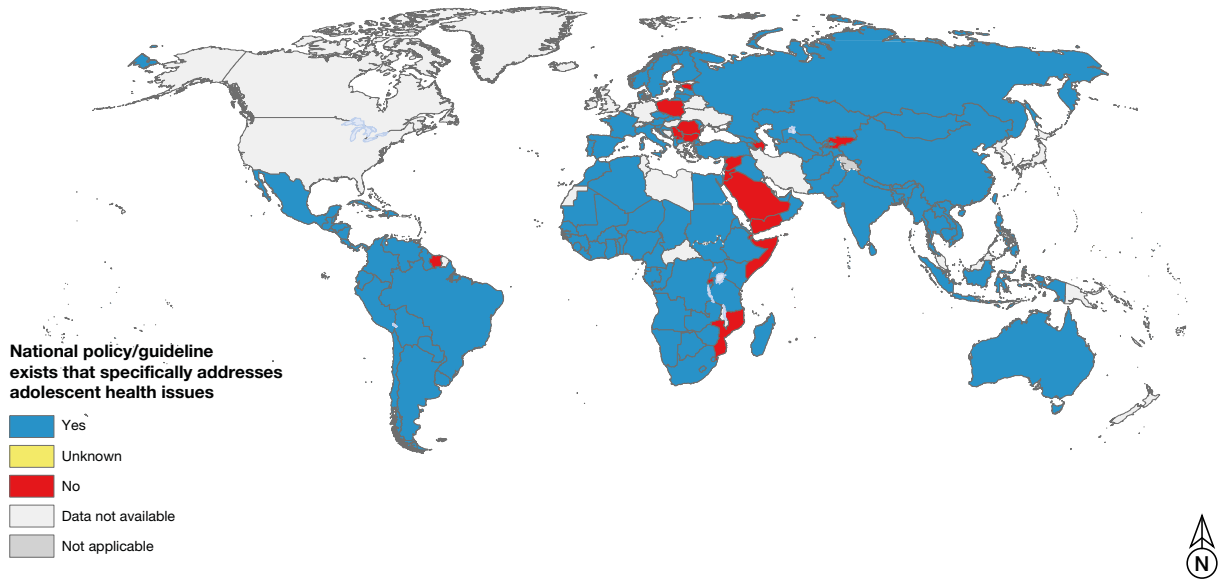
Globally, 85% of countries have a national policy/guideline that specifically addresses adolescent health issues. In most regions, over 80% of countries have an adolescent health policy (Region of the Americas: 93%, African Region: 91%, Western Pacific Region: 86%, European Region: 82%, South-East Asia Region: 81%). However, only 60% of countries in the Eastern Mediterranean Region have such a policy. There is little difference in the availability (81–87%) of national adolescent health policies/guidelines among World Bank income groups (Table A.2.57, Fig. 73).

9.2. Availability and components of national standard for delivery of health services to adolescents

Globally, 62% of countries have a national standard for the delivery of health services to adolescents. However, only 44% of countries have a national standard for delivery of health services to adolescents that includes a clearly defined comprehensive package of services as well as activities to monitor the implementation of these standards (Table A.2.58, Fig. 74).

Availability of a national standard for delivery of health services to adolescents varies greatly by region, with the highest availability in the South-East Asia Region (82% of countries), Region of the Americas (79%) and African Region (76%) and the

Figure 73. Map of countries where national policy/guideline on adolescent health is available

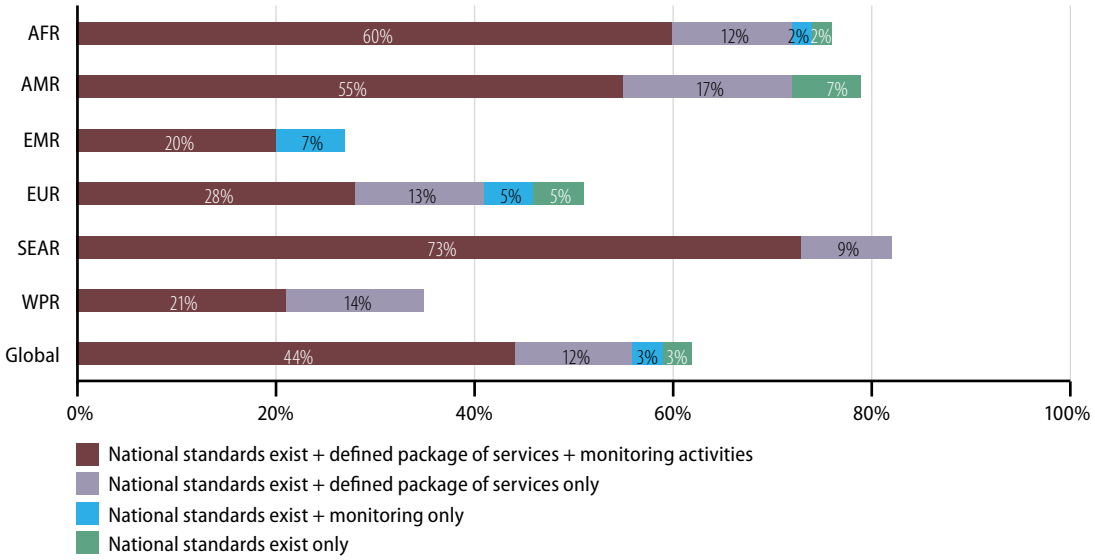


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Maternal, Newbon, Child, and Adolescent Health Policy Survey, 2018
Map Production: Department of Maternal, Newborn, Child, and Adolescent Health
World Health Organization

World Health Organization

Figure 74. Availability and components of national standards for delivery of health services to adolescents, by WHO region



lowest availability in the Eastern Mediterranean Region (27%), Western Pacific Region (36%) and European Region (51%). However, there is little difference in the availability (54–69%) of national standards for the delivery of health services to adolescents by World Bank income group.

The availability of a national standard for delivery of health services to adolescents that includes a clearly defined comprehensive package of health services as well as activities to monitor the implementation of these standards varies by region, with the highest availability in the South-East Asia Region (73% of countries), African Region (60%) and Region of the Americas (55%) and the lowest availability in the Eastern Mediterranean Region (20%), Western Pacific Region (21%) and European Region (28%) (Table A.2.58, Fig. 74).

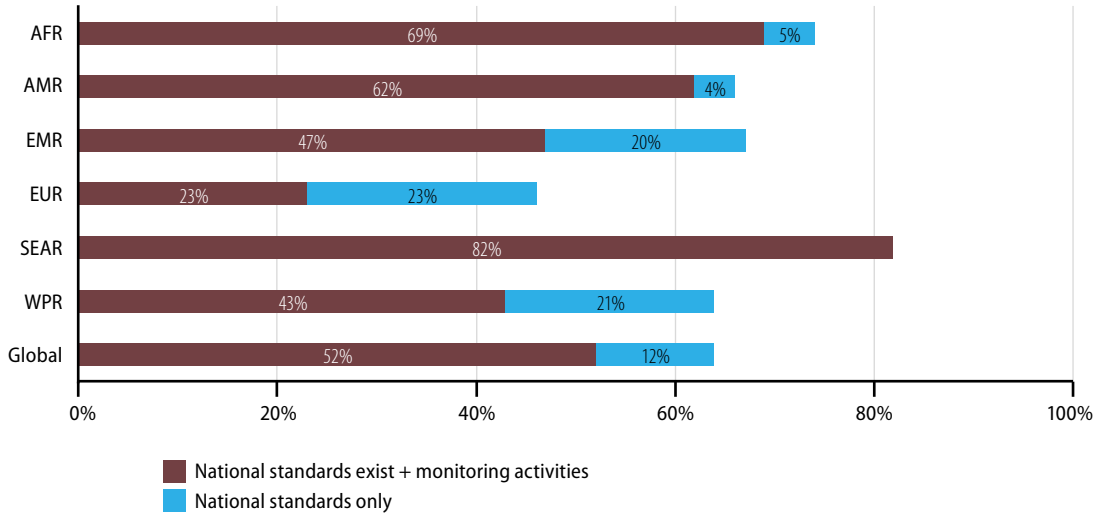
9.3. Availability and components of national standard for health-promoting schools

Globally, 64% of countries have national standards for health-promoting schools;[4] however, only 52% carry out activities to monitor the implementation of these standards (Table A.2.59, Fig. 75). Regionally, there is variation in the availability of national standards for health-promoting schools and related monitoring activities, with the highest availability in the South-East Asia Region (82% of countries), African Region (69%) and Region of the Americas (62%) and lower availability in the European Union (23%), Western Pacific Region (43%) and Eastern Mediterranean Region (47%) (Table A.2.59, Fig. 75).

By World Bank income group, there is higher availability of national standards for health-promoting schools with monitoring activities in low-income countries (75%) compared to high-income countries (50%) (Table A.2.59).

4 A health-promoting school is a school that constantly seeks to strengthen its capacity to promote healthy living, learning and working conditions.

Figure 75. Availability of national standards for health-promoting schools and related monitoring activities, by WHO region



9.4. Availability and components of national adolescent health programme

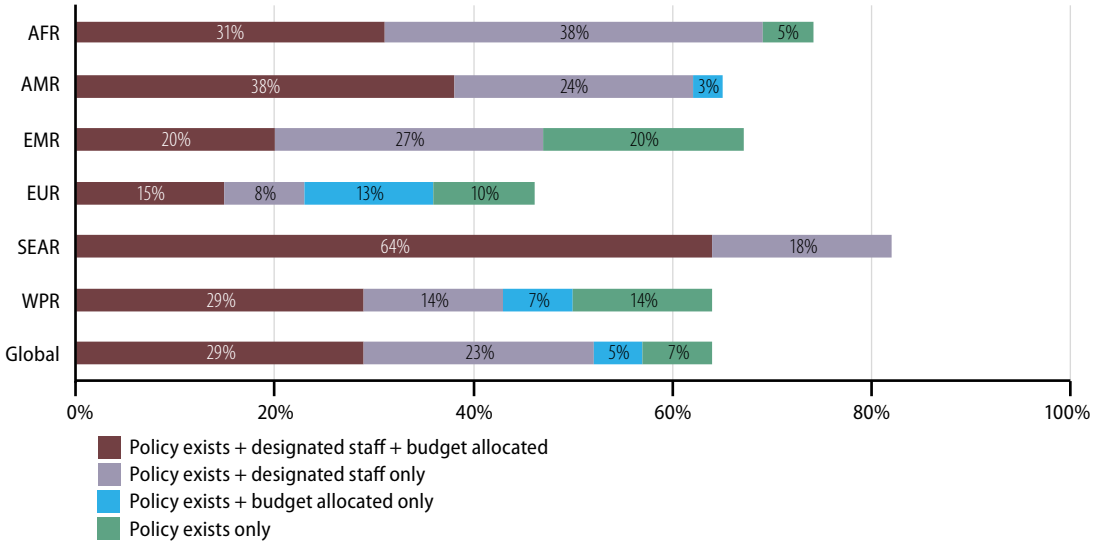
Globally, 64% of countries have a national adolescent health programme and 52% have at least one designated full-time person for this programme. However, only 34% of countries have regular government budget allocation to support the programme (Table A.2.60, Fig. 76). Twenty-nine per cent of all countries have a national adolescent health programme that includes both components (designated person, regular government budget allocation), while a further 28% of countries have a national adolescent health programme with at least one of the two core components. Regionally, availability of a national adolescent health programme with a designated full-time person and regular government budget allocation is highest in the South-East Asia Region (64% of countries) and lowest in the European Region (15%) and Eastern Mediterranean Region (20%) (Table A.2.60, Fig. 76).

9.5. Availability of national policy/ guideline and system related to health worker competency and training in adolescent health

Globally, 53% of countries have a national policy/ guideline that specifies the competencies required of health workers in adolescent health. In addition, 47% of countries have a continuous professional education system that enables primary health care workers to receive adolescent-specific training, and 32% of countries include adolescent health in pre-service training for clinicians, nurses and community health workers (Table A.2.61, Fig. 77).

The availability of a national policy/guideline that specifies the competencies required of health workers in adolescent health, a continuous professional education system for primary health care workers to receive adolescent-specific training, and adolescent health in pre-service training for clinicians, nurses and community health workers varies by region, with the South-East Asia Region having the highest availability of all three components (64%, 73% and 82%, respectively). The Eastern Mediterranean Region and African Region have the lowest proportion of countries with a national policy/guideline that specifies

Figure 76. Availability and components of national adolescent health programmes, by WHO region



the competencies required of health workers in adolescent health (13% and 21%, respectively). The Region of the Americas and the Eastern Mediterranean Region have the lowest proportion of countries with a continuous professional education system that enables primary health care workers to receive adolescent-specific training (38% and 33%, respectively). The Eastern Mediterranean Region and Western Pacific Region have the lowest proportion of countries that include adolescent health in pre-service training for clinicians, nurses and community health workers (33% and 43%, respectively) (Table A.2.61, Fig. 77).

Figure 77. Availability of national policies/guidelines related to health worker competency and training in adolescent health, by WHO region