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Glossary

Benefits package: Generally, the services to which a population is entitled for free or by co-payment. It includes what to buy, in which form, and what to exclude. The benefits package should not include essential nutrition actions (ENAs) associated with a certain threshold, e.g., 20% threshold for cases of anaemia, if that threshold is not met *(1)*.

Bundled service or **payment:** Bundling is grouping of health-care services into an aggregated unit, e.g., all the services used to treat a patient during a specific episode of care. Paying a provider or facility a single fixed payment to cover all services, supplies and equipment used by an aggregated group of services rather than for each service separately *(1, 2)*.

Cost–effectiveness: Comparative advantage of an intervention relative to the input invested; net incremental cost of the added benefits of an intervention in reducing malnutrition or mortality.

Costing: Valuing (in monetary terms) the inputs required to provide a service, conduct an activity or achieve a goal *(2)*.

Expenditure: Financial outlay by an agent (e.g., government, donor or individual) for goods and services during a certain period.

Financial agreement: An agreement between two parties (e.g., a development partner and a ministry of health) on the arrangements for mobilization and implementation of financing to the government and the ministry of health by the development partner, including financing for nutrition.

Health financing: The function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the population, individually and collectively, within the health system (e.g., ministry of health, national insurance agency). Its purpose is to make funding available and to ensure that services are paid for. It includes raising revenue (e.g., through taxes, insurance contributions, premiums, direct out-of-pocket expenditure, external aid), pooling of funds (accumulation of prepaid funds on behalf of some or all of the population) and purchasing services (allocation of funds from purchasers to providers through payment methods and contracting arrangements to incentivize coordination and quality of care) *(3)*.

Incentive: An economic signal that directs individuals or organizations (economic entities) towards self-interested behaviour *(1)*.

Passive purchasing for health: Purchasing services with a fixed budget or only by billables, with no involvement in deciding who benefits, what services to include, which providers are eligible to participate, what prices are to be paid or what payment methods to be used *(1)*.

Provider: Organizations specializing in deliver of health services (such as hospital, clinics, diagnostic centres and health centres through doctors, nurses, pharmacists, dentists and allied health workers) *(1)*.

Provider payment method: Mechanism for transferring resources from purchasers of health-care services to providers; can include global, line-item, bundled, capitation, fee for service and/or payment for performance *(1)*.

Provider payment system: Provider payment method(s) combined with all supporting systems, such as contracting, reporting, information, financial management and accountability mechanisms, considered in the context of referral rules and the relevant payment systems (e.g., for outpatient services) *(1, 2)*.

Purchaser: An entity that transfers pooled health care funds or resources to providers to pay for services, goods and interventions for a defined population, e.g., a government or health insurance company, or a scheme in which health personnel are paid to provide a health service, such as antenatal care *(1, 2)*.

Purchasing: Allocation of pooled funds or resources to the providers that deliver health-care goods and services to the population covered by the defined benefits package *(2)*.

Purchasing arrangement: A mechanism for financing, including the collection and pooling of revenues and provision of the said revenues to service providers. When implemented strategically, this takes the form of a contract, *"the success of which depends on how well both sides can negotiate a favourable contract, and how committed they are to abiding by its terms throughout the period of the contract" (1)*.

Strategic health purchasing: Active ("strategic") information-based engagement in defining the interventions and services to which the population should be entitled, from which providers those services should be purchased (including to maximize societal objectives) and how those services should be purchased (i.e., through what provider payment methods and contractual arrangements) in order to incentivise expenditure management and provision of high-quality services equitably and at scale and then purchasing in such a way as to link payments to performance and needs *(4)*.

Executive summary

This document provides an overview of strategic purchasing of nutrition services within primary health care. It introduces key terms and payment methods for countries to use in preparing to transform their health financial systems to scale up nutrition services. It does so by introducing nutritional perspectives to strategic health purchasing core areas: **What to buy, From whom to buy** and **How to buy**. This publication was developed to ensure that nutrition services are not left behind by increasing knowledge and build further understanding of strategic purchasing for nutrition services, particularly for ministries of health and nutrition programme managers and project officers who oversee purchasing of nutrition in health services and other ministries. It provides an overview of the key terms and payment methods and how nutrition services can be interlinked. **What to buy** covers how nutrition services should be prioritized and provides further understanding of nutrition service characteristics with examples and tools to assist decision-makers in deciding what to buy. **From whom to buy** describes providers and how decision-makers should select providers relevant to their nutrition services through contractual means and accreditation. **How to buy** introduces the various payment methods and describes recent research on nutrition services and payment schemes. It explores ways in which payment methods could increase the quality, coverage and efficiency of nutrition services and how decision-makers can identify the most appropriate payment methods. Lastly, information on governance and management provides the foundations for operation of strategic health purchasing of nutrition services. The document further provides information on avoiding conflicts of interest and use of existing or building new data monitoring systems. This document is complemented by the publication *Strategic purchasing for nutrition in primary health care: A proposed diagnostic assessment approach*.

Introduction

While global momentum to address malnutrition in all its forms has increased significantly over the past several years, the world will currently not meet all six of the World Health Assembly (WHA) Global Nutrition Targets, nor the diet-related non-communicable diseases (NCDs) targets by 2025 *(5,6)*. Reaching those targets will contribute to achievement of the Sustainable Development Goals and the *"universal call to action to end poverty, protect the planet and ensure prosperity for all"* by 2030. Malnutrition in all its forms has become the leading cause of ill health and death, and a rapid rise in the prevalence of diet-related NCDs is putting a massive strain on health systems *(7)*. Although nutrition is a foundation for health and well-being for all and a critical component of primary health care (PHC) *(8)*, nutrition actions and services represent only a small portion of national health budgets, despite the fact that they have been proven to reduce health-care spending in the long term *(9)*. Furthermore, expenditure on nutrition services remains far below the level required to meet the Global Nutrition Targets *(6)*.

The global commitment to universal health coverage (UHC) *(10)* and the United Nations Decade of Action on Nutrition (2016–2025) *(11)* provide opportunities to integrate nutrition care into PHC through essential nutrition actions (ENAs) (see Annex for a list of ENAs), both preventive and curative *(7)*. ENAs can be taken at all levels of the health system, and many are elements of established WHO programmes and initiatives, such as Integrated Management of Childhood Illness *(12, 13)*. Mainstreaming and scaling up nutrition within health systems will save lives and reduce health-care spending, while failure to offer ENAs can have human and economic costs *(9)*. Concrete action is required to ensure that ENAs are included in global and national commitments, nutrition services, resource mobilization and allocations and are financed through health financing systems. This document focuses on health financing systems and presents a conceptual framework for purposive, efficient purchase of nutrition services from national budgets and how modification of the criteria and conditions of allocations can improve nutrition service quality, coverage and efficiency.

Health financing and strategic purchasing

Health financing consists of three core functions: revenue collection, how money is raised to pay health-system costs; pooling, spread of the financial risk associated with use of health services; and purchasing, the process of paying for health services (Box 1). Purchasing can be done by public (e.g., ministry of health, public health insurance) or private health insurance agencies. This publication addresses use of public funds for UHC by public agencies. Revenue raising and pooling mechanisms and challenges in financing nutrition interventions in health systems are not discussed, as further information on these topics is available elsewhere *(14, 15)*.

Box 1. Technical definitions of health financing mechanisms

Revenue collection: is what most people associate with health financing: the way money is raised to pay health systems costs. Money is typically received from households, organizations or companies, and sometimes from contributors outside the country (called "external sources"). Resources can be collected through general or specific taxation; compulsory or voluntary health insurance contributions; direct out-of-pocket payments, such as user fees; and donations.

Pooling is the accumulation and management of financial resources to ensure that the financial risk of having to pay for health care is borne by all members of the pool and not by the individuals who fall ill. The main purpose of pooling is to spread the financial risk associated with the need to use health services. If funds are to be pooled, they have to be *prepaid,* before the illness occurs – through taxes and/or insurance, for example. Most health financing systems include an element of pooling funded by prepayment, combined with direct payments from individuals to service providers, sometimes called cost-sharing.

Purchasing: Is the processes of paying for health services. There are three main ways to do this. One is for government to provide budgets directly to its own health service providers (integration of purchasing and provision) using general government revenues and, sometimes, insurance contributions. The second is for an institutionally separate purchasing agency (e.g., a health insurance fund or government authority) to purchase services on behalf of a population (a purchaser-provider split). The third is for individuals to pay a provider directly for services. Many countries use a combination. Within these broad areas, health service providers can be paid in many different ways. Purchasing also includes deciding which services should be financed, including the mix between prevention, promotion, treatment and rehabilitation.

Taken from reference 16

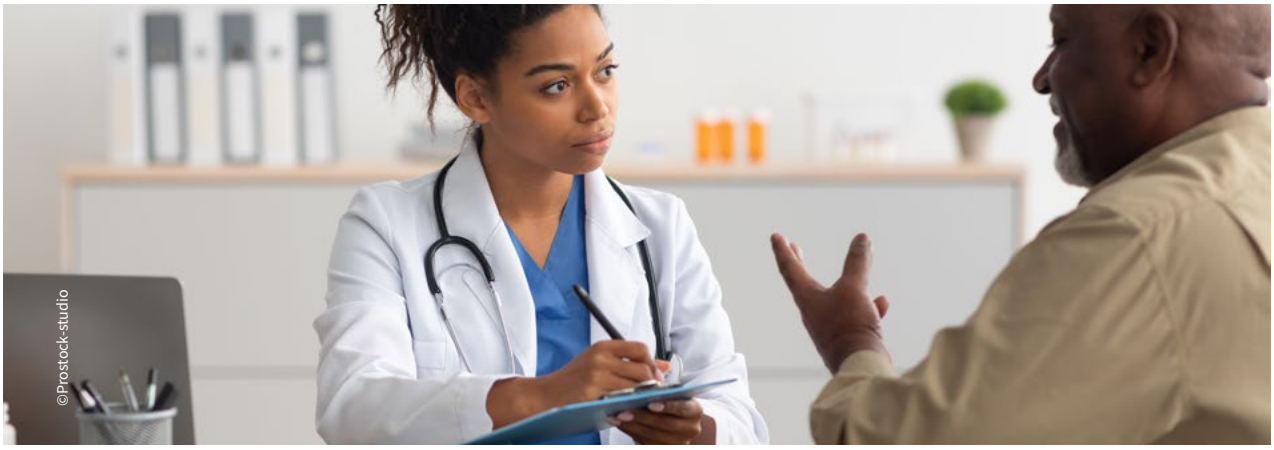
Purchasing in this context refers to allocation of pooled funds to health-care providers for the delivery of health services on behalf of certain groups (e.g., health insurance) or entire populations. Medicines and other medical supplies included in the provision of care or as part of inpatient or outpatient benefits are included in this definition. Purchasing is often conducted by purchasing agencies, such as a ministry of health, mandatory or voluntary health insurance agencies or a community health insurance organization. Purchasing of services must, however, be distinguished from procurement, which is the process of selecting vendors, establishing payment terms and negotiating contracts for obtaining commodities in bulk *(4)*.

Health services may be purchased passively or actively (strategically). Passive purchasing entails allocation of resources to any provider without distinction or consideration of their performance, and for a package of benefits that is poorly defined. Purchasing is considered to be strategic when the allocation of pooled funds for the delivery of health services is linked to information on the performance of providers (e.g., hospitals, health centres, community centres) and on the health needs of the population (e.g., counselling on breastfeeding), while managing increased expenditure. It is also intended to improve quality by alerting health providers and enhancing transparency and accountability to the population *(4)*. Key tasks for decision-makers include specifying the interventions to be purchased and setting the right incentives through provider payment methods. In other words, "*passive purchasing implies following a predetermined budget or simply paying bills when presented. Strategic purchasing involves a continuous search for the best ways to maximize health systems performance by deciding which interventions should be purchased, how and from whom" (17)*.

A strategic health purchasing framework creates active engagement in establishing the services to which a population should be entitled and the providers from which those services should be purchased *(4)*. Hence, it may result in gains in efficiency, allowing for the expansion of services within existing budgets. The three core areas *(4)* that should be aligned and addressed jointly are:

- **what to buy** (specification of services and interventions);
- **from whom to buy** (choice of providers); and
- **how to buy** (design of financial and non-financial incentives for provider payment mechanisms and contractual arrangements).

These three core areas are administered by the health system functions of governance and information management, which ensure oversight, accountability, coordination of purchasing agencies, the information to be generated and how best to manage and use it for strategic purchasing decisions. To ensure that countries are well prepared to transform their health financing systems in order to scale up nutrition services in PHC, they must understand the characteristics of purchasing and should map the characteristics of their health service to ensure that it is strategic and within their budget. This includes assessing payment methods to understand how nutrition services are purchased, which incentives are created by different payment methods and mapping the characteristics of nutrition services in health delivery. A strategic purchasing approach requires active, evidence-based definition of the mix and volume of services and selecting the provider mix that will maximize societal objectives *(4)*. Decision-makers must therefore identify which health financing payment methods are most effective in incentivizing health-care providers in their country to reach the nutrition targets in the most cost–effective way. They must decide on the kind of a payment methods necessary to ensure the scale and quality of nutrition services in PHC *(18, 19, 20)*.



What to buy

Setting priorities

For greater investment in implementing and scaling up evidence-informed practice to improve nutrition outcomes, WHO is strengthening evidence on effective nutrition actions to address malnutrition in all its forms through its Guidelines Review Committee. WHO's e-library of Evidence for Nutrition Actions *(21)* provides evidence-informed guidelines for nutrition interventions, representing a single point of reference for the latest guidelines, recommendations and related information on nutrition. Countries have, however, specific considerations in setting priorities for nutrition actions. There is no one-size-fits-all solution. The current burden of malnutrition in a country can be assessed from data on the epidemiology of particular conditions *(8)*, such as from a Demographic and Health Survey, if available. A new national or regional survey could be conducted if current data are lacking or outdated.

A decision and priority-setting to improve health and nutrition are always challenging when funds are limited, and interventions that are already budgeted for, financed and purchased must be distinguished from interventions that should be prioritized. Such difficult decisions and priority-setting should be guided by the extent to which issues in nutrition or interventions match criteria deemed important by stakeholders. Decision-makers must decide on the package of services to be provided, by and to whom, at what cost and for how long. Such decisions should be systematic, evidence-based and made transparently. The WHA Global Nutrition Targets and diet-related WHA targets on NCDs *(5)* can be used initially to identify priority nutrition concerns for action and ENAs *(8)*. Other sources include the Comprehensive implementation plan on maternal, infant and young child nutrition *(22)*, the Framework for action of the Second International Conference on Nutrition *(23)* and the e-Library of Evidence for Nutrition Actions *(21)*. The assessment can address whether national data indicate certain ENAs (e.g., daily iron supplementation for non-pregnant women in settings where the prevalence of anaemia in non-pregnant women is ≥ 40%) and whether those ENAs are already included in a national nutrition plan, a health or UHC road map or strategy or a similar government-endorsed document.

In setting priorities for action, it is recommended that a combination of approaches be used so that priorities are examined from various angles. Some methods are more technical (such as burden of disease and normative guidance or recommendations), and some focus on one criterion for priority-setting, while others include val ue-based elements (such as principles as equity, human rights or fairness) or cost–effectiveness.

Aligning ENAs with an effective strategic purchasing approach must be well organized, with a clearly defined level of intervention and well-quantified costs. Countries should assess whether their health programmes, such as antenatal care, growth monitoring, community management of acute malnutrition, immunization and essential newborn care, include ENAs and whether they are fully capable and financially able to meet nutritional needs.

Understanding service characteristics

Malnutrition exists in different forms, and there are variations in service characteristics for health-related nutrition actions. Hence, the provision of nutrition services cannot be effectively incentivized with the same payment method across the nutrition services. Often, the nutritional components of programmes such as antenatal care are incentivized to different degrees or are included directly. Assessment of these programmes and their service characteristics (Box 2) indicates the pros and cons of different payment methods. General questions that can assist in mapping service characteristics are:

- What service should be delivered, including the types of commodities and services specifications?
- What skills and competence are required, and at what level of care?
- How should these services be delivered, i.e., what key attributes must be guaranteed to ensure patient-centred care (with consideration of age, gender and ethics)?
- To whom is the service delivered?

The characteristics of services for nutrition may include whether they:

- are to be provided at all health centre visits or only when certain health conditions are present;
- can be provided by paraprofessionals, routinely trained professionals or specialists;
- are usually handled by a first-line provider or require referral;
- are population-based or individual;
- are preventive, promotive or curative; and
- are delivered to a group (e.g., outreach, community) or in a facility.

Box 2. Example of the delivery characteristics of nutrition counselling services in antenatal care

- What to deliver
  - Vitamin and mineral supplements, counselling on breastfeeding and healthy diets, screening for anaemia
- Who to deliver it
  - Nurses or community health-care workers
- How to deliver it
  - Group counselling or direct provision
- To whom to deliver it
  - Pregnant women

Tools for estimating costs sharing or management

It is critical to plan and design purchasing reforms in a holistic manner and align these with other aspects of the health financing system. A number of tools are available for programme designers to identify possibilities for sharing or managing the costs of establishing and maintaining nutrition programmes (Table 1). Each tool could be used to support development of a strategic purchasing approach to financing ENAs and or nutrition programmes. Box 3 gives a country example of cost estimation for nutrition.

Sample questions for estimating costs:

- What health system resources are necessary to implement the strategic health plan (e.g., the numbers of nurses, doctors or nutrition professionals are required over the next 5–10 years)?
- How much would the strategic plan cost, by year and by input?
- What would be the estimated health impact?
- How do the costs compare with the estimated available financing?

Table 1. Tools relevant for nutrition cost assessments

Name	Organizations	Audience	Description
The United Nations OneHealth Costing Tool *(24)*	United Nations Inter-Agency Working Group on Costing, comprising UNAIDS, UNDP, UNFPA, UNICEF, the World Bank and WHO	Health sector planners, programme planners, nongovernmental organizations, international development agencies, donors, academics, United Nations agencies	Provides technical guidance on development, capacity-building and technical support for policy-makers in national planning and estimating resources required. Designed for national strategic health planning in low- and middle-income countries. Frequently asked questions can be downloaded.
Maximizing the Quality of Scaling Up Nutrition Plus (MQSUN+) Costing Readiness Assessment *(25)*	United Kingdom Department for International Development (Foreign, Commonwealth and Development Office)	Policy decision-makers, national programme designers, government representatives, stakeholders in multisectoral planning and implementation for nutrition	Provides flexible technical assistance for nutrition policy and programming
Lives Saved (LiST) Costing Tool *(26)*	Institute for International Programs at Johns Hopkins Bloomberg School of Public Health (USA), funded by the Bill & Melinda Gates Foundation	Nongovernmental organizations, government partners, researchers, project planners and graduate students	For estimating the impact of scaling up interventions for maternal, newborn and child health and nutrition in low- and middle-income countries
Food and Nutrition Technical Assistance (FANTA) community-based management of acute malnutrition costing tool *(27)*	US Agency for International Development and Family Health International 360	Ministries of health, nongovernmental organizations, individuals and organizations responsible for designing and financing community management of acute malnutrition	For calculating the resources required to introduce, maintain or expand community-based management of acute malnutrition
Optima Nutrition Learning Tool *(28)*	World Bank Group, Bill & Melinda Gates Foundation and Burnet Institute	Government representatives, national programme designers, nongovernmental organizations, stakeholders in multisectoral planning and implementation for nutrition	A quantitative tool for optimizing a mix of interventions and investment for allocative efficiency in current or projected budgets for nutrition programmes

Box 3. **Example of nutrition cost assessment in Kenya**

The Government of Kenya used result-based costing [the specific tool used was not mentioned] to estimate the total resources necessary to implement Kenya's nutrition action plan and identify national priorities for the next five years. The estimates were derived by costing activities that were considered to require inputs. As inputs are required in certain quantities and at a certain frequency, the sum of all input costs gives the activity cost. The activities are then added to obtain the output cost and the total cost of achieving the results outlined in the national nutrition action plan. This method is referred to as "results-based costing", in which the emphasis is on results rather than spending.

The costs of each activity in nutrition interventions were established from the input cost provided by detailed costing of the national nutrition action plan. The financing required in various areas differs, nutrition commodities accounting for more than half (US$ 208 million of the estimate total of US$ 379 million) of the total resources required for the nutrition action plan. The estimates indicate potential mechanisms for financing and purchasing nutrition actions relevant to Kenya *(29)*.

From whom to buy

A purchaser (e.g., ministry of health, health insurance agency) is an entity that transfers pooled health care funds or resources to providers to pay for services, goods and interventions for a defined population, e.g., a government or health insurance company or a scheme in which health personnel are paid to provide a health service *(1, 2)*. The main objectives of a purchaser are to meet the health needs of beneficiaries and to ensure their financial protection and equitable access to high-quality health services *(19)*.

Providers are often central and/or district hospitals, special facilities (e.g., maternity hospital), private hospitals, health centres and community centres. The purchaser must further define and specify the level of provider and the health professionals (e.g., nutrition professionals, nurse, physician's assistant, general practice physician, health community worker) required and whether and how services can be accessed. Mapping of the country's nutrition services and facilities and where nutrition programmes are offered is necessary to decide from which providers the purchaser can buy services from and how to prioritize them.

One way in which purchasers can specify the nutrition services required is by selective contracting, in which a purchaser can select among competing providers *(4)*. The purchaser thus has the right not to contract all available providers but, for example, can choose to purchase services only from facilities with clearly defined quality of care. The selection may be based on predefined criteria or from the results of accreditation of the provider to further incentivize quality and good performance. Accreditation consists of a review of health-care providers to determine whether they can meet defined quality-related standards (related, e.g., to structure, process and/or outcomes). The results therefore provide relevant information to the purchaser about the provider's performance *(4)*.

Selective contracting and accreditation are thus key instruments in strategic purchasing for selecting and evaluating providers from which services will be bought. Further research is necessary, however, to determine their effectiveness in the area of nutrition.

How to buy

Payment methods

According to Langenbrunner, Cashin & O'Dougherty *(1)*, provider payment is defined as *"the mechanism used to transfer funds from the purchaser of health care services to the providers"*, while a provider payment system is defined as *"the payment method combined with all supporting systems, such as contracting, management information systems and accountability mechanisms that accompany the payment method"*. A payment method may distinguish between prospective payments, in which providers are paid at a fixed rate in advance, or retrospective payments, in which providers are paid after services are given. Prospective payment methods include line-item budgets, global budgets and capitation, while retrospective payment methods include fee-for-service, pay-for-performance, case-based ("diagnosis-related group") and per diem. Payment methods can also be categorized as input-based, when they are generally used to provide services (e.g., salaries, facilities and equipment), and output-based, in which the outputs are counted (e.g., cases treated, services, supplements and counselling) *(1, 18)*. Further details and definitions of the payment methods are shown in Table 2.

Table 2. Overview of provider payment methods

Payment method	Definition	Incentives for providers
Prospective – input-based		
Line-item budget	Allocation of a fixed amount of funds to a health-care provider to cover specific line items (or input costs), such as personnel, utilities, medicines and supplies, for a certain period.	Underprovide services, refer to other providers, increase inputs, no incentive or mechanism to improve the efficiency of the input mix, incentive to spend all remaining funds by the end of the budget year.
Prospective – output-based		
Capitation	Provider is paid a predetermined fixed rate in advance to provide a defined set of services for each individual enrolled with the provider for a fixed period.	Improve the efficiency of the input mix, attract additional enrolments, decrease inputs, underprovide services, refer to other providers, focus on less expensive health promotion and prevention, attempt to select healthier enrolments.
Prospective – input- and output-based		
Global budget	Providers receive a fixed amount of funds for a certain period to cover aggregated expenditure. The budget is flexible and is not tied to line items. A global budget can be based on inputs when it is determined on the basis of past costs. It can be based on outputs when measures of output such as number of bed days or cases are included in hospitals' global budgets.	Underprovide services, refer to other providers and increase inputs. In terms of quality or outputs, unless specified and held accountable; more potential for efficiency due to budget flexibility.
Retrospective – input-based		
Fee-for-service (no fixed-fee schedule)	Provider is reimbursed for each service provided, but there is no fixed-fee schedule, and services are not bundled into aggregated units. Providers can bill purchasers for all costs incurred in providing each service.	Increase number of services, increase inputs.
Retrospective – output-based		
Fee-for-service (fixed-fee schedule and bundling of services)	Provider is reimbursed for each service provided according to a fixed-fee schedule, and services are bundled to some extent. Provider is paid the fixed fee for a predefined service regardless of the costs incurred.	Increase overall number of services per encounter, including above the necessary level; reduce inputs per service. Services that can be provided most efficiently and generate a surplus will be expanded most rapidly.
Pay for performance (also called performance-based financing or results-based financing)	Providers are paid for each individual service or defined target (output or outcome), e.g., increased number of consultations. The payment is fixed in advance.	Increase number of services, focus on services paid for performance, possibly to the detriment of other services.
Case-based (diagnosis-related group)	Provider is reimbursed a predetermined rate for a defined case for which services have been provided.	Increase number of cases, including unnecessary hospitalizations; reduce inputs per case; incentive to improve the efficiency of the input mix; shorten hospital stay; shift rehabilitation care to outpatient care.
Per diem	Provider is reimbursed for each bed-day. The rate may be adjusted to reflect the characteristics of patients, clinical specialty and variations in the case mix among hospitals. It may also vary with the number of days in hospital, early days being paid at a higher rate than later days.	Increase number of days (admissions and length of stay), reduce inputs per hospital day, reduce the intensity of service for each bed-day, increase bed capacity, shift outpatient and community services to hospitals.

Adapted from references *2, 4, 15*

Each payment method has its own financial incentives, which induce desirable and undesirable behaviour; thus, each method has advantages and disadvantages. Output payment methods such as per diem, case-based, fee for services (fixed-fee schedule) and pay for performance are more likely to incentivize the provider's service delivery strategically. Input-based payment methods such as line-item and fee-for-service (no fixed-fee schedule) focus more on meeting standards and norms and less on volume and quality of care. Payment methods are, however, strategic only when decisions are based on data for achieving the targeted health goals *(4)*.

Payment methods to incentivize nutrition service quality, coverage and efficiency

The different payment methods presented in Table 2 can incentivize health-care providers to increase coverage and/or improve the quality of nutrition services, such as, for example, counselling (e.g., on a healthy diet during antenatal care), testing (e.g., for anaemia) and treatment (e.g., severe acute malnutrition). Providers are thus incentivized to increase the volume of services delivered, as the payment method is tied to individual services, hence increasing the quality, coverage and efficiency of ENAs. For example, fee-for-service is a widely discussed payment method in PHC and can influence providers to prioritize nutrition service delivery beyond that covered in input payment methods, e.g., capitation *(1)*. For example, fee-for-service can encourage increased delivery of high-dose vitamin A supplementation for infants and children aged 6-59 months where the prevalence is 20% or higher in infants and children. Careful planning is necessary, however, as the method used, such as fee-for-service, may have a negative impact and cause harm if not carefully designed. Fee-for-service may encourage the provider to supplement infants and children who are not at risk of vitamin A deficiency if providers are only rewarded based on volume and quantity regardless of the outcome. Furthermore, open-ended fee-for-services may escalate costs and jeopardize the financial viability of the programme. It may also increase the quantity of services at the expense of reducing the quality. Providers may also focus disproportionally on the extra income generated for specific services, e.g., immediate skin-to-skin contact, leaving other important services underdeveloped, e.g., counselling women to improve breastfeeding practices.

Pay-for-performance is typically used in health services for consultations, patients seen per provider or length of stay, equipment, supplement or medical availability (such as iron tablets and screening), quality of care (e.g., patient satisfaction, whether counselling or supplements were given) and management practices or health outcomes (e.g., nutrition outcomes such as rates of anaemia, stunting or wasting). Box 4 provides an example from Argentina, where performance-based methods, including fee-for-service, were used. Although the popularity of this method is increasing, little evidence of its effectiveness or impact on malnutrition has been published, and the design and reporting methods are not cohesive or sufficiently described for an evaluation *(30, 31)*. Recent reviews indicate that few pay-for-performance schemes incentivized health outcomes; however, only a few of the studies were related to nutrition and these focused on child nutritional status, anaemia among sick children and students' haemoglobin levels *(30-33)*. A study by Cruzado de la Vega *(34)* in Peru found that coverage of iron and multi-micronutrient supplements for children increased by 4% (from 17% to 21%) and coverage of iron and folic acid coverage in pregnant women increased by 3 % (from 78% to 81%). However, the effects were only seen during the first year of the programme. Another study *(35)* explored the impact of pay-for-performance on prevention and management of malnutrition among children under the age of five and found improvement at health centre level in the outcomes of treatment and increased rates of recovery from moderate acute malnutrition. Yet, the study and others found no impact on the outcome of malnutrition at population level *(30, 35)*. Korachais et al. *(35)* pointed out that, although the nutrition services offered improved as a result of pay-for-performance, other issues such as structural, equipment, reach, political and system-wide problems cannot be addressed by one intervention. Further evaluation is necessary of the effects of performance-based methods on targeted ENAs to determine what works and what does not in a given context. Malnutrition in all its forms is driven by a wide range of factors, and the design of the payment methods is not uniform. Their effects on provider performance must include further variables, such as quality and population reach, and not focus only on direct health outcomes.

Box 4. **Strategic health purchasing implementation in Argentina**

In Argentina, UHC through the Programa Sumar (previously Plan Nacer) has contributed to substantial decreases in stunting and undernutrition, the prevalence of stunting and underweight in the beneficiary population having decreased by 45% and 38%, respectively, between 2005 and 2013 *(36)*.

Programa Sumar is a performance-based payment model with two per-capita payment rates –general health and catastrophic diseases – whereby the per-capita amount is transferred from national to provincial level in two parts: 60% paid monthly and linked to programme enrolment and 40% paid every 4 months and contingent on provinces meeting health tracer indicator benchmarks. At subnational level, providers are reimbursed for each service provided (fee-for-service) *(37)*.

Fourteen national programme tracer indicators in Programa Sumar establish health sector priorities *(38)*. Benchmarks for these indicators are set at provincial level (negotiated between provincial and the national governments), and the 40% allocation referred to above is contingent on achieving those benchmarks. This provides an incentive at the subnational level of government to monitor the performance of providers and make corrections when necessary. Nutrition is included in the fee schedule of the payment system (including, for example, costs for breastfeeding counselling and obesity management) and monitoring indicators.

Strong financial management has been necessary to ensure the efficiency of the programme, as it is critical to monitor both performance outcomes and the inputs necessary to achieve those outcomes within the available budget. In the Programa Sumar fee-for-service arrangement, provinces set the price for each service provided on the basis of financial modelling of estimated enrolment rates and service needs. The process has improved over time, with accumulation of data on service delivery, and the projections of future need have become more predictable.

When implementing a payment method for nutrition, it should be noted that some nutrition services cannot result in immediate dose–response related outcomes (e.g., counselling on a healthy diet) that are seen with other health services (e.g., treatment of an infection). Outcome-based incentives should therefore be implemented cautiously, and the focus should be on increasing the availability and quality of nutrition services to improve outcomes based on evidence. Furthermore, nutrition should be included in health service packages and not siloed when scaling up health nutrition services.

Mixed payment methods

There is growing evidence and consensus that purposive alignment of payment methods – balancing the undesirable incentives of a single payment method and harmonizing the range of incentives by mixing two or more payment methods – is the optimal approach to improving payment systems. Purposive combination of two or more payment methods is better understood when applied with a system perspective rather than as individual payment. Most countries use several payment methods, resulting in a mixed provider payment system *(18)*. Thus, providers are faced with several financial incentives that can both be positive and negative. For example, combination of line-item payment with fee-for-service is a means for controlling overall spending. Alternatively, line-item payment (e.g., salaries) is combined with pay-for-performance methods (e.g., salary bonuses) to increase a specific health intervention or target. Bonus schemes for reaching counselling targets may incentivize health workers to include counselling on a healthy diet in their practice. However, although some incentives may be complementary, others may be incoherent or contradictory. For instance, uncoordinated incentives may encourage siloed approaches to the delivery of services at a level of care rather than ensuring a continuum of care with appropriate referrals. For example, community health centres that are not equipped to manage severe cases of malnutrition might be encouraged to do so if they receive the extra funds required rather than referring the patient to another facility.

Establishment of the appropriate mix of payment methods is complex, and the alternatives may evolve over time. It is therefore important to understand the available mechanisms in order to leverage them. WHO has issued a guide, *Analytical guide to assess a mixed provider payment system (18)* for better understanding of the many parameters and pathways for a strategic approach by contributing to a national policy dialogue on purchasing. The guide provides a number of questions for assessing a country's provider payment system in detail to assist in identifying options for better alignment of payment systems with the objectives of UHC. The questions should be adapted to nutrition rather than to overall UHC.

Determining the most appropriate payment methods

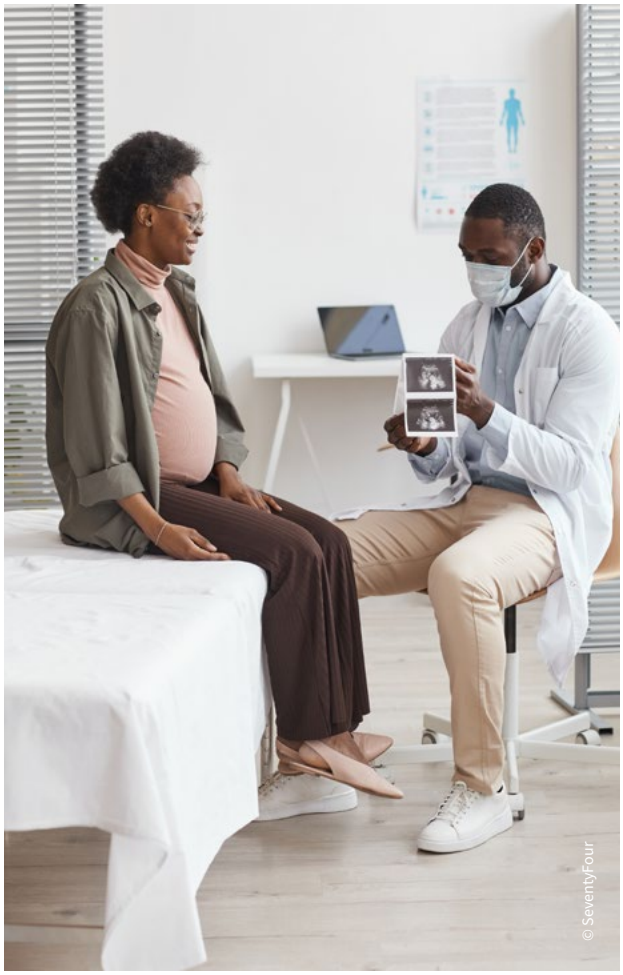
Further research should be conducted on how well purchasing arrangements and payment methods incentivize service provision related to nutrition action. Results for Development (R4D) and WHO propose an approach in *Strategic purchasing for nutrition in primary health care: A proposed diagnostic assessment approach (39)*, which provides 28 guiding questions for use by country teams to determine whether strategic purchasing for nutrition improves the quality, coverage and efficiency of nutrition services. The information compiled can be used to identify ways to make purchasing of ENAs strategic, thus optimizing funding for PHC to improve nutrition outcomes. How nutrition fits into existing PHC purchasing arrangements is assessed in four steps.

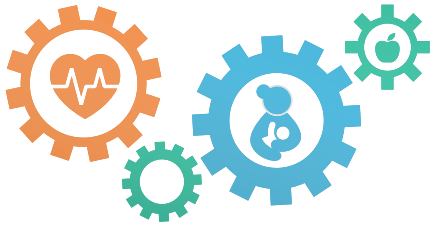
1. Take stock of the broader health financing system and identify how primary health care is currently purchased.
2. Systematically document how nutrition is included in purchasing of primary health care according to each functional area.
3. Map provider incentives to determine how current purchasing arrangements influence providers' delivery of nutrition services.
4. Identify potential opportunities for making purchasing for nutrition more strategic with key stakeholders.

Contractual obligations and other non-financial incentives for purchasers to increase provider performance

In order for purchasing arrangement and contracts between a purchaser and a provider to be strategic, they should go beyond financial incentives *(4)*. In the contractual agreement, the purchaser can specify the benefits of the nutrition service to be provided, beyond payment. The obligations should be aligned with the purchaser's nutrition goals and commitments. For example, for antenatal care, the purchaser can require that a minimal time be spent in counselling on diet, breastfeeding and complementary feeding. The purchaser could require a minimum density of nutrition professionals at the facility in which services are provided and the level of training and continuing education on nutrition for health-care workers. The obligations should be specific, linked to clear objectives and accountability measures, hence holding both provider and purchaser accountable through a contractual agreement on achieving their goals and commitments.

Non-financial incentives might further help to ensure that priority nutrition actions are consistently supported and delivered with quality throughout the health system. As providers can be driven by multiple motivational factors to provide nutrition services (e.g., professional ethics, training and career opportunities, organizational reputation etc.). For example, the State of California (USA) used a system for scoring exclusive breastfeeding to rank hospitals in the State *(40)*. The hospitals with the highest ranks may benefit from a better reputation and thus more patients seek care in its facility, while low-ranking hospitals might use the score as an incentive to strengthen their policies on exclusive breastfeeding or seek additional funding to increase their rates. Non-financial incentives are, however, not universal and differ significantly by context. For example, attracting more patients to a hospital may not be considered positive if staff are already overstretched and hiring is constrained. The impact of non-financial incentives for nutrition services in health systems should be evaluated.





Governance and information management systems

Strengthening nutrition through health systems governance and vice versa is critical for strategic purchasing. This requires strengthening policy frameworks, oversight and accountability. Strategic purchasing of nutrition services in health systems requires stewardship by ministries of health to prioritize ENAs, advocate for limited resources, plan implementation, allocate budgets, purchase services and incentivize providers. For effective strategic purchasing of ENAs, nutrition must be fully integrated into national health planning and not be based on single projects or donor support alone. According to the WHO *Global nutrition policy review 2016-2017 (41)*, however, only 95 of 167 countries had reported health sector plans that integrated nutrition objectives, and only 48 of 149 countries that had nutrition policies had a costed nutrition operational plan. Without proper governance and ownership, the sustainability of strategic purchasing programmes for nutrition services may be at risk. Proper structures must be in place to ensure the necessary infrastructure, payment and evaluation accordingly to the initial design. Donor-led projects must be allocated to the relevant governing body to ensure that the knowledge, capacity and integrity of programmes survives. Furthermore, research should be conducted to identify gaps and barriers and make sure that programmes do no harm.

Nutrition governance is complex and multisectoral, and budgeting for nutrition programmes should not be planned as a silo, as the programmes are often spread among several government ministries and departments; however, few countries have a designated coordinating department or ministry for nutrition information *(41).* Strategic purchasing of nutrition services in health services requires strong coordination of all actors, clear rules for decision-making and appropriate regulations. The designated coordinating department or ministry should actively manage the roles of and relations among different health purchasers and between the provider and the purchaser. WHO's health financing guidance, *Governance for strategic purchasing: an analytical framework to guide a country assessment (19)*, is designed to assist policy-makers and policy advisers in determining whether their governance arrangements for purchasing are conducive to strategic purchasing. The framework can be used to identify gaps in governance arrangements that impede strategic purchasing and proposes means for filling such gaps. It can be used to assess governance of both the health-care purchasing system and individual purchasing agencies, emphasizing mandatory health insurance and government health purchasing schemes.

Purchasing of nutrition services in health systems does not come without risks of conflict of interest. Governments need to have a clear conflict of interest framework to reduce the risk of improper action occurring. For example, conflicts of interest have resulted in promotion of breast-milk substitutes by health personnel providing counselling on breastfeeding *(42)*. Donations may be made in the interests of the donor than of the recipient. The interests of donors and private industry in health programmes must be evaluated to avoid any conflicts and harm. WHO has drafted an approach for preventing and managing conflicts of interest in the policy and implementation of nutrition programmes in countries *(43)*, which guides decision-makers through a six-step process in which each step is followed by an assessment of whether engagement should continue or stop.

Data and monitoring

As is the case for governance, information management is necessary, in which aligned data systems provide a basis for planning, monitoring and evaluation, while guaranteeing protection of patient data. For effective implementation of a strategic health purchasing approach, provider behaviour should be monitored to improve reporting and accountability. Detailed, up-to-date information on nutrition services is critical for purchasers to allocate funds according to population needs and to monitor whether performance indicators are met. The information should include data on both quality and service delivery, which requires harmonized data systems. Nutrition service data must be captured in the routine data collection from the health facilities. The *National nutrition information systems modules (44)* provide indicators of nutrition and information on factoring routine data on nutrition services into monitoring of individual and national performance.

If countries cannot rely on existing data, new data will have to be collected. Patient feedback is also important for improving the quality of services to further assess the approach to payment. Indicators of nutrition services should be designed carefully, as they may depend on the payment methods used. For example, pay-for-performance is linked to achievement of certain outcomes, such as coverage of iron and folic acid supplementation, and require good monitoring systems to document the outcomes. The Joint Learning Network for UHC *(45)* proposes step-by-step guidance on using data analytics to monitor health provider payment systems. It can assist in identifying trends, tracking whether payment systems support health system objectives and providing timely information on unintended consequences by proposing a framework based on generic data for decision-making, with seven steps and three parts.

Conclusions

Further understanding is required on how financial incentivization of health-care providers can benefit nutrition services. Strategic health purchasing can improve service delivery, gain efficiency, and ensure equitable distribution of resources. Exploring how the different payment methods incentivize providers to deliver ENAs are essential to improving nutrition services in health systems. Decision makers should identify the payment methods that are most effective to incentivize health providers in scaling up nutrition services in PHC. Proper governance and data monitoring structures must be in place for effective implementation.

Strategic health purchasing of nutrition services should not be siloed but must be built into existing frameworks for PHC. This document provides an introduction for implementing strategic health purchasing of nutrition services in PHC, which must be country-led and context driven. This document is complemented by the *Strategic purchasing for nutrition in primary health care: A proposed diagnostic assessment approach.*

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Annex

Essential nutrition actions

Key to symbols used

✓: interventions that are applicable in all settings

❑: interventions that may only be applicable in certain settings or for certain subgroups

X: interventions that are not recommended

Actions	Interventions	Check
MULTISECTORAL INTERVENTIONS FOR HEALTHIER POPULATIONS		
Healthy diet		
	Create a healthy food environment that enables people to adopt and maintain healthy dietary practices	✓
Fortification of condiments and staple foods with micronutrients		
	Universal salt iodization	✓
	Fortification of maize flour and corn meal with vitamins and minerals	❑
	Fortification of rice with vitamins and minerals	❑
	Fortification of wheat flour with vitamins and minerals	❑
NUTRITION THROUGH THE LIFE-COURSE		
Infants		
Optimal timing of umbilical cord clamping		
	Optimal timing of umbilical cord clamping	✓
Protecting, promoting and supporting breastfeeding		
	Support early initiation, establishment and maintenance of breastfeeding and immediate skin-to-skin contact	✓
	Optimize newborn feeding practices and address additional care needs of infants	✓
	Create an enabling environment for breastfeeding in health facilities	✓
	Enable exclusive breastfeeding for the first 6 months of life	✓
	Enable continued breastfeeding	✓
	Counsel women to improve breastfeeding practices	✓
Care of low-birth-weight and very low-birth-weight infants		
	Optimal feeding of low-birth-weight and very low-birth-weight infants	❑
	Enable kangaroo mother care for low-birth-weight infants	❑

Assessment and management of wasting		
	Identify infants under 6 months of age with severe acute malnutrition (undernutrition)	✓
	Inpatient management of infants under 6 months of age with severe acute malnutrition (undernutrition)	❑
	Outpatient management of infants under 6 months of age with severe acute malnutrition (undernutrition)	❑
Vitamin A supplementation for infants under 6 months of age		
	Neonatal vitamin A supplementation (i.e. supplementation within the first 28 days of life) is not recommended	X
	Vitamin A supplementation for infants aged 1–5 months is not recommended	X
Children		
Appropriate complementary feeding		
	Enable feeding of appropriate complementary foods	✓
Growth monitoring and assessment		
	Weight and height or length assessments for children under 5 years of age	✓
	Nutrition counselling for children under 5 years of age	✓
	Develop a management plan for overweight children under 5 years of age presenting to primary health-care facilities	❑
Assessment and management of wasting		
	Identify infants and children aged 6–59 months with severe acute malnutrition (undernutrition)	✓
	Inpatient management of infants and children aged 6–59 months with severe acute malnutrition (undernutrition)	❑
	Outpatient management of infants and children aged 6–59 months with severe acute malnutrition (undernutrition)	❑
	Management of infants and children aged 6–59 months with moderate acute malnutrition (undernutrition)	❑
	Routine provision of supplementary foods to infants and children with moderate wasting presenting to primary health-care facilities	❑
	Provision of supplementary foods for treating stunting among infants and children who present to primary health-care facilities is not recommended	X
Iron-containing micronutrient supplementation		
	Provision of iron-containing micronutrient powders for point-of-use fortification of foods for infants and young children aged 6–23 months	❑
	Provision of iron-containing micronutrient powders for point-of-use fortification of foods for children aged 2–12 years	❑
	Daily iron supplementation for infants and young children aged 6–23 months	❑
	Daily iron supplementation for children aged 2–12 years	❑
	Intermittent iron supplementation for children aged 2–12 years	❑

Vitamin A supplementation	
High-dose vitamin A supplementation for infants and children aged 6–59 months	❑
Iodine supplementation	
Iodine supplementation (or iodine-fortified complementary food) for infants and young children aged 6–23 months	❑
Zinc supplementation in the management of diarrhoea	
Zinc supplementation with increased fluids and continued feeding for management of diarrhoea in children	❑
Adolescents	
Iron-containing micronutrient supplementation	
Intermittent iron and folic acid supplementation for menstruating non-pregnant adolescent girls	❑
Daily iron supplementation for menstruating non-pregnant adolescent girls	❑
Adults	
Nutritional care of women during pregnancy and postpartum	
Nutritional counselling on healthy diet to reduce the risk of low birth weight	❑
Energy and protein dietary supplements for pregnant women in undernourished populations	❑
High-protein supplementation is not recommended for pregnant women in undernourished populations	X
Daily iron and folic acid supplementation for pregnant women	✓
Intermittent iron and folic acid supplementation for pregnant women	❑
Vitamin A supplementation for pregnant women	❑
Calcium supplementation for pregnant women to reduce the risk of pre-eclampsia	❑
Vitamin B6 (pyridoxine) supplementation is not recommended	X
Vitamin C and E supplementation is not recommended	X
Vitamin D supplementation is not recommended	X
Routine use of multiple micronutrient powders during pregnancy is not recommended as an alternative to standard iron and folic acid supplementation	X
Zinc supplementation is only recommended for pregnant women to improve maternal and perinatal outcomes	❑
Multiple micronutrient supplementation is not recommended for pregnant women to improve maternal and perinatal outcomes	X
Multiple micronutrient supplements that contain iron and folic acid may be considered for maternal health	❑
Vitamin A supplementation for postpartum women is not recommended for the prevention of maternal and infant morbidity and mortality	X
Oral iron supplementation, either alone or in combination with folic acid supplementation	❑
Iron-containing micronutrient supplementation	
Intermittent iron and folic acid supplementation for non-pregnant women (15–49 years)	❑
Daily iron supplementation for non-pregnant women (15–49 years)	❑

Iodine supplementation	
Iodine supplementation for non-pregnant women (15–49 years) and pregnant women	❑
Older persons	
Nutritional care for at-risk older persons	
Oral supplemental nutrition with dietary advice for older people affected by undernutrition	❑
Specific conditions	
Nutritional care for persons living with HIV	
Ensure optimal infant and young child feeding in the context of HIV	❑
Nutritional care for infants and children aged 6 months to 14 years living with HIV	❑
Vitamin A supplementation for pregnant women living with HIV is not recommended for reducing the risk of mother-to-child transmission of HIV	X
Nutritional care for persons with tuberculosis	
Nutritional assessment and counselling for persons with active tuberculosis	❑
Nutritional assessment, counselling and management for pregnant women with active tuberculosis	❑
Nutritional assessment, counselling, and management for persons with active tuberculosis and moderate undernutrition	❑
Nutritional assessment, counselling and management for persons with active tuberculosis and severe undernutrition	❑
Ensure optimal infant feeding of infants of mothers infected with tuberculosis	❑
Preventive chemotherapy for the control of soil-transmitted helminth infection (deworming)	
Preventive deworming for children aged 12 months and older	❑
Preventive deworming for non-pregnant women (15–49 years)	❑
Preventive deworming for pregnant women after the first trimester	❑
Nutritional care for persons with Ebola virus disease	
Optimal feeding of infants of mothers with Ebola virus disease	❑
Feeding protocols for adults and children older than 6 months with Ebola virus disease	❑
Nutritional care for persons with viral haemorrhagic disease (including Ebola, Marburg, Lassa and Crimean -Congo haemorrhagic fever)	
Optimal feeding of infants of mothers with viral haemorrhagic diseases (including Ebola, Marburg, Lassa and Crimean-Congo haemorrhagic fever)	❑
Feeding protocols for adults and children older than 6 months with viral haemorrhagic disease (including Ebola, Marburg, Lassa and Crimean-Congo haemorrhagic fever)	❑
Nutritional care for infants in the context of Zika virus transmission	
Optimal infant feeding in areas of Zika virus transmission	❑
Feeding of infants of mothers who are carriers of chronic hepatitis B	
Optimal feeding of infants of mothers who are carriers of chronic hepatitis B	❑
Feeding of infants in settings with an ongoing pandemic of influenza A (H1N1) virus transmission	
Optimal infant feeding in areas of pandemic influenza A (H1N1) virus transmission	❑

Vitamin A supplementation for infants and children with measles		
	Vitamin A supplementation for infants and children with measles	❑
NUTRITION IN EMERGENCIES[1]		
Infant and young child feeding in emergencies		
	Optimal infant and young child feeding in emergencies	❑
	Ensure appropriate complementary foods and multiple micronutrient supplementation for infants and children affected by an emergency	❑
Preventing and controlling micronutrient deficiencies in emergencies		
	Nutritional support and micronutrient supplementation for pregnant women affected by an emergency	❑

From: Essential nutrition actions: Mainstreaming nutrition through the life-course. Geneva: World Health Organization; 2019 (https://www.who.int/publications/i/item/9789241515856).

[1] The interventions presented in this section are not exhaustive and other nutrition actions through the life-course can be adapted as needed, to emergency settings.

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